

OLGA/OLGAS, OLGA-H/OLGAS-H

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

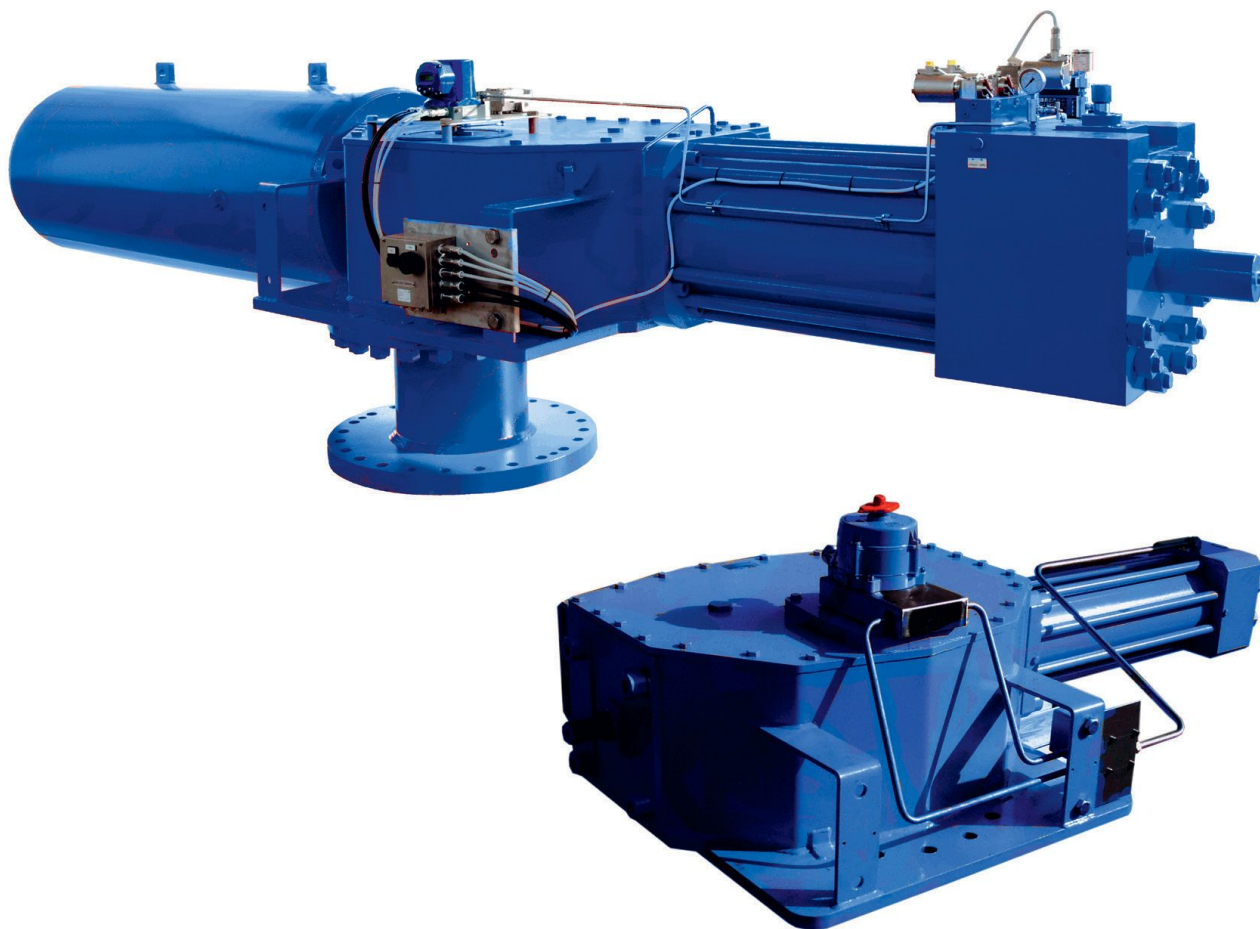
Алматы (7273)495-231
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Россия (495)268-04-70

Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Казахстан (7172)727-132

Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

OLGA/OLGAS, OLGA-H/OLGAS-H

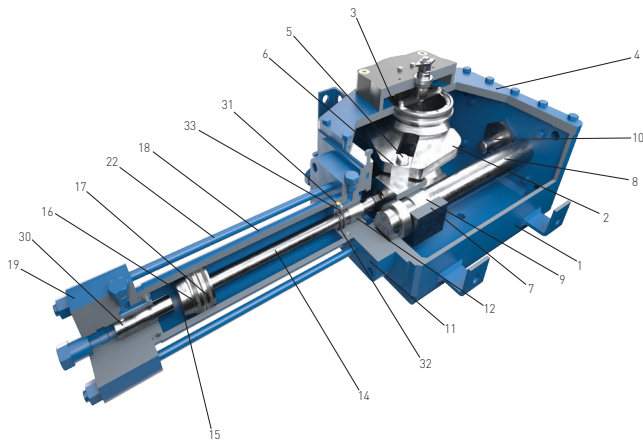


Гидравлические четвертьоборотные приводы Olga/Olga и OLGA-H/OLGAS-H

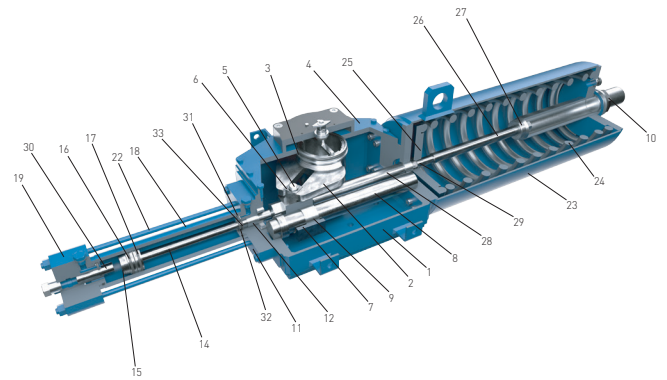
Четвертьоборотные приводы двойного действия с возвратной пружиной для включения-выключения и регулирования арматуры тяжелых условий эксплуатации (OLGA/OLGAS) и подачи высокого давления (OLGA-H/OLGAS-H). Обеспечивают выходной крутящий момент до 750 000 Нм. Специально разработанные поршневые уплотнения и уплотнения поршневого штока из двух тефлоновых колец эффективны как для низкого, так и для высокого давления масла, способствуют значительному продлению срока службы оборудования.

Biffi OLGA/OLGAS Series

OLGA Double-Acting



OLGAS Spring-Return



Materials

PART	MATERIAL
1	Housing Carbon steel
2	Yoke Carbon steel
3	Yoke bushing Bronze
4	Cover Carbon steel
5	Guide block pin Alloy steel
6	Sliding block Bronze
7	Guide block Carbon steel
8	Guide bar Alloy steel (hard chrome plated)
9	Guide block bushing Steel + bronze + PTFE
10	Travel stop screw Carbon steel
11	Cylinder head flange Carbon steel
12	Piston rod bushing Steel + bronze + PTFE
13	Piston rod seal NBR rubber
14	Piston rod Alloy steel (hard chrome plated)
15	Piston Carbon steel
16	Piston guide sliding ring PTFE + graphite
17	Piston seal O-ring PTFE + NBR rubber

PART	MATERIAL
18	Cylinder tube Carbon steel (ENP)
19	Cylinder end flange Carbon steel
20	Cylinder seal O-ring NBR rubber
21	Sealing washer PVC
22	Tie rod Alloy steel
23	Spring container Carbon steel
24	Spring Carbon steel
25	Spring thrust flange Carbon steel
26	Guide rod Alloy steel (hard chrome plated)
27	Guide rod bushing Steel + bronze + PTFE
28	Container rod Alloy steel (hard chrome plated)
29	Container rod bushing Steel + bronze + PTFE
30	Stop setting screw Carbon steel
31	Back-up ring NBR rubber
32	Piston rod seal ring PTFE + graphite + NBR
33	O-ring NBR rubber

OLGA Double-Acting Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Models 0.3C-45 to 14C-350

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			15		20		25		30		35		40	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-45	100	0°	339	298	458	404	576	510	695	615	814	721	933	827
		45°	132	105	179	142	225	179	271	217	318	254	364	291
		90°	191	145	258	197	325	249	392	300	459	352	525	403
0.3C-75	46	0°	959	943	1289	1268	1619	1593	1948	1918	2278	2244	2608	2569
		45°	375	332	504	447	632	561	761	676	890	791	1019	905
		90°	540	460	726	619	912	778	1098	936	1284	1095	1470	1254
0.3C-100	25	0°	1717	1730	2304	2322	2890	2914	-	-	-	-	-	-
		45°	671	610	900	818	1129	1027	-	-	-	-	-	-
		90°	968	844	1298	1134	1629	1423	-	-	-	-	-	-
0.9C-100	66	0°	1986	2001	2664	2685	3342	3370	4019	4055	4697	4739	5375	5424
		45°	776	705	1041	946	1306	1187	1571	1429	1836	1670	2101	1911
		90°	1119	977	1501	1311	1883	1645	2265	1979	2647	2314	3029	2648
0.9C-135	36	0°	3644	3683	4880	4934	6115	6185	7351	7435	8586	8686	-	-
		45°	1424	1298	1907	1739	2390	2180	2873	2620	3356	3061	-	-
		90°	2054	1798	2750	2409	3446	3019	4143	3630	4839	4241	-	-
1.5C-135	47	0°	4608	4658	6171	6239	7733	7821	9295	9402	10857	10984	12420	12566
		45°	1801	1641	2412	2199	3022	2756	3633	3314	4244	3871	4854	4429
		90°	2597	2274	3478	3046	4358	3818	5239	4590	6119	5363	7000	6135
1.5C-175	28	0°	7770	7910	10396	10586	13021	13261	-	-	-	-	-	-
		45°	3037	2788	4063	3731	5089	4674	-	-	-	-	-	-
		90°	4379	3862	5859	5168	7339	6474	-	-	-	-	-	-
3C-135	57	0°	7628	7710	10214	10327	12800	12945	15385	15563	17971	18181	20557	20799
		45°	2981	2717	3992	3640	5003	4562	6014	5485	7025	6408	8035	7331
		90°	4299	3764	5757	5042	7214	6320	8672	7598	10129	8876	11587	10155
3C-175	34	0°	12861	13093	17207	17521	21552	21950	25897	26379	-	-	-	-
		45°	5027	4614	6726	6175	8424	7736	10123	9297	-	-	-	-
		90°	7249	6392	9698	8554	12147	10717	14596	12879	-	-	-	-
6C-175	58	0°	15036	15307	20116	20484	25196	25662	30277	30839	35357	36017	40437	41194
		45°	5877	5395	7863	7220	9849	9045	11834	10870	13820	12694	15806	14519
		90°	8475	7473	11338	10001	14201	12529	17065	15057	19928	17585	22791	20113
6C-200	44	0°	19693	19867	26328	26568	32963	33268	39598	39969	46233	46670	52868	53371
		45°	7697	7002	10291	9364	12885	11726	15478	14088	18072	16449	20665	18811
		90°	11099	9699	14839	12971	18579	16243	22319	19514	26059	22786	29798	26058
14C-200	82	0°	21523	21713	28775	29037	36027	36361	43279	43685	50531	51009	57783	58333
		45°	8413	7653	11248	10234	14082	12816	16917	15397	19752	17979	22587	20560
		90°	12131	10601	16219	14177	20306	17753	24394	21329	28481	24904	32568	28480
14C-235	57	0°	29776	30872	39788	41259	49800	51646	59813	62034	69825	72421	79837	82808
		45°	11639	10881	15552	14542	19466	18203	23380	21865	27294	25526	31207	29187
		90°	16783	15073	22426	20144	28069	25216	33712	30287	39356	35359	44999	40430
14C-280	40	0°	42271	43955	56485	58743	70699	73532	84913	88320	99127	103109	113341	117897
		45°	16523	15492	22079	20705	27635	25917	33191	31130	38747	36342	44303	41555
		90°	23826	21460	31837	28681	39848	35901	47860	43121	55871	50342	63883	57562
14C-300	35	0°	48526	50896	64843	68019	81160	85141	97477	102264	113794	119386	-	-
		45°	18968	17939	25346	23974	31724	30009	38102	36044	44481	42079	-	-
		90°	27351	24849	36548	33209	45744	41569	54941	49929	64138	58289	-	-
14C-350	25	0°	66049	70344	88259	94005	110468	117667	-	-	-	-	-	-
		45°	25818	24794	34499	33134	43180	41473	-	-	-	-	-	-
		90°	37228	34344	49746	45897	62263	57450	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA/OLGAS Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			45		50		55		60		65		70	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-45	100	0°	1051	933	1170	1038	1289	1144	1408	1250	1526	1356	1645	1461
		45°	411	328	457	366	503	403	550	440	596	477	643	515
		90°	592	455	659	507	726	558	793	610	860	662	927	713
0.3C-75	46	0°	2938	2894	-	-	-	-	-	-	-	-	-	-
		45°	1148	1020	-	-	-	-	-	-	-	-	-	-
		90°	1656	1413	-	-	-	-	-	-	-	-	-	-
0.3C-100	25	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-100	66	0°	6053	6108	6731	6793	7409	7478	8087	8162	8765	8847	-	-
		45°	2366	2153	2631	2394	2896	2635	3161	2877	3426	3118	-	-
		90°	3412	2982	3794	3316	4176	3651	4558	3985	4940	4319	-	-
0.9C-135	36	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-135	47	0°	13982	14147	-	-	-	-	-	-	-	-	-	-
		45°	5465	4986	-	-	-	-	-	-	-	-	-	-
		90°	7881	6907	-	-	-	-	-	-	-	-	-	-
1.5C-175	28	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
3C-135	57	0°	23143	23417	25729	26034	28315	28652	-	-	-	-	-	-
		45°	9046	8253	10057	9176	11068	10099	-	-	-	-	-	-
		90°	13044	11433	14502	12711	15959	13989	-	-	-	-	-	-
3C-175	34	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
6C-175	58	0°	45517	46372	50597	51550	55677	56727	-	-	-	-	-	-
		45°	17792	16344	19777	18169	21763	19994	-	-	-	-	-	-
		90°	25655	22640	28518	25168	31381	27696	-	-	-	-	-	-
6C-200	44	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14C-200	82	0°	65035	65656	72287	72980	79539	80304	86791	87628	94043	94952	101295	102276
		45°	25421	23141	28256	25723	31091	28304	33925	30886	36760	33467	39595	36049
		90°	36656	32056	40743	35632	44831	39208	48918	42783	53006	46359	57093	49935
14C-235	57	0°	89849	93195	99862	103582	109874	113969	-	-	-	-	-	-
		45°	35121	32848	39035	36509	42948	40170	-	-	-	-	-	-
		90°	50642	45501	56285	50573	61929	55644	-	-	-	-	-	-
14C-280	40	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14C-300	35	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14C-350	25	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			75		80		85		90		95		100	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-45	100	0°	1764	1567	1882	1673	2001	1778	2120	1884	2239	1990	2357	2096
		45°	689	552	736	589	782	627	828	664	875	701	921	738
		90°	994	765	1061	816	1128	868	1195	920	1262	971	1328	1023
0.3C-75	46	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
0.3C-100	25	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
0.9C-100	66	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
0.9C-135	36	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
1.5C-135	47	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
1.5C-175	28	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
3C-135	57	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
3C-175	34	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
6C-175	58	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
6C-200	44	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
14C-200	82	0°	108547	109599	115799	116923	-	-	-	-	-	-	-	
		45°	42430	38630	45264	41211	-	-	-	-	-	-	-	
		90°	61181	53511	65268	57087	-	-	-	-	-	-	-	
14C-235	57	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
14C-280	40	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
14C-300	35	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
14C-350	25	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	

NOTE:

* MOP = Maximum Operating Pressure (barg)

OLGA Double-Acting Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Models 18C-235 to 80C-350

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			15		20		25		30		35		40	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-235	75	0°	34242	35503	45756	47448	57271	59393	68785	71339	80299	83284	91813	95229
		45°	13385	12513	17885	16724	22386	20934	26887	25144	31388	29355	35888	33565
		90°	19300	17334	25790	23166	32280	28998	38769	34830	45259	40662	51749	46495
18C-280	53	0°	48612	50548	64958	67555	81304	84562	97650	101569	113996	118575	130342	135582
		45°	19002	17816	25391	23811	31781	29805	38170	35799	44560	41794	50949	47788
		90°	27399	24679	36613	32983	45826	41286	55039	49590	64252	57893	73465	66197
18C-300	45	0°	55805	58531	74569	78221	93334	97912	112098	117603	130863	137294	149627	156985
		45°	21813	20630	29148	27570	36483	34511	43818	41451	51153	48391	58488	55332
		90°	31454	28577	42030	38191	52606	47805	63183	57418	73759	67032	84335	76646
18C-350	33	0°	75957	80895	101497	108106	127038	135317	152578	162528	-	-	-	-
		45°	29691	28513	39674	38104	49658	47695	59641	57286	-	-	-	-
		90°	42812	39496	57207	52782	71603	66067	85999	79353	-	-	-	-
32C-235	100	0°	40198	41678	53714	55700	67231	69723	80747	83746	94264	97768	107780	111791
		45°	15713	14690	20996	19632	26280	24575	31563	29517	36846	34460	42130	39402
		90°	22657	20348	30275	27195	37893	34041	45512	40888	53130	47734	60749	54581
32C-280	75	0°	57067	59339	76255	79304	95444	99268	114633	119233	133821	139197	153010	159162
		45°	22307	20915	29807	27952	37308	34989	44809	42025	52309	49062	59810	56099
		90°	32165	28972	42980	38719	53796	48467	64611	58214	75426	67962	86242	77709
32C-300	65	0°	65510	68710	87538	91825	109566	114941	131594	138056	153622	161171	175649	184287
		45°	25607	24218	34218	32365	42828	40513	51438	48660	60049	56807	68659	64955
		90°	36924	33547	49339	44833	61755	56119	74171	67404	86587	78690	99002	89976
32C-350	50	0°	89167	94964	119149	126907	149132	158850	179114	190794	209096	222737	239079	254680
		45°	34854	33471	46574	44730	58294	55989	70014	67248	81733	78507	93453	89766
		90°	50258	46365	67157	61961	84056	77557	100955	93153	117854	108749	134753	124345
50C-235	100	0°	44664	46308	59682	61889	74701	77470	89719	93051	104738	108631	119756	124212
		45°	17458	16322	23329	21814	29200	27305	35070	32797	40941	38289	46811	43781
		90°	25174	22609	33639	30217	42104	37824	50569	45431	59034	53038	67499	60645
50C-280	100	0°	63407	65933	84728	88115	106049	110298	127370	132481	148691	154664	170011	176846
		45°	24785	23239	33119	31058	41453	38876	49787	46695	58121	54514	66455	62332
		90°	35739	32191	47756	43021	59773	53852	71790	64682	83807	75513	95824	86344
50C-300	84	0°	72789	76344	97265	102028	121740	127712	146215	153396	170691	179079	195166	204763
		45°	28452	26909	38020	35961	47587	45014	57154	54067	66721	63119	76288	72172
		90°	41026	37274	54822	49814	68617	62354	82412	74894	96207	87434	110003	99974
50C-350	63	0°	99074	105516	132388	141008	165702	176500	199016	211993	232329	247485	265643	282978
		45°	38727	37191	51749	49701	64771	62210	77793	74720	90815	87230	103837	99740
		90°	55842	51517	74619	68846	93395	86175	112172	103503	130949	120832	149726	138161
80C-300	100	0°	84921	87484	113475	116920	142030	146356	170585	175793	199139	205229	227694	234665
		45°	33194	30835	44356	41210	55518	51586	66680	61961	77841	72336	89003	82712
		90°	47864	42713	63959	57085	80053	71457	96148	85829	112242	100201	128336	114573
80C-350	91	0°	115587	121517	154453	162397	193319	203276	232185	244156	271051	285036	309917	325915
		45°	45182	42831	60374	57239	75566	71648	90759	86057	105951	100466	121143	114875
		90°	65149	59329	87055	79289	108961	99248	130868	119207	152774	139166	174680	159125

NOTE:

* MOP = Maximum Operating Pressure (barg)

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			45		50		55		60		65		70	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-235	75	0°	103327	107174	114841	119120	126355	131065	137869	143010	149383	154955	160897	166901
		45°	40389	37775	44890	41986	49391	46196	53891	50406	58392	54617	62893	58827
		90°	58239	52327	64728	58159	71218	63991	77708	69823	84198	75655	90687	81488
18C-280	53	0°	146688	152589	163034	169596	-	-	-	-	-	-	-	-
		45°	57339	53782	63728	59777	-	-	-	-	-	-	-	-
		90°	82678	74500	91892	82803	-	-	-	-	-	-	-	-
18C-300	45	0°	168392	176676	-	-	-	-	-	-	-	-	-	-
		45°	65822	62272	-	-	-	-	-	-	-	-	-	-
		90°	94912	86260	-	-	-	-	-	-	-	-	-	-
18C-350	33	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
32C-235	100	0°	121297	125814	134813	139836	148330	153859	161846	167882	175363	181904	188879	195927
		45°	47413	44345	52697	49288	57980	54230	63264	59173	68547	64115	73831	69058
		90°	68367	61427	75986	68274	83604	75120	91222	81967	98841	88813	106459	95659
32C-280	75	0°	172199	179126	191387	199091	210576	219055	229765	239020	248954	258984	268142	278949
		45°	67311	63136	74811	70173	82312	77210	89813	84247	97313	91283	104814	98320
		90°	97057	87457	107873	97204	118688	106952	129504	116699	140319	126447	151135	136194
32C-300	65	0°	197677	207402	219705	230517	241733	253633	263761	276748	285789	299863	-	-
		45°	77270	73102	85880	81250	94491	89397	103101	97545	111712	105692	-	-
		90°	111418	101262	123834	112548	136249	123834	148665	135120	161081	146406	-	-
32C-350	50	0°	269061	286623	299043	318566	-	-	-	-	-	-	-	-
		45°	105173	101025	116893	112284	-	-	-	-	-	-	-	-
		90°	151652	139941	168552	155537	-	-	-	-	-	-	-	-
50C-235	100	0°	134774	139793	149793	155374	164811	170954	179829	186535	194848	202116	209866	217697
		45°	52682	49272	58552	54764	64423	60256	70293	65747	76164	71239	82034	76731
		90°	75964	68252	84428	75860	92893	83467	101358	91074	109823	98681	118288	106288
50C-280	100	0°	191332	199029	212653	221212	233974	243395	255294	265578	276615	287760	297936	309943
		45°	74790	70151	83124	77970	91458	85789	99792	93607	108126	101426	116460	109245
		90°	107842	97174	119859	108005	131876	118835	143893	129666	155910	140496	167927	151327
50C-300	84	0°	219641	230447	244117	256131	268592	281814	293068	307498	317543	333182	342018	358865
		45°	85855	81225	95423	90278	104990	99330	114557	108383	124124	117436	133691	126488
		90°	123798	112513	137593	125053	151388	137593	165184	150133	178979	162673	192774	175213
50C-350	63	0°	298957	318470	332270	353963	365584	389455	398898	424947	-	-	-	-
		45°	116859	112250	129881	124760	142903	137270	155925	149780	-	-	-	-
		90°	168503	155490	187280	172819	206056	190148	224833	207477	-	-	-	-
80C-300	100	0°	256248	264101	284803	293537	313358	322974	341912	352410	370467	381846	399021	411282
		45°	100165	93087	111326	103462	122488	113838	133650	124213	144812	134588	155973	144964
		90°	144431	128945	160525	143317	176620	157689	192714	172061	208809	186433	224903	200805
80C-350	91	0°	348783	366795	387649	407675	426515	448554	465381	489434	504247	530314	543113	571193
		45°	136336	129283	151528	143692	166720	158101	181913	172510	197105	186918	212297	201327
		90°	196587	179084	218493	199043	240399	219003	262306	238962	284212	258921	306118	278880

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA/OLGAS Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			75		80		85		90		95		100	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-235	75	0°	172411	178846	-	-	-	-	-	-	-	-	-	-
		45°	67394	63037	-	-	-	-	-	-	-	-	-	-
		90°	97177	87320	-	-	-	-	-	-	-	-	-	-
18C-280	53	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
18C-300	45	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
18C-350	33	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
32C-235	100	0°	202396	209950	215912	223972	229429	237995	242945	252018	256462	266040	269979	280063
		45°	79114	74000	84398	78943	89681	83885	94965	88828	100248	93770	105532	98713
		90°	114078	102506	121696	109352	129314	116199	136933	123045	144551	129892	152170	136738
32C-280	75	0°	287331	298913	306520	318878	-	-	-	-	-	-	-	-
		45°	112315	105357	119815	112394	-	-	-	-	-	-	-	-
		90°	161950	145942	172766	155689	-	-	-	-	-	-	-	-
32C-300	65	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
32C-350	50	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
50C-235	100	0°	224884	233277	239903	248858	254921	264439	269939	280020	284958	295600	299976	311181
		45°	87905	82223	93775	87714	99646	93206	105516	98698	111387	104189	117258	109681
		90°	126753	113895	135218	121503	143683	129110	152148	136717	160613	144324	169077	151931
50C-280	100	0°	319257	332126	340577	354309	361898	376491	383219	398674	404540	420857	425860	443040
		45°	124794	117063	133128	124882	141462	132701	149796	140520	158130	148338	166465	156157
		90°	179945	162157	191962	172988	203979	183818	215996	194649	228013	205480	240031	216310
50C-300	84	0°	366494	384549	390969	410233	415444	435917	-	-	-	-	-	-
		45°	143259	135541	152826	144594	162393	153646	-	-	-	-	-	-
		90°	206569	187753	220364	200292	234160	212832	-	-	-	-	-	-
50C-350	63	0°	-	-	-	-	-	-	-	-	-	-	-	
		45°	-	-	-	-	-	-	-	-	-	-	-	
		90°	-	-	-	-	-	-	-	-	-	-	-	
80C-300	100	0°	427576	440718	456131	470155	484685	499591	513240	529027	541794	558463	570349	587899
		45°	167135	155339	178297	165714	189459	176090	200620	186465	211782	196840	222944	207215
		90°	240997	215177	257092	229549	273186	243921	289281	258293	305375	272665	321470	287036
80C-350	91	0°	581979	612073	620845	652953	659711	693833	698577	734712	-	-	-	-
		45°	227490	215736	242682	230145	257874	244554	273067	258962	-	-	-	-
		90°	328024	298839	349931	318798	371837	338758	393743	358717	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

OLGA Double-Acting Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Models 0.3S-45 to 14S-350

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			15		20		25		30		35		40	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-45	100	0°	213	189	287	256	362	323	436	390	511	457	585	524
		45°	135	107	182	145	229	183	276	221	324	259	371	297
		90°	243	175	328	237	414	300	499	362	584	424	669	486
0.3S-75	73	0°	602	597	809	803	1016	1010	1223	1216	1430	1422	1637	1628
		45°	381	338	513	455	644	572	775	689	906	805	1038	922
		90°	688	554	925	746	1162	937	1399	1128	1635	1320	1872	1511
0.3S-100	40	0°	1078	1097	1446	1472	1814	1847	2182	2222	2550	2598	-	-
		45°	683	621	917	834	1150	1046	1383	1259	1617	1472	-	-
		90°	1233	1018	1653	1366	2074	1714	2495	2062	2916	2411	-	-
0.9S-100	100	0°	1246	1268	1672	1702	2097	2136	2523	2570	2948	3004	3374	3438
		45°	790	718	1060	964	1330	1210	1599	1456	1869	1702	2139	1948
		90°	1425	1177	1912	1579	2399	1982	2885	2385	3372	2788	3858	3190
0.9S-135	57	0°	2287	2335	3063	3127	3838	3920	4613	4713	5389	5506	6164	6299
		45°	1450	1322	1942	1772	2434	2221	2925	2670	3417	3119	3909	3568
		90°	2616	2166	3503	2902	4390	3638	5276	4374	6163	5109	7050	5845
1.5S-135	69	0°	3138	3203	4201	4290	5265	5378	6329	6466	7393	7553	8457	8641
		45°	1835	1667	2458	2234	3080	2800	3702	3366	4325	3932	4947	4499
		90°	3027	2507	4054	3359	5080	4210	6106	5061	7133	5913	8159	6764
1.5S-175	40	0°	5291	5439	7078	7279	8866	9119	10653	10959	12441	12799	14229	14639
		45°	3095	2832	4141	3790	5186	4748	6232	5706	7278	6664	8324	7622
		90°	5104	4258	6829	5698	8554	7139	10278	8579	12003	10019	13728	11460
3S-135	84	0°	5126	5232	6864	7009	8602	8786	10339	10562	12077	12339	13815	14116
		45°	3039	2763	4070	3702	5100	4640	6131	5578	7161	6517	8192	7455
		90°	5088	4214	6813	5645	8538	7076	10263	8507	11988	9938	13713	11369
3S-175	50	0°	8643	8886	11563	11892	14483	14897	17404	17903	20324	20909	23244	23915
		45°	5125	4693	6857	6280	8588	7868	10320	9455	12052	11043	13783	12630
		90°	8580	7157	11478	9578	14377	11999	17276	14420	20174	16841	23073	19262
6S-175	85	0°	10087	10370	13495	13878	16902	17385	20310	20893	23718	24401	27126	27909
		45°	5992	5487	8017	7343	10041	9200	12066	11056	14090	12912	16115	14768
		90°	10051	8384	13447	11220	16843	14057	20239	16893	23634	19729	27030	22565
6S-200	66	0°	13210	13459	17661	17999	22112	22539	26563	27079	31015	31618	35466	36158
		45°	7848	7122	10492	9524	13136	11927	15781	14329	18425	16731	21069	19133
		90°	13164	10882	17599	14553	22034	18223	26470	21894	30905	25564	35340	29235
14S-200	100	0°	14655	14931	19593	19968	24531	25004	29469	30040	34407	35077	39345	40113
		45°	8573	7774	11462	10396	14351	13018	17239	15641	20128	18263	23017	20885
		90°	14139	11689	18903	15631	23668	19574	28432	23517	33196	27459	37960	31402
14S-235	84	0°	20274	21229	27092	28372	33909	35515	40727	42658	47544	49801	54362	56944
		45°	11860	11053	15849	14772	19837	18491	23825	22210	27813	25929	31802	29648
		90°	19561	16619	26138	22211	32716	27803	39293	33394	45871	38986	52448	44578
14S-280	59	0°	28783	30226	38461	40396	48139	50565	57818	60735	67496	70904	77174	81074
		45°	16838	15737	22500	21032	28162	26327	33823	31622	39485	36916	45147	42211
		90°	27770	23662	37107	31623	46445	39584	55783	47545	65120	55506	74458	63468
14S-300	51	0°	33042	34999	44152	46774	55262	58548	66373	70323	77483	82097	88593	93872
		45°	19329	18222	25829	24353	32328	30483	38828	36614	45328	42744	51827	48875
		90°	31878	27399	42598	36616	53317	45834	64036	55051	74755	64269	85475	73486
14S-350	37	0°	44973	48373	60096	64644	75218	80915	90341	97186	105463	113457	-	-
		45°	26309	25185	35156	33657	44003	42129	52849	50600	61696	59072	-	-
		90°	43390	37868	57980	50606	72570	63343	87160	76081	101751	88819	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA/OLGAS Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			45		50		55		60		65		70	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-45	100	0°	660	591	734	658	809	725	883	792	958	859	1032	926
		45°	418	335	465	373	513	411	560	449	607	486	654	524
		90°	755	548	840	611	925	673	1010	735	1095	797	1181	859
0.3S-75	73	0°	1844	1835	2051	2041	2258	2247	2465	2453	-	-	-	-
		45°	1169	1039	1300	1156	1431	1273	1563	1390	-	-	-	-
		90°	2109	1702	2345	1894	2582	2085	2819	2277	-	-	-	-
0.3S-100	40	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-100	100	0°	3799	3872	4225	4306	4650	4740	5076	5174	5501	5608	5926	6042
		45°	2409	2193	2679	2439	2949	2685	3218	2931	3488	3177	3758	3423
		90°	4345	3593	4832	3996	5318	4398	5805	4801	6292	5204	6778	5607
0.9S-135	57	0°	6940	7091	7715	7884	-	-	-	-	-	-	-	-
		45°	4400	4017	4892	4467	-	-	-	-	-	-	-	-
		90°	7937	6581	8824	7317	-	-	-	-	-	-	-	-
1.5S-135	69	0°	9520	9728	10584	10816	11648	11904	12712	12991	13775	14079	-	-
		45°	5569	5065	6192	5631	6814	6197	7436	6764	8059	7330	-	-
		90°	9185	7616	10212	8467	11238	9319	12264	10170	13291	11021	-	-
1.5S-175	40	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
3S-135	84	0°	15553	15893	17291	17669	19028	19446	20766	21223	22504	23000	24242	24776
		45°	9222	8393	10253	9332	11283	10270	12314	11209	13344	12147	14375	13085
		90°	15438	12800	17163	14231	18888	15663	20613	17094	22338	18525	24063	19956
3S-175	50	0°	26164	26920	29084	29926	-	-	-	-	-	-	-	-
		45°	15515	14218	17247	15805	-	-	-	-	-	-	-	-
		90°	25972	21682	28870	24103	-	-	-	-	-	-	-	-
6S-175	85	0°	30534	31416	33942	34924	37350	38432	40757	41940	44165	45447	47573	48955
		45°	18139	16624	20164	18480	22189	20337	24213	22193	26238	24049	28262	25905
		90°	30426	25401	33822	28237	37218	31073	40613	33910	44009	36746	47405	39582
6S-200	66	0°	39917	40698	44368	45238	48819	49778	53270	54317	57721	58857	-	-
		45°	23714	21536	26358	23938	29002	26340	31647	28743	34291	31145	-	-
		90°	39776	32906	44211	36576	48646	40247	53082	43917	57517	47588	-	-
14S-200	100	0°	44283	45149	49221	50186	54159	55222	59096	60258	64034	65295	68972	70331
		45°	25905	23507	28794	26129	31683	28752	34571	31374	37460	33996	40349	36618
		90°	42724	35345	47488	39287	52252	43230	57016	47173	61780	51115	66544	55058
14S-235	84	0°	61179	64087	67996	71230	74814	78373	81631	85515	88449	92658	95266	99801
		45°	35790	33367	39778	37086	43766	40805	47754	44524	51743	48243	55731	51962
		90°	59025	50170	65603	55761	72180	61353	78758	66945	85335	72536	91913	78128
14S-280	59	0°	86853	91243	96531	101413	106209	111582	-	-	-	-	-	-
		45°	50809	47506	56471	52801	62133	58096	-	-	-	-	-	-
		90°	83795	71429	93133	79390	102471	87351	-	-	-	-	-	-
14S-300	51	0°	99703	105646	110814	117421	-	-	-	-	-	-	-	-
		45°	58327	55005	64826	61136	-	-	-	-	-	-	-	-
		90°	96194	82704	106913	91922	-	-	-	-	-	-	-	-
14S-350	37	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			75		80		85		90		95		100	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-45	100	0°	1107	993	1181	1060	1256	1127	1330	1194	1405	1261	1479	1328
		45°	702	562	749	600	796	638	843	676	891	714	938	752
		90°	1266	922	1351	984	1436	1046	1522	1108	1607	1170	1692	1233
0.3S-75	73	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-100	40	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-100	100	0°	6352	6476	6777	6910	7203	7344	7628	7777	-	-	-	-
		45°	4028	3669	4298	3914	4567	4160	4837	4406	-	-	-	-
		90°	7265	6009	7752	6412	8238	6815	8725	7218	-	-	-	-
0.9S-135	57	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-135	69	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-175	40	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
3S-135	84	0°	25979	26553	27717	28330	-	-	-	-	-	-	-	-
		45°	15405	14024	16436	14962	-	-	-	-	-	-	-	-
		90°	25788	21387	27513	22818	-	-	-	-	-	-	-	-
3S-175	50	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
6S-175	85	0°	50981	52463	54389	55970	57797	59478	-	-	-	-	-	-
		45°	30287	27761	32311	29617	34336	31474	-	-	-	-	-	-
		90°	50801	42418	54197	45254	57593	48090	-	-	-	-	-	-
6S-200	66	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14S-200	100	0°	73910	75367	78848	80404	83786	85440	88724	90476	93662	95513	98600	100549
		45°	43238	39240	46126	41863	49015	44485	51904	47107	54792	49729	57681	52351
		90°	71309	59000	76073	62943	80837	66886	85601	70828	90365	74771	95129	78714
14S-235	84	0°	102083	106944	108901	114087	-	-	-	-	-	-	-	-
		45°	59719	55681	63707	59400	-	-	-	-	-	-	-	-
		90°	98490	83720	105067	89312	-	-	-	-	-	-	-	-
14S-280	59	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14S-300	51	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
14S-350	37	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (barg)

OLGA Double-Acting Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Models 18S-235 to 80S-350

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			15		20		25		30		35		40	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-235	100	0°	23309	24407	31147	32619	38985	40831	46823	49043	54660	57255	62498	65467
		45°	13640	12711	18226	16988	22813	21265	27399	25542	31986	29819	36572	34096
		90°	22503	19119	30069	25551	37636	31984	45202	38416	52769	44849	60335	51282
18S-280	77	0°	33091	34750	44218	46442	55345	58133	66472	69825	77599	81517	88725	93208
		45°	19364	18098	25875	24188	32386	30277	38898	36366	45409	42455	51920	48545
		90°	31946	27221	42688	36379	53430	45537	64172	54696	74913	63854	85655	73012
18S-300	66	0°	37987	40238	50760	53775	63534	67312	76307	80848	89080	94385	101853	107922
		45°	22229	20956	29704	28007	37178	35057	44653	42107	52128	49157	59602	56208
		90°	36673	31519	49004	42123	61335	52727	73666	63330	85998	73934	98329	84538
18S-350	48	0°	51705	55613	69091	74319	86476	93026	103862	111733	121248	130439	138634	149146
		45°	30256	28964	40430	38707	50604	48450	60778	58192	70952	67935	81125	77678
		90°	49916	43563	66700	58216	83484	72869	100268	87523	117052	102176	133837	116829
32S-235	100	0°	27014	28286	36097	37804	45181	47321	54265	56838	63348	66355	72432	75872
		45°	16019	14939	21405	19966	26792	24992	32178	30018	37565	35045	42951	40071
		90°	26815	22783	35832	30448	44849	38114	53866	45779	62882	53445	71899	61110
32S-280	100	0°	38350	40273	51246	53823	64141	67373	77037	80923	89932	94473	102827	108023
		45°	22741	21270	30388	28426	38035	35583	45682	42739	53329	49895	60976	57052
		90°	38069	32438	50869	43351	63670	54265	76470	65178	89271	76092	102072	87005
32S-300	100	0°	44025	46633	58828	62322	73632	78010	88435	93698	103238	109387	118042	125075
		45°	26106	24629	34885	32915	43663	41200	52441	49486	61220	57772	69998	66058
		90°	43701	37560	58396	50196	73090	62832	87785	75468	102479	88104	117174	100740
32S-350	73	0°	59923	64452	80072	86132	100221	107811	120370	129491	140519	151171	160668	172851
		45°	35534	34040	47482	45490	59430	56940	71379	68390	83327	79840	95275	91290
		90°	59482	51912	79483	69373	99484	86835	119485	104297	139486	121759	159487	139220
50S-235	100	0°	30016	31429	40108	42004	50201	52579	60294	63153	70387	73728	80480	84303
		45°	17799	16599	23784	22184	29769	27769	35754	33354	41739	38939	47724	44524
		90°	29795	25314	39813	33831	49832	42349	59851	50866	69869	59383	79888	67900
50S-280	100	0°	42612	44748	56940	59804	71268	74859	85596	89915	99925	104970	114253	120025
		45°	25268	23633	33765	31585	42261	39536	50758	47488	59255	55439	67751	63391
		90°	42298	36042	56521	48168	70744	60294	84967	72420	99190	84547	113413	96673
50S-300	100	0°	48917	51815	65365	69246	81813	86678	98261	104109	114709	121541	131158	138972
		45°	29007	27366	38761	36572	48514	45778	58268	54985	68022	64191	77776	73398
		90°	48557	41733	64884	55773	81212	69813	97539	83853	113866	97893	130193	111933
50S-350	93	0°	66581	71613	88969	95702	111357	119791	133745	143879	156132	167968	178520	192057
		45°	39482	37822	52758	50544	66034	63267	79310	75989	92586	88711	105861	101434
		90°	66092	57680	88315	77082	110538	96484	132761	115886	154985	135287	177208	154689
80S-300	100	0°	57069	59375	76259	79354	95449	99332	114638	119310	133828	139289	153017	159267
		45°	33842	31359	45221	41910	56600	52462	67980	63013	79359	73564	90738	84116
		90°	56650	47823	75698	63914	94747	80005	113795	96097	132844	112188	151892	128279
80S-350	100	0°	77678	82473	103797	110218	129916	137963	156035	165708	182155	193453	208274	221198
		45°	46062	43558	61551	58211	77039	72865	92528	87518	108017	102171	123505	116825
		90°	77107	66427	103034	88774	128961	111121	154888	133468	180816	155814	206743	178161

NOTE:

* MOP = Maximum Operating Pressure (barg)

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			45		50		55		60		65		70	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-235	100	0°	70336	73679	78174	81891	86012	90103	93849	98315	101687	106527	109525	114739
		45°	41159	38373	45745	42650	50332	46927	54918	51204	59505	55481	64091	59758
		90°	67902	57714	75469	64147	83035	70580	90602	77012	98168	83445	105735	89878
18S-280	77	0°	99852	104900	110979	116592	122106	128283	133233	139975	144360	151667	155487	163358
		45°	58431	54634	64943	60723	71454	66812	77965	72902	84476	78991	90987	85080
		90°	96397	82171	107139	91329	117881	100487	128623	109646	139365	118804	150107	127962
18S-300	66	0°	114627	121459	127400	134996	140173	148533	152946	162069	165720	175606	-	-
		45°	67077	63258	74551	70308	82026	77359	89501	84409	96975	91459	-	-
		90°	110660	95142	122991	105745	135323	116349	147654	126953	159985	137557	-	-
18S-350	48	0°	156020	167852	-	-	-	-	-	-	-	-	-	-
		45°	91299	87421	-	-	-	-	-	-	-	-	-	-
		90°	150621	131483	-	-	-	-	-	-	-	-	-	-
32S-235	100	0°	81515	85389	90599	94907	99682	104424	108766	113941	117849	123458	126933	132975
		45°	48338	45098	53724	50124	59111	55151	64497	60177	69884	65204	75270	70230
		90°	80916	68776	89933	76441	98949	84107	107966	91772	116983	99438	126000	107103
32S-280	100	0°	115723	121573	128618	135123	141514	148672	154409	162222	167304	175772	180200	189322
		45°	68623	64208	76270	71364	83917	78521	91564	85677	99211	92833	106857	99990
		90°	114872	97919	127673	108833	140473	119746	153274	130660	166075	141573	178875	152487
32S-300	100	0°	132845	140763	147649	156452	162452	172140	177255	187829	192059	203517	206862	219205
		45°	78776	74343	87555	82629	96333	90915	105111	99201	113890	107486	122668	115772
		90°	131869	113376	146563	126012	161258	138648	175952	151284	190647	163920	205342	176556
32S-350	73	0°	180817	194531	200966	216211	221115	237890	241264	259570	261414	281250	281563	302930
		45°	107224	102740	119172	114191	131120	125641	143068	137091	155017	148541	166965	159991
		90°	179488	156682	199489	174144	219490	191606	239491	209067	259492	226529	279493	243991
50S-235	100	0°	90572	94877	100665	105452	110758	116026	120851	126601	130944	137176	141036	147750
		45°	53709	50109	59694	55694	65679	61279	71664	66864	77649	72449	83634	78034
		90°	89907	76418	99925	84935	109944	93452	119962	101969	129981	110486	140000	119004
50S-280	100	0°	128581	135081	142909	150136	157237	165192	171566	180247	185894	195303	200222	210358
		45°	76248	71342	84744	79294	93241	87245	101737	95197	110234	103148	118731	111100
		90°	127636	108799	141859	120925	156082	133051	170304	145178	184527	157304	198750	169430
50S-300	100	0°	147606	156404	164054	173835	180502	191267	196950	208698	213399	226130	229847	243562
		45°	87529	82604	97283	91810	107037	101017	116790	110223	126544	119429	136298	128636
		90°	146521	125973	162848	140013	179175	154053	195503	168093	211830	182133	228157	196173
50S-350	93	0°	200908	216145	223296	240234	245684	264323	268072	288411	290460	312500	312847	336589
		45°	119137	114156	132413	126878	145689	139601	158965	152323	172241	165046	185517	177768
		90°	199431	174091	221654	193493	243878	212895	266101	232297	288324	251699	310548	271101
80S-300	100	0°	172207	179245	191396	199223	210586	219202	229776	239180	248965	259158	268155	279137
		45°	102118	94667	113497	105219	124876	115770	136256	126322	147635	136873	159014	147425
		90°	170941	144371	189989	160462	209038	176553	228087	192644	247135	208736	266184	224827
80S-350	100	0°	234393	248943	260512	276688	286631	304433	312750	332178	338870	359923	364989	387668
		45°	138994	131478	154482	146132	169971	160785	185459	175439	200948	190092	216436	204745
		90°	232670	200508	258597	222855	284524	245202	310451	267549	336378	289896	362306	312242

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA/OLGAS Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			75		80		85		90		95		100	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-235	100	0°	117363	122951	125201	131163	133038	139375	140876	147587	148714	155799	156552	164011
		45°	68678	64035	73265	68312	77851	72589	82438	76866	87024	81143	91611	85420
		90°	113302	96310	120868	102743	128435	109176	136001	115608	143568	122041	151135	128474
18S-280	77	0°	166614	175050	-	-	-	-	-	-	-	-	-	-
		45°	97499	91169	-	-	-	-	-	-	-	-	-	-
		90°	160849	137121	-	-	-	-	-	-	-	-	-	-
18S-300	66	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
18S-350	48	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
32S-235	100	0°	136016	142493	145100	152010	154183	161527	163267	171044	172350	180561	181434	190078
		45°	80657	75257	86043	80283	91430	85310	96816	90336	102203	95363	107589	100389
		90°	135016	114769	144033	122434	153050	130100	162067	137765	171083	145431	180100	153096
32S-280	100	0°	193095	202872	205991	216422	218886	229972	231781	243522	244677	257072	257572	270621
		45°	114504	107146	122151	114302	129798	121459	137445	128615	145092	135771	152739	142927
		90°	191676	163400	204476	174314	217277	185228	230078	196141	242878	207055	255679	217968
32S-300	100	0°	221666	234894	236469	250582	251272	266270	266076	281959	280879	297647	295683	313336
		45°	131446	124058	140225	132344	149003	140630	157781	148915	166560	157201	175338	165487
		90°	220036	189192	234731	201828	249425	214464	264120	227100	278814	239736	293509	252372
32S-350	73	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
50S-235	100	0°	151129	158325	161222	168900	171315	179474	181408	190049	191500	200624	201593	211198
		45°	89619	83619	95604	89204	101589	94789	107574	100373	113559	105958	119544	111543
		90°	150018	127521	160037	136038	170055	144555	180074	153072	190093	161590	200111	170107
50S-280	100	0°	214550	225413	228879	240469	243207	255524	257535	270580	271863	285635	286192	300691
		45°	127227	119051	135724	127002	144220	134954	152717	142905	161213	150857	169710	158808
		90°	212973	181556	227196	193682	241419	205809	255642	217935	269865	230061	284088	242187
50S-300	100	0°	246295	260993	262743	278425	279192	295856	295640	313288	312088	330719	328536	348151
		45°	146052	137842	155805	147049	165559	156255	175313	165461	185066	174668	194820	183874
		90°	244485	210213	260812	224253	277139	238293	293467	252333	309794	266373	326121	280413
50S-350	93	0°	335235	360677	357623	384766	380011	408855	402399	432943	-	-	-	-
		45°	198793	190490	212069	203213	225344	215935	238620	228657	-	-	-	-
		90°	332771	290503	354994	309905	377217	329307	399441	348709	-	-	-	-
80S-300	100	0°	287344	299115	306534	319093	325724	339072	344913	359050	364103	379028	383292	399007
		45°	170394	157976	181773	168528	193152	179079	204532	189631	215911	200182	227290	210734
		90°	285232	240918	304281	257009	323329	273101	342378	289192	361426	305283	380475	321375
80S-350	100	0°	391108	415413	417227	443158	443346	470903	469465	498648	495585	526393	521704	554138
		45°	231925	219399	247413	234052	262902	248706	278390	263359	293879	278013	309368	292666
		90°	388233	334589	414160	356936	440087	379283	466014	401630	491941	423977	517869	446323

NOTE:

* MOP = Maximum Operating Pressure (barg)

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Close

Models 0.3C-008A-45-CL to 6C-3800-200-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)														
					15			20			25			30			35		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-45-CL	100	203	115	193	-	-	-	246	25	25	365	87	92	484	136	159	602	183	226
0.3C-008A-75-CL	49	196	110	179	748	240	308	1077	370	494	1407	499	680	1737	628	865	2067	757	1051
0.3C-008B-45-CL	100	309	157	192	-	-	-	-	-	-	-	-	-	485	49	49	604	116	116
0.3C-008B-75-CL	49	302	151	177	749	184	198	1079	318	384	1409	448	570	1738	578	756	2068	707	941
0.3C-008C-45-CL	100	372	192	245	-	-	-	-	-	-	-	-	-	-	-	-	551	48	48
0.3C-008C-75-CL	49	365	186	231	696	130	130	1026	277	316	1355	409	501	1685	539	687	2015	669	873
0.3C-0100-45-CL	100	598	328	502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-75-CL	53	590	322	487	-	-	-	770	67	67	1100	248	253	1430	385	439	1760	517	625
0.3C-0100-100-CL	30	584	318	475	1199	290	308	1785	527	639	2371	759	969	2957	990	1300	-	-	-
0.3C-0150-45-CL	100	752	443	818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-75-CL	58	745	438	804	-	-	-	-	-	-	785	75	75	1115	254	261	1444	391	447
0.3C-0150-100-CL	33	739	434	791	883	131	131	1470	401	461	2056	635	792	2642	866	1122	-	-	-
0.9C-0200-100-CL	74	987	576	1039	898	7	7	1576	372	389	2254	648	771	2932	917	1153	3610	1184	1535
0.9C-0200-135-CL	41	979	571	1023	2557	768	941	3792	1256	1638	5028	1740	2334	6263	2224	3030	7499	2708	3727
0.9C-0250-100-CL	77	1181	720	1435	-	-	-	1181	166	166	1859	489	548	2537	761	930	3215	1029	1312
0.9C-0250-135-CL	42	1173	714	1420	2162	611	719	3397	1100	1415	4633	1585	2111	5868	2070	2808	7104	2553	3504
0.9C-0350-100-CL	81	1875	1103	2023	-	-	-	-	-	-	-	-	-	1952	177	177	2630	559	559
0.9C-0350-135-CL	45	1867	1097	2007	-	-	-	2812	644	662	4047	1151	1358	5283	1642	2055	6518	2129	2751
0.9C-0400-100-CL	87	2210	1352	2711	-	-	-	-	-	-	-	-	-	-	-	-	1944	173	173
0.9C-0400-135-CL	47	2203	1346	2695	-	-	-	2127	276	276	3362	874	972	4598	1370	1668	5833	1859	2365
0.9C-0700-100-CL	93	3124	1874	3599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-135-CL	51	3116	1869	3583	-	-	-	-	-	-	-	-	-	3713	670	670	4949	1252	1367
1.5C-1100-135-CL	65	5773	3245	5306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-175-CL	39	5758	3234	5276	-	-	-	-	-	-	7649	1001	1001	10275	2392	2480	12900	3478	3960
1.5C-1200-135-CL	71	6685	3937	7235	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-175-CL	42	6670	3926	7205	-	-	-	-	-	-	-	-	-	8354	1429	1429	10979	2708	2908
3C-2000-135-CL	80	9844	5938	11537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-175-CL	48	9819	5920	11488	-	-	-	-	-	-	9918	1210	1210	14263	3449	3659	18609	5222	6108
6C-2500-175-CL	76	14038	8583	17194	-	-	-	-	-	-	-	-	-	12928	1416	1416	18008	4150	4279
6C-2500-200-CL	58	14033	8579	17183	-	-	-	-	-	-	15614	2930	2930	22249	5914	6670	28885	8574	10410
6C-3800-175-CL	84	18963	11945	25641	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-200-CL	64	18958	11941	25631	-	-	-	-	-	-	-	-	-	13836	1095	1095	20471	4699	4834

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)																	
		40			45			50			55			60					
		BTC	RTC	ETC	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-45-CL	100	203	115	193	721	230	293	840	277	360	958	323	427	1077	370	494	1196	416	561
0.3C-008A-75-CL	49	196	110	179	2396	886	1237	2726	1015	1423	-	-	-	-	-	-	-	-	-
0.3C-008B-45-CL	100	309	157	192	723	173	183	841	222	250	960	270	317	1079	318	384	1198	365	451
0.3C-008B-75-CL	49	302	151	177	2398	836	1127	2728	966	1313	-	-	-	-	-	-	-	-	-
0.3C-008C-45-CL	100	372	192	245	669	115	115	788	178	182	907	228	249	1026	277	316	1144	324	382
0.3C-008C-75-CL	49	365	186	231	2345	798	1059	2675	927	1245	-	-	-	-	-	-	-	-	-
0.3C-0100-45-CL	100	598	328	502	-	-	-	-	-	-	-	-	-	770	67	67	889	134	134
0.3C-0100-75-CL	53	590	322	487	2089	648	810	2419	778	996	2749	908	1182	-	-	-	-	-	-
0.3C-0100-100-CL	30	584	318	475	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-CL	100	752	443	818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-75-CL	58	745	438	804	1774	523	633	2104	654	819	2434	784	1005	2764	914	1190	-	-	-
0.3C-0150-100-CL	33	739	434	791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-CL	74	987	576	1039	4288	1450	1917	4966	1716	2299	5644	1982	2681	6322	2247	3063	6999	2513	3445
0.9C-0200-135-CL	41	979	571	1023	8734	3191	4423	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-CL	77	1181	720	1435	3893	1295	1694	4571	1561	2076	5249	1827	2458	5926	2092	2841	6604	2358	3223
0.9C-0250-135-CL	42	1173	714	1420	8339	3037	4200	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-CL	81	1875	1103	2023	3307	852	941	3985	1126	1323	4663	1396	1705	5341	1665	2088	6019	1932	2470
0.9C-0350-135-CL	45	1867	1097	2007	7754	2614	3447	8989	3098	4144	-	-	-	-	-	-	-	-	-
0.9C-0400-100-CL	87	2210	1352	2711	2622	555	555	3300	849	937	3978	1123	1319	4656	1393	1701	5334	1662	2083
0.9C-0400-135-CL	47	2203	1346	2695	7069	2345	3061	8304	2830	3758	-	-	-	-	-	-	-	-	-
0.9C-0700-100-CL	93	3124	1874	3599	-	-	-	-	-	-	3094	321	321	3772	703	703	4450	1043	1085
0.9C-0700-135-CL	51	3116	1869	3583	6184	1752	2063	7420	2244	2760	8655	2733	3456	-	-	-	-	-	-
1.5C-1100-135-CL	65	5773	3245	5306	7048	662	662	8611	1543	1543	10173	2348	2423	11735	3003	3304	13298	3639	4184
1.5C-1100-175-CL	39	5758	3234	5276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-135-CL	71	6685	3937	7235	-	-	-	6690	491	491	8252	1371	1371	9814	2211	2252	11377	2873	3133
1.5C-1200-175-CL	42	6670	3926	7205	13604	3778	4388	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-135-CL	80	9844	5938	11537	8923	649	649	11509	2107	2107	14095	3378	3564	16681	4445	5022	19267	5486	6479
3C-2000-175-CL	48	9819	5920	11488	22954	6953	8557	27299	8671	11006	-	-	-	-	-	-	-	-	-
6C-2500-175-CL	76	14038	8583	17194	23088	6254	7143	28168	8288	10006	33248	10302	12869	38328	12306	15733	43408	14305	18596
6C-2500-200-CL	58	14033	8579	17183	35520	11200	14150	42155	13813	17890	48790	16419	21629	55425	19022	25369	-	-	-
6C-3800-175-CL	84	18963	11945	25641	14674	1567	1567	19754	4382	4431	24835	6520	7294	29915	8567	10157	34995	10588	13020
6C-3800-200-CL	64	18958	11941	25631	27106	7441	8574	33741	10091	12314	40377	12716	16054	47012	15330	19794	53647	17937	23534

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	65			70			75			80		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-45-CL	100	203	115	193	1315	463	627	1433	509	694	1552	556	761	1671	602	828
0.3C-008A-75-CL	49	196	110	179	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008B-45-CL	100	309	157	192	1316	412	518	1435	458	584	1554	505	651	1672	552	718
0.3C-008B-75-CL	49	302	151	177	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-45-CL	100	372	192	245	1263	372	449	1382	419	516	1500	466	583	1619	513	650
0.3C-008C-75-CL	49	365	186	231	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-45-CL	100	598	328	502	1007	201	201	1126	259	268	1245	310	335	1364	358	401
0.3C-0100-75-CL	53	590	322	487	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-100-CL	30	584	318	475	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-CL	100	752	443	818	692	23	23	811	90	90	930	157	157	1049	224	224
0.3C-0150-75-CL	58	745	438	804	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-100-CL	33	739	434	791	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-CL	74	987	576	1039	7677	2778	3827	8355	3043	4210	-	-	-	-	-	-
0.9C-0200-135-CL	41	979	571	1023	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-CL	77	1181	720	1435	7282	2623	3605	7960	2889	3987	8638	3154	4369	-	-	-
0.9C-0250-135-CL	42	1173	714	1420	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-CL	81	1875	1103	2023	6697	2199	2852	7375	2465	3234	8053	2731	3616	8731	2997	3998
0.9C-0350-135-CL	45	1867	1097	2007	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-100-CL	87	2210	1352	2711	6012	1929	2466	6690	2196	2848	7368	2462	3230	8045	2728	3612
0.9C-0400-135-CL	47	2203	1346	2695	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-100-CL	93	3124	1874	3599	5127	1325	1468	5805	1600	1850	6483	1872	2232	7161	2142	2614
0.9C-0700-135-CL	51	3116	1869	3583	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-135-CL	65	5773	3245	5306	14860	4265	5065	-	-	-	-	-	-	-	-	-
1.5C-1100-175-CL	39	5758	3234	5276	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-135-CL	71	6685	3937	7235	12939	3510	4013	14501	4138	4894	-	-	-	-	-	-
1.5C-1200-175-CL	42	6670	3926	7205	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-135-CL	80	9844	5938	11537	21853	6517	7937	24439	7541	9394	27024	8562	10852	29610	9581	12309
3C-2000-175-CL	48	9819	5920	11488	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-175-CL	76	14038	8583	17194	48488	16301	21459	53568	18294	24322	58648	20285	27186	-	-	-
6C-2500-200-CL	58	14033	8579	17183	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-175-CL	84	18963	11945	25641	40075	12597	15884	45155	14599	18747	50235	16597	21610	55315	18593	24474
6C-3800-200-CL	64	18958	11941	25631	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					85			90			95			100		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-45-CL	100	203	115	193	1790	649	895	1908	695	962	2027	742	1029	2146	788	1096
0.3C-008A-75-CL	49	196	110	179	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008B-45-CL	100	309	157	192	1791	598	785	1910	645	852	2029	692	919	2147	738	986
0.3C-008B-75-CL	49	302	151	177	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-45-CL	100	372	192	245	1738	560	717	1857	606	784	1975	653	851	2094	700	918
0.3C-008C-75-CL	49	365	186	231	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-45-CL	100	598	328	502	1482	406	468	1601	454	535	1720	502	602	1839	549	669
0.3C-0100-75-CL	53	590	322	487	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-100-CL	30	584	318	475	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-CL	100	752	443	818	1167	277	291	1286	327	358	1405	375	425	1523	423	491
0.3C-0150-75-CL	58	745	438	804	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-100-CL	33	739	434	791	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-CL	74	987	576	1039	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-135-CL	41	979	571	1023	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-CL	77	1181	720	1435	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-135-CL	42	1173	714	1420	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-CL	81	1875	1103	2023	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-135-CL	45	1867	1097	2007	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-100-CL	87	2210	1352	2711	8723	2994	3994	-	-	-	-	-	-	-	-	-
0.9C-0400-135-CL	47	2203	1346	2695	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-100-CL	93	3124	1874	3599	7839	2410	2996	8517	2678	3378	-	-	-	-	-	-
0.9C-0700-135-CL	51	3116	1869	3583	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-135-CL	65	5773	3245	5306	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-175-CL	39	5758	3234	5276	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-135-CL	71	6685	3937	7235	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-175-CL	42	6670	3926	7205	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-135-CL	80	9844	5938	11537	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-175-CL	48	9819	5920	11488	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-175-CL	76	14038	8583	17194	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-200-CL	58	14033	8579	17183	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-175-CL	84	18963	11945	25641	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-200-CL	64	18958	11941	25631	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Close

Models 14C-5100-200-CL to 50C-15600-350-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					15			20			25			30		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14C-5100-200-CL	100	22753	14367	31007	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-235-CL	75	22738	14356	30976	-	-	-	-	-	-	18662	2598	2598	28675	7431	8241
14C-5100-280-CL	53	22679	14312	30855	-	-	-	25347	6049	6366	39561	11802	14377	53775	17416	22388
14C-5100-300-CL	46	22649	14291	30794	17388	1879	1879	33705	9466	11076	50022	15938	20273	66339	22354	29470
14C-5100-350-CL	34	22566	14230	30624	34911	9949	11756	57121	18732	24274	79330	27448	36792	101539	36146	49310
14C-5400-200-CL	100	29467	18157	37046	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-235-CL	78	29452	18146	37015	-	-	-	-	-	-	-	-	-	22660	934	934
14C-5400-280-CL	55	29393	18103	36894	-	-	-	-	-	-	33547	7070	7070	47760	13097	15082
14C-5400-300-CL	48	29363	18081	36833	-	-	-	27690	3769	3769	44007	11577	12966	60324	18114	22163
14C-5400-350-CL	35	29280	18020	36663	28897	4449	4449	51106	14441	16967	73315	23251	29485	95524	31986	42003
14C-8300-200-CL	100	37876	23442	48323	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-235-CL	84	37860	23431	48292	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-280-CL	59	37801	23387	48170	-	-	-	-	-	-	-	-	-	36530	5732	5732
14C-8300-300-CL	51	37772	23366	48110	-	-	-	-	-	-	32777	3617	3617	49093	11999	12814
14C-8300-350-CL	38	37689	23305	47940	-	-	-	39875	7618	7618	62084	17299	20136	84294	26132	32654
18C-9600-235-CL	100	61231	35851	64951	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-280-CL	75	61163	35800	64811	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-300-CL	65	61129	35775	64742	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-350-CL	48	61033	35704	64546	-	-	-	-	-	-	62020	4250	4250	87560	18645	18645
18C-9800-235-CL	100	77544	45086	80301	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-280-CL	79	77476	45036	80162	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-300-CL	69	77442	45010	80092	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-350-CL	51	77346	44939	79897	-	-	-	-	-	-	-	-	-	72272	855	855
18C-10500-280-CL	81	86785	49985	86961	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-300-CL	71	86751	49959	86891	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-350-CL	52	86655	49888	86695	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-280-CL	88	97091	57663	108069	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-300-CL	76	97057	57637	107999	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-350-CL	56	96961	57567	107804	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-300-CL	92	111946	63520	106395	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-350-CL	67	111834	63436	106166	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-300-CL	98	129982	75362	133282	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-350-CL	72	129870	75278	133052	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-300-CL	100	141211	78586	125096	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-350-CL	78	141087	78492	124841	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-300-CL	100	147506	83332	137990	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-350-CL	80	147382	83239	137735	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	35			40			45			50		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14C-5100-200-CL	100	22753	14367	31007	19393	3010	3010	26645	6594	7097	33897	9543	11185	41149	12431	15272
14C-5100-235-CL	75	22738	14356	30976	38687	11454	13884	48699	15417	19528	58711	19357	25171	68724	23290	30814
14C-5100-280-CL	53	22679	14312	30855	67989	23001	30400	82203	28574	38411	96416	34141	46423	110630	39706	54434
14C-5100-300-CL	46	22649	14291	30794	82656	28752	38667	98972	35142	47863	115289	41530	57060	-	-	-
14C-5100-350-CL	34	22566	14230	30624	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-CL	100	29467	18157	37046	-	-	-	-	-	-	27883	3878	3878	35135	7851	7965
14C-5400-235-CL	78	29452	18146	37015	32672	6577	6577	42685	11036	12221	52697	15077	17864	62709	19059	23507
14C-5400-280-CL	55	29393	18103	36894	61974	18768	23093	76188	24382	31104	90402	29974	39116	104616	35555	47127
14C-5400-300-CL	48	29363	18081	36833	76641	24561	31360	92958	30978	40557	109275	37381	49753	-	-	-
14C-5400-350-CL	35	29280	18020	36663	117733	40698	54521	-	-	-	-	-	-	-	-	-
14C-8300-200-CL	100	37876	23442	48323	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-235-CL	84	37860	23431	48292	-	-	-	31454	2871	2871	41466	8515	8515	51478	12991	14158
14C-8300-280-CL	59	37801	23387	48170	50744	12686	13744	64957	18451	21755	79171	24106	29767	93385	29721	37778
14C-8300-300-CL	51	37772	23366	48110	65410	18632	22010	81727	25119	31207	98044	31556	40404	114361	37973	49601
14C-8300-350-CL	38	37689	23305	47940	106503	34886	45172	-	-	-	-	-	-	-	-	-
18C-9600-235-CL	100	61231	35851	64951	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-280-CL	75	61163	35800	64811	-	-	-	65324	6112	6112	81669	15325	15325	98015	23347	24538
18C-9600-300-CL	65	61129	35775	64742	65844	6406	6406	84609	16982	16982	103373	25596	27558	122138	33266	38135
18C-9600-350-CL	48	61033	35704	64546	113101	29600	33041	138641	39889	47437	164182	50041	61832	-	-	-
18C-9800-235-CL	100	77544	45086	80301	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-280-CL	79	77476	45036	80162	-	-	-	-	-	-	-	-	-	82727	6748	6748
18C-9800-300-CL	69	77442	45010	80092	-	-	-	-	-	-	88085	9768	9768	106850	20345	20345
18C-9800-350-CL	51	77346	44939	79897	97812	15251	15251	123353	28636	29646	148893	39260	44042	174434	49557	58438
18C-10500-280-CL	81	86785	49985	86961	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-300-CL	71	86751	49959	86891	-	-	-	-	-	-	-	-	-	100079	10298	10298
18C-10500-350-CL	52	86655	49888	86695	91041	5204	5204	116582	19599	19599	142122	32892	33995	167663	43560	48391
18C-11000-280-CL	88	97091	57663	108069	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-300-CL	76	97057	57637	107999	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-350-CL	56	96961	57567	107804	-	-	-	95560	7751	7751	121100	22146	22146	146641	34827	36542
32C-12000-300-CL	92	111946	63520	106395	-	-	-	-	-	-	-	-	-	113108	1339	1339
32C-12000-350-CL	67	111834	63436	106166	-	-	-	132482	12259	12259	162464	29158	29158	192446	44555	46057
32C-15000-300-CL	98	129982	75362	133282	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-350-CL	72	129870	75278	133052	-	-	-	-	-	-	135687	8959	8959	165669	25858	25858
50C-15400-300-CL	100	141211	78586	125096	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-350-CL	78	141087	78492	124841	-	-	-	-	-	-	173664	14526	14526	206978	33303	33303
50C-15600-300-CL	100	147506	83332	137990	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-350-CL	80	147382	83239	137735	-	-	-	-	-	-	160823	7289	7289	194136	26066	26066

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	55			60			65			70		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14C-5100-200-CL	100	22753	14367	31007	48401	15299	19359	55653	18155	23447	62905	21005	27534	70157	23852	31622
14C-5100-235-CL	75	22738	14356	30976	78736	27215	36457	88748	31139	42101	98760	35059	47744	108772	38978	53387
14C-5100-280-CL	53	22679	14312	30855	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-300-CL	46	22649	14291	30794	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-350-CL	34	22566	14230	30624	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-CL	100	29467	18157	37046	42386	10914	12053	49638	13852	16140	56890	16749	20228	64142	19627	24315
14C-5400-235-CL	78	29452	18146	37015	72721	23017	29150	82734	26960	34794	92746	30895	40437	102758	34826	46080
14C-5400-280-CL	55	29393	18103	36894	118830	41128	55139	-	-	-	-	-	-	-	-	-
14C-5400-300-CL	48	29363	18081	36833	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-350-CL	35	29280	18020	36663	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-200-CL	100	37876	23442	48323	31156	2703	2703	38408	6791	6791	45660	10540	10878	52912	13581	14966
14C-8300-235-CL	84	37860	23431	48292	61490	17060	19801	71503	21062	25444	81515	25035	31088	91527	28989	36731
14C-8300-280-CL	59	37801	23387	48170	107599	35317	45789	-	-	-	-	-	-	-	-	-
14C-8300-300-CL	51	37772	23366	48110	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-350-CL	38	37689	23305	47940	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-235-CL	100	61231	35851	64951	61337	3865	3865	72851	10355	10355	84365	16844	16844	95879	22435	23334
18C-9600-280-CL	75	61163	35800	64811	114361	30114	33752	130707	36714	42965	147053	43242	52178	163399	49730	61391
18C-9600-300-CL	65	61129	35775	64742	140902	40793	48711	159667	48251	59287	178431	55675	69864	-	-	-
18C-9600-350-CL	48	61033	35704	64546	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-235-CL	100	77544	45086	80301	-	-	-	-	-	-	-	-	-	80591	5544	5544
18C-9800-280-CL	79	77476	45036	80162	99073	15961	15961	115419	25110	25175	131765	32203	34388	148111	38942	43601
18C-9800-300-CL	69	77442	45010	80092	125614	29606	30921	144378	37417	41497	163143	45027	52074	-	-	-
18C-9800-350-CL	51	77346	44939	79897	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-280-CL	81	86785	49985	86961	92302	5914	5914	108648	15128	15128	124994	24341	24341	141340	32553	33554
18C-10500-300-CL	71	86751	49959	86891	118843	20874	20874	137607	30917	31450	156372	38910	42027	175136	46605	52603
18C-10500-350-CL	52	86655	49888	86695	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-280-CL	88	97091	57663	108069	-	-	-	87626	3279	3279	103972	12492	12492	120318	21705	21705
18C-11000-300-CL	76	97057	57637	107999	97821	9025	9025	116585	19601	19601	135350	29905	30178	154114	37971	40754
18C-11000-350-CL	56	96961	57567	107804	172181	45405	50937	-	-	-	-	-	-	-	-	-
32C-12000-300-CL	92	111946	63520	106395	135136	13755	13755	157164	26170	26170	179192	38586	38586	201220	48299	51002
32C-12000-350-CL	67	111834	63436	106166	222429	57114	62956	252411	69295	79855	282393	81316	96754	312376	93255	113654
32C-15000-300-CL	98	129982	75362	133282	-	-	-	130387	5972	5972	152415	18387	18387	174442	30803	30803
32C-15000-350-CL	72	129870	75278	133052	195652	42624	42757	225634	55587	59657	255616	67905	76556	285599	80004	93455
50C-15400-300-CL	100	141211	78586	125096	-	-	-	167775	11207	11207	192250	25002	25002	216725	38798	38798
50C-15400-350-CL	78	141087	78492	124841	240291	52035	52080	273605	66555	70857	306919	80310	89634	340232	93806	108411
50C-15600-300-CL	100	147506	83332	137990	-	-	-	154934	3969	3969	179409	17765	17765	203884	31560	31560
50C-15600-350-CL	80	147382	83239	137735	227450	44842	44842	260764	61114	63619	294077	75049	82396	327391	88622	101173

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)											
		BTC	RTC	ETC	75			80			85		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14C-5100-200-CL	100	22753	14367	31007	77409	26695	35709	84661	29538	39797	91913	32378	43884
14C-5100-235-CL	75	22738	14356	30976	118785	42898	59030	-	-	-	-	-	-
14C-5100-280-CL	53	22679	14312	30855	-	-	-	-	-	-	-	-	-
14C-5100-300-CL	46	22649	14291	30794	-	-	-	-	-	-	-	-	-
14C-5100-350-CL	34	22566	14230	30624	-	-	-	-	-	-	-	-	-
14C-5400-200-CL	100	29467	18157	37046	71394	22493	28403	78646	25351	32490	85898	28205	36577
14C-5400-235-CL	78	29452	18146	37015	112770	38752	51723	-	-	-	-	-	-
14C-5400-280-CL	55	29393	18103	36894	-	-	-	-	-	-	-	-	-
14C-5400-300-CL	48	29363	18081	36833	-	-	-	-	-	-	-	-	-
14C-5400-350-CL	35	29280	18020	36663	-	-	-	-	-	-	-	-	-
14C-8300-200-CL	100	37876	23442	48323	60164	16527	19053	67415	19434	23141	74667	22321	27228
14C-8300-235-CL	84	37860	23431	48292	101539	32933	42374	111552	36869	48017	-	-	-
14C-8300-280-CL	59	37801	23387	48170	-	-	-	-	-	-	-	-	-
14C-8300-300-CL	51	37772	23366	48110	-	-	-	-	-	-	-	-	-
14C-8300-350-CL	38	37689	23305	47940	-	-	-	-	-	-	-	-	-
18C-9600-235-CL	100	61231	35851	64951	107393	27260	29824	118907	31961	36314	130421	36599	42803
18C-9600-280-CL	75	61163	35800	64811	179745	56194	70604	-	-	-	-	-	-
18C-9600-300-CL	65	61129	35775	64742	-	-	-	-	-	-	-	-	-
18C-9600-350-CL	48	61033	35704	64546	-	-	-	-	-	-	-	-	-
18C-9800-235-CL	100	77544	45086	80301	92105	12034	12034	103619	18524	18524	115133	24975	25013
18C-9800-280-CL	79	77476	45036	80162	164457	45555	52814	-	-	-	-	-	-
18C-9800-300-CL	69	77442	45010	80092	-	-	-	-	-	-	-	-	-
18C-9800-350-CL	51	77346	44939	79897	-	-	-	-	-	-	-	-	-
18C-10500-280-CL	81	86785	49985	86961	157686	39455	42767	174032	46156	51980	-	-	-
18C-10500-300-CL	71	86751	49959	86891	-	-	-	-	-	-	-	-	-
18C-10500-350-CL	52	86655	49888	86695	-	-	-	-	-	-	-	-	-
18C-11000-280-CL	88	97091	57663	108069	136663	30496	30918	153009	37510	40131	169355	44252	49345
18C-11000-300-CL	76	97057	57637	107999	172879	45688	51330	-	-	-	-	-	-
18C-11000-350-CL	56	96961	57567	107804	-	-	-	-	-	-	-	-	-
32C-12000-300-CL	92	111946	63520	106395	223248	57451	63418	245275	66413	75833	267303	75280	88249
32C-12000-350-CL	67	111834	63436	106166	-	-	-	-	-	-	-	-	-
32C-15000-300-CL	98	129982	75362	133282	196470	43004	43219	218498	52594	55635	240526	61746	68050
32C-15000-350-CL	72	129870	75278	133052	315581	91991	110354	-	-	-	-	-	-
50C-15400-300-CL	100	141211	78586	125096	241201	52463	52593	265676	63208	66388	290152	73433	80183
50C-15400-350-CL	78	141087	78492	124841	373546	107160	127187	406860	120436	145964	440173	133655	164741
50C-15600-300-CL	100	147506	83332	137990	228360	45355	45355	252835	57684	59150	277310	68103	72946
50C-15600-350-CL	80	147382	83239	137735	360705	102027	119950	394018	115326	138727	427332	128565	157503

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)												
		BTC	RTC	ETC	90			95			100			
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	
14C-5100-200-CL	100	22753	14367	31007	99165	35217	47972	106417	38056	52059	113669	40895	56147	
14C-5100-235-CL	75	22738	14356	30976	-	-	-	-	-	-	-	-	-	
14C-5100-280-CL	53	22679	14312	30855	-	-	-	-	-	-	-	-	-	
14C-5100-300-CL	46	22649	14291	30794	-	-	-	-	-	-	-	-	-	
14C-5100-350-CL	34	22566	14230	30624	-	-	-	-	-	-	-	-	-	
14C-5400-200-CL	100	29467	18157	37046	93150	31054	40665	100402	33903	44752	107654	36746	48840	
14C-5400-235-CL	78	29452	18146	37015	-	-	-	-	-	-	-	-	-	
14C-5400-280-CL	55	29393	18103	36894	-	-	-	-	-	-	-	-	-	
14C-5400-300-CL	48	29363	18081	36833	-	-	-	-	-	-	-	-	-	
14C-5400-350-CL	35	29280	18020	36663	-	-	-	-	-	-	-	-	-	
14C-8300-200-CL	100	37876	23442	48323	81919	25194	31316	89171	28059	35403	96423	30918	39491	
14C-8300-235-CL	84	37860	23431	48292	-	-	-	-	-	-	-	-	-	
14C-8300-280-CL	59	37801	23387	48170	-	-	-	-	-	-	-	-	-	
14C-8300-300-CL	51	37772	23366	48110	-	-	-	-	-	-	-	-	-	
14C-8300-350-CL	38	37689	23305	47940	-	-	-	-	-	-	-	-	-	
18C-9600-235-CL	100	61231	35851	64951	141935	41205	49293	153449	45786	55783	164963	50350	62273	
18C-9600-280-CL	75	61163	35800	64811	-	-	-	-	-	-	-	-	-	
18C-9600-300-CL	65	61129	35775	64742	-	-	-	-	-	-	-	-	-	
18C-9600-350-CL	48	61033	35704	64546	-	-	-	-	-	-	-	-	-	
18C-9800-235-CL	100	77544	45086	80301	126647	30045	31503	138161	34863	37993	149675	39578	44483	
18C-9800-280-CL	79	77476	45036	80162	-	-	-	-	-	-	-	-	-	
18C-9800-300-CL	69	77442	45010	80092	-	-	-	-	-	-	-	-	-	
18C-9800-350-CL	51	77346	44939	79897	-	-	-	-	-	-	-	-	-	
18C-10500-280-CL	81	86785	49985	86961	-	-	-	-	-	-	-	-	-	
18C-10500-300-CL	71	86751	49959	86891	-	-	-	-	-	-	-	-	-	
18C-10500-350-CL	52	86655	49888	86695	-	-	-	-	-	-	-	-	-	
18C-11000-280-CL	88	97091	57663	108069	-	-	-	-	-	-	-	-	-	
18C-11000-300-CL	76	97057	57637	107999	-	-	-	-	-	-	-	-	-	
18C-11000-350-CL	56	96961	57567	107804	-	-	-	-	-	-	-	-	-	
32C-12000-300-CL	92	111946	63520	106395	289331	84086	100665	311359	92852	113080	-	-	-	
32C-12000-350-CL	67	111834	63436	106166	-	-	-	-	-	-	-	-	-	
32C-15000-300-CL	98	129982	75362	133282	262554	70721	80466	284582	79596	92882	306609	88413	105297	
32C-15000-350-CL	72	129870	75278	133052	-	-	-	-	-	-	-	-	-	
50C-15400-300-CL	100	141211	78586	125096	314627	83447	93979	339102	93352	107774	363578	103175	121569	
50C-15400-350-CL	78	141087	78492	124841	-	-	-	-	-	-	-	-	-	
50C-15600-300-CL	100	147506	83332	137990	301786	78211	86741	326261	88166	100536	350736	98026	114331	
50C-15600-350-CL	80	147382	83239	137735	-	-	-	-	-	-	-	-	-	

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Open

Models 0.3C-008A-45-OP to 6C-3800-200-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)														
					15			20			25			30			35		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-45-OP	100	377	92	99	-	-	-	121	24	24	185	101	156	249	149	288	314	197	420
0.3C-008A-75-OP	48	364	87	92	392	254	581	571	383	947	750	513	1313	928	642	1679	1107	771	2045
0.3C-008B-45-OP	100	574	99	99	-	-	-	-	-	-	-	-	-	238	46	46	302	152	178
0.3C-008B-75-OP	48	561	92	92	381	212	339	559	345	705	738	475	1071	917	605	1437	1095	734	1803
0.3C-008C-45-OP	100	691	127	127	-	-	-	-	-	-	-	-	-	-	-	-	269	35	35
0.3C-008C-75-OP	48	678	119	119	348	173	196	526	309	562	705	440	928	884	570	1294	1062	700	1660
0.3C-0100-45-OP	100	1111	253	259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-75-OP	60	1097	247	251	-	-	-	376	47	47	554	295	413	733	429	779	912	561	1145
0.3C-0100-100-OP	34	1086	242	245	608	335	523	925	571	1173	1243	803	1824	1561	1033	2475	-	-	-
0.3C-0150-45-OP	100	1396	371	419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-75-OP	65	1383	366	412	-	-	-	-	-	-	384	64	64	562	301	430	741	435	796
0.3C-0150-100-OP	36	1371	361	406	437	173	173	755	445	824	1072	679	1474	1390	910	2125	1708	1140	2776
0.9C-0200-100-OP	74	1764	450	495	-	-	-	838	465	733	1205	738	1485	1573	1006	2238	1940	1273	2990
0.9C-0200-135-OP	41	1750	444	487	1369	858	1821	2039	1345	3192	2708	1829	4564	3378	2314	5935	4047	2798	7306
0.9C-0250-100-OP	77	2122	595	696	-	-	-	624	295	295	991	579	1047	1359	850	1799	1726	1118	2552
0.9C-0250-135-OP	42	2108	589	688	1155	701	1383	1825	1189	2754	2494	1674	4125	3163	2159	5496	3833	2643	6867
0.9C-0350-100-OP	87	3354	871	967	-	-	-	-	-	-	-	-	-	1028	288	288	1395	742	1041
0.9C-0350-135-OP	48	3339	865	959	-	-	-	1494	817	1243	2163	1317	2614	2833	1806	3985	3502	2292	5356
0.9C-0400-100-OP	92	3974	1121	1317	-	-	-	-	-	-	-	-	-	-	-	-	1024	280	280
0.9C-0400-135-OP	51	3959	1116	1309	-	-	-	1122	483	483	1792	1041	1854	2461	1535	3225	3131	2023	4596
0.9C-0700-100-OP	100	5602	1518	1735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-135-OP	58	5588	1513	1727	-	-	-	-	-	-	-	-	-	1966	1001	1227	2636	1511	2598
1.5C-1100-135-OP	79	10196	2358	2436	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-175-OP	47	10169	2346	2421	-	-	-	-	-	-	4084	1848	1848	5507	3045	4761	6929	4109	7675
1.5C-1200-135-OP	79	11884	3081	3418	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-175-OP	51	11857	3070	3403	-	-	-	-	-	-	-	-	-	4466	2256	2691	5889	3342	5604
3C-2000-135-OP	90	17508	4779	5488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-175-OP	53	17463	4761	5463	-	-	-	-	-	-	5326	2284	2284	7680	4325	7107	10035	6079	11929
6C-2500-175-OP	80	24935	6997	8184	-	-	-	-	-	-	-	-	-	6993	2766	2766	9746	5384	8403
6C-2500-200-OP	61	24926	6994	8179	-	-	-	-	-	-	8449	4393	5747	12044	7106	13111	15639	9755	20474
6C-3800-175-OP	90	33892	10151	12399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-200-OP	69	33883	10147	12394	-	-	-	-	-	-	-	-	-	7481	2124	2124	11076	6109	9487

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)														
					40			45			50			55			60		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-45-OP	100	377	92	99	378	244	551	442	290	683	507	337	815	571	383	947	635	430	1078
0.3C-008A-75-OP	48	364	87	92	1286	900	2411	1464	1029	2777	-	-	-	-	-	-	-	-	-
0.3C-008B-45-OP	100	574	99	99	366	201	310	431	249	441	495	297	573	559	345	705	624	392	837
0.3C-008B-75-OP	48	561	92	92	1274	864	2169	1453	993	2535	1632	1122	2901	-	-	-	-	-	-
0.3C-008C-45-OP	100	691	127	127	333	161	167	398	212	299	462	260	430	526	309	562	591	356	694
0.3C-008C-75-OP	48	678	119	119	1241	830	2026	1420	959	2392	1599	1088	2758	-	-	-	-	-	-
0.3C-0100-45-OP	100	1111	253	259	-	-	-	-	-	-	-	-	-	376	47	47	440	179	179
0.3C-0100-75-OP	60	1097	247	251	1090	692	1511	1269	822	1877	1448	952	2243	1626	1081	2609	1805	1210	2975
0.3C-0100-100-OP	34	1086	242	245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-OP	100	1396	371	419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-75-OP	65	1383	366	412	920	567	1162	1098	698	1528	1277	828	1894	1456	957	2260	1634	1087	2625
0.3C-0150-100-OP	36	1371	361	406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-OP	74	1764	450	495	2307	1539	3742	2675	1805	4495	3042	2071	5247	3409	2336	5999	3777	2602	6752
0.9C-0200-135-OP	41	1750	444	487	4716	3281	8677	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-OP	77	2122	595	696	2093	1384	3304	2460	1650	4056	2828	1916	4809	3195	2182	5561	3562	2447	6313
0.9C-0250-135-OP	42	2108	589	688	4502	3126	8238	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-OP	87	3354	871	967	1762	1019	1793	2130	1292	2545	2497	1561	3298	2864	1829	4050	3231	2096	4802
0.9C-0350-135-OP	48	3339	865	959	4171	2778	6728	4841	3263	8099	-	-	-	-	-	-	-	-	-
0.9C-0400-100-OP	92	3974	1121	1317	1391	739	1033	1758	1016	1785	2126	1289	2537	2493	1558	3290	2860	1826	4042
0.9C-0400-135-OP	51	3959	1116	1309	3800	2509	5967	4470	2994	7338	5139	3478	8709	-	-	-	-	-	-
0.9C-0700-100-OP	100	5602	1518	1735	-	-	-	-	-	-	1631	540	540	1998	1026	1292	2365	1307	2044
0.9C-0700-135-OP	58	5588	1513	1727	3305	2008	3969	3975	2499	5341	4644	2986	6712	5313	3472	8083	-	-	-
1.5C-1100-135-OP	79	10196	2358	2436	3759	1181	1181	4605	2353	2914	5452	3003	4648	6298	3639	6382	7145	4269	8116
1.5C-1100-175-OP	47	10169	2346	2421	8352	5159	10588	9774	6198	13502	-	-	-	-	-	-	-	-	-
1.5C-1200-135-OP	79	11884	3081	3418	-	-	-	3565	844	844	4411	2213	2578	5258	2866	4312	6104	3504	6045
1.5C-1200-175-OP	51	11857	3070	3403	7311	4402	8518	8734	5447	11431	10156	6484	14345	-	-	-	-	-	-
3C-2000-135-OP	90	17508	4779	5488	4787	1180	1180	6188	3188	4050	7589	4257	6920	8990	5305	9790	10391	6343	12659
3C-2000-175-OP	53	17463	4761	5463	12389	7804	16751	14744	9518	21574	17098	11227	26396	-	-	-	-	-	-
6C-2500-175-OP	80	24935	6997	8184	12499	7443	14041	15251	9471	19679	18004	11478	25317	20756	13480	30955	23509	15477	36592
6C-2500-200-OP	61	24926	6994	8179	19235	12374	27838	22830	14984	35201	26425	17591	42565	30020	20194	49929	33616	22796	57292
6C-3800-175-OP	90	33892	10151	12399	7935	3054	3054	10688	5814	8692	13441	7881	14330	16193	9921	19968	18946	11932	25606
6C-3800-200-OP	69	33883	10147	12394	14672	8795	16851	18267	11437	24215	21862	14055	31578	25457	16666	38942	29053	19274	46306

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					65			70			75			80		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-45-OP	100	377	92	99	700	477	1210	764	523	1342	828	570	1474	892	616	1605
0.3C-008A-75-OP	48	364	87	92	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008B-45-OP	100	574	99	99	688	439	968	752	485	1100	817	532	1232	881	579	1364
0.3C-008B-75-OP	48	561	92	92	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-45-OP	100	691	127	127	655	404	826	719	451	957	784	498	1089	848	544	1221
0.3C-008C-75-OP	48	678	119	119	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-45-OP	100	1111	253	259	504	256	311	569	306	442	633	354	574	697	403	706
0.3C-0100-75-OP	60	1097	247	251	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-100-OP	34	1086	242	245	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-OP	100	1396	371	419	-	-	-	398	93	93	462	222	225	526	273	356
0.3C-0150-75-OP	65	1383	366	412	1813	1216	2991	-	-	-	-	-	-	-	-	-
0.3C-0150-100-OP	36	1371	361	406	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-OP	74	1764	450	495	4144	2868	7504	4511	3133	8256	-	-	-	-	-	-
0.9C-0200-135-OP	41	1750	444	487	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-OP	77	2122	595	696	3930	2713	7066	4297	2978	7818	4664	3243	8570	-	-	-
0.9C-0250-135-OP	42	2108	589	688	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-OP	87	3354	871	967	3599	2363	5555	3966	2629	6307	4333	2895	7059	4701	3161	7812
0.9C-0350-135-OP	48	3339	865	959	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-100-OP	92	3974	1121	1317	3228	2093	4794	3595	2360	5547	3962	2626	6299	4330	2892	7051
0.9C-0400-135-OP	51	3959	1116	1309	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-100-OP	100	5602	1518	1735	2732	1583	2797	3100	1856	3549	3467	2128	4301	3834	2396	5054
0.9C-0700-135-OP	58	5588	1513	1727	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-135-OP	79	10196	2358	2436	7991	4895	9850	8838	5514	11584	9684	6132	13317	-	-	-
1.5C-1100-175-OP	47	10169	2346	2421	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-135-OP	79	11884	3081	3418	6951	4135	7779	7797	4761	9513	8644	5381	11247	9490	5999	12981
1.5C-1200-175-OP	51	11857	3070	3403	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-135-OP	90	17508	4779	5488	11792	7368	15529	13194	8390	18399	14595	9409	21269	15996	10427	24138
3C-2000-175-OP	53	17463	4761	5463	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-175-OP	80	24935	6997	8184	26262	17472	42230	29014	19466	47868	31767	21459	53506	34519	23450	59143
6C-2500-200-OP	61	24926	6994	8179	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-175-OP	90	33892	10151	12399	21698	13936	31243	24451	15936	36881	27204	17934	42519	29956	19929	48157
6C-3800-200-OP	69	33883	10147	12394	32648	21878	53669	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					85			90			95			100		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-45-OP	100	377	92	99	957	663	1737	1021	709	1869	1085	755	2001	1150	802	2132
0.3C-008A-75-OP	48	364	87	92	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008B-45-OP	100	574	99	99	945	625	1495	1010	672	1627	1074	719	1759	1138	765	1891
0.3C-008B-75-OP	48	561	92	92	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-45-OP	100	691	127	127	912	591	1353	977	638	1484	1041	685	1616	1105	731	1748
0.3C-008C-75-OP	48	678	119	119	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-45-OP	100	1111	253	259	762	450	838	826	498	969	890	546	1101	954	593	1233
0.3C-0100-75-OP	60	1097	247	251	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-100-OP	34	1086	242	245	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-45-OP	100	1396	371	419	591	322	488	655	371	620	719	419	752	784	467	883
0.3C-0150-75-OP	65	1383	366	412	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-100-OP	36	1371	361	406	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-100-OP	74	1764	450	495	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-135-OP	41	1750	444	487	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-100-OP	77	2122	595	696	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0250-135-OP	42	2108	589	688	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0350-100-OP	87	3354	871	967	5068	3427	8564	-	-	-	-	-	-	-	-	-
0.9C-0350-135-OP	48	3339	865	959	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-100-OP	92	3974	1121	1317	4697	3158	7804	5064	3424	8556	-	-	-	-	-	-
0.9C-0400-135-OP	51	3959	1116	1309	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-100-OP	100	5602	1518	1735	4202	2664	5806	4569	2932	6558	4936	3199	7311	5304	3465	8063
0.9C-0700-135-OP	58	5588	1513	1727	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-135-OP	79	10196	2358	2436	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-175-OP	47	10169	2346	2421	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-135-OP	79	11884	3081	3418	10337	6615	14714	-	-	-	-	-	-	-	-	-
1.5C-1200-175-OP	51	11857	3070	3403	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-135-OP	90	17508	4779	5488	17397	11444	27008	18798	12460	29878	-	-	-	-	-	-
3C-2000-175-OP	53	17463	4761	5463	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-175-OP	80	24935	6997	8184	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-200-OP	61	24926	6994	8179	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-175-OP	90	33892	10151	12399	32709	21922	53794	35461	23915	59432	-	-	-	-	-	-
6C-3800-200-OP	69	33883	10147	12394	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Open

Models 14C-5100-200-OP to 50C-15600-350-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					15			20			25			30		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14C-5100-200-OP	100	40669	12241	15001	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-235-OP	76	40641	12230	14985	-	-	-	-	-	-	10104	4906	5098	15529	9050	16210
14C-5100-280-OP	54	40531	12187	14924	-	-	-	13726	7699	12517	21428	13399	28292	29129	19003	44066
14C-5100-300-OP	47	40477	12165	14893	9413	3684	3684	18254	11073	21792	27096	17527	39901	35937	23939	58009
14C-5100-350-OP	34	40323	12104	14807	18908	11556	23131	30942	20318	47779	42976	29036	72427	55010	37738	97074
14C-5400-200-OP	100	52473	14988	17738	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-235-OP	83	52444	14976	17722	-	-	-	-	-	-	-	-	-	12225	1731	1731
14C-5400-280-OP	58	52335	14933	17660	-	-	-	-	-	-	18124	9694	13813	25826	15471	29588
14C-5400-300-OP	51	52280	14911	17629	-	-	-	14951	7212	7314	23792	13960	25422	32633	20470	43531
14C-5400-350-OP	37	52127	14850	17543	15605	7736	8653	27638	16813	33300	39672	25596	57948	51706	34328	82595
14C-8300-200-OP	100	67333	19401	23094	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-235-OP	91	67305	19390	23078	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-280-OP	64	67196	19346	23017	-	-	-	-	-	-	-	-	-	19829	9903	11360
14C-8300-300-OP	56	67141	19324	22986	-	-	-	-	-	-	17795	7194	7194	26636	15111	25303
14C-8300-350-OP	41	66988	19263	22900	-	-	-	21641	11318	15072	33675	20353	39720	45709	29155	64367
18C-9600-235-OP	100	106927	27068	29561	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-280-OP	86	106801	27016	29490	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-300-OP	74	106738	26990	29455	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-350-OP	55	106562	26918	29356	-	-	-	-	-	-	34139	9462	9462	47978	25885	37806
18C-9800-235-OP	100	135427	33729	36452	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-280-OP	95	135302	33677	36381	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-300-OP	83	135239	33651	36346	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-350-OP	61	135063	33578	36246	-	-	-	-	-	-	-	-	-	39728	2847	2847
18C-10500-280-OP	100	157915	39550	42897	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-300-OP	89	157852	39524	42861	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-350-OP	66	157676	39451	42762	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-280-OP	100	176935	47336	53617	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-300-OP	95	176872	47310	53582	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-350-OP	70	176696	47239	53482	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-300-OP	100	201070	48236	50917	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-350-OP	82	200863	48149	50801	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-300-OP	100	233909	59022	64321	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-350-OP	88	233702	58937	64204	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-300-OP	100	253231	57858	59373	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-350-OP	96	253001	57757	59244	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-300-OP	100	264849	62857	65922	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-350-OP	98	264619	62759	65792	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					35			40			45			50		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14C-5100-200-OP	100	40669	12241	15001	10500	5223	5909	14429	8227	13958	18358	11150	22006	22288	14027	30054
14C-5100-235-OP	76	40641	12230	14985	20954	13054	27321	26379	17006	38433	31804	20944	49544	37229	24875	60656
14C-5100-280-OP	54	40531	12187	14924	36831	24587	59841	44533	30163	75615	52234	35731	91389	59936	41299	107164
14C-5100-300-OP	47	40477	12165	14893	44778	30340	76118	53619	36732	94226	62461	43125	112334	-	-	-
14C-5100-350-OP	34	40323	12104	14807	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-OP	100	52473	14988	17738	-	-	-	-	-	-	15055	7297	7527	18984	10350	15575
14C-5400-235-OP	83	52444	14976	17722	17650	9332	12843	23075	13426	23954	28500	17449	35066	33926	21413	46177
14C-5400-280-OP	58	52335	14933	17660	33527	21123	45362	41229	26728	61136	48931	32316	76911	56633	37895	92685
14C-5400-300-OP	51	52280	14911	17629	41475	26906	61639	50316	33321	79747	59157	39723	97856	67998	46122	115964
14C-5400-350-OP	37	52127	14850	17543	63740	43042	107243	-	-	-	-	-	-	-	-	-
14C-8300-200-OP	100	67333	19401	23094	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-235-OP	91	67305	19390	23078	-	-	-	17078	5726	5726	22503	11981	16838	27928	16080	27949
14C-8300-280-OP	64	67196	19346	23017	27530	15781	27134	35232	21503	42908	42934	27134	58683	50635	32739	74457
14C-8300-300-OP	56	67141	19324	22986	35477	21684	43411	44319	28144	61519	53160	34572	79628	62001	40987	97736
14C-8300-350-OP	41	66988	19263	22900	57743	37898	89015	69777	46619	113663	-	-	-	-	-	-
18C-9600-235-OP	100	106927	27068	29561	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-280-OP	86	106801	27016	29490	-	-	-	35929	13128	13128	44786	23436	31269	53643	30174	49409
18C-9600-300-OP	74	106738	26990	29455	36211	13706	13706	46379	24662	34531	56546	32352	55356	66713	39925	76180
18C-9600-350-OP	55	106562	26918	29356	61817	36287	66151	75656	46527	94496	89495	56635	122840	103334	66705	151185
18C-9800-235-OP	100	135427	33729	36452	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-280-OP	95	135302	33677	36381	-	-	-	-	-	-	-	-	-	45393	14451	14451
18C-9800-300-OP	83	135239	33651	36346	-	-	-	-	-	-	48296	20397	20397	58464	30668	41221
18C-9800-350-OP	61	135063	33578	36246	53567	26853	31192	67406	37482	59537	81245	47844	87881	95084	58099	116226
18C-10500-280-OP	100	157915	39550	42897	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-300-OP	89	157852	39524	42861	-	-	-	-	-	-	-	-	-	50911	13484	13484
18C-10500-350-OP	66	157676	39451	42762	46014	3454	3454	59853	29394	31799	73692	40123	60144	87531	50544	88488
18C-11000-280-OP	100	176935	47336	53617	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-300-OP	95	176872	47310	53582	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-350-OP	70	176696	47239	53482	-	-	-	48462	8469	8469	62301	31336	36813	76140	41981	65158
32C-12000-300-OP	100	201070	48236	50917	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-350-OP	82	200863	48149	50801	-	-	-	68784	17993	17993	85030	42966	51267	101276	55470	84541
32C-15000-300-OP	100	233909	59022	64321	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-350-OP	88	233702	58937	64204	-	-	-	-	-	-	70272	10986	10986	86518	42139	44260
50C-15400-300-OP	100	253231	57858	59373	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-350-OP	96	253001	57757	59244	-	-	-	-	-	-	90087	20386	20386	108138	53088	57357
50C-15600-300-OP	100	264849	62857	65922	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-350-OP	98	264619	62759	65792	-	-	-	-	-	-	83129	6135	6135	101180	43106	43106

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					55			60			65			70		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14C-5100-200-OP	100	40669	12241	15001	26217	16888	38102	30147	19741	46150	34076	22592	54198	38006	25437	62247
14C-5100-235-OP	76	40641	12230	14985	42654	28803	71767	48079	32727	82879	53504	36649	93990	58929	40572	105102
14C-5100-280-OP	54	40531	12187	14924	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-300-OP	47	40477	12165	14893	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-350-OP	34	40323	12104	14807	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-OP	100	52473	14988	17738	22914	13306	23623	26843	16225	31672	30773	19113	39720	34702	21980	47768
14C-5400-235-OP	83	52444	14976	17722	39351	25362	57289	44776	29301	68400	50201	33238	79512	55626	37166	90623
14C-5400-280-OP	58	52335	14933	17660	64334	43472	108460	-	-	-	-	-	-	-	-	-
14C-5400-300-OP	51	52280	14911	17629	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-350-OP	37	52127	14850	17543	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-200-OP	100	67333	19401	23094	16917	5396	5396	20846	10701	13444	24776	13710	21492	28705	16660	29540
14C-8300-235-OP	91	67305	19390	23078	33354	20114	39061	38779	24102	50172	44204	28060	61284	49629	32006	72395
14C-8300-280-OP	64	67196	19346	23017	58337	38329	90232	66039	43912	106006	-	-	-	-	-	-
14C-8300-300-OP	56	67141	19324	22986	70843	47391	115845	-	-	-	-	-	-	-	-	-
14C-8300-350-OP	41	66988	19263	22900	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-235-OP	100	106927	27068	29561	33769	8704	8704	40007	19694	21482	46246	24561	34260	52485	29301	47038
18C-9600-280-OP	86	106801	27016	29490	62500	36796	67550	71357	43365	85691	80214	49863	103831	89071	56326	121972
18C-9600-300-OP	74	106738	26990	29455	76881	47424	97005	87048	54850	117830	97216	62254	138654	107383	69648	159479
18C-9600-350-OP	55	106562	26918	29356	117173	76752	179529	-	-	-	-	-	-	-	-	-
18C-9800-235-OP	100	135427	33729	36452	-	-	-	-	-	-	-	-	-	44235	12079	12079
18C-9800-280-OP	95	135302	33677	36381	54250	27390	32591	63107	34225	50732	71964	40912	68872	80821	47528	87013
18C-9800-300-OP	83	135239	33651	36346	68631	38406	62046	78798	46021	82871	88966	53574	103695	99133	61068	124520
18C-9800-350-OP	61	135063	33578	36246	108923	68222	144571	122762	78309	172915	-	-	-	-	-	-
18C-10500-280-OP	100	157915	39550	42897	46697	4853	4853	55554	22994	22994	64411	32989	41135	73268	39801	59275
18C-10500-300-OP	89	157852	39524	42861	61078	30369	34308	71245	38259	55133	81413	45959	75958	91580	53562	96782
18C-10500-350-OP	66	157676	39451	42762	101370	60835	116833	115209	71039	145178	129048	81148	173522	-	-	-
18C-11000-280-OP	100	176935	47336	53617	-	-	-	-	-	-	53020	17804	17804	61877	31003	35945
18C-11000-300-OP	95	176872	47310	53582	49687	10978	10978	59855	29396	31803	70022	37323	52627	80189	45037	73452
18C-11000-350-OP	70	176696	47239	53482	89979	52369	93503	103818	62651	121847	117657	72832	150192	131496	82935	178536
32C-12000-300-OP	100	201070	48236	50917	70223	20938	20938	82158	40698	45385	94094	49995	69831	106030	59066	94277
32C-12000-350-OP	82	200863	48149	50801	117522	67698	117815	133768	79792	151089	150013	91814	184363	166259	103699	217638
32C-15000-300-OP	100	233909	59022	64321	-	-	-	67400	5104	5104	79336	29550	29550	91272	45920	53996
32C-15000-350-OP	88	233702	58937	64204	102764	54828	77534	119009	67144	110808	135255	79291	144082	151501	91354	177356
50C-15400-300-OP	100	253231	57858	59373	-	-	-	86896	13850	13850	100158	41013	41013	113420	57272	68175
50C-15400-350-OP	96	253001	57757	59244	126189	67169	94328	144240	80870	131300	162291	94395	168271	180342	107817	205242
50C-15600-300-OP	100	264849	62857	65922	-	-	-	-	-	-	93200	26762	26762	106462	51743	53924
50C-15600-350-OP	98	264619	62759	65792	119231	61808	80077	137282	75618	117049	155333	89196	154020	173384	102658	190991

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)								
					75			80			85		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14C-5100-200-OP	100	40669	12241	15001	41935	28283	70295	45865	31126	78343	49794	33967	86391
14C-5100-235-OP	76	40641	12230	14985	64355	44494	116213	-	-	-	-	-	-
14C-5100-280-OP	54	40531	12187	14924	-	-	-	-	-	-	-	-	-
14C-5100-300-OP	47	40477	12165	14893	-	-	-	-	-	-	-	-	-
14C-5100-350-OP	34	40323	12104	14807	-	-	-	-	-	-	-	-	-
14C-5400-200-OP	100	52473	14988	17738	38632	24839	55816	42561	27694	63864	46491	30546	71913
14C-5400-235-OP	83	52444	14976	17722	61051	41094	101735	66476	45022	112846	-	-	-
14C-5400-280-OP	58	52335	14933	17660	-	-	-	-	-	-	-	-	-
14C-5400-300-OP	51	52280	14911	17629	-	-	-	-	-	-	-	-	-
14C-5400-350-OP	37	52127	14850	17543	-	-	-	-	-	-	-	-	-
14C-8300-200-OP	100	67333	19401	23094	32635	19581	37588	36564	22481	45636	40493	25353	53685
14C-8300-235-OP	91	67305	19390	23078	55054	35946	83507	60479	39883	94618	65904	43815	105730
14C-8300-280-OP	64	67196	19346	23017	-	-	-	-	-	-	-	-	-
14C-8300-300-OP	56	67141	19324	22986	-	-	-	-	-	-	-	-	-
14C-8300-350-OP	41	66988	19263	22900	-	-	-	-	-	-	-	-	-
18C-9600-235-OP	100	106927	27068	29561	58724	33983	59816	64963	38627	72595	71202	43250	85373
18C-9600-280-OP	86	106801	27016	29490	97928	62772	140112	106785	69214	158253	115642	75641	176393
18C-9600-300-OP	74	106738	26990	29455	-	-	-	-	-	-	-	-	-
18C-9600-350-OP	55	106562	26918	29356	-	-	-	-	-	-	-	-	-
18C-9800-235-OP	100	135427	33729	36452	50474	24384	24858	56713	29314	37636	62952	34107	50414
18C-9800-280-OP	95	135302	33677	36381	89678	54102	105153	98535	60630	123294	107392	67105	141435
18C-9800-300-OP	83	135239	33651	36346	109301	68498	145345	119468	75913	166169	-	-	-
18C-9800-350-OP	61	135063	33578	36246	-	-	-	-	-	-	-	-	-
18C-10500-280-OP	100	157915	39550	42897	82125	46493	77416	90982	53116	95556	99839	59700	113697
18C-10500-300-OP	89	157852	39524	42861	101748	61116	117607	111915	68627	138431	122083	76066	159256
18C-10500-350-OP	66	157676	39451	42762	-	-	-	-	-	-	-	-	-
18C-11000-280-OP	100	176935	47336	53617	70734	37867	54085	79591	44585	72226	88448	51228	90366
18C-11000-300-OP	95	176872	47310	53582	90357	52651	94277	100524	60208	115101	110692	67731	135926
18C-11000-350-OP	70	176696	47239	53482	-	-	-	-	-	-	-	-	-
32C-12000-300-OP	100	201070	48236	50917	117965	68030	118724	129901	76925	143170	141837	85775	167616
32C-12000-350-OP	82	200863	48149	50801	182505	115554	250912	198751	127375	284186	214997	139193	317460
32C-15000-300-OP	100	233909	59022	64321	103207	55167	78443	115143	64229	102889	127079	73193	127335
32C-15000-350-OP	88	233702	58937	64204	167747	103325	210631	183993	115197	243905	200239	127049	277179
50C-15400-300-OP	100	253231	57858	59373	126682	67546	95338	139944	77631	122500	153205	87603	149663
50C-15400-350-OP	96	253001	57757	59244	198392	121178	242213	216443	134405	279185	234494	147577	316156
50C-15600-300-OP	100	264849	62857	65922	119724	62191	81087	132986	72356	108249	146247	82383	135412
50C-15600-350-OP	98	264619	62759	65792	191434	116041	227962	209485	129312	264934	227536	142500	301905

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)								
					90			95			100		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14C-5100-200-OP	100	40669	12241	15001	53724	36808	94439	57653	39649	102487	61582	42490	110536
14C-5100-235-OP	76	40641	12230	14985	-	-	-	-	-	-	-	-	-
14C-5100-280-OP	54	40531	12187	14924	-	-	-	-	-	-	-	-	-
14C-5100-300-OP	47	40477	12165	14893	-	-	-	-	-	-	-	-	-
14C-5100-350-OP	34	40323	12104	14807	-	-	-	-	-	-	-	-	-
14C-5400-200-OP	100	52473	14988	17738	50420	33396	79961	54349	36242	88009	58279	39087	96057
14C-5400-235-OP	83	52444	14976	17722	-	-	-	-	-	-	-	-	-
14C-5400-280-OP	58	52335	14933	17660	-	-	-	-	-	-	-	-	-
14C-5400-300-OP	51	52280	14911	17629	-	-	-	-	-	-	-	-	-
14C-5400-350-OP	37	52127	14850	17543	-	-	-	-	-	-	-	-	-
14C-8300-200-OP	100	67333	19401	23094	44423	28219	61733	48352	31078	69781	52282	33935	77829
14C-8300-235-OP	91	67305	19390	23078	71329	47743	116841	-	-	-	-	-	-
14C-8300-280-OP	64	67196	19346	23017	-	-	-	-	-	-	-	-	-
14C-8300-300-OP	56	67141	19324	22986	-	-	-	-	-	-	-	-	-
14C-8300-350-OP	41	66988	19263	22900	-	-	-	-	-	-	-	-	-
18C-9600-235-OP	100	106927	27068	29561	77441	47834	98151	83679	52392	110929	89918	56944	123708
18C-9600-280-OP	86	106801	27016	29490	-	-	-	-	-	-	-	-	-
18C-9600-300-OP	74	106738	26990	29455	-	-	-	-	-	-	-	-	-
18C-9600-350-OP	55	106562	26918	29356	-	-	-	-	-	-	-	-	-
18C-9800-235-OP	100	135427	33729	36452	69191	38828	63192	75430	43509	75971	81668	48160	88749
18C-9800-280-OP	95	135302	33677	36381	116249	73568	159575	125106	80014	177716	-	-	-
18C-9800-300-OP	83	135239	33651	36346	-	-	-	-	-	-	-	-	-
18C-9800-350-OP	61	135063	33578	36246	-	-	-	-	-	-	-	-	-
18C-10500-280-OP	100	157915	39550	42897	108696	66258	131837	117553	72756	149978	126410	79223	168119
18C-10500-300-OP	89	157852	39524	42861	-	-	-	-	-	-	-	-	-
18C-10500-350-OP	66	157676	39451	42762	-	-	-	-	-	-	-	-	-
18C-11000-280-OP	100	176935	47336	53617	97305	57821	108507	106162	64387	126648	115019	70900	144788
18C-11000-300-OP	95	176872	47310	53582	120859	75173	156750	131027	82592	177575	-	-	-
18C-11000-350-OP	70	176696	47239	53482	-	-	-	-	-	-	-	-	-
32C-12000-300-OP	100	201070	48236	50917	153773	94567	192063	165708	103297	216509	177644	112006	240955
32C-12000-350-OP	82	200863	48149	50801	-	-	-	-	-	-	-	-	-
32C-15000-300-OP	100	233909	59022	64321	139014	82092	151781	150950	90946	176228	162886	99765	200674
32C-15000-350-OP	88	233702	58937	64204	216484	138867	310453	-	-	-	-	-	-
50C-15400-300-OP	100	253231	57858	59373	166467	97507	176826	179729	107363	203988	192991	117191	231151
50C-15400-350-OP	96	253001	57757	59244	252545	160734	353127	270596	173865	390099	288647	186996	427070
50C-15600-300-OP	100	264849	62857	65922	159509	92322	162575	172771	102204	189737	186033	112038	216900
50C-15600-350-OP	98	264619	62759	65792	245587	155672	338876	263638	168803	375847	281689	181934	412819

NOTES:

Model 80C available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Close Models 0.3S-008A-45-CL to 6S-3800-200-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)														
					15			20			25			30			35		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-45-CL	100	252	112	136	-	-	-	141	23	23	215	94	108	290	144	193	364	192	278
0.3S-008A-75-CL	70	244	106	127	455	250	383	662	382	619	869	513	856	1076	645	1093	1283	776	1330
0.3S-008B-45-CL	100	387	148	149	-	-	-	-	-	-	-	-	-	277	44	44	351	129	129
0.3S-008B-75-CL	73	378	140	140	442	198	233	649	334	470	856	467	706	1063	599	943	1270	731	1180
0.3S-008S-45-CL	100	464	181	187	-	-	-	-	-	-	-	-	-	-	-	-	314	39	39
0.3S-008S-75-CL	75	456	175	178	405	144	144	612	295	380	819	429	617	1026	561	854	1233	693	1091
0.3S-0100-45-CL	100	745	316	365	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-75-CL	81	737	311	356	-	-	-	437	53	53	644	270	289	851	409	526	1058	543	763
0.3S-0100-100-CL	46	729	306	348	706	312	360	1074	553	781	1442	789	1202	1810	1024	1623	2178	1258	2044
0.3S-0150-45-CL	100	931	435	565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-75-CL	86	923	429	556	-	-	-	-	-	-	446	63	63	653	276	300	860	415	537
0.3S-0150-100-CL	48	915	425	548	508	134	134	876	425	555	1244	663	976	1612	898	1397	1980	1133	1817
0.9S-0200-100-CL	100	1220	562	718	-	-	-	930	404	455	1355	685	942	1781	958	1428	2206	1230	1915
0.9S-0200-135-CL	59	1211	556	708	1545	807	1159	2321	1303	2046	3096	1797	2933	3872	2289	3819	4647	2782	4706
0.9S-0250-100-CL	100	1454	708	970	-	-	-	682	171	171	1107	523	658	1533	799	1145	1958	1072	1631
0.9S-0250-135-CL	60	1444	702	960	1297	647	875	2073	1145	1762	2848	1639	2649	3624	2132	3536	4399	2624	4423
0.9S-0350-100-CL	100	2316	1077	1394	-	-	-	-	-	-	-	-	-	1114	150	150	1540	623	637
0.9S-0350-135-CL	66	2307	1071	1384	-	-	-	1654	703	768	2430	1217	1655	3205	1716	2541	3980	2212	3428
0.9S-0400-100-CL	100	2721	1330	1830	-	-	-	-	-	-	-	-	-	-	-	-	1110	145	145
0.9S-0400-135-CL	69	2712	1324	1820	-	-	-	1224	276	276	1999	936	1163	2775	1440	2050	3550	1938	2936
0.9S-0700-100-CL	100	3854	1838	2455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0700-135-CL	74	3844	1832	2444	-	-	-	-	-	-	-	-	-	2159	737	737	2935	1345	1624
1.5S-1100-135-CL	88	6284	3076	3739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1100-175-CL	52	6267	3065	3718	-	-	-	-	-	-	5120	1248	1248	6907	2671	2973	8695	3767	4697
1.5S-1200-135-CL	94	7291	3781	5065	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-175-CL	56	7274	3770	5044	-	-	-	-	-	-	3812	21	21	5599	1745	1745	7387	2985	3470
3S-2000-135-CL	100	10967	5751	8016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-175-CL	65	10940	5733	7983	-	-	-	-	-	-	6482	1475	1475	9402	3811	4373	12322	5609	7272
6S-2500-175-CL	100	15694	8347	11920	-	-	-	-	-	-	-	-	-	8404	1715	1715	11812	4627	5110
6S-2500-200-CL	80	15689	8344	11913	-	-	-	-	-	-	10207	3510	3510	14658	6406	7946	19109	9113	12381
6S-3800-175-CL	100	21216	11714	17685	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-200-CL	87	21210	11711	17679	-	-	-	-	-	-	-	-	-	8972	1335	1335	13423	5241	5770

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)														
					40			45			50			55			60		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-45-CL	100	252	112	136	439	239	364	513	287	449	588	335	534	662	382	619	737	429	705
0.3S-008A-75-CL	70	244	106	127	1490	908	1566	1697	1039	1803	1904	1170	2040	2111	1301	2277	2318	1433	2513
0.3S-008B-45-CL	100	387	148	149	426	187	214	500	237	299	575	286	384	649	334	470	724	382	555
0.3S-008B-75-CL	73	378	140	140	1477	862	1417	1684	994	1653	1891	1125	1890	2098	1256	2127	2305	1388	2364
0.3S-008S-45-CL	100	464	181	187	388	125	125	463	195	210	537	245	295	612	295	380	686	343	466
0.3S-008S-75-CL	75	456	175	178	1440	825	1327	1647	957	1564	1854	1088	1801	2061	1220	2038	2268	1351	2274
0.3S-0100-45-CL	100	745	316	365	-	-	-	-	-	-	-	-	-	437	53	53	511	138	138
0.3S-0100-75-CL	81	737	311	356	1265	676	1000	1472	809	1236	1679	941	1473	1886	1073	1710	2093	1204	1946
0.3S-0100-100-CL	46	729	306	348	2546	1492	2464	2914	1726	2885	-	-	-	-	-	-	-	-	-
0.3S-0150-45-CL	100	931	435	565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-75-CL	86	923	429	556	1067	549	773	1274	682	1010	1481	815	1247	1688	947	1484	1895	1079	1720
0.3S-0150-100-CL	48	915	425	548	2348	1367	2238	2716	1600	2659	-	-	-	-	-	-	-	-	-
0.9S-0200-100-CL	100	1220	562	718	2632	1502	2401	3057	1772	2888	3483	2042	3375	3908	2313	3861	4334	2583	4348
0.9S-0200-135-CL	59	1211	556	708	5423	3274	5593	6198	3766	6480	6973	4258	7367	7749	4750	8254	-	-	-
0.9S-0250-100-CL	100	1454	708	970	2384	1344	2118	2809	1614	2604	3235	1885	3091	3660	2155	3578	4086	2425	4064
0.9S-0250-135-CL	60	1444	702	960	5175	3117	5310	5950	3609	6196	6725	4101	7083	7501	4592	7970	8276	5084	8857
0.9S-0350-100-CL	100	2316	1077	1394	1965	913	1123	2391	1192	1610	2816	1467	2097	3242	1740	2583	3667	2012	3070
0.9S-0350-135-CL	66	2307	1071	1384	4756	2707	4315	5531	3200	5202	6307	3692	6089	7082	4185	6976	7858	4677	7863
0.9S-0400-100-CL	100	2721	1330	1830	1535	620	632	1961	910	1118	2386	1189	1605	2812	1464	2092	3237	1737	2578
0.9S-0400-135-CL	69	2712	1324	1820	4326	2433	3823	5101	2926	4710	5877	3419	5597	6652	3912	6484	7428	4404	7371
0.9S-0700-100-CL	100	3854	1838	2455	-	-	-	-	-	-	1771	292	292	2196	779	779	2622	1134	1266
0.9S-0700-135-CL	74	3844	1832	2444	3710	1854	2511	4486	2354	3398	5261	2852	4285	6037	3347	5171	6812	3842	6058
1.5S-1100-135-CL	88	6284	3076	3739	4710	853	853	5774	1880	1880	6838	2628	2906	7902	3286	3932	8965	3930	4959
1.5S-1100-175-CL	52	6267	3065	3718	10482	4838	6422	12270	5899	8147	14057	6956	9871	-	-	-	-	-	-
1.5S-1200-135-CL	94	7291	3781	5065	-	-	-	4466	652	652	5530	1679	1679	6594	2489	2705	7658	3151	3731
1.5S-1200-175-CL	56	7274	3770	5044	9174	4069	5195	10962	5136	6919	12750	6196	8644	14537	7251	10369	-	-	-
3S-2000-135-CL	100	10967	5751	8016	5813	811	811	7551	2536	2536	9289	3739	4261	11026	4818	5986	12764	5877	7711
3S-2000-175-CL	65	10940	5733	7983	15242	7372	10171	18162	9123	13069	21082	10868	15968	24002	12609	18867	26923	14347	21765
6S-2500-175-CL	100	15694	8347	11920	15220	6751	8506	18628	8823	11902	22036	10876	15298	25444	12920	18694	28852	14958	22089
6S-2500-200-CL	80	15689	8344	11913	23560	11791	16816	28011	14456	21252	32462	17114	25687	36913	19769	30122	41364	22421	34558
6S-3800-175-CL	100	21216	11714	17685	9534	1895	1895	12942	4930	5291	16350	7076	8687	19758	9159	12083	23166	11218	15478
6S-3800-200-CL	87	21210	11711	17679	17874	8011	10205	22325	10711	14641	26776	13388	19076	31227	16054	23511	35678	18714	27947

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	65			70			75			80		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-45-CL	100	252	112	136	811	477	790	886	524	875	960	571	960	1035	619	1045
0.3S-008A-75-CL	70	244	106	127	2525	1564	2750	2732	1695	2987	-	-	-	-	-	-
0.3S-008B-45-CL	100	387	148	149	798	430	640	873	477	725	947	525	811	1022	572	896
0.3S-008B-75-CL	73	378	140	140	2512	1519	2600	2719	1650	2837	-	-	-	-	-	-
0.3S-008S-45-CL	100	464	181	187	761	391	551	835	439	636	910	487	721	985	535	806
0.3S-008S-75-CL	75	456	175	178	2475	1483	2511	2682	1614	2748	2889	1745	2984	-	-	-
0.3S-0100-45-CL	100	745	316	365	586	223	223	660	281	308	735	332	393	809	381	479
0.3S-0100-75-CL	81	737	311	356	2300	1336	2183	2507	1467	2420	2714	1599	2657	2921	1730	2893
0.3S-0100-100-CL	46	729	306	348	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-45-CL	100	931	435	565	-	-	-	463	82	82	537	167	167	612	247	252
0.3S-0150-75-CL	86	923	429	556	2102	1210	1957	2309	1342	2194	2516	1473	2430	2723	1605	2667
0.3S-0150-100-CL	48	915	425	548	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-100-CL	100	1220	562	718	4759	2853	4835	5185	3123	5321	5610	3393	5808	6036	3663	6294
0.9S-0200-135-CL	59	1211	556	708	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0250-100-CL	100	1454	708	970	4511	2695	4551	4937	2966	5038	5362	3236	5524	5788	3506	6011
0.9S-0250-135-CL	60	1444	702	960	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0350-100-CL	100	2316	1077	1394	4093	2284	3557	4518	2555	4043	4944	2826	4530	5369	3097	5017
0.9S-0350-135-CL	66	2307	1071	1384	8633	5170	8750	-	-	-	-	-	-	-	-	-
0.9S-0400-100-CL	100	2721	1330	1830	3663	2009	3065	4088	2281	3551	4514	2552	4038	4939	2823	4525
0.9S-0400-135-CL	69	2712	1324	1820	8203	4897	8258	-	-	-	-	-	-	-	-	-
0.9S-0700-100-CL	100	3854	1838	2455	3047	1419	1752	3473	1699	2239	3898	1975	2725	4324	2250	3212
0.9S-0700-135-CL	74	3844	1832	2444	7588	4336	6945	8363	4829	7832	-	-	-	-	-	-
1.5S-1100-135-CL	88	6284	3076	3739	10029	4568	5985	11093	5201	7011	12157	5832	8038	13221	6462	9064
1.5S-1100-175-CL	52	6267	3065	3718	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-135-CL	94	7291	3781	5065	8721	3797	4758	9785	4435	5784	10849	5069	6810	11913	5700	7837
1.5S-1200-175-CL	56	7274	3770	5044	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-135-CL	100	10967	5751	8016	14502	6927	9436	16240	7971	11161	17978	9013	12886	19715	10052	14611
3S-2000-175-CL	65	10940	5733	7983	29843	16085	24664	-	-	-	-	-	-	-	-	-
6S-2500-175-CL	100	15694	8347	11920	32259	16993	25485	35667	19026	28881	39075	21058	32277	42483	23087	35673
6S-2500-200-CL	80	15689	8344	11913	45815	25071	38993	50266	27722	43428	54717	30369	47864	59168	33017	52299
6S-3800-175-CL	100	21216	11714	17685	26574	13267	18874	29982	15309	22270	33389	17346	25666	36797	19381	29062
6S-3800-200-CL	87	21210	11711	17679	40129	21368	32382	44581	24022	36817	49032	26673	41253	53483	29323	45688

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	85			90			95			100		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-45-CL	100	252	112	136	1109	666	1131	1184	713	1216	1258	760	1301	1333	808	1386
0.3S-008A-75-CL	70	244	106	127	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008B-45-CL	100	387	148	149	1096	620	981	1171	667	1066	1245	715	1151	1320	762	1237
0.3S-008B-75-CL	73	378	140	140	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008S-45-CL	100	464	181	187	1059	582	892	1134	630	977	1208	678	1062	1283	725	1147
0.3S-008S-75-CL	75	456	175	178	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-45-CL	100	745	316	365	884	430	564	958	479	649	1033	527	734	1107	575	820
0.3S-0100-75-CL	81	737	311	356	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-100-CL	46	729	306	348	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-45-CL	100	931	435	565	686	299	338	761	349	423	835	398	508	910	447	593
0.3S-0150-75-CL	86	923	429	556	2930	1736	2904	-	-	-	-	-	-	-	-	-
0.3S-0150-100-CL	48	915	425	548	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-100-CL	100	1220	562	718	6461	3933	6781	6887	4203	7268	7312	4473	7754	7738	4743	8241
0.9S-0200-135-CL	59	1211	556	708	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0250-100-CL	100	1454	708	970	6213	3776	6497	6639	4046	6984	7064	4315	7471	7490	4585	7957
0.9S-0250-135-CL	60	1444	702	960	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0350-100-CL	100	2316	1077	1394	5795	3367	5503	6220	3637	5990	6645	3908	6476	7071	4178	6963
0.9S-0350-135-CL	66	2307	1071	1384	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0400-100-CL	100	2721	1330	1830	5364	3094	5011	5790	3364	5498	6215	3634	5985	6641	3905	6471
0.9S-0400-135-CL	69	2712	1324	1820	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0700-100-CL	100	3854	1838	2455	4749	2523	3699	5174	2796	4185	5600	3068	4672	6025	3340	5159
0.9S-0700-135-CL	74	3844	1832	2444	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1100-135-CL	88	6284	3076	3739	14284	7090	10090	-	-	-	-	-	-	-	-	-
1.5S-1100-175-CL	52	6267	3065	3718	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-135-CL	94	7291	3781	5065	12977	6330	8863	14040	6958	9889	-	-	-	-	-	-
1.5S-1200-175-CL	56	7274	3770	5044	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-135-CL	100	10967	5751	8016	21453	11089	16336	23191	12125	18061	24929	13160	19786	26667	14195	21511
3S-2000-175-CL	65	10940	5733	7983	-	-	-	-	-	-	-	-	-	-	-	-
6S-2500-175-CL	100	15694	8347	11920	45891	25116	39068	49299	27145	42464	52706	29174	45860	56114	31200	49256
6S-2500-200-CL	80	15689	8344	11913	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-175-CL	100	21216	11714	17685	40205	21414	32457	43613	23446	35853	47021	25476	39249	50429	27505	42645
6S-3800-200-CL	87	21210	11711	17679	57934	31974	50123	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Close

Models 14S-5100-200-CL to 50S-15600-350-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					15			20			25			30		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14S-5100-200-CL	100	24894	14052	21540	-	-	-	-	-	-	-	-	-	-	-	-
14S-5100-235-CL	100	24877	14040	21518	-	-	-	-	-	-	12493	3221	3221	19310	8108	9799
14S-5100-280-CL	73	24812	13997	21435	-	-	-	17045	6715	7613	26723	12553	16951	36401	18275	26288
14S-5100-300-CL	63	24779	13975	21393	11625	2384	2384	22736	10175	13103	33846	16768	23823	44956	23307	34542
14S-5100-350-CL	46	24687	13913	21276	23557	10667	13896	38680	19616	28486	53802	28500	43076	68924	37368	57666
14S-5400-200-CL	100	32200	17637	25799	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-235-CL	100	32183	17626	25778	-	-	-	-	-	-	-	-	-	15110	1379	1379
14S-5400-280-CL	75	32118	17582	25694	-	-	-	-	-	-	22522	8160	8530	32201	14139	17868
14S-5400-300-CL	65	32085	17560	25653	-	-	-	18535	4683	4683	29645	12595	15402	40756	19246	26122
14S-5400-350-CL	48	31994	17498	25536	19356	5476	5476	34479	15506	20066	49601	24480	34656	64724	33385	49246
14S-8300-200-CL	100	41398	22799	33637	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-235-CL	100	41381	22788	33616	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-280-CL	79	41316	22744	33532	-	-	-	-	-	-	-	-	-	24471	7044	7044
14S-8300-300-CL	69	41283	22722	33491	-	-	-	-	-	-	21916	4578	4578	33026	13251	15298
14S-8300-350-CL	50	41191	22660	33374	-	-	-	26749	9222	9242	41872	18621	23832	56994	27618	38422
18S-9600-235-CL	100	66994	34519	45762	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-280-CL	100	66919	34467	45666	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-300-CL	88	66881	34442	45618	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-350-CL	64	66776	34370	45484	-	-	-	-	-	-	41122	5450	5450	58508	21240	22234
18S-9800-235-CL	100	84610	43189	56372	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-280-CL	100	84535	43137	56276	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-300-CL	92	84497	43112	56228	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-350-CL	67	84392	43039	56094	-	-	-	-	-	-	-	-	-	48045	1901	1901
18S-10500-280-CL	100	93530	46981	59691	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-300-CL	93	93492	46955	59643	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-350-CL	68	93387	46883	59509	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-280-CL	100	104897	54769	74203	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-300-CL	99	104859	54743	74155	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-350-CL	73	104754	54671	74020	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-300-CL	100	124445	60472	74716	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-350-CL	92	124319	60386	74560	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-300-CL	100	144619	72222	93236	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-350-CL	97	144494	72136	93080	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-300-CL	100	157192	74572	88599	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-350-CL	100	157053	74476	88426	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-300-CL	100	164240	79422	97350	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-350-CL	100	164101	79327	97177	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	35			40			45			50		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14S-5100-200-CL	100	24894	14052	21540	12991	3701	3701	17929	7263	8466	22866	10253	13230	27804	13195	17994
14S-5100-235-CL	100	24877	14040	21518	26128	12199	16376	32945	16236	22954	39763	20253	29531	46580	24261	36109
14S-5100-280-CL	73	24812	13997	21435	46080	23967	35626	55758	29648	44964	65436	35323	54301	75115	40993	63639
14S-5100-300-CL	63	24779	13975	21393	56067	29828	45261	67177	36344	55980	78287	42851	66700	89397	49359	77419
14S-5100-350-CL	46	24687	13913	21276	84047	46225	72256	99169	55082	86846	114291	63933	101436	-	-	-
14S-5400-200-CL	100	32200	17637	25799	-	-	-	13728	45	45	18666	4809	4809	23604	8859	9574
14S-5400-235-CL	100	32183	17626	25778	21927	7766	7956	28745	12048	14533	35562	16154	21111	42379	20209	27688
14S-5400-280-CL	75	32118	17582	25694	41879	19913	27206	51557	25635	36543	61236	31335	45881	70914	37021	55219
14S-5400-300-CL	65	32085	17560	25653	51866	25817	36841	62976	32358	47560	74086	38885	58279	85197	45403	68999
14S-5400-350-CL	48	31994	17498	25536	79846	42265	63836	94968	51133	78426	110091	59995	93016	-	-	-
14S-8300-200-CL	100	41398	22799	33637	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-235-CL	100	41381	22788	33616	-	-	-	21015	3709	3709	27832	9956	10287	34650	14250	16864
14S-8300-280-CL	79	41316	22744	33532	34150	13943	16382	43828	19794	25719	53506	25552	35057	63185	31274	44395
14S-8300-300-CL	69	41283	22722	33491	44136	19978	26017	55247	26583	36736	66357	33147	47455	77467	39688	58175
14S-8300-350-CL	50	41191	22660	33374	72116	36538	53012	87239	45429	67602	102361	54306	82192	117484	63174	96782
18S-9600-235-CL	100	66994	34519	45762	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-280-CL	100	66919	34467	45666	-	-	-	43371	7621	7621	54498	18363	18363	65625	25769	29105
18S-9600-300-CL	88	66881	34442	45618	43726	7963	7963	56499	19907	20295	69273	28031	32626	82046	35804	44957
18S-9600-350-CL	64	66776	34370	45484	75894	32082	39018	93280	42541	55802	110666	52882	72587	128051	63166	89371
18S-9800-235-CL	100	84610	43189	56372	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-280-CL	100	84535	43137	56276	-	-	-	-	-	-	-	-	-	55162	8772	8772
18S-9800-300-CL	92	84497	43112	56228	-	-	-	-	-	-	58809	12293	12293	71582	24624	24624
18S-9800-350-CL	67	84392	43039	56094	65431	18685	18685	82816	31955	35469	100202	42658	52254	117588	53126	69038
18S-10500-280-CL	100	93530	46981	59691	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-300-CL	93	93492	46955	59643	-	-	-	-	-	-	55441	2092	2092	68214	14423	14423
18S-10500-350-CL	68	93387	46883	59509	62063	8484	8484	79449	25269	25269	96834	37626	42053	114220	48330	58837
18S-11000-280-CL	100	104897	54769	74203	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-300-CL	99	104859	54743	74155	-	-	-	-	-	-	-	-	-	53904	608	608
18S-11000-350-CL	73	104754	54671	74020	-	-	-	65138	11454	11454	82524	28238	28238	99910	39546	45022
32S-12000-300-CL	100	124445	60472	74716	-	-	-	-	-	-	-	-	-	73541	2334	2334
32S-12000-350-CL	92	124319	60386	74560	-	-	-	86560	15258	15258	106710	35259	35259	126859	49798	55259
32S-15000-300-CL	100	144619	72222	93236	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-350-CL	97	144494	72136	93080	-	-	-	-	-	-	88446	11348	11348	108595	31349	31349
50S-15400-300-CL	100	157192	74572	88599	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-350-CL	100	157053	74476	88426	-	-	-	-	-	-	113062	17851	17851	135450	40074	40074
50S-15600-300-CL	100	164240	79422	97350	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-350-CL	100	164101	79327	97177	-	-	-	-	-	-	104433	9285	9285	126821	31508	31508

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	55			60			65			70		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14S-5100-200-CL	100	24894	14052	21540	32742	16116	22758	37680	19027	27522	42618	21933	32286	47556	24834	37050
14S-5100-235-CL	100	24877	14040	21518	53398	28263	42686	60215	32261	49263	67032	36259	55841	73850	40252	62418
14S-5100-280-CL	73	24812	13997	21435	84793	46662	72976	94471	52330	82314	104150	57998	91652	113828	63662	100989
14S-5100-300-CL	63	24779	13975	21393	100508	55866	88138	111618	62369	98857	-	-	-	-	-	-
14S-5100-350-CL	46	24687	13913	21276	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-200-CL	100	32200	17637	25799	28542	11924	14338	33480	14907	19102	38417	17857	23866	43355	20787	28630
14S-5400-235-CL	100	32183	17626	25778	49197	24241	34266	56014	28261	40843	62832	32273	47421	69649	36278	53998
14S-5400-280-CL	75	32118	17582	25694	80592	42703	64556	90271	48378	73894	99949	54054	83231	109627	59723	92569
14S-5400-300-CL	65	32085	17560	25653	96307	51918	79718	107417	58429	90437	118528	64936	101156	-	-	-
14S-5400-350-CL	48	31994	17498	25536	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-200-CL	100	41398	22799	33637	20812	3514	3514	25750	8278	8278	30688	11793	13042	35626	14846	17806
14S-8300-235-CL	100	41381	22788	33616	41467	18379	23442	48285	22452	30019	55102	26497	36597	61920	30527	43174
14S-8300-280-CL	79	41316	22744	33532	72863	36977	53732	82541	42669	63070	92220	48355	72407	101898	54034	81745
14S-8300-300-CL	69	41283	22722	33491	88578	46215	68894	99688	52738	79613	110798	59254	90332	-	-	-
14S-8300-350-CL	50	41191	22660	33374	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-235-CL	100	66994	34519	45762	40658	5001	5001	48495	12568	12568	56333	19795	20134	64171	24859	27701
18S-9600-280-CL	100	66919	34467	45666	76752	32602	39847	87879	39310	50589	99006	45957	61330	110133	52567	72072
18S-9600-300-CL	88	66881	34442	45618	94819	43460	57288	107592	51062	69620	120366	58627	81951	133139	66171	94282
18S-9600-350-CL	64	66776	34370	45484	145437	73419	106155	162823	83655	122939	-	-	-	-	-	-
18S-9800-235-CL	100	84610	43189	56372	-	-	-	-	-	-	-	-	-	53708	7368	7368
18S-9800-280-CL	100	84535	43137	56276	66289	19514	19514	77416	28515	30256	88543	35525	40998	99670	42335	51739
18S-9800-300-CL	92	84497	43112	56228	84356	32922	36955	97129	40791	49287	109902	48516	61618	122675	56163	73949
18S-9800-350-CL	67	84392	43039	56094	134974	63487	85822	152360	73796	102606	169745	84068	119390	-	-	-
18S-10500-280-CL	100	93530	46981	59691	62921	9313	9313	74048	20055	20055	85175	30119	30797	96302	37291	41539
18S-10500-300-CL	93	93492	46955	59643	80988	26755	26755	93761	35689	39086	106534	43636	51417	119307	51414	63748
18S-10500-350-CL	68	93387	46883	59509	131606	58815	75621	148992	69202	92405	166378	79528	109190	-	-	-
18S-11000-280-CL	100	104897	54769	74203	-	-	-	59738	6240	6240	70865	16982	16982	81991	27724	27724
18S-11000-300-CL	99	104859	54743	74155	66678	12940	12940	79451	25271	25271	92224	34712	37602	104997	42693	49933
18S-11000-350-CL	73	104754	54671	74020	117296	50195	61806	134682	60660	78590	152067	71031	95375	169453	81350	112159
32S-12000-300-CL	100	124445	60472	74716	88344	17028	17028	103148	31723	31723	117951	44028	46417	132754	53537	61112
32S-12000-350-CL	92	124319	60386	74560	147008	62431	75260	167157	74797	95261	187306	87036	115262	207455	99196	135263
32S-15000-300-CL	100	144619	72222	93236	-	-	-	84884	7812	7812	99688	22507	22507	114491	37202	37202
32S-15000-350-CL	97	144494	72136	93080	128744	48383	51350	148893	61231	71351	169042	73703	91352	189192	86007	111353
50S-15400-300-CL	100	157192	74572	88599	-	-	-	109105	13923	13923	125553	30250	30250	142001	46577	46577
50S-15400-350-CL	100	157053	74476	88426	157838	59004	62298	180226	73344	84521	202614	87254	106744	225002	100965	128968
50S-15600-300-CL	100	164240	79422	97350	-	-	-	100475	5356	5356	116923	21684	21684	133372	38011	38011
50S-15600-350-CL	100	164101	79327	97177	149208	53199	53731	171596	67889	75955	193984	81923	98178	216372	95700	120401

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	Operating supply pressure (barg)											
		BTC	RTC	ETC	75			80			85		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14S-5100-200-CL	100	24894	14052	21540	52494	27733	41814	57432	30629	46578	62370	33525	51342
14S-5100-235-CL	100	24877	14040	21518	80667	44245	68996	87485	48238	75573	94302	52231	82151
14S-5100-280-CL	73	24812	13997	21435	-	-	-	-	-	-	-	-	-
14S-5100-300-CL	63	24779	13975	21393	-	-	-	-	-	-	-	-	-
14S-5100-350-CL	46	24687	13913	21276	-	-	-	-	-	-	-	-	-
14S-5400-200-CL	100	32200	17637	25799	48293	23708	33394	53231	26622	38158	58169	29529	42922
14S-5400-235-CL	100	32183	17626	25778	76466	40283	60575	83284	44281	67153	90101	48279	73730
14S-5400-280-CL	75	32118	17582	25694	119306	65392	101907	-	-	-	-	-	-
14S-5400-300-CL	65	32085	17560	25653	-	-	-	-	-	-	-	-	-
14S-5400-350-CL	48	31994	17498	25536	-	-	-	-	-	-	-	-	-
14S-8300-200-CL	100	41398	22799	33637	40564	17836	22570	45502	20793	27334	50440	23733	32098
14S-8300-235-CL	100	41381	22788	33616	68737	34548	49752	75554	38562	56329	82372	42570	62906
14S-8300-280-CL	79	41316	22744	33532	111576	59710	91083	-	-	-	-	-	-
14S-8300-300-CL	69	41283	22722	33491	-	-	-	-	-	-	-	-	-
14S-8300-350-CL	50	41191	22660	33374	-	-	-	-	-	-	-	-	-
18S-9600-235-CL	100	66994	34519	45762	72009	29712	35267	79847	34478	42834	87684	39193	50400
18S-9600-280-CL	100	66919	34467	45666	121260	59155	82814	132387	65726	93556	143514	72286	104298
18S-9600-300-CL	88	66881	34442	45618	145912	73698	106613	158685	81221	118945	171458	88730	131276
18S-9600-350-CL	64	66776	34370	45484	-	-	-	-	-	-	-	-	-
18S-9800-235-CL	100	84610	43189	56372	61545	14934	14934	69383	22501	22501	77221	28389	30068
18S-9800-280-CL	100	84535	43137	56276	110797	49053	62481	121923	55714	73223	133050	62343	83965
18S-9800-300-CL	92	84497	43112	56228	135449	63769	86280	148222	71344	98612	160995	78901	110943
18S-9800-350-CL	67	84392	43039	56094	-	-	-	-	-	-	-	-	-
18S-10500-280-CL	100	93530	46981	59691	107429	44185	52280	118555	50959	63022	129682	57662	73764
18S-10500-300-CL	93	93492	46955	59643	132081	59100	76080	144854	66737	88411	157627	74336	100742
18S-10500-350-CL	68	93387	46883	59509	-	-	-	-	-	-	-	-	-
18S-11000-280-CL	100	104897	54769	74203	93118	35281	38465	104245	42231	49207	115372	49029	59949
18S-11000-300-CL	99	104859	54743	74155	117771	50483	62265	130544	58178	74596	143317	65819	86927
18S-11000-350-CL	73	104754	54671	74020	-	-	-	-	-	-	-	-	-
32S-12000-300-CL	100	124445	60472	74716	147558	62771	75807	162361	71871	90501	177165	80887	105196
32S-12000-350-CL	92	124319	60386	74560	227604	111310	155264	247753	123395	175265	267902	135444	195266
32S-15000-300-CL	100	144619	72222	93236	129295	48743	51896	144098	58221	66591	158901	67457	81285
32S-15000-350-CL	97	144494	72136	93080	209341	98212	131354	229490	110359	151355	249639	122464	171356
50S-15400-300-CL	100	157192	74572	88599	158449	59407	62905	174898	69986	79232	191346	80284	95559
50S-15400-350-CL	100	157053	74476	88426	247390	114568	151191	269777	128093	173414	292165	141570	195637
50S-15600-300-CL	100	164240	79422	97350	149820	53621	54338	166268	64484	70666	182716	74904	86993
50S-15600-350-CL	100	164101	79327	97177	238760	109332	142625	261148	122883	164848	283536	136375	187071

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)											
		BTC	RTC	ETC	90			95			100		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
14S-5100-200-CL	100	24894	14052	21540	67308	36421	56107	72246	39313	60871	77184	42205	65635
14S-5100-235-CL	100	24877	14040	21518	101119	56224	88728	107937	60214	95305	114754	64204	101883
14S-5100-280-CL	73	24812	13997	21435	-	-	-	-	-	-	-	-	-
14S-5100-300-CL	63	24779	13975	21393	-	-	-	-	-	-	-	-	-
14S-5100-350-CL	46	24687	13913	21276	-	-	-	-	-	-	-	-	-
14S-5400-200-CL	100	32200	17637	25799	63107	32435	47686	68045	35336	52450	72983	38237	57215
14S-5400-235-CL	100	32183	17626	25778	96919	52277	80308	103736	56273	86885	110553	60266	93463
14S-5400-280-CL	75	32118	17582	25694	-	-	-	-	-	-	-	-	-
14S-5400-300-CL	65	32085	17560	25653	-	-	-	-	-	-	-	-	-
14S-5400-350-CL	48	31994	17498	25536	-	-	-	-	-	-	-	-	-
14S-8300-200-CL	100	41398	22799	33637	55378	26660	36862	60315	29580	41626	65253	32495	46391
14S-8300-235-CL	100	41381	22788	33616	89189	46575	69484	96007	50579	76061	102824	54577	82639
14S-8300-280-CL	79	41316	22744	33532	-	-	-	-	-	-	-	-	-
14S-8300-300-CL	69	41283	22722	33491	-	-	-	-	-	-	-	-	-
14S-8300-350-CL	50	41191	22660	33374	-	-	-	-	-	-	-	-	-
18S-9600-235-CL	100	66994	34519	45762	95522	43880	57967	103360	48546	65534	111198	53198	73100
18S-9600-280-CL	100	66919	34467	45666	154641	78839	115040	165768	85385	125782	176894	91924	136524
18S-9600-300-CL	88	66881	34442	45618	-	-	-	-	-	-	-	-	-
18S-9600-350-CL	64	66776	34370	45484	-	-	-	-	-	-	-	-	-
18S-9800-235-CL	100	84610	43189	56372	85059	33361	37634	92897	38205	45201	100734	42981	52767
18S-9800-280-CL	100	84535	43137	56276	144177	68948	94707	155304	75540	105449	166431	82111	116191
18S-9800-300-CL	92	84497	43112	56228	173768	86444	123274	-	-	-	-	-	-
18S-9800-350-CL	67	84392	43039	56094	-	-	-	-	-	-	-	-	-
18S-10500-280-CL	100	93530	46981	59691	140809	64322	84506	151936	70953	95248	163063	77564	105990
18S-10500-300-CL	93	93492	46955	59643	170400	81911	113073	-	-	-	-	-	-
18S-10500-350-CL	68	93387	46883	59509	-	-	-	-	-	-	-	-	-
18S-11000-280-CL	100	104897	54769	74203	126499	55751	70691	137626	62421	81433	148753	69060	92175
18S-11000-300-CL	99	104859	54743	74155	156090	73423	99258	168863	81000	111590	-	-	-
18S-11000-350-CL	73	104754	54671	74020	-	-	-	-	-	-	-	-	-
32S-12000-300-CL	100	124445	60472	74716	191968	89854	119890	206771	98785	134585	221575	107693	149279
32S-12000-350-CL	92	124319	60386	74560	288051	147487	215267	308200	159506	235268	-	-	-
32S-15000-300-CL	100	144619	72222	93236	173705	76563	95980	188508	85592	110674	203311	94569	125369
32S-15000-350-CL	97	144494	72136	93080	269788	134546	191357	289937	146595	211358	310086	158640	231359
50S-15400-300-CL	100	157192	74572	88599	207794	90439	111886	224242	100502	128214	240691	110504	144541
50S-15400-350-CL	100	157053	74476	88426	314553	155004	217861	336941	168420	240084	359329	181808	262307
50S-15600-300-CL	100	164240	79422	97350	199164	85125	103320	215613	95235	119647	232061	105265	135975
50S-15600-350-CL	100	164101	79327	97177	305923	149827	209294	328311	163256	231518	350699	176648	253741

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Open Models 0.3S-008A-45-OP to 6S-3800-200-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)														
					15			20			25			30			35		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-45-OP	100	222	99	116	-	-	-	156	33	33	234	100	116	311	149	200	389	197	283
0.3S-008A-75-OP	71	214	94	107	483	255	386	699	387	618	914	519	850	1129	651	1082	1345	782	1314
0.3S-008B-45-OP	100	334	109	109	-	-	-	-	-	-	-	-	-	306	62	62	383	145	146
0.3S-008B-75-OP	73	325	99	99	478	208	248	694	343	480	909	476	712	1124	608	944	1339	740	1176
0.3S-008S-45-OP	100	402	140	140	-	-	-	-	-	-	-	-	-	-	-	-	347	61	61
0.3S-008S-75-OP	74	394	131	131	442	163	163	657	305	395	872	439	627	1088	572	859	1303	704	1091
0.3S-0100-45-OP	100	655	278	302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-75-OP	78	647	272	293	-	-	-	482	82	82	698	285	314	913	423	546	1128	558	778
0.3S-0100-100-OP	44	640	267	284	762	327	383	1145	568	795	1528	804	1208	1910	1039	1620	2293	1274	2033
0.3S-0150-45-OP	100	834	398	507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-75-OP	83	826	392	497	-	-	-	-	-	-	492	92	92	707	292	324	923	429	556
0.3S-0150-100-OP	46	819	387	489	556	161	161	939	440	574	1322	677	986	1705	913	1399	2087	1148	1811
0.9S-0200-100-OP	100	1054	487	596	604	54	54	1046	451	531	1489	730	1008	1931	1003	1485	2374	1275	1962
0.9S-0200-135-OP	59	1045	481	586	1686	852	1221	2493	1349	2090	3299	1843	2959	4106	2336	3828	4913	2829	4697
0.9S-0250-100-OP	100	1278	635	853	-	-	-	788	253	253	1231	569	730	1673	844	1207	2116	1117	1684
0.9S-0250-135-OP	61	1269	629	843	1428	692	943	2235	1190	1812	3042	1685	2681	3848	2178	3550	4655	2671	4419
0.9S-0350-100-OP	100	2005	939	1169	-	-	-	-	-	-	-	-	-	1307	307	307	1749	714	783
0.9S-0350-135-OP	64	1996	933	1158	1062	43	43	1868	792	912	2675	1301	1781	3481	1801	2650	4288	2297	3519
0.9S-0400-100-OP	100	2394	1194	1614	-	-	-	-	-	-	-	-	-	-	-	-	1302	301	301
0.9S-0400-135-OP	66	2385	1188	1603	-	-	-	1421	430	430	2228	1021	1299	3034	1524	2168	3841	2022	3037
0.9S-0700-100-OP	100	3361	1626	2112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0700-135-OP	70	3352	1620	2101	-	-	-	-	-	-	1669	100	100	2475	951	969	3282	1479	1838
1.5S-1100-135-OP	98	6862	2643	2929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1100-175-OP	58	6844	2631	2912	-	-	-	-	-	-	4429	1370	1370	5998	2876	3373	7566	3958	5377
1.5S-1200-135-OP	100	8011	3367	4073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-175-OP	62	7993	3356	4055	-	-	-	-	-	-	-	-	-	4852	1950	1950	6420	3183	3953
3S-2000-135-OP	100	11599	5169	6555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-175-OP	68	11570	5151	6525	-	-	-	-	-	-	5924	1756	1756	8560	4125	5029	11197	5904	8302
6S-2500-175-OP	100	16485	7523	9766	-	-	-	-	-	-	-	-	-	7814	2174	2174	10903	5115	5993
6S-2500-200-OP	80	16479	7520	9760	-	-	-	-	-	-	9447	4085	4193	13481	6869	9182	17515	9555	14171
6S-3800-175-OP	100	22456	10790	14771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-200-OP	88	22450	10786	14765	-	-	-	-	-	-	-	-	-	8360	1786	1786	12394	5802	6774

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)														
					40			45			50			55			60		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-45-OP	100	222	99	116	466	245	367	544	292	451	621	340	534	699	387	618	776	435	701
0.3S-008A-75-OP	71	214	94	107	1560	914	1546	1775	1045	1778	1990	1177	2010	2206	1308	2242	2421	1440	2474
0.3S-008B-45-OP	100	334	109	109	461	197	229	538	246	313	616	295	396	693	343	480	771	391	563
0.3S-008B-75-OP	73	325	99	99	1555	872	1408	1770	1004	1640	1985	1135	1872	2201	1267	2104	2416	1399	2336
0.3S-008S-45-OP	100	402	140	140	424	144	144	502	206	228	579	256	311	657	305	395	734	354	478
0.3S-008S-75-OP	74	394	131	131	1518	836	1323	1733	968	1555	1949	1100	1787	2164	1231	2019	2379	1363	2251
0.3S-0100-45-OP	100	655	278	302	-	-	-	-	-	-	-	-	-	482	82	82	560	165	165
0.3S-0100-75-OP	78	647	272	293	1344	691	1010	1559	823	1242	1774	956	1474	1989	1088	1706	2205	1219	1938
0.3S-0100-100-OP	44	640	267	284	2676	1508	2445	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-45-OP	100	834	398	507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-75-OP	83	826	392	497	1138	564	788	1353	697	1020	1568	829	1252	1784	961	1484	1999	1093	1716
0.3S-0150-100-OP	46	819	387	489	2470	1382	2224	2853	1616	2636	-	-	-	-	-	-	-	-	-
0.9S-0200-100-OP	100	1054	487	596	2816	1547	2439	3259	1818	2915	3702	2089	3392	4144	2359	3869	4587	2630	4346
0.9S-0200-135-OP	59	1045	481	586	5719	3322	5566	6526	3814	6435	7332	4307	7305	8139	4800	8174	-	-	-
0.9S-0250-100-OP	100	1278	635	853	2559	1389	2161	3001	1660	2637	3444	1931	3114	3886	2202	3591	4329	2472	4068
0.9S-0250-135-OP	61	1269	629	843	5461	3164	5288	6268	3657	6157	7074	4150	7027	7881	4642	7896	8687	5135	8765
0.9S-0350-100-OP	100	2005	939	1169	2192	999	1260	2634	1276	1737	3077	1551	2214	3520	1824	2691	3962	2097	3168
0.9S-0350-135-OP	64	1996	933	1158	5095	2791	4388	5901	3286	5257	6708	3779	6126	7514	4272	6996	8321	4765	7865
0.9S-0400-100-OP	100	2394	1194	1614	1745	711	778	2187	996	1255	2630	1273	1732	3072	1548	2209	3515	1821	2686
0.9S-0400-135-OP	66	2385	1188	1603	4647	2517	3906	5454	3012	4775	6260	3505	5644	7067	3999	6514	7874	4492	7383
0.9S-0700-100-OP	100	3361	1626	2112	-	-	-	1628	57	57	2071	534	534	2514	978	1010	2956	1270	1487
0.9S-0700-135-OP	70	3352	1620	2101	4089	1985	2708	4895	2485	3577	5702	2982	4446	6508	3478	5315	7315	3973	6184
1.5S-1100-135-OP	98	6862	2643	2929	4070	911	911	5003	2103	2103	5937	2833	3296	6870	3482	4488	7804	4119	5680
1.5S-1100-175-OP	58	6844	2631	2912	9134	5019	7380	10703	6073	9384	12271	7122	11387	13840	8168	13391	-	-	-
1.5S-1200-135-OP	100	8011	3367	4073	-	-	-	3858	680	680	4791	1872	1872	5724	2695	3064	6658	3347	4257
1.5S-1200-175-OP	62	7993	3356	4055	7988	4256	5957	9557	5314	7960	11125	6366	9964	12694	7414	11967	14262	8460	13971
3S-2000-135-OP	100	11599	5169	6555	5321	1007	1007	6890	2945	2954	8458	4055	4902	10027	5121	6850	11596	6171	8797
3S-2000-175-OP	68	11570	5151	6525	13833	7656	11575	16469	9396	14848	19105	11131	18120	21741	12863	21393	24377	14595	24666
6S-2500-175-OP	100	16485	7523	9766	13991	7210	9813	17079	9266	13632	20167	11306	17452	23255	13338	21271	26344	15366	25091
6S-2500-200-OP	80	16479	7520	9760	21548	12216	19160	25582	14866	24149	29615	17511	29137	33649	20155	34126	37683	22800	39115
6S-3800-175-OP	100	22456	10790	14771	8870	2416	2416	11958	5499	6236	15047	7609	10055	18135	9673	13875	21223	11719	17694
6S-3800-200-OP	88	22450	10786	14765	16428	8536	11763	20461	11215	16752	24495	13876	21741	28528	16527	26729	32562	19172	31718

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					65			70			75			80		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-45-OP	100	222	99	116	854	482	785	931	530	868	1009	577	952	1086	624	1035
0.3S-008A-75-OP	71	214	94	107	2636	1571	2706	2852	1702	2938	-	-	-	-	-	-
0.3S-008B-45-OP	100	334	109	109	848	439	647	926	487	730	1003	534	814	1081	582	897
0.3S-008B-75-OP	73	325	99	99	2631	1530	2568	2846	1662	2800	-	-	-	-	-	-
0.3S-008S-45-OP	100	402	140	140	812	402	562	889	450	645	967	498	729	1044	545	812
0.3S-008S-75-OP	74	394	131	131	2595	1495	2483	2810	1626	2715	-	-	-	-	-	-
0.3S-0100-45-OP	100	655	278	302	637	244	249	715	297	332	792	347	416	870	396	499
0.3S-0100-75-OP	78	647	272	293	2420	1351	2170	2635	1483	2402	2851	1615	2634	-	-	-
0.3S-0100-100-OP	44	640	267	284	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-45-OP	100	834	398	507	432	27	27	509	111	111	587	194	194	664	263	278
0.3S-0150-75-OP	83	826	392	497	2214	1225	1948	2430	1357	2180	2645	1489	2412	2860	1621	2644
0.3S-0150-100-OP	46	819	387	489	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-100-OP	100	1054	487	596	5029	2900	4823	5472	3171	5300	5914	3441	5777	6357	3711	6254
0.9S-0200-135-OP	59	1045	481	586	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0250-100-OP	100	1278	635	853	4771	2743	4545	5214	3013	5022	5656	3283	5499	6099	3554	5976
0.9S-0250-135-OP	61	1269	629	843	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0350-100-OP	100	2005	939	1169	4405	2368	3645	4847	2640	4122	5290	2911	4599	5732	3182	5075
0.9S-0350-135-OP	64	1996	933	1158	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0400-100-OP	100	2394	1194	1614	3957	2094	3163	4400	2365	3640	4843	2637	4117	5285	2908	4593
0.9S-0400-135-OP	66	2385	1188	1603	8680	4985	8252	-	-	-	-	-	-	-	-	-
0.9S-0700-100-OP	100	3361	1626	2112	3399	1552	1964	3841	1830	2441	4284	2106	2918	4726	2381	3395
0.9S-0700-135-OP	70	3352	1620	2101	8121	4467	7053	8928	4961	7922	-	-	-	-	-	-
1.5S-1100-135-OP	98	6862	2643	2929	8737	4752	6873	9670	5380	8065	10604	6007	9257	11537	6631	10450
1.5S-1100-175-OP	58	6844	2631	2912	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-135-OP	100	8011	3367	4073	7591	3986	5449	8524	4619	6641	9458	5248	7833	10391	5874	9026
1.5S-1200-175-OP	62	7993	3356	4055	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-135-OP	100	11599	5169	6555	13165	7213	10745	14733	8251	12693	16302	9286	14641	17871	10319	16588
3S-2000-175-OP	68	11570	5151	6525	27013	16326	27939	-	-	-	-	-	-	-	-	-
6S-2500-175-OP	100	16485	7523	9766	29432	17390	28910	32520	19415	32730	35608	21440	36549	38697	23464	40369
6S-2500-200-OP	80	16479	7520	9760	41716	25444	44104	45750	28089	49092	49784	30733	54081	53817	33378	59070
6S-3800-175-OP	100	22456	10790	14771	24311	13755	21514	27400	15785	25333	30488	17812	29153	33576	19837	32972
6S-3800-200-OP	88	22450	10786	14765	36596	21816	36707	40629	24461	41696	44663	27105	46685	48696	29750	51673

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					85			90			95			100		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-45-OP	100	222	99	116	1164	672	1119	1241	719	1202	1319	766	1286	1396	814	1369
0.3S-008A-75-OP	71	214	94	107	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008B-45-OP	100	334	109	109	1158	630	981	1236	677	1064	1314	724	1148	1391	772	1231
0.3S-008B-75-OP	73	325	99	99	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008S-45-OP	100	402	140	140	1122	593	896	1200	641	979	1277	688	1063	1355	736	1146
0.3S-008S-75-OP	74	394	131	131	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-45-OP	100	655	278	302	947	445	583	1025	493	666	1102	541	750	1180	590	833
0.3S-0100-75-OP	78	647	272	293	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0100-100-OP	44	640	267	284	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-45-OP	100	834	398	507	742	314	361	819	364	445	897	413	528	974	462	612
0.3S-0150-75-OP	83	826	392	497	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-0150-100-OP	46	819	387	489	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-100-OP	100	1054	487	596	6799	3982	6730	7242	4252	7207	7685	4522	7684	8127	4793	8161
0.9S-0200-135-OP	59	1045	481	586	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0250-100-OP	100	1278	635	853	6542	3824	6453	6984	4095	6929	7427	4365	7406	7869	4635	7883
0.9S-0250-135-OP	61	1269	629	843	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0350-100-OP	100	2005	939	1169	6175	3453	5552	6617	3724	6029	7060	3994	6506	7503	4265	6983
0.9S-0350-135-OP	64	1996	933	1158	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0400-100-OP	100	2394	1194	1614	5728	3179	5070	6170	3450	5547	6613	3721	6024	7055	3992	6501
0.9S-0400-135-OP	66	2385	1188	1603	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0700-100-OP	100	3361	1626	2112	5169	2654	3872	5611	2927	4349	6054	3199	4825	6497	3471	5302
0.9S-0700-135-OP	70	3352	1620	2101	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1100-135-OP	98	6862	2643	2929	12470	7255	11642	13404	7878	12834	14337	8500	14026	-	-	-
1.5S-1100-175-OP	58	6844	2631	2912	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-135-OP	100	8011	3367	4073	11325	6499	10218	12258	7123	11410	13191	7746	12603	14125	8368	13795
1.5S-1200-175-OP	62	7993	3356	4055	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-135-OP	100	11599	5169	6555	19440	11351	18536	21008	12381	20484	22577	13412	22431	24146	14443	24379
3S-2000-175-OP	68	11570	5151	6525	-	-	-	-	-	-	-	-	-	-	-	-
6S-2500-175-OP	100	16485	7523	9766	41785	25489	44188	44873	27514	48008	47961	29538	51828	51050	31563	55647
6S-2500-200-OP	80	16479	7520	9760	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-175-OP	100	22456	10790	14771	36664	21861	36792	39752	23886	40611	42841	25911	44431	45929	27935	48250
6S-3800-200-OP	88	22450	10786	14765	52730	32394	56662	-	-	-	-	-	-	-	-	-

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGAS Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Open Models 14S-5100-200-OP to 50S-15600-350-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					15			20			25			30		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14S-5100-200-OP	100	27498	13013	17698	-	-	-	-	-	-	-	-	-	-	-	-
14S-5100-235-OP	100	27479	13002	17679	-	-	-	-	-	-	10964	3746	3746	16946	8680	11387
14S-5100-280-OP	71	27404	12958	17608	-	-	-	14958	7306	8847	23450	13083	19695	31942	18763	30542
14S-5100-300-OP	62	27367	12936	17572	10203	2773	2773	19951	10724	15226	29699	17267	27678	39448	23770	40131
14S-5100-350-OP	46	27263	12874	17471	20672	11212	16147	33940	20096	33096	47209	28948	50045	60477	37793	66994
14S-5400-200-OP	100	35440	16081	20993	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-235-OP	100	35421	16070	20974	-	-	-	-	-	-	-	-	-	13216	1549	1549
14S-5400-280-OP	75	35346	16025	20903	-	-	-	-	-	-	19720	9056	9857	28212	14940	20704
14S-5400-300-OP	66	35309	16003	20867	-	-	-	16221	5387	5387	25969	13412	17840	35718	20003	30292
14S-5400-350-OP	48	35205	15941	20766	16942	6308	6308	30210	16294	23257	43479	25200	40207	56747	34052	57156
14S-8300-200-OP	100	45484	20783	27317	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-235-OP	100	45465	20771	27298	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-280-OP	81	45390	20727	27227	-	-	-	-	-	-	-	-	-	21533	8262	8262
14S-8300-300-OP	71	45353	20705	27191	-	-	-	-	-	-	19291	5398	5398	29039	14388	17850
14S-8300-350-OP	52	45249	20642	27090	-	-	-	23532	10476	10815	36800	19695	27764	50069	28618	44713
18S-9600-235-OP	100	71792	29579	35058	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-280-OP	100	71707	29527	34976	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-300-OP	94	71664	29500	34935	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-350-OP	69	71544	29427	34819	-	-	-	-	-	-	37207	7736	7736	52471	24420	27222
18S-9800-235-OP	100	91146	37130	43510	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-280-OP	100	91060	37078	43428	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-300-OP	100	91017	37051	43387	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-350-OP	74	90897	36978	43271	-	-	-	-	-	-	-	-	-	42996	3248	3248
18S-10500-280-OP	100	106286	43484	51177	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-300-OP	100	106243	43457	51136	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-350-OP	77	106123	43384	51020	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-280-OP	100	119233	51369	63676	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-300-OP	100	119190	51343	63635	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-350-OP	81	119070	51271	63519	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-300-OP	100	156381	68205	84565	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-350-OP	100	156242	68119	84427	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-300-OP	100	134323	52005	56887	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-350-OP	100	134184	51916	56749	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-300-OP	100	169415	66500	73789	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-350-OP	100	169260	66401	73636	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-300-OP	100	177222	71451	81539	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-350-OP	100	177068	71354	81386	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	35			40			45			50		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14S-5100-200-OP	100	27498	13013	17698	11401	4304	4304	15733	7845	9838	20066	10802	15372	24398	13719	20907
14S-5100-235-OP	100	27479	13002	17679	22927	12732	19028	28909	16739	26669	34891	20730	34310	40872	24721	41951
14S-5100-280-OP	71	27404	12958	17608	40433	24428	41390	48925	30093	52237	57417	35754	63085	65909	41411	73932
14S-5100-300-OP	62	27367	12936	17572	49196	30273	52583	58944	36771	65036	68693	43265	77488	78441	49757	89941
14S-5100-350-OP	46	27263	12874	17471	73746	46632	83943	87014	55463	100893	100283	64294	117842	-	-	-
14S-5400-200-OP	100	35440	16081	20993	-	-	-	-	-	-	16336	5534	5534	20669	9734	11069
14S-5400-235-OP	100	35421	16070	20974	19198	8677	9190	25179	12871	16830	31161	16937	24471	37142	20959	32112
14S-5400-280-OP	75	35346	16025	20903	36704	20665	31552	45195	26345	42399	53687	32010	53247	62179	37676	64094
14S-5400-300-OP	66	35309	16003	20867	45466	26526	42745	55214	33029	55197	64963	39532	67650	74711	46036	80102
14S-5400-350-OP	48	35205	15941	20766	70016	42904	74105	83284	51752	91054	96553	60591	108003	-	-	-
14S-8300-200-OP	100	45484	20783	27317	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-235-OP	100	45465	20771	27298	-	-	-	18500	4388	4388	24482	11172	12029	30464	15372	19670
14S-8300-280-OP	81	45390	20727	27227	30025	15070	19109	38517	20856	29957	47008	26568	40804	55500	32250	51652
14S-8300-300-OP	71	45353	20705	27191	38787	21039	30303	48535	27592	42755	58284	34106	55207	68032	40610	67660
14S-8300-350-OP	52	45249	20642	27090	63337	37478	61663	76606	46329	78612	89874	55181	95561	103143	64030	112510
18S-9600-235-OP	100	71792	29579	35058	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-280-OP	100	71707	29527	34976	-	-	-	39182	10257	10257	48951	21869	22728	58719	28817	35199
18S-9600-300-OP	94	71664	29500	34935	39493	10654	10654	50707	23151	24970	61922	31035	39287	73136	38703	53603
18S-9600-350-OP	69	71544	29427	34819	67735	35025	46708	82999	45373	66194	98263	55629	85680	113527	65838	105166
18S-9800-235-OP	100	91146	37130	43510	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-280-OP	100	91060	37078	43428	-	-	-	-	-	-	-	-	-	49245	11225	11225
18S-9800-300-OP	100	91017	37051	43387	-	-	-	41233	996	996	52447	15313	15313	63661	28467	29629
18S-9800-350-OP	74	90897	36978	43271	58260	22734	22734	73524	35516	42220	88788	46047	61706	104052	56405	81192
18S-10500-280-OP	100	106286	43484	51177	-	-	-	-	-	-	-	-	-	-	-	-
18S-10500-300-OP	100	106243	43457	51136	-	-	-	-	-	-	-	-	-	55207	10768	10768
18S-10500-350-OP	77	106123	43384	51020	49806	3873	3873	65070	23359	23359	80334	37767	42845	95598	48404	62331
18S-11000-280-OP	100	119233	51369	63676	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-300-OP	100	119190	51343	63635	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-350-OP	81	119070	51271	63519	-	-	-	52506	7320	7320	67770	26806	26806	83034	39677	46293
32S-12000-300-OP	100	156381	68205	84565	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-350-OP	100	156242	68119	84427	-	-	-	-	-	-	71082	8462	8462	89271	31046	31046
32S-15000-300-OP	100	134323	52005	56887	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-350-OP	100	134184	51916	56749	-	-	-	80159	13205	13205	98349	35789	35789	116538	52870	58372
50S-15400-300-OP	100	169415	66500	73789	-	-	-	-	-	-	-	-	-	-	-	-
50S-15400-350-OP	100	169260	66401	73636	-	-	-	-	-	-	97738	14783	14783	117948	39875	39875
50S-15600-300-OP	100	177222	71451	81539	-	-	-	-	-	-	-	-	-	-	-	-
50S-15600-350-OP	100	177068	71354	81386	-	-	-	-	-	-	89947	5110	5110	110158	30203	30203

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					55			60			65			70		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14S-5100-200-OP	100	27498	13013	17698	28731	16620	26441	33064	19511	31976	37396	22401	37510	41729	25292	43045
14S-5100-235-OP	100	27479	13002	17679	46854	28711	49592	52836	32701	57233	58817	36687	64874	64799	40672	72515
14S-5100-280-OP	71	27404	12958	17608	74401	47068	84780	82893	52720	95627	91385	58372	106475	99876	64023	117322
14S-5100-300-OP	62	27367	12936	17572	88189	56245	102393	97937	62733	114846	-	-	-	-	-	-
14S-5100-350-OP	46	27263	12874	17471	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-200-OP	100	35440	16081	20993	25001	12749	16603	29334	15701	22137	33666	18625	27672	37999	21534	33206
14S-5400-235-OP	100	35421	16070	20974	43124	24963	39753	49106	28954	47394	55087	32945	55035	61069	36935	62676
14S-5400-280-OP	75	35346	16025	20903	70671	43341	74942	79163	49006	85789	87655	54663	96637	96146	60320	107484
14S-5400-300-OP	66	35309	16003	20867	84459	52535	92555	94207	59029	105007	103956	65523	117460	-	-	-
14S-5400-350-OP	48	35205	15941	20766	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-200-OP	100	45484	20783	27317	18322	4161	4161	22655	9695	9695	26987	12956	15229	31320	15961	20764
14S-8300-235-OP	100	45465	20771	27298	36445	19455	27311	42427	23492	34952	48409	27507	42593	54390	31509	50234
14S-8300-280-OP	81	45390	20727	27227	63992	37915	62499	72484	43580	73347	80976	49245	84194	89468	54910	95042
14S-8300-300-OP	71	45353	20705	27191	77780	47113	80112	87529	53616	92565	97277	60119	105017	107025	66616	117470
14S-8300-350-OP	52	45249	20642	27090	-	-	-	-	-	-	-	-	-	-	-	-
18S-9600-235-OP	100	71792	29579	35058	36799	7215	7215	43680	16000	16000	50561	23046	24784	57443	27928	33569
18S-9600-280-OP	100	71707	29527	34976	68488	35540	47670	78257	42172	60141	88026	48759	72612	97795	55315	85083
18S-9600-300-OP	94	71664	29500	34935	84350	46283	67919	95564	53819	82236	106779	61326	96552	117993	68817	110868
18S-9600-350-OP	69	71544	29427	34819	128791	76018	124652	144054	86197	144138	159318	96376	163624	-	-	-
18S-9800-235-OP	100	91146	37130	43510	-	-	-	-	-	-	41087	810	810	47968	9595	9595
18S-9800-280-OP	100	91060	37078	43428	59014	23696	23696	68783	32168	36167	78551	39016	48638	88320	45728	61109
18S-9800-300-OP	100	91017	37051	43387	74875	36462	43945	86090	44204	58261	97304	51841	72578	108518	59416	86894
18S-9800-350-OP	74	90897	36978	43271	119316	66678	100678	134580	76906	120164	149844	87109	139650	165108	97288	159136
18S-10500-280-OP	100	106286	43484	51177	50560	4835	4835	60328	17306	17306	70097	29777	29777	79866	37434	42248
18S-10500-300-OP	100	106243	43457	51136	66421	25084	25084	77636	35840	39401	88850	43742	53717	100064	51469	68033
18S-10500-350-OP	77	106123	43384	51020	110862	58823	81817	126126	69139	101304	141390	79398	120790	156653	89622	140276
18S-11000-280-OP	100	119233	51369	63676	-	-	-	47765	1267	1267	57534	13738	13738	67303	26209	26209
18S-11000-300-OP	100	119190	51343	63635	53858	9046	9046	65072	23362	23362	76286	34868	37678	87501	42803	51994
18S-11000-350-OP	81	119070	51271	63519	98298	50259	65779	113562	60655	85265	128826	70957	104751	144090	81210	124237
32S-12000-300-OP	100	156381	68205	84565	-	-	-	67866	4470	4470	81230	21062	21062	94593	37654	37654
32S-12000-350-OP	100	156242	68119	84427	107460	48684	53629	125649	61295	76212	143839	73615	98795	162028	85797	121378
32S-15000-300-OP	100	134323	52005	56887	81770	15205	15205	95133	31796	31796	108497	47089	48388	121860	56608	64980
32S-15000-350-OP	100	134184	51916	56749	134727	65488	80955	152917	77827	103538	171106	90024	126121	189295	102144	148704
50S-15400-300-OP	100	169415	66500	73789	-	-	-	94165	10347	10347	109013	28782	28782	123862	47217	47217
50S-15400-350-OP	100	169260	66401	73636	138158	61194	64967	158369	75385	90060	178579	89187	115152	198789	102806	140245
50S-15600-300-OP	100	177222	71451	81539	-	-	-	86375	675	675	101223	19110	19110	116072	37545	37545
50S-15600-350-OP	100	177068	71354	81386	130368	55295	55295	150578	69979	80388	170789	83896	105480	190999	97575	130572

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)								
					75			80			85		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14S-5100-200-OP	100	27498	13013	17698	46061	28182	48579	50394	31072	54113	54726	33962	59648
14S-5100-235-OP	100	27479	13002	17679	70781	44656	80156	76762	48640	87797	82744	52621	95438
14S-5100-280-OP	71	27404	12958	17608	-	-	-	-	-	-	-	-	-
14S-5100-300-OP	62	27367	12936	17572	-	-	-	-	-	-	-	-	-
14S-5100-350-OP	46	27263	12874	17471	-	-	-	-	-	-	-	-	-
14S-5400-200-OP	100	35440	16081	20993	42331	24433	38741	46664	27325	44275	50997	30215	49810
14S-5400-235-OP	100	35421	16070	20974	67051	40926	70317	73032	44916	77958	79014	48906	85599
14S-5400-280-OP	75	35346	16025	20903	104638	65977	118332	-	-	-	-	-	-
14S-5400-300-OP	66	35309	16003	20867	-	-	-	-	-	-	-	-	-
14S-5400-350-OP	48	35205	15941	20766	-	-	-	-	-	-	-	-	-
14S-8300-200-OP	100	45484	20783	27317	35653	18917	26298	39985	21847	31833	44318	24763	37367
14S-8300-235-OP	100	45465	20771	27298	60372	35500	57875	66354	39490	65516	72335	43480	73157
14S-8300-280-OP	81	45390	20727	27227	97960	60575	105889	106451	66234	116737	-	-	-
14S-8300-300-OP	71	45353	20705	27191	-	-	-	-	-	-	-	-	-
14S-8300-350-OP	52	45249	20642	27090	-	-	-	-	-	-	-	-	-
18S-9600-235-OP	100	71792	29579	35058	64324	32689	42353	71205	37391	51138	78086	42056	59923
18S-9600-280-OP	100	71707	29527	34976	107564	61851	97554	117333	68376	110025	127102	74891	122496
18S-9600-300-OP	94	71664	29500	34935	129207	76295	125184	140422	83774	139501	151636	91253	153817
18S-9600-350-OP	69	71544	29427	34819	-	-	-	-	-	-	-	-	-
18S-9800-235-OP	100	91146	37130	43510	54849	18379	18379	61730	27030	27164	68612	32047	35949
18S-9800-280-OP	100	91060	37078	43428	98089	52372	73580	107858	58972	86051	117627	65545	98522
18S-9800-300-OP	100	91017	37051	43387	119733	66958	101210	130947	74477	115527	142161	81976	129843
18S-9800-350-OP	74	90897	36978	43271	-	-	-	-	-	-	-	-	-
18S-10500-280-OP	100	106286	43484	51177	89635	44288	54719	99404	51018	67190	109173	57676	79662
18S-10500-300-OP	100	106243	43457	51136	111279	59106	82350	122493	66692	96666	133707	74244	110982
18S-10500-350-OP	77	106123	43384	51020	171917	99826	159762	-	-	-	-	-	-
18S-11000-280-OP	100	119233	51369	63676	77071	35435	38680	86840	42344	51152	96609	49099	63623
18S-11000-300-OP	100	119190	51343	63635	98715	50545	66311	109929	58189	80627	121144	65782	94943
18S-11000-350-OP	81	119070	51271	63519	159354	91428	143723	174618	101627	163209	-	-	-
32S-12000-300-OP	100	156381	68205	84565	107957	49037	54245	121320	58330	70837	134684	67440	87429
32S-12000-350-OP	100	156242	68119	84427	180217	97901	143961	198407	109956	166544	216596	121970	189128
32S-15000-300-OP	100	134323	52005	56887	135224	65828	81571	148588	74905	98163	161951	83898	114755
32S-15000-350-OP	100	134184	51916	56749	207484	114210	171287	225674	126241	193871	243863	138254	216454
50S-15400-300-OP	100	169415	66500	73789	138710	61590	65653	153559	72055	84088	168407	82269	102523
50S-15400-350-OP	100	169260	66401	73636	219000	116325	165337	239210	129771	190429	259420	143165	215522
50S-15600-300-OP	100	177222	71451	81539	130920	55894	55980	145768	66607	74416	160617	76931	92851
50S-15600-350-OP	100	177068	71354	81386	211209	111119	155665	231420	124588	180757	251630	138003	205850

NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA/OLGAS Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)								
					90			95			100		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
14S-5100-200-OP	100	27498	13013	17698	59059	36848	65182	63392	39734	70717	67724	42620	76251
14S-5100-235-OP	100	27479	13002	17679	88726	56602	103079	94707	60583	110719	100689	64564	118360
14S-5100-280-OP	71	27404	12958	17608	-	-	-	-	-	-	-	-	-
14S-5100-300-OP	62	27367	12936	17572	-	-	-	-	-	-	-	-	-
14S-5100-350-OP	46	27263	12874	17471	-	-	-	-	-	-	-	-	-
14S-5400-200-OP	100	35440	16081	20993	55329	33106	55344	59662	35996	60878	63994	38886	66413
14S-5400-235-OP	100	35421	16070	20974	84996	52892	93240	90977	56877	100881	96959	60862	108522
14S-5400-280-OP	75	35346	16025	20903	-	-	-	-	-	-	-	-	-
14S-5400-300-OP	66	35309	16003	20867	-	-	-	-	-	-	-	-	-
14S-5400-350-OP	48	35205	15941	20766	-	-	-	-	-	-	-	-	-
14S-8300-200-OP	100	45484	20783	27317	48650	27669	42902	52983	30567	48436	57315	33460	53971
14S-8300-235-OP	100	45465	20771	27298	78317	47471	80798	84299	51461	88439	90280	55452	96080
14S-8300-280-OP	81	45390	20727	27227	-	-	-	-	-	-	-	-	-
14S-8300-300-OP	71	45353	20705	27191	-	-	-	-	-	-	-	-	-
14S-8300-350-OP	52	45249	20642	27090	-	-	-	-	-	-	-	-	-
18S-9600-235-OP	100	71792	29579	35058	84967	46699	68707	91849	51326	77492	98730	55943	86277
18S-9600-280-OP	100	71707	29527	34976	136871	81406	134967	146640	87921	147439	156408	94436	159910
18S-9600-300-OP	94	71664	29500	34935	162850	98732	168133	-	-	-	-	-	-
18S-9600-350-OP	69	71544	29427	34819	-	-	-	-	-	-	-	-	-
18S-9800-235-OP	100	91146	37130	43510	75493	36891	44733	82374	41653	53518	89255	46366	62302
18S-9800-280-OP	100	91060	37078	43428	127396	72099	110993	137165	78635	123464	146934	85168	135936
18S-9800-300-OP	100	91017	37051	43387	153376	89464	144159	164590	96943	158475	175804	104421	172792
18S-9800-350-OP	74	90897	36978	43271	-	-	-	-	-	-	-	-	-
18S-10500-280-OP	100	106286	43484	51177	118942	64293	92133	128711	70880	104604	138480	77446	117075
18S-10500-300-OP	100	106243	43457	51136	144921	81768	125298	156136	89276	139615	167350	96776	153931
18S-10500-350-OP	77	106123	43384	51020	-	-	-	-	-	-	-	-	-
18S-11000-280-OP	100	119233	51369	63676	106378	55777	76094	116147	62403	88565	125916	68998	101036
18S-11000-300-OP	100	119190	51343	63635	132358	73336	109260	143572	80863	123576	154786	88374	137892
18S-11000-350-OP	81	119070	51271	63519	-	-	-	-	-	-	-	-	-
32S-12000-300-OP	100	156381	68205	84565	148047	76441	104020	161411	85384	120612	174775	94283	137204
32S-12000-350-OP	100	156242	68119	84427	234785	133966	211711	252974	145944	234294	271164	157909	256877
32S-15000-300-OP	100	134323	52005	56887	175315	92836	131347	188678	101734	147938	202042	110603	164530
32S-15000-350-OP	100	134184	51916	56749	262052	150233	239037	280242	162212	261620	298431	174167	284203
50S-15400-300-OP	100	169415	66500	73789	183255	92350	120958	198104	102345	139394	212952	112284	157829
50S-15400-350-OP	100	169260	66401	73636	279631	156528	240614	299841	169876	265707	320051	183187	290799
50S-15600-300-OP	100	177222	71451	81539	175465	87073	111286	190314	97114	129721	205162	107078	148157
50S-15600-350-OP	100	177068	71354	81386	271840	151382	230942	292051	164731	256034	312261	178057	281127

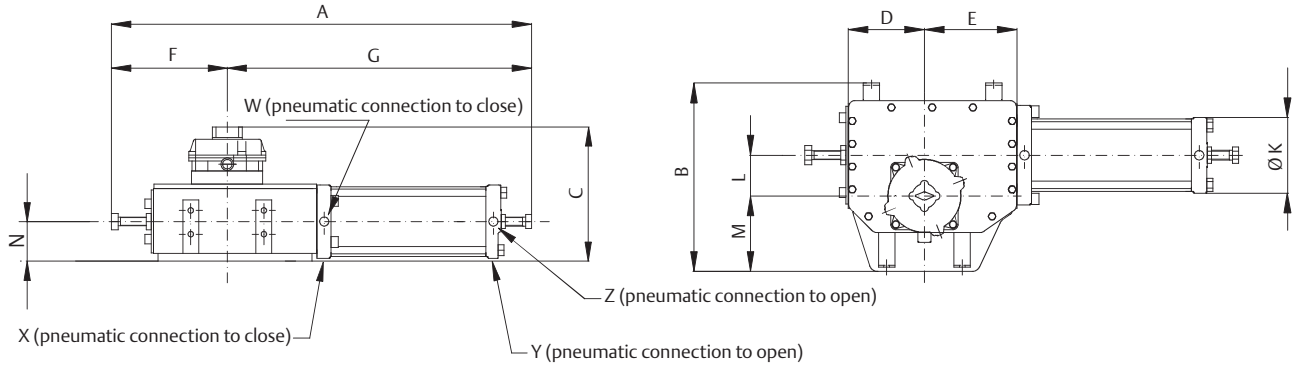
NOTES:

Model 80S available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

OLGA Double-Acting Hydraulic Actuator

Overall Dimensions



Dimensions (mm)

Model	A	B	C	D	E	F	G	ØK	L	M	N	Connection to close (in.)* [X-Y]	Connection to open (in.)* [W-Z]	Weight (kg)	Gas consumption (liters)
0.3-45	723	319	132	135	150	136	587	75	70	119	70	1/2	1/2	38	0.4
0.3-75	756	319	279	136	151	222	534	116	70	119	70	1/2	1/2	44	0.8
0.3-100	803	319	279	136	151	222	625	125	70	119	70	1/2	1/2	48	1.4
0.9-100	870	413	303	160	190	245	625	160	80	170	83	1/2	1/2	60	1.6
0.9-135	921	413	303	160	190	245	676	160	80	170	83	1/2	1/2	79	2.8
1.5-135	1011	469	343	187	227	293	718	160	100	185	100	1/2	1/2	116	3.5
1.5-175	1056	469	343	187	227	293	763	196	100	185	100	1/2	1/2	135	5.6
3-135	1451	586	351	285	330	391	1060	160	160	215	106	1/2	1/2	190	9.5
3-175	1532	586	351	285	330	391	1141	196	160	215	106	1/2	1/2	220	11.0
6-175	1625	740	414	327	379	430	1195	196	185	260	140	1/2	1/2	360	9.5
6-200	1705	740	414	327	379	430	1275	230	185	260	140	3/4	3/4	398	14.0
14-200	1826	873	527	376	435	496	1330	230	200	330	193	3/4	3/4	600	15.0
14-235	1806	873	527	376	435	496	1310	340	200	330	193	3/4	3/4	650	21.0
14-280	1842	873	527	376	435	496	1346	350	200	330	193	3/4	3/4	700	30.0
14-300	1800	873	384	376	435	376	1424	392	200	330	193	3/4	3/4	750	35.0
14-350	1870	873	460	376	435	376	1495	480	200	330	193	3/4	3/4	780	48.0
18-235	1972	880	511	424	492	548	1424	340	230	330	196	3/4	3/4	800	25.0
18-280	1953	880	511	424	492	548	1405	350	230	330	196	3/4	3/4	850	35.0
18-300	1906	955	387	421	492	425	1481	392	230	355	193	3/4	3/4	845	40.0
18-350	1979	955	460	421	492	425	1553	480	230	355	193	3/4	3/4	875	55.0
32-235	2263	1055	584	505	585	643	1620	340	270	395	232	3/4	3/4	1350	29.0
32-280	2263	1055	584	505	585	643	1620	350	270	395	232	3/4	3/4	1380	41.0
32-300	2186	1055	457	505	585	505	1681	392	270	395	232	3/4	3/4	1187	65.0
32-350	2241	1055	462	505	585	505	1736	480	270	395	232	3/4	3/4	1545	65.0
50-235	2460	1092	584	548	633	700	1760	340	300	387	232	3/4	3/4	1500	32.0
50-280	2460	1092	584	548	633	700	1760	350	300	387	232	3/4	3/4	1540	45.0
50-300	2500	1092	584	548	633	700	1800	392	300	387	232	3/4	3/4	1580	52.0
50-350	2481	1092	463	548	633	548	1933	480	300	387	232	3/4	3/4	1610	72.0
80-300	2790	1350	591	663	761	663	2127	392	350	450	302	3/4	3/4	2890	61.0
80-350	2854	1350	591	663	761	663	2191	480	350	450	302	3/4	3/4	2910	83.0

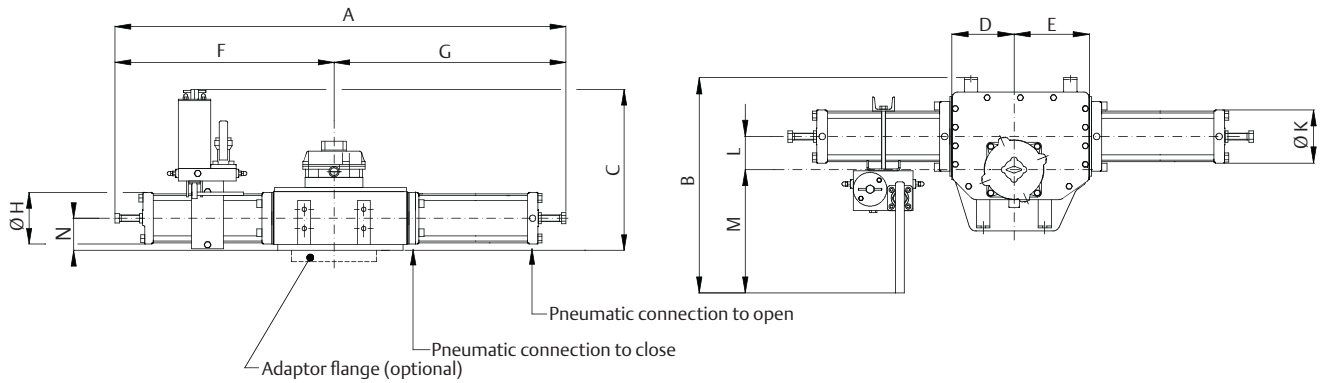
NOTE:

* Pneumatic connection NPT (in.)

OLGA Double-Acting Hydraulic Actuator

Overall Dimensions - MHP Hydraulic Manual Override

0.3-45-MHP45 to 14-350-MHP350



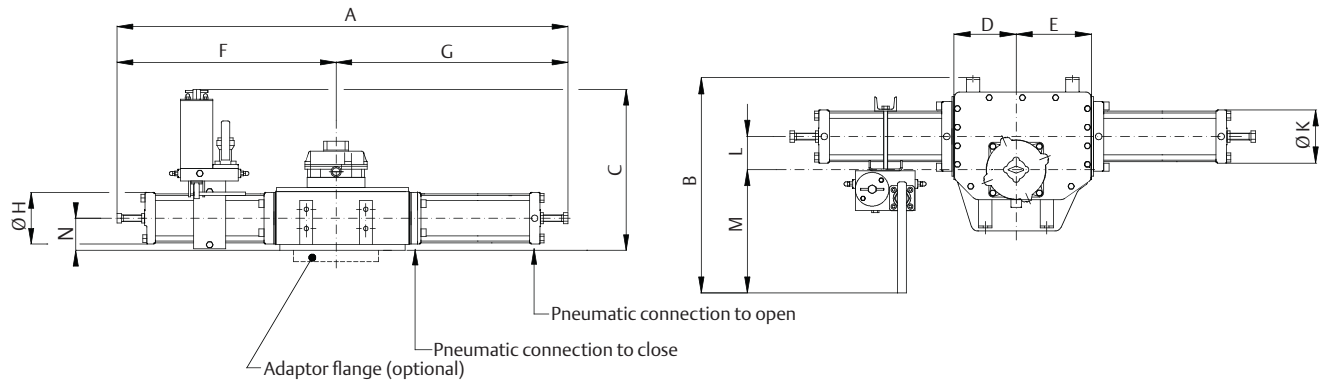
Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	Pneumatic connection NPT (in.)	Weight (kg)	Gas consumption (liters)	Handpump operation per stroke	Oil displacement (liters)
0.3-45-MHP45	1159	630	534	135	150	572	587	75	64	62	438	70	1/4	100	0.3	9	0.2
0.3-75-MHP75	1127	630	639	135	150	556	571	100	100	70	438	70	1/2	66	0.8	25	0.6
0.3-100-MHP75	1195	653	621	135	150	590	605	125	125	85	438	76	1/2	74	1.4	25	0.6
0.3-100-MHP100	1195	653	633	135	150	590	605	125	125	70	453	70	1/2	86	1.4	45	1.1
0.9-100-MHP100	1220	617	484	160	190	595	625	125	125	80	374	82	1/2	87	1.6	51	1.3
0.9-135-MHP100	1318	686	634	160	190	614	704	125	125	85	438	82	1/2	106	2.9	51	1.3
0.9-135-MHP135	1377	704	634	160	190	674	704	160	160	103	438	82	1/2	125	2.9	93	2.4
1.5-135-MHP135	1441	725	651	187	227	701	741	160	160	103	438	100	1/2	166	3.6	117	3.0
1.5-175-MHP135	1527	725	651	187	227	701	827	160	160	103	438	100	1/2	185	6.1	117	3.0
1.5-175-MHP175	1613	749	674	187	227	787	827	196	196	127	438	100	1/2	204	6.1	196	5.0
3-135-MHP135	2056	541	669	330	285	1006	1051	160	160	80	438	106	1/2	249	5.8	187	4.8
3-175-MHP135	2087	683	507	285	330	987	1100	160	196	160	312	106	1/2	278	9.7	187	4.8
3-175-MHP175	2284	811	843	285	330	1120	1165	196	196	128	478	106	1/2	307	9.7	314	8.0
6-175-MHP175	2375	900	877	327	379	1162	1214	96	196	128	478	140	1/2	462	11.2	363	9.3
6-200-MHP175	2467	900	877	327	415	1162	1306	196	230	128	478	140	3/4	500	14.6	363	9.3
6-200-MHP200	2559	913	890	327	379	1254	1306	230	230	140	478	140	3/4	540	14.6	474	12.1
14-200-MHP200	2664	961	943	376	435	1303	1362	230	230	140	478	193	3/4	750	15.8	513	13.1
14-235-MHP200	2663	961	943	376	435	1303	1361	230	338	140	478	193	3/4	765	21.9	513	13.1
14-235-MHP235	2662	998	980	376	435	1302	1361	339	339	177	478	193	3/4	785	21.9	708	18.1
14-280-MHP200	2715	961	943	376	435	1303	1412	230	360	140	478	193	3/4	790	31.0	513	13.1
14-280-MHP235	2714	998	980	376	435	1302	1412	340	360	177	478	193	3/4	805	31.0	708	18.1
14-280-MHP280	2765	1024	1010	376	435	1353	1412	360	360	203	478	193	3/4	820	31.0	1005	25.7
14-300-MHP200	2719	960	879	376	435	1296	1423	230	392	200	417	193	3/4	1039	35.6	513	13.1
14-300-MHP235	2722	993	982	376	435	1299	1423	230	392	200	450	193	3/4	987	35.6	708	18.1
14-300-MHP280	2776	1013	1010	376	435	1353	1423	360	392	200	470	193	3/4	1242	35.6	1005	25.7
14-300-MHP300	2791	1028	1016	376	435	1366	1425	392	392	207	478	193	3/4	1037	35.6	1154	29.5
14-350-MHP235	2657	993	982	376	435	1299	1358	340	340	200	450	193	3/4	1282	48.5	708	18.1
14-350-MHP280	2814	1024	1010	376	435	1353	1461	360	480	203	478	193	3/4	1115	48.5	1005	25.7
14-350-MHP300	2960	1084	1016	374	435	1364	1595	392	480	203	540	193	3/4	1332	48.5	1154	29.5
14-350-MHP350	2863	1070	1010	376	435	1402	1461	480	480	250	478	193	3/4	1410	48.5	1571	40.2

OLGA Double-Acting Hydraulic Actuator

Overall Dimensions - MHP Hydraulic Manual Override

18-235-MHP235 to 80-350-MHP350

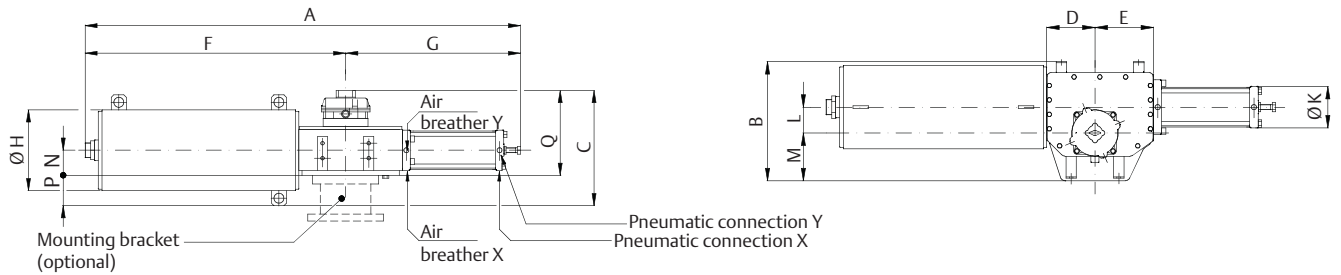


Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	Pneumatic connection NPT (in.)	Weight (kg)	Gas consumption (liters)	Handpump operation per stroke	Oil displacement (liters)
18-235-MHP235	2898	1025	980	425	493	1415	1483	339	339	177	478	193	3/4	880	25.1	814	20.8
18-280-MHP235	2885	1025	980	425	493	1415	1470	339	339	177	478	193	3/4	895	35.7	814	20.8
18-280-MHP280	2872	1051	1010	425	493	1402	1470	360	360	203	478	193	3/4	910	35.7	1156	29.6
18-300-MHP235	2890	1020	982	425	493	1409	1481	340	392	230	420	193	3/4	1253	41.0	814	20.8
18-300-MHP280	2883	1059	1010	425	493	1402	1481	360	392	210	460	193	3/4	1395	41.0	1156	29.6
18-300-MHP300	2894	1055	1017	425	493	1413	1481	392	392	203	478	193	3/4	1500	41.0	1327	34.0
18-350-MHP235	2901	993	982	425	493	1348	1553	340	480	230	420	193	3/4	1548	55.8	814	20.8
18-350-MHP280	2921	1051	1010	425	493	1402	1519	360	480	425	493	193	3/4	1585	55.8	1156	29.6
18-350-MHP300	3066	1110	1016	425	493	1413	1656	392	480	230	511	193	3/4	1690	55.8	1327	34.0
18-350-MHP350	2970	1097	1010	425	493	1451	1519	480	480	250	478	193	3/4	1880	55.8	1807	46.2
32-235-MHP235	3222	1045	1019	505	585	1571	1651	340	340	177	478	232	3/4	1540	29.5	956	24.5
32-280-MHP235	3226	1045	1019	505	585	1571	1655	340	360	507	587	232	3/4	1570	41.9	956	24.5
32-280-MHP280	3230	1071	1049	505	585	1575	1655	360	360	204	478	232	3/4	1620	41.9	1357	34.7
32-300-MHP235	3170	1040	1022	505	585	1489	1681	340	392	270	380	232	3/4	1675	48.1	956	24.5
32-300-MHP280	3263	1056	1049	505	585	1582	1681	360	392	270	340	232	3/4	1785	48.1	1357	34.7
32-300-MHP300	3282	1130	1056	505	585	1601	1681	392	392	270	470	232	3/4	1785	48.1	1558	39.9
32-350-MHP235	3307	1090	1029	505	585	1571	1736	340	480	270	380	239	3/4	1957	65.5	956	24.5
32-350-MHP280	3318	1066	977	505	585	1582	1736	360	480	270	356	239	3/4	2005	65.5	1357	34.7
32-350-MHP300	3337	1140	1063	505	585	1601	1736	392	480	270	430	239	3/4	2095	65.5	1558	39.9
32-350-MHP350	3393	1153	1095	505	585	1657	1737	480	480	235	478	236	3/4	2315	65.5	2121	54.3
50-235-MHP235	3435	1040	851	548	633	1675	1760	340	340	300	335	233	3/4	1700	32.8	1062	27.2
50-280-MHP235	3435	1040	851	548	633	1675	1760	340	350	300	335	233	3/4	1740	46.6	1062	27.2
50-280-MHP280	3500	1082	1295	551	636	1708	1793	360	360	300	378	233	3/4	1780	46.6	1508	38.6
50-300-MHP235	3475	1040	851	548	633	1675	1800	340	392	300	355	233	1	1780	53.4	1062	27.2
50-300-MHP280	3475	1062	876	548	633	1675	1800	350	392	300	357	233	1	1820	53.4	1508	38.6
50-300-MHP300	3509	1090	1054	551	636	1712	1797	392	392	207	478	233	3/4	1890	53.4	1731	44.3
50-350-MHP235	3655	1055	1011	551	636	1722	1933	340	480	300	350	233	3/4	2110	72.7	1062	27.2
50-350-MHP280	3641	1031	1022	551	636	1708	1933	360	480	300	326	233	3/4	2170	72.7	1508	38.6
50-350-MHP300	3643	1105	1056	551	636	1710	1933	392	480	300	400	233	3/4	2260	72.7	1731	44.3
50-350-MHP350	3782	1181	1338	551	636	1848	1933	480	480	300	478	233	3/4	2480	72.7	2356	60.3
80-300-MHP300	4156	1294	1407	663	761	2029	2127	392	392	350	394	302	3/4	3180	62.3	2020	51.7
80-350-MHP300	4220	1250	1127	663	761	2029	2191	392	480	350	350	302	3/4	3460	84.9	2020	51.7
80-350-MHP350	4294	1263	1401	663	761	2098	2196	480	480	236	478	302	3/4	3740	84.9	2749	70.4

OLGAS Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 0.3-008A-45-CL to 6-3800-200-CL

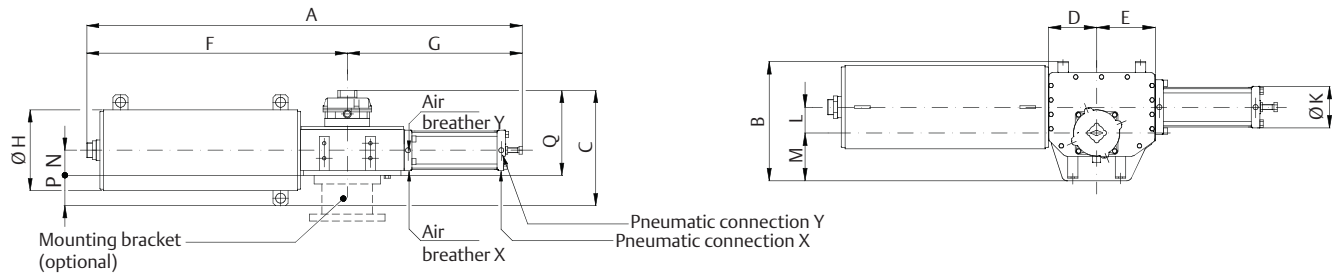


Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Q	Pneumatic connection NPT (in.)		Weight (kg)	Gas consumption (liters)
															X	Y		
0.3-008A-45-CL	1301	262	192	136	151	714	587	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008A-75-CL	1286	319	200	136	151	714	571	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-008B-45-CL	1301	262	192	136	151	714	587	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008B-75-CL	1286	319	200	136	151	714	571	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-008C-45-CL	1301	262	192	136	151	714	587	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008C-75-CL	1286	319	200	136	151	714	571	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-0100-45-CL	1402	300	293	136	151	815	587	223	75	70	119	70	42	251	1/2	-	75	0.35
0.3-0100-75-CL	1386	319	293	136	151	815	571	223	116	70	119	70	42	251	1/2	-	80	0.80
0.3-0100-100-CL	1419	319	293	136	151	815	605	233	125	70	119	70	42	251	1/2	-	84	1.40
0.3-0150-45-CL	1350	300	283	136	151	763	587	223	75	70	119	70	42	241	1/2	-	75	0.35
0.3-0150-75-CL	1334	319	283	136	151	763	571	223	100	70	119	70	42	151	1/2	-	80	0.80
0.3-0150-100-CL	1368	319	283	136	151	763	605	223	125	70	119	70	42	151	1/2	-	84	1.40
0.9-0200-100-CL	1501	413	300	160	190	857	644	240	125	80	170	82	37	175	1/2	-	147	1.60
0.9-0200-135-CL	1561	413	300	160	190	857	704	240	160	80	170	82	37	175	1/2	-	166	2.80
0.9-0250-100-CL	1430	413	300	160	190	786	644	240	125	80	170	82	37	262	1/2	-	147	1.60
0.9-0250-135-CL	1489	413	300	160	190	786	703	240	160	80	170	82	37	262	1/2	-	166	2.80
0.9-0350-100-CL	1554	413	370	160	190	910	644	310	125	80	170	82	73	175	1/2	-	181	1.60
0.9-0350-135-CL	1614	413	370	160	190	910	704	310	160	80	170	82	73	175	1/2	-	200	2.80
0.9-0400-100-CL	1488	413	370	160	190	844	644	310	125	80	170	82	73	175	1/2	-	176	1.60
0.9-0400-135-CL	1548	413	370	160	190	844	704	310	160	80	170	82	73	175	1/2	-	195	2.80
0.9-0700-100-CL	1515	413	370	160	190	871	644	310	125	80	170	82	73	175	1/2	-	198	1.60
0.9-0700-135-CL	1575	413	370	160	190	871	704	310	160	80	170	82	73	175	1/2	-	217	2.80
1.5-1100-135-CL	1749	470	458	187	227	1008	741	370	160	100	185	100	85	215	1/2	-	349	3.50
1.5-1100-175-CL	1835	470	440	187	227	1008	827	370	196	100	185	100	85	215	1/2	-	368	5.60
1.5-1200-135-CL	1818	469	384	187	227	1077	741	324	160	100	185	100	62	215	1/2	-	322	3.50
1.5-1200-175-CL	1904	469	384	187	227	1077	827	324	196	100	185	100	62	215	1/2	-	341	5.60
3-2000-135-CL	2444	586	466	285	330	1393	1051	406	160	160	215	106	98	222	1/2	-	617	3.60
3-2000-175-CL	2558	586	466	285	330	1393	1165	406	196	160	215	106	98	222	1/2	-	646	9.50
6-2500-175-CL	3120	740	443	327	379	1906	1214	383	196	185	260	140	52	285	1/2	-	831	11.00
6-2500-200-CL	3212	740	443	327	379	1906	1306	383	230	185	260	140	52	285	3/4	-	884	14.00
6-3800-175-CL	3350	740	600	327	379	2136	1214	530	196	185	260	140	125	285	1/2	-	1344	11.00
6-3800-200-CL	3442	740	600	327	379	2136	1306	530	230	185	260	140	125	285	-	3/4	1397	14.00

OLGAS Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 14-5100-200-CL to 50-15600-350-CL

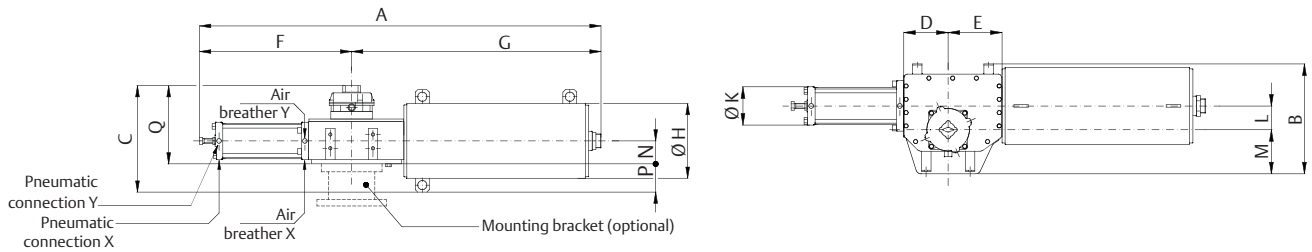


Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Q	Pneumatic connection NPT (in.)		Weight (kg)	Gas consumption (liters)
															X	Y		
14-5100-200-CL	3453	838	600	376	435	2092	1361	530	230	200	295	193	72	528	-	3/4	1952	15
14-5100-235-CL	3452	838	600	376	435	2092	1360	530	339	200	295	193	72	528	-	3/4	2012	21
14-5100-280-CL	3504	838	600	376	435	2092	1412	530	360	200	295	193	72	528	-	3/4	2062	30
14-5100-300-CL	3515	795	600	376	435	2092	1423	530	392	200	330	193	72	528	-	3/4	2100	35
14-5100-350-CL	3739	795	600	376	435	2144	1595	530	480	200	330	193	72	528	-	3/4	2062	48
14-5400-200-CL	3402	838	600	376	435	2040	1362	530	230	200	295	193	72	398	-	3/4	2000	15
14-5400-235-CL	3401	838	600	376	435	2040	1361	530	340	200	295	193	72	398	-	3/4	2060	21
14-5400-280-CL	3452	838	600	376	435	2040	1412	530	360	200	295	193	72	398	-	3/4	2110	30
14-5400-300-CL	3463	795	600	376	435	2040	1423	530	392	200	330	193	72	528	-	3/4	2158	35
14-5400-350-CL	3635	795	600	376	435	2040	1595	530	480	200	330	193	72	528	-	3/4	2405	48
14-8300-200-CL	3465	838	600	376	435	2103	1362	530	230	200	295	193	72	398	-	3/4	2050	15
14-8300-235-CL	3464	838	600	376	435	2103	1361	530	340	200	295	193	72	398	-	3/4	2110	21
14-8300-280-CL	3515	838	600	376	435	2103	1412	530	360	200	295	193	72	398	-	3/4	2160	30
14-8300-300-CL	3526	795	600	376	435	2103	1423	530	392	200	330	193	72	528	-	3/4	2112	35
14-8300-350-CL	3698	795	600	376	435	2013	1595	530	480	200	330	193	72	528	-	3/4	2455	48
18-9600-235-CL	4178	940	739	425	493	2695	1483	559	340	230	340	193	176	404	-	3/4	2610	25
18-9600-280-CL	4165	940	739	425	493	2695	1470	559	360	230	340	193	176	404	-	3/4	2650	35
18-9600-300-CL	4176	1878	648	425	493	2695	1481	559	392	230	340	193	86	562	-	3/4	2690	40
18-9600-350-CL	4338	864	648	425	493	2685	1653	559	480	230	340	193	86	562	-	3/4	2945	55
18-9800-235-CL	4168	940	738	425	493	2685	1483	559	340	230	340	193	176	404	-	3/4	2960	25
18-9800-280-CL	4155	940	738	425	493	2685	1470	559	360	230	340	193	176	404	-	3/4	3000	35
18-9800-300-CL	4166	864	648	425	493	2685	1481	559	392	230	355	193	86	562	-	3/4	3040	40
18-9800-350-CL	4338	864	648	425	493	2685	1653	558	480	230	355	193	86	562	-	3/4	3295	55
18-10500-280-CL	4239	940	760	425	493	2769	1470	670	360	230	340	193	142	618	-	3/4	3281	35
18-10500-300-CL	4250	940	760	425	493	2769	1481	670	392	230	340	193	142	618	-	3/4	3321	40
18-10500-350-CL	4422	940	760	425	493	2769	1653	670	480	230	340	193	142	618	-	3/4	3351	55
18-11000-280-CL	4123	920	760	425	493	2653	1470	670	360	230	340	193	142	404	-	3/4	3251	35
18-11000-300-CL	4134	920	760	425	493	2653	1481	670	392	230	355	193	142	618	-	3/4	3281	40
18-11000-350-CL	4306	920	760	425	493	2653	1653	670	480	230	355	193	142	618	-	3/4	3321	55
32-12000-300-CL	4590	1130	890	505	585	2909	1681	800	392	270	420	236	164	726	3/4	3/4	4700	48
32-12000-350-CL	4795	1130	890	505	585	2909	1886	800	480	270	420	236	164	726	3/4	3/4	4900	65
32-15000-300-CL	4590	1130	890	505	585	2909	1681	800	392	270	420	236	164	890	3/4	3/4	4840	48
32-15000-350-CL	4795	1130	890	505	585	2909	1886	800	480	270	420	236	164	726	3/4	3/4	5140	65
50-15400-300-CL	4828	1092	890	551	633	3027	1802	800	460	300	387	233	167	723	3/4	3/4	5420	52
50-15400-350-CL	4960	1092	890	551	633	3027	1933	800	460	300	387	233	167	723	3/4	3/4	6210	72
50-15600-300-CL	4828	1130	890	551	633	3027	1802	800	460	300	387	233	167	723	3/4	3/4	5358	52
50-15600-350-CL	4960	1092	890	551	633	3027	1933	800	460	300	387	233	167	723	3/4	3/4	6148	72

OLGAS Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 0.3-008A-45-OP to 6-3800-200-OP

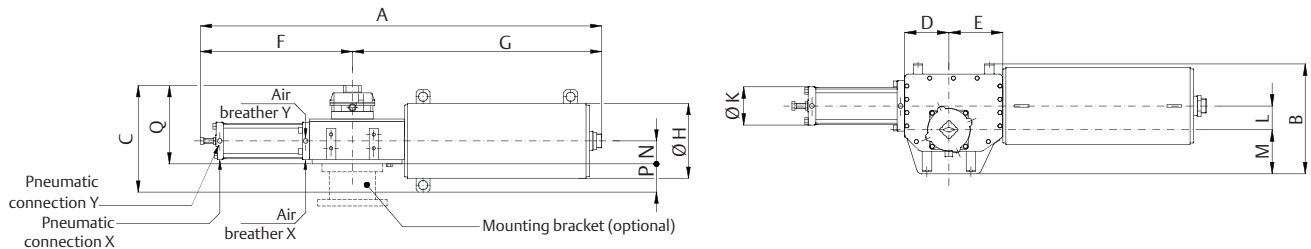


Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Q	Pneumatic connection NPT (in.)		Weight (kg)	Gas consumption (liters)
															X	Y		
0.3-008A-45-OP	1301	262	192	136	151	572	729	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008A-75-OP	1286	319	200	136	151	555	729	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-008B-45-OP	1301	262	192	136	151	572	729	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008B-75-OP	1286	319	200	136	151	555	729	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-008C-45-OP	1301	262	192	136	151	572	729	147	75	70	119	70	4	188	1/2	-	62	0.35
0.3-008C-75-OP	1286	319	200	136	151	555	729	147	116	70	119	70	4	188	1/2	-	62	0.80
0.3-0100-45-OP	1402	300	293	136	151	572	830	223	75	70	119	70	42	251	1/2	-	75	0.35
0.3-0100-75-OP	1386	319	293	136	151	555	830	223	116	70	119	70	42	251	1/2	-	80	0.80
0.3-0100-100-OP	1419	319	293	136	151	589	830	233	125	70	119	70	42	251	1/2	-	84	1.40
0.3-0150-45-OP	1350	300	283	136	151	572	778	223	75	70	119	70	42	241	1/2	-	75	0.35
0.3-0150-75-OP	1334	319	283	136	151	556	778	223	100	70	119	70	42	151	1/2	-	80	0.80
0.3-0150-100-OP	1368	319	283	136	151	590	778	223	125	70	119	70	42	151	1/2	-	84	1.40
0.9-0200-100-OP	1501	413	300	160	190	614	887	240	125	80	170	82	37	175	1/2	-	147	1.60
0.9-0200-135-OP	1561	413	300	160	190	674	887	240	160	80	170	82	37	175	1/2	-	166	2.80
0.9-0250-100-OP	1430	413	300	160	190	614	816	240	125	80	170	82	37	262	1/2	-	147	1.60
0.9-0250-135-OP	1489	413	300	160	190	673	816	240	160	80	170	82	37	262	1/2	-	166	2.80
0.9-0350-100-OP	1554	413	370	160	190	614	940	310	125	80	170	82	73	175	1/2	-	181	1.60
0.9-0350-135-OP	1614	413	370	160	190	674	940	310	160	80	170	82	73	175	1/2	-	200	2.80
0.9-0400-100-OP	1488	413	370	160	190	614	874	310	125	80	170	82	73	175	1/2	-	176	1.60
0.9-0400-135-OP	1548	413	370	160	190	674	874	310	160	80	170	82	73	175	1/2	-	195	2.80
0.9-0700-100-OP	1515	413	370	160	190	614	901	310	125	80	170	82	73	175	1/2	-	198	1.60
0.9-0700-135-OP	1575	413	370	160	190	674	901	310	160	80	170	82	73	175	1/2	-	217	2.80
1.5-1100-135-OP	1749	470	458	187	227	701	1048	370	160	100	185	100	85	215	1/2	-	349	3.50
1.5-1100-175-OP	1835	470	440	187	227	787	1048	370	196	100	185	100	85	215	1/2	-	368	5.60
1.5-1200-135-OP	1818	469	384	187	227	701	1117	324	160	100	185	100	62	215	1/2	-	322	3.50
1.5-1200-175-OP	1904	469	384	187	227	787	1117	324	196	100	185	100	62	215	1/2	-	341	5.60
3-2000-135-OP	2444	586	466	285	330	1006	1438	406	160	160	215	106	98	222	1/2	-	617	3.60
3-2000-175-OP	2558	586	466	285	330	1120	1438	406	196	160	215	106	98	222	1/2	-	646	9.50
6-2500-175-OP	3120	740	443	327	379	1162	1958	383	196	185	260	140	52	285	1/2	-	831	11.00
6-2500-200-OP	3212	740	443	327	379	1254	1958	383	230	185	260	140	52	285	3/4	-	884	14.00
6-3800-175-OP	3350	740	600	327	379	1162	2188	530	196	185	260	140	125	285	1/2	-	1344	11.00
6-3800-200-OP	3442	740	600	327	379	1254	2188	530	230	185	260	140	125	285	-	3/4	1397	14.00

OLGAS Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 14-5100-200-OP to 50-15600-350-OP



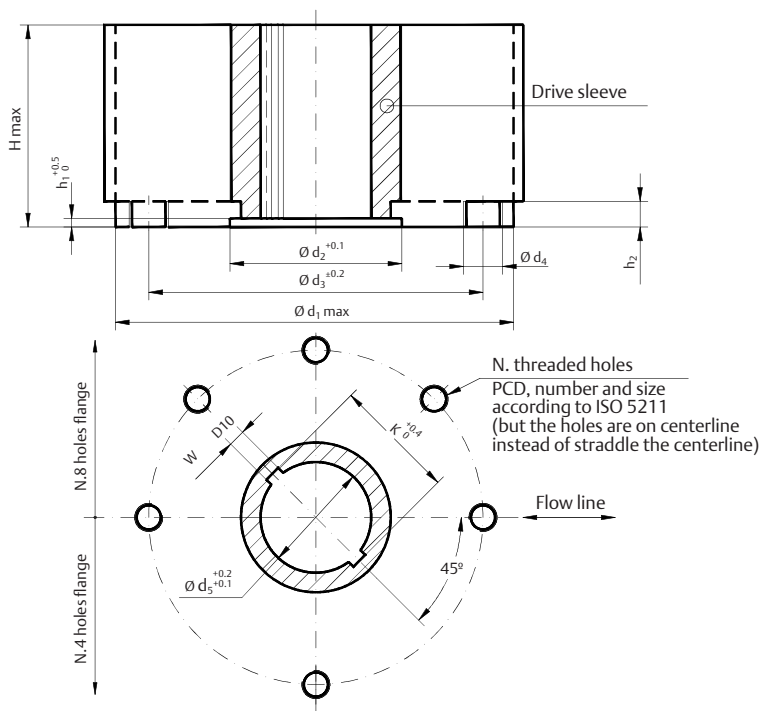
Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Q	Pneumatic connection NPT (in.)		Weight (kg)	Gas consumption (liters)
															X	Y		
14-5100-200-OP	3453	838	600	376	435	1301	2151	530	230	200	295	193	72	528	-	3/4	1952	15
14-5100-235-OP	3452	838	600	376	435	1301	2151	530	339	200	295	193	72	528	-	3/4	2012	21
14-5100-280-OP	3504	838	600	376	435	1353	2151	530	360	200	295	193	72	528	-	3/4	2062	30
14-5100-300-OP	3515	795	600	376	435	1364	2151	530	392	200	330	193	72	528	-	3/4	2100	35
14-5100-350-OP	3687	795	600	376	435	1536	2151	530	480	200	330	193	72	528	-	3/4	2062	48
14-5400-200-OP	3402	838	600	376	435	1303	2099	530	230	200	295	193	72	398	-	3/4	2000	15
14-5400-235-OP	3401	838	600	376	435	1302	2099	530	340	200	295	193	72	398	-	3/4	2060	21
14-5400-280-OP	3452	838	600	376	435	1353	2099	530	360	200	295	193	72	398	-	3/4	2110	30
14-5400-300-OP	3463	795	600	376	435	1364	2099	530	392	200	330	193	72	528	-	3/4	2158	35
14-5400-350-OP	3635	795	600	376	435	1536	2099	530	480	200	330	193	72	528	-	3/4	2405	48
14-8300-200-OP	3465	838	600	376	435	1303	2162	530	230	200	295	193	72	398	-	3/4	2050	15
14-8300-235-OP	3464	838	600	376	435	1302	2162	530	340	200	295	193	72	398	-	3/4	2110	21
14-8300-280-OP	3515	838	600	376	435	1353	2162	530	360	200	295	193	72	398	-	3/4	2160	30
14-8300-300-OP	3526	795	600	376	435	1364	2162	530	392	200	330	193	72	528	-	3/4	2112	35
14-8300-350-OP	3698	795	600	376	435	1536	2162	530	480	200	330	193	72	528	-	3/4	2455	48
18-9600-235-OP	4178	940	739	425	493	1415	2763	559	340	230	340	193	176	404	-	3/4	2610	25
18-9600-280-OP	4165	940	739	425	493	1402	2763	559	360	230	340	193	176	404	-	3/4	2650	35
18-9600-300-OP	4176	1878	648	425	493	1413	2763	559	392	230	340	193	86	562	-	3/4	2690	40
18-9600-350-OP	4338	864	648	425	493	1585	2763	559	480	230	340	193	86	562	-	3/4	2945	55
18-9800-235-OP	4168	940	738	425	493	1415	2753	559	340	230	340	193	176	404	-	3/4	2960	25
18-9800-280-OP	4155	940	738	425	493	1402	2753	559	360	230	340	193	176	404	-	3/4	3000	35
18-9800-300-OP	4166	864	648	425	493	1413	2753	559	392	230	355	193	86	562	-	3/4	3040	40
18-9800-350-OP	4338	864	648	425	493	1585	2753	558	480	230	355	193	86	562	-	3/4	3295	55
18-10500-280-OP	4239	940	760	425	493	1402	2873	670	360	230	340	193	142	618	-	3/4	3281	35
18-10500-300-OP	4250	940	760	425	493	1413	2873	670	392	230	340	193	142	618	-	3/4	3321	40
18-10500-350-OP	4422	940	760	425	493	1585	2873	670	480	230	340	193	142	618	-	3/4	3351	55
18-11000-280-OP	4123	920	760	425	493	1402	2721	670	360	230	340	193	142	404	-	3/4	3251	35
18-11000-300-OP	4134	920	760	425	493	1413	2721	670	392	230	355	193	142	618	-	3/4	3281	40
18-11000-350-OP	4306	920	760	425	493	1585	2721	670	480	230	355	193	142	618	-	3/4	3321	55
32-12000-300-OP	4590	1130	890	505	585	1601	2989	800	392	270	420	236	164	726	3/4	3/4	4700	48
32-12000-350-OP	4795	1130	890	505	585	1805	2989	800	480	270	420	236	164	726	3/4	3/4	4900	65
32-15000-300-OP	4590	1130	890	505	585	1601	2989	800	392	270	420	236	164	890	3/4	3/4	4840	48
32-15000-350-OP	4795	1130	890	505	585	1805	2989	800	480	270	420	236	164	726	3/4	3/4	5140	65
50-15400-300-OP	4828	1092	890	551	633	1822	3112	800	460	300	387	233	167	723	3/4	3/4	5420	52
50-15400-350-OP	4960	1092	890	551	633	1848	3112	800	460	300	387	233	167	723	3/4	3/4	6210	72
50-15600-300-OP	4828	1130	890	551	633	1822	3112	800	460	300	387	233	167	723	3/4	3/4	5358	52
50-15600-350-OP	4960	1092	890	551	633	1848	3112	800	460	300	387	233	167	723	3/4	3/4	6148	72

OLGA/OLGAS Hydraulic Actuator

Mounting Dimensions

Actuator models 0.3 to 6.0



Top view of the scotch yoke mechanism (actuator shown in closed position)

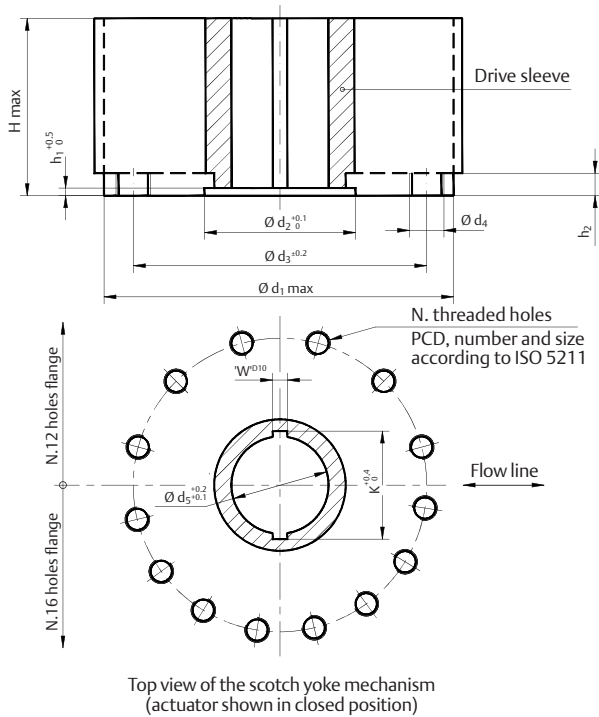
Coupling dimensions models 0.3 to 0.6 (mm)

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
0.3	240	93	165	M20	4	5	17	127	70	12	75.6
0.9	310	112	254	M16	8	5	19	150	86	14	93.6
1.5	360	144	298	M20	8	6	19	190	112	18	119.0
3	430	195	356	M30	8	9	23	200	157	25	167.8
6	520	250	406	M36	8	14	29	260	200	28	212.8

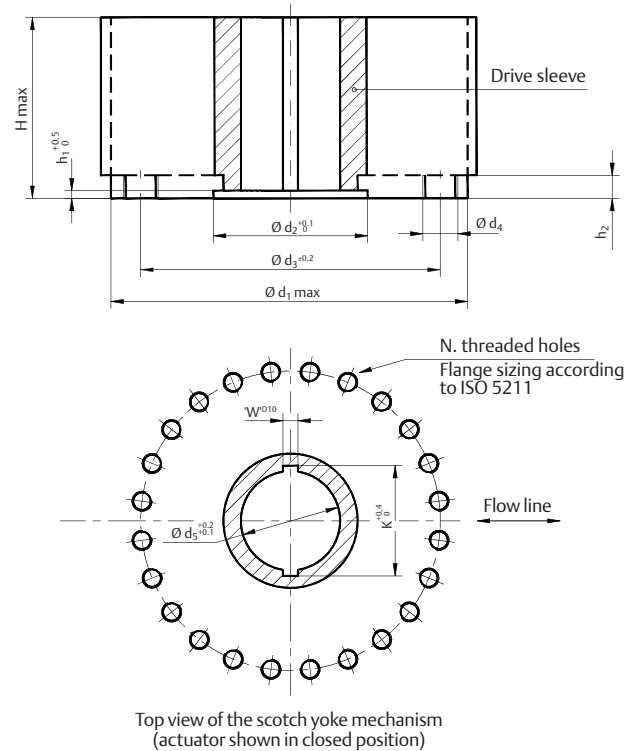
NOTE:

$\varnothing d_1$ is maximum adapter flange diameter

Actuator models 14 to 32



Actuator models 50 to 80



Coupling dimensions models 14 to 32 (mm)

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
14	580	250	483	M36	12	10	29	340	175	45	195.8
18	680	290	603	M36	16	12	32	350	200	45	220.8
32	780	290	603	M36	16	12	32	400	220	50	242.8

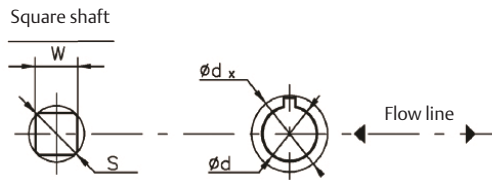
Coupling dimensions models 50 and 80 (mm)

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
50	800	315	698	M36	24	10	32	430	240	56	264.8
80	900	370	813	M42	24	9	37	540	280	46	327.0

NOTE:

$\varnothing d_1$ is maximum adapter flange diameter

Stem Acceptance



Stem acceptance dimensions for insert bushes (mm)

Housing size	Max. stem diameter with rectangular key d (bxh) ^[2] (mm)	Max. accepted diameter described by the key d_x ^[3] (mm)	Max. accepted square stem (mm)		Max. accepted square stem height (inch) ^{**}
			W	S*	
0.3	53 (16x10)	64	46	64	120
0.9	62 (18x11)	73	55	73	140
1.5	62 (18x11)	99	73	99	180
3	126 (32x18)	145	104	145	190
6	161 (40x22)	185	133	185	250
14	105 (28x16)	121	-	-	340
18	122 (32x18)	140	-	-	350
32	160 (40x22)	183	-	-	400
50	160 (40x22)	183	-	-	430
65	-	-	-	-	540
80	-	-	-	-	540
100	-	-	-	-	600

NOTES:

1. The listed maximum acceptance values are applicable for stems with keyways parallel or perpendicular to the flow line and for square stems with diagonal parallel with the flow line.
2. Key according to UNI6604 or DIN 6885 sh.1 or ISO 773 or equivalent.
3. For stem with key not correspondent to any specification, check the dimension d_x .

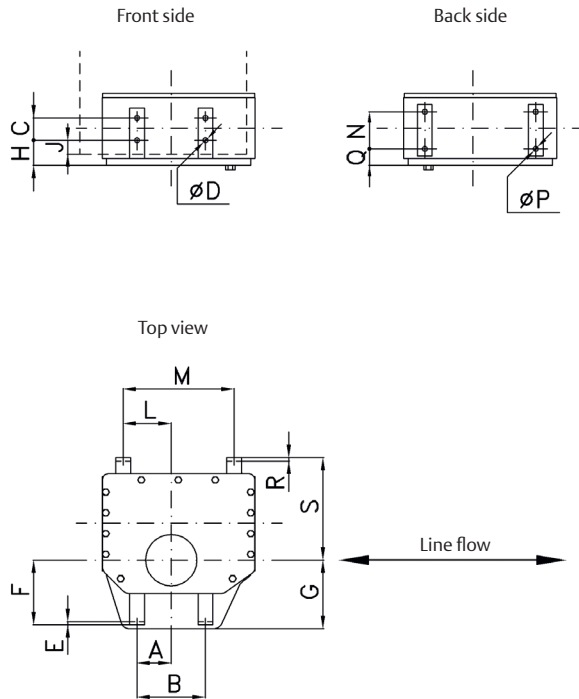
* S max: maximum external diameter in case of rounded edge.

** Without adapter flange.

OLGA/OLGAS Hydraulic Actuators

Accessories Mounting Dimensions

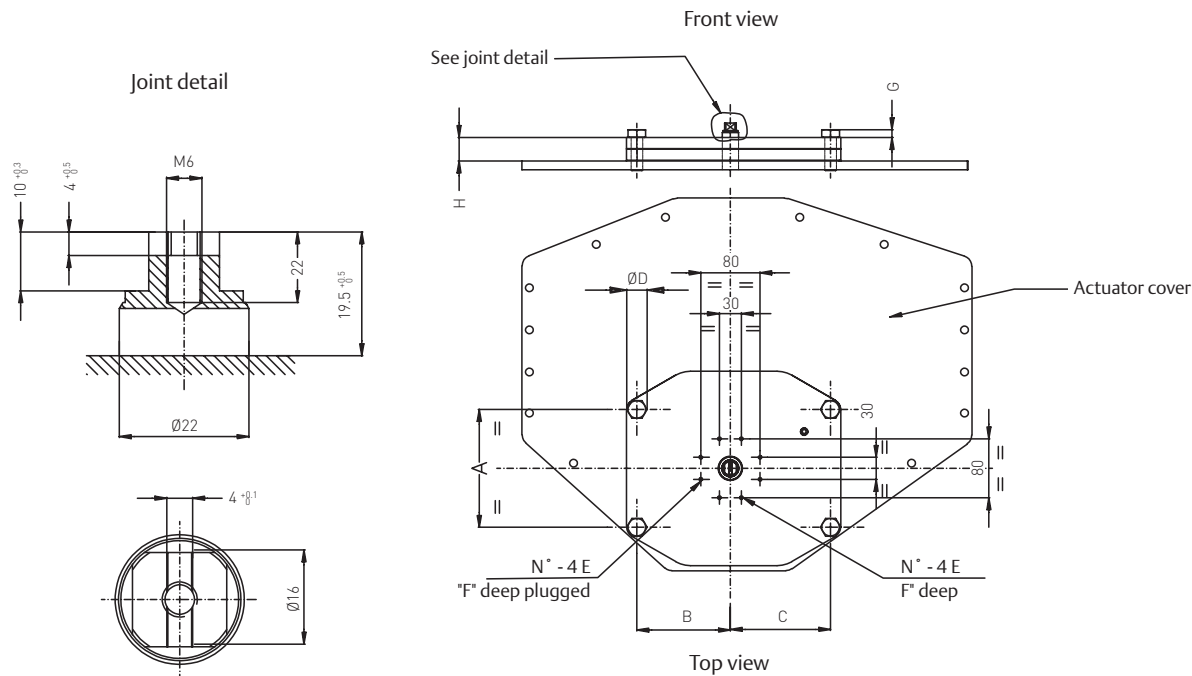
Actuator models 0.3 to 80



Accessories mounting dimensions (mm)

Actuator model	A	B	C	$\varnothing D$	E	F	G	H	J	L	M	N	$\varnothing P$	Q	R	S
0.3	77.5	155	60	14	5	113.0	119	37	12	92	200	60	14	36	5	200
0.9	92.5	185	60	14	5	155.0	170	61	35	85	200	60	14	48	5	243
1.5	92.5	185	60	14	5	175.0	185	62	35	130	300	100	14	45	5	284
3	117.5	235	85	23	8	203.0	215	57	25	230	500	100	14	54	5	371
6	137.0	455	115	23	8	248.0	260	59	22	224	500	100	14	87	8	480
14	315.0	630	200	27	10	227.0	330	97	55	220	500	170	27	99	8	543
18	315.0	630	200	27	10	235.0	340	72	32	306	680	215	27	80	10	600
32	315.0	630	200	27	10	385.0	395	72	32	414	890	215	27	149	10	660
50	387.5	860	250	30	12	372.0	387	77	35	473	1030	215	27	163	10	1072
80	500.0	1000	250	30	15	437.5	450	107	50	500	1100	215	27	270	15	900
80	500.0	1000	250	30	15	437.5	450	107	50	500	1100	215	27	270	15	900
100	500.0	1100	250	30	20	564.0	600	127	50	500	1100	215	27	333	15	1275

Accessories Mounting Holes on Actuator Top (Cover and Yoke)



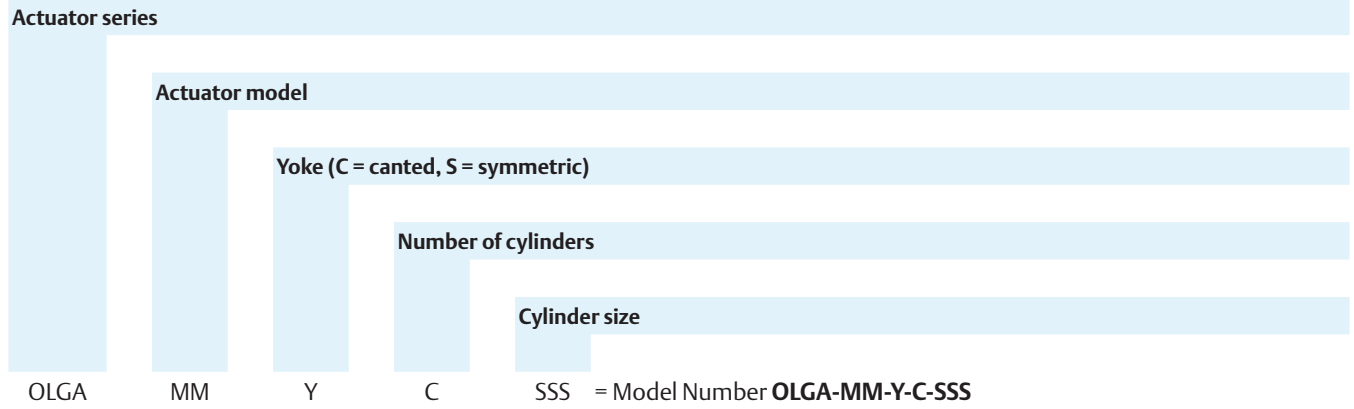
Dimensions (mm)

Actuator model	A	B	C	D	E	F	G	H
0.3	-	-	-	-	M5	9	-	32
0.9	-	-	-	-	M5	9	-	32
1.5	-	-	-	-	M5	9	-	32
3	160.0	127.0	136.0	30	M5	9	11	32
6	160.0	127.0	136.0	30	M5	9	11	32
14	160.0	127.0	136.0	30	M5	9	11	32
18	314.0	109.0	109.0	30	M5	9	11	32
32	314.0	109.0	109.0	30	M5	9	11	29
50	280.6	138.5	138.5	37	M5	9	13	32
65	410.0	180.0	180.0	44	M5	9	16	32
80	410.0	180.0	180.0	44	M5	9	16	32
100	460.0	205.0	205.0	44	M5	9	16	32

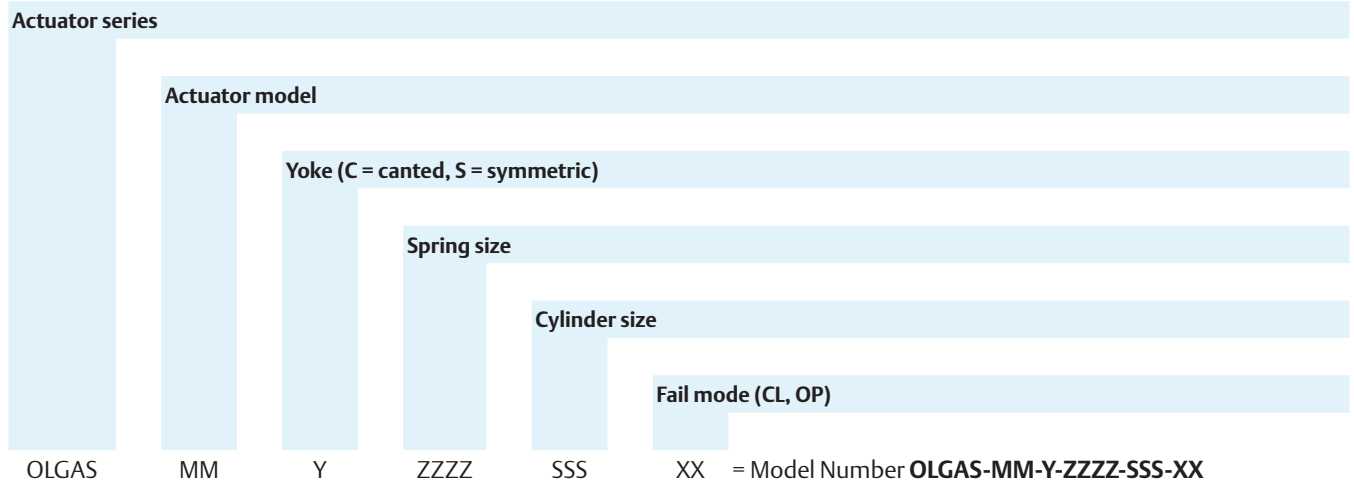
OLGA/OLGAS Hydraulic Actuators

Model Decoding

Double-Acting Hydraulic Actuators

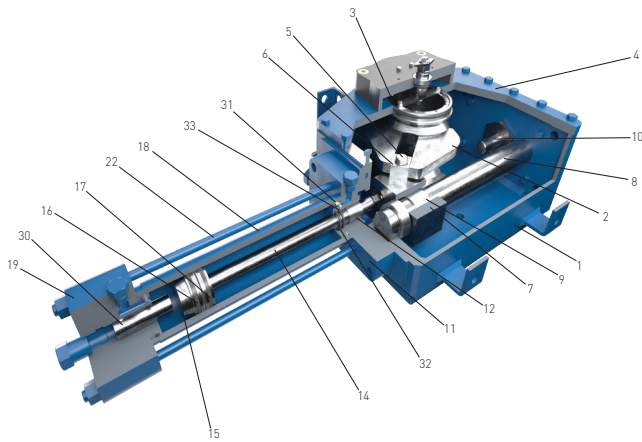


Single Acting Hydraulic Actuators

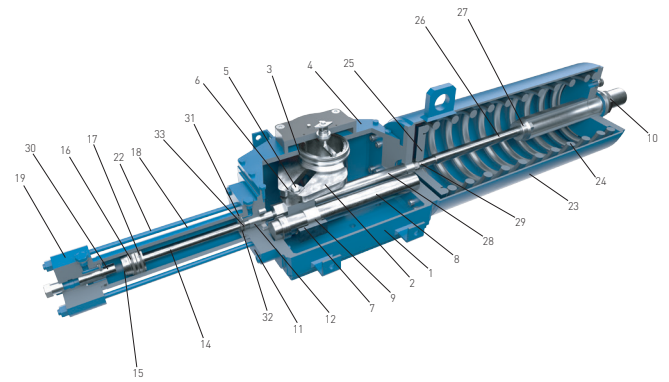


Biffi OLGA-H/OLGAS-H Series

OLGA-H Double-Acting



OLGAS-H Spring-Return



Materials

PART	MATERIAL
1	Housing Carbon steel
2	Yoke Carbon steel
3	Yoke bushing Bronze
4	Cover Carbon steel
5	Guide block pin Alloy steel
6	Sliding block Bronze
7	Guide block Carbon steel
8	Guide bar Alloy steel (hard chrome plated)
9	Guide block bushing Steel + bronze + PTFE
10	Travel stop screw Carbon steel
11	Cylinder head flange Carbon steel
12	Piston rod bushing Steel + bronze + PTFE
13	Piston rod seal NBR rubber
14	Piston rod Alloy steel (hard chrome plated)
15	Piston Carbon steel
16	Piston guide sliding ring PTFE + graphite
17	Piston seal O-ring PTFE + NBR rubber

PART	MATERIAL
18	Cylinder tube Carbon steel (ENP)
19	Cylinder end flange Carbon steel
20	Cylinder seal O-ring NBR rubber
21	Sealing washer PVC
22	Tie rod Alloy steel
23	Spring container Carbon steel
24	Spring Carbon steel
25	Spring thrust flange Carbon steel
26	Guide rod Alloy steel (hard chrome plated)
27	Guide rod bushing Steel + bronze + PTFE
28	Container rod Alloy steel (hard chrome plated)
29	Container rod bushing Steel + bronze + PTFE
30	Stop setting screw Carbon steel
31	Back-up ring NBR rubber
32	Piston rod seal ring PTFE + graphite + NBR
33	O-ring NBR rubber

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Models 0.3C-28 to 1.5C-95

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-28	325	0°	724	537	908	674	1092	812	1275	949	1367	1018	1459	1087
		45°	283	189	355	237	426	286	498	334	534	358	570	383
		90°	408	262	511	329	615	396	719	463	770	497	822	530
0.3C-35	205	0°	1136	845	1424	1059	1711	1274	1998	1489	2142	1596	2285	1704
		45°	444	297	556	373	668	449	781	524	837	562	893	600
		90°	640	412	802	517	964	622	1126	727	1207	779	1288	832
0.3C-45	125	0°	1882	1673	2357	2096	2832	2519						
		45°	736	589	921	738	1107	887						
		90°	1061	816	1328	1023	1596	1229						
0.3C-50	100	0°	2327	2166	2913	2713								
		45°	909	763	1138	956								
		90°	1311	1057	1642	1324								
0.3C-60	70	0°												
		45°												
		90°												
0.9C-45	325	0°	2177	1934	2726	2423	3275	2912	3824	3401	4099	3646	4373	3890
		45°	851	681	1065	854	1280	1026	1494	1199	1602	1285	1709	1371
		90°	1227	944	1536	1183	1846	1422	2155	1660	2310	1780	2465	1899
0.9C-50	265	0°	2691	2505	3369	3137	4047	3769	4724	4401	5063	4717	5402	5033
		45°	1051	883	1316	1105	1581	1328	1846	1551	1979	1662	2111	1774
		90°	1516	1223	1898	1531	2281	1840	2663	2148	2854	2303	3045	2457
0.9C-60	180	0°	3885	3559	4861	4454	5837	5349	6813	6245	7301	6692	7789	7140
		45°	1518	1254	1900	1570	2281	1885	2663	2201	2854	2359	3044	2516
		90°	2189	1737	2740	2174	3290	2612	3840	3049	4115	3267	4390	3486
0.9C-70	135	0°	5294	4792	6623	5996	7952	7200						
		45°	2069	1689	2589	2113	3108	2537						
		90°	2984	2340	3733	2927	4482	3515						
0.9C-85	90	0°	7807	6738										
		45°	3051	2375										
		90°	4400	3289										
1.5C-50	350	0°	3403	3167	4260	3967	5117	4766	5974	5565	6403	5964	6832	6364
		45°	1330	1116	1665	1398	2000	1679	2335	1961	2503	2102	2670	2243
		90°	1918	1546	2401	1936	2884	2327	3367	2717	3609	2912	3850	3107
1.5C-60	240	0°	4912	4501	6147	5633	7381	6765	8616	7897	9233	8463	9850	9029
		45°	1920	1586	2402	1985	2885	2384	3367	2783	3609	2983	3850	3182
		90°	2769	2197	3464	2750	4160	3303	4856	3855	5204	4132	5552	4408
1.5C-70	175	0°	6695	6060	8375	7582	10055	9104	11735	10627	12576	11388	13416	12149
		45°	2617	2136	3273	2672	3930	3209	4587	3745	4915	4013	5244	4282
		90°	3773	2959	4720	3702	5667	4445	6614	5188	7088	5560	7561	5931
1.5C-85	120	0°	9872	8520	12349	10661	14827	12801						
		45°	3859	3003	4827	3757	5795	4512						
		90°	5564	4160	6960	5205	8357	6250						
1.5C-95	95	0°	12331	11250										
		45°	4820	3965										
		90°	6950	5492										

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-28	325	0°	1551	1155	1643	1224	1827	1361	2011	1499	2195	1636	2976	2220
		45°	606	407	642	431	714	480	786	528	858	576	1163	782
		90°	874	564	926	597	1030	664	1133	732	1237	799	1677	1084
0.3C-35	205	0°	2429	1811	2573	1918	2860	2133					2932	2187
		45°	949	638	1005	676	1118	752					1146	770
		90°	1369	884	1450	936	1612	1041					1652	1067
0.3C-45	125	0°											2951	2624
		45°											1153	925
		90°											1663	1281
0.3C-50	100	0°											2913	2713
		45°											1138	956
		90°											1642	1324
0.3C-60	70	0°											2937	2691
		45°											1148	948
		90°											1655	1313
0.9C-45	325	0°	4648	4135	4922	4379	5471	4868	6020	5357	6569	5846	8903	7925
		45°	1816	1457	1924	1543	2138	1716	2353	1888	2568	2060	3480	2793
		90°	2619	2019	2774	2138	3084	2377	3393	2615	3703	2854	5018	3869
0.9C-50	265	0°	5741	5349	6080	5665	6758	6296	7436	6928	8114	7560	8961	8350
		45°	2244	1885	2376	1996	2641	2219	2906	2442	3171	2664	3503	2943
		90°	3236	2611	3427	2765	3809	3074	4191	3383	4573	3691	5051	4077
0.9C-60	180	0°	8277	7588	8766	8035							8766	8035
		45°	3235	2674	3426	2832							3426	2832
		90°	4665	3704	4940	3923							4940	3923
0.9C-70	135	0°											8948	8103
		45°											3497	2856
		90°											5043	3956
0.9C-85	90	0°											8786	7584
		45°											3434	2673
		90°											4952	3703
1.5C-50	350	0°	7260	6764	7689	7163	8546	7962	9403	8761	10261	9561	14975	13956
		45°	2838	2384	3005	2524	3340	2806	3675	3088	4010	3369	5853	4919
		90°	4092	3302	4333	3497	4817	3887	5300	4277	5783	4668	8440	6814
1.5C-60	240	0°	10467	9595	11085	10161	12319	11293	13553	12425	14788	13557	14788	13557
		45°	4091	3382	4333	3581	4815	3980	5298	4379	5780	4778	5780	4778
		90°	5900	4684	6247	4961	6943	5514	7639	6066	8335	6619	8335	6619
1.5C-70	175	0°	14256	12910									14676	13290
		45°	5572	4550									5736	4684
		90°	8035	6303									8272	6489
1.5C-85	120	0°											14827	12801
		45°											5795	4512
		90°											8357	6250
1.5C-95	95	0°											14652	13369
		45°											5727	4712
		90°											8258	6527

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Models 3C-60 to 6C-125

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3C-60	290	0°	8131	7449	10174	9323	12218	11197	14261	13071	15282	14008	16304	14945
		45°	3178	2625	3977	3286	4775	3946	5574	4607	5973	4937	6373	5267
		90°	4583	3637	5734	4552	6886	5467	8038	6382	8613	6839	9189	7296
3C-70	215	0°	11082	10031	13863	12550	16644	15070	19425	17589	20815	18849	22206	20109
		45°	4331	3535	5418	4423	6506	5311	7593	6199	8136	6643	8680	7087
		90°	6246	4897	7813	6127	9381	7357	10948	8588	11732	9203	12516	9818
3C-85	145	0°	16340	14103	20441	17646	24541	21189	28642	24732				
		45°	6387	4971	7990	6219	9593	7468	11195	8717				
		90°	9210	6885	11521	8615	13832	10345	16143	12075				
3C-90	130	0°	18319	16299	22916	20393	27513	24487						
		45°	7160	5745	8957	7188	10754	8631						
		90°	10325	7958	12916	9957	15507	11956						
3C-95	115	0°	20411	18621	25533	23298								
		45°	7978	6563	9980	8211								
		90°	11504	9091	14391	11375								
3C-110	85	0°	27400	24110										
		45°	10710	8498										
		90°	15443	11771										
6C-70	350	0°	12956	11727	16207	14673	19458	17618	22709	20564	24335	22036	25961	23509
		45°	5064	4133	6335	5171	7606	6210	8877	7248	9512	7767	10147	8286
		90°	7302	5725	9135	7164	10967	8602	12800	10040	13716	10759	14632	11478
6C-85	250	0°	19103	16488	23897	20630	28691	24772	33485	28914	35882	30985	38279	33056
		45°	7467	5811	9341	7271	11215	8731	13089	10191	14026	10921	14962	11651
		90°	10767	8050	13469	10072	16171	12094	18873	14117	20224	15128	21575	16139
6C-90	220	0°	21417	19055	26791	23842	32166	28628	37540	33415	40227	35808	42915	38201
		45°	8371	6716	10472	8403	12573	10090	14674	11777	15724	12621	16775	13464
		90°	12071	9303	15100	11640	18130	13977	21159	16314	22673	17483	24188	18651
6C-95	200	0°	23863	21770	29851	27237	35839	32705	41827	38172	44821	40906	47815	43640
		45°	9327	7673	11668	9600	14009	11527	16350	13454	17520	14418	18690	15381
		90°	13450	10629	16825	13298	20200	15968	23575	18637	25263	19972	26950	21307
6C-110	145	0°	32033	28187	40062	35256	48090	42325	56119	49394				
		45°	12521	9935	15660	12426	18798	14918	21936	17410				
		90°	18055	13762	22580	17213	27105	20665	31630	24116				
6C-125	115	0°	41366	38544	51733	48208								
		45°	16169	13585	20222	16992								
		90°	23315	18818	29158	23537								

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3C-60	290	0°	17326	15882	18347	16819	20390	18692	22433	20566	24477	22440	29584	27125
		45°	6772	5597	7171	5928	7970	6588	8769	7249	9567	7909	11564	9560
		90°	9765	7754	10341	8211	11492	9126	12644	10041	13796	10956	16675	13243
3C-70	215	0°	23596	21368	24987	22628	27767	25147					29853	27037
		45°	9223	7531	9767	7975	10854	8863					11669	9529
		90°	13299	10433	14083	11048	15651	12278					16826	13200
3C-85	145	0°											29667	25618
		45°											11596	9029
		90°											16721	12507
3C-90	130	0°											29812	26534
		45°											11653	9352
		90°											16803	12955
3C-95	115	0°											29375	26805
		45°											11482	9448
		90°											16556	13087
3C-110	85	0°											29117	25621
		45°											11381	9030
		90°											16411	12509
6C-70	350	0°	27586	24982	29212	26454	32463	29400	35714	32345	38965	35291	56847	51491
		45°	10783	8805	11418	9324	12689	10362	13960	11400	15231	12439	22221	18149
		90°	15548	12197	16465	12916	18297	14354	20130	15792	21962	17230	32041	25140
6C-85	250	0°	40676	35127	43073	37198	47867	41340	52660	45482	57454	49624	59851	51695
		45°	15899	12381	16836	13111	18710	14571	20584	16031	22458	17491	23395	18221
		90°	22926	17150	24277	18161	26979	20184	29681	22206	32383	24228	33734	25240
6C-90	220	0°	45602	40594	48289	42987	53664	47774	59038	52560			59038	52560
		45°	17825	14308	18875	15151	20976	16838	23077	18525			23077	18525
		90°	25703	19819	27217	20988	30247	23325	33276	25662			33276	25662
6C-95	200	0°	50810	46374	53804	49107	59792	54575					59792	54575
		45°	19861	16345	21031	17308	23372	19236					23372	19236
		90°	28638	22641	30326	23976	33701	26645					33701	26645
6C-110	145	0°											58126	51161
		45°											22721	18032
		90°											32762	24979
6C-125	115	0°											59509	55457
		45°											23261	19546
		90°											33541	27076

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Models 14C-85 to 80C-200

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14C-85	350	0°	20879	18021	26119	22548	31358	27075	36598	31602	39217	33865	41837	36129
		45°	8161	6351	10209	7947	12257	9543	14305	11138	15329	11936	16353	12734
		90°	11768	8798	14721	11008	17674	13219	20628	15429	22104	16534	23581	17639
14C-95	350	0°	26081	23794	32626	29769	39171	35745	45716	41721	48988	44709	52260	47697
		45°	10194	8386	12753	10492	15311	12599	17869	14705	19149	15758	20428	16811
		90°	14700	11617	18389	14534	22078	17452	25767	20370	27611	21828	29456	23287
14C-110	270	0°	35011	30807	43786	38533	52561	46260	61336	53986	65723	57849	70111	61712
		45°	13685	10858	17115	13581	20545	16305	23975	19028	25690	20390	27405	21751
		90°	19733	15041	24679	18813	29625	22586	34571	26358	37044	28244	39517	30130
14C-125	210	0°	45211	42127	56542	52690	67873	63253	79205	73816	84870	79098	90536	84380
		45°	17672	14848	22101	18571	26531	22294	30960	26018	33175	27879	35389	29741
		90°	25482	20568	31869	25725	38256	30883	44642	36040	47836	38619	51029	41197
14C-135	180	0°	52734	50476	65951	63132	79168	75787	92384	88443	98993	94771	105601	101099
		45°	20613	17791	25779	22252	30946	26712	36112	31173	38695	33403	41278	35634
		90°	29723	24644	37172	30823	44622	37002	52071	43181	55796	46271	59520	49360
14C-145	155	0°	60874	55968	76121	69992	91369	84016	106616	98040	114240	105052		
		45°	23795	19727	29755	24670	35715	29613	41675	34556	44655	37027		
		90°	34311	27326	42905	34173	51499	41020	60092	47867	64389	51291		
14C-175	105	0°	88669	86815	110879	108566								
		45°	34660	30599	43341	38266								
		90°	49977	42387	62495	53006								
14C-185	95	0°	99093	98383										
		45°	38734	34677										
		90°	55852	48034										
14C-200	80	0°	115813	112754										
		45°	45270	39742										
		90°	65276	55051										
18C-125	275	0°	51993	48446	65024	60593	78054	72741	91085	84889	97601	90963	104116	97037
		45°	20323	17075	25417	21357	30510	25639	35604	29920	38151	32061	40698	34202
		90°	29305	23653	36649	29584	43994	35515	51339	41446	55011	44411	58683	47377

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-145	205	0°	70005	64364	87540	80491	105074	96619	122608	112746	131376	120810	140143	128874
		45°	27364	22686	34218	28370	41072	34055	47926	39739	51353	42581	54780	45424
		90°	39457	31425	49340	39299	59223	47173	69106	55047	74048	58984	78989	62921
18C-175	140	0°	101970	99838	127510	124850	153051	149863	178591	174876				
		45°	39859	35189	49842	44005	59826	52822	69809	61638				
		90°	57474	48745	71869	60957	86265	73169	100661	85381				
18C-185	125	0°	113957	113141	142499	141485	171042	169830						
		45°	44544	39878	55701	49869	66859	59859						
		90°	64230	55240	80318	69079	96406	82918						
18C-200	105	0°	133185	129668	166544	162154								
		45°	52061	45703	65100	57154								
		90°	75068	63309	93870	79170								
32C-145	270	0°	82180	75557	102764	94490	123348	113422	143932	132354	154224	141821	164515	151287
		45°	32123	26631	40169	33304	48215	39977	56261	46650	60284	49987	64307	53323
		90°	46320	36890	57921	46134	69523	55377	81125	64621	86926	69242	92727	73864
32C-175	200	0°	119704	117201	149686	146564	179669	175926	209651	205289	224642	219971	239633	234652
		45°	46791	41309	58511	51659	70230	62008	81950	72358	87810	77532	93670	82707
		90°	67469	57222	84368	71558	101268	85894	118167	100230	126616	107398	135066	114567
32C-200	160	0°	156348	152219	195509	190355	234669	228491	273830	266627	293410	285695		
		45°	61115	53652	76422	67094	91730	80536	107037	93977	114691	100698		
		90°	88123	74319	110196	92939	132268	111559	154340	130178	165377	139488		
50C-175	270	0°	133004	130223	166318	162849	199632	195474	232946	228099	249602	244412	266259	260724
		45°	51990	45899	65012	57399	78034	68898	91056	80397	97567	86147	104078	91897
		90°	74966	63580	93743	79509	112520	95438	131296	111367	140685	119332	150073	127296
50C-200	205	0°	173720	169132	217232	211505	260744	253879	304256	296253	326011	317439	347767	338626
		45°	67905	59613	84914	74549	101922	89484	118930	104419	127434	111887	135939	119355
		90°	97915	82577	122440	103265	146965	123954	171489	144643	183752	154987	196014	165331
80C-200	290	0°	202674	188870	253437	236193	304201	283516	354965	330840	380347	354501	405729	378163
		45°	79223	66570	99066	83250	118909	99930	138752	116610	148674	124950	158595	133290
		90°	114234	92214	142846	115319	171459	138424	200071	161529	214377	173082	228683	184635

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14C-85	350	0°	44457	38393	47077	40656	52316	45183	57556	49710	62795	54237	91613	79136
		45°	17378	13532	18402	14330	20450	15925	22498	17521	24546	19117	35810	27893
		90°	25057	18745	26534	19850	29487	22060	32440	24270	35394	26481	51636	38637
14C-95	350	0°	55533	50685	58805	53672	65350	59648	71895	65624	78440	71600	114437	104466
		45°	21707	17864	22986	18918	25544	21024	28103	23130	30661	25236	44732	36821
		90°	31300	24746	33145	26205	36834	29122	40523	32040	44212	34958	64501	51005
14C-110	270	0°	74498	65575	78886	69438	87660	77165	96435	84891	105210	92617	118373	104206
		45°	29120	23113	30835	24474	34265	27198	37695	29921	41125	32644	46270	36729
		90°	41990	32016	44463	33902	49408	37675	54354	41447	59300	45219	66719	50878
14C-125	210	0°	96201	89661	101867	94943	113198	105506					118864	110788
		45°	37604	31602	39818	33464	44248	37187					46462	39049
		90°	54222	43776	57416	46355	63802	51512					66996	54091
14C-135	180	0°	112209	107427	118818	113755							118818	113755
		45°	43861	37864	46444	40095							46444	40095
		90°	63245	52450	66970	55539							66970	55539
14C-145	155	0°											118051	108558
		45°											46145	38263
		90°											66538	53002
14C-175	105	0°											116431	114003
		45°											45511	40182
		90°											65625	55661
14C-185	95	0°											117708	116869
		45°											46010	41192
		90°											66344	57060
14C-200	80	0°											115813	112754
		45°											45270	39742
		90°											65276	55051
18C-125	275	0°	110632	103110	117147	109184	130178	121332	143209	133480	156240	145627	179044	166886
		45°	43245	36343	45791	38484	50885	42765	55979	47047	61072	51329	69986	58822
		90°	62356	50343	66028	53308	73373	59239	80718	65170	88062	71101	100915	81480

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-145	205	0°	148910	136938	157677	145001	175211	161129					179595	165161
		45°	58207	48266	61634	51108	68488	56792					70202	58214
		90°	83931	66858	88872	70795	98755	78670					101226	80638
18C-175	140	0°											178591	174876
		45°											69809	61638
		90°											100661	85381
18C-185	125	0°											178178	176916
		45°											69648	62357
		90°											100427	86377
18C-200	105	0°											174884	170276
		45°											68360	60016
		90°											98571	83135
32C-145	270	0°	174807	160753	185099	170219	205683	189151	226267	208084	246851	227016	277726	255414
		45°	68330	56660	72353	59996	80399	66670	88445	73343	96491	80016	108560	90025
		90°	98528	78486	104329	83108	115930	92351	127532	101595	139134	110838	156537	124704
32C-175	200	0°	254624	249333	269616	264015	299598	293377					299598	293377
		45°	99530	87882	105390	93056	117110	103406					117110	103406
		90°	143516	121735	151965	128903	168864	143239					168864	143239
32C-200	160	0°											#N/A	#N/A
		45°											#N/A	#N/A
		90°											#N/A	#N/A
50C-175	270	0°	282916	277037	299573	293350	332887	325975	366200	358600	399514	391225	449485	440163
		45°	110589	97646	117100	103396	130122	114895	143144	126395	156166	137894	175699	155143
		90°	159462	135261	168850	143225	187627	159154	206404	175083	225181	191012	253346	214906
50C-200	205	0°	369523	359813	391279	381000	434791	423374					445669	433967
		45°	144443	126822	152947	134290	169955	149225					174207	152959
		90°	208277	175675	220539	186020	245064	206708					251195	211880
80C-200	290	0°	431110	401825	456492	425486	507256	472809	558020	520133	608784	567456	735693	685764
		45°	168517	141630	178438	149970	198281	166650	218124	183330	237967	200010	287575	241710
		90°	242990	196187	257296	207740	285908	230845	314520	253950	343133	277055	414663	334818

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Models 0.3S-28 to 1.5S-95

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-28	350	0°	454	340	570	427	685	514	800	601	858	645	916	689
		45°	288	193	361	242	434	291	507	341	544	365	581	390
		90°	519	316	651	396	783	477	915	558	981	599	1047	639
0.3S-35	290	0°	713	535	893	671	1074	808	1254	944	1344	1012	1434	1080
		45°	452	303	566	380	681	457	795	534	852	573	909	611
		90°	816	497	1022	623	1228	749	1434	876	1537	939	1640	1002
0.3S-45	175	0°	1181	1060	1479	1328	1777	1596	2075	1864	2224	1998	2374	2132
		45°	749	600	938	752	1127	904	1316	1056	1410	1132	1505	1208
		90°	1351	984	1692	1233	2033	1481	2374	1730	2544	1854	2715	1979
0.3S-50	140	0°	1460	1373	1828	1719	2196	2066	2564	2412				
		45°	926	778	1159	974	1393	1170	1626	1366				
		90°	1670	1274	2091	1595	2512	1917	2933	2238				
0.3S-60	95	0°	2108	1951										
		45°	1337	1105										
		90°	2411	1810										
0.9S-45	350	0°	1366	1226	1711	1536	2055	1846	2400	2156	2572	2311	2745	2466
		45°	866	694	1085	870	1303	1046	1522	1221	1631	1309	1740	1397
		90°	1562	1138	1957	1425	2351	1713	2745	2001	2942	2144	3139	2288
0.9S-50	350	0°	1689	1588	2114	1988	2540	2389	2965	2789	3178	2990	3391	3190
		45°	1071	899	1340	1126	1610	1353	1880	1580	2015	1694	2150	1807
		90°	1931	1473	2418	1845	2905	2217	3391	2588	3635	2774	3878	2960
0.9S-60	255	0°	2438	2256	3051	2823	3663	3391	4276	3958	4582	4242	4889	4526
		45°	1546	1278	1934	1599	2323	1921	2711	2242	2906	2403	3100	2564
		90°	2788	2093	3489	2620	4190	3147	4891	3673	5241	3937	5591	4200
0.9S-70	215	0°	3323	3038	4157	3801	4991	4564	5825	5327	6242	5708	6659	6090
		45°	2107	1721	2636	2153	3165	2585	3693	3018	3958	3234	4222	3450
		90°	3800	2819	4754	3527	5708	4235	6662	4943	7139	5297	7616	5651
0.9S-85	125	0°	4900	4271	6129	5344	7359	6417						
		45°	3107	2419	3887	3027	4666	3635						
		90°	5604	3963	7010	4959	8417	5955						
1.5S-50	350	0°	2317	2178	2900	2728	3484	3277	4068	3827	4360	4101	4652	4376
		45°	1355	1134	1697	1420	2038	1706	2380	1992	2550	2135	2721	2278
		90°	2235	1705	2798	2135	3361	2565	3925	2996	4206	3211	4488	3426
1.5S-60	350	0°	3345	3095	4185	3873	5026	4652	5866	5430	6287	5819	6707	6209
		45°	1956	1611	2448	2016	2940	2422	3432	2827	3677	3030	3923	3232
		90°	3227	2423	4038	3032	4849	3641	5660	4251	6065	4556	6471	4860
1.5S-70	260	0°	4559	4167	5703	5214	6847	6261	7991	7307	8563	7831	9135	8354
		45°	2667	2169	3336	2714	4005	3259	4674	3804	5009	4077	5344	4349
		90°	4398	3262	5502	4082	6606	4901	7709	5720	8261	6130	8813	6540
1.5S-85	175	0°	6722	5859	8409	7331	10095	8803	11782	10275	12626	11011	13469	11747
		45°	3932	3050	4919	3817	5906	4583	6893	5349	7386	5733	7879	6116
		90°	6485	4587	8113	5739	9740	6891	11368	8043	12181	8620	12995	9196
1.5S-95	140	0°	8396	7736	10504	9679	12611	11622	14718	13565				
		45°	4912	4028	6144	5039	7377	6051	8610	7062				
		90°	8101	6056	10134	7577	12167	9098	14200	10619				

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-28	350	0°	973	732	1031	776	1147	863	1262	950	1377	1037	2012	1516
		45°	617	415	654	439	727	489	800	538	873	587	1276	859
		90°	1113	679	1179	720	1311	801	1443	881	1575	962	2301	1407
0.3S-35	290	0°	1524	1148	1615	1216	1795	1352	1975	1488	2155	1624	2606	1964
		45°	966	650	1024	689	1138	766	1252	843	1367	920	1653	1113
		90°	1744	1065	1847	1128	2053	1255	2259	1381	2465	1507	2981	1823
0.3S-45	175	0°	2523	2266									2597	2333
		45°	1599	1284									1647	1322
		90°	2885	2103									2970	2165
0.3S-50	140	0°											2564	2412
		45°											1626	1366
		90°											2933	2238
0.3S-60	95	0°											2506	2319
		45°											1589	1314
		90°											2866	2152
0.9S-45	350	0°	2917	2621	3089	2776	3434	3086	3779	3396	4123	3706	6019	5411
		45°	1849	1485	1959	1572	2177	1748	2396	1924	2614	2099	3816	3065
		90°	3336	2432	3533	2576	3927	2864	4322	3151	4716	3439	6884	5021
0.9S-50	350	0°	3603	3390	3816	3590	4242	3991	4667	4392	5093	4792	7433	6995
		45°	2285	1920	2420	2034	2689	2261	2959	2488	3229	2715	4713	3963
		90°	4121	3146	4365	3332	4851	3704	5338	4075	5824	4447	8501	6492
0.9S-60	255	0°	5195	4809	5502	5093	6114	5661	6727	6228	7340	6796	7799	7221
		45°	3294	2725	3488	2885	3877	3207	4265	3528	4654	3850	4945	4091
		90°	5942	4463	6292	4727	6993	5253	7694	5780	8394	6306	8920	6701
0.9S-70	215	0°	7076	6471	7493	6853							7493	6853
		45°	4487	3666	4751	3882							4751	3882
		90°	8092	6005	8569	6359							8569	6359
0.9S-85	125	0°											7666	6685
		45°											4861	3787
		90°											8768	6204
1.5S-50	350	0°	4943	4651	5235	4926	5819	5475	6403	6025	6986	6574	10197	9597
		45°	2892	2421	3062	2564	3404	2850	3745	3137	4087	3423	5965	4996
		90°	4769	3641	5051	3856	5614	4286	6177	4716	6740	5146	9838	7513
1.5S-60	350	0°	7127	6598	7547	6987	8388	7766	9228	8544	10069	9323	14692	13605
		45°	4169	3435	4415	3638	4907	4043	5398	4448	5890	4854	8595	7083
		90°	6876	5165	7282	5470	8093	6079	8904	6689	9714	7298	14175	10650
1.5S-70	260	0°	9707	8877	10279	9401	11423	10448	12567	11494	13711	12541	14855	13588
		45°	5678	4622	6013	4894	6682	5439	7351	5984	8021	6529	8690	7074
		90°	9365	6950	9917	7359	11021	8179	12124	8998	13228	9818	14332	10637
1.5S-85	175	0°	14313	12483									14734	12851
		45°	8373	6499									8619	6691
		90°	13809	9772									14216	10060
1.5S-95	140	0°											14718	13565
		45°											8610	7062
		90°											14200	10619

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Models 3S-60 to 6S-125

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3S-60	350	0°	5464	5056	6837	6328	8210	7599	9584	8871	10270	9507	10957	10143
		45°	3240	2670	4054	3342	4869	4013	5683	4685	6090	5021	6497	5357
		90°	5424	4072	6787	5096	8150	6121	9513	7145	10195	7657	10876	8169
3S-70	320	0°	7447	6808	9316	8518	11185	10228	13054	11938	13988	12793	14923	13648
		45°	4416	3595	5524	4498	6632	5401	7741	6305	8295	6756	8849	7208
		90°	7392	5483	9247	6860	11103	8238	12958	9615	13885	10304	14813	10992
3S-85	215	0°	10981	9572	13737	11976	16492	14381	19248	16785	20626	17988	22004	19190
		45°	6511	5055	8145	6325	9780	7595	11414	8865	12231	9500	13048	10135
		90°	10900	7709	13636	9646	16371	11583	19106	13519	20474	14488	21842	15456
3S-90	190	0°	12311	11062	15400	13841	18490	16619	21579	19398	23124	20787	24668	22177
		45°	7300	5842	9132	7310	10964	8777	12796	10245	13712	10979	14628	11712
		90°	12220	8910	15287	11148	18354	13386	21420	15624	22954	16743	24487	17862
3S-95	170	0°	13717	12638	17159	15812	20601	18986	24043	22160	25764	23747	27486	25334
		45°	8134	6674	10175	8351	12216	10027	14257	11704	15278	12542	16299	13380
		90°	13616	10179	17033	12735	20450	15292	23867	17848	25575	19127	27283	20405
3S-110	130	0°	18413	16363	23029	20467	27644	24571						
		45°	10919	8642	13656	10809	16392	12977						
		90°	18278	13179	22859	16485	27440	19790						
6S-70	350	0°	8691	7945	10872	9940	13053	11936	15234	13931	16324	14929	17415	15927
		45°	5163	4204	6459	5260	7754	6316	9050	7372	9698	7900	10346	8428
		90°	8660	6424	10834	8037	13007	9651	15180	11264	16267	12071	17353	12877
6S-85	350	0°	12815	11170	16031	13976	19247	16783	22463	19589	24071	20992	25678	22395
		45°	7613	5911	9523	7396	11434	8881	13344	10365	14300	11108	15255	11850
		90°	12770	9031	15974	11300	19179	13569	22383	15838	23986	16973	25588	18107
6S-90	330	0°	14367	12910	17972	16152	21578	19395	25183	22638	26986	24259	28788	25881
		45°	8535	6831	10677	8547	12819	10263	14961	11979	16032	12837	17102	13695
		90°	14316	10438	17909	13060	21501	15682	25094	18303	26890	19614	28687	20925
6S-95	295	0°	16008	14749	20025	18453	24042	22157	28059	25861	30067	27713	32076	29565
		45°	9510	7804	11896	9764	14283	11724	16669	13685	17862	14665	19056	15645
		90°	15951	11925	19954	14920	23957	17915	27960	20910	29961	22407	31963	23905
6S-110	220	0°	21489	19096	26875	23885	32260	28674	37646	33464	40339	35858	43032	38253
		45°	12766	10105	15966	12639	19165	15173	22365	17708	23965	18975	25564	20242
		90°	21413	15440	26780	19312	32147	23184	37513	27057	40197	28993	42880	30929
6S-125	170	0°	27749	26113	34704	32660	41659	39208	48614	45756	52091	49030	55568	52304
		45°	16485	13818	20617	17283	24749	20747	28880	24212	30946	25945	33012	27677
		90°	27651	21113	34581	26407	41512	31701	48442	36995	51907	39642	55372	42289

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3S-60	350	0°	11643	10779	12330	11415	13703	12686	15076	13958	16449	15230	24001	22225
		45°	6904	5692	7311	6028	8125	6700	8940	7372	9754	8043	14232	11738
		90°	11558	8681	12239	9194	13602	10218	14965	11242	16328	12267	23824	17900
3S-70	320	0°	15857	14503	16792	15357	18660	17067	20529	18777	22398	20487	29874	27327
		45°	9403	7659	9957	8111	11065	9014	12174	9917	13282	10820	17715	14432
		90°	15741	11681	16668	12369	18523	13747	20378	15124	22234	16501	29654	22010
3S-85	215	0°	23381	20392	24759	21595	27515	23999					29582	25803
		45°	13865	10770	14682	11405	16316	12675					17542	13627
		90°	23209	16425	24577	17393	27313	19330					29364	20782
3S-90	190	0°	26213	23566	27758	24955							29303	26345
		45°	15544	12446	16460	13180							17376	13914
		90°	26020	18981	27554	20100							29087	21219
3S-95	170	0°	29207	26921									29207	26921
		45°	17319	14218									17319	14218
		90°	28992	21683									28992	21683
3S-110	130	0°											29951	26623
		45°											17761	14060
		90°											29731	21443
6S-70	350	0°	18505	16925	19596	17922	21777	19918	23958	21913	26139	23909	38135	34884
		45°	10994	8956	11641	9484	12937	10540	14233	11596	15529	12652	22655	18459
		90°	18440	13684	19527	14491	21700	16104	23873	17718	26047	19331	38000	28205
6S-85	350	0°	27286	23798	28894	25201	32110	28007	35326	30813	38542	33620	56229	49054
		45°	16210	12593	17165	13335	19076	14820	20986	16305	22897	17790	33405	25957
		90°	27190	19241	28792	20376	31997	22645	35201	24914	38406	27183	56031	39662
6S-90	330	0°	30591	27502	32394	29123	35999	32366	39604	35609	43210	38851	59434	53444
		45°	18173	14553	19244	15411	21386	17127	23528	18843	25670	20559	35309	28280
		90°	30483	22236	32279	23547	35872	26169	39465	28791	43057	31413	59224	43211
6S-95	295	0°	34085	31417	36093	33269	40110	36974	44127	40678	48144	44382	59191	54568
		45°	20249	16625	21442	17605	23829	19565	26215	21525	28602	23485	35164	28876
		90°	33964	25402	35966	26899	39969	29894	43971	32889	47974	35884	58982	44120
6S-110	220	0°	45725	40648	48418	43042	53804	47831	59189	52621			59189	52621
		45°	27164	21509	28764	22776	31964	25311	35163	27845			35163	27845
		90°	45563	32865	48247	34801	53614	38673	58980	42546			58980	42546
6S-125	170	0°	59046	55578									59046	55578
		45°	35078	29410									35078	29410
		90°	58837	44936									58837	44936

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Models 14S-85 to 80S-200

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14S-85	350	0°	14217	12392	17784	15505	21352	18618	24920	21731	26703	23288	28487	24844
		45°	8317	6452	10404	8073	12491	9693	14578	11314	15621	12125	16665	12935
		90°	13716	9701	17158	12138	20600	14575	24042	17012	25763	18231	27484	19449
14S-95	350	0°	17759	16362	22215	20471	26671	24580	31128	28690	33356	30744	35584	32799
		45°	10389	8519	12996	10658	15603	12798	18210	14937	19513	16007	20817	17077
		90°	17133	12809	21433	16026	25733	19242	30032	22459	32182	24068	34332	25676
14S-110	350	0°	23839	21185	29814	26498	35789	31811	41764	37124	44751	39780	47739	42437
		45°	13946	11030	17441	13796	20937	16562	24432	19329	26180	20712	27927	22095
		90°	23000	16584	28765	20743	34529	24903	40294	29062	43176	31142	46058	33221
14S-125	310	0°	30784	28969	38500	36233	46215	43497	53931	50761	57789	54393	61646	58025
		45°	18009	15083	22522	18865	27036	22647	31550	26429	33806	28320	36063	30211
		90°	29701	22678	37145	28364	44588	34051	52032	39737	55754	42581	59476	45424
14S-135	265	0°	35907	34710	44906	43413	53906	52116	62905	60819	67405	65170	71904	69522
		45°	21005	18072	26270	22603	31535	27134	36799	31666	39432	33931	42064	36197
		90°	34643	27172	43326	33985	52008	40798	60691	47611	65032	51018	69373	54424
14S-145	230	0°	41450	38487	51831	48131	62213	57775	72595	67418	77786	72240	82977	77062
		45°	24248	20038	30321	25059	36395	30081	42468	35102	45505	37612	48542	40123
		90°	39990	30129	50007	37679	60023	45228	70040	52778	75048	56553	80057	60327
14S-175	155	0°	60376	59700	75498	74656	90620	89613	105743	104570	113304	112048		
		45°	35320	31083	44166	38870	53013	46657	61860	54445	66283	58339		
		90°	58250	46735	72840	58444	87430	70153	102020	81861	109315	87716		
14S-185	140	0°	67473	67654	84373	84603	101273	101553	118173	118502				
		45°	39472	35224	49358	44049	59245	52874	69131	61699				
		90°	65098	52962	81403	66231	97708	79499	114013	92768				
14S-200	120	0°	78858	77537	98610	96963	118361	116389						
		45°	46132	40370	57687	50484	69242	60598						
		90°	76082	60699	95139	75906	114195	91114						
18S-125	350	0°	35392	33305	44262	41656	53133	50007	62003	58358	66438	62534	70873	66709
		45°	20710	17346	25901	21695	31092	26044	36283	30394	38878	32569	41473	34743
		90°	34167	26088	42731	32630	51294	39172	59857	45713	64139	48984	68421	52255

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			80		100		120		140		150		160	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-145	300	0°	47654	44248	59589	55335	71525	66422	83461	77509	89429	83053	95397	88597
		45°	27886	23045	34870	28819	41855	34594	48840	40368	52332	43255	55824	46143
		90°	46005	34660	57527	43345	69050	52030	80573	60715	86335	65057	92096	69400
18S-175	205	0°	69412	68635	86798	85831	104184	103026	121570	120222	130263	128819	138956	137417
		45°	40618	35746	50792	44702	60966	53658	71140	62614	76227	67091	81314	71569
		90°	67010	53764	83795	67233	100579	80703	117363	94172	125755	100907	134147	107642
18S-185	180	0°	77572	77780	97001	97266	116431	116753	135860	136239	145575	145982	155290	155725
		45°	45393	40509	56763	50658	68133	60807	79502	70956	85187	76030	90872	81104
		90°	74888	60927	93645	76191	112402	91455	131159	106719	140538	114351	149916	121983
18S-200	155	0°	90661	89142	113369	111476	136077	133809	158785	156143	170139	167309		
		45°	53053	46427	66341	58059	79629	69690	92917	81322	99562	87138		
		90°	87524	69827	109446	87322	131368	104816	153291	122310	164252	131057		
32S-145	350	0°	55228	51281	69061	64130	82893	76979	96726	89829	103643	96253	110559	102678
		45°	32749	27083	40952	33870	49155	40656	57358	47442	61460	50836	65561	54229
		90°	54822	41303	68553	51653	82284	62002	96015	72351	102881	77526	109747	82701
32S-175	295	0°	80445	79544	100594	99472	120743	119401	140892	139329	150966	149294	161041	159258
		45°	47703	42011	59651	52536	71600	63061	83548	73586	89522	78849	95496	84111
		90°	79853	64068	99854	80119	119855	96170	139856	112221	149857	120247	159857	128272
32S-200	210	0°	105071	103310	131388	129194	157705	155077	184022	180960	197181	193901	210339	206843
		45°	62306	54563	77912	68233	93518	81903	109124	95573	116927	102408	124730	109243
		90°	104298	83210	130422	104057	156546	124904	182669	145751	195731	156175	208793	166599
50S-175	350	0°	89383	88382	111771	110525	134159	132668	156547	154811	167741	165882	178934	176953
		45°	53003	46679	66279	58373	79555	70068	92831	81762	99469	87610	106107	93457
		90°	88726	71186	110949	89021	133172	106855	155396	124690	166507	133607	177619	142525
50S-200	305	0°	116745	114789	145987	143548	175228	172307	204469	201066	219090	215446	233710	229825
		45°	69229	60625	86569	75814	103909	91003	121249	106192	129919	113787	138589	121381
		90°	115887	92456	144913	115619	173940	138783	202966	161946	217479	173528	231992	185110
80S-200	350	0°	136203	128186	170318	160304	204433	192422	238547	224540	255605	240600	272662	256659
		45°	80767	67701	100997	84664	121227	101627	141457	118590	151572	127072	161687	135553
		90°	135202	103245	169066	129115	202930	154984	236794	180853	253726	193788	270658	206722

NOTE:

* MOP = Maximum Operating Pressure (barg)

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14S-85	350	0°	30271	26401	32055	27958	35622	31071	39190	34184	42758	37297	62380	54419
		45°	17708	13746	18752	14556	20839	16177	22926	17798	25013	19419	36492	28333
		90°	29205	20668	30926	21886	34368	24323	37811	26760	41253	29197	60184	42601
14S-95	350	0°	37813	34854	40041	36908	44497	41018	48954	45127	53410	49236	77921	71838
		45°	22120	18147	23424	19216	26031	21356	28638	23495	31245	25635	45584	37403
		90°	36482	27285	38631	28893	42931	32110	47231	35327	51530	38544	75178	56237
14S-110	350	0°	50726	45094	53714	47750	59689	53063	65663	58376	71638	63689	104500	92911
		45°	29675	23478	31423	24861	34918	27627	38413	30394	41909	33160	61133	48375
		90°	48941	35301	51823	37381	57587	41540	63352	45699	69117	49858	100822	72734
14S-125	310	0°	65504	61657	69362	65289	77077	72552	84793	79816	92508	87080	119513	112504
		45°	38320	32102	40577	33993	45090	37775	49604	41557	54118	45339	69915	58576
		90°	63198	48267	66920	51110	74364	56797	81808	62483	89252	68170	115306	88073
14S-135	265	0°	76404	73873	80904	78225	89903	86928	98902	95631	107902	104333	119151	115212
		45°	44696	38462	47329	40728	52593	45259	57858	49790	63123	54322	69704	59986
		90°	73715	57831	78056	61237	86738	68050	95421	74863	104104	81676	114957	90192
14S-145	230	0°	88168	81884	93359	86706	103741	96350	114123	105993			119314	110815
		45°	51579	42633	54615	45144	60689	50165	66762	55186			69799	57697
		90°	85065	64102	90073	67877	100090	75426	110106	82976			115114	86751
14S-175	155	0°											117084	115788
		45°											68495	60285
		90°											112963	90643
14S-185	140	0°											118173	118502
		45°											69131	61699
		90°											114013	92768
14S-200	120	0°											118361	116389
		45°											69242	60598
		90°											114195	91114
18S-125	350	0°	75308	70885	79744	75061	88614	83412	97484	91763	106354	100114	155141	146046
		45°	44069	36918	46664	39093	51855	43442	57045	47792	62236	52141	90785	76063
		90°	72702	55526	76984	58797	85548	65338	94111	71880	102674	78422	149773	114401

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

Biffi OLGA-H/OLGAS-H Series

Model	MOP* (barg)	Position	Operating supply pressure (barg)											
			170		180		200		220		240		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-145	300	0°	101365	94140	107333	99684	119269	110771	131205	121858	143141	132945	178948	166207
		45°	59316	49030	62809	51917	69793	57691	76778	63466	83763	69240	104717	86564
		90°	97857	73742	103619	78085	115142	86769	126665	95454	138187	104139	172756	130194
18S-175	205	0°	147648	146015	156341	154612	173727	171808					178074	176107
		45°	86401	76047	91487	80525	101661	89481					104205	91720
		90°	142539	114377	150931	121112	167716	134581					171912	137949
18S-185	180	0°	165005	165468	174719	175211							174719	175211
		45°	96557	86179	102242	91253							102242	91253
		90°	159295	129615	168674	137247							168674	137247
18S-200	155	0°											175816	172893
		45°											102884	90046
		90°											169732	135431
32S-145	350	0°	117476	109103	124392	115527	138225	128377	152058	141226	165891	154075	241972	224747
		45°	69662	57622	73764	61015	81967	67801	90170	74588	98372	81374	143488	118699
		90°	116612	87875	123478	93050	137209	103399	150940	113749	164672	124098	240194	181019
32S-175	295	0°	171115	169222	181190	179186	201339	199115	221488	219043	241637	238972	297047	293775
		45°	101470	89374	107445	94636	119393	105162	131341	115687	143290	126212	176147	155156
		90°	169858	136298	179858	144323	199859	160374	219860	176425	239861	192477	294864	236617
32S-200	210	0°	223498	219784	236656	232726	262974	258609	289291	284492			276132	271550
		45°	132533	116078	140336	122913	155942	136583	171548	150253			163745	143418
		90°	221855	177022	234917	187446	261040	208293	287164	229140			274102	218717
50S-175	350	0°	190128	188025	201322	199096	223710	221239	246098	243382	268486	265524	391619	387309
		45°	112745	99304	119383	105152	132659	116846	145935	128541	159211	140235	232228	204556
		90°	188731	151442	199842	160359	222066	178194	244289	196028	266512	213863	388740	311953
50S-200	305	0°	248331	244205	262952	258584	292193	287343	321434	316102	350676	344861	445710	438328
		45°	147259	128976	155929	136570	173269	151759	190609	166948	207949	182137	264304	231501
		90°	246506	196691	261019	208273	290045	231437	319071	254600	348098	277764	442433	353045
80S-200	350	0°	289720	272718	306777	288777	340892	320895	375007	353013	409122	385132	596753	561782
		45°	171802	144035	181917	152516	202147	169479	222377	186443	242607	203406	353872	296703
		90°	287590	219657	304522	232592	338386	258461	372250	284330	406114	310199	592366	452480

NOTE:

* MOP = Maximum Operating Pressure (barg)

MOT = Max Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Close

Models 0.3C-008A-20-CL to 0.9C-0700-85-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	350	208	118	203				248	27	27	342	78	79	436	117	132
0.3C-008A-28-CL	350	206	117	200	512	147	175	696	220	279	880	292	382	1064	365	486
0.3C-008A-35-CL	220	206	117	198	925	310	408	1212	423	570	1499	535	732	1787	648	893
0.3C-008B-20-CL	350	313	160	201										438	22	22
0.3C-008B-28-CL	350	312	159	198	514	65	65	698	163	169	882	239	273	1065	312	376
0.3C-008B-35-CL	220	311	159	197	926	257	298	1214	371	460	1501	484	622	1788	597	784
0.3C-008C-20-CL	350	376	195	254												
0.3C-008C-28-CL	350	375	194	252				644	101	101	828	195	204	1012	271	308
0.3C-008C-35-CL	225	374	194	250	873	214	230	1160	331	392	1448	445	553	1735	558	715
0.3C-0100-28-CL	350	601	330	508										757	59	59
0.3C-0100-35-CL	245	600	329	507				905	143	143	1192	288	305	1479	405	467
0.3C-0100-40-CL	185	598	328	504	967	178	178	1342	349	389	1717	500	601	2092	649	812
0.3C-0100-45-CL	145	598	328	502	1364	358	401	1839	549	669	2313	736	937	2788	923	1204
0.3C-0100-50-CL	120	597	327	501	1808	537	652	2395	768	982	2981	999	1313			
0.3C-0150-35-CL	265	754	445	823							877	127	127	1164	276	289
0.3C-0150-40-CL	205	753	444	820				1027	212	212	1402	374	423	1777	524	634
0.3C-0150-45-CL	160	752	443	818	1049	224	224	1523	423	491	1998	612	759	2473	799	1027
0.3C-0150-50-CL	130	752	443	817	1493	411	474	2079	644	805	2666	875	1135			
0.3C-0150-60-CL	90	752	443	818	2526	820	1056									
0.9C-0200-40-CL	350	1003	589	1072				1064	100	100	1498	338	344	1932	519	589
0.9C-0200-45-CL	350	1002	588	1070	1089	114	114	1638	398	424	2188	621	733	2737	840	1043
0.9C-0200-50-CL	295	1002	587	1069	1603	383	404	2281	659	786	2959	928	1168	3637	1195	1550
0.9C-0200-60-CL	205	1002	588	1070	2797	864	1077	3773	1248	1627	4750	1631	2177	5726	2014	2727
0.9C-0250-40-CL	350	1197	732	1469							1103	122	122	1537	355	366
0.9C-0250-45-CL	350	1196	731	1467				1243	201	201	1792	462	510	2341	683	820
0.9C-0250-50-CL	310	1196	731	1465	1208	181	181	1886	500	563	2564	771	945	3242	1039	1327
0.9C-0250-60-CL	215	1196	731	1466	2402	707	854	3378	1093	1404	4355	1476	1955	5331	1859	2505
0.9C-0250-70-CL	155	1196	731	1466	3812	1263	1649	5140	1785	2398	6469	2305	3146	7798	2825	3895
0.9C-0350-45-CL	350	1890	1114	2054										1756	67	67
0.9C-0350-50-CL	325	1889	1114	2053							1979	192	192	2657	574	574
0.9C-0350-60-CL	225	1890	1114	2054	1817	101	101	2793	636	651	3769	1039	1202	4745	1429	1752
0.9C-0350-70-CL	165	1889	1114	2054	3226	819	896	4555	1353	1645	5884	1879	2393	7213	2401	3142
0.9C-0350-85-CL	110	1884	1110	2043	5739	1822	2312	7698	2592	3416						
0.9C-0400-50-CL	345	2225	1363	2741										1971	188	188
0.9C-0400-60-CL	240	2226	1363	2742				2108	265	265	3084	760	815	4060	1156	1366
0.9C-0400-70-CL	175	2225	1363	2742	2541	509	509	3870	1080	1258	5199	1608	2007	6527	2132	2756
0.9C-0400-85-CL	120	2220	1359	2731	5054	1551	1926	7013	2323	3030	8972	3092	4134			
0.9C-0700-60-CL	255	3139	1886	3630										3176	368	368
0.9C-0700-70-CL	190	3139	1886	3630				2986	260	260	4314	984	1009	5643	1535	1758
0.9C-0700-85-CL	125	3134	1882	3619	4169	920	927	6128	1730	2032	8088	2509	3136			

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	350	208	118	203	483	135	159	530	154	185	577	173	212	624	191	238
0.3C-008A-28-CL	350	206	117	200	1156	401	538	1248	437	590	1340	473	642	1432	509	693
0.3C-008A-35-CL	220	206	117	198	1930	704	974	2074	760	1055	2218	816	1136	2361	872	1217
0.3C-008B-20-CL	350	313	160	201	485	49	49	532	75	75	578	102	102	625	128	128
0.3C-008B-28-CL	350	312	159	198	1157	349	428	1249	385	480	1341	421	532	1433	458	583
0.3C-008B-35-CL	220	311	159	197	1932	654	865	2075	710	945	2219	766	1026	2363	823	1107
0.3C-008C-20-CL	350	376	195	254				478	7	7	525	33	33	572	60	60
0.3C-008C-28-CL	350	375	194	252	1104	308	360	1196	345	412	1288	382	463	1380	418	515
0.3C-008C-35-CL	225	374	194	250	1879	615	796	2022	671	877	2166	728	958	2309	784	1039
0.3C-0100-28-CL	350	601	330	508	849	111	111	941	163	163	1032	215	215	1124	259	267
0.3C-0100-35-CL	245	600	329	507	1623	463	548	1767	520	629	1910	577	710	2054	634	791
0.3C-0100-40-CL	185	598	328	504	2280	723	918	2467	797	1024	2655	871	1129	2843	945	1235
0.3C-0100-45-CL	145	598	328	502												
0.3C-0100-50-CL	120	597	327	501												
0.3C-0150-35-CL	265	754	445	823	1308	336	370	1452	394	451	1595	452	532	1739	509	613
0.3C-0150-40-CL	205	753	444	820	1965	599	740	2152	673	846	2340	747	952	2528	821	1057
0.3C-0150-45-CL	160	752	443	818	2711	893	1161	2948	986	1294						
0.3C-0150-50-CL	130	752	443	817												
0.3C-0150-60-CL	90	752	443	818												
0.9C-0200-40-CL	350	1003	589	1072	2149	606	711	2366	693	834	2583	779	956	2799	865	1078
0.9C-0200-45-CL	350	1002	588	1070	3011	948	1197	3286	1056	1352	3560	1165	1507	3835	1272	1662
0.9C-0200-50-CL	295	1002	587	1069	3976	1328	1741	4315	1461	1932	4654	1594	2123	4993	1727	2314
0.9C-0200-60-CL	205	1002	588	1070	6214	2205	3003	6702	2396	3278	7190	2587	3553	7678	2778	3828
0.9C-0250-40-CL	350	1197	732	1469	1754	446	489	1970	534	611	2187	621	733	2404	708	855
0.9C-0250-45-CL	350	1196	731	1467	2616	792	975	2891	901	1129	3165	1009	1284	3440	1117	1439
0.9C-0250-50-CL	310	1196	731	1465	3581	1173	1519	3920	1306	1710	4259	1439	1901	4598	1572	2092
0.9C-0250-60-CL	215	1196	731	1466	5819	2050	2780	6307	2241	3055	6795	2433	3330	7283	2624	3605
0.9C-0250-70-CL	155	1196	731	1466	8462	3085	4270									
0.9C-0350-45-CL	350	1890	1114	2054	2031	222	222	2305	376	376	2580	531	531	2854	662	686
0.9C-0350-50-CL	325	1889	1114	2053	2996	723	766	3335	863	957	3673	1001	1148	4012	1137	1339
0.9C-0350-60-CL	225	1890	1114	2054	5233	1622	2027	5722	1815	2302	6210	2007	2577	6698	2199	2852
0.9C-0350-70-CL	165	1889	1114	2054	7877	2662	3517	8541	2923	3891						
0.9C-0350-85-CL	110	1884	1110	2043												
0.9C-0400-50-CL	345	2225	1363	2741	2310	379	379	2649	570	570	2988	719	761	3327	860	952
0.9C-0400-60-CL	240	2226	1363	2742	4548	1351	1641	5036	1544	1916	5525	1737	2191	6013	1929	2466
0.9C-0400-70-CL	175	2225	1363	2742	7192	2393	3131	7856	2654	3505	8520	2915	3880			
0.9C-0400-85-CL	120	2220	1359	2731												
0.9C-0700-60-CL	255	3139	1886	3630	3664	643	643	4152	912	918	4640	1123	1193	5128	1326	1468
0.9C-0700-70-CL	190	3139	1886	3630	6307	1802	2133	6972	2066	2507	7636	2330	2881	8300	2593	3256
0.9C-0700-85-CL	125	3134	1882	3619												

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	350	208	118	203	718	228	291	811	265	344	905	302	397	1421	504	687
0.3C-008A-28-CL	350	206	117	200	1615	581	797	1799	653	901	1983	724	1004	2994	1120	1574
0.3C-008A-35-CL	220	206	117	198	2648	985	1379	2936	1097	1541				2936	1097	1541
0.3C-008B-20-CL	350	313	160	201	719	172	181	813	211	234	907	249	287	1423	454	578
0.3C-008B-28-CL	350	312	159	198	1617	530	687	1801	602	791	1985	674	894	2996	1071	1464
0.3C-008B-35-CL	220	311	159	197	2650	935	1269	2937	1048	1431				2937	1048	1431
0.3C-008C-20-CL	350	376	195	254	666	113	113	760	165	166	853	206	219	1369	414	509
0.3C-008C-28-CL	350	375	194	252	1564	491	619	1748	563	722	1931	636	826	2943	1032	1396
0.3C-008C-35-CL	225	374	194	250	2597	897	1201	2884	1009	1363				2956	1038	1404
0.3C-0100-28-CL	350	601	330	508	1308	336	370	1492	410	474	1676	484	577	2687	884	1147
0.3C-0100-35-CL	245	600	329	507	2341	747	952	2629	861	1114	2916	973	1276	2988	1002	1317
0.3C-0100-40-CL	185	598	328	504										2936	982	1288
0.3C-0100-45-CL	145	598	328	502										2907	970	1271
0.3C-0100-50-CL	120	597	327	501										2981	999	1313
0.3C-0150-35-CL	265	754	445	823	2026	623	775	2313	737	937	2601	850	1099	2960	991	1301
0.3C-0150-40-CL	205	753	444	820	2903	968	1269							2997	1005	1322
0.3C-0150-45-CL	160	752	443	818										2948	986	1294
0.3C-0150-50-CL	130	752	443	817										2959	990	1301
0.3C-0150-60-CL	90	752	443	818										2948	986	1294
0.9C-0200-40-CL	350	1003	589	1072	3233	1036	1323	3667	1207	1567	4101	1377	1812	6487	2312	3157
0.9C-0200-45-CL	350	1002	588	1070	4384	1488	1971	4933	1703	2281	5482	1919	2590	8502	3101	4292
0.9C-0200-50-CL	295	1002	587	1069	5671	1992	2696	6349	2258	3079	7027	2523	3461	8891	3253	4511
0.9C-0200-60-CL	205	1002	588	1070	8654	3160	4378							8898	3256	4516
0.9C-0250-40-CL	350	1197	732	1469	2838	880	1100	3272	1051	1344	3706	1222	1589	6092	2157	2934
0.9C-0250-45-CL	350	1196	731	1467	3989	1333	1748	4538	1548	2058	5087	1764	2367	8107	2946	4070
0.9C-0250-50-CL	310	1196	731	1465	5276	1838	2474	5954	2103	2856	6631	2368	3238	9004	3354	4575
0.9C-0250-60-CL	215	1196	731	1466	8259	3006	4155							8991	3292	4568
0.9C-0250-70-CL	155	1196	731	1466										8794	3215	4457
0.9C-0350-45-CL	350	1890	1114	2054	3403	891	995	3953	1113	1305	4502	1332	1614	7522	2523	3317
0.9C-0350-50-CL	325	1889	1114	2053	4690	1407	1721	5368	1675	2103	6046	1943	2485	8927	3074	4109
0.9C-0350-60-CL	225	1890	1114	2054	7674	2583	3402	8650	2965	3953				8894	3061	4090
0.9C-0350-70-CL	165	1889	1114	2054										8873	3053	4078
0.9C-0350-85-CL	110	1884	1110	2043										8678	2976	3968
0.9C-0400-50-CL	345	2225	1363	2741	4005	1134	1335	4683	1404	1717	5361	1672	2099	8920	3071	4105
0.9C-0400-60-CL	240	2226	1363	2742	6989	2313	3016	7965	2697	3566	8941	3080	4117	8941	3080	4117
0.9C-0400-70-CL	175	2225	1363	2742										8853	3045	4067
0.9C-0400-85-CL	120	2220	1359	2731										8972	3092	4134
0.9C-0700-60-CL	255	3139	1886	3630	6104	1720	2018	7081	2110	2568	8057	2496	3119	8789	2786	3531
0.9C-0700-70-CL	190	3139	1886	3630										8965	2855	3630
0.9C-0700-85-CL	125	3134	1882	3619										8577	2702	3412

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Close

Models 1.5C-1100-70-CL to 14C-8300-200-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	240	5802	3267	5365										6364	276	276
1.5C-1100-85-CL	160	5795	3262	5352				6978	622	622	9455	2019	2019	11933	3084	3415
1.5C-1100-95-CL	130	5790	3258	5341	6960	612	612	10055	2297	2356	13149	3579	4101			
1.5C-1100-110-CL	95	5793	3260	5347	11183	2775	2992									
1.5C-1200-70-CL	265	6714	3958	7293												
1.5C-1200-85-CL	180	6707	3954	7280							7535	967	967	10012	2297	2363
1.5C-1200-95-CL	140	6702	3950	7270				8134	1305	1305	11228	2811	3049	14323	4066	4793
1.5C-1200-110-CL	105	6705	3952	7275	9262	1940	1940	13411	3700	4279						
3C-2000-70-CL	295	9894	5974	11635										7791	7	7
3C-2000-85-CL	200	9884	5966	11613				8807	580	580	12907	2861	2891	17008	4576	5202
3C-2000-95-CL	160	9875	5960	11596	8777	563	563	13899	3293	3450	19021	5386	6337	24143	7423	9224
3C-2000-110-CL	120	9880	5963	11605	15766	4070	4503	22633	6824	8373	29501	9536	12244			
6C-2500-85-CL	320	14109	8635	17339							11342	522	522	16136	3224	3224
6C-2500-95-CL	255	14099	8628	17319				12502	1176	1176	18490	4358	4551	24479	6814	7927
6C-2500-110-CL	190	14104	8632	17330	14685	2406	2406	22713	6102	6931	30742	9310	11457	38770	12480	15982
6C-2500-125-CL	145	14092	8622	17304	24017	6629	7666	34384	10751	13510	44752	14833	19353	55119	18902	25197
6C-2500-135-CL	125	14082	8615	17285	30900	9373	11546	42993	14142	18362	55085	18889	25178			
6C-3800-85-CL	350	19035	11997	25787												
6C-3800-95-CL	285	19025	11990	25767										16065	2351	2351
6C-3800-110-CL	210	19030	11994	25778				14300	1356	1356	22328	5488	5881	30357	8744	10406
6C-3800-125-CL	165	19017	11984	25752	15603	2091	2091	25971	6982	7934	36338	11121	13778	46706	15210	19621
6C-3800-135-CL	140	19008	11977	25733	22487	5554	5970	34579	10423	12786	46672	15197	19602	58764	19947	26418
14C-5100-95-CL	350	22826	14420	31156										14578	295	295
14C-5100-110-CL	340	22832	14424	31167							21423	4154	4154	30198	8051	9100
14C-5100-125-CL	265	22818	14414	31139	14073	11	11	25404	6073	6398	36735	10678	12784	48066	15167	19171
14C-5100-135-CL	225	22808	14406	31118	21596	4251	4251	34813	9909	11701	48029	15152	19150	61246	20353	26600
14C-5100-145-CL	195	22817	14413	31138	29736	7864	8839	44983	13949	17433	60231	19954	26027	75478	25938	34621
14C-5100-175-CL	135	22789	14393	31080	57531	18894	24506	79741	27609	37024	101950	36307	49542			
14C-5100-200-CL	100	22761	14373	31023	84675	29544	39805	113683	40901	56155						
14C-5400-110-CL	350	29546	18214	37206										24183	1793	1793
14C-5400-125-CL	275	29532	18204	37178							30721	5477	5477	42052	10777	11864
14C-5400-135-CL	235	29522	18197	37157				28798	4394	4394	42015	10761	11843	55232	16089	19293
14C-5400-145-CL	205	29531	18204	37177	23722	1532	1532	38969	9499	10126	54216	15685	18720	69463	21730	27314
14C-5400-175-CL	140	29503	18183	37119	51517	14606	17199	73726	23413	29717	95935	32148	42235	118144	40859	54753
14C-5400-185-CL	125	29492	18175	37097	61940	18754	23074	86760	28543	37063	111580	38285	51053			
14C-5400-200-CL	105	29475	18163	37062	78661	25356	32498	107669	36752	48848						
14C-8300-125-CL	295	37940	23489	48455										30821	2515	2515
14C-8300-135-CL	255	37930	23482	48434							30784	2494	2494	44001	9811	9943
14C-8300-145-CL	220	37939	23489	48454				27738	777	777	42985	9348	9371	58233	15747	17965
14C-8300-175-CL	150	37911	23468	48396	40286	7850	7850	62495	17464	20367	84704	26295	32885	106914	35047	45403
14C-8300-185-CL	135	37901	23460	48374	50709	12672	13724	75529	22662	27714	100349	32464	41703			
14C-8300-200-CL	115	37884	23448	48339	67430	19440	23149	96438	30923	39499						

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	240	5802	3267	5365	7204	750	750	8044	1223	1223	8884	1697	1697	9724	2150	2170
1.5C-1100-85-CL	160	5795	3262	5352	13171	3588	4113	14410	4086	4811						
1.5C-1100-95-CL	130	5790	3258	5341												
1.5C-1100-110-CL	95	5793	3260	5347												
1.5C-1200-70-CL	265	6714	3958	7293				6123	172	172	6964	645	645	7804	1119	1119
1.5C-1200-85-CL	180	6707	3954	7280	11251	2821	3061	12489	3328	3760	13728	3828	4458	14967	4324	5156
1.5C-1200-95-CL	140	6702	3950	7270												
1.5C-1200-110-CL	105	6705	3952	7275												
3C-2000-70-CL	295	9894	5974	11635	9181	791	791	10572	1575	1575	11962	2359	2359	13353	3058	3142
3C-2000-85-CL	200	9884	5966	11613	19058	5401	6358	21108	6219	7514	23158	7033	8669	25209	7844	9825
3C-2000-95-CL	160	9875	5960	11596	26704	8434	10668	29265	9443	12111						
3C-2000-110-CL	120	9880	5963	11605												
6C-2500-85-CL	320	14109	8635	17339	18533	4376	4575	20930	5376	5926	23327	6350	7277	25724	7313	8628
6C-2500-95-CL	255	14099	8628	17319	27473	8012	9614	30467	9201	11302	33461	10386	12989	36455	11569	14677
6C-2500-110-CL	190	14104	8632	17330	42784	14060	18244	46799	15637	20507	50813	17214	22770	54827	18787	25032
6C-2500-125-CL	145	14092	8622	17304												
6C-2500-135-CL	125	14082	8615	17285												
6C-3800-85-CL	350	19035	11997	25787				12517	351	351	14914	1702	1702	17311	3053	3053
6C-3800-95-CL	285	19025	11990	25767	19059	4039	4039	22053	5373	5726	25047	6607	7414	28042	7817	9101
6C-3800-110-CL	210	19030	11994	25778	34371	10341	12669	38385	11930	14932	42400	13514	17194	46414	15095	19457
6C-3800-125-CL	165	19017	11984	25752	51889	17247	22543	57073	19283	25465						
6C-3800-135-CL	140	19008	11977	25733												
14C-5100-95-CL	350	22826	14420	31156	17850	2140	2140	21122	3984	3984	24395	5642	5829	27667	7017	7673
14C-5100-110-CL	340	22832	14424	31167	34585	9819	11572	38973	11568	14045	43360	13308	16518	47748	15041	18991
14C-5100-125-CL	265	22818	14414	31139	53732	17399	22364	59398	19627	25558	65063	21853	28751	70729	24076	31944
14C-5100-135-CL	225	22808	14406	31118	67855	22949	30324	74463	25540	34049	81071	28131	37774	87680	30721	41498
14C-5100-145-CL	195	22817	14413	31138	83101	28927	38918	90725	31913	43215	98349	34898	47512	105972	37882	51809
14C-5100-175-CL	135	22789	14393	31080												
14C-5100-200-CL	100	22761	14373	31023												
14C-5400-110-CL	350	29546	18214	37206	28571	4266	4266	32958	6738	6738	37346	8813	9211	41733	10645	11684
14C-5400-125-CL	275	29532	18204	37178	47718	13079	15057	53383	15352	18251	59049	17608	21444	64714	19854	24637
14C-5400-135-CL	235	29522	18197	37157	61840	18715	23017	68448	21329	26742	75057	23937	30467	81665	26539	34191
14C-5400-145-CL	205	29531	18204	37177	77087	24736	31611	84711	27738	35908	92334	30733	40205	99958	33728	44502
14C-5400-175-CL	140	29503	18183	37119												
14C-5400-185-CL	125	29492	18175	37097												
14C-5400-200-CL	105	29475	18163	37062												
14C-8300-125-CL	295	37940	23489	48455	36487	5708	5708	42152	8901	8901	47818	11463	12095	53484	13815	15288
14C-8300-135-CL	255	37930	23482	48434	50609	12630	13668	57218	15336	17393	63826	17999	21117	70434	20637	24842
14C-8300-145-CL	220	37939	23489	48454	65856	18810	22262	73480	21849	26559	81103	24872	30856	88727	27884	35153
14C-8300-175-CL	150	37911	23468	48396	118018	39410	51662									
14C-8300-185-CL	135	37901	23460	48374												
14C-8300-200-CL	115	37884	23448	48339												

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	240	5802	3267	5365	11405	2867	3117	13085	3553	4064	14765	4227	5011	14765	4227	5011
1.5C-1100-85-CL	160	5795	3262	5352										14410	4086	4811
1.5C-1100-95-CL	130	5790	3258	5341										14697	4200	4973
1.5C-1100-110-CL	95	5793	3260	5347										14294	4039	4746
1.5C-1200-70-CL	265	6714	3958	7293	9484	2061	2066	11164	2785	3013	12844	3472	3960	14944	4315	5143
1.5C-1200-85-CL	180	6707	3954	7280										14967	4324	5156
1.5C-1200-95-CL	140	6702	3950	7270										14323	4066	4793
1.5C-1200-110-CL	105	6705	3952	7275										14448	4116	4864
3C-2000-70-CL	295	9894	5974	11635	16134	4220	4710	18915	5343	6277	21696	6452	7845	29343	9474	12155
3C-2000-85-CL	200	9884	5966	11613	29309	9461	12136							29309	9461	12136
3C-2000-95-CL	160	9875	5960	11596										29265	9443	12111
3C-2000-110-CL	120	9880	5963	11605										29501	9536	12244
6C-2500-85-CL	320	14109	8635	17339	30518	9222	11330	35312	11117	14033	40106	13006	16735	59281	20534	27543
6C-2500-95-CL	255	14099	8628	17319	42443	13926	18052	48431	16279	21427	54420	18628	24802	58911	20388	27334
6C-2500-110-CL	190	14104	8632	17330										58842	20361	27295
6C-2500-125-CL	145	14092	8622	17304										57711	19918	26658
6C-2500-135-CL	125	14082	8615	17285										58108	20074	26882
6C-3800-85-CL	350	19035	11997	25787	22104	5394	5755	26898	7357	8457	31692	9276	11159	58059	19670	26020
6C-3800-95-CL	285	19025	11990	25767	34030	10206	12477	40018	12575	15852	46006	14934	19227	59480	20227	26821
6C-3800-110-CL	210	19030	11994	25778	54442	18250	23982							58457	19826	26245
6C-3800-125-CL	165	19017	11984	25752										59665	20300	26926
6C-3800-135-CL	140	19008	11977	25733										58764	19947	26418
14C-5100-95-CL	350	22826	14420	31156	34212	9669	11362	40757	12276	15051	47302	14865	18740	83299	29004	39029
14C-5100-110-CL	340	22832	14424	31167	56522	18497	23937	65297	21945	28883	74072	25387	33829	117947	42570	58558
14C-5100-125-CL	265	22818	14414	31139	82060	28518	38331	93391	32957	44718	104722	37393	51104	118886	42938	59088
14C-5100-135-CL	225	22808	14406	31118	100896	35895	48948	114113	41069	56397				117417	42363	58260
14C-5100-145-CL	195	22817	14413	31138										117408	42359	58254
14C-5100-175-CL	135	22789	14393	31080										118606	42828	58930
14C-5100-200-CL	100	22761	14373	31023										113683	40901	56155
14C-5400-110-CL	350	29546	18214	37206	50508	14201	16630	59283	17701	21576	68058	21175	26522	116319	40143	53724
14C-5400-125-CL	275	29532	18204	37178	76046	24326	31024	87377	28785	37411	98708	33237	43797	118538	41013	54974
14C-5400-135-CL	235	29522	18197	37157	94882	31734	41641	108098	36920	49090				118011	40807	54677
14C-5400-145-CL	205	29531	18204	37177	115205	39706	53096							119017	41201	55244
14C-5400-175-CL	140	29503	18183	37119										118144	40859	54753
14C-5400-185-CL	125	29492	18175	37097										117785	40718	54550
14C-5400-200-CL	105	29475	18163	37062										114921	39595	52936
14C-8300-125-CL	295	37940	23489	48455	64815	18394	21675	76146	22907	28061	87477	27390	34448	118638	39653	52011
14C-8300-135-CL	255	37930	23482	48434	83651	25878	32292	96868	31093	39741	110084	36293	47190	119997	40187	52777
14C-8300-145-CL	220	37939	23489	48454	103974	33891	43747	119222	39883	52340				119222	39883	52340
14C-8300-175-CL	150	37911	23468	48396										118018	39410	51662
14C-8300-185-CL	135	37901	23460	48374										118964	39781	52195
14C-8300-200-CL	115	37884	23448	48339										118194	39479	51761

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Close

Models 18C-9600-145-CL to 50C-15600-300-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	275	61322	35919	65137										57590	1753	1753
18C-9600-175-CL	190	61289	35894	65070				62492	4516	4516	88033	18912	18912	113573	29793	33307
18C-9600-185-CL	170	61277	35885	65046				77481	12965	12965	106024	26696	29052	134567	38260	45140
18C-9600-200-CL	145	61257	35871	65005	68167	7715	7715	101526	24825	26517	134885	38388	45320	168244	51651	64122
18C-9600-235-CL	105	61206	35832	64900	118861	31942	36288	164917	50332	62247						
18C-9800-145-CL	295	77635	45154	80488												
18C-9800-175-CL	200	77602	45130	80421							72744	1122	1122	98285	15517	15517
18C-9800-185-CL	180	77590	45121	80396							90736	11262	11262	119279	26857	27350
18C-9800-200-CL	155	77571	45106	80356				86238	8727	8727	119597	26998	27529	152956	40911	46332
18C-9800-235-CL	110	77519	45068	80250	103573	18498	18498	149629	39559	44457						
18C-10500-175-CL	205	86911	50080	87220										91514	5470	5470
18C-10500-185-CL	185	86899	50071	87195							83965	1215	1215	112508	17303	17303
18C-10500-200-CL	160	86880	50056	87155							112826	17482	17482	146185	34634	36285
18C-10500-235-CL	115	86828	50017	87049	96802	8451	8451	142858	33210	34410						
18C-11000-175-CL	225	97217	57757	108328												
18C-11000-185-CL	200	97205	57747	108303										91485	5454	5454
18C-11000-200-CL	170	97186	57733	108263							91804	5634	5634	125163	24436	24436
18C-11000-235-CL	125	97134	57695	108157				121836	22561	22561	167892	43654	48520			
32C-12000-175-CL	280	112135	63661	106781												
32C-12000-200-CL	215	112097	63633	106705							128073	9773	9773	167233	31846	31846
32C-12000-235-CL	155	112037	63588	106581				163328	29645	29645	217394	55042	60118	271460	76945	90592
32C-12000-250-CL	135	112008	63566	106521	137698	15198	15198	198886	47311	49686	260074	72377	84175			
32C-15000-175-CL	300	130171	75502	133668												
32C-15000-200-CL	230	130133	75475	133592										140456	11647	11647
32C-15000-235-CL	165	130073	75429	133467				136551	9446	9446	190617	39919	39919	244683	63448	70393
32C-15000-250-CL	145	130044	75408	133408				172109	29488	29488	233297	58769	63976	294486	83567	98464
50C-15400-200-CL	260	141379	78713	125440										178963	17513	17513
50C-15400-235-CL	190	141312	78662	125303				174623	15067	15067	234697	48927	48927	294770	75334	82787
50C-15400-250-CL	165	141280	78638	125237				214132	37336	37336	282120	70107	75656	350107	97773	113976
50C-15400-300-CL	115	141238	78606	125151	265725	63229	66416	363627	103195	121597						
50C-15600-200-CL	270	147674	83458	138334										166121	10275	10275
50C-15600-235-CL	195	147607	83408	138196				161782	7830	7830	221856	41689	41689	281929	70028	75549
50C-15600-250-CL	170	147575	83384	138131				201291	30098	30098	269278	64732	68418	337266	92610	106738
50C-15600-300-CL	120	147533	83352	138045	252884	57706	59178	350785	98045	114359	448687	137029	169540			

NOTES:

Model 80C is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	275	61322	35919	65137	66357	6695	6695	75124	11636	11636	83892	16578	16578	92659	21040	21519
18C-9600-175-CL	190	61289	35894	65070	126343	34962	40505	139114	40078	47703	151884	45164	54901	164654	50228	62098
18C-9600-185-CL	170	61277	35885	65046	148838	43952	53184	163110	49616	61228	177381	55260	69272			
18C-9600-200-CL	145	61257	35871	65005												
18C-9600-235-CL	105	61206	35832	64900												
18C-9800-145-CL	295	77635	45154	80488										77370	3729	3729
18C-9800-175-CL	200	77602	45130	80421	111055	22715	22715	123825	28839	29913	136596	34214	37111	149366	39452	44308
18C-9800-185-CL	180	77590	45121	80396	133550	32949	35394	147821	38824	43438	162093	44604	51482	176364	50329	59526
18C-9800-200-CL	155	77571	45106	80356	169635	47635	55733									
18C-9800-235-CL	110	77519	45068	80250												
18C-10500-175-CL	205	86911	50080	87220	104284	12668	12668	117054	19866	19866	129825	27064	27064	142595	33097	34261
18C-10500-185-CL	185	86899	50071	87195	126779	25347	25347	141050	32428	33391	155322	38475	41435	169593	44349	49479
18C-10500-200-CL	160	86880	50056	87155	162864	41593	45686	179544	48393	55087						
18C-10500-235-CL	115	86828	50017	87049												
18C-11000-175-CL	225	97217	57757	108328	83262	819	819	96032	8017	8017	108802	15215	15215	121573	22412	22412
18C-11000-185-CL	200	97205	57747	108303	105757	13498	13498	120028	21542	21542	134299	29425	29586	148571	35645	37630
18C-11000-200-CL	170	97186	57733	108263	141842	32771	33837	158522	39802	43238	175201	46631	52639			
18C-11000-235-CL	125	97134	57695	108157												
32C-12000-175-CL	280	112135	63661	106781	118045	4122	4122	133037	12571	12571	148028	21021	21021	163019	29470	29470
32C-12000-200-CL	215	112097	63633	106705	186813	42093	42882	206394	50473	53918	225974	58566	64954	245554	66526	75990
32C-12000-235-CL	155	112037	63588	106581	298493	87732	105829									
32C-12000-250-CL	135	112008	63566	106521												
32C-15000-175-CL	300	130171	75502	133668							121250	822	822	136242	9272	9272
32C-15000-200-CL	230	130133	75475	133592	160036	22683	22683	179617	33719	33719	199197	44244	44756	218777	52712	55792
32C-15000-235-CL	165	130073	75429	133467	271716	74421	85630	298749	85271	100867						
32C-15000-250-CL	145	130044	75408	133408												
50C-15400-200-CL	260	141379	78713	125440	200719	29776	29776	222474	42038	42038	244230	53857	54300	265986	63340	66563
50C-15400-235-CL	190	141312	78662	125303	324807	87579	99716	354844	99675	116646	384880	111689	133576	414917	123642	150506
50C-15400-250-CL	165	141280	78638	125237	384100	111379	133136	418094	124903	152296						
50C-15400-300-CL	115	141238	78606	125151												
50C-15600-200-CL	270	147674	83458	138334	187877	22538	22538	209633	34800	34800	231389	47063	47063	253145	57820	59325
50C-15600-235-CL	195	147607	83408	138196	311966	82366	92479	342002	94517	109408	372039	106558	126338	402076	118532	143268
50C-15600-250-CL	170	147575	83384	138131	371259	106246	125898	405253	119796	145059	439246	133287	164219			
50C-15600-300-CL	120	147533	83352	138045												

NOTES:

Model 80C is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	275	61322	35919	65137	110193	28411	31402	127727	35517	41285	145262	42529	51168	175947	54693	68463
18C-9600-175-CL	190	61289	35894	65070										177424	55277	69296
18C-9600-185-CL	170	61277	35885	65046										177381	55260	69272
18C-9600-200-CL	145	61257	35871	65005										176584	54945	68822
18C-9600-235-CL	105	61206	35832	64900										176431	54885	68736
18C-9800-145-CL	295	77635	45154	80488	94905	13612	13612	112439	23495	23495	129973	31452	33378	178193	51060	60556
18C-9800-175-CL	200	77602	45130	80421	174906	49746	58704							174906	49746	58704
18C-9800-185-CL	180	77590	45121	80396										176364	50329	59526
18C-9800-200-CL	155	77571	45106	80356										177975	50973	60434
18C-9800-235-CL	110	77519	45068	80250										172657	48847	57436
18C-10500-175-CL	205	86911	50080	87220	168135	43753	48657							174520	46355	52256
18C-10500-185-CL	185	86899	50071	87195										176729	47252	53501
18C-10500-200-CL	160	86880	50056	87155										179544	48393	55087
18C-10500-235-CL	115	86828	50017	87049										177400	47525	53879
18C-11000-175-CL	225	97217	57757	108328	147113	35028	36808	172654	45597	51204				179039	48189	54802
18C-11000-185-CL	200	97205	57747	108303	177114	47408	53717							177114	47408	53717
18C-11000-200-CL	170	97186	57733	108263										175201	46631	52639
18C-11000-235-CL	125	97134	57695	108157										179406	48338	55010
32C-12000-175-CL	280	112135	63661	106781	193001	44795	46370	222983	57342	63269	252966	69519	80168	312930	93475	113966
32C-12000-200-CL	215	112097	63633	106705	284715	82244	98063							314085	93932	114617
32C-12000-235-CL	155	112037	63588	106581										312009	93109	113447
32C-12000-250-CL	135	112008	63566	106521										305966	90706	110041
32C-15000-175-CL	300	130171	75502	133668	166224	26171	26171	196206	42881	43070	226189	55819	59969	316136	92212	110667
32C-15000-200-CL	230	130133	75475	133592	257938	68848	77864	297098	84611	99937				316679	92428	110973
32C-15000-235-CL	165	130073	75429	133467										312265	90672	108485
32C-15000-250-CL	145	130044	75408	133408										309783	89682	107086
50C-15400-200-CL	260	141379	78713	125440	309498	81364	91088	353010	98939	115613	396522	116322	140137	440033	133599	164662
50C-15400-235-CL	190	141312	78662	125303										444925	141866	167419
50C-15400-250-CL	165	141280	78638	125237										435061	137969	161860
50C-15400-300-CL	115	141238	78606	125151										437053	132418	162982
50C-15600-200-CL	270	147674	83458	138334	296657	76110	83850	340169	93781	108375	383680	111211	132900	448948	137133	169687
50C-15600-235-CL	195	147607	83408	138196										447102	142726	168646
50C-15600-250-CL	170	147575	83384	138131										439217	139611	164202
50C-15600-300-CL	120	147533	83352	138045										448687	137029	169540

NOTES:

Model 80C is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Open

Models 0.3C-008A-20-OP to 0.9C-0700-85-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					80			100			120			140		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-20-OP	350	385	96	104				122	27	27	173	92	131	223	130	235
0.3C-008A-28-OP	340	383	95	102	265	161	320	364	234	524	464	306	728	564	378	932
0.3C-008A-35-OP	215	382	94	102	488	324	778	644	436	1096	800	549	1415	955	661	1734
0.3C-008B-20-OP	350	583	104	104												
0.3C-008B-28-OP	350	580	103	103	253	78	78	353	191	282	452	266	486	552	339	690
0.3C-008B-35-OP	230	579	102	102	477	284	536	632	398	854	788	511	1173	944	624	1492
0.3C-008C-20-OP	350	699	131	131												
0.3C-008C-28-OP	350	696	130	130				320	139	139	420	228	343	519	303	547
0.3C-008C-35-OP	240	695	129	129	444	247	393	599	363	712	755	477	1031	911	590	1349
0.3C-0100-28-OP	350	1116	255	262										368	32	32
0.3C-0100-35-OP	275	1115	254	261				449	197	197	604	333	516	760	449	834
0.3C-0100-40-OP	210	1112	253	260	482	238	265	685	394	682	889	545	1098	1092	693	1515
0.3C-0100-45-OP	165	1111	253	259	697	403	706	954	593	1233	1212	780	1760	1469	967	2287
0.3C-0100-50-OP	135	1110	252	258	938	581	1199	1256	812	1850	1573	1043	2501			
0.3C-0150-35-OP	295	1400	373	422							434	166	166	589	321	485
0.3C-0150-40-OP	225	1397	372	420				515	264	332	718	418	748	921	568	1165
0.3C-0150-45-OP	180	1396	371	419	526	273	356	784	467	883	1041	656	1410	1298	843	1937
0.3C-0150-50-OP	145	1395	371	419	767	455	850	1085	688	1500	1403	919	2151	1720	1149	2802
0.3C-0150-60-OP	100	1395	371	419	1327	864	1996	1784	1195	2932						
0.9C-0200-40-OP	350	1794	463	512				560	165	165	796	432	646	1031	609	1128
0.9C-0200-45-OP	350	1793	462	511	574	193	193	872	490	802	1169	711	1412	1467	929	2021
0.9C-0200-50-OP	295	1791	461	510	853	476	763	1220	749	1516	1587	1017	2268	1955	1284	3020
0.9C-0200-60-OP	205	1792	462	510	1500	953	2088	2029	1337	3172	2557	1720	4255	3086	2103	5338
0.9C-0250-40-OP	350	2152	607	713							581	208	208	816	448	689
0.9C-0250-45-OP	350	2150	606	712				658	326	364	955	552	973	1253	773	1582
0.9C-0250-50-OP	310	2149	606	711	639	310	325	1006	590	1077	1373	861	1829	1741	1128	2582
0.9C-0250-60-OP	215	2150	606	712	1285	797	1650	1814	1182	2733	2343	1565	3816	2872	1948	4900
0.9C-0250-70-OP	155	2149	606	712	2049	1352	3214	2769	1874	4689	3489	2394	6163	4209	2915	7638
0.9C-0350-45-OP	350	3382	882	983										922	72	72
0.9C-0350-50-OP	350	3381	882	983							1042	319	319	1410	753	1071
0.9C-0350-60-OP	240	3382	882	983	955	139	139	1484	810	1222	2012	1205	2306	2541	1594	3389
0.9C-0350-70-OP	175	3381	882	983	1718	986	1703	2438	1519	3178	3158	2043	4652	3878	2565	6127
0.9C-0350-85-OP	120	3372	878	978	3080	1986	4491	4141	2756	6666	5203	3524	8840			
0.9C-0400-50-OP	350	4001	1132	1332										1038	310	310
0.9C-0400-60-OP	255	4001	1133	1332				1112	462	462	1641	929	1545	2170	1322	2629
0.9C-0400-70-OP	185	4001	1132	1332	1347	705	943	2067	1246	2417	2787	1773	3892	3507	2296	5367
0.9C-0400-85-OP	125	3992	1129	1327	2708	1716	3731	3770	2487	5905	4832	3256	8080			
0.9C-0700-60-OP	290	5630	1530	1751										1675	631	631
0.9C-0700-70-OP	215	5630	1529	1751				1572	420	420	2292	1252	1894	3012	1791	3369
0.9C-0700-85-OP	145	5620	1526	1745	2213	1192	1733	3275	1986	3908	4336	2762	6082	5398	3534	8256

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-20-OP	350	385	96	104	249	149	287	274	168	339	300	187	391	325	205	443
0.3C-008A-28-OP	340	383	95	102	613	414	1034	663	450	1136	713	486	1238	763	522	1340
0.3C-008A-35-OP	215	382	94	102	1033	718	1893	1111	774	2053	1189	830	2212	1267	886	2372
0.3C-008B-20-OP	350	583	104	104	237	45	45	263	97	97	288	141	149	314	161	202
0.3C-008B-28-OP	350	580	103	103	602	376	792	652	412	894	702	448	996	751	485	1098
0.3C-008B-35-OP	230	579	102	102	1022	681	1652	1099	737	1811	1177	793	1970	1255	850	2130
0.3C-008C-20-OP	350	699	131	131							255	7	7	281	59	59
0.3C-008C-28-OP	350	696	130	130	569	340	649	619	377	751	669	414	853	718	450	955
0.3C-008C-35-OP	240	695	129	129	989	647	1509	1066	703	1668	1144	759	1828	1222	816	1987
0.3C-0100-28-OP	350	1116	255	262	418	134	134	468	227	236	518	266	338	568	305	440
0.3C-0100-35-OP	275	1115	254	261	838	507	994	916	564	1153	993	621	1313	1071	678	1472
0.3C-0100-40-OP	210	1112	253	260	1194	767	1723	1295	841	1931	1397	915	2139	1499	988	2347
0.3C-0100-45-OP	165	1111	253	259	1598	1060	2550	1726	1153	2814						
0.3C-0100-50-OP	135	1110	252	258												
0.3C-0150-35-OP	295	1400	373	422	667	380	644	745	438	804	823	496	963	901	553	1122
0.3C-0150-40-OP	225	1397	372	420	1023	643	1373	1125	717	1581	1226	791	1789	1328	865	1998
0.3C-0150-45-OP	180	1396	371	419	1427	937	2201	1556	1030	2464	1684	1123	2728	1813	1216	2991
0.3C-0150-50-OP	145	1395	371	419												
0.3C-0150-60-OP	100	1395	371	419												
0.9C-0200-40-OP	350	1794	463	512	1148	696	1368	1266	782	1609	1383	868	1850	1501	954	2091
0.9C-0200-45-OP	350	1793	462	511	1615	1037	2326	1764	1145	2630	1913	1253	2935	2062	1361	3240
0.9C-0200-50-OP	295	1791	461	510	2138	1417	3396	2322	1550	3773	2506	1683	4149	2689	1816	4525
0.9C-0200-60-OP	205	1792	462	510	3351	2294	5880	3615	2485	6422	3880	2677	6963	4144	2868	7505
0.9C-0250-40-OP	350	2152	607	713	934	537	930	1052	624	1171	1169	711	1411	1287	798	1652
0.9C-0250-45-OP	350	2150	606	712	1401	881	1887	1550	990	2192	1699	1098	2496	1848	1206	2801
0.9C-0250-50-OP	310	2149	606	711	1924	1262	2958	2108	1395	3334	2291	1528	3710	2475	1661	4086
0.9C-0250-60-OP	215	2150	606	712	3137	2139	5441	3401	2331	5983	3666	2522	6525	3930	2713	7067
0.9C-0250-70-OP	155	2149	606	712	4569	3175	8375									
0.9C-0350-45-OP	350	3382	882	983	1070	376	376	1219	605	681	1368	721	986	1517	835	1290
0.9C-0350-50-OP	350	3381	882	983	1593	893	1447	1777	1030	1823	1961	1167	2199	2144	1303	2576
0.9C-0350-60-OP	240	3382	882	983	2806	1787	3931	3070	1979	4472	3335	2171	5014	3599	2363	5556
0.9C-0350-70-OP	175	3381	882	983	4238	2826	6864	4598	3087	7602	4958	3347	8339			
0.9C-0350-85-OP	120	3372	878	978												
0.9C-0400-50-OP	350	4001	1132	1332	1222	607	687	1406	750	1063	1589	890	1439	1773	1027	1815
0.9C-0400-60-OP	255	4001	1133	1332	2435	1516	3170	2699	1709	3712	2964	1901	4254	3228	2094	4795
0.9C-0400-70-OP	185	4001	1132	1332	3867	2557	6104	4227	2818	6841	4587	3079	7578	4947	3339	8316
0.9C-0400-85-OP	125	3992	1129	1327												
0.9C-0700-60-OP	290	5630	1530	1751	1940	980	1173	2204	1185	1714	2468	1385	2256	2733	1584	2798
0.9C-0700-70-OP	215	5630	1529	1751	3372	2058	4106	3732	2321	4843	4092	2584	5581	4452	2846	6318
0.9C-0700-85-OP	145	5620	1526	1745												

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)									MOT@MOP		
					200			220			240			BTC	RTC	ETC
0.3C-008A-20-OP	350	385	96	104	376	242	547	427	279	652	478	316	756	757	518	1328
0.3C-008A-28-OP	340	383	95	102	862	594	1544	962	666	1748	1062	738	1952	1560	1098	2972
0.3C-008A-35-OP	215	382	94	102	1422	999	2690							1539	1083	2929
0.3C-008B-20-OP	350	583	104	104	364	200	306	415	238	410	466	276	514	746	480	1086
0.3C-008B-28-OP	350	580	103	103	851	557	1302	951	629	1506	1050	701	1710	1598	1098	2832
0.3C-008B-35-OP	230	579	102	102	1411	962	2449	1566	1075	2767				1644	1131	2927
0.3C-008C-20-OP	350	699	131	131	331	160	163	382	200	267	433	239	371	713	446	944
0.3C-008C-28-OP	350	696	130	130	818	523	1159	918	595	1363	1017	667	1568	1565	1064	2690
0.3C-008C-35-OP	240	695	129	129	1378	928	2306	1533	1041	2625	1689	1154	2943	1689	1154	2943
0.3C-0100-28-OP	350	1116	255	262	667	380	644	767	454	849	866	528	1053	1414	927	2175
0.3C-0100-35-OP	275	1115	254	261	1227	791	1791	1383	904	2110	1538	1017	2428	1811	1214	2986
0.3C-0100-40-OP	210	1112	253	260	1702	1136	2764							1804	1209	2972
0.3C-0100-45-OP	165	1111	253	259										1791	1200	2946
0.3C-0100-50-OP	135	1110	252	258										1812	1215	2989
0.3C-0150-35-OP	295	1400	373	422	1056	667	1441	1212	780	1760	1367	893	2079	1796	1204	2956
0.3C-0150-40-OP	225	1397	372	420	1531	1012	2414	1734	1159	2830				1785	1196	2935
0.3C-0150-45-OP	180	1396	371	419										1813	1216	2991
0.3C-0150-50-OP	145	1395	371	419										1800	1207	2964
0.3C-0150-60-OP	100	1395	371	419										1784	1195	2932
0.9C-0200-40-OP	350	1794	463	512	1736	1125	2572	1971	1295	3054	2206	1466	3535	3499	2401	6183
0.9C-0200-45-OP	350	1793	462	511	2359	1577	3849	2657	1792	4458	2954	2008	5068	4591	3190	8419
0.9C-0200-50-OP	295	1791	461	510	3057	2081	5277	3424	2347	6030	3791	2613	6782	4801	3342	8851
0.9C-0200-60-OP	205	1792	462	510	4673	3250	8588							4805	3345	8859
0.9C-0250-40-OP	350	2152	607	713	1522	969	2134	1757	1140	2615	1992	1311	3097	3285	2247	5745
0.9C-0250-45-OP	350	2150	606	712	2145	1422	3411	2443	1637	4020	2740	1853	4629	4377	3036	7981
0.9C-0250-50-OP	310	2149	606	711	2842	1927	4839	3210	2192	5591	3577	2458	6343	4863	3387	8977
0.9C-0250-60-OP	215	2150	606	712	4459	3095	8150							4856	3382	8962
0.9C-0250-70-OP	155	2149	606	712										4749	3305	8744
0.9C-0350-45-OP	350	3382	882	983	1814	1058	1900	2112	1279	2509	2409	1497	3118	4046	2687	6470
0.9C-0350-50-OP	350	3381	882	983	2512	1572	3328	2879	1840	4080	3246	2107	4833	5266	3571	8970
0.9C-0350-60-OP	240	3382	882	983	4128	2746	6639	4657	3129	7722	5186	3512	8806	5186	3512	8806
0.9C-0350-70-OP	175	3381	882	983										5138	3478	8707
0.9C-0350-85-OP	120	3372	878	978										5203	3524	8840
0.9C-0400-50-OP	350	4001	1132	1332	2140	1300	2567	2508	1569	3320	2875	1837	4072	4895	3302	8210
0.9C-0400-60-OP	255	4001	1133	1332	3757	2477	5879	4286	2861	6962	4815	3244	8045	5212	3531	8858
0.9C-0400-70-OP	185	4001	1132	1332										5127	3470	8684
0.9C-0400-85-OP	125	3992	1129	1327										5097	3448	8623
0.9C-0700-60-OP	290	5630	1530	1751	3262	1977	3881	3791	2364	4964	4320	2750	6048	5642	3711	8756
0.9C-0700-70-OP	215	5630	1529	1751	5172	3369	7793							5712	3761	8899
0.9C-0700-85-OP	145	5620	1526	1745										5663	3726	8800

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGA-H/OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Canted Yoke Design, Spring to Open

Models 1.5C-1100-70-OP to 14C-8300-200-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					80			100			120			140		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	295	10249	2381	2466										3388	421	421
1.5C-1100-85-OP	200	10237	2376	2459				3720	1102	1102	5063	2707	3852	6405	3719	6601
1.5C-1100-95-OP	160	10228	2372	2454	3711	1083	1083	5388	2954	4517	7064	4209	7951	8741	5444	11386
1.5C-1100-110-OP	120	10233	2374	2457	5999	3415	5769	8247	5082	10373	10495	6722	14978			
1.5C-1200-70-OP	315	11937	3103	3448												
1.5C-1200-85-OP	215	11925	3098	3442							4022	1781	1781	5365	2947	4531
1.5C-1200-95-OP	170	11916	3094	3436				4347	2162	2446	6024	3444	5881	7701	4690	9315
1.5C-1200-110-OP	125	11921	3096	3439	4958	2638	3698	7206	4324	8303	9454	5973	12907			
3C-2000-70-OP	330	17595	4813	5534												
3C-2000-85-OP	225	17575	4805	5522				4727	1051	1051	6949	3771	5601	9170	5437	10152
3C-2000-95-OP	180	17560	4799	5514	4711	1018	1018	7486	4178	6702	10262	6246	12387	13037	8275	18071
3C-2000-110-OP	135	17568	4802	5518	8498	4937	8774	12219	7678	16395	15940	10385	24017			
6C-2500-85-OP	340	25066	7050	8258							6134	1006	1006	8732	4611	6326
6C-2500-95-OP	270	25048	7043	8248				6763	2293	2293	10007	5582	8939	13252	8002	15584
6C-2500-110-OP	200	25058	7047	8253	7945	4000	4715	12295	7293	13625	16646	10489	22535	20996	13654	31445
6C-2500-125-OP	155	25034	7037	8240	13002	7816	15072	18619	11926	26578	24237	16005	38083	29855	20074	49589
6C-2500-135-OP	135	25017	7030	8230	16732	10552	22711	23284	15314	36131	29836	20061	49552			
6C-3800-85-OP	350	34023	10203	12473												
6C-3800-95-OP	305	34005	10196	12463										8689	4263	4598
6C-3800-110-OP	225	34015	10200	12468				7732	2639	2639	12083	6866	11549	16433	10096	20459
6C-3800-125-OP	175	33991	10190	12455	8439	4062	4085	14056	8339	15591	19674	12463	27097	25291	16546	38602
6C-3800-135-OP	150	33974	10184	12445	12169	6931	11724	18721	11768	25145	25273	16533	38565	31825	21282	51985
14C-5100-95-OP	350	40803	12294	15077										7890	565	565
14C-5100-110-OP	345	40813	12298	15083							11599	6081	8162	16354	9665	17900
14C-5100-125-OP	270	40788	12288	15068	7617	5	5	13757	7722	12580	19896	12280	25156	26036	16756	37731
14C-5100-135-OP	230	40769	12281	15058	11693	6154	8354	18855	11517	23022	26016	16742	37690	33178	21940	52358
14C-5100-145-OP	200	40786	12288	15068	16104	9478	17388	24366	15541	34309	32627	21541	51230	40889	27525	68152
14C-5100-175-OP	135	40734	12267	15038	31165	20480	48235	43199	29197	72882	55233	37899	97530			
14C-5100-200-OP	105	40683	12247	15010	45872	31131	78359	61590	42495	110552						
14C-5400-110-OP	350	52617	15045	17819										13051	3422	3422
14C-5400-125-OP	290	52591	15035	17804							16593	8513	10677	22733	13171	23252
14C-5400-135-OP	250	52573	15028	17794				15551	7694	8543	22713	13156	23211	29874	18455	37879
14C-5400-145-OP	215	52590	15035	17804	12800	2909	2909	21062	11920	19831	29324	18052	36752	37585	24078	53673
14C-5400-175-OP	145	52538	15014	17774	27861	16978	33756	39895	25758	58404	51929	34489	83051	63963	43203	107699
14C-5400-185-OP	130	52519	15006	17763	33509	21109	45324	46957	30884	72869	60406	40627	100414			
14C-5400-200-OP	110	52487	14993	17746	42569	27700	63880	58287	39093	96073						
14C-8300-125-OP	320	67452	19448	23161										16735	5024	5024
14C-8300-135-OP	275	67433	19441	23150							16715	4983	4983	23877	13029	19651
14C-8300-145-OP	235	67451	19448	23161				15065	1603	1603	23327	12611	18524	31588	18805	35445
14C-8300-175-OP	160	67399	19427	23131	21864	11490	15528	33898	20518	40176	45932	29317	64823	57966	38059	89471
14C-8300-185-OP	145	67379	19419	23120	27512	15768	27096	40960	25694	54641	54409	35478	82186	67857	45229	109731
14C-8300-200-OP	125	67348	19407	23102	36572	22487	45652	52290	33940	77845	68007	45338	110038			

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	295	10249	2381	2466	3843	1353	1353	4298	2111	2286	4753	2469	3218	5209	2818	4150
1.5C-1100-85-OP	200	10237	2376	2459	7076	4218	7976	7748	4715	9351	8419	5208	10725	9090	5698	12100
1.5C-1100-95-OP	160	10228	2372	2454	9580	6055	13103	10418	6666	14820						
1.5C-1100-110-OP	120	10233	2374	2457												
1.5C-1200-70-OP	315	11937	3103	3448				3258	215	215	3713	1148	1148	4168	2019	2080
1.5C-1200-85-OP	215	11925	3098	3442	6036	3453	5905	6707	3954	7280	7378	4452	8655	8049	4946	10029
1.5C-1200-95-OP	170	11916	3094	3436	8539	5305	11032	9377	5917	12749	10216	6527	14467			
1.5C-1200-110-OP	125	11921	3096	3439												
3C-2000-70-OP	330	17595	4813	5534	4930	1466	1466	5683	2789	3009	6437	3379	4553	7190	3954	6096
3C-2000-85-OP	225	17575	4805	5522	10281	6260	12427	11392	7075	14703	12503	7886	16978	13614	8695	19254
3C-2000-95-OP	180	17560	4799	5514	14425	9285	20914	15812	10293	23756	17200	11300	26598	18588	12307	29440
3C-2000-110-OP	135	17568	4802	5518												
6C-2500-85-OP	340	25066	7050	8258	10031	5599	8986	11329	6573	11646	12628	7539	14307	13927	8501	16967
6C-2500-95-OP	270	25048	7043	8248	14874	9196	18907	16497	10380	22230	18119	11562	25553	19741	12742	28876
6C-2500-110-OP	200	25058	7047	8253	23171	15232	35900	25346	16810	40355	27521	18385	44810	29696	19960	49265
6C-2500-125-OP	155	25034	7037	8240	32663	22108	55342									
6C-2500-135-OP	135	25017	7030	8230												
6C-3800-85-OP	350	34023	10203	12473				6766	660	660	8065	3320	3320	9364	4796	5980
6C-3800-95-OP	305	34005	10196	12463	10311	5526	7921	11934	6755	11243	13556	7967	14566	15178	9171	17889
6C-3800-110-OP	225	34015	10200	12468	18608	11686	24914	20783	13270	29369	22958	14853	33824	25133	16431	38279
6C-3800-125-OP	175	33991	10190	12455	28100	18584	44355	30909	20618	50108	33718	22652	55861			
6C-3800-135-OP	150	33974	10184	12445	35102	23654	58695									
14C-5100-95-OP	350	40803	12294	15077	9663	4197	4197	11437	5956	7829	13210	7310	11460	14983	8642	15092
14C-5100-110-OP	345	40813	12298	15083	18731	11426	22770	21109	13167	27639	23486	14901	32508	25863	16630	37377
14C-5100-125-OP	270	40788	12288	15068	29106	18986	44018	32176	21214	50306	35246	23439	56594	38316	25662	62881
14C-5100-135-OP	230	40769	12281	15058	36758	24534	59691	40339	27127	67025	43920	29719	74359	47500	32308	81693
14C-5100-145-OP	200	40786	12288	15068	45020	30515	76612	49151	33501	85073	53281	36488	93534	57412	39475	101994
14C-5100-175-OP	135	40734	12267	15038												
14C-5100-200-OP	105	40683	12247	15010												
14C-5400-110-OP	350	52617	15045	17819	15428	7596	8291	17805	9451	13160	20182	11257	18029	22560	13042	22898
14C-5400-125-OP	290	52591	15035	17804	25802	15453	29540	28872	17721	35828	31942	19966	42115	35012	22206	48403
14C-5400-135-OP	250	52573	15028	17794	33455	21070	45213	37035	23678	52547	40616	26283	59881	44197	28881	67215
14C-5400-145-OP	215	52590	15035	17804	41716	27081	62134	45847	30079	70594	49978	33076	79055	54109	36067	87516
14C-5400-175-OP	145	52538	15014	17774												
14C-5400-185-OP	130	52519	15006	17763												
14C-5400-200-OP	110	52487	14993	17746												
14C-8300-125-OP	320	67452	19448	23161	19805	9885	11312	22875	12266	17600	25945	14592	23887	29015	16891	30175
14C-8300-135-OP	275	67433	19441	23150	27458	15727	26985	31038	18398	34319	34619	21051	41653	38200	23679	48987
14C-8300-145-OP	235	67451	19448	23161	35719	21862	43906	39850	24884	52367	43981	27898	60827	48112	30903	69288
14C-8300-175-OP	160	67399	19427	23131	63983	42423	101795	70000	46780	114119						
14C-8300-185-OP	145	67379	19419	23120												
14C-8300-200-OP	125	67348	19407	23102												

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	200			220			240			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	295	10249	2381	2466	6119	3505	6015	7029	4183	7880	7940	4857	9744	10443	6684	14872
1.5C-1100-85-OP	200	10237	2376	2459	10432	6676	14849							10432	6676	14849
1.5C-1100-95-OP	160	10228	2372	2454										10418	6666	14820
1.5C-1100-110-OP	120	10233	2374	2457										10495	6722	14978
1.5C-1200-70-OP	315	11937	3103	3448	5078	2730	3945	5989	3417	5809	6899	4096	7674	10313	6598	14666
1.5C-1200-85-OP	215	11925	3098	3442	9392	5927	12779							10398	6660	14841
1.5C-1200-95-OP	170	11916	3094	3436										10216	6527	14467
1.5C-1200-110-OP	125	11921	3096	3439										10016	6382	14058
3C-2000-70-OP	330	17595	4813	5534	8697	5085	9182	10204	6203	12268	11711	7308	15355	18491	12237	29243
3C-2000-85-OP	225	17575	4805	5522	15836	10310	23804	18058	11922	28355				18613	12325	29493
3C-2000-95-OP	180	17560	4799	5514										18588	12307	29440
3C-2000-110-OP	135	17568	4802	5518										18731	12410	29733
6C-2500-85-OP	340	25066	7050	8258	16524	10400	22287	19122	12292	27607	21720	14179	32927	34707	23586	59528
6C-2500-95-OP	270	25048	7043	8248	22986	15098	35522	26231	17450	42167	29476	19800	48813	34343	23322	58781
6C-2500-110-OP	200	25058	7047	8253	34047	23108	58175							34047	23108	58175
6C-2500-125-OP	155	25034	7037	8240										34068	23123	58218
6C-2500-135-OP	135	25017	7030	8230										34750	23617	59617
6C-3800-85-OP	350	34023	10203	12473	11961	6776	11300	14559	8712	16620	17156	10626	21941	31443	21005	51202
6C-3800-95-OP	305	34005	10196	12463	18423	11551	24535	21668	13914	31180	24912	16271	37826	35458	23912	59425
6C-3800-110-OP	225	34015	10200	12468	29484	19586	47189	33834	22736	56099				34921	23524	58326
6C-3800-125-OP	175	33991	10190	12455										35122	23669	58737
6C-3800-135-OP	150	33974	10184	12445										35102	23654	58695
14C-5100-95-OP	350	40803	12294	15077	18529	11276	22356	22076	13872	29619	25622	16455	36882	45127	30592	76832
14C-5100-110-OP	345	40813	12298	15083	30618	20083	47115	35373	23531	56854	40127	26973	66592	65089	45025	117718
14C-5100-125-OP	270	40788	12288	15068	44455	30107	75457	50595	34546	88032	56735	38985	100607	65945	45643	119470
14C-5100-135-OP	230	40769	12281	15058	54662	37486	96361	61823	42664	111029				65404	45252	118363
14C-5100-145-OP	200	40786	12288	15068	65674	45447	118916							65674	45447	118916
14C-5100-175-OP	135	40734	12267	15038										64258	44424	116016
14C-5100-200-OP	105	40683	12247	15010										65520	45336	118600
14C-5400-110-OP	350	52617	15045	17819	27314	16574	32637	32069	20059	42375	36824	23524	52113	62974	42487	105674
14C-5400-125-OP	290	52591	15035	17804	41152	26672	60978	47292	31127	73553	53431	35577	86129	68781	46688	117567
14C-5400-135-OP	250	52573	15028	17794	51358	34076	81882	58520	39261	96550	65681	44447	111218	69262	47036	118552
14C-5400-145-OP	215	52590	15035	17804	62370	42050	104437							68567	46533	117128
14C-5400-175-OP	145	52538	15014	17774										66971	45380	113861
14C-5400-185-OP	130	52519	15006	17763										67130	45495	114186
14C-5400-200-OP	110	52487	14993	17746										66146	44783	112169
14C-8300-125-OP	320	67452	19448	23161	35155	21446	42750	41295	25938	55325	47434	30410	67901	71993	48224	118202
14C-8300-135-OP	275	67433	19441	23150	45361	28902	63654	52523	34109	78322	59684	39306	92990	72216	48385	118659
14C-8300-145-OP	235	67451	19448	23161	56373	36903	86209	64635	42896	103130				70831	47382	115821
14C-8300-175-OP	160	67399	19427	23131										70000	46780	114119
14C-8300-185-OP	145	67379	19419	23120										71220	47664	116617
14C-8300-200-OP	125	67348	19407	23102										71937	48183	118086

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18C-9600-145-OP	320	107095	27137	29656	36489	14275	14275	41239	20672	24005	45990	24365	33735	50740	27984	43465
18C-9600-175-OP	215	107035	27112	29622	68992	41615	80848	75912	46714	95020	82831	51773	109192	89751	56822	123365
18C-9600-185-OP	195	107012	27103	29609	81181	50569	105812	88914	56211	121650	96647	61840	137489	104380	67466	153327
18C-9600-200-OP	165	106976	27088	29589	100734	64813	145859	109772	71381	164370						
18C-9600-235-OP	120	106881	27049	29535												
18C-9800-145-OP	350	135595	33799	36547										42490	8506	8506
18C-9800-175-OP	240	135535	33774	36513	60742	32419	45889	67662	37675	60061	74581	42873	74233	81501	48035	88406
18C-9800-185-OP	215	135513	33765	36500	72931	41637	70853	80664	47411	86692	88397	53152	102530	96130	58868	118368
18C-9800-200-OP	185	135477	33750	36480	92484	56179	110901	101522	62817	129411	110559	69416	147922	119597	76006	166433
18C-9800-235-OP	135	135381	33710	36426												
18C-10500-175-OP	260	158149	39647	43028	53189	18151	18151	60109	29600	32323	67028	35020	46496	73948	40317	60668
18C-10500-185-OP	235	158126	39638	43015	65378	33742	43116	73111	39682	58954	80844	45530	74792	88577	51324	90630
18C-10500-200-OP	200	158090	39623	42995	84931	48596	83163	93969	55342	101674	103006	62049	120184	112044	68722	138695
18C-10500-235-OP	145	157995	39583	42941												
18C-11000-175-OP	280	177169	47431	53749				48718	8993	8993	55638	23165	23165	62557	31537	37338
18C-11000-185-OP	250	177146	47422	53736	53987	19785	19785	61720	30879	35624	69453	36888	51462	77186	42772	67300
18C-11000-200-OP	210	177110	47407	53715	73540	40008	59833	82578	46832	78343	91615	53588	96854	100653	60304	115365
18C-11000-235-OP	155	177015	47368	53662	125088	78259	165412									
32C-12000-175-OP	340	201417	48382	51113	60962	1971	1971	69085	18608	18608	77208	35245	35245	85331	43202	51882
32C-12000-200-OP	260	201349	48353	51074	98224	53153	78289	108833	61180	100020	119443	69134	121750	130052	77037	143480
32C-12000-235-OP	185	201237	48306	51011	158737	98203	202230	173385	108898	232232	188032	119578	262233	202680	130233	292234
32C-12000-250-OP	160	201183	48284	50981	187652	119301	261453	204229	131360	295407						
32C-15000-175-OP	350	234257	59165	64517										70573	11601	11601
32C-15000-200-OP	275	234188	59137	64478	83466	38008	38008	94075	48118	59738	104685	56297	81468	115294	64343	103199
32C-15000-235-OP	200	234076	59091	64415	143979	85776	161949	158626	96625	191950	173274	107373	221951	187922	118065	251953
32C-15000-250-OP	175	234023	59069	64385	172894	107094	221172	189471	119195	255126	206049	131276	289079			
50C-15400-200-OP	315	253541	57993	59548	104747	50354	50411	116535	59710	74555	128323	68802	98700	140112	77757	122845
50C-15400-235-OP	225	253417	57939	59478	171983	101617	188123	188259	113688	221458	204534	125686	254792	220809	137591	288127
50C-15400-250-OP	200	253357	57913	59445	204111	125376	253927	222531	138847	291652	240950	152288	329378	259369	165698	367104
50C-15400-300-OP	140	253280	57879	59401												
50C-15600-200-OP	320	265159	62988	66097	97789	36160	36160	109577	54235	60304	121365	63458	84449	133154	72484	108593
50C-15600-235-OP	230	265035	62936	66027	165025	96433	173872	181301	108529	207207	197576	120575	240541	213851	132510	273876
50C-15600-250-OP	205	264976	62910	65993	197153	120263	239675	215573	133770	277401	233992	147210	315127	252411	160636	352853
50C-15600-300-OP	140	264898	62877	65950												

NOTES:

Model 80C is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	200			220			240			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18C-9600-145-OP	320	107095	27137	29656	60241	35113	62924	69742	42171	82383	79243	49154	101843	117247	76805	179681
18C-9600-175-OP	215	107035	27112	29622	103590	66891	151709							113969	74427	172968
18C-9600-185-OP	195	107012	27103	29609										115979	75885	177084
18C-9600-200-OP	165	106976	27088	29589										114290	74660	173626
18C-9600-235-OP	120	106881	27049	29535										114849	75065	174769
18C-9800-145-OP	350	135595	33799	36547	51991	25604	27965	61492	32992	47425	70993	40185	66884	123248	78663	173911
18C-9800-175-OP	240	135535	33774	36513	95340	58288	116750	109179	68409	145095	123018	78495	173440	123018	78495	173440
18C-9800-185-OP	215	135513	33765	36500	111596	70172	150045							123195	78624	173802
18C-9800-200-OP	185	135477	33750	36480										124116	79294	175688
18C-9800-235-OP	135	135381	33710	36426										125316	80166	178145
18C-10500-175-OP	260	158149	39647	43028	87787	50736	89013	101626	61025	117357	115465	71227	145702	129304	81335	174047
18C-10500-185-OP	235	158126	39638	43015	104043	62817	122307	119508	74187	153984				131108	82651	177741
18C-10500-200-OP	200	158090	39623	42995	130119	81930	175717							130119	81930	175717
18C-10500-235-OP	145	157995	39583	42941										130240	82018	175964
18C-11000-175-OP	280	177169	47431	53749	76396	42176	65682	90235	52560	94027	104074	62840	122372	131752	83122	179061
18C-11000-185-OP	250	177146	47422	53736	92652	54360	98977	108118	65831	130653	123583	77161	162330	131316	82804	178168
18C-11000-200-OP	210	177110	47407	53715	118729	73617	152387							127766	80213	170897
18C-11000-235-OP	155	177015	47368	53662										131327	82811	178190
32C-12000-175-OP	340	201417	48382	51113	101577	55698	85156	117822	67923	118431	134068	80015	151705	215297	139412	318076
32C-12000-200-OP	260	201349	48353	51074	151271	92735	186940	172490	108246	230400	193709	123707	273860	214928	139143	317320
32C-12000-235-OP	185	201237	48306	51011										210016	135982	307258
32C-12000-250-OP	160	201183	48284	50981										204229	131360	295407
32C-15000-175-OP	350	234257	59165	64517	86818	42381	44875	103064	55058	78150	119310	67371	111424	208662	133177	294432
32C-15000-200-OP	275	234188	59137	64478	136513	80228	146659	157732	95965	190119	178951	111519	233579	216097	138942	309660
32C-15000-235-OP	200	234076	59091	64415	217217	139401	311955							217217	139401	311955
32C-15000-250-OP	175	234023	59069	64385										214337	137305	306055
50C-15400-200-OP	315	253541	57993	59548	163688	95436	171134	187265	112951	219423	210842	130306	267712	299254	194692	448795
50C-15400-235-OP	225	253417	57939	59478	253360	161326	354796	285910	185005	421465				294064	191597	438164
50C-15400-250-OP	200	253357	57913	59445	296208	192482	442556							296224	193185	442588
50C-15400-300-OP	140	253280	57879	59401										299129	195322	448538
50C-15600-200-OP	320	265159	62988	66097	156730	90244	156882	180307	107792	205171	203884	125210	253460	298206	194644	446649
50C-15600-235-OP	230	265035	62936	66027	246402	156265	340545	278952	179943	407214				295243	192465	440581
50C-15600-250-OP	205	264976	62910	65993	289250	187433	428304							298475	194842	447200
50C-15600-300-OP	140	264898	62877	65950										292171	190204	434287

NOTES:

Model 80C is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Close Models 0.3S-008A-20-CL to 0.9S-0700-85-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	350	257	115	142				142	24	24	201	85	92	260	124	159
0.3S-008A-28-CL	350	256	114	140	308	155	214	423	229	346	538	303	478	654	377	610
0.3S-008A-35-CL	320	255	114	140	566	321	510	747	436	716	927	550	922	1107	665	1129
0.3S-008B-20-CL	350	392	151	155										247	9	9
0.3S-008B-28-CL	350	391	150	153	295	64	64	410	177	196	526	253	328	641	328	460
0.3S-008B-35-CL	335	390	150	153	554	272	360	734	388	566	914	504	773	1095	619	979
0.3S-008C-20-CL	350	470	184	193												
0.3S-008C-28-CL	350	468	183	191				373	107	107	488	212	239	604	289	371
0.3S-008C-35-CL	340	467	183	190	516	231	271	697	350	477	877	466	683	1057	581	890
0.3S-0100-28-CL	350	749	319	369										428	43	43
0.3S-0100-35-CL	350	748	318	368				521	149	149	702	310	356	882	429	562
0.3S-0100-40-CL	285	746	317	366	560	194	194	796	372	463	1031	526	732	1267	677	1002
0.3S-0100-45-CL	225	745	316	365	809	381	479	1107	575	820	1405	766	1160	1704	957	1501
0.3S-0100-50-CL	180	745	316	364	1088	563	798	1456	799	1219	1824	1034	1640	2192	1268	2060
0.3S-0150-35-CL	350	934	437	569							504	129	129	684	298	336
0.3S-0150-40-CL	300	932	435	567				598	237	237	833	397	506	1069	550	775
0.3S-0150-45-CL	240	931	435	565	612	247	252	910	447	593	1208	640	934	1506	830	1275
0.3S-0150-50-CL	190	931	434	565	891	435	572	1259	672	992	1627	908	1413	1995	1142	1834
0.3S-0150-60-CL	135	931	435	565	1539	851	1313	2069	1189	1919	2598	1526	2525			
0.9S-0200-40-CL	350	1240	574	739				608	87	87	881	370	399	1153	553	710
0.9S-0200-45-CL	350	1239	573	738	624	105	105	969	431	500	1314	658	894	1658	880	1288
0.9S-0200-50-CL	350	1238	573	737	947	416	474	1372	696	961	1798	969	1448	2223	1241	1934
0.9S-0200-60-CL	295	1238	573	738	1696	904	1331	2309	1296	2032	2922	1686	2733	3534	2075	3434
0.9S-0250-40-CL	350	1473	720	991							633	115	115	905	387	426
0.9S-0250-45-CL	350	1472	719	990				721	216	216	1066	495	610	1410	720	1004
0.9S-0250-50-CL	350	1471	719	989	699	191	191	1124	534	677	1550	810	1164	1975	1083	1651
0.9S-0250-60-CL	305	1472	719	989	1448	745	1048	2061	1138	1749	2674	1528	2449	3286	1918	3150
0.9S-0250-70-CL	225	1471	719	989	2333	1311	2060	3167	1842	3013	4001	2371	3967	4835	2901	4921
0.9S-0350-45-CL	350	2335	1089	1414										992	10	10
0.9S-0350-50-CL	350	2334	1088	1413							1131	170	170	1557	635	656
0.9S-0350-60-CL	335	2335	1089	1414	1030	53	53	1642	695	754	2255	1103	1455	2868	1500	2156
0.9S-0350-70-CL	245	2334	1089	1414	1914	879	1065	2748	1423	2019	3582	1958	2973	4416	2490	3927
0.9S-0350-85-CL	165	2328	1085	1407	3491	1900	2869	4721	2684	4275	5951	3466	5682	7180	4247	7088
0.9S-0400-50-CL	350	2739	1341	1850										1127	164	164
0.9S-0400-60-CL	345	2739	1342	1850				1212	262	262	1825	820	963	2438	1222	1664
0.9S-0400-70-CL	255	2739	1341	1850	1484	574	574	2318	1145	1527	3152	1683	2481	3986	2216	3435
0.9S-0400-85-CL	170	2733	1337	1843	3061	1624	2377	4291	2410	3783	5520	3193	5190	6750	3974	6596
0.9S-0700-60-CL	350	3872	1850	2474										1822	351	351
0.9S-0700-70-CL	260	3872	1849	2474				1703	215	215	2537	1075	1168	3371	1632	2122
0.9S-0700-85-CL	185	3866	1846	2467	2446	1012	1064	3675	1831	2471	4905	2623	3877	6135	3410	5283

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	350	257	115	142	289	143	193	319	162	226	348	181	260	377	200	294
0.3S-008A-28-CL	350	256	114	140	711	413	676	769	450	742	827	487	808	885	523	874
0.3S-008A-35-CL	320	255	114	140	1198	722	1232	1288	779	1335	1378	836	1438	1468	893	1541
0.3S-008B-20-CL	350	392	151	155	276	43	43	306	77	77	335	110	110	365	144	144
0.3S-008B-28-CL	350	391	150	153	699	366	526	756	403	592	814	440	658	872	476	724
0.3S-008B-35-CL	335	390	150	153	1185	676	1082	1275	733	1185	1365	791	1288	1455	848	1391
0.3S-008C-20-CL	350	470	184	193							298	21	21	327	55	55
0.3S-008C-28-CL	350	468	183	191	661	327	437	719	364	503	777	401	569	834	439	635
0.3S-008C-35-CL	340	467	183	190	1147	639	993	1238	696	1096	1328	754	1199	1418	811	1302
0.3S-0100-28-CL	350	749	319	369	486	109	109	544	175	175	602	240	241	659	281	307
0.3S-0100-35-CL	350	748	318	368	972	488	665	1062	546	768	1153	604	871	1243	662	974
0.3S-0100-40-CL	285	746	317	366	1384	753	1136	1502	828	1271	1620	903	1406	1738	978	1540
0.3S-0100-45-CL	225	745	316	365	1853	1052	1672	2002	1146	1842	2151	1241	2013	2300	1336	2183
0.3S-0100-50-CL	180	745	316	364	2376	1385	2271	2560	1501	2481	2744	1618	2692	2928	1735	2902
0.3S-0150-35-CL	350	934	437	569	774	358	439	865	418	542	955	476	645	1045	535	748
0.3S-0150-40-CL	300	932	435	567	1187	626	910	1304	702	1045	1422	777	1180	1540	852	1314
0.3S-0150-45-CL	240	931	435	565	1655	926	1446	1804	1021	1616	1953	1115	1786	2102	1210	1957
0.3S-0150-50-CL	190	931	434	565	2179	1259	2045	2363	1376	2255	2547	1493	2465	2731	1610	2676
0.3S-0150-60-CL	135	931	435	565												
0.9S-0200-40-CL	350	1240	574	739	1289	642	866	1425	730	1022	1561	818	1177	1698	905	1333
0.9S-0200-45-CL	350	1239	573	738	1830	990	1485	2003	1100	1682	2175	1211	1879	2347	1320	2076
0.9S-0200-50-CL	350	1238	573	737	2436	1377	2178	2649	1512	2421	2862	1648	2664	3074	1783	2908
0.9S-0200-60-CL	295	1238	573	738	3841	2270	3784	4147	2464	4134	4453	2659	4485	4760	2853	4835
0.9S-0250-40-CL	350	1473	720	991	1041	479	582	1177	569	738	1313	658	894	1450	746	1049
0.9S-0250-45-CL	350	1472	719	990	1582	831	1201	1755	942	1398	1927	1052	1595	2099	1162	1793
0.9S-0250-50-CL	350	1471	719	989	2188	1219	1894	2401	1354	2137	2614	1490	2381	2826	1625	2624
0.9S-0250-60-CL	305	1472	719	989	3593	2112	3500	3899	2307	3851	4205	2501	4201	4512	2696	4552
0.9S-0250-70-CL	225	1471	719	989	5252	3166	5398	5669	3430	5875	6086	3695	6352	6503	3959	6829
0.9S-0350-45-CL	350	2335	1089	1414	1164	207	207	1336	404	404	1508	600	601	1681	722	798
0.9S-0350-50-CL	350	2334	1088	1413	1769	782	900	1982	924	1143	2195	1064	1386	2408	1203	1630
0.9S-0350-60-CL	335	2335	1089	1414	3174	1697	2506	3480	1893	2856	3787	2089	3207	4093	2284	3557
0.9S-0350-70-CL	245	2334	1089	1414	4833	2756	4404	5250	3021	4881	5667	3286	5357	6084	3551	5834
0.9S-0350-85-CL	165	2328	1085	1407	7795	4637	7791	8410	5028	8494						
0.9S-0400-50-CL	350	2739	1341	1850	1339	408	408	1552	632	651	1765	779	894	1978	921	1138
0.9S-0400-60-CL	345	2739	1342	1850	2744	1420	2014	3050	1617	2365	3357	1814	2715	3663	2010	3065
0.9S-0400-70-CL	255	2739	1341	1850	4403	2482	3912	4820	2748	4389	5237	3013	4866	5654	3278	5343
0.9S-0400-85-CL	170	2733	1337	1843	7365	4364	7299	7980	4755	8002	8595	5145	8706			
0.9S-0700-60-CL	350	3872	1850	2474	2129	702	702	2435	1004	1052	2741	1215	1402	3048	1420	1753
0.9S-0700-70-CL	260	3872	1849	2474	3788	1904	2599	4205	2173	3076	4622	2442	3553	5039	2709	4030
0.9S-0700-85-CL	185	3866	1846	2467	6749	3802	5987	7364	4194	6690	7979	4585	7393	8594	4976	8096

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	350	257	115	142	436	238	361	495	276	428	554	313	496	878	519	866
0.3S-008A-28-CL	350	256	114	140	1000	596	1006	1115	670	1138	1231	743	1270	1865	1146	1996
0.3S-008A-35-CL	320	255	114	140	1648	1008	1747	1829	1122	1953	2009	1237	2160	2730	1694	2985
0.3S-008B-20-CL	350	392	151	155	424	186	211	482	225	279	541	264	346	865	472	716
0.3S-008B-28-CL	350	391	150	153	987	550	856	1103	624	988	1218	697	1120	1853	1100	1846
0.3S-008B-35-CL	335	390	150	153	1636	963	1598	1816	1077	1804	1996	1192	2010	2853	1735	2990
0.3S-008C-20-CL	350	470	184	193	386	122	122	445	182	190	504	223	257	828	434	627
0.3S-008C-28-CL	350	468	183	191	950	513	767	1065	586	899	1181	660	1031	1815	1064	1757
0.3S-008C-35-CL	340	467	183	190	1598	926	1508	1778	1040	1714	1959	1155	1921	2860	1727	2952
0.3S-0100-28-CL	350	749	319	369	775	358	439	890	434	571	1005	509	703	1640	916	1429
0.3S-0100-35-CL	350	748	318	368	1423	778	1180	1603	893	1387	1784	1008	1593	2775	1638	2727
0.3S-0100-40-CL	285	746	317	366	1973	1128	1810	2209	1278	2079	2444	1428	2348	2974	1764	2954
0.3S-0100-45-CL	225	745	316	365	2598	1525	2524	2896	1714	2865				2970	1762	2950
0.3S-0100-50-CL	180	745	316	364										2928	1735	2902
0.3S-0150-35-CL	350	934	437	569	1225	651	954	1406	766	1160	1586	882	1367	2578	1512	2501
0.3S-0150-40-CL	300	932	435	567	1775	1002	1584	2011	1152	1853	2246	1302	2122	2953	1751	2930
0.3S-0150-45-CL	240	931	435	565	2400	1400	2298	2698	1589	2639	2996	1778	2980	2996	1778	2980
0.3S-0150-50-CL	190	931	434	565										2915	1726	2886
0.3S-0150-60-CL	135	931	435	565										2996	1778	2979
0.9S-0200-40-CL	350	1240	574	739	1970	1079	1644	2242	1253	1956	2515	1427	2267	4012	2379	3980
0.9S-0200-45-CL	350	1239	573	738	2692	1540	2470	3037	1759	2865	3381	1978	3259	5277	3182	5427
0.9S-0200-50-CL	350	1238	573	737	3500	2053	3394	3925	2323	3881	4351	2594	4367	6691	4079	7044
0.9S-0200-60-CL	295	1238	573	738	5372	3242	5536	5985	3631	6237	6598	4020	6937	8283	5089	8864
0.9S-0250-40-CL	350	1473	720	991	1722	921	1361	1994	1095	1672	2267	1269	1984	3764	2221	3697
0.9S-0250-45-CL	350	1472	719	990	2444	1382	2187	2789	1601	2581	3133	1820	2975	5029	3024	5143
0.9S-0250-50-CL	350	1471	719	989	3252	1896	3111	3677	2166	3597	4103	2436	4084	6443	3921	6760
0.9S-0250-60-CL	305	1472	719	989	5124	3085	5252	5737	3474	5953	6350	3862	6654	8341	5126	8931
0.9S-0250-70-CL	225	1471	719	989	7337	4488	7782	8171	5017	8736				8379	5150	8975
0.9S-0350-45-CL	350	2335	1089	1414	2025	953	1192	2370	1178	1587	2715	1401	1981	4610	2614	4149
0.9S-0350-50-CL	350	2334	1088	1413	2833	1478	2116	3259	1751	2603	3684	2023	3089	6024	3513	5766
0.9S-0350-60-CL	335	2335	1089	1414	4706	2675	4258	5318	3065	4959	5931	3454	5659	8842	5302	8988
0.9S-0350-70-CL	245	2334	1089	1414	6918	4081	6788	7752	4610	7742	8586	5140	8696	8794	5272	8934
0.9S-0350-85-CL	165	2328	1085	1407										8717	5223	8846
0.9S-0400-50-CL	350	2739	1341	1850	2403	1200	1624	2829	1475	2111	3254	1748	2598	5594	3240	5274
0.9S-0400-60-CL	345	2739	1342	1850	4276	2401	3766	4888	2791	4467	5501	3181	5168	8718	5223	8847
0.9S-0400-70-CL	255	2739	1341	1850	6488	3808	6296	7322	4337	7250	8156	4867	8204	8781	5264	8919
0.9S-0400-85-CL	170	2733	1337	1843										8595	5145	8706
0.9S-0700-60-CL	350	3872	1850	2474	3660	1821	2453	4273	2217	3154	4886	2611	3855	8256	4760	7709
0.9S-0700-70-CL	260	3872	1849	2474	5873	3242	4984	6706	3774	5937	7540	4306	6891	8166	4703	7607
0.9S-0700-85-CL	185	3866	1846	2467										8901	5171	8448

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Close

Models 1.5S-1100-70-CL to 14S-8300-200-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	325	6315	3098	3779										4244	404	404
1.5S-1100-85-CL	220	6308	3093	3770				4662	807	807	6349	2315	2434	8036	3368	4062
1.5S-1100-95-CL	175	6303	3089	3763	4650	795	795	6757	2577	2828	8864	3869	4861	10972	5129	6894
1.5S-1100-110-CL	130	6305	3091	3767	7525	3055	3569	10350	4759	6295	13175	6435	9020			
1.5S-1200-70-CL	350	7322	3803	5105												
1.5S-1200-85-CL	235	7315	3798	5096							5041	1207	1207	6728	2574	2835
1.5S-1200-95-CL	190	7309	3794	5089				5449	1601	1601	7557	3089	3634	9664	4363	5667
1.5S-1200-110-CL	140	7312	3796	5093	6217	2246	2342	9043	3990	5067	11868	5674	7793	14693	7343	10519
3S-2000-70-CL	350	11023	5787	8082										5052	51	51
3S-2000-85-CL	275	11011	5779	8067				5735	729	729	8490	3227	3465	11246	4951	6200
3S-2000-95-CL	220	11002	5773	8056	5715	710	710	9157	3655	4126	12599	5776	7543	16041	7851	10960
3S-2000-110-CL	160	11007	5777	8062	10412	4438	5372	15027	7241	9953	19642	10006	14534	24257	12759	19115
6S-2500-85-CL	350	15774	8400	12019							7341	655	655	10557	3800	3859
6S-2500-95-CL	350	15763	8393	12005				8119	1430	1430	12136	4834	5433	16153	7321	9436
6S-2500-110-CL	265	15769	8397	12012	9583	2889	2889	14969	6597	8256	20355	9865	13622	25740	13098	18989
6S-2500-125-CL	205	15755	8388	11995	15843	7132	9127	22798	11334	16057	29753	15497	22988	36708	19647	29918
6S-2500-135-CL	175	15745	8381	11982	20461	9929	13728	28573	14792	21812	36685	19633	29895	44797	24465	37979
6S-3800-85-CL	350	21296	11767	17784												
6S-3800-95-CL	350	21285	11760	17771										10467	2825	2825
6S-3800-110-CL	285	21291	11764	17778				9283	1645	1645	14669	6031	7011	20055	9338	12378
6S-3800-125-CL	220	21277	11754	17760	10158	2516	2516	17112	7545	9446	24067	11761	16377	31022	15931	23307
6S-3800-135-CL	190	21266	11747	17747	14775	6098	7117	22887	11050	15201	30999	15917	23284	39111	20761	31368
14S-5100-95-CL	350	24974	14105	21642										9712	538	538
14S-5100-110-CL	350	24980	14110	21650							14373	4994	5035	20348	8738	10799
14S-5100-125-CL	350	24965	14099	21630	9368	206	206	17084	6739	7650	24799	11408	15094	32515	15982	22538
14S-5100-135-CL	310	24953	14092	21616	14491	5074	5149	23490	10627	13831	32489	15967	22514	41489	21270	31196
14S-5100-145-CL	270	24964	14099	21629	20033	8547	10496	30415	14741	20513	40797	20863	30529	51179	26962	40546
14S-5100-175-CL	185	24933	14078	21590	38959	19780	28756	54082	28664	43346	69204	37531	57936	84326	46389	72526
14S-5100-200-CL	140	24902	14058	21551	57442	30635	46588	77193	42211	65644	96945	53779	84701	116697	65341	103757
14S-5400-110-CL	350	32286	17695	25909										16147	2379	2379
14S-5400-125-CL	350	32271	17685	25890							20598	6674	6674	28314	11785	14118
14S-5400-135-CL	320	32260	17677	25875				19289	5411	5411	28289	11770	14094	37288	17184	22776
14S-5400-145-CL	280	32271	17684	25889	15833	2076	2076	26214	10496	12092	36596	16771	22109	46978	22932	32125
14S-5400-175-CL	190	32239	17663	25849	34759	15674	20336	49881	24645	34926	65003	33549	49516	80126	42429	64106
14S-5400-185-CL	170	32228	17656	25834	41856	19899	27183	58756	29875	43488	75656	39807	59793	92556	49719	76099
14S-5400-200-CL	145	32209	17643	25810	53241	26628	38168	72993	38243	57224	92744	49829	76280	112496	61403	95337
14S-8300-125-CL	350	41469	22847	33728										20584	3294	3294
14S-8300-135-CL	340	41457	22839	33714							20559	3270	3270	29559	11076	11952
14S-8300-145-CL	295	41468	22846	33727				18485	1269	1269	28867	10632	11285	39249	17044	21302
14S-8300-175-CL	200	41437	22825	33687	27029	9415	9512	42151	18789	24102	57274	27783	38692	72396	36702	53282
14S-8300-185-CL	180	41425	22817	33672	34126	13929	16359	51026	24082	32664	67926	34071	48970	84826	44012	65275
14S-8300-200-CL	155	41406	22805	33648	45512	20799	27344	65263	32501	46400	85015	44122	65456	104767	55716	84513

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	325	6315	3098	3779	4816	956	956	5388	1508	1508	5960	2055	2059	6532	2433	2611
1.5S-1100-85-CL	220	6308	3093	3770	8880	3878	4876	9723	4385	5689	10566	4888	6503	11410	5390	7317
1.5S-1100-95-CL	175	6303	3089	3763	12025	5754	7911	13079	6378	8927	14132	7000	9944			
1.5S-1100-110-CL	130	6305	3091	3767												
1.5S-1200-70-CL	350	7322	3803	5105				4081	280	280	4653	832	832	5225	1384	1384
1.5S-1200-85-CL	235	7315	3798	5096	7572	3098	3648	8415	3612	4462	9259	4120	5276	10102	4624	6090
1.5S-1200-95-CL	190	7309	3794	5089	10717	4991	6683	11771	5616	7700	12824	6240	8716	13878	6862	9733
1.5S-1200-110-CL	140	7312	3796	5093												
3S-2000-70-CL	350	11023	5787	8082	5986	979	979	6921	1907	1907	7855	2803	2834	8790	3420	3762
3S-2000-85-CL	275	11011	5779	8067	12624	5791	7568	14002	6624	8935	15379	7454	10303	16757	8280	11671
3S-2000-95-CL	220	11002	5773	8056	17763	8883	12669	19484	9912	14377	21205	10939	16086	22926	11966	17794
3S-2000-110-CL	160	11007	5777	8062	26564	14132	21406	28872	15506	23696						
6S-2500-85-CL	350	15774	8400	12019	12165	4852	5461	13773	5860	7064	15381	6849	8666	16988	7830	10268
6S-2500-95-CL	350	15763	8393	12005	18162	8541	11437	20170	9754	13439	22179	10962	15440	24187	12167	17442
6S-2500-110-CL	265	15769	8397	12012	28433	14708	21673	31126	16317	24356	33819	17924	27039	36512	19530	29723
6S-2500-125-CL	205	15755	8388	11995	40185	21719	33383	43662	23789	36848	47140	25860	40313	50617	27931	43778
6S-2500-135-CL	175	15745	8381	11982	48853	26880	42020	52909	29294	46062	56965	31706	50104			
6S-3800-85-CL	350	21296	11767	17784				8087	453	453	9695	2055	2055	11303	3657	3657
6S-3800-95-CL	350	21285	11760	17771	12476	4623	4826	14484	5916	6828	16493	7164	8829	18502	8395	10830
6S-3800-110-CL	285	21291	11764	17778	22748	10966	15062	25441	12586	17745	28133	14201	20428	30826	15814	23112
6S-3800-125-CL	220	21277	11754	17760	34499	18009	26772	37977	20084	30237	41454	22159	33702	44932	24232	37167
6S-3800-135-CL	190	21266	11747	17747	43167	23180	35409	47223	25596	39451	51280	28011	43493	55336	30426	47534
14S-5100-95-CL	350	24974	14105	21642	11940	2688	2688	14168	4838	4838	16396	6309	6987	18625	7690	9137
14S-5100-110-CL	350	24980	14110	21650	23335	10534	13682	26323	12315	16564	29310	14087	19446	32297	15854	22329
14S-5100-125-CL	350	24965	14099	21630	36372	18257	26260	40230	20529	29982	44088	22797	33704	47946	25063	37426
14S-5100-135-CL	310	24953	14092	21616	45988	23913	35538	50488	26556	39879	54988	29196	44220	59487	31835	48562
14S-5100-145-CL	270	24964	14099	21629	56370	30006	45554	61561	33051	50562	66752	36095	55571	71943	39136	60579
14S-5100-175-CL	185	24933	14078	21590	91888	50817	79821	99449	55246	87116	107010	59672	94411	114571	64097	101706
14S-5100-200-CL	140	24902	14058	21551												
14S-5400-110-CL	350	32286	17695	25909	19134	5262	5262	22122	7896	8144	25109	9809	11026	28097	11653	13908
14S-5400-125-CL	350	32271	17685	25890	32172	14122	17840	36029	16433	21562	39887	18730	25284	43745	21018	29006
14S-5400-135-CL	320	32260	17677	25875	41788	19859	27117	46287	22524	31459	50787	25180	35800	55287	27832	40141
14S-5400-145-CL	280	32271	17684	25889	52169	25996	37134	57360	29053	42142	62551	32109	47150	67742	35158	52159
14S-5400-175-CL	190	32239	17663	25849	87687	46863	71401	95248	51297	78696	102809	55730	85991	110370	60159	93286
14S-5400-185-CL	170	32228	17656	25834	101006	54674	84251	109456	59623	92404	117906	64572	100556			
14S-5400-200-CL	145	32209	17643	25810												
14S-8300-125-CL	350	41469	22847	33728	24442	7016	7016	28300	10263	10738	32158	12712	14460	36015	15084	18182
14S-8300-135-CL	340	41457	22839	33714	34058	13887	16293	38558	16627	20635	43058	19332	24976	47557	22020	29317
14S-8300-145-CL	295	41468	22846	33727	44440	20160	26310	49631	23252	31318	54822	26331	36326	60013	29402	41335
14S-8300-175-CL	200	41437	22825	33687	79957	41151	60577	87519	45593	67872	95080	50035	75167	102641	54470	82462
14S-8300-185-CL	180	41425	22817	33672	93276	48976	73427	101726	53933	81580	110176	58889	89732	118626	63844	97885
14S-8300-200-CL	155	41406	22805	33648	114642	61508	94041									

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	325	6315	3098	3779	7677	3148	3715	8821	3843	4819	9965	4529	5923	14827	7410	10614
1.5S-1100-85-CL	220	6308	3093	3770	13097	6389	8944	14784	7384	10572				14784	7384	10572
1.5S-1100-95-CL	175	6303	3089	3763										14659	7311	10452
1.5S-1100-110-CL	130	6305	3091	3767										14588	7269	10383
1.5S-1200-70-CL	350	7322	3803	5105	6369	2344	2488	7513	3062	3591	8657	3758	4695	14949	7494	10766
1.5S-1200-85-CL	235	7315	3798	5096	11789	5627	7717	13476	6625	9345				14741	7371	10565
1.5S-1200-95-CL	190	7309	3794	5089										14932	7484	10749
1.5S-1200-110-CL	140	7312	3796	5093										14693	7343	10519
3S-2000-70-CL	350	11023	5787	8082	10659	4590	5617	12527	5732	7472	14396	6862	9327	24675	13008	19531
3S-2000-85-CL	275	11011	5779	8067	19513	9930	14406	22269	11574	17142	25024	13216	19877	29847	16086	24664
3S-2000-95-CL	220	11002	5773	8056	26368	14016	21211	29810	16064	24628				29810	16064	24628
3S-2000-110-CL	160	11007	5777	8062										28872	15506	23696
6S-2500-85-CL	350	15774	8400	12019	20204	9775	13473	23420	11707	16677	26636	13634	19882	44324	24183	37507
6S-2500-95-CL	350	15763	8393	12005	28204	14571	21444	32221	16971	25447	36238	19367	29450	58332	32520	51466
6S-2500-110-CL	265	15769	8397	12012	41898	22739	35090	47284	25946	40456	52669	29152	45823	59402	33155	52532
6S-2500-125-CL	205	15755	8388	11995	57572	32067	50709							59311	33101	52441
6S-2500-135-CL	175	15745	8381	11982										58993	32912	52125
6S-3800-85-CL	350	21296	11767	17784	14519	5937	6862	17735	7926	10066	20951	9881	13271	38638	20479	30896
6S-3800-95-CL	350	21285	11760	17771	22519	10828	14833	26536	13244	18836	30553	15650	22839	52647	28825	44855
6S-3800-110-CL	285	21291	11764	17778	36212	19032	28478	41598	22244	33845	46984	25453	39212	59102	32669	51287
6S-3800-125-CL	220	21277	11754	17760	51886	28373	44097	58841	32514	51028				58841	32514	51028
6S-3800-135-CL	190	21266	11747	17747										59392	32841	51576
14S-5100-95-CL	350	24974	14105	21642	23081	10382	13437	27538	13037	17736	31994	15674	22036	56505	30085	45684
14S-5100-110-CL	350	24980	14110	21650	38272	19376	28093	44247	22890	33858	50222	26400	39622	83084	45661	71327
14S-5100-125-CL	350	24965	14099	21630	55661	29591	44870	63377	34115	52314	71092	38637	59758	113527	63486	100699
14S-5100-135-CL	310	24953	14092	21616	68487	37111	57244	77486	42382	65927	86485	47653	74609	117983	66094	104998
14S-5100-145-CL	270	24964	14099	21629	82325	45216	70595	92707	51297	80612	103089	57377	90628	118662	66491	105653
14S-5100-175-CL	185	24933	14078	21590										118352	66309	105354
14S-5100-200-CL	140	24902	14058	21551										116697	65341	103757
14S-5400-110-CL	350	32286	17695	25909	34072	15262	19673	40046	18825	25437	46021	22366	31202	78883	41700	62907
14S-5400-125-CL	350	32271	17685	25890	51460	25577	36450	59176	30122	43893	66891	34658	51337	109327	59547	92279
14S-5400-135-CL	320	32260	17677	25875	64286	33128	48824	73285	38415	57506	82285	43695	66189	118282	64792	100919
14S-5400-145-CL	280	32271	17684	25889	78124	41255	62175	88506	47344	72192	98888	53432	82208	119652	65595	102241
14S-5400-175-CL	190	32239	17663	25849										117932	64587	100581
14S-5400-185-CL	170	32228	17656	25834										117906	64572	100556
14S-5400-200-CL	145	32209	17643	25810										117434	64296	100101
14S-8300-125-CL	350	41469	22847	33728	43731	19736	25626	51446	24331	33070	59162	28899	40513	101597	53858	81455
14S-8300-135-CL	340	41457	22839	33714	56557	27359	38000	65556	32674	46682	74555	37973	55365	119552	64387	98778
14S-8300-145-CL	295	41468	22846	33727	70395	35524	51351	80777	41633	61368	91159	47732	71384	119709	64479	98930
14S-8300-175-CL	200	41437	22825	33687	117763	63338	97052							117763	63338	97052
14S-8300-185-CL	180	41425	22817	33672										118626	63844	97885
14S-8300-200-CL	155	41406	22805	33648										119580	64404	98805

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Close Models 18S-9600-145-CL to 50S-15600-300-CL

Model	MOP (barg)	BTC	RTC	ETC	Operating supply pressure (barg)											
					80			100			120			140		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	350	67094	34587	45890										38107	2539	2539
18S-9600-175-CL	255	67058	34563	45844				41444	5760	5760	58830	21450	22544	76216	32277	39329
18S-9600-185-CL	230	67045	34554	45827				51647	15610	15610	71077	29140	34368	90506	40886	53125
18S-9600-200-CL	195	67023	34539	45799	45307	9490	9490	68015	27254	31412	90723	41015	53334	113431	54521	75256
18S-9600-235-CL	105	66966	34500	45727	79815	34459	42804	111166	53179	73070	142518	71699	103336	173869	90146	133603
18S-9800-145-CL	350	84710	43258	56500												
18S-9800-175-CL	270	84674	43233	56454							48367	2212	2212	65752	18996	18996
18S-9800-185-CL	240	84661	43224	56437							60614	14035	14035	80043	30201	32792
18S-9800-200-CL	205	84639	43209	56410				57552	11079	11079	80260	30339	33001	102968	44335	54923
18S-9800-235-CL	150	84582	43170	56337	69352	22471	22471	100703	42962	52737	132054	61751	83003	163405	80324	113270
18S-10500-175-CL	275	93669	47078	59869												
18S-10500-185-CL	245	93656	47068	59852							57246	3834	3834	76675	22591	22591
18S-10500-200-CL	210	93634	47053	59825				54184	878	878	76892	22800	22800	99600	39353	44723
18S-10500-235-CL	150	93577	47014	59752	65984	12270	12270	97335	37940	42536	128686	57064	72803	160038	75769	103069
18S-11000-175-CL	290	105036	54864	74381												
18S-11000-185-CL	260	105023	54855	74364										62365	8776	8776
18S-11000-200-CL	220	105001	54840	74336							62582	8985	8985	85290	30196	30908
18S-11000-235-CL	160	104944	54802	74263				83025	28652	28721	114376	48425	58988	145727	67258	89254
32S-12000-175-CL	350	124656	60616	74978												
32S-12000-200-CL	295	124614	60587	74926							83597	12316	12316	109914	38440	38440
32S-12000-235-CL	215	124546	60541	74842				107290	35835	35835	143624	60333	71902	179958	82583	107969
32S-12000-250-CL	190	124514	60519	74802	90066	18737	18737	131186	52548	59555	172307	77938	100373	213427	102791	141192
32S-15000-175-CL	350	144830	72365	93498												
32S-15000-200-CL	310	144788	72336	93446										91651	14529	14529
32S-15000-235-CL	225	144721	72290	93362				89027	11924	11924	125361	46144	47991	161695	69180	84058
32S-15000-250-CL	200	144688	72268	93322				112923	35645	35645	154043	64442	76463	195164	89632	117281
50S-15400-200-CL	350	157380	74703	88832										116623	21386	21386
50S-15400-235-CL	260	157305	74650	88739				113707	18491	18491	154078	56510	58566	194450	82212	98640
50S-15400-250-CL	235	157269	74625	88694				140259	44847	44847	185948	76925	90201	231638	105008	135555
50S-15400-300-CL	160	157222	74593	88636	174931	70007	79264	240723	110524	144574	306516	150183	209883	372309	189571	275192
50S-15600-200-CL	350	164429	79551	97583										107994	12820	12820
50S-15600-235-CL	270	164353	79499	97490				105078	9925	9925	145449	49999	49999	185820	76845	90074
50S-15600-250-CL	235	164317	79475	97445				131629	36281	36281	177318	71512	81635	223008	99749	126988
50S-15600-300-CL	165	164270	79443	97387	166301	64505	70698	232094	105285	136007	297887	145006	201317	363679	184410	266626

NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	150			160			170			180		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	350	67094	34587	45890	44075	8300	8300	50043	14062	14062	56011	19577	19823	61979	23475	25585
18S-9600-175-CL	255	67058	34563	45844	84909	37528	47721	93602	42733	56113	102294	47913	64505	110987	53073	72897
18S-9600-185-CL	230	67045	34554	45827	100221	46680	62503	109936	52450	71882	119651	58205	81261	129365	63942	90639
18S-9600-200-CL	195	67023	34539	45799	124785	61237	86217	136139	67942	97178	147493	74630	108140	158847	81317	119101
18S-9600-235-CL	105	66966	34500	45727												
18S-9800-145-CL	350	84710	43258	56500										51516	5252	5252
18S-9800-175-CL	270	84674	43233	56454	74445	26569	27388	83138	32157	35780	91831	37551	44172	100524	42853	52564
18S-9800-185-CL	240	84661	43224	56437	89758	36276	42171	99473	42216	51549	109187	48086	60928	118902	53911	70306
18S-9800-200-CL	205	84639	43209	56410	114322	51167	65885	125676	57955	76846	137030	64709	87807	148384	71440	98768
18S-9800-235-CL	150	84582	43170	56337	179081	89578	128403									
18S-10500-175-CL	275	93669	47078	59869	71077	17187	17187	79770	25579	25579	88463	32290	33971	97156	37828	42363
18S-10500-185-CL	245	93656	47068	59852	86390	30929	31970	96105	37167	41348	105819	43197	50727	115534	49127	60106
18S-10500-200-CL	210	93634	47053	59825	110954	46340	55684	122308	53224	66645	133662	60048	77606	145016	66833	88567
18S-10500-235-CL	150	93577	47014	59752	175713	85058	118202									
18S-11000-175-CL	290	105036	54864	74381	56767	3372	3372	65460	11764	11764	74153	20156	20156	82846	28527	28548
18S-11000-185-CL	260	105023	54855	74364	72080	18155	18155	81794	27533	27533	91509	34255	36912	101224	40362	46291
18S-11000-200-CL	220	105001	54840	74336	96644	37506	41869	107998	44535	52830	119352	51441	63791	130706	58275	74752
18S-11000-235-CL	160	104944	54802	74263	161403	76581	104387	177079	85867	119520						
32S-12000-175-CL	350	124656	60616	74978	76859	5627	5627	86933	15628	15628	97008	25628	25628	107082	35629	35629
32S-12000-200-CL	295	124614	60587	74926	123073	47367	51502	136232	55723	64564	149390	63902	77625	162549	71985	90687
32S-12000-235-CL	215	124546	60541	74842	198125	93575	126002	216292	104516	144036	234459	115422	162069	252626	126309	180103
32S-12000-250-CL	190	124514	60519	74802	233988	115139	161601	254548	127458	182010	275108	139754	202419	295668	152030	222828
32S-15000-175-CL	350	144830	72365	93498							78744	1718	1718	88819	11718	11718
32S-15000-200-CL	310	144788	72336	93446	104810	27591	27591	117968	40653	40653	131127	49938	53715	144285	58339	66777
32S-15000-235-CL	225	144721	72290	93362	179862	80324	102092	198029	91371	120125	216196	102355	138159	234363	113292	156192
32S-15000-250-CL	200	144688	72268	93322	215724	102070	137690	236284	114449	158100	256845	126787	178509	277405	139101	198918
50S-15400-200-CL	350	157380	74703	88832	131244	35899	35899	145865	50412	50412	160485	60739	64925	175106	70118	79439
50S-15400-235-CL	260	157305	74650	88739	214635	94636	118677	234821	106941	138715	255007	119172	158752	275192	131353	178789
50S-15400-250-CL	235	157269	74625	88694	254482	118855	158232	277327	132638	180908	300172	146377	203585	323017	160080	226262
50S-15400-300-CL	160	157222	74593	88636	405206	209203	307847	438102	228825	340501						
50S-15600-200-CL	350	164429	79551	97583	122614	27333	27333	137235	41846	41846	151856	55013	56359	166476	64618	70872
50S-15600-235-CL	270	164353	79499	97490	206006	89342	110111	226191	101691	130148	246377	113956	150186	266562	126156	170223
50S-15600-250-CL	235	164317	79475	97445	245853	113638	149665	268697	127443	172342	291542	141194	195019	314387	154904	217696
50S-15600-300-CL	165	164270	79443	97387	396576	204056	299281	429472	223678	331935						

NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTC	RTC	ETC	200			220			240			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	350	67094	34587	45890	73915	30876	37107	85851	38093	48630	97787	45232	60153	118674	57627	80318
18S-9600-175-CL	255	67058	34563	45844	128373	63356	89681	145759	73608	106465	163145	83844	123250	119680	58223	81289
18S-9600-185-CL	230	67045	34554	45827	148795	75396	109396	168224	86829	128154				119651	58205	81261
18S-9600-200-CL	195	67023	34539	45799										119108	57884	80737
18S-9600-235-CL	105	66966	34500	45727										119004	57822	80637
18S-9800-145-CL	350	84710	43258	56500	63451	16775	16775	75387	27192	28297	87323	34771	39820	152971	74157	103196
18S-9800-175-CL	270	84674	43233	56454	117910	53318	69348	135296	63678	86133	152681	73986	102917	178760	89389	128093
18S-9800-185-CL	240	84661	43224	56437	138332	65483	89064	157761	76991	107821	177191	88464	126578	177191	88464	126578
18S-9800-200-CL	205	84639	43209	56410	171092	84863	120690							176769	88216	126171
18S-9800-235-CL	150	84582	43170	56337										179081	89578	128403
18S-10500-175-CL	275	93669	47078	59869	114542	48525	59148	131928	59008	75932	149313	69393	92716	179739	87442	122088
18S-10500-185-CL	245	93656	47068	59852	134964	60829	78863	154393	72413	97620	173823	83938	116377	178680	86816	121066
18S-10500-200-CL	210	93634	47053	59825	167724	80325	110489							179078	87051	121450
18S-10500-235-CL	150	93577	47014	59752										175713	85058	118202
18S-11000-175-CL	290	105036	54864	74381	100232	39747	45333	117617	50390	62117	135003	60853	78901	178468	86690	120861
18S-11000-185-CL	260	105023	54855	74364	120653	52227	65048	140083	63888	83805	159513	75457	102562	178942	86971	121319
18S-11000-200-CL	220	105001	54840	74336	153414	71831	96674	176122	85300	118596				176122	85300	118596
18S-11000-235-CL	160	104944	54802	74263										177079	85867	119520
32S-12000-175-CL	350	124656	60616	74978	127231	50037	55629	147380	62661	75630	167530	75024	95631	278349	141692	205637
32S-12000-200-CL	295	124614	60587	74926	188866	87979	116811	215183	103848	142935	241500	119645	169058	313872	162889	240898
32S-12000-235-CL	215	124546	60541	74842	288960	148029	216170							316211	164284	243220
32S-12000-250-CL	190	124514	60519	74802										316229	164294	243237
32S-15000-175-CL	350	144830	72365	93498	108968	31719	31719	129117	48627	51720	149266	61464	71721	260086	128731	181726
32S-15000-200-CL	310	144788	72336	93446	170603	74660	92901	196920	90698	119024	223237	106595	145148	302188	153922	223519
32S-15000-235-CL	225	144721	72290	93362	270697	135090	192259	307031	156818	228326				316115	162236	237343
32S-15000-250-CL	200	144688	72268	93322	318526	163674	239736							318526	163674	239736
50S-15400-200-CL	350	157380	74703	88832	204347	88323	108465	233589	106192	137491	262830	123900	166518	423657	220209	326162
50S-15400-235-CL	260	157305	74650	88739	315563	155610	218864	355935	179779	258938	396306	203895	299012	436677	227975	339087
50S-15400-250-CL	235	157269	74625	88694	368706	187416	271616	414396	214685	316969				448663	235125	350984
50S-15400-300-CL	160	157222	74593	88636										438102	228825	340501
50S-15600-200-CL	350	164429	79551	97583	195718	82998	99899	224959	100939	128925	254200	118684	157951	415027	215061	317596
50S-15600-235-CL	270	164353	79499	97490	306934	150433	210297	347305	174618	250372	387676	198747	290446	448233	234868	350558
50S-15600-250-CL	235	164317	79475	97445	360076	182255	263049	405766	209537	308403				440033	229977	342418
50S-15600-300-CL	165	164270	79443	97387										429472	223678	331935

NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Open Models 0.3S-008A-20-OP to 0.9S-0700-85-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					80			100			120			140		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-20-OP	350	227	103	122				158	35	35	219	90	101	280	129	167
0.3S-008A-28-OP	350	226	102	120	330	160	220	450	235	350	570	308	479	690	382	608
0.3S-008A-35-OP	325	225	101	119	599	326	510	787	441	712	974	556	915	1162	671	1117
0.3S-008B-20-OP	350	339	114	114										275	29	29
0.3S-008B-28-OP	350	337	113	113	325	82	82	445	186	212	565	263	341	685	338	470
0.3S-008B-35-OP	335	336	112	112	594	281	372	782	398	575	969	513	777	1157	628	979
0.3S-008C-20-OP	350	407	146	146												
0.3S-008C-28-OP	350	406	144	144				408	127	127	528	223	256	648	300	385
0.3S-008C-35-OP	340	405	144	144	557	242	288	745	360	490	933	476	692	1120	592	894
0.3S-0100-28-OP	350	658	280	306										474	72	72
0.3S-0100-35-OP	350	658	280	305				570	176	176	758	325	379	945	444	581
0.3S-0100-40-OP	275	656	278	303	611	220	220	856	387	484	1101	540	748	1345	692	1012
0.3S-0100-45-OP	215	655	278	302	870	396	499	1180	590	833	1490	781	1167	1800	971	1501
0.3S-0100-50-OP	175	654	277	301	1160	577	812	1543	813	1224	1926	1048	1637	2308	1283	2049
0.3S-0150-35-OP	350	837	399	510							552	157	157	740	313	359
0.3S-0150-40-OP	290	835	398	508				650	253	262	895	412	526	1140	565	790
0.3S-0150-45-OP	230	834	398	507	664	263	278	974	462	612	1284	654	946	1594	845	1280
0.3S-0150-50-OP	185	833	397	506	954	449	590	1337	687	1003	1720	922	1415	2103	1157	1828
0.3S-0150-60-OP	125	834	397	506	1628	866	1317	2180	1204	1911	2731	1541	2504			
0.9S-0200-40-OP	350	1072	500	618				712	171	171	995	418	476	1278	598	781
0.9S-0200-45-OP	350	1071	499	617	728	188	188	1087	477	575	1445	703	961	1804	925	1347
0.9S-0200-50-OP	350	1071	499	616	1064	463	550	1507	741	1027	1949	1014	1504	2392	1286	1981
0.9S-0200-60-OP	300	1071	499	616	1843	949	1390	2481	1341	2077	3118	1732	2763	3755	2121	3450
0.9S-0250-40-OP	350	1297	647	875							737	198	198	1020	435	503
0.9S-0250-45-OP	350	1296	646	873				829	297	297	1187	541	683	1546	765	1069
0.9S-0250-50-OP	350	1295	646	872	806	272	272	1249	580	749	1691	855	1226	2134	1128	1703
0.9S-0250-60-OP	305	1296	646	873	1585	790	1112	2223	1183	1799	2860	1574	2485	3497	1964	3172
0.9S-0250-70-OP	225	1295	646	873	2506	1356	2104	3373	1888	3038	4241	2418	3973	5108	2948	4908
0.9S-0350-45-OP	350	2022	951	1189										1179	169	169
0.9S-0350-50-OP	350	2022	950	1188							1325	326	326	1767	726	803
0.9S-0350-60-OP	320	2022	951	1189	1219	212	212	1856	784	898	2493	1188	1585	3131	1584	2272
0.9S-0350-70-OP	235	2022	951	1188	2139	966	1203	3006	1507	2138	3874	2042	3073	4741	2575	4007
0.9S-0350-85-OP	160	2016	947	1182	3779	1984	2971	5058	2769	4349	6337	3552	5727	7616	4335	7105
0.9S-0400-50-OP	350	2411	1205	1633										1320	321	321
0.9S-0400-60-OP	335	2411	1205	1634				1409	416	416	2046	906	1103	2683	1307	1790
0.9S-0400-70-OP	245	2411	1205	1633	1692	676	721	2559	1229	1656	3427	1767	2591	4294	2300	3525
0.9S-0400-85-OP	165	2405	1201	1627	3332	1708	2489	4611	2495	3867	5890	3279	5245	7169	4061	6623
0.9S-0700-60-OP	350	3379	1638	2132										2125	591	591
0.9S-0700-70-OP	260	3379	1637	2131				2000	458	458	2868	1213	1392	3735	1764	2327
0.9S-0700-85-OP	175	3373	1633	2125	2773	1151	1290	4052	1962	2668	5331	2754	4047	6610	3541	5425

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-20-OP	350	227	103	122	311	149	200	341	168	233	372	187	266	403	206	299
0.3S-008A-28-OP	350	226	102	120	750	419	673	810	455	738	870	492	802	930	529	867
0.3S-008A-35-OP	325	225	101	119	1255	728	1218	1349	785	1319	1443	842	1420	1537	900	1521
0.3S-008B-20-OP	350	339	114	114	306	62	62	336	95	95	367	128	128	397	155	161
0.3S-008B-28-OP	350	337	113	113	745	375	535	805	412	600	865	449	664	925	486	729
0.3S-008B-35-OP	335	336	112	112	1250	686	1080	1344	743	1181	1438	801	1282	1532	858	1383
0.3S-008C-20-OP	350	407	146	146				300	10	10	330	43	43	361	76	76
0.3S-008C-28-OP	350	406	144	144	708	337	450	768	375	515	828	412	579	888	449	644
0.3S-008C-35-OP	340	405	144	144	1214	650	995	1308	707	1096	1401	765	1197	1495	822	1298
0.3S-0100-28-OP	350	658	280	306	534	137	137	594	202	202	654	256	266	714	296	331
0.3S-0100-35-OP	350	658	280	305	1039	502	682	1133	560	783	1227	619	884	1321	676	985
0.3S-0100-40-OP	275	656	278	303	1468	767	1144	1590	843	1276	1713	918	1408	1835	993	1540
0.3S-0100-45-OP	215	655	278	302	1955	1066	1668	2110	1161	1835	2265	1256	2002	2420	1351	2170
0.3S-0100-50-OP	175	654	277	301	2500	1400	2255	2691	1517	2462	2882	1634	2668			
0.3S-0150-35-OP	350	837	399	510	834	373	460	927	432	561	1021	491	662	1115	549	763
0.3S-0150-40-OP	290	835	398	508	1262	641	922	1385	716	1054	1507	792	1186	1630	867	1318
0.3S-0150-45-OP	230	834	398	507	1749	940	1447	1904	1035	1614	2059	1130	1781	2214	1225	1948
0.3S-0150-50-OP	185	833	397	506	2294	1274	2034	2485	1391	2240	2677	1508	2446	2868	1625	2652
0.3S-0150-60-OP	125	834	397	506												
0.9S-0200-40-OP	350	1072	500	618	1420	687	934	1562	775	1086	1703	863	1239	1845	950	1391
0.9S-0200-45-OP	350	1071	499	617	1983	1035	1540	2162	1146	1734	2341	1256	1927	2521	1366	2120
0.9S-0200-50-OP	350	1071	499	616	2613	1422	2219	2834	1558	2458	3055	1693	2696	3277	1829	2934
0.9S-0200-60-OP	300	1071	499	616	4074	2316	3793	4393	2511	4137	4711	2706	4480	5030	2901	4824
0.9S-0250-40-OP	350	1297	647	875	1162	525	656	1304	614	808	1445	703	961	1587	791	1114
0.9S-0250-45-OP	350	1296	646	873	1725	876	1262	1904	987	1456	2084	1097	1649	2263	1207	1842
0.9S-0250-50-OP	350	1295	646	872	2355	1264	1941	2576	1400	2180	2798	1535	2418	3019	1671	2657
0.9S-0250-60-OP	305	1296	646	873	3816	2159	3515	4135	2353	3859	4453	2548	4202	4772	2743	4546
0.9S-0250-70-OP	225	1295	646	873	5542	3213	5375	5975	3478	5842	6409	3743	6310	6843	4008	6777
0.9S-0350-45-OP	350	2022	951	1189	1358	362	362	1538	555	555	1717	693	748	1896	810	942
0.9S-0350-50-OP	350	2022	950	1188	1988	869	1041	2210	1010	1279	2431	1149	1518	2652	1287	1756
0.9S-0350-60-OP	320	2022	951	1189	3449	1781	2615	3768	1977	2959	4087	2173	3302	4405	2369	3645
0.9S-0350-70-OP	235	2022	951	1188	5175	2841	4475	5609	3106	4942	6042	3372	5410	6476	3637	5877
0.9S-0350-85-OP	160	2016	947	1182	8256	4726	7794	8895	5116	8484						
0.9S-0400-50-OP	350	2411	1205	1633	1541	559	559	1762	723	797	1984	866	1036	2205	1007	1274
0.9S-0400-60-OP	335	2411	1205	1634	3002	1505	2133	3321	1701	2477	3639	1898	2820	3958	2094	3163
0.9S-0400-70-OP	245	2411	1205	1633	4728	2567	3993	5161	2832	4460	5595	3098	4928	6029	3364	5395
0.9S-0400-85-OP	165	2405	1201	1627	7808	4452	7312	8448	4843	8002						
0.9S-0700-60-OP	350	3379	1638	2132	2443	929	935	2762	1144	1278	3081	1350	1621	3399	1553	1965
0.9S-0700-70-OP	260	3379	1637	2131	4169	2035	2794	4603	2304	3262	5036	2572	3729	5470	2840	4196
0.9S-0700-85-OP	175	3373	1633	2125	7250	3933	6114	7889	4325	6803	8529	4717	7492			

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)									MOT@MOP		
					200			220			240			BTC	RTC	ETC
0.3S-008A-20-OP	350	227	103	122	464	243	365	525	281	431	586	319	496	923	525	859
0.3S-008A-28-OP	350	226	102	120	1050	602	996	1170	676	1126	1290	749	1255	1950	1152	1966
0.3S-008A-35-OP	325	225	101	119	1724	1014	1723	1912	1129	1925	2099	1243	2127	2896	1730	2986
0.3S-008B-20-OP	350	339	114	114	459	195	227	520	235	293	581	273	359	918	482	722
0.3S-008B-28-OP	350	337	113	113	1045	560	858	1165	633	988	1285	707	1117	1945	1111	1828
0.3S-008B-35-OP	335	336	112	112	1719	973	1585	1907	1087	1787	2094	1202	1989	2985	1746	2949
0.3S-008C-20-OP	350	407	146	146	422	142	142	483	194	208	545	234	274	881	445	637
0.3S-008C-28-OP	350	406	144	144	1008	523	773	1128	597	903	1248	671	1032	1909	1075	1743
0.3S-008C-35-OP	340	405	144	144	1683	937	1500	1870	1052	1702	2058	1166	1904	2995	1739	2915
0.3S-0100-28-OP	350	658	280	306	834	373	460	954	449	590	1074	524	719	1734	931	1430
0.3S-0100-35-OP	350	658	280	305	1508	792	1187	1696	907	1389	1883	1022	1591	2915	1654	2703
0.3S-0100-40-OP	275	656	278	303	2080	1143	1804	2325	1293	2068	2570	1443	2331	2999	1705	2793
0.3S-0100-45-OP	215	655	278	302	2730	1541	2504							2962	1683	2754
0.3S-0100-50-OP	175	654	277	301										2978	1693	2771
0.3S-0150-35-OP	350	837	399	510	1302	665	965	1490	781	1167	1677	896	1369	2709	1528	2481
0.3S-0150-40-OP	290	835	398	508	1875	1017	1582	2120	1167	1846	2365	1317	2110	2977	1692	2770
0.3S-0150-45-OP	230	834	398	507	2524	1415	2282	2834	1605	2616				2989	1699	2783
0.3S-0150-50-OP	185	833	397	506										2964	1684	2756
0.3S-0150-60-OP	125	834	397	506										2869	1626	2653
0.9S-0200-40-OP	350	1072	500	618	2128	1124	1697	2411	1298	2002	2695	1472	2307	4252	2425	3986
0.9S-0200-45-OP	350	1071	499	617	2879	1585	2506	3238	1805	2892	3596	2024	3279	5568	3229	5403
0.9S-0200-50-OP	350	1071	499	616	3719	2099	3411	4162	2370	3888	4604	2641	4365	7038	4128	6988
0.9S-0200-60-OP	300	1071	499	616	5667	3290	5510	6304	3679	6197	6942	4069	6884	8853	5236	8944
0.9S-0250-40-OP	350	1297	647	875	1870	966	1419	2153	1140	1724	2437	1314	2029	3994	2268	3708
0.9S-0250-45-OP	350	1296	646	873	2621	1427	2228	2980	1647	2614	3338	1866	3001	5310	3072	5125
0.9S-0250-50-OP	350	1295	646	872	3461	1942	3133	3904	2212	3610	4346	2483	4087	6780	3970	6710
0.9S-0250-60-OP	305	1296	646	873	5409	3132	5232	6046	3522	5919	6684	3911	6606	8755	5176	8837
0.9S-0250-70-OP	225	1295	646	873	7710	4538	7712	8578	5067	8646				8794	5200	8880
0.9S-0350-45-OP	350	2022	951	1189	2255	1039	1328	2613	1263	1714	2972	1486	2100	4943	2699	4225
0.9S-0350-50-OP	350	2022	950	1188	3095	1562	2233	3537	1835	2710	3980	2107	3187	6414	3599	5810
0.9S-0350-60-OP	320	2022	951	1189	5043	2760	4332	5680	3150	5019	6317	3540	5705	8866	5099	8452
0.9S-0350-70-OP	235	2022	951	1188	7344	4168	6812	8211	4698	7746				8861	5096	8447
0.9S-0350-85-OP	160	2016	947	1182										8895	5116	8484
0.9S-0400-50-OP	350	2411	1205	1633	2647	1284	1751	3090	1559	2228	3533	1832	2705	5967	3326	5328
0.9S-0400-60-OP	335	2411	1205	1634	4595	2485	3850	5232	2876	4537	5870	3266	5223	8897	5117	8485
0.9S-0400-70-OP	245	2411	1205	1633	6896	3894	6330	7764	4425	7264	8631	4955	8199	8848	5087	8433
0.9S-0400-85-OP	165	2405	1201	1627										8768	5038	8346
0.9S-0700-60-OP	350	3379	1638	2132	4036	1952	2651	4674	2348	3338	5311	2742	4025	8816	4893	7802
0.9S-0700-70-OP	260	3379	1637	2131	6337	3373	5131	7205	3906	6066	8072	4437	7000	8940	4969	7935
0.9S-0700-85-OP	175	3373	1633	2125										8848	4913	7837

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Open

Models 1.5S-1100-70-OP to 14S-8300-200-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					80			100			120			140		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	350	6898	2665	2964										3661	389	389
1.5S-1100-85-OP	245	6890	2660	2956				4028	857	857	5508	2528	2748	6988	3563	4639
1.5S-1100-95-OP	195	6884	2656	2950	4017	844	844	5866	2783	3205	7715	4059	5567	9564	5309	7929
1.5S-1100-110-OP	145	6887	2658	2953	6540	3254	4066	9019	4941	7233	11498	6605	10399	13976	8260	13565
1.5S-1200-70-OP	350	8047	3389	4107												
1.5S-1200-85-OP	260	8039	3384	4100							4362	1324	1324	5842	2779	3215
1.5S-1200-95-OP	210	8033	3380	4093				4720	1782	1782	6569	3286	4143	8418	4547	6505
1.5S-1200-110-OP	155	8036	3382	4097	5394	2459	2642	7873	4177	5809	10352	5848	8975	12830	7505	12141
3S-2000-70-OP	350	11658	5203	6609										4637	153	153
3S-2000-85-OP	285	11645	5195	6596				5253	919	919	7741	3556	4007	10229	5255	7096
3S-2000-95-OP	230	11635	5189	6586	5236	896	896	8343	3974	4754	11450	6073	8612	14558	8134	12471
3S-2000-110-OP	170	11640	5192	6591	9476	4747	6161	13642	7528	11333	17808	10277	16506	21974	13015	21678
6S-2500-85-OP	350	16573	7577	9854							6850	981	981	9765	4315	4586
6S-2500-95-OP	350	16561	7570	9842				7556	1854	1854	11196	5318	6356	14836	7776	10858
6S-2500-110-OP	265	16567	7573	9848	8882	3495	3495	13763	7058	9531	18644	10301	15567	23524	13515	21604
6S-2500-125-OP	205	16551	7564	9833	14555	7588	10511	20858	11761	18306	27161	15901	26101	33463	20033	33896
6S-2500-135-OP	175	16540	7557	9821	18740	10365	15686	26091	15200	24779	33442	20020	33871	40794	24839	42963
6S-3800-85-OP	350	22544	10843	14858												
6S-3800-95-OP	350	22532	10836	14846										9716	3462	3462
6S-3800-110-OP	290	22538	10840	14853				8642	2134	2134	13523	6578	8171	18404	9852	14207
6S-3800-125-OP	225	22522	10830	14837	9435	3114	3114	15737	8074	10909	22040	12258	18704	28342	16405	26499
6S-3800-135-OP	190	22511	10823	14826	13619	6643	8290	20971	11552	17382	28322	16391	26474	35673	21212	35566
14S-5100-95-OP	350	27589	13067	17786										8524	628	628
14S-5100-110-OP	350	27596	13072	17793							12613	5635	5853	17856	9302	12549
14S-5100-125-OP	350	27579	13061	17776	8222	243	243	14992	7330	8891	21762	11947	17538	28531	16486	26186
14S-5100-135-OP	305	27566	13054	17764	12717	5712	5985	20613	11172	16071	28509	16472	26158	36405	21740	36244
14S-5100-145-OP	265	27578	13061	17775	17580	9113	12197	26689	15254	23833	35798	21336	35469	44908	27413	47105
14S-5100-175-OP	180	27542	13040	17741	34186	20260	33409	47454	29111	50358	60723	37956	67308	73991	46795	84257
14S-5100-200-OP	135	27508	13019	17708	50403	31078	54124	67733	42626	76262	85063	54165	98400			
14S-5400-110-OP	350	35538	16140	21088										14126	2711	2711
14S-5400-125-OP	350	35521	16129	21071							18032	7700	7700	24801	12611	16348
14S-5400-135-OP	325	35508	16122	21059				16883	6233	6233	24779	12596	16319	32675	17957	26406
14S-5400-145-OP	280	35520	16129	21070	13850	2359	2359	22959	11340	13995	32069	17548	25631	41178	23661	37267
14S-5400-175-OP	190	35484	16108	21036	30456	16460	23571	43724	25364	40520	56993	34216	57469	70261	43067	74419
14S-5400-185-OP	170	35471	16100	21023	36683	20651	31526	51511	30559	50467	66340	40451	69409	81168	50342	88350
14S-5400-200-OP	145	35450	16087	21003	46673	27331	44286	64003	38892	66424	81333	50452	88562	98664	61997	110699
14S-8300-125-OP	350	45565	20831	27395										18122	3905	3905
14S-8300-135-OP	350	45552	20823	27383							18100	3877	3877	25996	12257	13964
14S-8300-145-OP	300	45564	20830	27394				16280	1552	1552	25390	11825	13189	34499	18133	24825
14S-8300-175-OP	205	45529	20809	27360	23777	10658	11129	37046	19861	28078	50314	28782	45027	63583	37641	61976
14S-8300-185-OP	185	45515	20801	27347	30004	15055	19083	44833	25108	38025	59661	35025	56966	74489	44917	75908
14S-8300-200-OP	155	45494	20789	27327	39994	21853	31844	57324	33466	53982	74654	45028	76119	91985	56589	98257

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	350	6898	2665	2964	4163	1030	1030	4665	1671	1671	5167	2277	2312	5669	2643	2953
1.5S-1100-85-OP	245	6890	2660	2956	7728	4068	5584	8468	4570	6529	9208	5069	7475	9948	5567	8420
1.5S-1100-95-OP	195	6884	2656	2950	10488	5929	9110	11413	6548	10291	12337	7166	11471	13261	7783	12652
1.5S-1100-110-OP	145	6887	2658	2953												
1.5S-1200-70-OP	350	8047	3389	4107				3519	247	247	4021	888	888	4523	1530	1530
1.5S-1200-85-OP	260	8039	3384	4100	6582	3295	4160	7322	3803	5106	8062	4306	6051	8802	4806	6996
1.5S-1200-95-OP	210	8033	3380	4093	9342	5170	7686	10267	5791	8867	11191	6410	10048	12115	7028	11228
1.5S-1200-110-OP	155	8036	3382	4097	14070	8332	13725									
3S-2000-70-OP	350	11658	5203	6609	5481	1201	1201	6324	2248	2248	7168	3147	3295	8011	3745	4343
3S-2000-85-OP	285	11645	5195	6596	11473	6088	8640	12716	6915	10184	13960	7739	11729	15204	8561	13273
3S-2000-95-OP	230	11635	5189	6586	16112	9160	14400	17665	10183	16329	19219	11205	18258	20773	12225	20187
3S-2000-110-OP	170	11640	5192	6591	24057	14383	24265	26140	15752	26851	28223	17120	29437			
6S-2500-85-OP	350	16573	7577	9854	11222	5336	6388	12679	6328	8190	14136	7308	9992	15593	8280	11795
6S-2500-95-OP	350	16561	7570	9842	16656	8986	13109	18477	10191	15361	20297	11391	17612	22117	12590	19863
6S-2500-110-OP	265	16567	7573	9848	25965	15117	24622	28405	16717	27640	30845	18317	30658	33286	19917	33677
6S-2500-125-OP	205	16551	7564	9833	36614	22099	37793	39766	24165	41691	42917	26231	45588	46068	28297	49486
6S-2500-135-OP	175	16540	7557	9821	44469	27249	47509	48145	29659	52055	51821	32069	56601			
6S-3800-85-OP	350	22544	10843	14858				7558	794	794	9016	2596	2596	10473	4398	4398
6S-3800-95-OP	350	22532	10836	14846	11536	5202	5713	13356	6464	7964	15176	7697	10215	16996	8915	12466
6S-3800-110-OP	290	22538	10840	14853	20844	11468	17225	23284	13078	20244	25725	14685	23262	28165	16288	26280
6S-3800-125-OP	225	22522	10830	14837	31494	18472	30397	34645	20538	34294	37796	22604	38192	40947	24670	42089
6S-3800-135-OP	190	22511	10823	14826	39349	23621	40112	43024	26031	44658	46700	28441	49204	50376	30851	53750
14S-5100-95-OP	350	27589	13067	17786	10479	3126	3126	12434	5502	5623	14389	6908	8121	16344	8266	10618
14S-5100-110-OP	350	27596	13072	17793	20477	11080	15898	23098	12847	19246	25719	14605	22594	28341	16359	25943
14S-5100-125-OP	350	27579	13061	17776	31916	18746	30510	35301	21004	34834	38686	23262	39157	42070	25520	43481
14S-5100-135-OP	305	27566	13054	17764	40353	24374	41288	44301	27008	46331	48249	29642	51374	52197	32276	56417
14S-5100-145-OP	265	27578	13061	17775	49462	30451	52923	54017	33489	58741	58572	36523	64560	63126	39557	70378
14S-5100-175-OP	180	27542	13040	17741	80626	51211	92731	87260	55626	101206	93894	60042	109681	100528	64457	118155
14S-5100-200-OP	135	27508	13019	17708												
14S-5400-110-OP	350	35538	16140	21088	16747	6059	6059	19368	8801	9408	21990	10664	12756	24611	12480	16104
14S-5400-125-OP	350	35521	16129	21071	28186	14922	20671	31571	17213	24995	34956	19492	29319	38341	21763	33643
14S-5400-135-OP	325	35508	16122	21059	36623	20611	31449	40571	23255	36493	44519	25895	41536	48467	28528	46579
14S-5400-145-OP	280	35520	16129	21070	45732	26704	43085	50287	29742	48903	54842	32781	54721	59396	35819	60539
14S-5400-175-OP	190	35484	16108	21036	76896	47493	82893	83530	51916	91368	90164	56335	99842	96798	60755	108317
14S-5400-185-OP	170	35471	16100	21023	88582	55281	97821	95996	60220	107292	103410	65159	116763			
14S-5400-200-OP	145	35450	16087	21003												
14S-8300-125-OP	350	45565	20831	27395	21507	8229	8229	24892	11468	12553	28277	13858	16877	31662	16195	21200
14S-8300-135-OP	350	45552	20823	27383	29945	15014	19007	33893	17720	24050	37841	20399	29093	41789	23062	34137
14S-8300-145-OP	300	45564	20830	27394	39054	21219	30643	43608	24286	36461	48163	27343	42279	52717	30390	48097
14S-8300-175-OP	205	45529	20809	27360	70217	42067	70451	76851	46493	78925	83485	50919	87400	90120	55345	95875
14S-8300-185-OP	185	45515	20801	27347	81903	49863	85379	89317	54809	94850	96731	59755	104320	104146	64698	113791
14S-8300-200-OP	155	45494	20789	27327	100650	62369	109326									

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	200			220			240			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	350	6898	2665	2964	6673	3346	4236	7676	4033	5518	8680	4713	6800	14201	8410	13853
1.5S-1100-85-OP	245	6890	2660	2956	11428	6558	10311	12908	7547	12201	14389	8535	14092	14759	8781	14565
1.5S-1100-95-OP	195	6884	2656	2950										14648	8708	14423
1.5S-1100-110-OP	145	6887	2658	2953										14596	8673	14357
1.5S-1200-70-OP	350	8047	3389	4107	5527	2554	2812	6530	3259	4094	7534	3947	5376	13055	7655	12429
1.5S-1200-85-OP	260	8039	3384	4100	10282	5801	8887	11763	6792	10777	13243	7780	12668	14723	8767	14559
1.5S-1200-95-OP	210	8033	3380	4093	13964	8261	13590							14889	8878	14771
1.5S-1200-110-OP	155	8036	3382	4097										14689	8745	14516
3S-2000-70-OP	350	11658	5203	6609	9698	4898	6437	11386	6030	8532	13073	7151	10627	22352	13263	22147
3S-2000-85-OP	285	11645	5195	6596	17692	10200	16361	20179	11836	19450	22667	13470	22539	28264	17147	29488
3S-2000-95-OP	230	11635	5189	6586	23880	14267	24045	26987	16308	27903				28541	17329	29832
3S-2000-110-OP	170	11640	5192	6591										28223	17120	29437
6S-2500-85-OP	350	16573	7577	9854	18508	10211	15399	21422	12133	19003	24336	14048	22608	40365	24558	42432
6S-2500-95-OP	350	16561	7570	9842	25757	14981	24365	29398	17368	28868	33038	19754	33370	53060	32881	58133
6S-2500-110-OP	265	16567	7573	9848	38166	23117	39713	43047	26317	45749	47928	29516	51786	54028	33516	59331
6S-2500-125-OP	205	16551	7564	9833	52371	32429	57281							53946	33462	59230
6S-2500-135-OP	175	16540	7557	9821										53658	33274	58874
6S-3800-85-OP	350	22544	10843	14858	13387	6485	8002	16301	8451	11607	19215	10391	15211	35244	20930	35035
6S-3800-95-OP	350	22532	10836	14846	20637	11331	16969	24277	13733	21471	27917	16125	25973	47939	29253	50736
6S-3800-110-OP	290	22538	10840	14853	33046	19489	32316	37926	22689	38353	42807	25889	44389	55009	33888	59480
6S-3800-125-OP	225	22522	10830	14837	47250	28802	49884	53552	32934	57679				55128	33967	59628
6S-3800-135-OP	190	22511	10823	14826										54051	33261	58296
14S-5100-95-OP	350	27589	13067	17786	20254	10929	15613	24164	13562	20608	28074	16181	25603	49580	30530	53074
14S-5100-110-OP	350	27596	13072	17793	33583	19858	32639	38825	23355	39336	44068	26852	46033	72901	46069	82864
14S-5100-125-OP	350	27579	13061	17776	48840	30036	52129	55610	34550	60776	62379	39060	69424	99612	63847	116985
14S-5100-135-OP	305	27566	13054	17764	60094	37537	66504	67990	42797	76590	75886	48057	86677	101548	65136	119458
14S-5100-145-OP	265	27578	13061	17775	72235	45626	82014	81345	51690	93650	90454	57752	105286	101840	65330	119831
14S-5100-175-OP	180	27542	13040	17741										100528	64457	118155
14S-5100-200-OP	135	27508	13019	17708										98061	62815	115003
14S-5400-110-OP	350	35538	16140	21088	29853	16052	22801	35096	19585	29498	40338	23099	36194	69171	42340	73026
14S-5400-125-OP	350	35521	16129	21071	45110	26289	42290	51880	30805	50938	58649	35321	59585	95883	60145	107147
14S-5400-135-OP	325	35508	16122	21059	56364	33796	56666	64260	39064	66752	72156	44331	76839	105714	66694	119706
14S-5400-145-OP	280	35520	16129	21070	68505	41896	72176	77615	47973	83812	86724	54043	95448	104942	66180	118720
14S-5400-175-OP	190	35484	16108	21036										103433	65174	116792
14S-5400-185-OP	170	35471	16100	21023										103410	65159	116763
14S-5400-200-OP	145	35450	16087	21003										102996	64883	116234
14S-8300-125-OP	350	45565	20831	27395	38431	20798	29848	45201	25355	38496	51971	29890	47143	89204	54734	94705
14S-8300-135-OP	350	45552	20823	27383	49685	28361	44223	57581	33638	54310	65477	38905	64396	108906	67869	119872
14S-8300-145-OP	300	45564	20830	27394	61827	36470	59733	70936	42547	71369	80045	48624	83005	107373	66848	117914
14S-8300-175-OP	205	45529	20809	27360	103388	64193	112824							106705	66403	117061
14S-8300-185-OP	185	45515	20801	27347										107853	67167	118527
14S-8300-200-OP	155	45494	20789	27327										104982	65255	114860

NOTES:

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (Nm) - Symmetric Yoke Design, Spring to Open Models 18S-9600-145-OP to 50S-15600-300-OP

Model	MOP (barg)	BTO	RTO	ETO	Operating supply pressure (barg)											
					80			100			120			140		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	350	71907	29649	35169										34560	4356	4356
18S-9600-175-OP	275	71866	29624	35129				37489	8096	8096	52753	24621	27583	68017	35218	47069
18S-9600-185-OP	245	71850	29615	35114				46447	19532	19532	63506	32127	41309	80564	43732	63086
18S-9600-200-OP	210	71826	29600	35091	40881	12426	12426	60818	30272	37877	80754	43861	63329	100691	57255	88780
18S-9600-235-OP	150	71761	29560	35028	71178	37372	51103	98702	55924	86241	126227	74308	121380	153752	92664	156519
18S-9800-145-OP	350	91260	37200	43621												
18S-9800-175-OP	295	91219	37175	43581							43279	3608	3608	58543	23094	23094
18S-9800-185-OP	265	91204	37166	43566							54031	17335	17335	71089	33804	39112
18S-9800-200-OP	225	91179	37151	43543				51343	13903	13903	71279	33938	39354	91216	47704	64806
18S-9800-235-OP	165	91114	37111	43480	61703	27010	27129	89228	46347	62267	116753	64958	97406	144277	83392	132544
18S-10500-175-OP	310	106444	43581	51330										50088	4234	4234
18S-10500-185-OP	275	106429	43572	51316										62635	20251	20251
18S-10500-200-OP	235	106405	43557	51292							62825	20494	20494	82762	39485	45945
18S-10500-235-OP	170	106340	43517	51229	53249	8268	8268	80774	38080	43407	108298	57081	78545	135823	75664	113684
18S-11000-175-OP	325	119392	51466	63830												
18S-11000-185-OP	290	119376	51456	63815										50071	4212	4212
18S-11000-200-OP	250	119352	51441	63791							50262	4455	4455	70198	29906	29906
18S-11000-235-OP	180	119287	51402	63729				68210	27368	27368	95735	48498	62506	123260	67209	97645
32S-12000-175-OP	350	134555	54671	62899												
32S-12000-200-OP	325	134509	54642	62854							72228	9886	9886	95985	39382	39382
32S-12000-235-OP	235	134434	54595	62779				93616	36440	36440	126416	61819	77164	159216	83918	117887
32S-12000-250-OP	210	134398	54572	62743	78067	17135	17135	115188	54097	63223	152309	79303	109311	189430	104007	155399
32S-15000-175-OP	350	156616	66040	79017												
32S-15000-200-OP	340	156570	66011	78971										79231	12053	12053
32S-15000-235-OP	245	156495	65965	78897				76862	9111	9111	109662	47941	49835	142462	70757	90558
32S-15000-250-OP	215	156459	65942	78861				98434	35894	35894	135555	66054	81982	172676	91073	128071
50S-15400-200-OP	350	169623	66634	73996										100952	18774	18774
50S-15400-235-OP	290	169539	66580	73913				98320	15505	15505	134764	58733	60754	171209	84183	106002
50S-15400-250-OP	255	169500	66555	73873				122289	45264	45264	163534	78938	96473	204780	106823	147682
50S-15400-300-OP	175	169447	66521	73822	153588	72075	84125	212982	112304	157866	272376	151736	231606	331769	190904	305347
50S-15600-200-OP	350	177431	71583	81746										93162	9102	9102
50S-15600-235-OP	295	177347	71530	81663				90529	5833	5833	126974	51081	51081	163419	78858	96330
50S-15600-250-OP	260	177307	71505	81624				114498	35592	35592	155744	73569	86801	196990	101597	138010
50S-15600-300-OP	180	177255	71472	81572	145798	66628	74453	205192	107098	148193	264585	146588	221934	323979	185774	295675

NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	150			160			170			180		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	350	71907	29649	35169	39799	11045	11045	45039	17734	17734	50279	22841	24423	55518	26579	31112
18S-9600-175-OP	275	71866	29624	35129	75649	40408	56812	83281	45564	66555	90913	50698	76298	98545	55819	86041
18S-9600-185-OP	245	71850	29615	35114	89093	49477	73974	97622	55199	84862	106151	60907	95751	114680	66607	106639
18S-9600-200-OP	210	71826	29600	35091	110659	63921	101505	120627	70573	114231	130595	77221	126956	140564	83869	139682
18S-9600-235-OP	150	71761	29560	35028	167515	101842	174088									
18S-9800-145-OP	350	91260	37200	43621							40804	449	449	46043	7138	7138
18S-9800-175-OP	295	91219	37175	43581	66175	30299	32838	73807	35713	42581	81438	41011	52324	89070	46240	62067
18S-9800-185-OP	265	91204	37166	43566	79618	39753	50000	88147	45610	60888	96676	51415	71777	105206	57185	82665
18S-9800-200-OP	225	91179	37151	43543	101184	54465	77531	111152	61190	90257	121121	67889	102982	131089	74572	115708
18S-9800-235-OP	165	91114	37111	43480	158040	92575	150114	171802	101753	167683						
18S-10500-175-OP	310	106444	43581	51330	57720	13977	13977	65352	23720	23720	72984	32454	33463	80616	37968	43206
18S-10500-185-OP	275	106429	43572	51316	71164	31094	31139	79693	37311	42027	88222	43305	52916	96751	49197	63804
18S-10500-200-OP	235	106405	43557	51292	92730	46429	58670	102698	53268	71396	112667	60049	84122	122635	66788	96847
18S-10500-235-OP	170	106340	43517	51229	149586	84896	131253	163348	94100	148822	177111	103290	166391			
18S-11000-175-OP	325	119392	51466	63830				52789	7681	7681	60421	17424	17424	68053	27167	27167
18S-11000-185-OP	290	119376	51456	63815	58600	15100	15100	67130	25989	25989	75659	34414	36877	84188	40488	47765
18S-11000-200-OP	250	119352	51441	63791	80166	37648	42632	90135	44635	55357	100103	51495	68083	110071	58286	80808
18S-11000-235-OP	180	119287	51402	63729	137022	76468	115214	150785	85698	132783	164547	94901	150353	178309	104089	167922
32S-12000-175-OP	350	134555	54671	62899	66145	2333	2333	75239	13625	13625	84334	24916	24916	93429	36208	36208
32S-12000-200-OP	325	134509	54642	62854	107864	48971	54130	119743	57245	68878	131622	65361	83627	143500	73388	98375
32S-12000-235-OP	235	134434	54595	62779	175616	94843	138249	192016	105721	158611	208416	116568	178972	224817	127400	199334
32S-12000-250-OP	210	134398	54572	62743	207991	116287	178443	226551	128543	201488	245112	140766	224532	263672	152987	247576
32S-15000-175-OP	350	156616	66040	79017										76675	8879	8879
32S-15000-200-OP	340	156570	66011	78971	91110	26801	26801	102989	41549	41549	114867	51684	56298	126746	60002	71046
32S-15000-235-OP	245	156495	65965	78897	158862	81824	110920	175262	92801	131282	191662	103719	151643	208062	114593	172005
32S-15000-250-OP	215	156459	65942	78861	191237	103436	151115	209797	115743	174159	228358	128014	197203	246918	140266	220247
50S-15400-200-OP	350	169623	66634	73996	114151	35161	35161	127350	51548	51548	140548	62907	67935	153747	72185	84321
50S-15400-235-OP	265	169539	66580	73913	189431	96518	128626	207654	108743	151250	225876	120900	173874	244098	133011	196498
50S-15400-250-OP	255	169500	66555	73873	225403	120585	173287	246025	134288	198891	266648	147953	224496	287271	161574	250100
50S-15400-300-OP	175	169447	66521	73822	361466	210443	342218	391163	229953	379088	420860	249463	415959			
50S-15600-200-OP	350	177431	71583	81746	106361	25489	25489	119559	41875	41875	132758	57259	58262	145956	66740	74649
50S-15600-235-OP	295	177347	71530	81663	181641	91260	118954	199863	103527	141578	218086	115714	164202	236308	127840	186826
50S-15600-250-OP	260	177307	71505	81624	217612	115398	163614	238235	129123	189219	258858	142793	214823	279481	156429	240428
50S-15600-300-OP	180	177255	71472	81572	353676	205325	332546	383373	224835	369416	413069	244345	406286	442766	263855	443157

NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Biffi OLGA-H/OLGAS-H Series

Model	MOP (barg)	Operating supply pressure (barg)														
		BTO	RTO	ETO	200			220			240			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	350	71907	29649	35169	65997	33838	44490	76476	40968	57868	86956	48038	71245	144591	86555	144823
18S-9600-175-OP	275	71866	29624	35129	113809	66026	105527	129073	76206	125013	144337	86385	144499	171049	104199	178600
18S-9600-185-OP	245	71850	29615	35114	131738	77983	128416	148797	89359	150192	165855	100735	171969	170119	103579	177413
18S-9600-200-OP	210	71826	29600	35091	160500	97164	165133							170469	103812	177859
18S-9600-235-OP	150	71761	29560	35028										167515	101842	174088
18S-9800-145-OP	350	91260	37200	43621	56523	20516	20516	67002	30894	33893	77481	38274	47271	135116	77265	120849
18S-9800-175-OP	295	91219	37175	43581	104334	56596	81553	119598	66867	101039	134862	77095	120525	176838	105111	174111
18S-9800-185-OP	265	91204	37166	43566	122264	68656	104442	139322	80078	126218	156380	91468	147995	177703	105688	175216
18S-9800-200-OP	225	91179	37151	43543	151026	87897	141159	170962	101192	166610				175946	104516	172973
18S-9800-235-OP	165	91114	37111	43480										178684	106342	176468
18S-10500-175-OP	310	106444	43581	51330	95880	48598	62692	111144	59015	82178	126408	69329	101664	179832	105104	169865
18S-10500-185-OP	275	106429	43572	51316	113810	60822	85581	130868	72332	107357	147926	83784	129134	177778	103735	167243
18S-10500-200-OP	235	106405	43557	51292	142571	80191	122298	162508	93538	147750				177460	103523	166838
18S-10500-235-OP	170	106340	43517	51229										177111	103290	166391
18S-11000-175-OP	325	119392	51466	63830	83317	39876	46653	98580	50453	66139	113844	60846	85625	178716	104360	168441
18S-11000-185-OP	290	119376	51456	63815	101246	52276	69542	118304	63862	91319	135362	75355	113095	178008	103888	167537
18S-11000-200-OP	250	119352	51441	63791	130008	71753	106259	149944	85136	131711	169881	98468	157162	179849	105116	169887
18S-11000-235-OP	180	119287	51402	63729										178309	104089	167922
32S-12000-175-OP	350	134555	54671	62899	111618	51610	58791	129807	64129	81374	147997	76407	103957	248038	142693	228164
32S-12000-200-OP	325	134509	54642	62854	167258	89282	127871	191015	105057	157367	214773	120766	186864	315742	187195	312223
32S-12000-235-OP	235	134434	54595	62779	257617	149001	240057	290417	170557	280781				315017	186719	311323
32S-12000-250-OP	210	134398	54572	62743	300793	177374	293664							319354	189568	316708
32S-15000-175-OP	350	156616	66040	79017	94864	31462	31462	113053	50388	54045	131242	63100	76628	231284	129946	200835
32S-15000-200-OP	340	156570	66011	78971	150504	76198	100542	174261	92132	130038	198019	107937	159535	316806	186238	307017
32S-15000-235-OP	245	156495	65965	78897	240863	136273	212728	273663	157879	253452	306463	179443	294175	314663	184830	304356
32S-15000-250-OP	215	156459	65942	78861	284039	164712	266335							311880	183002	300901
50S-15400-200-OP	350	169623	66634	73996	180144	90249	117095	206541	108000	149869	232938	125599	182643	378123	221386	362898
50S-15400-235-OP	290	169539	66580	73913	280543	157130	241747	316987	181170	286995	353432	205165	332243	448188	267416	449888
50S-15400-250-OP	255	169500	66555	73873	328517	188762	301309	369762	215894	352518	411008	242990	403727	441942	263313	442134
50S-15400-300-OP	175	169447	66521	73822										435708	259218	434394
50S-15600-200-OP	350	177431	71583	81746	172354	84961	107423	198751	102780	140197	225148	120416	172970	370332	216268	353226
50S-15600-235-OP	295	177347	71530	81663	272752	151985	232074	309197	176039	277323	345642	200040	322571	447686	267087	449266
50S-15600-250-OP	260	177307	71505	81624	320726	183632	291637	361972	210776	342846	403217	237872	394055	444463	264969	445264
50S-15600-300-OP	180	177255	71472	81572										442766	263855	443157

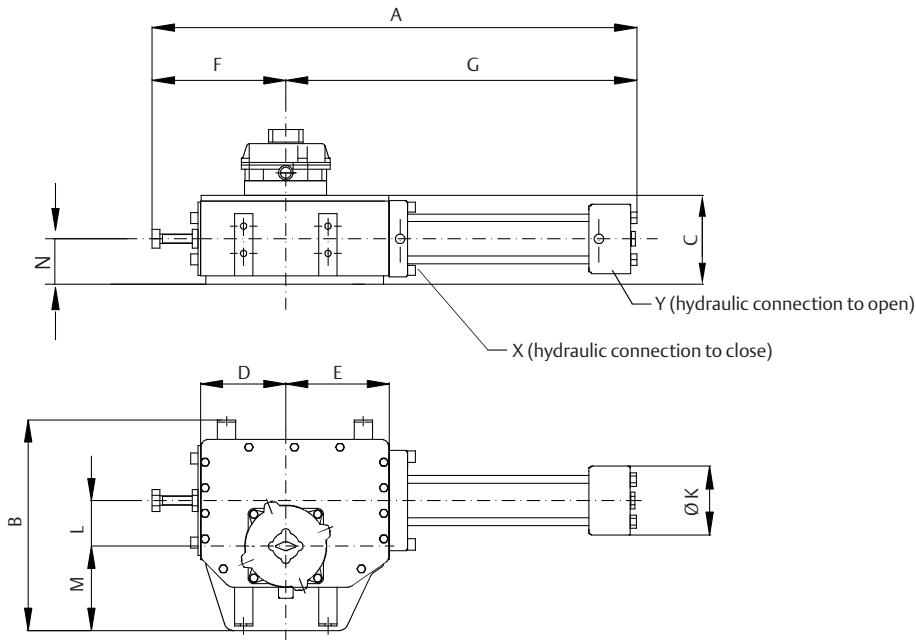
NOTES:

Model 80S is available on request.

- MOP: Maximum Operating Pressure
- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open
- MOT: Maximum Operating Torque

OLGA-H Double-Acting Hydraulic Actuator

Overall Dimensions - Models 0.3-28 to 1.5-95



Dimensions (mm)

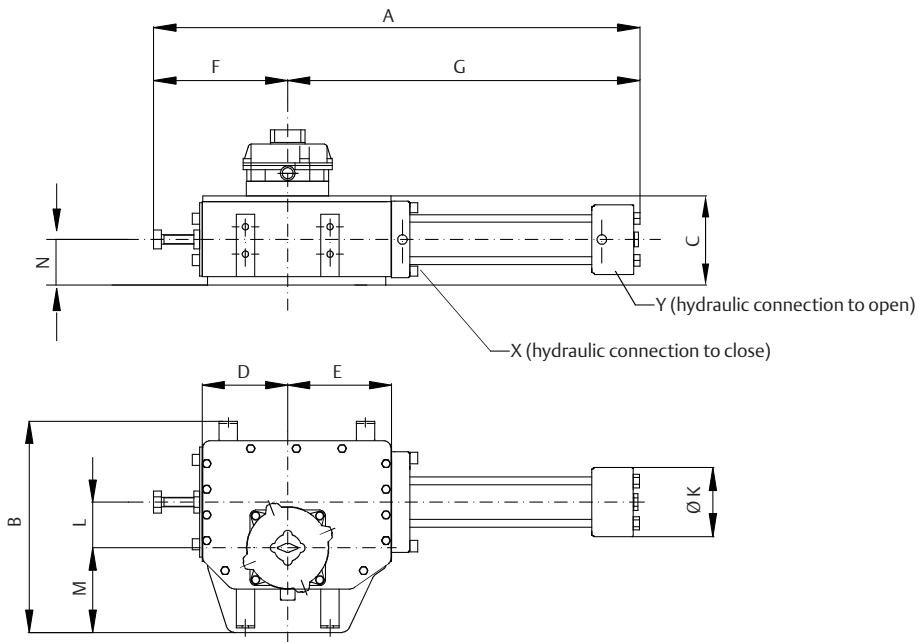
Model	A	B	C	D	E	F	G	ØK	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (kg)	Oil displacement (liters)
0.3-28	753	319	144	136	151	221	532	75	70	119	70	1/2	1/2	40	0.10
0.3-35	747	319	163	136	151	221	526	75	70	119	70	1/2	1/2	43	0.15
0.3-45	772	319	163	136	151	221	551	90	70	119	70	1/2	1/2	51	0.26
0.3-50	772	319	163	136	151	221	551	90	70	119	70	1/2	1/2	47	0.30
0.3-60	798	319	163	136	151	221	577	100	70	119	70	1/2	1/2	51	0.45
0.9-45	837	413	175	160	190	247	590	90	80	170	82	1/2	1/2	68	0.30
0.9-50	837	413	187	160	190	247	590	90	80	170	82	1/2	1/2	58	0.35
0.9-60	863	413	187	160	190	247	616	100	80	170	82	1/2	1/2	63	0.50
0.9-70	934	413	187	160	190	247	687	120	80	170	82	1/2	1/2	81	0.70
0.9-85	933	413	187	160	190	247	686	125	80	170	82	1/2	1/2	86	1.10
1.5-50	1045	477	208	187	227	312	733	90	100	185	100	1/2	1/2	92	0.45
1.5-60	1003	469	227	187	227	312	691	100	100	185	100	1/2	1/2	100	0.65
1.5-70	1036	469	227	187	227	312	724	120	100	185	100	1/2	1/2	117	0.85
1.5-85	1035	469	227	187	227	312	723	125	100	185	100	1/2	1/2	122	1.30
1.5-95	1082	477	208	187	227	312	770	140	100	185	100	3/4	3/4	128	1.70

NOTE:

MHP manual override is available as an option

OLGA-H Double-Acting Hydraulic Actuator

Overall Dimensions - 3-60 to 6-125



Dimensions (mm)

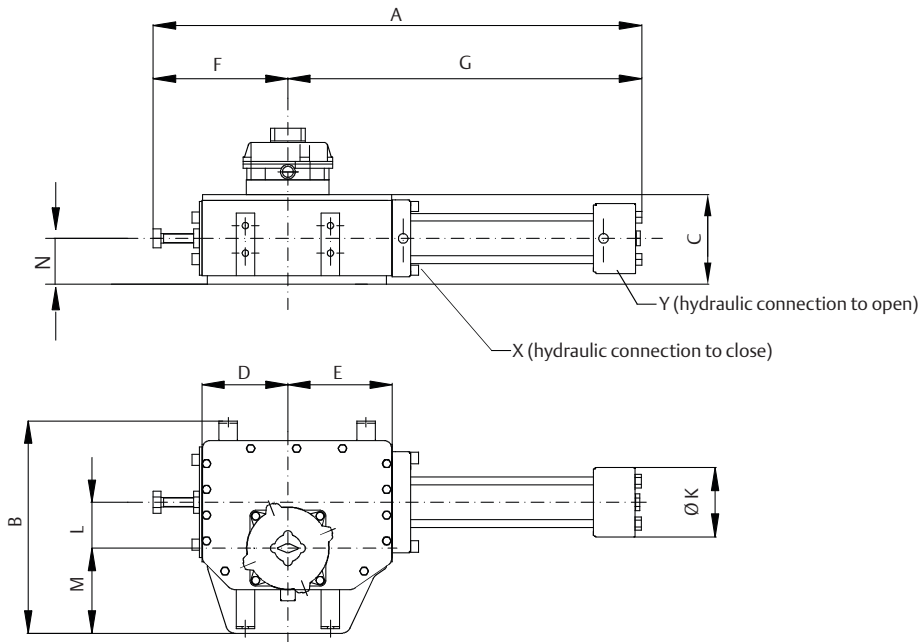
Model	A	B	C	D	E	F	G	ØK	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (kg)	Oil displacement (liters)
3-60	1363	586	234	285	330	409	954	100	160	215	106	1/2	1/2	183	1.0
3-70	1372	586	234	285	330	409	963	120	160	215	106	1/2	1/2	193	1.4
3-85	1372	586	234	285	330	409	963	125	160	215	106	1/2	1/2	198	2.0
3-90	1478	586	215	285	330	409	1069	140	160	215	106	3/4	3/4	193	2.3
3-95	1476	586	234	285	330	409	1067	140	160	215	106	3/4	3/4	237	2.5
3-110	1512	586	234	285	330	409	1103	170	160	215	106	3/4	3/4	245	3.4
6-70	1538	740	297	327	379	466	1072	120	185	260	140	1/2	1/2	320	1.6
6-85	1664	740	297	327	379	560	1104	125	185	260	140	1/2	1/2	327	2.4
6-90	1578	740	297	327	379	466	1116	140	185	260	140	3/4	3/4	378	2.6
6-95	1582	740	297	327	379	466	1116	140	185	260	140	3/4	3/4	380	2.6
6-110	1618	740	297	327	379	466	1152	170	185	260	140	3/4	3/4	388	2.9
6-125	1677	740	297	327	379	466	1211	190	185	260	140	3/4	3/4	408	3.2

NOTE:

MHP manual override is available as an option

OLGA-H Spring-Return Hydraulic Actuator

Overall Dimensions - Models 14-85 to 80-200



Dimensions (mm)

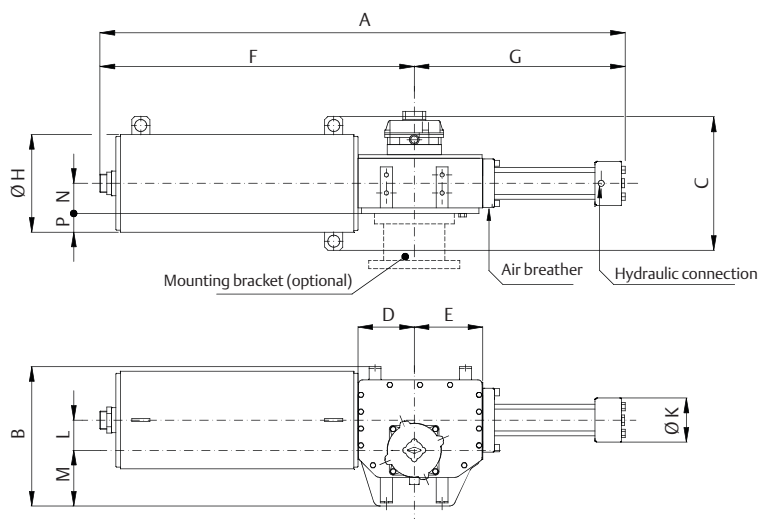
Model	A	B	C	D	E	F	G	ØK	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (kg)	Oil displacement (liters)
14-85	1693	873	391	376	435	497	1196	125	200	330	193	1/2	1/2	480	2.5
14-95	1718	873	391	376	435	497	1221	140	200	330	193	3/4	3/4	488	3.2
14-110	1770	873	391	376	435	497	1273	170	200	330	193	3/4	3/4	518	4.2
14-125	1800	838	410	376	435	533	1267	190	200	295	193	3/4	3/4	630	5.4
14-135	1807	838	410	376	435	533	1274	200	200	295	193	3/4	3/4	650	6.2
14-145	1886	838	410	376	435	533	1353	250	200	295	193	3/4	3/4	695	7.3
14-175	1890	838	410	376	435	533	1357	280	200	295	193	3/4	3/4	775	10.6
14-185	1890	838	410	376	435	533	1357	280	200	295	193	3/4	3/4	821	12.0
14-200	1958	838	410	376	435	533	1425	320	200	295	193	3/4	3/4	850	13.8
18-125	1931	955	406	425	493	546	1385	190	230	355	193	3/4	3/4	744	6.4
18-145	1993	940	406	425	493	582	1411	250	230	340	193	3/4	3/4	850	8.4
18-175	1997	940	406	425	493	582	1415	280	230	340	193	3/4	3/4	925	12.2
18-185	1997	940	406	425	493	582	1415	280	230	340	193	3/4	3/4	753	14.0
18-200	2065	940	406	425	493	582	1483	320	230	340	193	3/4	3/4	1000	15.9
32-145	2260	1055	457	505	585	620	1640	250	270	395	233	3/4	3/4	1206	10.0
32-175	2233	1055	473	505	585	620	1613	280	270	395	232	3/4	3/4	1480	14.3
32-200	2290	1055	473	505	585	620	1670	320	270	395	232	3/4	3/4	1550	18.6
50-175	2466	1092	471	548	636	693	1773	280	300	387	233	3/4	3/4	1455	16.0
50-200	2518	1092	471	548	636	693	1825	320	300	387	233	3/4	3/4	1700	20.7
80-200	2908	1350	591	663	761	808	2100	320	350	450	302	3/4	3/4	2690	24.0

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 0.3-008A-20-CL to 0.3-0150-60-CL



Dimensions (mm)

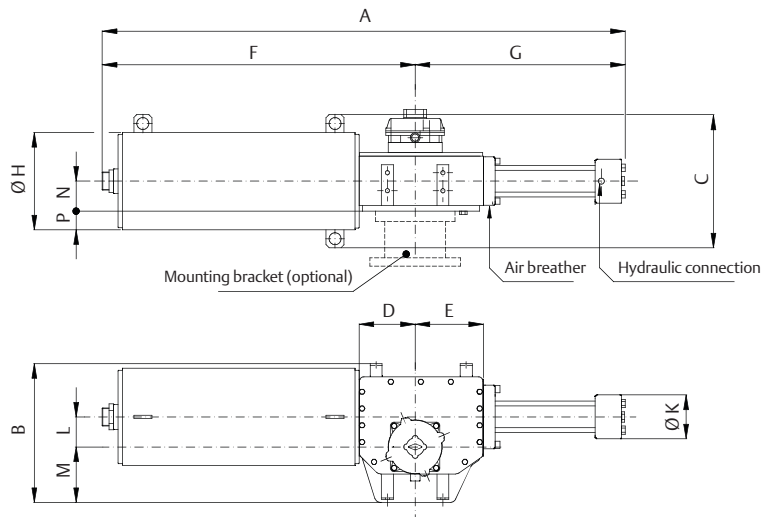
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
0.3-008A-20-CL	1178	319	200	136	151	715	463	150	54	70	119	70	4	3/8	60	0.05
0.3-008A-28-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.10
0.3-008A-35-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.15
0.3-008B-20-CL	1178	319	315	136	151	730	448	150	54	70	119	70	4	3/8	60	0.05
0.3-008B-28-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.10
0.3-008B-35-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.15
0.3-008-20-CL	1178	319	315	136	151	730	448	150	54	70	119	70	4	3/8	60	0.05
0.3-008-28-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.10
0.3-008-35-CL	1241	319	200	136	151	715	526	150	75	70	119	70	4	1/2	60	0.15
0.3-0100-28-CL	1342	319	280	136	151	816	526	223	75	70	119	70	36	1/2	65	0.10
0.3-0100-35-CL	1342	319	280	136	151	816	526	223	75	70	119	70	36	1/2	65	0.15
0.3-0100-40-CL	1341	319	280	136	151	816	525	223	75	70	119	70	36	1/2	65	0.20
0.3-0100-45-CL	1367	319	293	136	151	816	551	223	90	70	119	70	43	1/2	83	0.26
0.3-0100-50-CL	1367	319	293	136	151	816	551	223	90	70	119	70	42	1/2	85	0.30
0.3-0150-35-CL	1289	319	283	136	151	763	526	223	75	70	119	70	42	1/2	74	0.15
0.3-0150-40-CL	1288	319	283	136	151	763	525	223	75	70	119	70	42	1/2	76	0.20
0.3-0150-45-CL	1314	319	283	136	151	763	551	223	90	70	119	70	42	1/2	78	0.26
0.3-0150-50-CL	1314	319	283	136	151	763	551	223	90	70	119	70	42	1/2	80	0.30
0.3-0150-60-CL	1340	319	283	136	151	763	577	223	100	70	119	70	42	1/2	84	0.45

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 0.9-0200-40-CL to 3-2000-110-CL



Dimensions (mm)

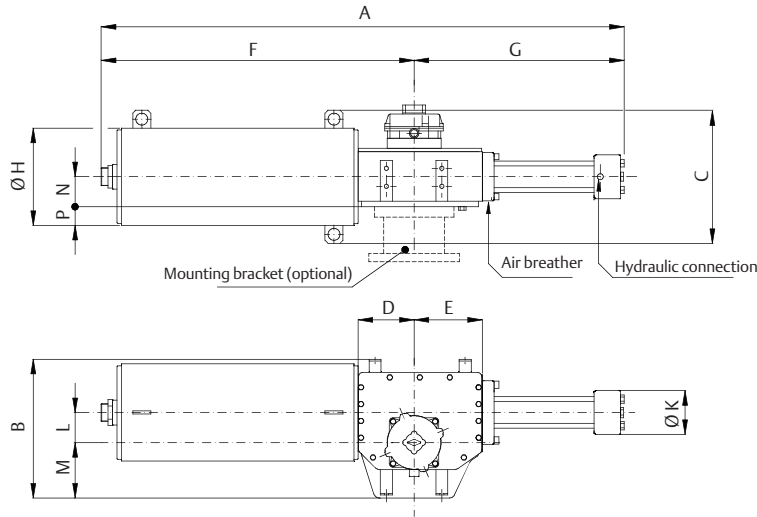
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
0.9-0200-40-CL	1421	413	300	160	190	857	564	280	80	80	170	83	37	1/2	141	0.23
0.9-0200-45-CL	1447	413	300	160	190	857	590	280	90	80	170	83	37	1/2	143	0.30
0.9-0200-50-CL	1447	413	300	160	190	857	590	280	90	80	170	83	37	1/2	145	0.45
0.9-0200-60-CL	1473	413	300	160	190	857	616	280	100	80	170	83	37	1/2	150	0.50
0.9-0250-40-CL	1350	413	300	160	190	786	564	280	80	80	170	83	37	1/2	141	0.23
0.9-0250-45-CL	1376	413	300	160	190	786	590	280	90	80	170	83	37	1/2	143	0.30
0.9-0250-50-CL	1376	413	300	160	190	786	590	280	90	80	170	83	37	1/2	145	0.35
0.9-0250-60-CL	1402	413	300	160	190	786	616	280	100	80	170	83	37	1/2	150	0.50
0.9-0250-70-CL	1473	413	300	160	190	786	687	280	120	80	170	83	37	1/2	155	0.70
0.9-0350-45-CL	1500	413	370	160	190	910	590	350	90	80	170	83	73	1/2	180	0.30
0.9-0350-50-CL	1500	413	370	160	190	910	590	350	90	80	170	83	73	1/2	185	0.35
0.9-0350-60-CL	1526	413	370	160	190	910	616	350	100	80	170	83	73	1/2	189	0.50
0.9-0350-70-CL	1597	413	370	160	190	910	687	350	120	80	170	83	73	1/2	202	0.70
0.9-0350-85-CL	1597	413	370	160	190	910	686	350	125	80	170	83	73	1/2	207	1.10
0.9-0400-50-CL	1434	413	370	160	190	844	590	350	90	80	170	83	73	1/2	174	0.35
0.9-0400-60-CL	1460	413	370	160	190	844	616	350	100	80	170	83	73	1/2	178	0.50
0.9-0400-70-CL	1530	413	370	160	190	844	686	350	120	80	170	83	73	1/2	197	0.70
0.9-0400-85-CL	1530	413	370	160	190	844	686	350	125	80	170	83	73	1/2	202	1.10
0.9-0700-60-CL	1487	413	370	160	190	871	616	350	100	80	170	83	73	1/2	200	0.50
0.9-0700-70-CL	1558	413	370	160	190	871	687	350	120	80	170	83	73	1/2	220	0.70
0.9-0700-85-CL	1557	413	370	160	190	871	686	350	125	80	170	83	73	1/2	224	1.10
1.5-1100-70-CL	1732	470	440	187	227	1008	724	400	120	100	185	100	85	1/2	349	0.85
1.5-1100-85-CL	1731	470	440	187	227	1008	723	400	125	100	185	100	85	1/2	368	1.30
1.5-1100-95-CL	1772	470	440	187	227	1008	764	400	140	100	185	100	85	3/4	305	1.70
1.5-1100-110-CL	1797	470	440	187	227	1008	789	400	170	100	185	100	85	3/4	325	2.20
1.5-1200-70-CL	1801	470	384	187	227	1077	724	324	120	100	185	100	62	1/2	327	0.85
1.5-1200-85-CL	1800	470	384	187	227	1077	723	324	125	100	185	100	62	1/2	341	1.30
1.5-1200-95-CL	1841	470	384	187	227	1077	764	324	140	100	185	100	62	3/4	300	1.70
1.5-1200-110-CL	1866	470	384	187	227	1077	788	324	170	100	185	100	62	3/4	328	2.20
3-2000-70-CL	2356	586	466	285	330	1393	963	415	120	160	215	106	98	1/2	595	1.40
3-2000-85-CL	2356	586	466	285	330	1393	963	415	125	160	215	106	98	1/2	610	2.00
3-2000-95-CL	2460	586	466	285	330	1393	1067	415	140	160	215	106	98	3/4	633	2.50
3-2000-110-CL	2496	586	466	285	330	1393	1103	415	170	160	215	106	98	3/4	646	3.40

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 6-2500-85-CL to 14-8300-200-CL



Dimensions (mm)

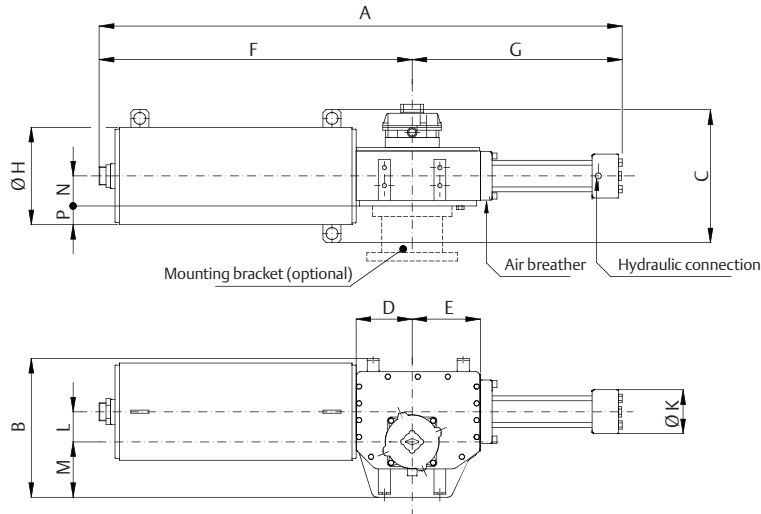
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
6-2500-85-CL	3004	740	443	327	379	1906	1098	383	125	185	260	140	52	3/4	825	2.4
6-2500-95-CL	3022	740	443	327	379	1906	1116	383	140	185	260	140	52	3/4	841	2.9
6-2500-110-CL	3058	740	443	327	379	1906	1152	383	170	185	260	140	52	3/4	851	3.9
6-2500-125-CL	3117	740	443	327	379	1906	1211	383	190	185	260	140	52	3/4	870	4.6
6-2500-135-CL	3124	740	443	327	379	1906	1218	383	200	185	260	140	52	3/4	884	5.8
6-3800-85-CL	3234	740	600	327	379	2136	1098	530	125	185	260	140	125	3/4	1480	2.4
6-3800-95-CL	3252	740	600	327	379	2136	1116	530	140	185	260	140	125	3/4	1354	2.9
6-3800-110-CL	3288	740	600	327	379	2136	1152	530	170	185	260	140	125	3/4	1364	3.9
6-3800-125-CL	3347	740	600	327	379	2136	1211	530	190	185	260	140	125	3/4	1384	4.6
6-3800-135-CL	3354	740	600	327	379	2136	1218	530	200	185	260	140	125	3/4	1397	5.8
14-5100-95-CL	3313	873	601	376	435	2092	1221	530	140	200	330	193	72	3/4	1537	3.2
14-5100-110-CL	3366	873	601	376	435	2092	1273	530	170	200	330	193	72	3/4	1565	4.2
14-5100-125-CL	3359	873	601	376	435	2092	1267	530	190	200	330	193	72	3/4	1602	5.4
14-5100-135-CL	3366	873	601	376	435	2092	1274	530	200	200	330	193	72	3/4	1700	6.4
14-5100-145-CL	3445	873	601	376	435	2092	1353	530	250	200	330	193	72	3/4	1766	7.3
14-5100-175-CL	3449	873	601	376	435	2092	1357	530	250	200	330	193	72	3/4	1835	10.6
14-5100-200-CL	3517	873	601	376	435	2092	1425	530	280	200	330	193	72	3/4	1960	13.8
14-5400-110-CL	3313	873	601	376	435	2040	1273	530	170	200	330	193	72	3/4	1635	4.2
14-5400-125-CL	3307	873	601	376	435	2040	1267	530	190	200	330	193	72	3/4	1650	5.4
14-5400-135-CL	3314	873	601	376	435	2040	1274	530	200	200	330	193	72	3/4	1670	6.2
14-5400-145-CL	3393	873	601	376	435	2040	1353	530	250	200	330	193	72	3/4	1710	7.3
14-5400-175-CL	3397	873	601	376	435	2040	1357	530	250	200	295	193	72	3/4	1790	10.6
14-5400-185-CL	3397	873	601	376	435	2040	1357	530	280	200	295	193	72	3/4"	1845	12
14-5400-200-CL	3465	873	601	376	435	2040	1425	530	280	200	295	193	72	3/4	1860	13.8
14-8300-125-CL	3370	838	600	376	435	2103	1267	530	190	200	295	193	72	3/4	1700	5.4
14-8300-135-CL	3377	838	600	376	435	2103	1274	530	200	200	295	193	72	3/4	1720	6.2
14-8300-145-CL	3456	838	600	376	435	2103	1353	530	250	200	295	193	72	3/4	1760	7.3
14-8300-175-CL	3460	838	600	376	435	2103	1357	530	280	200	295	193	72	3/4	1840	10.6
14-8300-185-CL	3460	838	600	376	435	2103	1357	530	280	200	295	193	72	3/4	1895	12
14-8300-200-CL	3528	838	600	376	435	2103	1425	530	320	200	295	193	72	3/4	1910	13.8

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Close, Models 18-9600-145-CL to 50-15600-300-CL



Dimensions (mm)

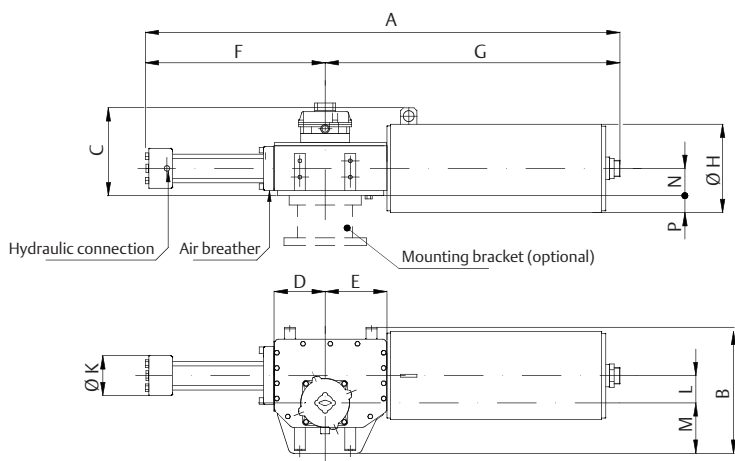
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
18-9600-145-CL	4106	940	739	425	493	2695	1411	559	250	230	340	193	86	3/4	2670	8.4
18-9600-175-CL	4110	940	739	425	493	2695	1415	559	280	230	340	193	86	3/4	2750	12.2
18-9600-185-CL	4110	940	739	425	493	2695	1415	559	280	230	340	193	86	3/4	2762	14.0
18-9600-200-CL	4178	940	739	425	493	2695	1483	559	320	230	340	193	86	3/4	2840	15.9
18-9600-235-CL	4174	955	739	425	493	2695	1479	559	345	230	355	193	86	3/4	2918	21.0
18-9800-145-CL	4096	940	738	425	493	2685	1411	559	250	230	340	193	86	3/4	2900	8.4
18-9800-175-CL	4100	940	738	425	493	2685	1415	559	280	230	340	193	86	3/4	2970	12.2
18-9800-185-CL	4100	940	738	425	493	2685	1415	559	280	230	340	193	86	3/4	2980	14.0
18-9800-200-CL	4168	955	738	425	493	2685	1483	559	320	230	340	193	86	3/4	3050	15.9
18-9800-235-CL	4164	955	738	425	493	2685	1479	559	345	230	340	193	86	3/4	2825	21.0
18-10500-175-CL	4184	955	850	425	493	2769	1415	670	280	230	340	193	142	3/4	3310	12.2
18-10500-185-CL	4184	955	850	425	493	2769	1415	670	280	230	340	193	142	3/4	3300	14.0
18-10500-200-CL	4252	955	850	425	493	2769	1483	670	230	355	340	193	142	3/4	3435	15.9
18-10500-235-CL	4248	955	850	425	493	2769	1479	670	230	355	340	193	142	3/4	3478	21.0
18-11000-175-CL	4068	940	850	425	493	2653	1415	670	230	355	340	193	142	3/4	3460	12.2
18-11000-185-CL	4068	955	850	425	493	2653	1415	670	230	355	340	193	142	3/4	3922	14.0
18-11000-200-CL	4136	940	850	425	493	2653	1483	670	320	230	340	193	142	3/4	3515	15.9
18-11000-235-CL	4132	940	850	425	493	2653	1479	670	345	230	340	193	142	3/4	3625	21.0
32-12000-175-CL	4522	1065	980	505	585	2909	1613	800	280	270	395	233	258	3/4	4616	14.3
32-12000-200-CL	4579	1130	980	505	585	2909	1670	800	320	270	420	240	161	3/4	4500	18.6
32-12000-235-CL	4555	1065	980	505	585	2889	1666	800	345	270	395	233	258	3/4	4392	25.6
32-12000-250-CL	4643	1065	980	505	585	2889	1754	800	390	270	395	233	258	3/4	4413	29.0
32-15000-175-CL	4522	1065	980	505	585	2909	1613	800	280	270	395	233	258	3/4	4445	14.3
32-15000-200-CL	4579	1065	980	505	585	2909	1670	800	320	270	395	233	258	3/4	4555	18.6
32-15000-235-CL	4575	1065	980	505	585	2909	1665	800	345	270	395	233	258	3/4	4598	25.6
32-15000-250-CL	4663	1065	980	505	585	2909	1754	800	390	270	395	233	258	3/4	4769	29.0
50-15400-200-CL	4852	1092	980	548	633	3027	1825	800	320	300	387	233	257	3/4	5713	20.7
50-15400-235-CL	4944	1092	980	548	633	3027	1917	800	345	300	387	233	257	3/4	5154	28.6
50-15400-250-CL	4829	1087	980	548	633	3027	1802	800	390	300	382	233	257	3/4	5175	32.0
50-15400-300-CL	4934	1092	980	551	636	3027	1907	800	460	300	387	233	257	1	5734	46.0
50-15600-200-CL	4852	1092	980	548	633	3027	1825	800	320	152	387	233	257	3/4	5608	20.7
50-15600-235-CL	4944	1092	980	548	633	3027	1796	800	345	300	387	233	257	3/4	5672	28.6
50-15600-250-CL	4829	1087	980	548	633	3027	1802	800	390	300	382	233	257	3/4	5175	32.0
50-15600-300-CL	4934	1092	1080	551	636	3027	1907	800	460	300	387	233	257	1	5520	46.0

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 0.3-008A-20-OP to 0.3-0150-60-OP



Dimensions (mm)

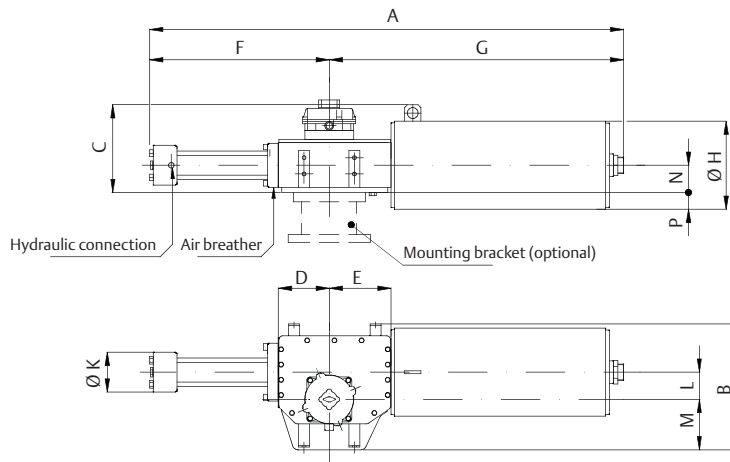
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
0.3-008A-20-OP	1178	319	200	136	151	448	730	150	54	70	119	70	4	3/8	60	0.05
0.3-008A-28-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.10
0.3-008A-35-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.15
0.3-008B-20-OP	1178	319	315	136	151	448	730	150	54	70	119	70	4	3/8	60	0.05
0.3-008B-28-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.10
0.3-008B-35-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.15
0.3-008-20-OP	1178	319	315	136	151	448	730	150	54	70	119	70	4	3/8	60	0.05
0.3-008-28-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.10
0.3-008-35-OP	1241	319	200	136	151	511	730	150	75	70	119	70	4	1/2	60	0.15
0.3-0100-28-OP	1342	319	280	136	151	511	830	223	75	70	119	70	36	1/2	65	0.10
0.3-0100-35-OP	1342	319	280	136	151	511	830	223	75	70	119	70	36	1/2	65	0.15
0.3-0100-40-OP	1341	319	280	136	151	510	830	223	75	70	119	70	36	1/2	65	0.20
0.3-0100-45-OP	1367	319	293	136	151	537	830	223	90	70	119	70	43	1/2	83	0.26
0.3-0100-50-OP	1367	319	293	136	151	537	830	223	90	70	119	70	42	1/2	85	0.30
0.3-0150-35-OP	1289	319	283	136	151	511	778	223	75	70	119	70	42	1/2	74	0.15
0.3-0150-40-OP	1288	319	283	136	151	510	778	223	75	70	119	70	42	1/2	76	0.20
0.3-0150-45-OP	1314	319	283	136	151	536	778	223	90	70	119	70	42	1/2	78	0.26
0.3-0150-50-OP	1314	319	283	136	151	536	778	223	90	70	119	70	42	1/2	80	0.30
0.3-0150-60-OP	1340	319	283	136	151	562	778	223	100	70	119	70	42	1/2	84	0.45

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 0.9-0200-40-OP to 3-2000-110-OP



Dimensions (mm)

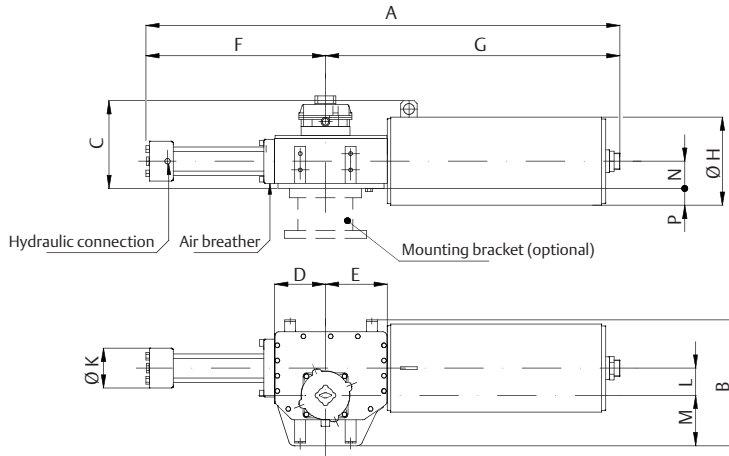
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
0.9-0200-40-OP	1421	413	300	160	190	534	887	280	80	80	170	83	37	1/2	141	0.23
0.9-0200-45-OP	1447	413	300	160	190	560	887	280	90	80	170	83	37	1/2	143	0.30
0.9-0200-50-OP	1447	413	300	160	190	560	887	280	90	80	170	83	37	1/2	145	0.45
0.9-0200-60-OP	1473	413	300	160	190	586	887	280	100	80	170	83	37	1/2	150	0.50
0.9-0250-40-OP	1350	413	300	160	190	534	816	280	80	80	170	83	37	1/2	141	0.23
0.9-0250-45-OP	1376	413	300	160	190	560	816	280	90	80	170	83	37	1/2	143	0.30
0.9-0250-50-OP	1376	413	300	160	190	560	816	280	90	80	170	83	37	1/2	145	0.35
0.9-0250-60-OP	1402	413	300	160	190	586	816	280	100	80	170	83	37	1/2	150	0.50
0.9-0250-70-OP	1473	413	300	160	190	657	816	280	120	80	170	83	37	1/2	155	0.70
0.9-0350-45-OP	1500	413	370	160	190	560	940	350	90	80	170	83	73	1/2	180	0.30
0.9-0350-50-OP	1500	413	370	160	190	560	940	350	90	80	170	83	73	1/2	185	0.35
0.9-0350-60-OP	1526	413	370	160	190	586	940	350	100	80	170	83	73	1/2	189	0.50
0.9-0350-70-OP	1597	413	370	160	190	657	940	350	120	80	170	83	73	1/2	202	0.70
0.9-0350-85-OP	1597	413	370	160	190	656	940	350	125	80	170	83	73	1/2	207	1.10
0.9-0400-50-OP	1434	413	370	160	190	560	874	350	90	80	170	83	73	1/2	174	0.35
0.9-0400-60-OP	1460	413	370	160	190	586	874	350	100	80	170	83	73	1/2	178	0.50
0.9-0400-70-OP	1530	413	370	160	190	657	874	350	120	80	170	83	73	1/2	197	0.70
0.9-0400-85-OP	1530	413	370	160	190	656	874	350	125	80	170	83	73	1/2	202	1.10
0.9-0700-60-OP	1487	413	370	160	190	586	901	350	100	80	170	83	73	1/2	200	0.50
0.9-0700-70-OP	1558	413	370	160	190	657	901	350	120	80	170	83	73	1/2	220	0.70
0.9-0700-85-OP	1557	413	370	160	190	656	901	350	125	80	170	83	73	1/2	224	1.10
1.5-1100-70-OP	1732	470	440	187	227	684	1048	400	120	100	185	100	85	1/2	349	0.85
1.5-1100-85-OP	1731	470	440	187	227	683	1048	400	125	100	185	100	85	1/2	368	1.30
1.5-1100-95-OP	1772	470	440	187	227	724	1048	400	140	100	185	100	85	3/4	305	1.70
1.5-1100-110-OP	1797	470	440	187	227	749	1048	400	170	100	185	100	85	3/4	325	2.20
1.5-1200-70-OP	1801	470	384	187	227	684	1119	324	120	100	185	100	62	1/2	327	0.85
1.5-1200-85-OP	1800	470	384	187	227	683	1117	324	125	100	185	100	62	1/2	341	1.30
1.5-1200-95-OP	1841	470	384	187	227	724	1117	324	140	100	185	100	62	3/4	300	1.70
1.5-1200-110-OP	1866	470	384	187	227	749	1117	324	170	100	185	100	62	3/4	328	2.20
3-2000-70-OP	2356	586	466	285	330	918	1438	415	120	160	215	106	98	1/2	595	1.40
3-2000-85-OP	2356	586	466	285	330	918	1438	415	125	160	215	106	98	1/2	610	2.00
3-2000-95-OP	2460	586	466	285	330	1022	1438	415	140	160	215	106	98	3/4	633	2.50
3-2000-110-OP	2496	586	466	285	330	1058	1438	415	170	160	215	106	98	3/4	646	3.40

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 6-2500-85-OP to 14-8300-200-OP



Dimensions (mm)

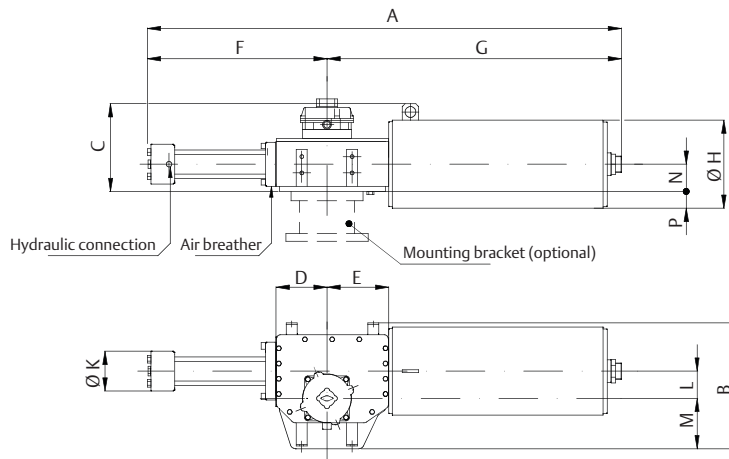
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
6-2500-85-OP	3004	740	443	327	379	1046	1958	383	125	185	260	140	52	3/4	825	2.4
6-2500-95-OP	3022	740	443	327	379	1064	1958	383	140	185	260	140	52	3/4	841	2.9
6-2500-110-OP	3058	740	443	327	379	1100	1958	383	170	185	260	140	52	3/4	851	3.9
6-2500-125-OP	3117	740	443	327	379	1159	1958	383	190	185	260	140	52	3/4	870	4.6
6-2500-135-OP	3124	740	443	327	379	1166	1958	383	200	185	260	140	52	3/4	884	5.8
6-3800-85-OP	3234	740	600	327	379	1046	2188	530	125	185	260	140	125	3/4	1480	2.4
6-3800-95-OP	3252	740	600	327	379	1064	2188	530	140	185	260	140	125	3/4	1354	2.9
6-3800-110-OP	3288	740	600	327	379	1100	2188	530	170	185	260	140	125	3/4	1364	3.9
6-3800-125-OP	3347	740	600	327	379	1159	2188	530	190	185	260	140	125	3/4	1384	4.6
6-3800-135-OP	3354	740	600	327	379	1166	2188	530	200	185	260	140	125	3/4	1397	5.8
14-5100-95-OP	3313	873	601	376	435	1162	2151	530	140	200	330	193	72	3/4	1537	3.2
14-5100-110-OP	3366	873	601	376	435	1214	2151	530	170	200	330	193	72	3/4	1565	4.2
14-5100-125-OP	3359	873	601	376	435	14208	2151	530	190	200	330	193	72	3/4	1602	5.4
14-5100-135-OP	3366	873	601	376	435	1215	2151	530	200	200	330	193	72	3/4	1700	6.4
14-5100-145-OP	3445	873	601	376	435	1294	2151	530	250	200	330	193	72	3/4	1766	7.3
14-5100-175-OP	3449	873	601	376	435	1298	2151	530	250	200	330	193	72	3/4	1835	10.6
14-5100-200-OP	3517	873	601	376	435	1366	2151	530	280	200	330	193	72	3/4	1960	13.8
14-5400-110-OP	3313	873	601	376	435	1214	2099	530	170	200	330	193	72	3/4	1635	4.2
14-5400-125-OP	3307	873	601	376	435	1208	2099	530	190	200	330	193	72	3/4	1650	5.4
14-5400-135-OP	3314	873	601	376	435	1215	2099	530	200	200	330	193	72	3/4	1670	6.2
14-5400-145-OP	3393	873	601	376	435	1294	2099	530	250	200	330	193	72	3/4	1710	7.3
14-5400-175-OP	3397	873	601	376	435	1298	2099	530	250	200	295	193	72	3/4	1790	10.6
14-5400-185-OP	3397	873	601	376	435	1298	2099	530	280	200	295	193	72	3/4	1845	12.0
14-5400-200-OP	3465	873	601	376	435	1366	2099	530	280	200	295	193	72	3/4	1860	13.8
14-8300-125-OP	3370	838	600	376	435	1208	2162	530	190	200	295	193	72	3/4	1700	5.4
14-8300-135-OP	3377	838	600	376	435	1215	2162	530	200	200	295	193	72	3/4	1720	6.2
14-8300-145-OP	3456	838	600	376	435	1294	2162	530	250	200	295	193	72	3/4	1760	7.3
14-8300-175-L	3460	838	600	376	435	1298	2162	530	280	200	295	193	72	3/4	1840	10.6
14-8300-185-OP	3460	838	600	376	435	1298	2162	530	280	200	295	193	72	3/4	1895	12.0
14-8300-200-OP	3528	838	600	376	435	1366	2162	530	320	200	295	193	72	3/4	1910	13.8

NOTE:

MHP manual override is available as an option

OLGAS-H Spring-Return Hydraulic Actuator

Overall Dimensions - Spring to Open, Models 18-9600-145-OP to 50-15600-300-OP



Dimensions (mm)

Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (kg)	Oil displacement (liters)
18-9600-145-OP	4106	940	739	425	493	1343	2763	559	250	230	340	193	86	3/4	2670	8.4
18-9600-175-OP	4110	940	739	425	493	1347	2763	559	280	230	340	193	86	3/4	2750	12.2
18-9600-185-OP	4110	940	739	425	493	1347	2763	559	280	230	340	193	86	3/4	2762	14.0
18-9600-200-OP	4178	940	739	425	493	1415	2763	559	320	230	340	193	86	3/4	2840	15.9
18-9600-235-OP	4174	955	739	425	493	1411	2763	559	345	230	355	193	86	3/4	2918	21.0
18-9800-145-OP	4096	940	738	425	493	1343	2753	559	250	230	340	193	86	3/4	2900	8.4
18-9800-175-OP	4100	940	738	425	493	1347	2753	559	280	230	340	193	86	3/4	2970	12.2
18-9800-185-OP	4100	940	738	425	493	1347	2753	559	280	230	340	193	86	3/4	2980	14.0
18-9800-200-OP	4168	955	738	425	493	1415	2753	559	320	230	340	193	86	3/4	3050	15.9
18-9800-235-OP	4164	955	738	425	493	1411	2753	559	345	230	340	193	86	3/4	2825	21.0
18-10500-175-OP	4184	955	850	425	493	1347	2837	670	280	230	340	193	142	3/4	3310	12.2
18-10500-185-OP	4184	955	850	425	493	1347	2837	670	280	230	340	193	142	3/4	3300	14.0
18-10500-200-OP	4252	955	850	425	493	1415	2837	670	230	355	340	193	142	3/4	3435	15.9
18-10500-235-OP	4248	955	850	425	493	1411	2837	670	230	355	340	193	142	3/4	3478	21.0
18-11000-175-OP	4068	940	850	425	493	1347	2721	670	230	355	340	193	142	3/4	3460	12.2
18-11000-185-OP	4068	955	850	425	493	1395	2721	670	230	355	340	193	142	3/4	3922	14.0
18-11000-200-OP	4136	940	850	425	493	1415	2721	670	320	230	340	193	142	3/4	3515	15.9
18-11000-235-OP	4132	940	850	425	493	1411	2721	670	345	230	340	193	142	3/4	3625	21.0
32-12000-175-OP	4522	1065	980	505	585	1516	2989	800	280	270	395	233	258	3/4	4616	14.3
32-12000-200-OP	4579	1130	980	505	585	1503	2969	800	320	270	420	240	161	3/4	4500	18.6
32-12000-235-OP	4555	1065	980	505	585	1586	2969	800	345	270	395	233	258	3/4	4392	25.6
32-12000-250-OP	4643	1065	980	505	585	1674	2969	800	390	270	395	233	258	3/4	4413	29.0
32-15000-175-OP	4522	1065	980	505	585	1533	2989	800	280	270	395	233	258	3/4	4445	14.3
32-15000-200-OP	4579	1065	980	505	585	1578	2989	800	320	270	395	233	258	3/4	4555	18.6
32-15000-235-OP	4575	1065	980	505	585	1586	2989	800	345	270	395	233	258	3/4	4598	25.6
32-15000-250-OP	4663	1065	980	505	585	1674	2989	800	390	270	395	233	258	3/4	4769	29.0
50-15400-200-OP	4852	1092	980	551	636	1740	3112	800	320	300	387	233	257	3/4	5713	20.7
50-15400-235-OP	4944	1092	1080	551	636	1832	3112	800	340	300	387	233	257	3/4	5154	28.6
50-15400-250-OP	4829	1092	1080	551	636	1717	3112	800	390	300	387	233	257	3/4	5175	32.0
50-15400-300-OP	4934	1092	1080	551	636	1822	3112	800	460	300	387	233	257	1	5734	46.0
50-15600-200-OP	4840	1092	1080	551	636	1728	3112	800	320	300	387	233	257	3/4	5608	20.7
50-15600-235-OP	4944	1092	1080	551	636	1832	3112	800	345	300	387	233	257	3/4	5672	28.6
50-15600-250-OP	4829	1092	1080	551	636	1717	3112	800	390	300	387	233	257	3/4	5175	32.0
50-15600-300-OP	4934	1092	980	551	636	1822	3112	800	460	300	387	233	257	1	5520	46.0

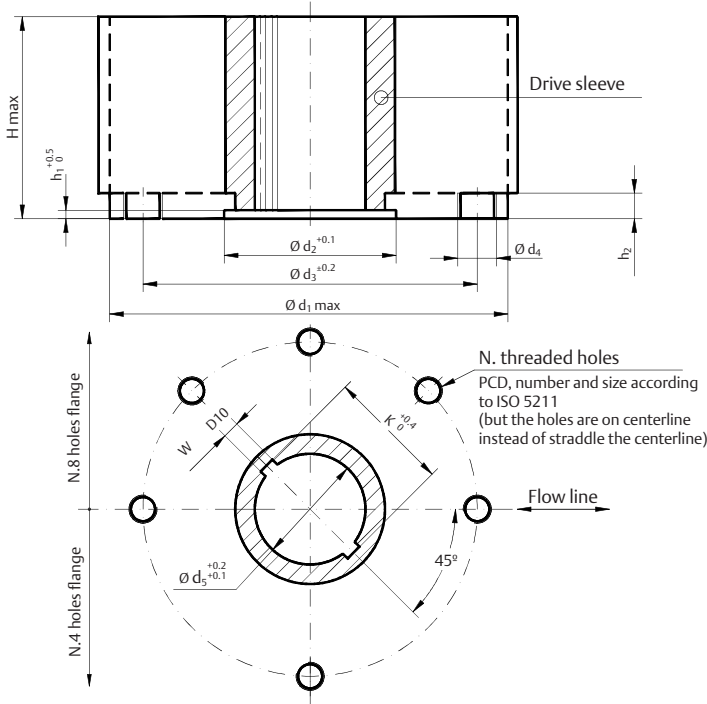
NOTE:

MHP manual override is available as an option

OLGA-H/OLGAS-H Hydraulic Actuator

Mounting Dimensions

Actuator models 0.3 to 6.0



Top view of the scotch yoke mechanism
(actuator shown in closed position)

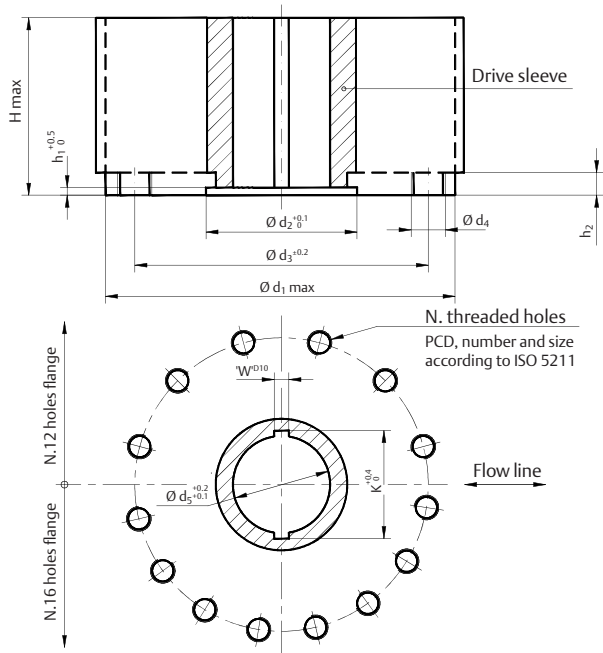
Coupling dimensions (mm) models 0.3 to 0.6

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
0.3	240	93	165	M20	4	5	17	127	70	12	75.6
0.9	310	112	254	M16	8	5	19	150	86	14	93.6
1.5	360	144	298	M20	8	6	19	190	112	18	119.0
3	430	195	356	M30	8	9	23	200	157	25	167.8
6	520	250	406	M36	8	14	29	260	200	28	212.8

NOTE:

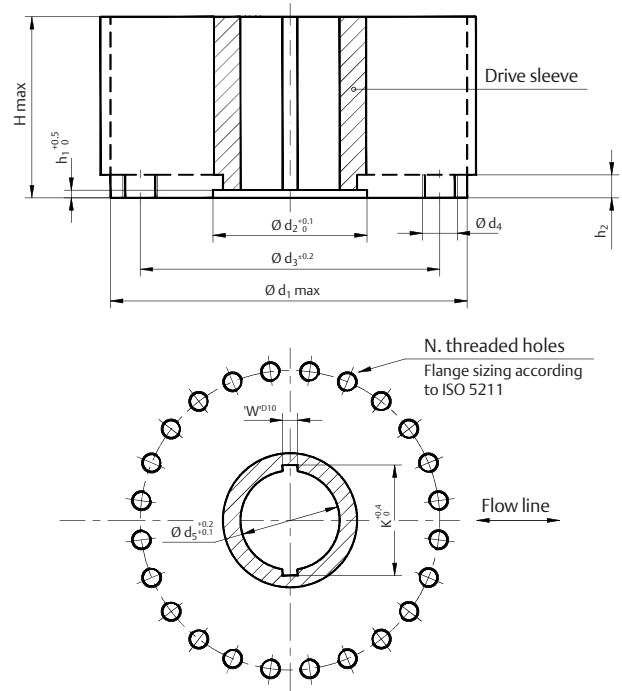
$\varnothing d_1$ is maximum adapter flange diameter.

Actuator models 14 to 32



Top view of the Scotch yoke mechanism (actuator shown in closed position)

Actuator models 50 to 80



Top view of the Scotch yoke mechanism (actuator shown in closed position)

Coupling dimensions (mm) models 14 to 32

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
14	580	250	483	M36	12	10	29	340	175	45	195.8
18	680	290	603	M36	16	12	32	350	200	45	220.8
32	780	310	603	M36	16	12	32	400	220	50	242.8

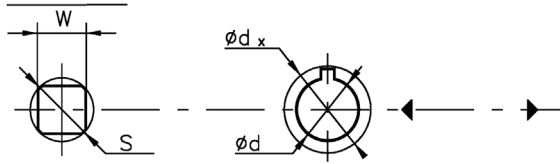
Coupling dimensions (mm) models 50 to 80

Actuator model	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	N	h_1	h_2	H max	$\varnothing d_5$	W	K
50	800	315	698	M36	24	10	32	430	240	56	264.8
80	900	370	813	M42	24	9	37	540	280	46	327.0

NOTE:

$\varnothing d_1$ is maximum adapter flange diameter.

Stem Acceptance



Stem acceptance dimensions for insert bushes (mm)

Housing size	Max. stem diameter with rectangular key d (bxh) ^[2] (mm)	Max. accepted diameter described by the key dx ^[3] (mm)	Max. accepted square stem (mm)		Max. accepted square stem height (mm) ^{**}
			W	S*	
0.3	53 (16x10)	64	46	64	120
0.9	62 (18x11)	73	55	73	140
1.5	85 (22x14)	99	73	99	180
3	126 (32x18)	145	104	145	190
6	161 (40x22)	185	133	185	250
14	105 (28x16)	121	-	-	340
18	122 (32x18)	140	-	-	350
32	160 (40x22)	183	-	-	400
50	160 (40x22)	183	-	-	430
65	-	-	-	-	540
80	-	-	-	-	540
100	-	-	-	-	600

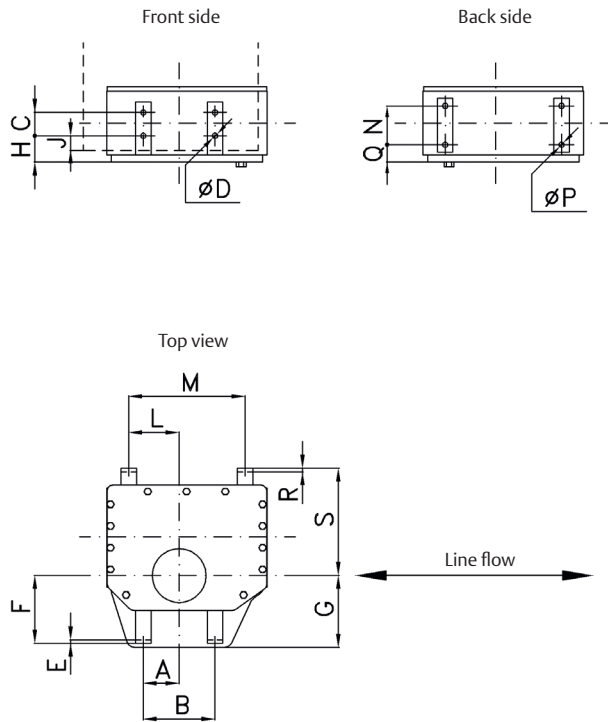
NOTES:

1. The listed maximum acceptance values are applicable for stems with keyways parallel or perpendicular to the flow line and for square stems with diagonal parallel with the flow line.
 2. Key according to UNI6604 or DIN 6885 sh. 1 or ISO 773 or equivalent.
 3. For stem with key not correspondent to any specification, check the dimension dx.
- * S max: maximum external diameter in case of rounded edge.
 ** Without adapter flange.

OLGA-H/OLGAS-H Hydraulic Actuators

Accessories Mounting Dimensions

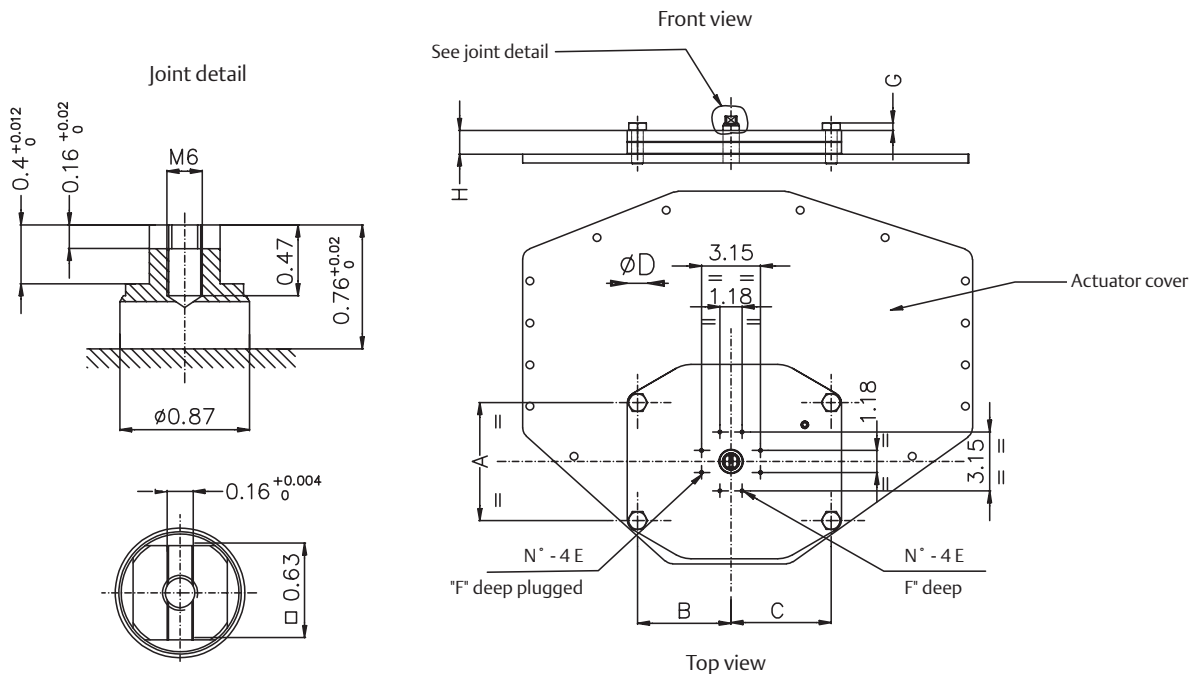
Actuator models 0.3 to 80



Accessories mounting dimensions (mm)

Actuator model	A	B	C	$\varnothing D$	E	F	G	H	J	L	M	N	$\varnothing P$	Q	R	S
0.3	77.5	155	60	14	5	113	119	37	12	92	200	60	14	36	5	200
0.9	92.5	185	60	14	5	155	170	61	35	85	200	60	14	48	5	243
1.5	92.5	185	60	14	5	175	185	62	35	130	300	100	14	45	5	284
3	117.5	235	85	23	8	203	215	57	25	230	500	100	14	54	5	371
6	137.0	455	115	23	8	248	260	59	22	224	500	100	14	87	8	480
14	315.0	630	200	27	10	227	330	97	55	220	500	170	27	99	8	543
18	315.0	630	200	27	10	235	340	72	32	306	680	215	27	80	10	600
32	315.0	630	200	27	10	385	395	72	32	414	890	215	27	149	10	660
50	387.5	860	250	30	12	372	387	77	35	473	1030	215	27	163	10	1072
80	500.0	1000	250	30	15	437.5	450	107	50	500	1100	215	27	270	15	900

Accessories Mounting Holes on Actuator Top (Cover and Yoke)



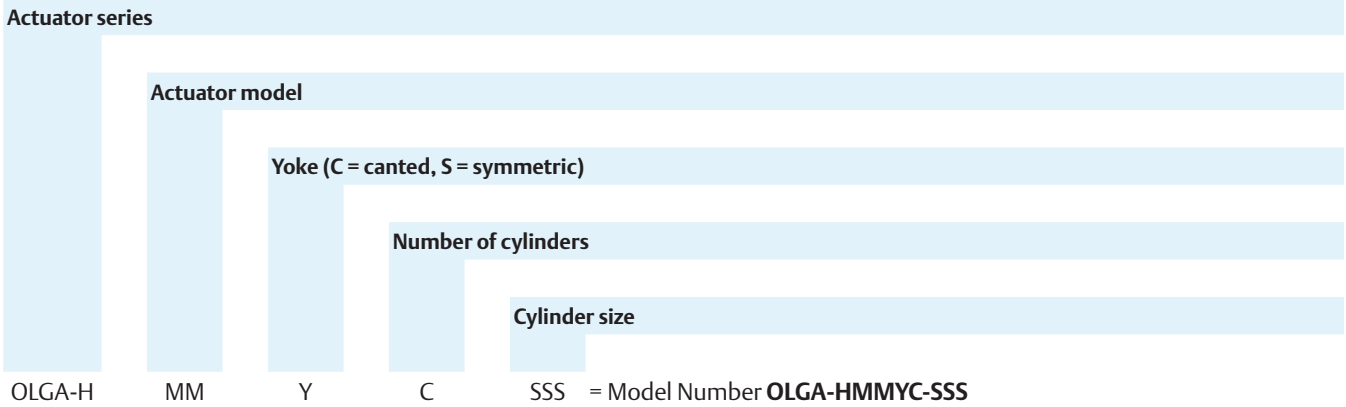
Dimensions (mm)

Actuator model	A	B	C	D	E	F	G	H
0.3	-	-	-	-	M5	9	-	32
0.9	-	-	-	-	M5	9	-	32
1.5	-	-	-	-	M5	9	-	32
3	160	127	136	30	M5	9	11	32
6	160	127	136	30	M5	9	11	32
14	160	127	136	30	M5	9	11	32
*	11	32	109	30	M5	9	11	29
18	314	109	109	30	M5	9	11	29
32	314	109	109	30	M5	9	11	29
50	280.6	138.5	138.5	37	M5	9	13	32
65	410	180	180	44	M5	9	16	32
80	410	180	180	44	M5	9	16	32
100	460	205	205	44	M5	9	16	32

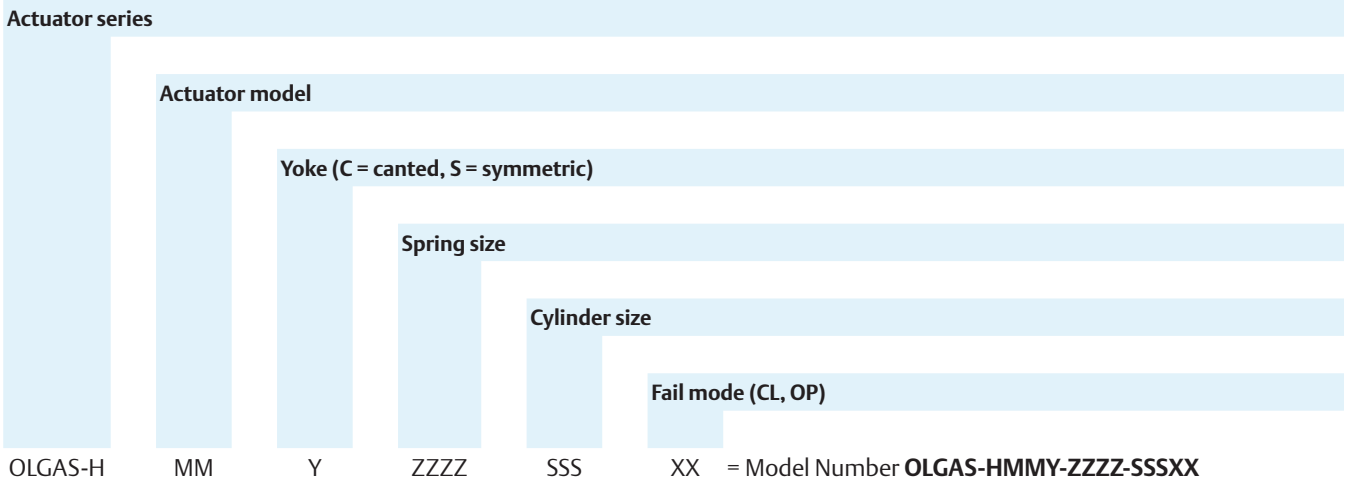
OLGA-H/OLGAS-H Hydraulic Actuators

Selection Guide

Scotch Yoke Double-Acting Hydraulic Actuators



Scotch Yoke Single Acting Hydraulic Actuators



По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54
Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астрахань (8512)99-46-04	Калуга (4842)92-23-67	Омск (3812)21-46-40	Ставрополь (8652)20-65-13
Барнаул (3852)73-04-60	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462)77-98-35
Белгород (4722)40-23-64	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Брянск (4832)59-03-52	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Владивосток (423)249-28-31	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
Волгоград (844)278-03-48	Курск (4712)77-13-04	Ростов-на-Дону (863)308-18-15	Тюмень (3452)66-21-18
Вологда (8172)26-41-59	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Воронеж (473)204-51-73	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Екатеринбург (343)384-55-89	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212)92-98-04
Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Иркутск (395)279-98-46	Нижний Новгород (831)429-08-12	Симферополь (3652)67-13-56	Ярославль (4852)69-52-93
Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	