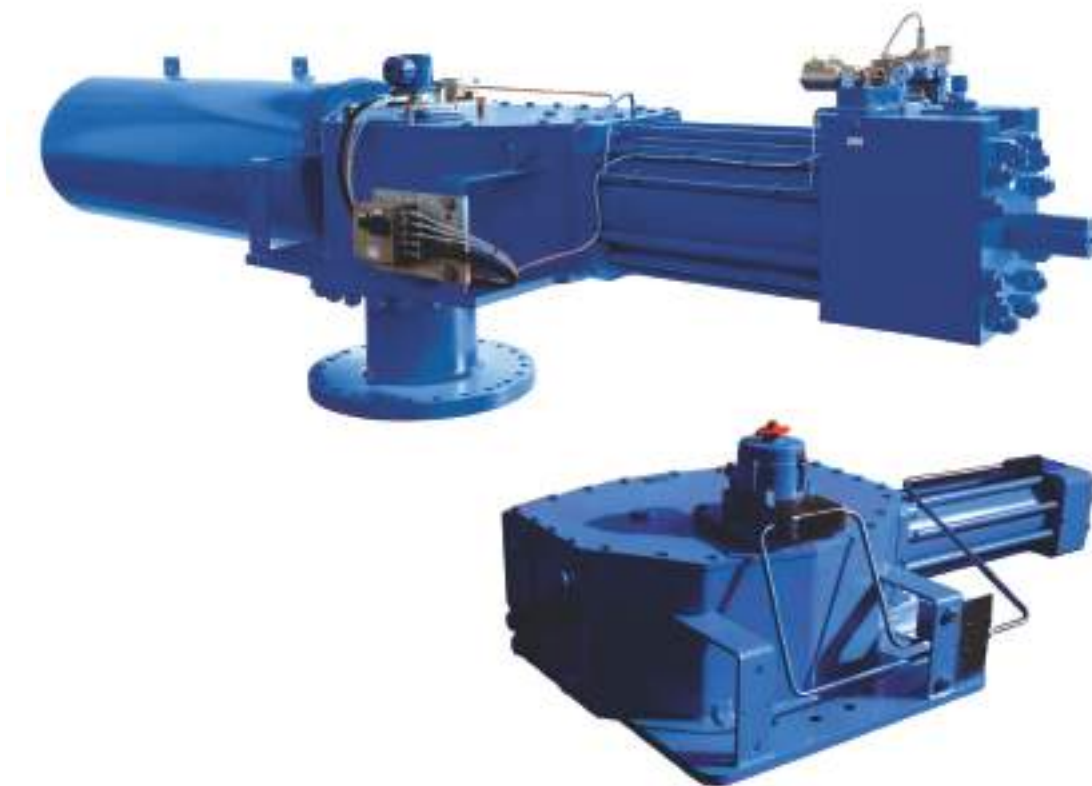


Biffi OLGA-H/OLGAS-H

High Pressure Hydraulic Actuators Scotch Yoke Design

Double-acting and spring-return hydraulic quarter-turn actuators for ON-OFF and modulating control of valves in heavy duty service suitable for high pressure supply. Models available for output torques to 6,638,000 lb-in.



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General Application

OLGA-H and OLGAS-H series hydraulic actuators are designed for the control of quarter turn ball, butterfly, plug or damper style valves.

Technical Data

Design pressure (MAWP):

OLGA-H/OLGAS-H: 5100 psi maximum

OLGAS-H-QA: Contact factory

Supply medium: Hydraulic oil, special versions for fire resistant fluids

Output torque

OLGA-H: Double-Acting torque up to 6,638,000 lb-in

OLGAS-H/QA: Spring starting torque up to 2,964,000 lb-in

Spring ending torque up to 2,079,000 lb-in

Higher values available with special versions

Ambient temperature

Standard range: -4 °F to + 210 °F
(-20 °C to +100 °C)

Extended range: -70 °F to + 275 °F
(-60 °C to +135 °C)

Features

- Totally enclosed, weatherproof housing in fabricated carbon steel for maximum strength.
- Guide bar resists transverse loads and supports the piston rod.
- Hard chromium plated alloy steel material guarantees corrosion protection and minimal friction.
- PTFE-impregnated bronze or sintered bronze bushings provide minimal friction and extended service life.
- Scotch yoke design with canted or symmetric torque arm allows close working to distinctive valve torque profiles.
- External travel stops for precise angular stroke adjustment 90° +/- 4° at each end of travel.
- Electroless nickel plated and polished cylinder provides maximum corrosion resistance and reduces friction.
- Triple-element piston seals provide low friction, high sensitivity, ensure long life and prevent sticking problems.
- OLGAS-H fully encapsulated spring return pack ensures personnel safety and simplifies assembly.
- OLGAS-H modular design enables spring action to be changed in the field easily.
- OLGAS-H QA is the quick-acting spring return hydraulic and electro-hydraulic actuators with high flow rate manifold and cylinder, integral quick exhaust valves, and end-ofstroke damper systems, designed by Biffi.
- OLGAS-H QA achieves "safe" position in less than 0.3 second. This configuration can be provided with a double camber option, and the name will add the suffix DC at the end.

Approvals

Safety integrity level: (IEC 61508-1÷7:2010) - Suitable for use in SIL3 applications

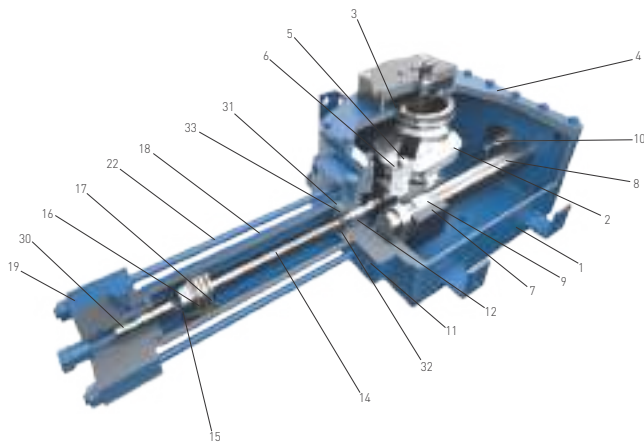
Area classification: (ATEX) - Ex II 2GD

Enclosure standards: (IEC 60529) - IP67M
(ANSI/NEMA 250) - NEMA 4, 4X, 6

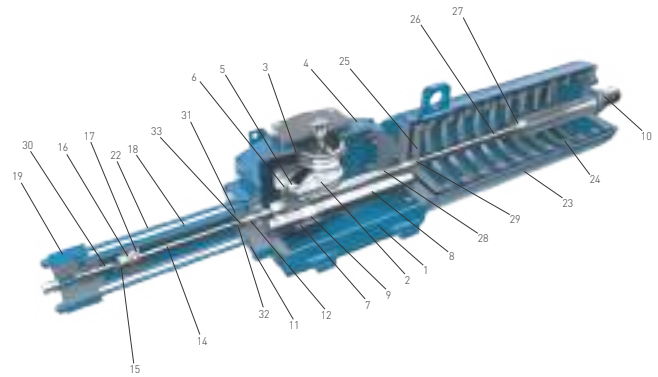
Pressure equipment directive: PED 97/23/EC

Machinery directive: 2006/42/EC

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 (lb-in) - Canted Yoke Design, Models 0.3C-28 to 1.5C-95

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-28	4713	0°	6408	4753	8036	5965	9665	7187	11285	8399	12099	9010	12913	9621
		45°	2505	1673	3142	2098	3770	2531	4408	2956	4726	3169	5045	3390
		90°	3611	2319	4523	2912	5443	3505	6364	4098	6815	4399	7275	4691
0.3C-35	2973	0°	10054	7479	12603	9373	15144	11276	17684	13179	18958	14126	20224	15082
		45°	3930	2629	4921	3301	5912	3974	6912	4638	7408	4974	7904	5310
		90°	5664	3647	7098	4576	8532	5505	9966	6434	10683	6895	11400	7364
0.3C-45	1813	0°	16657	14807	20861	18551	25065	22295	-	-	-	-	-	-
		45°	6514	5213	8152	6532	9798	7851	-	-	-	-	-	-
		90°	9391	7222	11754	9054	14126	10878	-	-	-	-	-	-
0.3C-50	1450	0°	20596	19171	25782	24012	-	-	-	-	-	-	-	-
		45°	8045	6753	10072	8461	-	-	-	-	-	-	-	-
		90°	11603	9355	14533	11718	-	-	-	-	-	-	-	-
0.3C-60	1015	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-45	4713	0°	19268	17117	24127	21445	28986	25773	33845	30101	36279	32270	38704	34429
		45°	7532	6027	9426	7559	11329	9081	13223	10612	14179	11373	15126	12134
		90°	10860	8355	13595	10470	16338	12586	19073	14692	20445	15754	21817	16808
0.9C-50	3843	0°	23817	22171	29818	27765	35819	33358	41811	38952	44811	41749	47812	44546
		45°	9302	7815	11648	9780	13993	11754	16338	13728	17516	14710	18684	15701
		90°	13418	10824	16799	13550	20189	16285	23570	19011	25260	20383	26951	21746
0.9C-60	2610	0°	34385	31500	43023	39421	51662	47343	60300	55273	64619	59229	68938	63194
		45°	13435	11099	16816	13896	20189	16684	23570	19481	25260	20879	26942	22268
		90°	19374	15374	24251	19242	29119	23118	33987	26986	36421	28915	38855	30854
0.9C-70	1958	0°	46856	42413	58619	53069	70381	63725	-	-	-	-	-	-
		45°	18312	14949	22915	18702	27508	22454	-	-	-	-	-	-
		90°	26411	20711	33040	25906	39669	31110	-	-	-	-	-	-
0.9C-85	1305	0°	69098	59636	-	-	-	-	-	-	-	-	-	-
		45°	27004	21021	-	-	-	-	-	-	-	-	-	-
		90°	38943	29110	-	-	-	-	-	-	-	-	-	-
1.5C-50	5075	0°	30119	28030	37704	35111	45289	42183	52874	49254	56671	52786	60468	56326
		45°	11771	9877	14736	12373	17702	14860	20667	17356	22153	18604	23632	19852
		90°	16976	13683	21251	17135	25526	20596	29800	24047	31942	25773	34075	27499
1.5C-60	3480	0°	43475	39837	54406	49856	65327	59875	76258	69894	81719	74904	87180	79913
		45°	16993	14037	21260	17569	25534	21100	29800	24632	31942	26402	34075	28163
		90°	24508	19445	30659	24340	36819	29234	42979	34120	46059	36571	49139	39014
1.5C-70	2538	0°	59256	53636	74125	67106	88994	80577	103864	94057	111307	100792	118742	107528
		45°	23162	18905	28969	23649	34783	28402	40598	33146	43501	35518	46413	37899
		90°	33394	26189	41776	32765	50157	39342	58539	45918	62734	49210	66921	52494
1.5C-85	1740	0°	87375	75408	109298	94358	131230	113298	-	-	-	-	-	-
		45°	34155	26579	42723	33252	51290	39935	-	-	-	-	-	-
		90°	49246	36819	61601	46068	73966	55317	-	-	-	-	-	-
1.5C-95	1378	0°	109139	99571	-	-	-	-	-	-	-	-	-	-
		45°	42661	35093	-	-	-	-	-	-	-	-	-	-
		90°	61513	48608	-	-	-	-	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3C-28	4713	0°	13728	10223	14542	10833	16170	12046	17799	13267	19427	14480	26340	19649
		45°	5364	3602	5682	3815	6319	4248	6957	4673	7594	5098	10293	6921
		90°	7736	4992	8196	5284	9116	5877	10028	6479	10948	7072	14843	9594
0.3C-35	2973	0°	21498	16029	22773	16976	25313	18879	-	-	-	-	25950	19357
		45°	8399	5647	8895	5983	9895	6656	-	-	-	-	10143	6815
		90°	12117	7824	12834	8284	14267	9214	-	-	-	-	14621	9444
0.3C-45	1813	0°	-	-	-	-	-	-	-	-	-	-	26119	23224
		45°	-	-	-	-	-	-	-	-	-	-	10205	8187
		90°	-	-	-	-	-	-	-	-	-	-	14719	11338
0.3C-50	1450	0°	-	-	-	-	-	-	-	-	-	-	25782	24012
		45°	-	-	-	-	-	-	-	-	-	-	10072	8461
		90°	-	-	-	-	-	-	-	-	-	-	14533	11718
0.3C-60	1015	0°	-	-	-	-	-	-	-	-	-	-	25995	23817
		45°	-	-	-	-	-	-	-	-	-	-	10161	8391
		90°	-	-	-	-	-	-	-	-	-	-	14648	11621
0.9C-45	4713	0°	41138	36598	43563	38757	48422	43085	53282	47413	58141	51741	78798	70142
		45°	16073	12896	17029	13657	18923	15188	20826	16710	22729	18233	30801	24720
		90°	23180	17870	24552	18923	27296	21038	30031	23145	32774	25260	44413	34244
0.9C-50	3843	0°	50812	47343	53813	50139	59813	55724	65814	61318	71815	66912	79312	73904
		45°	19861	16684	21029	17666	23375	19640	25720	21614	28066	23578	31004	26048
		90°	28641	23109	30332	24472	33713	27207	37093	29942	40474	32668	44705	36085
0.9C-60	2610	0°	73258	67159	77586	71116	-	-	-	-	-	-	77586	71116
		45°	28632	23667	30323	25065	-	-	-	-	-	-	30323	25065
		90°	41289	32783	43723	34721	-	-	-	-	-	-	43723	34721
0.9C-70	1958	0°	-	-	-	-	-	-	-	-	-	-	79197	71718
		45°	-	-	-	-	-	-	-	-	-	-	30951	25278
		90°	-	-	-	-	-	-	-	-	-	-	44634	35014
0.9C-85	1305	0°	-	-	-	-	-	-	-	-	-	-	77763	67124
		45°	-	-	-	-	-	-	-	-	-	-	30393	23658
		90°	-	-	-	-	-	-	-	-	-	-	43829	32774
1.5C-50	5075	0°	64256	59866	68053	63398	75639	70470	83224	77541	90818	84622	132540	123521
		45°	25118	21100	26597	22339	29562	24835	32527	27331	35492	29818	51803	43537
		90°	36217	29225	38350	30951	42634	34403	46909	37855	51184	41315	74700	60309
1.5C-60	3480	0°	92641	84923	98111	89932	109032	99952	119954	109971	130885	119990	130885	119990
		45°	36208	29933	38350	31695	42616	35226	46891	38757	51157	42289	51157	42289
		90°	52219	41457	55291	43909	61451	48803	67611	53689	73771	58583	73771	58583
1.5C-70	2538	0°	126176	114263	-	-	-	-	-	-	-	-	129894	117626
		45°	49316	40271	-	-	-	-	-	-	-	-	50768	41457
		90°	71116	55786	-	-	-	-	-	-	-	-	73213	57433
1.5C-85	1740	0°	-	-	-	-	-	-	-	-	-	-	131230	113298
		45°	-	-	-	-	-	-	-	-	-	-	51290	39935
		90°	-	-	-	-	-	-	-	-	-	-	73966	55317
1.5C-95	1378	0°	-	-	-	-	-	-	-	-	-	-	129681	118326
		45°	-	-	-	-	-	-	-	-	-	-	50688	41705
		90°	-	-	-	-	-	-	-	-	-	-	73089	57769

NOTE:

* MOP = Maximum Operating Pressure (psi).
MOT = Maximum Operating Torque.

OLGA-H Double-Acting Hydraulic Actuator

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

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3C-60	4205	0°	71965	65929	90048	82516	108138	99102	126221	115688	135257	123981	144303	132274
		45°	28128	23233	35199	29084	42262	34925	49334	40775	52866	43696	56406	46617
		90°	40563	32190	50750	40289	60946	48387	71142	56485	76232	60530	81330	64575
3C-70	3118	0°	98084	88782	122698	111077	147312	133381	171926	155676	184228	166828	196540	177980
		45°	38333	31287	47953	39147	57583	47006	67204	54866	72010	58796	76825	62725
		90°	55282	43342	69151	54229	83029	65115	96898	76010	103837	81453	110776	86897
3C-85	2103	0°	144621	124822	180918	156180	217206	187539	253503	218897	-	-	-	-
		45°	56530	43997	70717	55043	84905	66097	99084	77152	-	-	-	-
		90°	81515	60937	101969	76249	122424	91561	142878	106873	-	-	-	-
3C-90	1885	0°	162137	144258	202824	180493	243511	216728	-	-	-	-	-	-
		45°	63371	50848	79276	63619	95181	76391	-	-	-	-	-	-
		90°	91384	70434	114316	88127	137249	105820	-	-	-	-	-	-
3C-95	1668	0°	180653	164810	225986	206205	-	-	-	-	-	-	-	-
		45°	70611	58087	88330	72674	-	-	-	-	-	-	-	-
		90°	101819	80462	127371	100677	-	-	-	-	-	-	-	-
3C-110	1233	0°	242511	213392	-	-	-	-	-	-	-	-	-	-
		45°	94792	75214	-	-	-	-	-	-	-	-	-	-
		90°	136682	104182	-	-	-	-	-	-	-	-	-	-
6C-70	5075	0°	114670	103793	143444	129867	172218	155933	200992	182007	215383	195035	229774	208072
		45°	44820	36580	56070	45767	67319	54963	78568	64150	84188	68744	89809	73337
		90°	64628	50671	80852	63407	97066	76134	113290	88862	121397	95225	129504	101589
6C-85	3625	0°	169076	145931	211506	182591	253937	219251	296367	255911	317583	274240	338798	292570
		45°	66089	51432	82675	64354	99261	77276	115847	90198	124141	96659	132425	103120
		90°	95296	71249	119211	89145	143125	107041	167040	124946	178998	133894	190955	142842
6C-90	3190	0°	189557	168651	237120	211020	284693	253379	332257	295748	356039	316928	379830	338108
		45°	74090	59442	92685	74373	111280	89304	129876	104235	139169	111705	148471	119166
		90°	106837	82339	133646	103023	160464	123707	187273	144391	200673	154738	214082	165075
6C-95	2900	0°	211205	192681	264204	241068	317202	289464	370200	337851	396699	362049	423199	386247
		45°	82551	67912	103271	84967	123990	102023	144710	119078	155065	127610	165421	136133
		90°	119043	94075	148914	117697	178785	141329	208656	164951	223596	176767	238528	188583
6C-110	2103	0°	283516	249476	354579	312042	425633	374608	496695	437174	-	-	-	-
		45°	110820	87932	138603	109979	166376	132035	194150	154092	-	-	-	-
		90°	159800	121804	199850	152348	239900	182901	279949	213445	-	-	-	-
6C-125	1668	0°	366120	341143	457876	426677	-	-	-	-	-	-	-	-
		45°	143108	120237	178980	150392	-	-	-	-	-	-	-	-
		90°	206355	166553	258070	208320	-	-	-	-	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3C-60	4205	0°	153348	140568	162385	148861	180467	165438	198549	182025	216640	198611	261841	240077
		45°	59937	49538	63469	52467	70540	58309	77612	64159	84675	70001	102350	84613
		90°	86428	68629	91526	72674	101713	80772	111909	88870	122105	96969	147586	117210
3C-70	3118	0°	208842	189123	221154	200275	245759	222570	-	-	-	-	264221	239298
		45°	81630	66655	86445	70585	96066	78444	-	-	-	-	103279	84339
		90°	117706	92340	124645	97783	138523	108670	-	-	-	-	148923	116830
3C-85	2103	0°	-	-	-	-	-	-	-	-	-	-	262575	226739
		45°	-	-	-	-	-	-	-	-	-	-	102633	79913
		90°	-	-	-	-	-	-	-	-	-	-	147993	110696
3C-90	1885	0°	-	-	-	-	-	-	-	-	-	-	263859	234846
		45°	-	-	-	-	-	-	-	-	-	-	103138	82772
		90°	-	-	-	-	-	-	-	-	-	-	148719	114661
3C-95	1668	0°	-	-	-	-	-	-	-	-	-	-	259991	237244
		45°	-	-	-	-	-	-	-	-	-	-	101624	83622
		90°	-	-	-	-	-	-	-	-	-	-	146533	115830
3C-110	1233	0°	-	-	-	-	-	-	-	-	-	-	257707	226765
		45°	-	-	-	-	-	-	-	-	-	-	100730	79922
		90°	-	-	-	-	-	-	-	-	-	-	145250	110714
6C-70	5075	0°	244157	221109	258548	234138	287322	260212	316096	286278	344869	312352	503139	455734
		45°	95438	77931	101058	82524	112307	91711	123556	100899	134806	110094	196673	160632
		90°	137611	107953	145728	114316	161942	127044	178166	139771	194380	152498	283587	222508
6C-85	3625	0°	360013	310900	381228	329230	423659	365890	466080	402550	508511	439210	529726	457540
		45°	140718	109581	149011	116042	165598	128964	182184	141886	198770	154808	207063	161270
		90°	202912	151790	214870	160738	238784	178644	262699	196540	286614	214436	298571	223393
6C-90	3190	0°	403612	359287	427394	380467	474967	422836	522531	465195	-	-	522531	465195
		45°	157765	126637	167058	134098	185653	149029	204249	163960	-	-	204249	163960
		90°	227491	175413	240891	185760	267709	206444	294518	227128	-	-	294518	227128
6C-95	2900	0°	449707	410445	476206	434634	529204	483030	-	-	-	-	529204	483030
		45°	175785	144666	186140	153189	206860	170253	-	-	-	-	206860	170253
		90°	253468	200390	268408	212206	298279	235828	-	-	-	-	298279	235828
6C-110	2103	0°	-	-	-	-	-	-	-	-	-	-	514459	452813
		45°	-	-	-	-	-	-	-	-	-	-	201098	159597
		90°	-	-	-	-	-	-	-	-	-	-	289968	221083
6C-125	1668	0°	-	-	-	-	-	-	-	-	-	-	526699	490836
		45°	-	-	-	-	-	-	-	-	-	-	205877	172997
		90°	-	-	-	-	-	-	-	-	-	-	296863	239643

NOTE:

* MOP = Maximum Operating Pressure (psi).

MOT = Maximum Operating Torque.

OLGA-H Double-Acting Hydraulic Actuator

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

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14C-85	5075	0°	184795	159499	231173	199567	277542	239634	323920	279701	347100	299731	370289	319769
		45°	72231	56211	90357	70337	108484	84463	126610	98580	135673	105643	144736	112705
		90°	104156	77869	130292	97429	156428	116998	182573	136558	195637	146338	208710	156118
14C-95	5075	0°	230836	210595	288765	263478	346693	316370	404621	369262	433581	395708	462540	422154
		45°	90225	74222	112874	92862	135514	111511	158154	130150	169483	139470	180803	148790
		90°	130106	102819	162756	128637	195407	154463	228057	180290	244378	193194	260708	206107
14C-110	3915	0°	309874	272665	387539	341046	465204	409436	542870	477817	581698	512007	620535	546197
		45°	121123	96101	151481	120202	181839	144311	212197	168412	227376	180467	242555	192513
		90°	174652	133124	218428	166509	262203	199903	305979	233288	327867	249981	349755	266673
14C-125	3045	0°	400151	372856	500439	466346	600727	559836	701024	653327	751163	700077	801312	746826
		45°	156410	131416	195610	164367	234819	197319	274019	230279	293624	246750	313219	263230
		90°	225535	182042	282065	227686	338594	273338	395115	318981	423384	341807	451645	364624
14C-135	2610	0°	466735	446750	583716	558766	700696	670772	817668	782787	876162	838794	934648	894802
		45°	182441	157464	228163	196947	273895	236421	319618	275904	342480	295642	365341	315388
		90°	263071	218118	329000	272807	394938	327495	460867	382184	493836	409533	526797	436873
14C-145	2248	0°	538781	495359	673728	619482	808684	743605	943632	867728	1011110	929789	-	-
		45°	210604	174599	263354	218348	316105	262097	368855	305847	395230	327717	-	-
		90°	303678	241856	379741	302457	455805	363058	531859	423659	569891	453964	-	-
14C-175	1523	0°	784787	768378	981362	960891	-	-	-	-	-	-	-	-
		45°	306767	270824	383600	338683	-	-	-	-	-	-	-	-
		90°	442334	375157	553128	469143	-	-	-	-	-	-	-	-
14C-185	1378	0°	877047	870763	-	-	-	-	-	-	-	-	-	-
		45°	342825	306917	-	-	-	-	-	-	-	-	-	-
		90°	494332	425137	-	-	-	-	-	-	-	-	-	-
14C-200	1160	0°	1025032	997957	-	-	-	-	-	-	-	-	-	-
		45°	400673	351747	-	-	-	-	-	-	-	-	-	-
		90°	577742	487243	-	-	-	-	-	-	-	-	-	-
18C-125	3988	0°	460177	428783	575511	536293	690836	643812	806171	751331	863842	805091	921505	858850
		45°	179874	151127	224960	189025	270036	226924	315122	264814	337665	283764	360208	302713
		90°	259371	209347	324371	261841	389380	314334	454389	366828	486889	393071	519389	419322

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-145	2973	0°	619597	569670	774795	712406	929984	855151	1085173	997887	1162776	1069259	1240371	1140632
		45°	242192	200788	302855	251096	363518	301412	424181	351720	454513	376874	484844	402036
		90°	349224	278135	436696	347826	524168	417516	611640	487207	655380	522053	699112	556898
18C-175	2030	0°	902511	883641	1128559	1105016	1354616	1326400	1580664	1547784	-	-	-	-
		45°	352782	311449	441139	389477	529505	467514	617862	545543	-	-	-	-
		90°	508688	431430	636095	539515	763510	647601	890925	755686	-	-	-	-
18C-185	1813	0°	1008605	1001383	1261223	1252248	1513850	1503123	-	-	-	-	-	-
		45°	394248	352950	492996	441378	591752	529797	-	-	-	-	-	-
		90°	568484	488915	710875	611401	853265	733886	-	-	-	-	-	-
18C-200	1523	0°	1178787	1147659	1474039	1435185	-	-	-	-	-	-	-	-
		45°	460779	404506	576184	505856	-	-	-	-	-	-	-	-
		90°	664408	560332	830820	700714	-	-	-	-	-	-	-	-
32C-145	3915	0°	727355	668736	909538	836307	1091722	1003870	1273906	1171432	1364998	1255222	1456081	1339003
		45°	284313	235704	355526	294765	426739	353826	497952	412887	533559	442422	569165	471949
		90°	409967	326504	512644	408321	615331	490128	718017	571944	769360	612844	820703	653752
32C-175	2900	0°	1059470	1037317	1324833	1297201	1590205	1557077	1855569	1816962	1988250	1946908	2120932	2076846
		45°	414135	365616	517866	457221	621588	548817	725319	640423	777184	686216	829050	732019
		90°	597151	506458	746720	633342	896298	760226	1045867	887111	1120647	950553	1195435	1014004
32C-200	2320	0°	1383797	1347252	1730401	1684785	2076997	2022317	2423601	2359849	2596899	2528615	-	-
		45°	540914	474860	676392	593832	811879	712804	947358	831767	1015101	891253	-	-
		90°	779955	657779	975317	822580	1170671	987381	1366025	1152173	1463710	1234573	-	-
50C-175	3915	0°	1177185	1152571	1472039	1441336	1766893	1730092	2061747	2018847	2209165	2163230	2356592	2307603
		45°	460150	406241	575405	508024	690659	609799	805914	711574	863541	762466	921168	813357
		90°	663505	562731	829696	703714	995886	844698	1162068	985681	1245168	1056178	1328259	1126665
50C-200	2973	0°	1537552	1496945	1922666	1871978	2307780	2247020	2692894	2622061	2885442	2809573	3077999	2997094
		45°	601010	527620	751553	659815	902086	792001	1052620	924186	1127886	990284	1203162	1056381
		90°	866621	730868	1083686	913973	1300750	1097086	1517806	1280199	1626343	1371751	1734871	1463303
80C-200	4205	0°	1793817	1671641	2243108	2090485	2692407	2509329	3141706	2928182	3366356	3137600	3591006	3347026
		45°	701183	589194	876808	736825	1052434	884455	1228059	1032086	1315876	1105901	1403685	1179716
		90°	1011057	816163	1264294	1020660	1517541	1225156	1770778	1429653	1897397	1531906	2024016	1634158

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14C-85	5075	0°	393478	339807	416667	359836	463036	399903	509414	439971	555783	480038	810844	700413
		45°	153808	119768	162872	126831	180998	140948	199124	155074	217251	169200	316945	246874
		90°	221773	165907	234846	175687	260982	195248	287118	214808	313263	234377	457017	341966
14C-95	5075	0°	491509	448600	520468	475037	578397	527930	636325	580822	694253	633714	1012853	924602
		45°	192123	158110	203443	167438	226084	186078	248733	204718	271373	223358	395912	325893
		90°	277028	219021	293358	231934	326009	257752	358659	283578	391309	309405	570882	451433
14C-110	3915	0°	659363	580388	698200	614578	775857	682968	853522	751349	931187	819730	1047690	922301
		45°	257734	204567	272913	216613	303271	240723	333629	264823	363987	288924	409524	325079
		90°	371643	283366	393531	300058	437298	333452	481074	366837	524849	400222	590513	450308
14C-125	3045	0°	851451	793567	901599	840317	1001887	933807	-	-	-	-	1052036	980557
		45°	332824	279701	352419	296181	391628	329133	-	-	-	-	411224	345613
		90°	479905	387450	508175	410277	564696	455920	-	-	-	-	592965	478746
14C-135	2610	0°	993134	950810	1051628	1006817	-	-	-	-	-	-	1051628	1006817
		45°	388203	335125	411064	354871	-	-	-	-	-	-	411064	354871
		90°	559766	464222	592735	491562	-	-	-	-	-	-	592735	491562
14C-145	2248	0°	-	-	-	-	-	-	-	-	-	-	1044840	960820
		45°	-	-	-	-	-	-	-	-	-	-	408418	338656
		90°	-	-	-	-	-	-	-	-	-	-	588911	469107
14C-175	1523	0°	-	-	-	-	-	-	-	-	-	-	1030502	1009012
		45°	-	-	-	-	-	-	-	-	-	-	402806	355641
		90°	-	-	-	-	-	-	-	-	-	-	580830	492642
14C-185	1378	0°	-	-	-	-	-	-	-	-	-	-	1041804	1034378
		45°	-	-	-	-	-	-	-	-	-	-	407223	364580
		90°	-	-	-	-	-	-	-	-	-	-	587194	505024
14C-200	1160	0°	-	-	-	-	-	-	-	-	-	-	1025032	997957
		45°	-	-	-	-	-	-	-	-	-	-	400673	351747
		90°	-	-	-	-	-	-	-	-	-	-	577742	487243
18C-125	3988	0°	979176	912601	1036839	966360	1152173	1073879	1267507	1181398	1382841	1288908	1584674	1477066
		45°	382751	321663	405285	340612	450370	378502	495456	416401	540533	454300	619429	520619
		90°	551897	445573	584397	471816	649406	524310	714415	576803	779415	629297	893173	721159

NOTE:

* MOP = Maximum Operating Pressure (psi).
MOT = Maximum Operating Torque.

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18C-145	2973	0°	1317965	1212004	1395560	1283368	1550749	1426112	-	-	-	-	1589550	1461799
		45°	515176	427190	545507	452344	606170	502652	-	-	-	-	621340	515238
		90°	742852	591743	786584	626589	874056	696289	-	-	-	-	895926	713707
18C-175	2030	0°	-	-	-	-	-	-	-	-	-	-	1580664	1547784
		45°	-	-	-	-	-	-	-	-	-	-	617862	545543
		90°	-	-	-	-	-	-	-	-	-	-	890925	755686
18C-185	1813	0°	-	-	-	-	-	-	-	-	-	-	1577009	1565839
		45°	-	-	-	-	-	-	-	-	-	-	616437	551906
		90°	-	-	-	-	-	-	-	-	-	-	888854	764501
18C-200	1523	0°	-	-	-	-	-	-	-	-	-	-	1547855	1507070
		45°	-	-	-	-	-	-	-	-	-	-	605037	531187
		90°	-	-	-	-	-	-	-	-	-	-	872427	735807
32C-145	3915	0°	1547173	1422785	1638265	1506566	1820449	1674128	2002633	1841699	2184816	2009262	2458083	2260605
		45°	604772	501483	640378	531010	711591	590080	782805	649141	854018	708202	960837	796789
		90°	872047	694660	923390	735568	1026067	817376	1128754	899192	1231440	980999	1385470	1103724
32C-175	2900	0°	2253613	2206784	2386304	2336731	2651667	2596606	-	-	-	-	2651667	2596606
		45°	880915	777822	932781	823615	1036511	915221	-	-	-	-	1036511	915221
		90°	1270224	1077446	1345004	1140888	1494573	1267773	-	-	-	-	1494573	1267773
32C-200	2320	0°	-	-	-	-	-	-	-	-	-	-	-	-
		45°	-	-	-	-	-	-	-	-	-	-	-	-
		90°	-	-	-	-	-	-	-	-	-	-	-	-
50C-175	3915	0°	2504019	2451985	2651446	2596368	2946300	2885123	3241145	3173879	3535999	3462635	3978279	3895773
		45°	978796	864240	1036423	915132	1151677	1016907	1266932	1118691	1382186	1220465	1555068	1373132
		90°	1411358	1197161	1494449	1267649	1660640	1408632	1826830	1549616	1993021	1690599	2242302	1902079
50C-200	2973	0°	3270556	3184615	3463113	3372136	3848226	3747177	-	-	-	-	3944505	3840933
		45°	1278429	1122470	1353696	1188567	1504229	1320753	-	-	-	-	1541863	1353802
		90°	1843408	1554856	1951936	1646417	2169000	1829521	-	-	-	-	2223264	1875297
80C-200	4205	0°	3815647	3556453	4040297	3765870	4489596	4184714	4938896	4603567	5388195	5022411	6511435	6069526
		45°	1491502	1253532	1579310	1327347	1754936	1474977	1930561	1622608	2106186	1770239	2545254	2139315
		90°	2150644	1736402	2277263	1838655	2530500	2043151	2783738	2247648	3036984	2452145	3670079	2963390

NOTE:

* MOP = Maximum Operating Pressure (psi)

MOT = Maximum Operating Torque.

OLGA-H Double-Acting Hydraulic Actuator

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

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-28	5075	0°	4018	3009	5045	3779	6063	4549	7081	5319	7594	5709	8107	6098
		45°	2549	1708	3195	2142	3841	2576	4487	3018	4815	3231	5142	3452
		90°	4594	2797	5762	3505	6930	4222	8098	4939	8683	5302	9267	5656
0.3S-35	4205	0°	6311	4735	7904	5939	9506	7151	11099	8355	11895	8957	12692	9559
		45°	4001	2682	5010	3363	6027	4045	7036	4726	7541	5071	8045	5408
		90°	7222	4399	9045	5514	10869	6629	12692	7753	13604	8311	14515	8868
0.3S-45	2538	0°	10453	9382	13090	11754	15728	14126	18365	16498	19684	17684	21012	18870
		45°	6629	5310	8302	6656	9975	8001	11648	9346	12480	10019	13320	10692
		90°	11957	8709	14975	10913	17994	13108	21012	15312	22516	16409	24030	17516
0.3S-50	2030	0°	12922	12152	16179	15214	19436	18286	22693	21348	-	-	-	-
		45°	8196	6886	10258	8621	12329	10355	14391	12090	-	-	-	-
		90°	14781	11276	18507	14117	22233	16967	25959	19808	-	-	-	-
0.3S-60	1378	0°	18657	17268	-	-	-	-	-	-	-	-	-	-
		45°	11833	9780	-	-	-	-	-	-	-	-	-	-
		90°	21339	16020	-	-	-	-	-	-	-	-	-	-
0.9S-45	5075	0°	12090	10851	15144	13595	18188	16338	21242	19082	22764	20454	24295	21826
		45°	7665	6142	9603	7700	11533	9258	13471	10807	14436	11586	15400	12364
		90°	13825	10072	17321	12612	20808	15161	24295	17710	26039	18976	27783	20251
0.9S-50	5075	0°	14949	14055	18710	17595	22481	21144	26242	24685	28128	26464	30013	28234
		45°	9479	7957	11860	9966	14250	11975	16639	13984	17834	14993	19029	15993
		90°	17091	13037	21401	16330	25711	19622	30013	22906	32172	24552	34323	26198
0.9S-60	3698	0°	21578	19967	27004	24986	32420	30013	37846	35031	40554	37545	43271	40058
		45°	13683	11311	17117	14152	20560	17002	23994	19843	25720	21268	27437	22693
		90°	24676	18525	30880	23189	37085	27853	43289	32509	46387	34845	49485	37173
0.9S-70	3118	0°	29411	26889	36793	33642	44174	40395	51556	47148	55246	50520	58937	53901
		45°	18649	15232	23331	19056	28013	22879	32686	26712	35031	28623	37368	30535
		90°	33633	24950	42076	31217	50520	37483	58964	43749	63186	46882	67407	50016
0.9S-85	1813	0°	43369	37802	54246	47298	65133	56795	-	-	-	-	-	-
		45°	27499	21410	34403	26791	41298	32172	-	-	-	-	-	-
		90°	49600	35076	62044	43891	74497	52706	-	-	-	-	-	-
1.5S-50	5075	0°	20507	19277	25667	24145	30836	29004	36005	33872	38589	36297	41174	38731
		45°	11993	10037	15020	12568	18038	15099	21065	17631	22569	18896	24083	20162
		90°	19781	15091	24764	18896	29747	22702	34739	26517	37226	28420	39722	30323
1.5S-60	5075	0°	29606	27393	37040	34279	44484	41174	51918	48060	55645	51503	59362	54954
		45°	17312	14259	21667	17843	26021	21437	30376	25021	32544	26818	34721	28606
		90°	28561	21445	35739	26835	42917	32226	50095	37625	53680	40324	57273	43015
1.5S-70	3770	0°	40351	36881	50476	46148	60601	55415	70726	64672	75789	69310	80852	73939
		45°	23605	19197	29526	24021	35447	28845	41368	33668	44333	36085	47298	38492
		90°	38926	28871	48697	36129	58468	43378	68230	50626	73116	54255	78002	57884
1.5S-85	2538	0°	59495	51857	74426	64885	89348	77913	104280	90941	111750	97456	119211	103970
		45°	34801	26995	43537	33783	52273	40563	61008	47343	65372	50741	69735	54131
		90°	57397	40598	71806	50794	86206	60991	100615	71187	107811	76293	115015	81391
1.5S-95	2030	0°	74311	68469	92968	85666	111617	102863	130265	120060	-	-	-	-
		45°	43475	35651	54379	44599	65292	53556	76205	62504	-	-	-	-
		90°	71700	53600	89694	67062	107687	80524	125681	93986	-	-	-	-

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
0.3S-28	5075	0°	8612	6479	9125	6868	10152	7638	11170	8408	12187	9178	17808	13418
		45°	5461	3673	5788	3885	6434	4328	7081	4762	7727	5195	11294	7603
		90°	9851	6010	10435	6373	11603	7089	12772	7798	13940	8514	20366	12453
0.3S-35	4205	0°	13489	10161	14294	10763	15887	11966	17480	13170	19073	14374	23065	17383
		45°	8550	5753	9063	6098	10072	6780	11081	7461	12099	8143	14630	9851
		90°	15436	9426	16347	9984	18171	11108	19994	12223	21817	13338	26384	16135
0.3S-45	2538	0°	22330	20056	-	-	-	-	-	-	-	-	22985	20649
		45°	14152	11364	-	-	-	-	-	-	-	-	14577	11701
		90°	25534	18613	-	-	-	-	-	-	-	-	26287	19162
0.3S-50	2030	0°	-	-	-	-	-	-	-	-	-	-	22693	21348
		45°	-	-	-	-	-	-	-	-	-	-	14391	12090
		90°	-	-	-	-	-	-	-	-	-	-	25959	19808
0.3S-60	1378	0°	-	-	-	-	-	-	-	-	-	-	22180	20525
		45°	-	-	-	-	-	-	-	-	-	-	14064	11630
		90°	-	-	-	-	-	-	-	-	-	-	25366	19047
0.9S-45	5075	0°	25818	23198	27340	24570	30393	27313	33447	30057	36492	32801	53273	47891
		45°	16365	13143	17339	13913	19268	15471	21206	17029	23136	18578	33774	27128
		90°	29526	21525	31270	22800	34757	25349	38253	27889	41740	30438	60929	44440
0.9S-50	5075	0°	31889	30004	33774	31774	37545	35323	41306	38872	45077	42413	65788	61911
		45°	20224	16993	21419	18002	23800	20012	26189	22021	28579	24030	41714	35076
		90°	36474	27844	38634	29491	42935	32783	47245	36067	51547	39359	75240	57459
0.9S-60	3698	0°	45980	42563	48697	45077	54113	50104	59539	55122	64965	60150	69027	63911
		45°	29154	24118	30871	25534	34314	28384	37748	31225	41191	34075	43767	36208
		90°	52591	39501	55689	41837	61893	46493	68098	51157	74293	55813	78949	59309
0.9S-70	3118	0°	62628	57273	66319	60654	-	-	-	-	-	-	66319	60654
		45°	39713	32447	42050	34359	-	-	-	-	-	-	42050	34359
		90°	71620	53149	75842	56282	-	-	-	-	-	-	75842	56282
0.9S-85	1813	0°	-	-	-	-	-	-	-	-	-	-	67850	59167
		45°	-	-	-	-	-	-	-	-	-	-	43023	33518
		90°	-	-	-	-	-	-	-	-	-	-	77603	54910
1.5S-50	5075	0°	43749	41165	46334	43599	51503	48458	56671	53326	61831	58185	90251	84941
		45°	25596	21428	27101	22693	30128	25225	33146	27765	36173	30296	52795	44218
		90°	42209	32226	44705	34128	49688	37934	54671	41740	59654	45546	87074	66496
1.5S-60	5075	0°	63079	58397	66797	61840	74240	68735	81675	75621	89118	82516	130035	120414
		45°	36899	30402	39076	32199	43431	35784	47776	39368	52131	42962	76072	62690
		90°	60858	45714	64451	48414	71629	53804	78807	59203	85976	64593	125459	94260
1.5S-70	3770	0°	85914	78568	90977	83206	101102	92473	111227	101731	121353	110997	131478	120264
		45°	50255	40908	53220	43316	59141	48139	65062	52963	70992	57787	76913	62610
		90°	82887	61513	87773	65133	97544	72390	107306	79639	117078	86897	126849	94145
1.5S-85	2538	0°	126681	110484	-	-	-	-	-	-	-	-	130407	113741
		45°	74107	57521	-	-	-	-	-	-	-	-	76285	59220
		90°	122220	86490	-	-	-	-	-	-	-	-	125822	89039
1.5S-95	2030	0°	-	-	-	-	-	-	-	-	-	-	130265	120060
		45°	-	-	-	-	-	-	-	-	-	-	76205	62504
		90°	-	-	-	-	-	-	-	-	-	-	125681	93986

NOTE:

* MOP = Maximum Operating Pressure (psi).

MOT = Maximum Operating Torque.

OLGA-H Double-Acting Hydraulic Actuator

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

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3S-60	5075	0°	48360	44749	60513	56008	72665	67257	84826	78515	90897	84144	96978	89773
		45°	28676	23632	35881	29579	43094	35518	50299	41466	53901	44440	57503	47413
		90°	48006	36040	60070	45103	72134	54175	84197	63239	90233	67770	96261	72302
3S-70	4640	0°	65912	60256	82454	75391	98996	90525	115538	105660	123804	113228	132080	120795
		45°	39085	31818	48892	39811	58698	47803	68514	55804	73417	59796	78320	63796
		90°	65425	48529	81843	60716	98270	72912	114688	85100	122893	91198	131106	97287
3S-85	3118	0°	97190	84719	121583	105997	145967	127283	170359	148560	182556	159207	194752	169846
		45°	57627	44741	72089	55981	86560	67221	101022	78462	108254	84082	115485	89702
		90°	96473	68230	120689	85374	144896	102518	169102	119653	181210	128230	193318	136797
3S-90	2755	0°	108962	97907	136302	122503	163650	147091	190990	171687	204665	183981	218330	196283
		45°	64610	51706	80825	64699	97040	77683	113254	90676	121361	97172	129469	103660
		90°	108156	78860	135301	98668	162447	118476	189583	138284	203160	148188	216728	158092
3S-95	2465	0°	121406	111856	151870	139948	182334	168040	212799	196133	228031	210179	243272	224225
		45°	71992	59070	90056	73913	108121	88746	126185	103589	135222	111006	144258	118423
		90°	120512	90092	150755	112714	180998	135346	211241	157968	226358	169288	241475	180600
3S-110	1885	0°	162969	144825	203824	181148	244670	217472	-	-	-	-	-	-
		45°	96641	76488	120866	95668	145081	114856	-	-	-	-	-	-
		90°	161774	116644	202319	145905	242865	175156	-	-	-	-	-	-
6S-70	5075	0°	76922	70319	96225	87976	115529	105643	134832	123300	144480	132133	154136	140966
		45°	45696	37209	57167	46555	68629	55901	80099	65248	85835	69921	91570	74594
		90°	76647	56857	95889	71133	115122	85419	134354	99695	143975	106837	153587	113971
6S-85	5075	0°	113422	98863	141886	123698	170350	148542	198814	173377	213046	185795	227270	198213
		45°	67381	52317	84286	65460	101199	78604	118104	91738	126566	98314	135018	104881
		90°	113024	79931	141382	100013	169749	120096	198106	140178	212294	150224	226473	160261
6S-90	4785	0°	127159	114263	159066	142957	190981	171660	222888	200363	238846	214710	254795	229066
		45°	75541	60459	94499	75647	113458	90835	132416	106023	141895	113617	151366	121211
		90°	126707	92384	158508	115591	190300	138797	222101	161995	237997	173599	253901	185202
6S-95	4278	0°	141683	130540	177236	163323	212790	196106	248343	228889	266116	245281	283897	261672
		45°	84171	69071	105289	86419	126415	103766	147533	121123	158092	129796	168660	138470
		90°	141178	105545	176608	132053	212037	158561	247467	185069	265177	198319	282897	211577
6S-110	3190	0°	190194	169014	237864	211400	285525	253786	333195	296181	357030	317370	380865	338568
		45°	112989	89437	141311	111865	169625	134292	197947	156729	212108	167943	226261	179157
		90°	189521	136656	237023	170926	284525	205196	332018	239475	355774	256610	379520	273745
6S-125	2465	0°	245599	231120	307156	289065	368713	347020	430270	404975	461044	433952	491818	462930
		45°	145905	122300	182476	152968	219047	183627	255610	214294	273895	229633	292181	244962
		90°	244732	186866	306068	233722	367412	280578	428748	327433	459416	350861	490084	374289

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
3S-60	5075	0°	103049	95402	109130	101031	121282	112281	133434	123539	145586	134797	212427	196708
		45°	61106	50378	64708	53352	71912	59300	79126	65248	86330	71187	125964	103890
		90°	102297	76833	108324	81374	120388	90437	132451	99500	144515	108572	210860	158428
3S-70	4640	0°	140346	128362	148622	135921	165155	151056	181697	166191	198239	181325	264407	241864
		45°	83224	67788	88127	71788	97934	79781	107749	87773	117556	95765	156791	127734
		90°	139320	103386	147524	109475	163942	121671	180361	133859	196788	146046	262460	194805
3S-85	3118	0°	206939	180484	219136	191132	243528	212409	-	-	-	-	261823	228376
		45°	122716	95323	129947	100943	144409	112183	-	-	-	-	155260	120609
		90°	205417	145374	217525	153941	241741	171085	-	-	-	-	259893	183936
3S-90	2755	0°	232005	208577	245679	220870	-	-	-	-	-	-	259354	233173
		45°	137576	110156	145683	116653	-	-	-	-	-	-	153791	123149
		90°	230297	167996	243874	177900	-	-	-	-	-	-	257442	187804
3S-95	2465	0°	258504	238271	-	-	-	-	-	-	-	-	258504	238271
		45°	153286	125840	-	-	-	-	-	-	-	-	153286	125840
		90°	256601	191911	-	-	-	-	-	-	-	-	256601	191911
3S-110	1885	0°	-	-	-	-	-	-	-	-	-	-	265089	235634
		45°	-	-	-	-	-	-	-	-	-	-	157198	124442
		90°	-	-	-	-	-	-	-	-	-	-	263142	189787
6S-70	5075	0°	163783	149799	173439	158623	192743	176289	212046	193946	231350	211613	337523	308750
		45°	97305	79267	103032	83941	114502	93287	125973	102633	137443	111980	200514	163376
		90°	163208	121114	172829	128256	192061	142532	211294	156818	230535	171094	336329	249635
6S-85	5075	0°	241502	210630	255734	223048	284198	247883	312662	272718	341126	297562	497669	434165
		45°	143471	111457	151923	118025	168837	131168	185742	144311	202656	157455	295659	229739
		90°	240652	170297	254831	180343	283197	200425	311555	220508	339922	240590	495916	351038
6S-90	4785	0°	270753	243413	286711	257760	318618	286463	350525	315166	382441	343860	526035	473019
		45°	160845	128805	170324	136399	189282	151587	208240	166775	227199	181963	312511	250299
		90°	269797	196805	285693	208409	317494	231615	349295	254822	381087	278029	524177	382450
6S-95	4278	0°	301678	278064	319450	294456	355004	327248	390557	360031	426111	392814	523885	482968
		45°	179219	147144	189778	155817	210905	173165	232022	190512	253149	207860	311228	255574
		90°	300607	224827	318326	238076	353756	264584	389176	291092	424606	317600	522035	390495
6S-110	3190	0°	404701	359765	428536	380954	476206	423340	523867	465735	-	-	523867	465735
		45°	240422	190371	254583	201585	282905	224021	311219	246449	-	-	311219	246449
		90°	403267	290880	427022	308015	474524	342285	522017	376564	-	-	522017	376564
6S-125	2465	0°	522601	491907	-	-	-	-	-	-	-	-	522601	491907
		45°	310467	260301	-	-	-	-	-	-	-	-	310467	260301
		90°	520752	397717	-	-	-	-	-	-	-	-	520752	397717

NOTE:

* MOP = Maximum Operating Pressure (psi).
MOT = Maximum Operating Torque.

OLGA-H Double-Acting Hydraulic Actuator

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

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14S-85	5075	0°	125831	109678	157402	137231	188981	164783	220561	192336	236342	206116	252131	219888
		45°	73612	57105	92083	71452	110555	85790	129026	100137	138258	107315	147498	114484
		90°	121397	85861	151861	107430	182325	129000	212790	150569	228022	161358	243254	172138
14S-95	5075	0°	157180	144816	196619	181184	236058	217551	275506	253928	295226	272107	314945	290296
		45°	91950	75400	115024	94331	138098	113272	161172	132204	172705	141674	184246	151144
		90°	151640	113369	189698	141842	227756	170306	265806	198779	284835	213020	303864	227252
14S-110	5075	0°	210993	187503	263876	234527	316759	281551	369643	328575	396080	352083	422526	375599
		45°	123433	97624	154366	122105	185308	146586	216242	171076	231713	183317	247175	195557
		90°	203567	146781	254592	183591	305608	220410	356632	257220	382140	275630	407648	294031
14S-125	4495	0°	272461	256397	340754	320689	409037	384981	477330	449273	511476	481419	545613	513565
		45°	159393	133496	199337	166969	239289	200443	279241	233916	299208	250653	319185	267390
		90°	262876	200717	328761	251043	394637	301377	460522	351702	493465	376874	526407	402036
14S-135	3843	0°	317804	307210	397452	384238	477109	461266	556756	538294	596585	576803	636404	615322
		45°	185910	159951	232509	200054	279108	240156	325699	280268	349003	300315	372298	320371
		90°	306617	240493	383468	300793	460310	361093	537161	421393	575582	451548	614003	481693
14S-145	3335	0°	366864	340639	458743	425995	550632	511352	642520	596700	688464	639378	734409	682056
		45°	214613	177351	268364	221791	322123	266239	375874	310679	402753	332894	429633	355119
		90°	353941	266664	442599	333487	531249	400302	619907	467125	664231	500536	708564	533939
14S-175	2248	0°	534373	528390	668214	660762	802055	793142	935905	925523	1002825	991709	-	-
		45°	312608	275108	390902	344029	469205	412949	547507	481879	586654	516344	-	-
		90°	515556	413640	644689	517273	773821	620907	902954	724531	967520	776352	-	-
14S-185	2030	0°	597187	598789	746764	748800	896342	898820	1045920	1048832	-	-	-	-
		45°	349357	311759	436855	389867	524363	467975	611861	546082	-	-	-	-
		90°	576166	468753	720478	586194	864789	703626	1009101	821066	-	-	-	-
14S-200	1740	0°	697952	686261	872772	858195	1047584	1030130	-	-	-	-	-	-
		45°	408303	357305	510573	446821	612844	536338	-	-	-	-	-	-
		90°	673383	537232	842052	671825	1010711	806427	-	-	-	-	-	-
18S-125	5075	0°	313246	294774	391752	368687	470267	442599	548773	516512	588026	553473	627279	590425
		45°	183299	153525	229243	192017	275188	230509	321132	269010	344099	288260	367067	307502
		90°	302404	230898	378201	288800	453990	346702	529779	404594	567678	433545	605577	462496

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			1160		1450		1740		2030		2175		2320	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-145	4350	0°	421774	391628	527407	489756	633050	587885	738692	686013	791514	735081	844335	784150
		45°	246812	203966	308626	255070	370448	306183	432271	357287	463177	382839	494084	408400
		90°	407179	306767	509157	383636	611144	460505	713131	537373	764130	575803	815119	614242
18S-175	2973	0°	614348	607471	768227	759669	922107	911857	1075986	1064055	1152925	1140145	1229865	1216244
		45°	359500	316379	449547	395646	539595	474914	629642	554181	674666	593806	719690	633439
		90°	593089	475852	741649	595062	890200	714282	1038751	833493	1113026	893103	1187302	952712
18S-185	2610	0°	686570	688411	858532	860877	1030502	1033352	1202463	1205817	1288448	1292050	1374433	1378283
		45°	401762	358535	502395	448361	603028	538188	703652	628014	753969	672923	804285	717831
		90°	662815	539250	828828	674347	994842	809445	1160856	944543	1243867	1012092	1326869	1079641
18S-200	2248	0°	802418	788974	1003401	986646	1204384	1184310	1405366	1381983	1505858	1480810	-	-
		45°	469559	410914	587168	513866	704776	616809	822385	719761	881198	771237	-	-
		90°	774653	618021	968679	772865	1162705	927700	1356740	1082535	1453753	1159953	-	-
32S-145	5075	0°	488809	453875	611242	567599	733665	681322	856098	795054	917318	851911	978530	908777
		45°	289853	239705	362456	299775	435059	359836	507661	419897	543967	449937	580264	479967
		90°	485216	365563	606745	457168	728275	548764	849805	640361	910574	686163	971343	731966
32S-175	4278	0°	711999	704024	890332	880402	1068666	1056788	1247000	1233166	1336162	1321364	1425334	1409553
		45°	422207	371829	527956	464983	633714	558137	739462	651291	792337	697873	845211	744445
		90°	706759	567050	883783	709113	1060807	851177	1237830	993240	1326347	1064276	1414854	1135303
32S-200	3045	0°	929957	914371	1162882	1143464	1395808	1372548	1628733	1601632	1745200	1716169	1861658	1830716
		45°	551455	482923	689580	603913	827704	724903	965829	845893	1034892	906388	1103954	966882
		90°	923116	736471	1154333	920982	1385550	1105494	1616758	1290006	1732366	1382266	1847975	1474526
50S-175	5075	0°	791107	782247	989257	978229	1187408	1174211	1385558	1370193	1484634	1468180	1583700	1566167
		45°	469116	413144	586619	516645	704121	620154	821624	723655	880375	775414	939127	827165
		90°	785292	630049	981982	787903	1178672	945747	1375371	1103600	1473712	1182522	1572061	1261453
50S-200	4423	0°	1033281	1015969	1292094	1270507	1550899	1525046	1809704	1779585	1939111	1906859	2068509	2034124
		45°	612729	536577	766201	671011	919673	805445	1073145	939879	1149881	1007100	1226617	1074313
		90°	1025687	818305	1282589	1023315	1539499	1228334	1796401	1433344	1924852	1535853	2053303	1638362
80S-200	5075	0°	1205499	1134542	1507442	1418811	1809385	1703079	2111320	1987347	2262296	2129490	2413263	2271625
		45°	714849	599205	893899	749340	1072950	899475	1252001	1049610	1341526	1124683	1431051	1199746
		90°	1196639	913796	1496361	1142765	1796083	1371725	2095804	1600685	2245665	1715169	2395526	1829645

NOTE:

* MOP = Maximum Operating Pressure (psi).

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
14S-85	5075	0°	267921	233669	283711	247449	315281	275002	346861	302554	378440	330106	552110	481649
		45°	156729	121662	165969	128832	184441	143179	202912	157526	221384	171873	322982	250768
		90°	258486	182927	273718	193708	304183	215277	334656	236846	365120	258415	532674	377051
14S-95	5075	0°	334673	308484	354393	326663	393832	363040	433280	399408	472719	435776	689659	635820
		45°	195779	160615	207320	170076	230394	189017	253468	207948	276542	226889	403453	331045
		90°	322893	241493	341913	255725	379972	284198	418030	312670	456079	341143	665382	497740
14S-110	5075	0°	448963	399116	475409	422623	528292	469647	581167	516671	634050	563695	924903	822332
		45°	262646	207798	278117	220038	309050	244520	339984	269010	370926	293491	541073	428155
		90°	433165	312440	458672	330850	509688	367660	560713	404470	611737	441281	892350	643750
14S-125	4495	0°	579760	545711	613906	577857	682189	642140	750482	706431	818765	770723	1057780	995745
		45°	339161	284127	359137	300864	399080	334337	439033	367811	478985	401284	618800	518442
		90°	559350	427199	592292	452362	658177	502696	724062	553021	789947	603356	1020545	779512
14S-135	3843	0°	676233	653831	716061	692350	795709	769378	875357	846406	955014	923425	1054576	1019713
		45°	395593	340418	418897	360473	465487	400576	512087	440679	558686	480790	616933	530921
		90°	652433	511848	690854	541993	767696	602294	844547	662594	921398	722894	1017456	798267
14S-145	3335	0°	780353	724735	826297	767413	918186	852770	1010074	938118	-	-	1056018	980796
		45°	456513	377334	483384	399558	537143	443998	590894	488437	-	-	617773	510662
		90°	752889	567351	797214	600762	885872	667577	974521	734400	-	-	1018845	767811
14S-175	2248	0°	-	-	-	-	-	-	-	-	-	-	1036281	1024811
		45°	-	-	-	-	-	-	-	-	-	-	606232	533567
		90°	-	-	-	-	-	-	-	-	-	-	999807	802259
14S-185	2030	0°	-	-	-	-	-	-	-	-	-	-	1045920	1048832
		45°	-	-	-	-	-	-	-	-	-	-	611861	546082
		90°	-	-	-	-	-	-	-	-	-	-	1009101	821066
14S-200	1740	0°	-	-	-	-	-	-	-	-	-	-	1047584	1030130
		45°	-	-	-	-	-	-	-	-	-	-	612844	536338
		90°	-	-	-	-	-	-	-	-	-	-	1010711	806427
18S-125	5075	0°	666532	627385	705794	664346	784300	738259	862807	812171	941313	886084	1373114	1292617
		45°	390044	326752	413011	346002	458956	384494	504891	422995	550835	461487	803515	673215
		90°	643467	491447	681366	520398	757164	578290	832953	636192	908742	694094	1325603	1012535

NOTE:

* MOP = Maximum Operating Pressure (psi).
MOT = Maximum Operating Torque.

Model	MOP* (psi)	Position	Operating supply pressure (psi)											
			2465		2610		2900		3190		3480		MOT@MOP	
			OP	CL	OP	CL	OP	CL	OP	CL	OP	CL	OP	CL
18S-145	4350	0°	897156	833210	949978	882278	1055620	980406	1161263	1078535	1266905	1176663	1583824	1471057
		45°	524991	433952	555907	459504	617720	510609	679543	561722	741365	612826	926824	766156
		90°	866108	652672	917106	691111	1019093	767971	1121080	844839	1223059	921708	1529020	1152315
18S-175	2973	0°	1306796	1292342	1383735	1368432	1537614	1520630	-	-	-	-	1576088	1558679
		45°	764714	673073	809729	712707	899776	791974	-	-	-	-	922292	811791
		90°	1261577	1012322	1335853	1071932	1484412	1191143	-	-	-	-	1521550	1220952
18S-185	2610	0°	1460418	1464516	1546394	1550749	-	-	-	-	-	-	1546394	1550749
		45°	854602	762749	904918	807657	-	-	-	-	-	-	904918	807657
		90°	1409880	1147190	1492891	1214739	-	-	-	-	-	-	1492891	1214739
18S-200	2248	0°	-	-	-	-	-	-	-	-	-	-	1556103	1530233
		45°	-	-	-	-	-	-	-	-	-	-	910601	796975
		90°	-	-	-	-	-	-	-	-	-	-	1502255	1198666
32S-145	5075	0°	1039751	965643	1100962	1022501	1223395	1136233	1345827	1249956	1468260	1363679	2141634	1989180
		45°	616561	509998	652867	540029	725469	600090	798072	660160	870666	720221	1269976	1050575
		90°	1032104	777760	1092873	823562	1214403	915159	1335932	1006764	1457471	1098360	2125897	1602154
32S-175	4278	0°	1514496	1497742	1603667	1585930	1782001	1762317	1960335	1938695	2138669	2115081	2629089	2600129
		45°	898086	791027	950969	837600	1056718	930763	1162466	1023917	1268224	1117071	1559033	1373247
		90°	1503371	1206340	1591878	1277367	1768902	1419430	1945926	1561494	2122950	1703566	2609768	2094238
32S-200	3045	0°	1978125	1945253	2094583	2059800	2327517	2288884	2560442	2517968	-	-	2443975	2403421
		45°	1173016	1027377	1242079	1087872	1380204	1208862	1518328	1329852	-	-	1449266	1269357
		90°	1963583	1566777	2079192	1659038	2310400	1843549	2541617	2028061	-	-	2426008	1935809
50S-175	5075	0°	1682775	1664162	1781851	1762149	1980001	1958131	2178152	2154113	2376302	2350087	3466122	3427975
		45°	997878	878915	1056629	930674	1174132	1034175	1291634	1137684	1409137	1241185	2055392	1810474
		90°	1670411	1340375	1768752	1419297	1965451	1577151	2162141	1734995	2358831	1892848	3440641	2761018
50S-200	4423	0°	2197916	2161397	2327322	2288662	2586127	2543201	2844932	2797740	3103746	3052278	3944868	3879532
		45°	1303353	1141534	1380089	1208747	1533561	1343181	1687033	1477615	1840505	1612049	2339289	2048957
		90°	2181763	1740863	2310214	1843372	2567116	2048391	2824018	2253401	3080928	2458420	3915864	3124713
80S-200	5075	0°	2564239	2413759	2715207	2555893	3017150	2840161	3319093	3124430	3621037	3408707	5281712	4972192
		45°	1520577	1274818	1610102	1349881	1789153	1500016	1968203	1650160	2147254	1800296	3132033	2626044
		90°	2545387	1944129	2695248	2058614	2994970	2287574	3294692	2516534	3594413	2745494	5242883	4004787

NOTE:

* MOP = Maximum Operating Pressure (psi).

MOT = Maximum Operating Torque.

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (lb-in) - Canted Yoke Design, Spring to Close Models 0.3C-008A-20-CL to 0.9C-0700-85-CL

					Operating supply pressure (psi)											
					1160			1450			1740			2030		
Model	MOP (psi)	BTC	RTC	ETC	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	5075	1841	1044	1797	-	-	-	2195	239	239	3027	690	699	3859	1036	1168
0.3C-008A-28-CL	5075	1823	1036	1770	4532	1301	1549	6160	1947	2469	7789	2584	3381	9417	3231	4301
0.3C-008A-35-CL	3190	1823	1036	1752	8187	2744	3611	10727	3744	5045	13267	4735	6479	15816	5735	7904
0.3C-008B-20-CL	5075	2770	1416	1779	-	-	-	-	-	-	-	-	-	3877	195	195
0.3C-008B-28-CL	5075	2761	1407	1752	4549	575	575	6178	1443	1496	7806	2115	2416	9426	2761	3328
0.3C-008B-35-CL	3190	2753	1407	1744	8196	2275	2638	10745	3284	4071	13285	4284	5505	15825	5284	6939
0.3C-008C-20-CL	5075	3328	1726	2248	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-28-CL	5075	3319	1717	2230	-	-	-	5700	894	894	7328	1726	1806	8957	2399	2726
0.3C-008C-35-CL	3263	3310	1717	2213	7727	1894	2036	10267	2930	3469	12816	3939	4894	15356	4939	6328
0.3C-0100-28-CL	5075	5319	2921	4496	-	-	-	-	-	-	-	-	-	6700	522	522
0.3C-0100-35-CL	3553	5310	2912	4487	-	-	-	8010	1266	1266	10550	2549	2699	13090	3585	4133
0.3C-0100-40-CL	2683	5293	2903	4461	8559	1575	1575	11878	3089	3443	15197	4425	5319	18516	5744	7187
0.3C-0100-45-CL	2103	5293	2903	4443	12072	3169	3549	16277	4859	5921	20472	6514	8293	24676	8169	10656
0.3C-0100-50-CL	1740	5284	2894	4434	16002	4753	5771	21198	6797	8691	26384	8842	11621	-	-	-
0.3C-0150-35-CL	3843	6673	3939	7284	-	-	-	-	-	-	7762	1124	1124	10302	2443	2558
0.3C-0150-40-CL	2973	6665	3930	7258	-	-	-	9090	1876	1876	12409	3310	3744	15728	4638	5611
0.3C-0150-45-CL	2320	6656	3921	7240	9284	1983	1983	13480	3744	4346	17684	5417	6718	21888	7072	9090
0.3C-0150-50-CL	1885	6656	3921	7231	13214	3638	4195	18401	5700	7125	23596	7744	10046	-	-	-
0.3C-0150-60-CL	1305	6656	3921	7240	22357	7258	9346	-	-	-	-	-	-	-	-	-
0.9C-0200-40-CL	5075	8877	5213	9488	-	-	-	9417	885	885	13258	2992	3045	17100	4594	5213
0.9C-0200-45-CL	5075	8868	5204	9470	9638	1009	1009	14498	3523	3753	19365	5496	6488	24225	7435	9231
0.9C-0200-50-CL	4278	8868	5195	9461	14188	3390	3576	20189	5833	6957	26189	8213	10338	32190	10577	13719
0.9C-0200-60-CL	2973	8868	5204	9470	24756	7647	9532	33394	11046	14400	42041	14436	19268	50679	17825	24136
0.9C-0250-40-CL	5075	10594	6479	13002	-	-	-	-	-	-	9762	1080	1080	13604	3142	3239
0.9C-0250-45-CL	5075	10585	6470	12984	-	-	-	11001	1779	1779	15861	4089	4514	20720	6045	7258
0.9C-0250-50-CL	4495	10585	6470	12966	10692	1602	1602	16693	4425	4983	22693	6824	8364	28694	9196	11745
0.9C-0250-60-CL	3118	10585	6470	12975	21260	6257	7559	29898	9674	12426	38545	13064	17303	47183	16454	22171
0.9C-0250-70-CL	2248	10585	6470	12975	33739	11178	14595	45493	15799	21224	57256	20401	27844	69018	25003	34474
0.9C-0350-45-CL	5075	16728	9860	18179	-	-	-	-	-	-	-	-	-	15542	593	593
0.9C-0350-50-CL	4713	16719	9860	18171	-	-	-	-	-	-	17516	1699	1699	23516	5080	5080
0.9C-0350-60-CL	3263	16728	9860	18179	16082	894	894	24720	5629	5762	33358	9196	10639	41997	12648	15507
0.9C-0350-70-CL	2393	16719	9860	18179	28553	7249	7930	40315	11975	14559	52078	16631	21180	63840	21251	27809
0.9C-0350-85-CL	1595	16675	9824	18082	50794	16126	20463	68133	22941	30234	-	-	-	-	-	-
0.9C-0400-50-CL	5003	19693	12064	24260	-	-	-	-	-	-	-	-	-	17445	1664	1664
0.9C-0400-60-CL	3480	19702	12064	24269	-	-	-	18657	2345	2345	27296	6727	7213	35934	10231	12090
0.9C-0400-70-CL	2538	19693	12064	24269	22490	4505	4505	34252	9559	11134	46015	14232	17763	57769	18870	24393
0.9C-0400-85-CL	1740	19649	12028	24171	44732	13728	17047	62070	20560	26818	79409	27367	36589	-	-	-
0.9C-0700-60-CL	3698	27783	16693	32128	-	-	-	-	-	-	-	-	-	28110	3257	3257
0.9C-0700-70-CL	2755	27783	16693	32128	-	-	-	26428	2301	2301	38182	8709	8930	49945	13586	15560
0.9C-0700-85-CL	1813	27738	16657	32031	36899	8143	8205	54237	15312	17985	71585	22207	27756	-	-	-

NOTES:

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- 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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	5075	1841	1044	1797	4275	1195	1407	4691	1363	1637	5107	1531	1876	5523	1690	2106
0.3C-008A-28-CL	5075	1823	1036	1770	10231	3549	4762	11046	3868	5222	11860	4186	5682	12674	4505	6134
0.3C-008A-35-CL	3190	1823	1036	1752	17082	6231	8621	18356	6727	9338	19631	7222	10054	20897	7718	10771
0.3C-008B-20-CL	5075	2770	1416	1779	4293	434	434	4709	664	664	5116	903	903	5532	1133	1133
0.3C-008B-28-CL	5075	2761	1407	1752	10240	3089	3788	11055	3408	4248	11869	3726	4709	12683	4054	5160
0.3C-008B-35-CL	3190	2753	1407	1744	17100	5788	7656	18365	6284	8364	19640	6780	9081	20914	7284	9798
0.3C-008C-20-CL	5075	3328	1726	2248	-	-	-	4231	62	62	4647	292	292	5063	531	531
0.3C-008C-28-CL	5075	3319	1717	2230	9771	2726	3186	10585	3054	3647	11400	3381	4098	12214	3700	4558
0.3C-008C-35-CL	3263	3310	1717	2213	16631	5443	7045	17896	5939	7762	19171	6443	8479	20436	6939	9196
0.3C-0100-28-CL	5075	5319	2921	4496	7514	982	982	8329	1443	1443	9134	1903	1903	9948	2292	2363
0.3C-0100-35-CL	3553	5310	2912	4487	14365	4098	4850	15639	4602	5567	16905	5107	6284	18179	5611	7001
0.3C-0100-40-CL	2683	5293	2903	4461	20180	6399	8125	21835	7054	9063	23499	7709	9992	25163	8364	10931
0.3C-0100-45-CL	2103	5293	2903	4443	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0100-50-CL	1740	5284	2894	4434	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-35-CL	3843	6673	3939	7284	11577	2974	3275	12851	3487	3992	14117	4001	4709	15391	4505	5426
0.3C-0150-40-CL	2973	6665	3930	7258	17392	5302	6550	19047	5957	7488	20711	6612	8426	22375	7266	9355
0.3C-0150-45-CL	2320	6656	3921	7240	23994	7904	10276	26092	8727	11453	-	-	-	-	-	-
0.3C-0150-50-CL	1885	6656	3921	7231	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-60-CL	1305	6656	3921	7240	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-40-CL	5075	8877	5213	9488	19020	5364	6293	20941	6134	7382	22861	6895	8461	24773	7656	9541
0.9C-0200-45-CL	5075	8868	5204	9470	26650	8391	10594	29084	9346	11966	31509	10311	13338	33943	11258	14710
0.9C-0200-50-CL	4278	8868	5195	9461	35191	11754	15409	38191	12931	17100	41191	14108	18790	44192	15285	20481
0.9C-0200-60-CL	2973	8868	5204	9470	54999	19516	26579	59318	21206	29013	63637	22897	31447	67956	24587	33881
0.9C-0250-40-CL	5075	10594	6479	13002	15524	3947	4328	17436	4726	5408	19357	5496	6488	21277	6266	7567
0.9C-0250-45-CL	5075	10585	6470	12984	23154	7010	8629	25588	7975	9992	28013	8930	11364	30447	9886	12736
0.9C-0250-50-CL	4495	10585	6470	12966	31695	10382	13444	34695	11559	15135	37695	12736	16825	40696	13913	18516
0.9C-0250-60-CL	3118	10585	6470	12975	51503	18144	24605	55822	19835	27039	60141	21534	29473	64460	23224	31907
0.9C-0250-70-CL	2248	10585	6470	12975	74895	27305	37793	-	-	-	-	-	-	-	-	-
0.9C-0350-45-CL	5075	16728	9860	18179	17976	1965	1965	20401	3328	3328	22835	4700	4700	25260	5859	6072
0.9C-0350-50-CL	4713	16719	9860	18171	26517	6399	6780	29517	7638	8470	32509	8860	10161	35509	10063	11851
0.9C-0350-60-CL	3263	16728	9860	18179	46316	14356	17940	50644	16064	20374	54963	17763	22808	59282	19463	25242
0.9C-0350-70-CL	2393	16719	9860	18179	69717	23561	31128	75594	25871	34438	-	-	-	-	-	-
0.9C-0350-85-CL	1595	16675	9824	18082	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-50-CL	5003	19693	12064	24260	20445	3354	3354	23446	5045	5045	26446	6364	6735	29446	7612	8426
0.9C-0400-60-CL	3480	19702	12064	24269	40253	11957	14524	44572	13666	16958	48900	15374	19392	53220	17073	21826
0.9C-0400-70-CL	2538	19693	12064	24269	63655	21180	27712	69531	23490	31022	75408	25800	34341	-	-	-
0.9C-0400-85-CL	1740	19649	12028	24171	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-60-CL	3698	27783	16693	32128	32429	5691	5691	36748	8072	8125	41067	9939	10559	45387	11736	12993
0.9C-0700-70-CL	2755	27783	16693	32128	55822	15949	18879	61707	18286	22189	67584	20622	25499	73461	22950	28818
0.9C-0700-85-CL	1813	27738	16657	32031	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

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Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3C-008A-20-CL	5075	1841	1044	1797	6355	2018	2576	7178	2345	3045	8010	2673	3514	12577	4461	6080
0.3C-008A-28-CL	5075	1823	1036	1770	14294	5142	7054	15922	5780	7975	17551	6408	8886	26499	9913	13931
0.3C-008A-35-CL	3190	1823	1036	1752	23437	8718	12205	25986	9709	13639	-	-	-	25986	9709	13639
0.3C-008B-20-CL	5075	2770	1416	1779	6364	1522	1602	7196	1868	2071	8028	2204	2540	12595	4018	5116
0.3C-008B-28-CL	5075	2761	1407	1752	14312	4691	6080	15940	5328	7001	17569	5965	7913	26517	9479	12957
0.3C-008B-35-CL	3190	2753	1407	1744	23454	8275	11232	25995	9276	12665	-	-	-	25995	9276	12665
0.3C-008C-20-CL	5075	3328	1726	2248	5895	1000	1000	6727	1460	1469	7550	1823	1938	12117	3664	4505
0.3C-008C-28-CL	5075	3319	1717	2230	13843	4346	5479	15471	4983	6390	17091	5629	7311	26048	9134	12356
0.3C-008C-35-CL	3263	3310	1717	2213	22985	7939	10630	25526	8930	12064	-	-	-	26163	9187	12426
0.3C-0100-28-CL	5075	5319	2921	4496	11577	2974	3275	13205	3629	4195	14834	4284	5107	23782	7824	10152
0.3C-0100-35-CL	3553	5310	2912	4487	20720	6612	8426	23269	7620	9860	25809	8612	11294	26446	8868	11656
0.3C-0100-40-CL	2683	5293	2903	4461	-	-	-	-	-	-	-	-	-	25986	8691	11400
0.3C-0100-45-CL	2103	5293	2903	4443	-	-	-	-	-	-	-	-	-	25729	8585	11249
0.3C-0100-50-CL	1740	5284	2894	4434	-	-	-	-	-	-	-	-	-	26384	8842	11621
0.3C-0150-35-CL	3843	6673	3939	7284	17932	5514	6859	20472	6523	8293	23021	7523	9727	26198	8771	11515
0.3C-0150-40-CL	2973	6665	3930	7258	25694	8568	11232	-	-	-	-	-	-	26526	8895	11701
0.3C-0150-45-CL	2320	6656	3921	7240	-	-	-	-	-	-	-	-	-	26092	8727	11453
0.3C-0150-50-CL	1885	6656	3921	7231	-	-	-	-	-	-	-	-	-	26189	8762	11515
0.3C-0150-60-CL	1305	6656	3921	7240	-	-	-	-	-	-	-	-	-	26092	8727	11453
0.9C-0200-40-CL	5075	8877	5213	9488	28614	9169	11710	32456	10683	13869	36297	12187	16038	57415	20463	27942
0.9C-0200-45-CL	5075	8868	5204	9470	38802	13170	17445	43661	15073	20189	48520	16985	22923	75249	27446	37987
0.9C-0200-50-CL	4278	8868	5195	9461	50193	17631	23862	56193	19985	27251	62194	22330	30632	78692	28791	39926
0.9C-0200-60-CL	2973	8868	5204	9470	76594	27968	38749	-	-	-	-	-	-	78754	28818	39970
0.9C-0250-40-CL	5075	10594	6479	13002	25118	7789	9736	28960	9302	11895	32801	10816	14064	53919	19091	25968
0.9C-0250-45-CL	5075	10585	6470	12984	35306	11798	15471	40165	13701	18215	45024	15613	20950	71753	26074	36023
0.9C-0250-50-CL	4495	10585	6470	12966	46697	16268	21897	52697	18613	25278	58689	20959	28659	79692	29685	40492
0.9C-0250-60-CL	3118	10585	6470	12975	73098	26605	36775	-	-	-	-	-	-	79577	29137	40430
0.9C-0250-70-CL	2248	10585	6470	12975	-	-	-	-	-	-	-	-	-	77833	28455	39448
0.9C-0350-45-CL	5075	16728	9860	18179	30119	7886	8806	34987	9851	11550	39846	11789	14285	66575	22330	29358
0.9C-0350-50-CL	4713	16719	9860	18171	41510	12453	15232	47511	14825	18613	53512	17197	21994	79011	27207	36368
0.9C-0350-60-CL	3263	16728	9860	18179	67921	22861	30110	76559	26242	34987	-	-	-	78719	27092	36200
0.9C-0350-70-CL	2393	16719	9860	18179	-	-	-	-	-	-	-	-	-	78533	27021	36093
0.9C-0350-85-CL	1595	16675	9824	18082	-	-	-	-	-	-	-	-	-	76807	26340	35120
0.9C-0400-50-CL	5003	19693	12064	24260	35447	10037	11816	41448	12426	15197	47449	14798	18578	78949	27181	36332
0.9C-0400-60-CL	3480	19702	12064	24269	61858	20472	26694	70496	23870	31562	79135	27260	36439	79135	27260	36439
0.9C-0400-70-CL	2538	19693	12064	24269	-	-	-	-	-	-	-	-	-	78356	26951	35996
0.9C-0400-85-CL	1740	19649	12028	24171	-	-	-	-	-	-	-	-	-	79409	27367	36589
0.9C-0700-60-CL	3698	27783	16693	32128	54025	15223	17861	62672	18675	22729	71310	22091	27605	77789	24658	31252
0.9C-0700-70-CL	2755	27783	16693	32128	-	-	-	-	-	-	-	-	-	79347	25269	32128
0.9C-0700-85-CL	1813	27738	16657	32031	-	-	-	-	-	-	-	-	-	75913	23915	30199

NOTES:

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- BTO: Break to Open
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- ETO: End to Open
- MOT: Maximum Operating Torque

OLGAS-H Spring-Return Hydraulic Actuator

Output Torques (lb-in) - Canted Yoke Design, Spring to Close Models 1.5C-1100-70-CL to 14C-8300-200-CL

Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	3480	51352	28915	47484	-	-	-	-	-	-	-	-	-	56326	2443	2443
1.5C-1100-85-CL	2320	51290	28871	47369	-	-	-	61761	5505	5505	83684	17870	17870	105616	27296	30225
1.5C-1100-95-CL	1885	51246	28836	47272	61601	5417	5417	88994	20330	20852	116379	31677	36297	-	-	-
1.5C-1100-110-CL	1378	51272	28853	47325	98978	24561	26481	-	-	-	-	-	-	-	-	-
1.5C-1200-70-CL	3843	59424	35031	64549	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-85-CL	2610	59362	34996	64433	-	-	-	-	-	-	66690	8559	8559	88614	20330	20914
1.5C-1200-95-CL	2030	59318	34960	64345	-	-	-	71992	11550	11550	99376	24879	26986	126769	35987	42422
1.5C-1200-110-CL	1523	59344	34978	64389	81976	17170	17170	118697	32748	37872	-	-	-	-	-	-
3C-2000-70-CL	4278	87569	52874	102978	-	-	-	-	-	-	-	-	-	68956	62	62
3C-2000-85-CL	2900	87481	52804	102784	-	-	-	77949	5133	5133	114237	25322	25588	150534	40501	46042
3C-2000-95-CL	2320	87401	52750	102633	77683	4983	4983	123017	29146	30535	168350	47670	56087	213684	65699	81639
3C-2000-110-CL	1740	87445	52777	102713	139541	36023	39855	200319	60398	74107	261106	84401	108369	-	-	-
6C-2500-85-CL	4640	124875	76426	153463	-	-	-	-	-	-	100385	4620	4620	142816	28535	28535
6C-2500-95-CL	3698	124787	76364	153286	-	-	-	110652	10408	10408	163650	38572	40280	216658	60309	70160
6C-2500-110-CL	2755	124831	76400	153383	129973	21295	21295	201027	54007	61345	272090	82400	101403	343144	110457	141453
6C-2500-125-CL	2103	124725	76311	153153	212568	58672	67850	304324	95154	119574	396089	131283	171289	487844	167297	223012
6C-2500-135-CL	1813	124636	76249	152985	273488	82958	102191	380520	125167	162517	487544	167182	222844	-	-	-
6C-3800-85-CL	5075	168474	106182	228234	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-95-CL	4133	168386	106120	228057	-	-	-	-	-	-	-	-	-	142187	20808	20808
6C-3800-110-CL	3045	168430	106156	228155	-	-	-	126566	12002	12002	197620	48573	52051	268682	77391	92101
6C-3800-125-CL	2393	168315	106067	227925	138098	18507	18507	229863	61796	70222	321619	98429	121946	413383	134620	173661
6C-3800-135-CL	2030	168235	106005	227756	199027	49157	52839	306050	92251	113166	413082	134505	173492	520105	176546	233819
14C-5100-95-CL	5075	202027	127628	275754	-	-	-	-	-	-	-	-	-	129026	2611	2611
14C-5100-110-CL	4930	202080	127663	275851	-	-	-	-	-	-	189610	36766	36766	267275	71257	80542
14C-5100-125-CL	3843	201956	127575	275604	124557	97	97	224844	53751	56627	325132	94508	113148	425420	134239	169678
14C-5100-135-CL	3263	201868	127504	275418	191141	37625	37625	308121	87702	103563	425093	134107	169492	542073	180139	235430
14C-5100-145-CL	2828	201948	127566	275595	263186	69602	78232	398133	123459	154295	533090	176608	230358	668037	229571	306422
14C-5100-175-CL	1958	201700	127389	275081	509192	167226	216896	705768	244360	327690	902334	321344	438484	-	-	-
14C-5100-200-CL	1450	201452	127212	274577	749437	261487	352304	1006180	362005	497014	-	-	-	-	-	-
14C-5400-110-CL	5075	261504	161208	329301	-	-	-	-	-	-	-	-	-	214038	15869	15869
14C-5400-125-CL	3988	261380	161119	329053	-	-	-	-	-	-	271904	48476	48476	372192	95385	105005
14C-5400-135-CL	3408	261292	161057	328867	-	-	-	254884	38890	38890	371864	95243	104819	488845	142400	170758
14C-5400-145-CL	2973	261371	161119	329044	209957	13559	13559	344905	84073	89623	479852	138824	165686	614800	192327	241749
14C-5400-175-CL	2030	261124	160933	328531	455964	129274	152224	652530	207223	263018	849097	284534	373811	1045663	361633	484605
14C-5400-185-CL	1813	261026	160862	328336	548215	165987	204222	767891	252627	328035	987567	338851	451857	-	-	-
14C-5400-200-CL	1523	260876	160756	328026	696209	224420	287632	952951	325283	432341	-	-	-	-	-	-
14C-8300-125-CL	4278	335797	207895	428863	-	-	-	-	-	-	-	-	-	272789	22260	22260
14C-8300-135-CL	3698	335709	207833	428677	-	-	-	-	-	-	272461	22074	22074	389442	86835	88003
14C-8300-145-CL	3190	335789	207895	428854	-	-	-	245502	6877	6877	380449	82737	82940	515406	139373	159004
14C-8300-175-CL	2175	335541	207709	428341	356561	69478	69478	553128	154569	180263	749694	232730	291057	946269	310192	401851
14C-8300-185-CL	1958	335452	207639	428146	448813	112157	121468	668488	200576	245290	888164	287331	369103	-	-	-
14C-8300-200-CL	1668	335302	207532	427836	596806	172059	204886	853549	273692	349596	-	-	-	-	-	-

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- BTO: Break to Open
- RTO: Run to Open
- ETO: End to Open

Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	3480	51352	28915	47484	63761	6638	6638	71195	10824	10824	78630	15020	15020	86065	19029	19206
1.5C-1100-85-CL	2320	51290	28871	47369	116573	31756	36403	127539	36164	42581	-	-	-	-	-	-
1.5C-1100-95-CL	1885	51246	28836	47272	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1100-110-CL	1378	51272	28853	47325	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-70-CL	3843	59424	35031	64549	-	-	-	54193	1522	1522	61637	5709	5709	69071	9904	9904
1.5C-1200-85-CL	2610	59362	34996	64433	99580	24968	27092	110537	29455	33279	121503	33881	39457	132469	38271	45634
1.5C-1200-95-CL	2030	59318	34960	64345	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-110-CL	1523	59344	34978	64389	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-70-CL	4278	87569	52874	102978	81259	7001	7001	93570	13940	13940	105873	20879	20879	118184	27066	27809
3C-2000-85-CL	2900	87481	52804	102784	168678	47803	56273	186822	55043	66505	204966	62247	76727	223119	69425	86959
3C-2000-95-CL	2320	87401	52750	102633	236350	74647	94420	259017	83578	107191	-	-	-	-	-	-
3C-2000-110-CL	1740	87445	52777	102713	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-85-CL	4640	124875	76426	153463	164031	38731	40492	185246	47582	52450	206461	56202	64407	227677	64726	76364
6C-2500-95-CL	3698	124787	76364	153286	243157	70912	85091	269656	81436	100031	296155	91924	114962	322654	102394	129902
6C-2500-110-CL	2755	124831	76400	153383	378670	124442	161473	414206	138399	181502	449733	152357	201532	485260	166279	221552
6C-2500-125-CL	2103	124725	76311	153153	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-135-CL	1813	124636	76249	152985	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-85-CL	5075	168474	106182	228234	-	-	-	110785	3107	3107	132000	15064	15064	153215	27021	27021
6C-3800-95-CL	4133	168386	106120	228057	168686	35748	35748	195186	47555	50679	221685	58477	65619	248193	69186	80551
6C-3800-110-CL	3045	168430	106156	228155	304209	91526	112130	339736	105589	132159	375272	119609	152180	410799	133602	172209
6C-3800-125-CL	2393	168315	106067	227925	459257	152649	199522	505139	170669	225384	-	-	-	-	-	-
6C-3800-135-CL	2030	168235	106005	227756	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-95-CL	5075	202027	127628	275754	157986	18941	18941	186946	35261	35261	215914	49936	51591	244874	62106	67912
14C-5100-110-CL	4930	202080	127663	275851	306103	86906	102421	344940	102385	124309	383769	117786	146197	422606	133124	168085
14C-5100-125-CL	3843	201956	127575	275604	475568	153994	197938	525717	173714	226207	575856	193415	254468	626005	213091	282728
14C-5100-135-CL	3263	201868	127504	275418	600568	203116	268390	659053	226048	301359	717539	248980	334328	776034	271904	367288
14C-5100-145-CL	2828	201948	127566	275595	735506	256026	344453	802984	282454	382485	870462	308873	420517	937932	335284	458549
14C-5100-175-CL	1958	201700	127389	275081	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-200-CL	1450	201452	127212	274577	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-110-CL	5075	261504	161208	329301	252875	37757	37757	291703	59636	59636	330540	78002	81524	369368	94216	103412
14C-5400-125-CL	3988	261380	161119	329053	422340	115759	133266	472480	135877	161535	522628	155844	189795	572767	175723	218056
14C-5400-135-CL	3408	261292	161057	328867	547330	165642	203718	605816	188778	236687	664311	211860	269656	722796	234890	302616
14C-5400-145-CL	2973	261371	161119	329044	682278	218932	279781	749756	245502	317813	817225	272010	355844	884703	298518	393876
14C-5400-175-CL	2030	261124	160933	328531	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-185-CL	1813	261026	160862	328336	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-CL	1523	260876	160756	328026	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-125-CL	4278	335797	207895	428863	322937	50520	50520	373077	78781	78781	423225	101456	107050	473374	122273	135310
14C-8300-135-CL	3698	335709	207833	428677	447928	111785	120972	506422	135735	153941	564908	159305	186901	623394	182653	219870
14C-8300-145-CL	3190	335789	207895	428854	582875	166483	197035	650353	193380	235067	717822	220136	273099	785300	246794	311130
14C-8300-175-CL	2175	335541	207709	428341	1044548	348808	457247	-	-	-	-	-	-	-	-	-
14C-8300-185-CL	1958	335452	207639	428146	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-200-CL	1668	335302	207532	427836	-	-	-	-	-	-	-	-	-	-	-	-

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5C-1100-70-CL	3480	51352	28915	47484	100943	25375	27588	115812	31447	35969	130681	37412	44351	130681	37412	44351
1.5C-1100-85-CL	2320	51290	28871	47369	-	-	-	-	-	-	-	-	-	127539	36164	42581
1.5C-1100-95-CL	1885	51246	28836	47272	-	-	-	-	-	-	-	-	-	130079	37173	44015
1.5C-1100-110-CL	1378	51272	28853	47325	-	-	-	-	-	-	-	-	-	126513	35748	42006
1.5C-1200-70-CL	3843	59424	35031	64549	83941	18241	18286	98810	24649	26667	113679	30730	35049	132266	38191	45519
1.5C-1200-85-CL	2610	59362	34996	64433	-	-	-	-	-	-	-	-	-	132469	38271	45634
1.5C-1200-95-CL	2030	59318	34960	64345	-	-	-	-	-	-	-	-	-	126769	35987	42422
1.5C-1200-110-CL	1523	59344	34978	64389	-	-	-	-	-	-	-	-	-	127876	36430	43050
3C-2000-70-CL	4278	87569	52874	102978	142798	37350	41687	167412	47290	55556	192026	57105	69434	259708	83852	107581
3C-2000-85-CL	2900	87481	52804	102784	259407	83737	107413	-	-	-	-	-	-	259407	83737	107413
3C-2000-95-CL	2320	87401	52750	102633	-	-	-	-	-	-	-	-	-	259017	83578	107191
3C-2000-110-CL	1740	87445	52777	102713	-	-	-	-	-	-	-	-	-	261106	84401	108369
6C-2500-85-CL	4640	124875	76426	153463	270107	81622	100279	312538	98394	124203	354968	115113	148117	524681	181741	243776
6C-2500-95-CL	3698	124787	76364	153286	375652	123256	159774	428651	144081	189645	481658	164872	219516	521407	180449	241926
6C-2500-110-CL	2755	124831	76400	153383	-	-	-	-	-	-	-	-	-	520796	180210	241581
6C-2500-125-CL	2103	124725	76311	153153	-	-	-	-	-	-	-	-	-	510786	176289	235943
6C-2500-135-CL	1813	124636	76249	152985	-	-	-	-	-	-	-	-	-	514299	177670	237926
6C-3800-85-CL	5075	168474	106182	228234	195637	47741	50936	238067	65115	74851	280498	82100	98766	513866	174094	230297
6C-3800-95-CL	4133	168386	106120	228057	301191	90331	110431	354189	111298	140302	407188	132177	170173	526443	179024	237386
6C-3800-110-CL	3045	168430	106156	228155	481853	161526	212259	-	-	-	-	-	-	517388	175475	232288
6C-3800-125-CL	2393	168315	106067	227925	-	-	-	-	-	-	-	-	-	528080	179670	238315
6C-3800-135-CL	2030	168235	106005	227756	-	-	-	-	-	-	-	-	-	520105	176546	233819
14C-5100-95-CL	5075	202027	127628	275754	302802	85578	100562	360730	108652	133213	418658	131566	165863	737259	256707	345436
14C-5100-110-CL	4930	202080	127663	275851	500262	163712	211860	577927	194230	255636	655593	224694	299412	1043919	376776	518282
14C-5100-125-CL	3843	201956	127575	275604	726293	252406	339258	826580	291694	395788	926868	330956	452309	1052230	380034	522973
14C-5100-135-CL	3263	201868	127504	275418	893005	317698	433227	1009986	363491	499156	-	-	-	1039229	374944	515645
14C-5100-145-CL	2828	201948	127566	275595	-	-	-	-	-	-	-	-	-	1039149	374909	515592
14C-5100-175-CL	1958	201700	127389	275081	-	-	-	-	-	-	-	-	-	1049752	379060	521575
14C-5100-200-CL	1450	201452	127212	274577	-	-	-	-	-	-	-	-	-	1006180	362005	497014
14C-5400-110-CL	5075	261504	161208	329301	447034	125690	147188	524699	156667	190964	602364	187415	234740	1029510	355296	475498
14C-5400-125-CL	3988	261380	161119	329053	673064	215303	274586	773352	254769	331115	873640	294172	387636	1049150	362996	486561
14C-5400-135-CL	3408	261292	161057	328867	839777	280870	368554	956748	326770	434483	-	-	-	1044486	361173	483932
14C-5400-145-CL	2973	261371	161119	329044	1019651	351428	469939	-	-	-	-	-	-	1053390	364660	488951
14C-5400-175-CL	2030	261124	160933	328531	-	-	-	-	-	-	-	-	-	1045663	361633	484605
14C-5400-185-CL	1813	261026	160862	328336	-	-	-	-	-	-	-	-	-	1042486	360385	482808
14C-5400-200-CL	1523	260876	160756	328026	-	-	-	-	-	-	-	-	-	1017137	350445	468523
14C-8300-125-CL	4278	335797	207895	428863	573661	162801	191840	673949	202744	248361	774237	242422	304891	1050035	350959	460336
14C-8300-135-CL	3698	335709	207833	428677	740374	229040	285808	857354	275196	351738	974326	321220	417667	1062063	355685	467116
14C-8300-145-CL	3190	335789	207895	428854	920248	299961	387194	1055204	352994	463248	-	-	-	1055204	352994	463248
14C-8300-175-CL	2175	335541	207709	428341	-	-	-	-	-	-	-	-	-	1044548	348808	457247
14C-8300-185-CL	1958	335452	207639	428146	-	-	-	-	-	-	-	-	-	1052921	352092	461965
14C-8300-200-CL	1668	335302	207532	427836	-	-	-	-	-	-	-	-	-	1046106	349419	458124

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 (lb-in) - Canted Yoke Design, Spring to Close Models 18C-9600-145-CL to 50C-15600-300-CL

Model	MOP (psi)					Operating supply pressure (psi)											
		BTC	RTC	ETC		1160			1450			1740			2030		
						BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	3988	542746	317910	576511	-	-	-	-	-	-	-	-	-	-	509715	15515	15515
18C-9600-175-CL	2755	542454	317689	575918	-	-	-	-	553101	39970	39970	779158	167385	167385	1005206	263690	294792
18C-9600-185-CL	2465	542347	317609	575706	-	-	-	-	685765	114750	114750	938392	236280	257132	1191019	338630	399523
18C-9600-200-CL	2103	542170	317485	575343	603329	68284	68284	898581	219720	234695	1193833	339763	401116	1489086	457150	567528	
18C-9600-235-CL	1523	541719	317140	574414	1052009	282711	321176	1459639	445476	550933	-	-	-	-	-	-	-
18C-9800-145-CL	4278	687128	399647	712379	-	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-175-CL	2900	686836	399434	711786	-	-	-	-	-	-	-	643839	9931	9931	869896	137337	137337
18C-9800-185-CL	2610	686730	399355	711565	-	-	-	-	-	-	-	803082	99677	99677	1055709	237705	242068
18C-9800-200-CL	2248	686562	399222	711211	-	-	-	-	763271	77240	77240	1058523	238953	243652	1353775	362093	410073
18C-9800-235-CL	1595	686101	398886	710273	916699	163721	163721	1324329	350127	393478	-	-	-	-	-	-	-
18C-10500-175-CL	2973	769228	443246	771962	-	-	-	-	-	-	-	-	-	-	809968	48414	48414
18C-10500-185-CL	2683	769121	443166	771741	-	-	-	-	-	-	-	743153	10754	10754	995780	153145	153145
18C-10500-200-CL	2320	768953	443033	771387	-	-	-	-	-	-	-	998595	154729	154729	1293847	306537	321149
18C-10500-235-CL	1668	768493	442688	770449	856770	74798	74798	1264400	293933	304554	-	-	-	-	-	-	-
18C-11000-175-CL	3263	860443	511193	958784	-	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-185-CL	2900	860337	511104	958563	-	-	-	-	-	-	-	-	-	-	809711	48272	48272
18C-11000-200-CL	2465	860169	510980	958209	-	-	-	-	-	-	-	812534	49865	49865	1107786	216277	216277
18C-11000-235-CL	1813	859709	510644	957271	-	-	-	-	1078340	199682	199682	1485970	386371	429438	-	-	-
32C-12000-175-CL	4060	992479	563448	945092	-	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-200-CL	3118	992143	563200	944419	-	-	-	-	-	-	-	1133542	86498	86498	1480137	281861	281861
32C-12000-235-CL	2248	991611	562801	943322	-	-	-	-	1445575	262380	262380	17029728	4311758	532089	2402625	681021	801807
32C-12000-250-CL	1958	991355	562607	942791	1218731	134514	134514	1760290	418738	439758	2301850	640591	745012	-	-	-	-
32C-15000-175-CL	4350	1152111	668249	1183062	-	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-200-CL	3335	1151775	668010	1182389	-	-	-	-	-	-	-	-	-	-	1243141	103085	103085
32C-15000-235-CL	2393	1151244	667603	1181283	-	-	-	-	1208579	83604	83604	1687103	353313	353313	2165628	561562	623031
32C-15000-250-CL	2103	1150987	667417	1180761	-	-	-	-	1523294	260991	260991	2064853	520150	566236	2606422	739631	871480
50C-15400-200-CL	3770	1251310	696669	1110238	-	-	-	-	-	-	-	-	-	-	1583957	155003	155003
50C-15400-235-CL	2755	1250717	696218	1109026	-	-	-	-	1545545	133354	133354	2077244	433041	433041	2608936	666762	732727
50C-15400-250-CL	2393	1250434	696005	1108441	-	-	-	-	1895229	330452	330452	2496974	620500	669612	3098710	865364	1008773
50C-15400-300-CL	1668	1250062	695722	1107680	2351866	559624	587831	3218372	913353	1076225	-	-	-	-	-	-	-
50C-15600-200-CL	3915	1307026	738666	1224360	-	-	-	-	-	-	-	-	-	-	1470295	90941	90941
50C-15600-235-CL	2828	1306433	738223	1223138	-	-	-	-	1431892	69301	69301	1963592	368979	368979	2495283	619800	668665
50C-15600-250-CL	2465	1306149	738011	1222563	-	-	-	-	1781576	266390	266390	2383312	572927	605551	2985057	819668	944711
50C-15600-300-CL	1740	1305778	737728	1221802	2238213	510741	523770	3104710	867772	1012163	3971216	1212809	1500556	-	-	-	-

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	3988	542746	317910	576511	587309	59256	59256	664904	102987	102987	742507	146728	146728	820102	186220	190459
18C-9600-175-CL	2755	542454	317689	575918	1118230	309440	358500	1231263	354720	422207	1344287	399735	485915	1457311	444555	549614
18C-9600-185-CL	2465	542347	317609	575706	1317328	389008	470718	1443646	439139	541914	1569955	489092	613109	-	-	-
18C-9600-200-CL	2103	542170	317485	575343	-	-	-	-	-	-	-	-	-	-	-	-
18C-9600-235-CL	1523	541719	317140	574414	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-145-CL	4278	687128	399647	712379	-	-	-	-	-	-	-	-	-	684783	33004	33004
18C-9800-175-CL	2900	686836	399434	711786	982920	201045	201045	1095944	255247	264752	1208977	302820	328460	1322001	349180	392159
18C-9800-185-CL	2610	686730	399355	711565	1182018	291623	313263	1308327	343622	384459	1434645	394779	455654	1560954	445449	526850
18C-9800-200-CL	2248	686562	399222	711211	1501397	421605	493279	-	-	-	-	-	-	-	-	-
18C-9800-235-CL	1595	686101	398886	710273	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-175-CL	2973	769228	443246	771962	922992	112121	112121	1036016	175829	175829	1149049	239537	239537	1262073	292933	303236
18C-10500-185-CL	2683	769121	443166	771741	1122089	224340	224340	1248398	287012	295535	1374716	340533	366731	1501025	392522	437926
18C-10500-200-CL	2320	768953	443033	771387	1441469	368129	404355	1589099	428314	487561	-	-	-	-	-	-
18C-10500-235-CL	1668	768493	442688	770449	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-175-CL	3263	860443	511193	958784	736931	7249	7249	849955	70956	70956	962979	134664	134664	1076012	198363	198363
18C-11000-185-CL	2900	860337	511104	958563	936029	119467	119467	1062338	190663	190663	1188647	260433	261858	1314965	315485	333054
18C-11000-200-CL	2465	860169	510980	958209	1255408	290048	299483	1403039	352278	382689	1550660	412719	465895	-	-	-
18C-11000-235-CL	1813	859709	510644	957271	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-175-CL	4060	992479	563448	945092	1044787	36483	36483	1177477	111263	111263	1310159	186052	186052	1442840	260832	260832
32C-12000-200-CL	3118	992143	563200	944419	1653435	372555	379538	1826742	446724	477215	2000039	518353	574892	2173337	588805	672568
32C-12000-235-CL	2248	991611	562801	943322	2641887	776494	936666	-	-	-	-	-	-	-	-	-
32C-12000-250-CL	1958	991355	562607	942791	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-175-CL	4350	1152111	668249	1183062	-	-	-	-	-	-	1073153	7275	7275	1205844	82064	82064
32C-15000-200-CL	3335	1151775	668010	1182389	1416439	200762	200762	1589745	298438	298438	1763043	391593	396124	1936341	466541	493801
32C-15000-235-CL	2393	1151244	667603	1181283	2404890	658682	757890	2644153	754712	892749	-	-	-	-	-	-
32C-15000-250-CL	2103	1150987	667417	1180761	-	-	-	-	-	-	-	-	-	-	-	-
50C-15400-200-CL	3770	1251310	696669	1110238	1776514	263540	263540	1969062	372068	372068	2161619	476675	480596	2354176	560607	589132
50C-15400-235-CL	2755	1250717	696218	1109026	2874786	775140	882561	3140636	882199	1032405	3406477	988531	1182248	3672327	1094324	1332091
50C-15400-250-CL	2393	1250434	696005	1108441	3399573	985788	1178353	3700445	1105485	1347934	-	-	-	-	-	-
50C-15400-300-CL	1668	1250062	695722	1107680	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-200-CL	3915	1307026	738666	1224360	1662852	199478	199478	1855409	308006	308006	2047966	416543	416543	2240523	511750	525071
50C-15600-235-CL	2828	1306433	738223	1223138	2761133	729001	818509	3026974	836546	968343	3292824	943118	1118186	3558674	1049097	1268029
50C-15600-250-CL	2465	1306149	738011	1222563	3285921	940357	1114292	3586793	1060284	1283881	3887657	1179690	1453461	-	-	-
50C-15600-300-CL	1740	1305778	737728	1221802	-	-	-	-	-	-	-	-	-	-	-	-

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)									MOT@MOP		
					2900			3190			3480					
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18C-9600-145-CL	3988	542746	317910	576511	975291	251459	277931	1130480	314352	365403	1285678	376414	452875	1557263	484074	605949
18C-9600-175-CL	2755	542454	317689	575918	-	-	-	-	-	-	-	-	-	1570335	489243	613322
18C-9600-185-CL	2465	542347	317609	575706	-	-	-	-	-	-	-	-	-	1569955	489092	613109
18C-9600-200-CL	2103	542170	317485	575343	-	-	-	-	-	-	-	-	-	1562901	486304	609126
18C-9600-235-CL	1523	541719	317140	574414	-	-	-	-	-	-	-	-	-	1561547	485773	608365
18C-9800-145-CL	4278	687128	399647	712379	839980	120476	120476	995169	207948	207948	1150359	278374	295420	1577142	451919	535966
18C-9800-175-CL	2900	686836	399434	711786	1548049	440289	519574	-	-	-	-	-	-	1548049	440289	519574
18C-9800-185-CL	2610	686730	399355	711565	-	-	-	-	-	-	-	-	-	1560954	445449	526850
18C-9800-200-CL	2248	686562	399222	711211	-	-	-	-	-	-	-	-	-	1575212	451149	534886
18C-9800-235-CL	1595	686101	398886	710273	-	-	-	-	-	-	-	-	-	1528144	432333	508352
18C-10500-175-CL	2973	769228	443246	771962	1488121	387247	430651	-	-	-	-	-	-	1544633	410277	462505
18C-10500-185-CL	2683	769121	443166	771741	-	-	-	-	-	-	-	-	-	1564184	418216	473524
18C-10500-200-CL	2320	768953	443033	771387	-	-	-	-	-	-	-	-	-	1589099	428314	487561
18C-10500-235-CL	1668	768493	442688	770449	-	-	-	-	-	-	-	-	-	1570123	420632	476870
18C-11000-175-CL	3263	860443	511193	958784	1302060	310024	325778	1528117	403568	453194	-	-	-	1584629	426509	485039
18C-11000-185-CL	2900	860337	511104	958563	1567592	419596	475436	-	-	-	-	-	-	1567592	419596	475436
18C-11000-200-CL	2465	860169	510980	958209	-	-	-	-	-	-	-	-	-	1550660	412719	465895
18C-11000-235-CL	1813	859709	510644	957271	-	-	-	-	-	-	-	-	-	1587878	427828	486880
32C-12000-175-CL	4060	992479	563448	945092	1708204	396469	410409	1973567	507520	559978	2238939	615295	709547	2769665	827324	1008685
32C-12000-200-CL	3118	992143	563200	944419	2519941	727921	867931	-	-	-	-	-	-	2779888	831369	1014446
32C-12000-235-CL	2248	991611	562801	943322	-	-	-	-	-	-	-	-	-	2761514	824084	1004091
32C-12000-250-CL	1958	991355	562607	942791	-	-	-	-	-	-	-	-	-	2708029	802816	973945
32C-15000-175-CL	4350	1152111	668249	1183062	1471207	231633	231633	1736570	379529	381202	2001942	494040	530771	2798041	816145	979486
32C-15000-200-CL	3335	1151775	668010	1182389	2282945	609356	689155	2629540	748871	884517	-	-	-	2802847	818057	982194
32C-15000-235-CL	2393	1151244	667603	1181283	-	-	-	-	-	-	-	-	-	2763779	802515	960174
32C-15000-250-CL	2103	1150987	667417	1180761	-	-	-	-	-	-	-	-	-	2741812	793753	947791
50C-15400-200-CL	3770	1251310	696669	1110238	2739289	720132	806197	3124403	875684	1023262	3509517	1029537	1240318	3894622	1182451	1457382
50C-15400-235-CL	2755	1250717	696218	1109026	-	-	-	-	-	-	-	-	-	3937920	1255620	1481784
50C-15400-250-CL	2393	1250434	696005	1108441	-	-	-	-	-	-	-	-	-	3850616	1221129	1432582
50C-15400-300-CL	1668	1250062	695722	1107680	-	-	-	-	-	-	-	-	-	3868247	1171999	1442513
50C-15600-200-CL	3915	1307026	738666	1224360	2625637	673631	742135	3010751	830032	959200	3395856	984301	1176265	3973527	1213730	1501857
50C-15600-235-CL	2828	1306433	738223	1223138	-	-	-	-	-	-	-	-	-	3957188	1263232	1492644
50C-15600-250-CL	2465	1306149	738011	1222563	-	-	-	-	-	-	-	-	-	3887400	1235662	1453311
50C-15600-300-CL	1740	1305778	737728	1221802	-	-	-	-	-	-	-	-	-	3971216	1212809	1500556

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 (lb-in) - Canted Yoke Design, Spring to Open Models 0.3C-008A-20-OP to 0.9C-0700-85-OP

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-20-OP	5075	3408	850	920	-	-	-	1080	239	239	1531	814	1159	1974	1151	2080
0.3C-008A-28-OP	4930	3390	841	903	2345	1425	2832	3222	2071	4638	4107	2708	6443	4992	3346	8249
0.3C-008A-35-OP	3118	3381	832	903	4319	2868	6886	5700	3859	9700	7081	4859	12524	8452	5850	15347
0.3C-008B-20-OP	5075	5160	920	920	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008B-28-OP	5075	5133	912	912	2239	690	690	3124	1690	2496	4001	2354	4301	4886	3000	6107
0.3C-008B-35-OP	3335	5125	903	903	4222	2514	4744	5594	3523	7559	6974	4523	10382	8355	5523	13205
0.3C-008C-20-OP	5075	6187	1159	1159	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-008C-28-OP	5075	6160	1151	1151	-	-	-	2832	1230	1230	3717	2018	3036	4594	2682	4841
0.3C-008C-35-OP	3480	6151	1142	1142	3930	2186	3478	5302	3213	6302	6682	4222	9125	8063	5222	11940
0.3C-0100-28-OP	5075	9877	2257	2319	-	-	-	-	-	-	-	-	-	3257	283	283
0.3C-0100-35-OP	3988	9869	2248	2310	-	-	-	3974	1744	1744	5346	2947	4567	6727	3974	7382
0.3C-0100-40-OP	3045	9842	2239	2301	4266	2106	2345	6063	3487	6036	7868	4824	9718	9665	6134	13409
0.3C-0100-45-OP	2393	9833	2239	2292	6169	3567	6249	8444	5248	10913	10727	6904	15577	13002	8559	20242
0.3C-0100-50-OP	1958	9824	2230	2283	8302	5142	10612	11117	7187	16374	13922	9231	22136	-	-	-
0.3C-0150-35-OP	4278	12391	3301	3735	-	-	-	-	-	-	3841	1469	1469	5213	2841	4293
0.3C-0150-40-OP	3263	12364	3292	3717	-	-	-	4558	2337	2938	6355	3700	6620	8152	5027	10311
0.3C-0150-45-OP	2610	12356	3284	3708	4655	2416	3151	6939	4133	7815	9214	5806	12480	11488	7461	17144
0.3C-0150-50-OP	2103	12347	3284	3708	6789	4027	7523	9603	6089	13276	12418	8134	19038	15223	10170	24800
0.3C-0150-60-OP	1450	12347	3284	3708	11745	7647	17666	15790	10577	25950	-	-	-	-	-	-
0.9C-0200-40-OP	5075	15878	4098	4532	-	-	-	4956	1460	1460	7045	3824	5718	9125	5390	9984
0.9C-0200-45-OP	5075	15869	4089	4523	5080	1708	1708	7718	4337	7098	10347	6293	12497	12984	8222	17887
0.9C-0200-50-OP	4278	15852	4080	4514	7550	4213	6753	10798	6629	13418	14046	9001	20074	17303	11364	26729
0.9C-0200-60-OP	2973	15861	4089	4514	13276	8435	18480	17958	11833	28075	22631	15223	37660	27313	18613	47245
0.9C-0250-40-OP	5075	19047	5372	6311	-	-	-	-	-	-	5142	1841	1841	7222	3965	6098
0.9C-0250-45-OP	5075	19029	5364	6302	-	-	-	5824	2885	3222	8452	4886	8612	11090	6842	14002
0.9C-0250-50-OP	4495	19020	5364	6293	5656	2744	2876	78806	5222	9532	12152	7620	16188	15409	9984	22853
0.9C-0250-60-OP	3118	19029	5364	6302	11373	7054	14604	142101	10462	24189	20737	13851	33774	25419	17241	43369
0.9C-0250-70-OP	2248	19020	5364	6302	18135	11966	28446	216912	16586	41501	30880	21189	54547	37253	25800	67602
0.9C-0350-45-OP	5075	29933	7806	8700	-	-	-	-	-	-	-	-	-	8160	637	637
0.9C-0350-50-OP	5075	29924	7806	8700	-	-	-	-	-	-	9222	2823	2823	12480	6665	9479
0.9C-0350-60-OP	3480	29933	7806	8700	8452	1230	1230	13135	7169	10816	17808	10665	20410	22490	14108	29995
0.9C-0350-70-OP	2538	29924	7806	8700	15206	8727	15073	21578	13444	28128	27951	18082	41174	34323	22702	54229
0.9C-0350-85-OP	1740	29845	7771	8656	27260	17578	39749	36651	24393	58999	46050	31190	78241	-	-	-
0.9C-0400-50-OP	5075	35412	10019	11789	-	-	-	-	-	-	-	-	-	9187	2744	2744
0.9C-0400-60-OP	3698	35412	10028	11789	-	-	-	9842	4089	4089	14524	8222	13674	19206	11701	23269
0.9C-0400-70-OP	2683	35412	10019	11789	11922	6240	8346	18295	11028	21392	24667	15692	34447	31040	20321	47502
0.9C-0400-85-OP	1813	35332	9992	11745	23968	15188	33022	33367	22012	52264	42767	28818	71514	-	-	-
0.9C-0700-60-OP	4205	49830	13542	15498	-	-	-	-	-	-	-	-	-	14825	5585	5585
0.9C-0700-70-OP	3118	49830	13533	15498	-	-	-	13913	3717	3717	20286	11081	16763	26658	15852	29818
0.9C-0700-85-OP	2103	49741	13506	15445	19587	10550	15338	28986	17578	34589	38377	24446	53830	47776	31279	73072

NOTES:

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- 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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-20-OP	5075	3408	850	920	2204	1319	2540	2425	1487	3000	2655	1655	3461	2876	1814	3921
0.3C-008A-28-OP	4930	3390	841	903	5426	3664	9152	5868	3983	10054	6311	4301	10957	6753	4620	11860
0.3C-008A-35-OP	3118	3381	832	903	9143	6355	16754	9833	6850	18171	10524	7346	19578	11214	7842	20994
0.3C-008B-20-OP	5075	5160	920	920	2098	398	398	2328	859	859	2549	1248	1319	2779	1425	1788
0.3C-008B-28-OP	5075	5133	912	912	5328	3328	7010	5771	3647	7913	6213	3965	8815	6647	4293	9718
0.3C-008B-35-OP	3335	5125	903	903	9045	6027	14621	9727	6523	16029	10417	7019	17436	11108	7523	18852
0.3C-008C-20-OP	5075	6187	1159	1159	-	-	-	-	-	-	2257	62	62	2487	522	522
0.3C-008C-28-OP	5075	6160	1151	1151	5036	3009	5744	5479	3337	6647	5921	3664	7550	6355	3983	8452
0.3C-008C-35-OP	3480	6151	1142	1142	8753	5726	13356	9435	6222	14763	10125	6718	16179	10816	7222	17586
0.3C-0100-28-OP	5075	9877	2257	2319	3700	1186	1186	4142	2009	2089	4585	2354	2992	5027	2699	3894
0.3C-0100-35-OP	3988	9869	2248	2310	7417	4487	8798	8107	4992	10205	8789	5496	11621	9479	6001	13028
0.3C-0100-40-OP	3045	9842	2239	2301	10568	6789	15250	11462	7443	17091	12364	8098	18932	13267	8745	20773
0.3C-0100-45-OP	2393	9833	2239	2292	14143	9382	22569	15276	10205	24906	-	-	-	-	-	-
0.3C-0100-50-OP	1958	9824	2230	2283	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-35-OP	4278	12391	3301	3735	5903	3363	5700	6594	3877	7116	7284	4390	8523	7975	4894	9931
0.3C-0150-40-OP	3263	12364	3292	3717	9054	5691	12152	9957	6346	13993	10851	7001	15834	11754	7656	17684
0.3C-0150-45-OP	2610	12356	3284	3708	12630	8293	19481	13772	9116	21808	14905	9939	24145	16046	10763	26473
0.3C-0150-50-OP	2103	12347	3284	3708	-	-	-	-	-	-	-	-	-	-	-	-
0.3C-0150-60-OP	1450	12347	3284	3708	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0200-40-OP	5075	15878	4098	4532	10161	6160	12108	11205	6921	14241	12241	7682	16374	13285	8444	18507
0.9C-0200-45-OP	5075	15869	4089	4523	14294	9178	20587	15613	10134	23277	16931	11090	25977	18250	12046	28676
0.9C-0200-50-OP	4278	15852	4080	4514	18923	12542	30057	20551	13719	33394	22180	14896	36722	23800	16073	40050
0.9C-0200-60-OP	2973	15861	4089	4514	29659	20304	52042	31995	21994	56840	34341	23693	61628	36678	25384	66425
0.9C-0250-40-OP	5075	19047	5372	6311	8267	4753	8231	9311	5523	10364	10347	6293	12488	11391	7063	14621
0.9C-0250-45-OP	5075	19029	5364	6302	12400	7798	16701	13719	8762	19401	15037	9718	22091	16356	10674	24791
0.9C-0250-50-OP	4495	19020	5364	6293	17029	11170	26181	18657	12347	29508	20277	13524	32836	21906	14701	36164
0.9C-0250-60-OP	3118	19029	5364	6302	27765	18932	48157	30101	20631	52954	32447	22322	57751	34783	24012	62548
0.9C-0250-70-OP	2248	19020	5364	6302	40439	28101	74125	-	-	-	-	-	-	-	-	-
0.9C-0350-45-OP	5075	29933	7806	8700	9470	3328	3328	10789	5355	6027	12108	6381	8727	13427	7390	11417
0.9C-0350-50-OP	5075	29924	7806	8700	14099	7904	12807	15728	9116	16135	17356	10329	19463	18976	11533	22800
0.9C-0350-60-OP	3480	29933	7806	8700	24835	15816	34792	27172	17516	39581	29517	19215	44378	31854	20914	49175
0.9C-0350-70-OP	2538	29924	7806	8700	37509	25012	60752	40696	27322	67283	43882	29623	73806	-	-	-
0.9C-0350-85-OP	1740	29845	7771	8656	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0400-50-OP	5075	35412	10019	11789	10816	5372	6080	12444	6638	9408	14064	7877	12736	15692	9090	16064
0.9C-0400-60-OP	3698	35412	10028	11789	21552	13418	28057	23888	15126	32854	26234	16825	37651	28570	18533	42439
0.9C-0400-70-OP	2683	35412	10019	11789	34226	22631	54025	37412	24941	60548	40598	27251	67071	43785	29553	73603
0.9C-0400-85-OP	1813	35332	9992	11745	-	-	-	-	-	-	-	-	-	-	-	-
0.9C-0700-60-OP	4205	49830	13542	15498	17170	8674	10382	19507	10488	15170	21844	12258	19967	24189	14020	24764
0.9C-0700-70-OP	3118	49830	13533	15498	29845	18215	36341	33031	20543	42864	36217	22870	49396	39404	25189	55919
0.9C-0700-85-OP	2103	49741	13506	15445	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

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- BTC: Break to Close
- RTC: Run to Close
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- BTO: Break to Open
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- ETO: End to Open

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3C-008A-20-OP	5075	3408	850	920	3328	2142	4841	3779	2469	5771	4231	2797	6691	6700	4585	11754
0.3C-008A-28-OP	4930	3390	841	903	7629	5257	13666	8514	5895	15471	9399	6532	17277	13807	9718	26304
0.3C-008A-35-OP	3118	3381	832	903	12586	8842	23809	-	-	-	-	-	-	13621	9585	25924
0.3C-008B-20-OP	5075	5160	920	920	3222	1770	2708	3673	2106	3629	4124	2443	4549	6603	4248	9612
0.3C-008B-28-OP	5075	5133	912	912	7532	4930	11524	8417	5567	13329	9293	6204	15135	14143	9718	25065
0.3C-008B-35-OP	3335	5125	903	903	12488	8514	21675	13860	9515	24490	-	-	-	14551	10010	25906
0.3C-008C-20-OP	5075	6187	1159	1159	2930	1416	1443	3381	1770	2363	3832	2115	3284	6311	3947	8355
0.3C-008C-28-OP	5075	6160	1151	1151	7240	4629	10258	8125	5266	12064	9001	5903	13878	13851	9417	23809
0.3C-008C-35-OP	3480	6151	1142	1142	12196	8213	20410	13568	9214	23233	14949	10214	26048	14949	10214	26048
0.3C-0100-28-OP	5075	9877	2257	2319	5903	3363	5700	6789	4018	7514	7665	4673	9320	12515	8205	19250
0.3C-0100-35-OP	3988	9869	2248	2310	10860	7001	15852	12241	8001	18675	13612	9001	21490	16029	10745	26428
0.3C-0100-40-OP	3045	9842	2239	2301	15064	10054	24463	-	-	-	-	-	-	15967	10701	26304
0.3C-0100-45-OP	2393	9833	2239	2292	-	-	-	-	-	-	-	-	-	15852	10621	26074
0.3C-0100-50-OP	1958	9824	2230	2283	-	-	-	-	-	-	-	-	-	16038	10754	26455
0.3C-0150-35-OP	4278	12391	3301	3735	9346	5903	12754	10727	6904	15577	12099	7904	18401	15896	10656	26163
0.3C-0150-40-OP	3263	12364	3292	3717	13550	8957	21366	15347	10258	25048	-	-	-	15799	10585	25977
0.3C-0150-45-OP	2610	12356	3284	3708	-	-	-	-	-	-	-	-	-	16046	10763	26473
0.3C-0150-50-OP	2103	12347	3284	3708	-	-	-	-	-	-	-	-	-	15931	10683	26234
0.3C-0150-60-OP	1450	12347	3284	3708	-	-	-	-	-	-	-	-	-	15790	10577	25950
0.9C-0200-40-OP	5075	15878	4098	4532	15365	9957	22764	17445	11462	27030	19525	12975	31287	30969	21251	54724
0.9C-0200-45-OP	5075	15869	4089	4523	20879	123536	301514	23516	15861	39457	26145	17772	44856	40634	28234	74514
0.9C-0200-50-OP	4278	15852	4080	4514	27057	18418	46705	30305	20773	53370	33553	23127	60026	42492	29579	78338
0.9C-0200-60-OP	2973	15861	4089	4514	41360	28765	76010	-	-	-	-	-	-	42528	29606	78409
0.9C-0250-40-OP	5075	19047	5372	6311	13471	8576	18888	15551	10090	23145	17631	11603	27411	29075	19888	50848
0.9C-0250-45-OP	5075	19029	5364	6302	18985	12586	30190	21622	14489	35580	24251	16400	40970	38740	26871	70638
0.9C-0250-50-OP	4495	19020	5364	6293	25154	17055	42829	28411	19401	49485	31659	21755	56140	43041	29977	79453
0.9C-0250-60-OP	3118	19029	5364	6302	39465	27393	72134	-	-	-	-	-	-	42979	29933	79320
0.9C-0250-70-OP	2248	19020	5364	6302	-	-	-	-	-	-	-	-	-	42032	29252	77391
0.9C-0350-45-OP	5075	29933	7806	8700	16055	9364	16816	18693	11320	22207	21321	13250	27597	35810	23782	57264
0.9C-0350-50-OP	5075	29924	7806	8700	22233	13913	29455	25481	16285	36111	28730	18649	42776	46608	31606	79391
0.9C-0350-60-OP	3480	29933	7806	8700	36536	24304	58760	41218	27694	68345	45900	31084	77940	45900	31084	77940
0.9C-0350-70-OP	2538	29924	7806	8700	-	-	-	-	-	-	-	-	-	45475	30783	77063
0.9C-0350-85-OP	1740	29845	7771	8656	-	-	-	-	-	-	-	-	-	46050	31190	78241
0.9C-0400-50-OP	5075	35412	10019	11789	18941	11506	22720	22198	13887	29384	25446	16259	36040	43324	29225	72665
0.9C-0400-60-OP	3698	35412	10028	11789	33252	21923	52034	37934	25322	61619	42616	28712	71204	46130	31252	78400
0.9C-0400-70-OP	2683	35412	10019	11789	-	-	-	-	-	-	-	-	-	45378	30712	76860
0.9C-0400-85-OP	1813	35332	9992	11745	-	-	-	-	-	-	-	-	-	45112	30517	76320
0.9C-0700-60-OP	4205	49830	13542	15498	28871	17498	34350	33553	20923	43935	38235	24340	53529	49936	32845	77497
0.9C-0700-70-OP	3118	49830	13533	15498	45776	29818	68974	-	-	-	-	-	-	50555	33288	78763
0.9C-0700-85-OP	2103	49741	13506	15445	-	-	-	-	-	-	-	-	-	50122	32978	77887

NOTES:

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- MOT: Maximum Operating Torque

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

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

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

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	4278	90711	21074	21826	-	-	-	-	-	-	-	-	-	29986	3726	3726
1.5C-1100-85-OP	2900	90605	21029	21764	-	-	-	32925	9754	9754	44811	23959	34093	56689	32916	58424
1.5C-1100-95-OP	2320	90525	20994	21720	32845	9585	9585	47688	26145	39979	62522	37253	70372	77364	48183	100775
1.5C-1100-110-OP	1740	90570	21012	21746	53096	30225	51060	72992	44980	91809	92889	59495	132567	-	-	-
1.5C-1200-70-OP	4568	105651	27464	30517	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-85-OP	3118	105545	27420	30464	-	-	-	-	-	-	35598	15763	15763	47484	26083	40103
1.5C-1200-95-OP	2465	105466	27384	30411	-	-	-	38474	19135	21649	53317	30482	52051	68160	41510	82445
1.5C-1200-110-OP	1813	105510	27402	30438	43882	23348	32730	63779	38271	73488	83675	52866	114237	-	-	-
3C-2000-70-OP	4785	155729	42599	48980	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-85-OP	3263	155552	42528	48874	-	-	-	41837	9302	9302	61504	33376	49573	81161	48122	89853
3C-2000-95-OP	2610	155419	42475	48803	41696	9010	9010	66257	36978	59318	90826	55282	109634	115387	73240	159942
3C-2000-110-OP	1958	155490	42501	48838	75214	43696	77656	108147	67956	145108	141081	91915	212568	-	-	-
6C-2500-85-OP	4930	221853	62398	73089	-	-	-	-	-	-	54291	8904	8904	77285	40811	55990
6C-2500-95-OP	3915	221694	62336	73001	-	-	-	59858	20295	20295	88569	49405	79117	117290	70824	137930
6C-2500-110-OP	2900	221782	62371	73045	70319	35403	41731	108820	64549	120591	147330	92836	199452	185830	120848	278312
6C-2500-125-OP	2248	221570	62283	72930	115077	69177	133399	164792	105554	235235	214516	141656	337063	264239	177670	438900
6C-2500-135-OP	1958	221419	62221	72842	148091	93393	201009	206081	135540	319786	264071	177555	438572	-	-	-
6C-3800-85-OP	5075	301129	90304	110395	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-95-OP	4423	300970	90242	110307	-	-	-	-	-	-	-	-	-	76904	37731	40696
6C-3800-110-OP	3263	301058	90278	110351	-	-	-	68434	23357	23357	106944	60769	102217	145444	89357	181077
6C-3800-125-OP	2538	300846	90189	110236	74691	35952	36155	124406	73806	137992	174130	110307	239829	223844	146445	341657
6C-3800-135-OP	2175	300695	90136	110148	107705	61345	103766	165695	104156	222552	223685	146329	341329	281675	188362	460106
14C-5100-95-OP	5075	361137	108811	133443	-	-	-	-	-	-	-	-	-	69832	5001	5001
14C-5100-110-OP	5003	361226	108847	133496	-	-	-	-	-	-	102660	53821	72240	144745	85542	158428
14C-5100-125-OP	3915	361004	108758	133363	67416	44	44	121760	68345	111342	176095	108687	222649	230438	148303	333948
14C-5100-135-OP	3335	360836	108696	133275	103492	54468	73939	166881	101934	203762	230261	148179	333585	293650	194185	463408
14C-5100-145-OP	2900	360987	108758	133363	142532	83887	153897	215657	137550	303660	288773	190654	453424	361898	243617	603196
14C-5100-175-OP	1958	360526	108572	133098	275834	181263	426916	382344	258415	645060	488853	335435	863214	-	-	-
14C-5100-200-OP	1523	360075	108395	132850	406002	275533	693536	545118	376113	978468	-	-	-	-	-	-
14C-5400-110-OP	5075	465700	133160	157712	-	-	-	-	-	-	-	-	-	115511	30287	30287
14C-5400-125-OP	4205	465470	133071	157579	-	-	-	-	-	-	146860	75346	94499	201204	116573	205798
14C-5400-135-OP	3625	465310	133009	157490	-	-	-	137638	68098	75612	201027	116440	205435	264407	163341	335258
14C-5400-145-OP	3118	465461	133071	157579	113290	25747	25747	186414	105501	175519	259539	159774	325283	332655	213108	475046
14C-5400-175-OP	2103	465001	132885	157313	246591	150268	298766	353101	227978	516919	459611	305254	735064	566121	382379	953217
14C-5400-185-OP	1885	464833	132814	157216	296580	186830	401151	415605	273347	644945	534638	359579	888739	-	-	-
14C-5400-200-OP	1595	464549	132699	157065	376768	245166	565386	515884	346002	850318	-	-	-	-	-	-
14C-8300-125-OP	4640	597001	172129	204992	-	-	-	-	-	-	-	-	-	148117	44466	44466
14C-8300-135-OP	3988	596833	172067	204895	-	-	-	-	-	-	147940	44103	44103	211329	115316	173926
14C-8300-145-OP	3408	596992	172129	204992	-	-	-	133337	14188	14188	206461	111617	163951	279577	166438	313715
14C-8300-175-OP	2320	596532	171944	204727	193513	101695	137434	300023	181600	355588	406533	259477	573732	513043	336851	791885
14C-8300-185-OP	2103	596355	171873	204629	243502	139559	239820	362527	227411	483614	481560	314007	727408	600585	400311	971202
14C-8300-200-OP	1813	596080	171767	204470	323690	199027	404054	462806	300394	688987	601913	401275	973919	-	-	-

NOTES:

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Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	4278	90711	21074	21826	34013	11975	11975	38041	18684	20233	42068	21853	28482	46104	24941	36731
1.5C-1100-85-OP	2900	90605	21029	21764	62628	37332	70594	68576	41731	82763	74514	46095	94924	80453	50432	107094
1.5C-1100-95-OP	2320	90525	20994	21720	84790	53591	115971	92207	58999	131168	-	-	-	-	-	-
1.5C-1100-110-OP	1740	90570	21012	21746	-	-	-	-	-	-	-	-	-	-	-	-
1.5C-1200-70-OP	4568	105651	27464	30517	-	-	-	28836	1903	1903	32863	10161	10161	36890	17870	18410
1.5C-1200-85-OP	3118	105545	27420	30464	53423	30562	52264	59362	34996	64433	65301	39404	76603	71240	43776	88764
1.5C-1200-95-OP	2465	105466	27384	30411	75577	46953	97641	82993	52370	112838	90419	57769	128044	-	-	-
1.5C-1200-110-OP	1813	105510	27402	30438	-	-	-	-	-	-	-	-	-	-	-	-
3C-2000-70-OP	4785	155729	42599	48980	43634	12975	12975	50299	24685	26632	56972	29907	40297	63637	34996	53954
3C-2000-85-OP	3263	155552	42528	48874	90995	55406	109988	100828	62619	130133	110661	69797	150268	120494	76957	170412
3C-2000-95-OP	2610	155419	42475	48803	127672	82179	185105	139948	91101	210258	152233	100013	235412	164518	108926	260566
3C-2000-110-OP	1958	155490	42501	48838	-	-	-	-	-	-	-	-	-	-	-	-
6C-2500-85-OP	4930	221853	62398	73089	88782	49555	79533	100270	58176	103076	111767	66726	126628	123264	75240	150171
6C-2500-95-OP	3915	221694	62336	73001	131646	81391	167341	146011	91871	196752	160367	102332	226163	174723	112776	255574
6C-2500-110-OP	2900	221782	62371	73045	205081	134815	317742	224331	148781	357172	243581	162721	396602	262832	176661	436032
6C-2500-125-OP	2248	221570	62283	72930	289092	195672	489818	-	-	-	-	-	-	-	-	-
6C-2500-135-OP	1958	221419	62221	72842	-	-	-	-	-	-	-	-	-	-	-	-
6C-3800-85-OP	5075	301129	90304	110395	-	-	-	59884	5841	5841	71381	29384	29384	82878	42448	52927
6C-3800-95-OP	4423	300970	90242	110307	91260	48909	70107	105625	59787	99509	119981	70514	128920	134337	81170	158331
6C-3800-110-OP	3263	301058	90278	110351	164695	103430	220508	183945	117449	259938	203196	131460	299368	222446	145427	338798
6C-3800-125-OP	2538	300846	90189	110236	248706	164482	392575	273568	182485	443493	298430	200487	494412	-	-	-
6C-3800-135-OP	2175	300695	90136	110148	310679	209356	519495	-	-	-	-	-	-	-	-	-
14C-5100-95-OP	5075	361137	108811	133443	85525	37147	37147	101226	52715	69293	116918	64699	101430	132611	76488	133576
14C-5100-110-OP	5003	361226	108847	133496	165783	101129	201532	186830	116538	244626	207869	131885	287720	228907	147188	330814
14C-5100-125-OP	3915	361004	108758	133363	257610	168040	389592	284782	187760	445246	311954	207453	500899	339125	227128	556544
14C-5100-135-OP	3335	360836	108696	133275	325336	217144	528310	357030	240094	593222	388725	263035	658133	420411	285950	723044
14C-5100-145-OP	2900	360987	108758	133363	398461	270081	678074	435023	296509	752960	471577	322946	827846	508139	349383	902723
14C-5100-175-OP	1958	360526	108572	133098	-	-	-	-	-	-	-	-	-	-	-	-
14C-5100-200-OP	1523	360075	108395	132850	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-110-OP	5075	465700	133160	157712	136549	67230	73382	157588	83648	116476	178626	99633	159570	199673	115431	202664
14C-5400-125-OP	4205	465470	133071	157579	228367	136771	261451	255539	156844	317105	282711	176714	372749	309882	196540	428403
14C-5400-135-OP	3625	465310	133009	157490	296102	186485	400169	327788	209568	465080	359482	232624	529992	391177	255619	594903
14C-5400-145-OP	3118	465461	133071	157579	369218	239687	549933	405780	266222	624810	442343	292747	699696	478905	319220	774582
14C-5400-175-OP	2103	465001	132885	157313	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-185-OP	1885	464833	132814	157216	-	-	-	-	-	-	-	-	-	-	-	-
14C-5400-200-OP	1595	464549	132699	157065	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-125-OP	4640	597001	172129	204992	175289	87490	100120	202461	108563	155773	229633	129150	211418	256805	149498	267071
14C-8300-135-OP	3988	596833	172067	204895	243024	139196	238837	274710	162836	303749	306404	186317	368660	338099	209577	433572
14C-8300-145-OP	3408	596992	172129	204992	316140	193495	388601	352702	220242	463487	389265	246918	538365	425827	273515	613251
14C-8300-175-OP	2320	596532	171944	204727	566298	375475	900962	619553	414038	1010039	-	-	-	-	-	-
14C-8300-185-OP	2103	596355	171873	204629	-	-	-	-	-	-	-	-	-	-	-	-
14C-8300-200-OP	1813	596080	171767	204470	-	-	-	-	-	-	-	-	-	-	-	-

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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5C-1100-70-OP	4278	90711	21074	21826	54158	31022	53237	62212	37023	69744	70275	42988	86242	92428	59158	131628
1.5C-1100-85-OP	2900	90605	21029	21764	92331	59088	131425	-	-	-	-	-	-	92331	59088	131425
1.5C-1100-95-OP	2320	90525	20994	21720	-	-	-	-	-	-	-	-	-	92207	58999	131168
1.5C-1100-110-OP	1740	90570	21012	21746	-	-	-	-	-	-	-	-	-	92889	59495	132567
1.5C-1200-70-OP	4568	105651	27464	30517	44944	24163	34916	53007	30243	51414	61061	36253	67921	91278	58397	129805
1.5C-1200-85-OP	3118	105545	27420	30464	83126	52458	113104	-	-	-	-	-	-	92030	58946	131354
1.5C-1200-95-OP	2465	105466	27384	30411	-	-	-	-	-	-	-	-	-	90419	57769	128044
1.5C-1200-110-OP	1813	105510	27402	30438	-	-	-	-	-	-	-	-	-	88649	56485	124424
3C-2000-70-OP	4785	155729	42599	48980	76975	45006	81268	90313	54901	108581	103651	64681	135903	163659	108307	258822
3C-2000-85-OP	3263	155552	42528	48874	140160	91251	210683	159827	105519	250963	-	-	-	164739	109085	261035
3C-2000-95-OP	2610	155419	42475	48803	-	-	-	-	-	-	-	-	-	164518	108926	260566
3C-2000-110-OP	1958	155490	42501	48838	-	-	-	-	-	-	-	-	-	165783	109838	263159
6C-2500-85-OP	4930	221853	62398	73089	146250	92048	197257	169244	108793	244343	192238	125495	291429	307183	208754	526867
6C-2500-95-OP	3915	221694	62336	73001	203443	133629	314396	232164	154446	373210	260885	175245	432032	303961	206417	520256
6C-2500-110-OP	2900	221782	62371	73045	301341	204523	514892	-	-	-	-	-	-	301341	204523	514892
6C-2500-125-OP	2248	221570	62283	72930	-	-	-	-	-	-	-	-	-	301527	204656	515273
6C-2500-135-OP	1958	221419	62221	72842	-	-	-	-	-	-	-	-	-	307564	209028	527655
6C-3800-85-OP	5075	301129	90304	110395	105864	59973	100013	128858	77108	147099	151843	94048	194194	278294	185910	453176
6C-3800-95-OP	4423	300970	90242	110307	163057	102235	217153	191778	123149	275966	220490	144011	334788	313830	211639	525956
6C-3800-110-OP	3263	301058	90278	110351	260956	173351	417658	299456	201231	496518	-	-	-	309077	208205	516229
6C-3800-125-OP	2538	300846	90189	110236	-	-	-	-	-	-	-	-	-	310856	209488	519867
6C-3800-135-OP	2175	300695	90136	110148	-	-	-	-	-	-	-	-	-	310679	209356	519495
14C-5100-95-OP	5075	361137	108811	133443	163996	99801	197867	195389	122778	262150	226774	145639	326433	399408	270762	680021
14C-5100-110-OP	5003	361226	108847	133496	270992	177750	417003	313078	208267	503201	355154	238731	589389	576086	398505	1041893
14C-5100-125-OP	3915	361004	108758	133363	393460	266470	667851	447804	305758	779149	502147	345046	890447	583663	403975	1057399
14C-5100-135-OP	3335	360836	108696	133275	483800	331779	852867	547180	377608	982690	-	-	-	578874	400514	1047601
14C-5100-145-OP	2900	360987	108758	133363	581264	402240	1052496	-	-	-	-	-	-	581264	402240	1052496
14C-5100-175-OP	1958	360526	108572	133098	-	-	-	-	-	-	-	-	-	568731	393186	1026829
14C-5100-200-OP	1523	360075	108395	132850	-	-	-	-	-	-	-	-	-	579901	401258	1049699
14C-5400-110-OP	5075	465700	133160	157712	241749	146692	288862	283835	177537	375051	325920	208205	461239	557367	376042	935294
14C-5400-125-OP	4205	465470	133071	157579	364226	236067	539701	418570	275497	650999	472904	314883	762306	608763	413224	1040556
14C-5400-135-OP	3625	465310	133009	157490	454557	301598	724717	517946	347489	854540	581326	393389	984363	613021	416304	1049274
14C-5400-145-OP	3118	465461	133071	157579	552021	372174	924346	-	-	-	-	-	-	606869	411852	1036671
14C-5400-175-OP	2103	465001	132885	157313	-	-	-	-	-	-	-	-	-	592744	401647	1007755
14C-5400-185-OP	1885	464833	132814	157216	-	-	-	-	-	-	-	-	-	594151	402665	1010632
14C-5400-200-OP	1595	464549	132699	157065	-	-	-	-	-	-	-	-	-	585442	396363	992780
14C-8300-125-OP	4640	597001	172129	204992	311148	189813	378370	365492	229571	489668	419826	269151	600975	637192	426819	1046176
14C-8300-135-OP	3988	596833	172067	204895	401479	255804	563386	464868	301890	693208	528248	347888	823031	639166	428244	1050221
14C-8300-145-OP	3408	596992	172129	204992	498943	326619	763014	572068	379662	912778	-	-	-	626907	419366	1025103
14C-8300-175-OP	2320	596532	171944	204727	-	-	-	-	-	-	-	-	-	619553	414038	1010039
14C-8300-185-OP	2103	596355	171873	204629	-	-	-	-	-	-	-	-	-	630350	421862	1032148
14C-8300-200-OP	1813	596080	171767	204470	-	-	-	-	-	-	-	-	-	636696	426456	1045150

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 (lb-in) - Canted Yoke Design, Spring to Open Models 18C-9600-145-OP to 50C-15600-300-OP

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18C-9600-145-OP	4640	947871	240183	262478	-	-	-	-	-	-	-	-	-	280905	40236	40236
18C-9600-175-OP	3118	947340	239962	262177	-	-	-	304422	88384	88384	426907	230836	339258	549393	322858	590124
18C-9600-185-OP	2828	947136	239882	262062	-	-	-	376298	191840	235616	513184	295863	515972	650070	397478	796337
18C-9600-200-OP	2393	946818	239749	261885	331638	144126	144126	491615	279701	471798	651601	398602	799462	811578	515459	1127134
18C-9600-235-OP	1740	945977	239404	261407	574750	341710	642069	795620	503838	1094457	1016500	664382	1546837	-	-	-
18C-9800-145-OP	5075	1200117	299146	323468	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-175-OP	3480	1199586	298925	323167	-	-	-	-	-	-	353888	29845	29845	476374	239457	280710
18C-9800-185-OP	3118	1199392	298846	323052	-	-	-	-	-	-	440165	206559	206559	577051	316972	486924
18C-9800-200-OP	2683	1199073	298713	322875	-	-	-	418596	162385	162385	578582	318123	490048	738560	437944	817721
18C-9800-235-OP	1958	1198223	298359	322397	501731	259274	332655	722602	426084	785044	943481	588805	1237432	-	-	-
18C-10500-175-OP	3770	1399737	350906	380830	-	-	-	-	-	-	-	-	-	409524	35217	35217
18C-10500-185-OP	3408	1399534	350826	380715	-	-	-	-	-	-	-	-	-	510201	241422	241422
18C-10500-200-OP	2900	1399215	350693	380538	-	-	-	-	-	-	511733	244555	244555	671710	369908	572219
18C-10500-235-OP	2103	1398374	350339	380060	434882	87153	87153	655752	357792	539542	876631	523186	991930	1097502	685632	1444318
18C-11000-175-OP	4060	1568079	419800	475719	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-185-OP	3625	1567875	419720	475604	-	-	-	-	-	-	-	-	-	409383	34934	34934
18C-11000-200-OP	3045	1567556	419588	475418	-	-	-	-	-	-	410914	38058	38058	570891	292606	365731
18C-11000-235-OP	2248	1566716	419242	474949	-	-	-	554942	280117	333054	775812	448175	785442	996683	611905	1237822
32C-12000-175-OP	4930	1782692	428217	452388	-	-	-	-	-	-	-	-	-	-	-	-
32C-12000-200-OP	3770	1782090	427960	452043	-	-	-	-	-	-	587646	115936	115936	775450	398169	500590
32C-12000-235-OP	2683	1781098	427544	451486	-	-	-	756721	383538	462230	1016013	581078	993293	1275296	773927	1524356
32C-12000-250-OP	2320	1780620	427350	451220	633811	210480	210480	927249	514344	811499	1220695	733471	1412527	1514142	948915	2013546
32C-15000-175-OP	5075	2073350	523655	571024	-	-	-	-	-	-	-	-	-	-	-	-
32C-15000-200-OP	3988	2072739	523407	570679	-	-	-	-	-	-	-	-	-	644830	144073	144073
32C-15000-235-OP	2900	2071748	523000	570121	-	-	-	626102	105713	105713	885385	466735	636776	1144676	662718	1167839
32C-15000-250-OP	2538	2071279	522805	569856	-	-	-	796629	397593	454982	1090076	621836	1056010	1383514	840113	1657029
50C-15400-200-OP	4568	2244028	513282	527044	-	-	-	-	-	-	-	-	-	822748	232474	232474
50C-15400-235-OP	3263	2242931	512804	526425	-	-	-	801940	189857	189857	1090032	573883	779928	1378133	791947	1369999
50C-15400-250-OP	2900	2242399	512573	526133	-	-	-	991417	497129	577936	1317461	746490	1245734	1643513	989381	1913541
50C-15400-300-OP	2030	2241718	512273	525743	1238839	687270	1084704	1708354	1037396	2046338	2177860	1380894	3007972	2647374	1722267	3969614
50C-15600-200-OP	4640	2346856	557491	585008	-	-	-	-	-	-	-	-	-	761165	106342	106342
50C-15600-235-OP	3335	2345759	557031	584388	-	-	-	740356	63725	63725	1028448	526168	653796	1316549	745800	1243867
50C-15600-250-OP	2973	2345236	556801	584088	-	-	-	929833	447901	451795	1255877	700112	1119602	1581930	943711	1787409
50C-15600-300-OP	2030	2344546	556509	583707	1177256	640591	958572	1646771	991788	1920206	2116276	1335959	2881840	2585791	1677580	3843482

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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18C-9600-145-OP	4640	947871	240183	262478	322955	126344	126344	364996	182963	212462	407046	215649	298580	449087	247679	384698
18C-9600-175-OP	3118	947340	239962	262177	610631	368324	715565	671878	413454	840998	733116	458230	966431	794364	502917	1091873
18C-9600-185-OP	2828	947136	239882	262062	718513	447574	936516	786956	497510	1076694	855398	547330	1216881	923841	597125	1357059
18C-9600-200-OP	2393	946818	239749	261885	891571	573644	1290962	971565	631775	1454798	-	-	-	-	-	-
18C-9600-235-OP	1740	945977	239404	261407	-	-	-	-	-	-	-	-	-	-	-	-
18C-9800-145-OP	5075	1200117	299146	323468	-	-	-	-	-	-	-	-	-	376068	75284	75284
18C-9800-175-OP	3480	1199586	298925	323167	537612	286932	406152	598859	333452	531585	660098	379458	657018	721345	425146	782459
18C-9800-185-OP	3118	1199392	298846	323052	645494	368519	627102	713937	419623	767289	782380	470435	907467	850823	521026	1047646
18C-9800-200-OP	2683	1199073	298713	322875	818553	497226	981557	898546	555978	1145384	978530	614384	1309221	1058523	672710	1473057
18C-9800-235-OP	1958	1198223	298359	322397	-	-	-	-	-	-	-	-	-	-	-	-
18C-10500-175-OP	3770	1399737	350906	380830	470763	160650	160650	532010	261982	286083	593248	309953	411524	654495	356836	536957
18C-10500-185-OP	3408	1399534	350826	380715	578644	298642	381609	647087	351215	521787	715530	402975	661965	783973	454256	802143
18C-10500-200-OP	2900	1399215	350693	380538	751703	430111	736055	831696	489818	899891	911680	549180	1063719	991673	608241	1227555
18C-10500-235-OP	2103	1398374	350339	380060	-	-	-	-	-	-	-	-	-	-	-	-
18C-11000-175-OP	4060	1568079	419800	475719	-	-	-	431191	79595	79595	492438	205028	205028	553676	279126	330469
18C-11000-185-OP	3625	1567875	419720	475604	477825	175112	175112	546268	273302	315299	614711	326486	455477	683154	378564	595655
18C-11000-200-OP	3045	1567556	419588	475418	650884	354101	529567	730877	414498	693394	810861	474294	857231	890855	533736	1021067
18C-11000-235-OP	2248	1566716	419242	474949	1107123	692651	1464020	-	-	-	-	-	-	-	-	-
32C-12000-175-OP	4930	1782692	428217	452388	539559	17445	17445	611454	164695	164695	683349	311945	311945	755243	382370	459195
32C-12000-200-OP	3770	1782090	427960	452043	869356	470444	692916	963254	541489	885252	1057160	611888	1077579	1151058	681835	1269906
32C-12000-235-OP	2683	1781098	427544	451486	1404942	869170	1789887	1534587	963829	2055427	1664224	1058355	2320959	1793870	1152660	2586490
32C-12000-250-OP	2320	1780620	427350	451220	1660861	1055903	2314055	1807580	1162635	2614574	-	-	-	-	-	-
32C-15000-175-OP	5075	2073350	523655	571024	-	-	-	-	-	-	-	-	-	624624	102678	102678
32C-15000-200-OP	3988	2072739	523407	570679	738737	336399	336399	832634	425880	528726	926541	498271	721053	1020438	569484	913389
32C-15000-235-OP	2900	2071748	523000	570121	1274322	759182	1433370	1403959	855204	1698901	1533605	950332	1964433	1663251	1044964	2229973
32C-15000-250-OP	2538	2071279	522805	569856	1530242	947862	1957538	1676960	1054965	2258056	1823688	1161891	2558566	-	-	-
50C-15400-200-OP	4568	2244028	513282	527044	927090	445671	446175	1031422	528478	659868	1135755	608949	873569	1240096	688208	1087270
50C-15400-235-OP	3263	2242931	512804	526425	1522179	899387	1665030	1666233	1006224	1960069	1810279	1112415	2255100	1954325	1217784	2550140
50C-15400-250-OP	2900	2242399	512573	526133	1806535	1109672	2247444	1969566	1228900	2581339	2132588	1347863	2915242	2295610	1466552	3249146
50C-15400-300-OP	2030	2241718	512273	525743	-	-	-	-	-	-	-	-	-	-	-	-
50C-15600-200-OP	4640	2346856	557491	585008	865506	320043	320043	969839	480020	533736	1074171	561651	747437	1178513	641538	961129
50C-15600-235-OP	3335	2345759	557031	584388	1460595	853504	1538898	1604650	960563	1833937	1748696	1067179	2128968	1892742	1172813	2424008
50C-15600-250-OP	2973	2345236	556801	584088	1744952	1064418	2121304	1907983	1183965	2455207	2071005	1302919	2789110	2234027	1421749	3123014
50C-15600-300-OP	2030	2344546	556509	583707	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:

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- 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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18C-9600-145-OP	4640	947871	240183	262478	533178	310776	556925	617269	373245	729151	701360	435050	901387	1037724	679782	1590312
18C-9600-175-OP	3118	947340	239962	262177	916849	592036	1342738	-	-	-	-	-	-	1008711	658735	1530897
18C-9600-185-OP	2828	947136	239882	262062	-	-	-	-	-	-	-	-	-	1026501	671639	1567326
18C-9600-200-OP	2393	946818	239749	261885	-	-	-	-	-	-	-	-	-	1011552	660797	1536720
18C-9600-235-OP	1740	945977	239404	261407	-	-	-	-	-	-	-	-	-	1016500	664382	1546837
18C-9800-145-OP	5075	1200117	299146	323468	460159	226615	247511	544250	292004	419747	628341	355667	591974	1090837	696227	1539243
18C-9800-175-OP	3480	1199586	298925	323167	843831	515893	1033325	966316	605471	1284200	1088802	694740	1535074	1088802	694740	1535074
18C-9800-185-OP	3118	1199392	298846	323052	987708	621075	1328011	-	-	-	-	-	-	1090368	695881	1538278
18C-9800-200-OP	2683	1199073	298713	322875	-	-	-	-	-	-	-	-	-	1098520	701811	1554971
18C-9800-235-OP	1958	1198223	298359	322397	-	-	-	-	-	-	-	-	-	1109141	709529	1576717
18C-10500-175-OP	3770	1399737	350906	380830	776981	449052	787832	899466	540117	1038697	1021952	630412	1289572	1144437	719876	1540446
18C-10500-185-OP	3408	1399534	350826	380715	920859	555978	1082509	1057735	656611	1362874	-	-	-	1160404	731523	1573141
18C-10500-200-OP	2900	1399215	350693	380538	1151651	725142	1555227	-	-	-	-	-	-	1151651	725142	1555227
18C-10500-235-OP	2103	1398374	350339	380060	-	-	-	-	-	-	-	-	-	1152722	725921	1557413
18C-11000-175-OP	4060	1568079	419800	475719	676162	373289	581335	798647	465195	832209	921133	556181	1083084	1166104	735692	1584824
18C-11000-185-OP	3625	1567875	419720	475604	820040	481127	876021	956925	582654	1156377	1093802	682933	1436742	1162245	732878	1576920
18C-11000-200-OP	3045	1567556	419588	475418	1050841	651566	1348739	-	-	-	-	-	-	1130825	709945	1512567
18C-11000-235-OP	2248	1566716	419242	474949	-	-	-	-	-	-	-	-	-	1162342	732939	1577115
32C-12000-175-OP	4930	1782692	428217	452388	899033	492969	753694	1042813	601169	1048203	1186602	708193	1342703	1905540	1233901	2815211
32C-12000-200-OP	3770	1782090	427960	452043	1338862	820774	1654559	1526666	958058	2039213	1714470	1094900	2423866	1902274	1231520	2808520
32C-12000-235-OP	2683	1781098	427544	451486	-	-	-	-	-	-	-	-	-	1858799	1203543	2719464
32C-12000-250-OP	2320	1780620	427350	451220	-	-	-	-	-	-	-	-	-	1807580	1162635	2614574
32C-15000-175-OP	5075	2073350	523655	571024	768404	375104	397177	912194	487305	691686	1055983	596284	986186	1846815	1178716	2605944
32C-15000-200-OP	3988	2072739	523407	570679	1208242	710078	1298042	1396046	849362	1682696	1583851	987027	2067349	1912621	1229741	2740723
32C-15000-235-OP	2900	2071748	523000	570121	1922533	1233803	2761036	-	-	-	-	-	-	1922533	1233803	2761036
32C-15000-250-OP	2538	2071279	522805	569856	-	-	-	-	-	-	-	-	-	1897043	1215252	2708816
50C-15400-200-OP	4568	2244028	513282	527044	1448762	844680	1514664	1657436	999701	1942058	1866110	1153306	2369452	2648622	1723170	3972172
50C-15400-235-OP	3263	2242931	512804	526425	2242426	1427856	3140211	2530518	1637433	3730281	-	-	-	2602687	1695777	3878080
50C-15400-250-OP	2900	2242399	512573	526133	2621663	1703610	3916953	-	-	-	-	-	-	2621805	1709832	3917236
50C-15400-300-OP	2030	2241718	512273	525743	-	-	-	-	-	-	-	-	-	2647516	1728746	3969898
50C-15600-200-OP	4640	2346856	557491	585008	1387178	798727	1388523	1595852	954040	1815917	1804526	1108202	2243311	2639347	1722745	3953179
50C-15600-235-OP	3335	2345759	557031	584388	2180843	1383062	3014079	2468934	1592631	3604149	-	-	-	2613122	1703460	3899472
50C-15600-250-OP	2973	2345236	556801	584088	2560079	1658923	3790812	-	-	-	-	-	-	2641728	1724498	3958055
50C-15600-300-OP	2030	2344546	556509	583707	-	-	-	-	-	-	-	-	-	2585932	1683448	3843766

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

Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	5075	2275	1018	1257	-	-	-	1257	212	212	1779	752	814	2301	1097	1407
0.3S-008A-28-CL	5075	2266	1009	1239	2726	1372	1894	3744	2027	3062	4762	2682	4231	5788	3337	5399
0.3S-008A-35-CL	4640	2257	1009	1239	5010	2841	4514	6612	3859	6337	8205	4868	8160	9798	5886	9992
0.3S-008B-20-CL	5075	3469	1336	1372	-	-	-	-	-	-	-	-	-	2186	80	80
0.3S-008B-28-CL	5075	3461	1328	1354	2611	566	566	3629	1567	1735	4655	2239	2903	5673	2903	4071
0.3S-008B-35-CL	4858	3452	1328	1354	4903	2407	3186	6496	3434	5010	8090	4461	6842	9692	5479	8665
0.3S-008C-20-CL	5075	4160	1629	1708	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008C-28-CL	5075	4142	1620	1690	-	-	-	3301	947	947	4319	1876	2115	5346	2558	3284
0.3S-008C-35-CL	4930	4133	1620	1682	4567	2045	2399	6169	3098	4222	7762	4124	6045	9355	5142	7877
0.3S-0100-28-CL	5075	6629	2823	3266	-	-	-	-	-	-	-	-	-	3788	381	381
0.3S-0100-35-CL	5075	6620	2815	3257	-	-	-	4611	1319	1319	6213	2744	3151	7806	3797	4974
0.3S-0100-40-CL	4133	6603	2806	3239	4956	1717	1717	7045	3292	4098	9125	4655	6479	11214	5992	8868
0.3S-0100-45-CL	3263	6594	2797	3231	7160	3372	4240	9798	5089	7258	12435	6780	10267	15082	8470	13285
0.3S-0100-50-CL	2610	6594	2797	3222	9630	4983	7063	12887	7072	10789	16144	9152	14515	19401	11223	18233
0.3S-0150-35-CL	5075	8267	3868	5036	-	-	-	-	-	-	4461	1142	1142	6054	2638	2974
0.3S-0150-40-CL	4350	8249	3850	5018	-	-	-	5293	2098	2098	7373	3514	4478	9461	4868	6859
0.3S-0150-45-CL	3480	8240	3850	5001	5417	2186	2230	8054	3956	5248	10692	5664	8267	13329	7346	11285
0.3S-0150-50-CL	2755	8240	3841	5001	7886	3850	5063	11143	5948	8780	14400	8036	12506	17657	10108	16232
0.3S-0150-60-CL	1958	8240	3850	5001	13621	7532	11621	18312	10524	16985	22994	13506	22348	-	-	-
0.9S-0200-40-CL	5075	10975	5080	6541	-	-	-	5381	770	770	7798	3275	3531	10205	4894	6284
0.9S-0200-45-CL	5075	10966	5071	6532	5523	929	929	8576	3815	4425	11630	5824	7913	14675	7789	11400
0.9S-0200-50-CL	5075	10957	5071	6523	8382	3682	4195	12143	6160	8506	15914	8576	12816	19675	10984	17117
0.9S-0200-60-CL	4278	10957	5071	6532	15011	8001	11780	20436	11471	17985	25862	14922	24189	31279	18365	30393
0.9S-0250-40-CL	5075	13037	6373	8771	-	-	-	-	-	-	5603	1018	1018	8010	3425	3770
0.9S-0250-45-CL	5075	13028	6364	8762	-	-	-	6381	1912	1912	9435	4381	5399	12480	6373	8886
0.9S-0250-50-CL	5075	13019	6364	8753	6187	1690	1690	9948	4726	5992	13719	7169	10302	17480	9585	14613
0.9S-0250-60-CL	4423	13028	6364	8753	12816	6594	9276	18241	10072	15480	23667	13524	21675	29084	16976	27880
0.9S-0250-70-CL	3263	13019	6364	8753	20649	11603	18233	28030	16303	26667	35412	20985	35111	42793	25676	43555
0.9S-0350-45-CL	5075	20667	9638	12515	-	-	-	-	-	-	-	-	-	8780	89	89
0.9S-0350-50-CL	5075	20658	9630	12506	-	-	-	-	-	-	10010	1505	1505	13781	5620	5806
0.9S-0350-60-CL	4858	20667	9638	12515	9116	469	469	14533	6151	6673	19958	9762	12878	25384	13276	19082
0.9S-0350-70-CL	3553	20658	9638	12515	16940	7780	9426	24322	12595	17870	31703	17330	26313	39085	22038	34757
0.9S-0350-85-CL	2393	20605	9603	12453	30898	16816	25393	41784	23755	37837	52671	30677	50290	63548	37589	62734
0.9S-0400-50-CL	5075	24242	11869	16374	-	-	-	-	-	-	-	-	-	9975	1452	1452
0.9S-0400-60-CL	5003	24242	11878	16374	-	-	-	10727	2319	2319	16153	7258	8523	21578	10816	14728
0.9S-0400-70-CL	3698	24242	11869	16374	13135	5080	5080	20516	10134	13515	27898	14896	21959	35279	19613	30402
0.9S-0400-85-CL	2465	24189	11833	16312	27092	14374	21038	37979	21330	33482	48856	28260	45935	59743	35173	58380
0.9S-0700-60-CL	5075	34270	16374	21897	-	-	-	-	-	-	-	-	-	16126	3107	3107
0.9S-0700-70-CL	3770	34270	16365	21897	-	-	-	15073	1903	1903	22454	9515	10338	29836	14444	18781
0.9S-0700-85-CL	2683	34216	16338	21835	21649	8957	9417	32527	16206	21870	43413	23216	34314	54299	30181	46759

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	5075	2275	1018	1257	2558	1266	1708	2823	1434	2000	3080	1602	2301	3337	1770	2602
0.3S-008A-28-CL	5075	2266	1009	1239	6293	3655	5983	6806	3983	6567	7320	4310	7151	7833	4629	7736
0.3S-008A-35-CL	4640	2257	1009	1239	10603	6390	10904	11400	6895	11816	12196	7399	12727	12993	7904	13639
0.3S-008B-20-CL	5075	3469	1336	1372	2443	381	381	2708	682	682	2965	974	974	3231	1275	1275
0.3S-008B-28-CL	5075	3461	1328	1354	6187	3239	4655	6691	3567	5240	7205	3894	5824	7718	4213	6408
0.3S-008B-35-CL	4858	3452	1328	1354	10488	5983	9577	11285	6488	10488	12081	7001	11400	12878	7505	12311
0.3S-008C-20-CL	5075	4160	1629	1708	-	-	-	-	-	-	2638	186	186	2894	487	487
0.3S-008C-28-CL	5075	4142	1620	1690	5850	2894	3868	6364	3222	4452	6877	3549	5036	7382	3885	5620
0.3S-008C-35-CL	4930	4133	1620	1682	10152	5656	8789	10957	6160	9700	11754	6673	10612	12550	7178	11524
0.3S-0100-28-CL	5075	6629	2823	3266	4301	965	965	4815	1549	1549	5328	2124	2133	5833	2487	2717
0.3S-0100-35-CL	5075	6620	2815	3257	8603	4319	5886	9399	4833	6797	10205	5346	7709	11001	5859	8621
0.3S-0100-40-CL	4133	6603	2806	3239	12249	6665	10054	13294	7328	11249	14338	7992	12444	15383	8656	13630
0.3S-0100-45-CL	3263	6594	2797	3231	16400	9311	14798	17719	10143	16303	19038	10984	17817	20357	11825	19321
0.3S-0100-50-CL	2610	6594	2797	3222	21029	12258	20100	22658	13285	21959	24286	14321	23826	25915	15356	25685
0.3S-0150-35-CL	5075	8267	3868	5036	6850	3169	3885	7656	3700	4797	8452	4213	5709	9249	4735	6620
0.3S-0150-40-CL	4350	8249	3850	5018	10506	5541	8054	11541	6213	9249	12586	6877	10444	13630	7541	11630
0.3S-0150-45-CL	3480	8240	3850	5001	14648	8196	12798	15967	9037	14303	17286	9869	15807	18604	10709	17321
0.3S-0150-50-CL	2755	8240	3841	5001	19286	11143	18100	20914	12179	19958	22543	13214	21817	24171	14250	23685
0.3S-0150-60-CL	1958	8240	3850	5001	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-40-CL	5075	10975	5080	6541	11409	5682	7665	12612	6461	9045	13816	7240	10417	15029	8010	11798
0.9S-0200-45-CL	5075	10966	5071	6532	16197	8762	13143	17728	9736	14887	19250	10718	16631	20773	11683	18374
0.9S-0200-50-CL	5075	10957	5071	6523	21560	12187	19277	23446	13382	21428	25331	14586	23578	27207	15781	25738
0.9S-0200-60-CL	4278	10957	5071	6532	33996	20091	33491	36704	21808	36589	39412	23534	39696	42130	25251	42793
0.9S-0250-40-CL	5075	13037	6373	8771	9214	4240	5151	10417	5036	6532	11621	5824	7913	12834	6603	9284
0.9S-0250-45-CL	5075	13028	6364	8762	14002	7355	10630	15533	8337	12373	17055	9311	14117	18578	10285	15869
0.9S-0250-50-CL	5075	13019	6364	8753	19365	10789	16763	21251	11984	18914	23136	13188	21074	25012	14382	23224
0.9S-0250-60-CL	4423	13028	6364	8753	31801	18693	30978	34509	20419	34084	37217	22136	37182	39935	23862	40289
0.9S-0250-70-CL	3263	13019	6364	8753	46484	28021	47776	50175	30358	51998	53866	32704	56220	57556	35040	60442
0.9S-0350-45-CL	5075	20667	9638	12515	10302	1832	1832	11825	3576	3576	13347	5310	5319	14878	6390	7063
0.9S-0350-50-CL	5075	20658	9630	12506	15657	6921	7966	17542	8178	10116	19427	9417	12267	21313	10647	14427
0.9S-0350-60-CL	4858	20667	9638	12515	28092	15020	22180	30801	16754	25278	33518	18489	28384	36226	20215	31482
0.9S-0350-70-CL	3553	20658	9638	12515	42776	24393	38979	46466	26738	43201	50157	29084	47413	53848	31429	51635
0.9S-0350-85-CL	2393	20605	9603	12453	68992	41041	68956	74435	44502	75178	-	-	-	-	-	-
0.9S-0400-50-CL	5075	24242	11869	16374	11851	3611	3611	13736	5594	5762	15622	6895	7913	17507	8152	10072
0.9S-0400-60-CL	5003	24242	11878	16374	24286	12568	17825	26995	14312	20932	29712	16055	24030	32420	17790	27128
0.9S-0400-70-CL	3698	24242	11869	16374	38970	21968	34624	42661	24322	38846	46351	26667	43068	50042	29013	47290
0.9S-0400-85-CL	2465	24189	11833	16312	65186	38625	64602	70629	42085	70824	76072	45537	77055	-	-	-
0.9S-0700-60-CL	5075	34270	16374	21897	18843	6213	6213	21552	8886	9311	24260	10754	12409	26977	12568	15515
0.9S-0700-70-CL	3770	34270	16365	21897	33527	16852	23003	37217	19233	27225	40908	21614	31447	44599	23977	35669
0.9S-0700-85-CL	2683	34217	16338	21835	59734	33651	52989	65177	37120	59212	70620	40581	65434	76063	44041	71656

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
0.3S-008A-20-CL	5075	2275	1018	1257	3859	2106	3195	4381	2443	3788	4903	2770	4390	7771	4594	7665
0.3S-008A-28-CL	5075	2266	1009	1239	8851	5275	8904	9869	5930	10072	10895	6576	11240	16507	10143	17666
0.3S-008A-35-CL	4640	2257	1009	1239	14586	8922	15462	16188	9931	17286	17781	10948	19118	24163	14993	26419
0.3S-008B-20-CL	5075	3469	1336	1372	3753	1646	1868	4266	1991	2469	4788	2337	3062	7656	4178	6337
0.3S-008B-28-CL	5075	3461	1328	1354	8736	4868	7576	9762	5523	8745	10780	6169	9913	16400	9736	16338
0.3S-008B-35-CL	4858	3452	1328	1354	14480	8523	14143	16073	9532	15967	17666	10550	17790	25251	15356	26464
0.3S-008C-20-CL	5075	4160	1629	1708	3416	1080	1080	3939	1611	1682	4461	1974	2275	7328	3841	5549
0.3S-008C-28-CL	5075	4142	1620	1690	8408	4540	6789	9426	5187	7957	10453	5841	9125	16064	9417	15551
0.3S-008C-35-CL	4930	4133	1620	1682	14143	8196	13347	15737	9205	15170	17339	10223	17002	25313	15285	26127
0.3S-0100-28-CL	5075	6629	2823	3266	6859	3169	3885	7877	3841	5054	8895	4505	6222	14515	8107	12648
0.3S-0100-35-CL	5075	6620	2815	3257	12595	6886	10444	14188	7904	12276	15790	8922	14099	24561	14498	24136
0.3S-0100-40-CL	4133	6603	2806	3239	17463	9984	16020	19551	11311	18401	21631	12639	20782	26322	15613	26145
0.3S-0100-45-CL	3263	6594	2797	3231	22994	13497	22339	25632	15170	25357	-	-	-	26287	15595	26110
0.3S-0100-50-CL	2610	6594	2797	3222	-	-	-	-	-	-	-	-	-	25915	15356	25685
0.3S-0150-35-CL	5075	8267	3868	5036	10842	5762	8444	12444	6780	10267	14037	7806	12099	22817	13382	22136
0.3S-0150-40-CL	4350	8249	3850	5018	15710	8868	14020	17799	10196	16400	19879	11524	18781	26136	15498	25933
0.3S-0150-45-CL	3480	8240	3850	5001	21242	12391	20339	23879	14064	23357	26517	15737	26375	26517	15737	26375
0.3S-0150-50-CL	2755	8240	3841	5001	-	-	-	-	-	-	-	-	-	25800	15276	25543
0.3S-0150-60-CL	1958	8240	3850	5001	-	-	-	-	-	-	-	-	-	26517	15737	26366
0.9S-0200-40-CL	5075	10975	5080	6541	17436	9550	14551	19843	11090	17312	22260	12630	20065	35509	21056	35226
0.9S-0200-45-CL	5075	10966	5071	6532	23826	13630	21861	26880	15568	25357	29924	17507	28845	46705	28163	48033
0.9S-0200-50-CL	5075	10957	5071	6523	30978	18171	30039	34739	20560	34350	38510	22959	38651	59220	36102	62345
0.9S-0200-60-CL	4278	10957	5071	6532	47546	28694	48998	52972	32137	55202	58397	35580	61398	73311	45041	78453
0.9S-0250-40-CL	5075	13037	6373	8771	15241	8152	12046	17648	9692	14798	20065	11232	17560	33314	19658	32721
0.9S-0250-45-CL	5075	13028	6364	8762	21631	12232	19357	24685	14170	22844	27729	16108	26331	44510	26765	45519
0.9S-0250-50-CL	5075	13019	6364	8753	28783	16781	27535	32544	19171	31836	36315	21560	36146	57025	34704	59831
0.9S-0250-60-CL	4423	13028	6364	8753	45351	27305	46484	50777	30748	52689	56202	34182	58893	73824	45369	79046
0.9S-0250-70-CL	3263	13019	6364	8753	64938	39722	68877	72319	44404	77320	-	-	-	74160	45581	79435
0.9S-0350-45-CL	5075	20667	9638	12515	17923	8435	10550	20976	10426	14046	24030	12400	17533	40802	23136	36722
0.9S-0350-50-CL	5075	20658	9630	12506	25074	13081	18728	28845	15498	23039	32606	17905	27340	53317	31093	51033
0.9S-0350-60-CL	4858	20667	9638	12515	41652	23676	37686	47068	27128	43891	52494	30570	50086	78258	46927	79551
0.9S-0350-70-CL	3553	20658	9638	12515	61229	36120	60079	68611	40802	68523	75993	45493	76966	77833	46661	79073
0.9S-0350-85-CL	2393	20605	9603	12453	-	-	-	-	-	-	-	-	-	77152	46227	78294
0.9S-0400-50-CL	5075	24242	11869	16374	21268	10621	14374	25039	13055	18684	28800	15471	22994	49511	28676	46679
0.9S-0400-60-CL	5003	24242	11878	16374	37846	21251	33332	43262	24702	39536	48688	28154	45741	77161	46227	78303
0.9S-0400-70-CL	3698	24242	11869	16374	57424	33704	55724	64805	38386	64168	72187	43077	72612	77718	46590	78940
0.9S-0400-85-CL	2465	24189	11833	16312	-	-	-	-	-	-	-	-	-	76072	45537	77055
0.9S-0700-60-CL	5075	34270	16374	21897	32394	16117	21711	37819	19622	27915	43245	23109	34120	73072	42130	68230
0.9S-0700-70-CL	3770	34270	16365	21897	51980	28694	44112	59353	33403	52547	66735	38111	60991	72275	41625	67328
0.9S-0700-85-CL	2683	34217	16338	21835	-	-	-	-	-	-	-	-	-	78781	45767	74771

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 (lb-in) - Symmetric Yoke Design, Spring to Close Models 1.5S-1100-70-CL to 14S-8300-200-CL

					Operating supply pressure (psi)											
					1160			1450			1740			2030		
Model	MOP (psi)	BTC	RTC	ETC	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	4713	55892	27420	33447	-	-	-	-	-	-	-	-	-	37563	3576	3576
1.5S-1100-85-CL	3190	55831	27375	33367	-	-	-	41262	7143	7143	56193	20489	21543	71125	29809	35952
1.5S-1100-95-CL	2538	55786	27340	33305	41156	7036	7036	59805	22808	25030	78453	34244	43023	97110	45395	61017
1.5S-1100-110-CL	1885	55804	27358	33341	66602	27039	31588	91605	42121	55715	116609	56955	79834	-	-	-
1.5S-1200-70-CL	5075	64805	33659	45183	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-85-CL	3408	64743	33615	45103	-	-	-	-	-	-	44617	10683	10683	59548	22782	25092
1.5S-1200-95-CL	2755	64690	33580	45041	-	-	-	48228	14170	14170	66885	27340	32164	85534	38616	50157
1.5S-1200-110-CL	2030	64717	33597	45077	55025	19879	20728	80037	35314	44847	105041	50219	68974	130044	64991	93101
3S-2000-70-CL	5075	97562	51219	71532	-	-	-	-	-	-	-	-	-	44714	451	451
3S-2000-85-CL	3988	97456	51148	71399	-	-	-	50759	6452	6452	75143	28561	30668	99536	43820	54875
3S-2000-95-CL	3190	97376	51095	71302	50582	6284	6284	81046	32349	36518	111511	51122	66761	141975	69487	97004
3S-2000-110-CL	2320	97420	51131	71355	92154	39280	47546	133000	64088	88092	173846	88561	128637	214693	112927	169182
6S-2500-85-CL	5075	139612	74346	106377	-	-	-	-	-	-	64973	5797	5797	93437	33633	34155
6S-2500-95-CL	5075	139514	74284	106253	-	-	-	71859	12657	12657	107413	42785	48086	142966	64796	83516
6S-2500-110-CL	3843	139567	74320	106315	84817	25570	25570	132487	58388	73072	180157	87313	120565	227818	115927	168067
6S-2500-125-CL	2973	139444	74240	106165	140222	63124	80781	201779	100314	142116	263336	137160	203461	324893	173891	264797
6S-2500-135-CL	2538	139355	74178	106050	181095	87879	121503	252892	130920	193053	324690	173767	264593	396487	216534	336143
6S-3800-85-CL	5075	188486	104147	157402	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-95-CL	5075	188388	104085	157287	-	-	-	-	-	-	-	-	-	92641	25003	25003
6S-3800-110-CL	4133	188441	104120	157349	-	-	-	82162	14559	14559	129832	53379	62053	177502	82648	109555
6S-3800-125-CL	3190	188317	104032	157189	89906	22268	22268	151454	66779	83604	213011	104094	144949	274568	141001	206284
6S-3800-135-CL	2755	188220	103970	157074	130770	53972	62991	202567	97801	134540	274364	140877	206081	346162	183750	277630
14S-5100-95-CL	5075	221039	124840	191548	-	-	-	-	-	-	-	-	-	85958	4762	4762
14S-5100-110-CL	5075	221092	124884	191619	-	-	-	-	-	-	127212	44201	44564	180095	77338	95579
14S-5100-125-CL	5075	220959	124787	191442	82914	1823	1823	151206	59645	67708	219490	100969	133593	287782	141453	199478
14S-5100-135-CL	4495	220853	124725	191318	128256	44909	45573	207904	94057	122415	287552	141320	199266	367209	188255	276108
14S-5100-145-CL	3915	220950	124787	191433	177307	75647	92897	269196	130469	181555	361084	184653	270205	452973	238634	358863
14S-5100-175-CL	2683	220676	124601	191088	344816	175068	254512	478666	253698	383645	612507	332177	512777	746348	410577	641909
14S-5100-200-CL	2030	220401	124424	190743	508405	271143	412339	683216	373599	580999	858036	475984	749667	1032856	578317	918327
14S-5400-110-CL	5075	285755	156614	229314	-	-	-	-	-	-	-	-	-	142913	21056	21056
14S-5400-125-CL	5075	285623	156526	229146	-	-	-	-	-	-	182308	59070	59070	250600	104306	124955
14S-5400-135-CL	4640	285525	156455	229013	-	-	-	170722	47891	47891	250379	104173	124742	330027	152091	201585
14S-5400-145-CL	4060	285623	156517	229137	140134	18374	18374	232014	92897	107023	323902	148436	195681	415791	202965	284330
14S-5400-175-CL	2755	285339	156331	228783	307643	138727	179989	441484	218127	309121	575325	296934	438254	709175	375528	567386
14S-5400-185-CL	2465	285242	156269	228650	370457	176121	240590	520035	264416	384901	669612	352322	529213	819190	440050	673533
14S-5400-200-CL	2103	285074	156154	228438	471223	235678	337815	646043	338479	506475	820854	441024	675135	995674	543463	843804
14S-8300-125-CL	5075	367032	202213	298518	-	-	-	-	-	-	-	-	-	182184	29154	29154
14S-8300-135-CL	4930	366926	202142	298394	-	-	-	-	-	-	181963	28942	28942	261619	98031	105784
14S-8300-145-CL	4278	367023	202204	298509	-	-	-	163606	11232	11232	255495	94101	99881	347383	150852	188539
14S-8300-175-CL	2900	366749	202018	298155	239227	83330	84188	373068	166297	213321	506918	245900	342453	640759	324840	471586
14S-8300-185-CL	2610	366642	201948	298022	302041	123282	144789	451618	213144	289101	601196	301554	433421	750774	389539	577533
14S-8300-200-CL	2248	366474	201841	297810	402815	184087	242015	577626	287658	410675	752447	390513	579335	927267	493128	748003

NOTES:

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- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
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Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	4713	55892	27420	33447	42625	8461	8461	47688	13347	13347	52750	18188	18224	57813	21534	23109
1.5S-1100-85-CL	3190	55831	27375	33367	78595	34323	43156	86056	38811	50352	93517	43262	57556	100987	47706	64761
1.5S-1100-95-CL	2538	55786	27340	33305	106430	50927	70018	115759	56450	-	125079	61955	88012	-	-	-
1.5S-1100-110-CL	1885	55804	27358	33341	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-70-CL	5075	64805	33659	45183	-	-	-	36120	2478	2478	41183	7364	7364	46245	12249	12249
1.5S-1200-85-CL	3408	64743	33615	45103	67018	27420	32288	74479	31969	39492	81949	36465	46697	89410	40926	53901
1.5S-1200-95-CL	2755	64690	33580	45041	94853	44174	59150	104182	49706	68151	113502	55229	77143	122831	60734	86144
1.5S-1200-110-CL	2030	64717	33597	45077	-	-	-	-	-	-	-	-	-	-	-	-
3S-2000-70-CL	5075	97562	51219	71532	52981	8665	8665	61256	16878	16878	69523	24809	25083	77798	30270	33297
3S-2000-85-CL	3988	97456	51148	71399	111732	51255	66982	123928	58627	79081	136116	65973	91189	148312	73284	103297
3S-2000-95-CL	3190	97376	51095	71302	157216	78621	112130	172448	87729	127247	187680	96818	142373	202912	105908	157490
3S-2000-110-CL	2320	97420	51131	71355	235111	125079	189459	255539	137240	209727	-	-	-	-	-	-
6S-2500-85-CL	5075	139612	74346	106377	107669	42944	48334	121901	51865	62522	136133	60619	76701	150357	69301	90880
6S-2500-95-CL	5075	139514	74284	106253	160747	75594	101226	178520	86330	118945	196301	97022	136656	214073	107687	154375
6S-2500-110-CL	3843	139567	74320	106315	251653	130177	191822	275488	144418	215569	299324	158641	239315	323159	172855	263071
6S-2500-125-CL	2973	139444	74240	106165	355667	192229	295465	386441	210550	326132	417224	228880	356800	447998	247210	387468
6S-2500-135-CL	2538	139355	74178	106050	432386	237908	371909	468284	259274	407683	504183	280622	443458	-	-	-
6S-3800-85-CL	5075	188486	104147	157402	-	-	-	71576	4009	4009	85808	18188	18188	100040	32367	32367
6S-3800-95-CL	5075	188388	104085	157287	110422	40917	42714	128194	52361	60433	145975	63407	78143	163757	74302	95854
6S-3800-110-CL	4133	188441	104120	157349	201337	97057	133310	225172	111396	157057	248998	125690	180803	272833	139966	204559
6S-3800-125-CL	3190	188317	104032	157189	305342	159393	236952	336125	177758	267620	366899	196124	298288	397682	214471	328956
6S-3800-135-CL	2755	188220	103970	157074	382060	205160	313396	417959	226544	349171	453866	247918	384946	489765	269293	420712
14S-5100-95-CL	5075	221039	124840	191548	105678	23791	23791	125397	42820	42820	145117	55839	61840	164845	68062	80869
14S-5100-110-CL	5075	221092	124884	191619	206532	93234	121096	232978	108997	146604	259415	124681	172112	285853	140320	197628
14S-5100-125-CL	5075	220959	124787	191442	321919	161588	232421	356066	181697	265363	390212	201771	298306	424358	221826	331248
14S-5100-135-CL	4495	220853	124725	191318	407028	211648	314538	446857	235041	352959	486685	258406	391380	526505	281764	429810
14S-5100-145-CL	3915	220950	124787	191433	498917	265576	403187	544861	292526	447512	590805	319468	491845	636750	346383	536170
14S-5100-175-CL	2683	220676	124601	191088	813278	449769	706476	880198	488969	771042	947119	528142	835608	1014039	567307	900174
14S-5100-200-CL	2030	220401	124424	190743	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-110-CL	5075	285755	156614	229314	169350	46573	46573	195796	69886	72081	222233	86817	97588	248680	103138	123096
14S-5400-125-CL	5075	285623	156526	229146	284746	124990	157897	318884	145444	190840	353030	165775	223782	387176	186025	256725
14S-5400-135-CL	4640	285525	156455	229013	369855	175767	240006	409675	199354	278436	449503	222862	316857	489331	246334	355278
14S-5400-145-CL	4060	285623	156517	229137	461735	230084	328664	507679	257141	372988	553623	284189	417313	599568	311175	461646
14S-5400-175-CL	2755	285339	156331	228783	776096	414773	631952	843016	454017	696519	909937	493252	761085	976857	532452	825651
14S-5400-185-CL	2465	285242	156269	228650	893979	483906	745685	968768	527708	817845	1043557	571511	889996	-	-	-
14S-5400-200-CL	2103	285074	156154	228438	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-125-CL	5075	367032	202213	298518	216330	62097	62097	250476	90835	95039	284622	112511	127982	318760	133505	160924
14S-8300-135-CL	4930	366926	202142	298394	301439	122910	144205	341267	147161	182635	381096	171103	221056	420915	194894	259477
14S-8300-145-CL	4278	367023	202204	298509	393327	178431	232863	439272	205798	277188	485216	233049	321512	531160	260230	365846
14S-8300-175-CL	2900	366749	202018	298155	707679	364217	536152	774609	403532	600718	841529	442847	665284	908450	482100	729851
14S-8300-185-CL	2610	366642	201948	298022	825563	433474	649884	900351	477347	722044	975140	521212	794195	1049929	565067	866356
14S-8300-200-CL	2248	366474	201841	297810	1014668	544392	832333	-	-	-	-	-	-	-	-	-

NOTES:

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- BTC: Break to Close
- RTC: Run to Close
- ETC: End to Close
- BTO: Break to Open
- RTO: Run to Open
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Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
1.5S-1100-70-CL	4713	55892	27420	33447	67947	27862	32881	78072	34013	42652	88198	40085	52423	131230	65584	93942
1.5S-1100-85-CL	3190	55831	27375	33367	115918	56547	79161	130849	65354	93570	-	-	-	130849	65354	93570
1.5S-1100-95-CL	2538	55786	27340	33305	-	-	-	-	-	-	-	-	-	129743	64708	92508
1.5S-1100-110-CL	1885	55804	27358	33341	-	-	-	-	-	-	-	-	-	129115	64336	91897
1.5S-1200-70-CL	5075	64805	33659	45183	56370	20746	22021	66496	27101	31783	76621	33261	41554	132310	66328	95287
1.5S-1200-85-CL	3408	64743	33615	45103	104341	49803	68301	119273	58636	82710	-	-	-	130469	65239	93508
1.5S-1200-95-CL	2755	64690	33580	45041	-	-	-	-	-	-	-	-	-	132159	66239	95137
1.5S-1200-110-CL	2030	64717	33597	45077	-	-	-	-	-	-	-	-	-	130044	64991	93101
3S-2000-70-CL	5075	97562	51219	71532	94340	40625	49715	110873	50732	66133	127415	60734	82551	218392	115131	172864
3S-2000-85-CL	3988	97456	51148	71399	172705	87888	127504	197097	102439	151720	221481	116972	175926	264168	142373	218295
3S-2000-95-CL	3190	97376	51095	71302	233377	124052	187733	263841	142178	217976	-	-	-	263841	142178	217976
3S-2000-110-CL	2320	97420	51131	71355	-	-	-	-	-	-	-	-	-	255539	137240	209727
6S-2500-85-CL	5075	139612	74346	106377	178821	86516	119246	207285	103616	147604	235749	120671	175971	392301	214038	331965
6S-2500-95-CL	5075	139514	74284	106253	249627	128964	189795	285180	150206	225225	320733	171412	260655	516282	287826	455513
6S-2500-110-CL	3843	139567	74320	106315	370829	201257	310573	418499	229642	358066	466160	258017	405568	525752	293447	464948
6S-2500-125-CL	2973	139444	74240	106165	509555	283817	448813	-	-	-	-	-	-	524947	292969	464142
6S-2500-135-CL	2538	139355	74178	106050	-	-	-	-	-	-	-	-	-	522132	291296	461345
6S-3800-85-CL	5075	188486	104147	157402	128504	52547	60734	156968	70151	89092	185432	87454	117458	341975	181255	273453
6S-3800-95-CL	5075	188388	104085	157287	199310	95836	131283	234864	117219	166713	270417	138514	202142	465965	255123	397000
6S-3800-110-CL	4133	188441	104120	157349	320503	168447	252052	368173	196876	299554	415844	225278	347056	523097	289145	453928
6S-3800-125-CL	3190	188317	104032	157189	459230	251122	390292	520787	287773	451636	-	-	-	520787	287773	451636
6S-3800-135-CL	2755	188220	103970	157074	-	-	-	-	-	-	-	-	-	525664	290667	456486
14S-5100-95-CL	5075	221039	124840	191548	204284	91888	118928	243732	115387	156977	283171	138727	195035	500112	266275	404338
14S-5100-110-CL	5075	221092	124884	191619	338736	171492	248644	391619	202594	299669	444502	233660	350684	735356	404134	631297
14S-5100-125-CL	5075	220959	124787	191442	492642	261903	397133	560934	301943	463018	629218	341966	528903	1004799	561899	891262
14S-5100-135-CL	4495	220853	124725	191318	606161	328460	506652	685809	375112	583503	765457	421765	660346	1044238	584981	929311
14S-5100-145-CL	3915	220950	124787	191433	728638	400196	624819	820526	454017	713477	912415	507829	802126	1050248	588495	935108
14S-5100-175-CL	2683	220676	124601	191088	-	-	-	-	-	-	-	-	-	1047504	586884	932462
14S-5100-200-CL	2030	220401	124424	190743	-	-	-	-	-	-	-	-	-	1032856	578317	918327
14S-5400-110-CL	5075	285755	156614	229314	301563	135080	174121	354437	166615	225137	407320	197956	276161	698174	369076	556774
14S-5400-125-CL	5075	285623	156526	229146	455460	226376	322610	523752	266602	388486	592036	306749	454371	967626	527036	816738
14S-5400-135-CL	4640	285525	156455	229013	568979	293208	432129	648627	340002	508971	728284	386734	585822	1046884	573458	893209
14S-5400-145-CL	4060	285623	156517	229137	691456	365138	550295	783344	419030	638953	875233	472913	727602	1059010	580565	904910
14S-5400-175-CL	2755	285339	156331	228783	-	-	-	-	-	-	-	-	-	1043787	571643	890217
14S-5400-185-CL	2465	285242	156269	228650	-	-	-	-	-	-	-	-	-	1043557	571511	889996
14S-5400-200-CL	2103	285074	156154	228438	-	-	-	-	-	-	-	-	-	1039379	569068	885969
14S-8300-125-CL	5075	367032	202213	298518	387052	174678	226809	455336	215348	292694	523628	255778	358570	899210	476684	720938
14S-8300-135-CL	4930	366926	202142	298394	500572	242148	336329	580220	289189	413171	659868	336090	490022	1058125	569873	874259
14S-8300-145-CL	4278	367023	202204	298509	623049	314414	454495	714937	368483	543153	806826	422464	631802	1059514	570688	875605
14S-8300-175-CL	2900	366749	202018	298155	1042291	560589	858983	-	-	-	-	-	-	1042291	560589	858983
14S-8300-185-CL	2610	366642	201948	298022	-	-	-	-	-	-	-	-	-	1049929	565067	866356
14S-8300-200-CL	2248	366474	201841	297810	-	-	-	-	-	-	-	-	-	1058373	570024	874498

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 (lb-in) - Symmetric Yoke Design, Spring to Close Models 18S-9600-145-CL to 50S-15600-300-CL

Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	5075	593832	306121	406161	-	-	-	-	-	-	-	-	-	337276	22472	22472
18S-9600-175-CL	3698	593514	305908	405754	-	-	-	366810	50980	50980	520690	189849	199531	674569	285676	348091
18S-9600-185-CL	3335	593399	305829	405603	-	-	-	457115	138160	138160	629085	257911	304183	801046	361872	470196
18S-9600-200-CL	2828	593204	305696	405355	401001	83994	83994	601984	241218	278020	802967	363014	472046	1003949	482552	666072
18S-9600-235-CL	1523	592699	305351	404718	706423	304988	378848	983902	470674	646724	1261391	634590	914601	1538871	797860	1182487
18S-9800-145-CL	5075	749747	382866	500067	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-175-CL	3915	749428	382644	499660	-	-	-	-	-	-	428084	19578	19578	581955	168129	168129
18S-9800-185-CL	3480	749313	382565	499510	-	-	-	-	-	-	536479	124220	124220	708441	267302	290234
18S-9800-200-CL	2973	749119	382432	499271	-	-	-	509378	98057	98057	710361	268523	292084	911344	392398	486110
18S-9800-235-CL	2175	748614	382087	498625	613817	198885	198885	891297	380246	466762	1168777	546543	734639	1446257	710928	1002524
18S-10500-175-CL	3988	829041	416676	529886	-	-	-	-	-	-	-	-	-	552145	77842	77842
18S-10500-185-CL	3553	828926	416587	529735	-	-	-	-	-	-	506670	33934	33934	678631	199947	199947
18S-10500-200-CL	3045	828731	416454	529496	-	-	-	479569	7771	7771	680552	201797	201797	881535	348304	395832
18S-10500-235-CL	2175	828227	416109	528850	584008	108599	108599	861488	335797	376476	1138968	505059	644361	1416456	670612	912238
18S-11000-175-CL	4205	929647	485588	658328	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-185-CL	3770	929532	485508	658177	-	-	-	-	-	-	-	-	-	551977	77674	77674
18S-11000-200-CL	3190	929338	485375	657929	-	-	-	-	-	-	553898	79524	79524	754880	267257	273559
18S-11000-235-CL	2320	928833	485039	657283	-	-	-	734834	253592	254202	8959733	428598	522088	1289793	595284	789965
32S-12000-175-CL	5075	1103299	536497	663612	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-200-CL	4278	1102927	536240	663151	-	-	-	-	-	-	739896	109006	109006	972821	340223	340223
32S-12000-235-CL	3118	1102326	535833	662408	-	-	-	949597	317167	317167	1271180	533992	636387	1592763	730921	955607
32S-12000-250-CL	2755	1102042	535639	662054	797152	165837	165837	1161094	465089	527106	1525046	689810	888376	1888989	909777	1249655
32S-15000-175-CL	5075	1281854	640485	827527	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-200-CL	4495	1281482	640228	827067	-	-	-	-	-	-	-	-	-	811180	128593	128593
32S-15000-235-CL	3263	1280889	639821	826324	-	-	-	787956	105536	105536	1109539	408409	424756	1431122	612295	743976
32S-15000-250-CL	2900	1280597	639626	825970	-	-	-	999453	315485	315485	1363396	570360	676755	1727348	793310	1038025
50S-15400-200-CL	5075	1392931	661178	786230	-	-	-	-	-	-	-	-	-	1032201	189282	189282
50S-15400-235-CL	3770	1392267	660708	785407	-	-	-	1006392	163659	163659	1363706	500156	518353	1721028	727638	873038
50S-15400-250-CL	3408	1391949	660487	785008	-	-	-	1241397	396930	396930	1645779	680844	798347	2050170	929400	1199763
50S-15400-300-CL	2320	1391533	660204	784495	1548271	619614	701546	2130579	978220	1279588	2712896	1329232	1857622	3295214	1677846	2435656
50S-15600-200-CL	5075	1455320	704086	863683	-	-	-	-	-	-	-	-	-	955828	113467	113467
50S-15600-235-CL	3915	1454647	703626	862860	-	-	-	930019	87844	87844	1287333	442529	442529	1644646	680136	797222
50S-15600-250-CL	3408	1454329	703413	862461	-	-	-	1165015	321114	321114	1569397	632935	722531	1973788	882853	1123939
50S-15600-300-CL	2393	1453913	703130	861948	1471889	570918	625730	2054206	931851	1203764	2636523	1283412	1781806	3218832	1632167	2359840

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 (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	5075	593832	306121	406161	390097	73461	73461	442918	124459	124459	495739	173271	175448	548561	207771	226446
18S-9600-175-CL	3698	593514	305908	405754	751508	332151	422367	828448	378219	496642	905379	424066	570918	982318	469736	645193
18S-9600-185-CL	3335	593399	305829	405603	887031	413153	553198	973016	464222	636210	1059001	515158	719221	1144977	565935	802223
18S-9600-200-CL	2828	593204	305696	405355	1104441	541993	763085	1204932	601338	860098	1305424	660531	957120	1405915	719716	1054133
18S-9600-235-CL	1523	592699	305351	404718	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-145-CL	5075	749747	382866	500067	-	-	-	-	-	-	-	-	-	455955	46484	46484
18S-9800-175-CL	3915	749428	382644	499660	658894	235156	242404	735834	284614	316680	812773	332355	390955	889713	379281	465231
18S-9800-185-CL	3480	749313	382565	499510	794426	321070	373245	880411	373643	456247	966387	425597	539258	1052372	477153	622261
18S-9800-200-CL	2973	749119	382432	499271	1011835	452866	583132	1112327	512945	680145	1212818	572723	777158	1313310	632298	874171
18S-9800-235-CL	2175	748614	382087	498625	1585001	792832	1136463	-	-	-	-	-	-	-	-	-
18S-10500-175-CL	3988	829041	416676	529886	629085	152118	152118	706024	226393	226393	782964	285791	300669	859903	334806	374944
18S-10500-185-CL	3553	828926	416587	529735	764616	273745	282958	850601	328956	365961	936578	382326	448972	1022563	434811	531983
18S-10500-200-CL	3045	828731	416454	529496	982026	410144	492845	1082518	471072	589858	1183009	531470	686871	1283500	591522	783884
18S-10500-235-CL	2175	828227	416109	528850	1555192	752827	1046176	-	-	-	-	-	-	-	-	-
18S-11000-175-CL	4205	929647	485588	658328	502431	29845	29845	579370	104120	104120	656310	178396	178396	733249	252485	252671
18S-11000-185-CL	3770	929532	485508	658177	637962	160685	160685	723938	243688	243688	809923	303182	326699	895908	357234	409710
18S-11000-200-CL	3190	929338	485375	657929	855372	331956	370572	955863	394168	467585	1056355	455291	564598	1156846	515777	661611
18S-11000-235-CL	2320	928833	485039	657283	1428538	677799	923903	1567282	759987	1057842	-	-	-	-	-	-
32S-12000-175-CL	5075	1103299	536497	663612	680260	49803	49803	769422	138320	138320	858594	226827	226827	947756	315343	315343
32S-12000-200-CL	4278	1102927	536240	663151	1089288	419233	455831	1205755	493190	571440	1322214	565581	687039	1438681	637121	802648
32S-12000-235-CL	3118	1102326	535833	662408	1753555	828209	1115212	1914346	925045	1274827	2075138	1021571	1434432	2235930	1117929	1594047
32S-12000-250-CL	2755	1102042	535639	662054	2070969	1019067	1430290	2252941	1128099	1610925	2434912	1236928	1791560	2616884	1345580	1972195
32S-15000-175-CL	5075	1281854	640485	827527	-	-	-	-	-	-	696943	15206	15206	786115	103713	103713
32S-15000-200-CL	4495	1281482	640228	827067	927647	244201	244201	1044105	359810	359810	1160572	441989	475418	1277030	516344	591027
32S-15000-235-CL	3263	1280889	639821	826324	1591914	710928	903591	1752705	808702	1063196	1913497	905919	1222811	2074288	1002719	1382416
32S-15000-250-CL	2900	1280597	639626	825970	1909319	903396	1218660	2091291	1012959	1399304	2273271	1122160	1579939	2455242	1231148	1760573
50S-15400-200-CL	5075	1392931	661178	786230	1161608	317733	317733	1291015	446184	446184	1420413	537586	574635	1549819	620597	703095
50S-15400-235-CL	3770	1392267	660708	785407	1899681	837600	1050380	2078342	946508	1227732	2257003	1054762	1405074	2435656	1162573	1582417
50S-15400-250-CL	3408	1391949	660487	785008	2252357	1051956	1400472	2454552	1173946	1601171	2656747	1295546	1801880	2858943	1416828	2002588
50S-15400-300-CL	2320	1391533	660204	784495	3586377	1851603	2724677	3877531	2025273	3013689	-	-	-	-	-	-
50S-15600-200-CL	5075	1455320	704086	863683	1085226	241918	241918	1214633	370368	370368	1344039	486906	498819	1473437	571918	627270
50S-15600-235-CL	3915	1454647	703626	862860	1823308	790744	974565	2001960	900042	1151907	2180621	1008596	1329259	2359274	1116575	1506601
50S-15600-250-CL	3408	1454329	703413	862461	2175983	1005782	1324647	2378170	1127966	1525356	2580365	1249673	1726064	2782561	1371017	1926773
50S-15600-300-CL	2393	1453913	703130	861948	3509995	1806049	2648861	3801149	1979718	2937874	-	-	-	-	-	-

NOTES:

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Model	MOP (psi)	BTC	RTC	ETC	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO	BTO	RTO	ETO
18S-9600-145-CL	5075	593832	306121	406161	654203	273276	328425	759846	337152	430412	865488	400337	532399	1050354	510042	710875
18S-9600-175-CL	3698	593514	305908	405754	1136197	560748	793744	1290076	651486	942295	1443956	742082	1090855	1059258	515317	719469
18S-9600-185-CL	3335	593399	305829	405603	1316947	667311	968237	1488909	768502	1134259	-	-	-	1059001	515158	719221
18S-9600-200-CL	2828	593204	305696	405355	-	-	-	-	-	-	-	-	-	1054195	512317	714583
18S-9600-235-CL	1523	592699	305351	404718	-	-	-	-	-	-	-	-	-	1053275	511768	713698
18S-9800-145-CL	5075	749747	382866	500067	561589	148471	148471	667231	240670	250450	772874	307749	352437	1353908	656345	913362
18S-9800-175-CL	3915	749428	382644	499660	1043592	471904	613782	1197471	563598	762342	1351341	654832	910893	1582160	791160	1133719
18S-9800-185-CL	3480	749313	382565	499510	1224342	579574	788283	1396303	681428	954297	1568273	782973	1120310	1568273	782973	1120310
18S-9800-200-CL	2973	749119	382432	499271	1514293	751101	1068197	-	-	-	-	-	-	1564538	780778	1116708
18S-9800-235-CL	2175	748614	382087	498625	-	-	-	-	-	-	-	-	-	1585001	792832	1136463
18S-10500-175-CL	3988	829041	416676	529886	1013783	429483	523504	1167662	522265	672055	1321532	614180	820606	1590825	773927	1080570
18S-10500-185-CL	3553	828926	416587	529735	1194533	538382	697997	1366494	640909	864010	1538464	742914	1030024	1581452	768387	1071525
18S-10500-200-CL	3045	828731	416454	529496	1484483	710936	977911	-	-	-	-	-	-	1584975	770467	1074924
18S-10500-235-CL	2175	828227	416109	528850	-	-	-	-	-	-	-	-	-	1555192	752827	1046176
18S-11000-175-CL	4205	929647	485588	658328	887128	351791	401231	1040999	445989	549782	1194878	538595	698333	1579576	767272	1069710
18S-11000-185-CL	3770	929532	485508	658177	1067870	462248	575724	1239840	565457	741737	1411810	667851	907751	1583771	769759	1073764
18S-11000-200-CL	3190	929338	485375	657929	1357829	635758	855637	1558812	754969	1049664	-	-	-	1558812	754969	1049664
18S-11000-235-CL	2320	928833	485039	657283	-	-	-	-	-	-	-	-	-	1567282	759987	1057842
32S-12000-175-CL	5075	1103299	536497	663612	1126090	442865	492358	1304424	554597	669382	1482766	664019	846406	2463597	1254080	1820042
32S-12000-200-CL	4278	1102927	536240	663151	1671606	778680	1033865	1904531	919133	1265082	2137456	1058948	1496290	2778003	1441690	2132128
32S-12000-235-CL	3118	1102326	535833	662408	2557513	1310168	1913267	-	-	-	-	-	-	2798705	1454037	2152679
32S-12000-250-CL	2755	1102042	535639	662054	-	-	-	-	-	-	-	-	-	2798864	1454125	2152830
32S-15000-175-CL	5075	1281854	640485	827527	964449	280737	280737	1142782	430385	457761	1321116	544002	634785	2301956	1139366	1608411
32S-15000-200-CL	4495	1281482	640228	827067	1509965	660797	822244	1742890	802745	1053452	1975815	943446	1284669	2674590	1362325	1978311
32S-15000-235-CL	3263	1280889	639821	826324	2395871	1195648	1701636	2717455	1387957	2020856	-	-	-	2797855	1435910	2100664
32S-15000-250-CL	2900	1280597	639626	825970	2819194	1448638	2121843	-	-	-	-	-	-	2819194	1448638	2121843
50S-15400-200-CL	5075	1392931	661178	786230	1808624	781725	959997	2067438	939879	1216898	2326243	1096608	1473809	3749682	1949015	2886778
50S-15400-235-CL	3770	1392267	660708	785407	2792969	1377265	1937111	3150292	1591179	2291796	3507605	1804624	2646480	3864919	2017750	3001174
50S-15400-250-CL	3408	1391949	660487	785008	3263325	1658772	2404005	3667715	1900123	2805413	-	-	-	3971004	2081033	3106472
50S-15400-300-CL	2320	1391533	660204	784495	-	-	-	-	-	-	-	-	-	3877531	2025273	3013689
50S-15600-200-CL	5075	1455320	704086	863683	1732251	734595	884181	1991056	893386	1141083	2249861	1050442	1397985	3673300	1903451	2810963
50S-15600-235-CL	3915	1454647	703626	862860	2716596	1331445	1861286	3073910	1545500	2215980	3431223	1759060	2570665	3967198	2078758	3102701
50S-15600-250-CL	3408	1454329	703413	862461	3186943	1613093	2328181	3591333	1854560	2729598	-	-	-	3894622	2035469	3030656
50S-15600-300-CL	2393	1453913	703130	861948	-	-	-	-	-	-	-	-	-	3801149	1979718	2937874

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

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-20-OP	5075	2009	912	1080	-	-	-	1398	310	310	1938	797	894	2478	1142	1478
0.3S-008A-28-OP	5075	2000	903	1062	2921	1416	1947	3983	2080	3098	5045	2726	4240	6107	3381	5381
0.3S-008A-35-OP	4713	1991	894	1053	5302	2885	4514	6966	3903	6302	8621	4921	8098	10285	5939	9886
0.3S-008B-20-OP	5075	3000	1009	1009	-	-	-	-	-	-	-	-	-	2434	257	257
0.3S-008B-28-OP	5075	2983	1000	1000	2876	726	726	3939	1646	1876	5001	2328	3018	6063	2992	4160
0.3S-008B-35-OP	4858	2974	991	991	5257	2487	3292	6921	3523	5089	8576	4540	6877	10240	5558	8665
0.3S-008C-20-OP	5075	3602	1292	1292	-	-	-	-	-	-	-	-	-	-	-	-
0.3S-008C-28-OP	5075	3593	1275	1275	-	-	-	3611	1124	1124	4673	1974	2266	5735	2655	3408
0.3S-008C-35-OP	4930	3585	1275	1275	4930	2142	2549	6594	3186	4337	8258	4213	6125	9913	5240	7913
0.3S-0100-28-OP	5075	5824	2478	2708	-	-	-	-	-	-	-	-	-	4195	637	637
0.3S-0100-35-OP	5075	5824	2478	2699	-	-	-	5045	1558	1558	6709	2876	3354	8364	3930	5142
0.3S-0100-40-OP	3988	5806	2461	2682	5408	1947	1947	7576	3425	4284	9745	4779	6620	11904	6125	8957
0.3S-0100-45-OP	3118	5797	2461	2673	7700	3505	4417	10444	5222	7373	13188	6912	10329	15931	8594	13285
0.3S-0100-50-OP	2538	5788	2452	2664	10267	5107	7187	13657	7196	10833	17047	9276	14489	20428	11356	18135
0.3S-0150-35-OP	5075	7408	3531	4514	-	-	-	-	-	-	4886	1390	1390	6550	2770	3177
0.3S-0150-40-OP	4205	7390	3523	4496	-	-	-	5753	2239	2319	7921	3647	4655	10090	5001	6992
0.3S-0150-45-OP	3335	7382	3523	4487	5877	2328	2461	8621	4089	5417	11364	5788	8373	14108	7479	11329
0.3S-0150-50-OP	2683	7373	3514	4478	8444	3974	5222	11833	6080	8877	15223	8160	12524	18613	10240	16179
0.3S-0150-60-OP	1813	7382	3514	4478	14409	7665	11656	19295	10656	16914	24171	13639	22162	-	-	-
0.9S-0200-40-OP	5075	9488	4425	5470	-	-	-	6302	1513	1513	8806	3700	4213	11311	5293	6912
0.9S-0200-45-OP	5075	9479	4417	5461	6443	1664	1664	9621	4222	5089	12789	6222	8506	15967	8187	11922
0.9S-0200-50-OP	5075	9479	4417	5452	9417	4098	4868	13338	6558	9090	17250	8975	13312	21171	11382	17533
0.9S-0200-60-OP	4350	9479	4417	5452	16312	8399	12303	21959	11869	18383	27597	15329	24455	33235	18772	30535
0.9S-0250-40-OP	5075	11479	5726	7744	-	-	-	-	-	-	6523	1752	1752	9028	3850	4452
0.9S-0250-45-OP	5075	11471	5718	7727	-	-	-	7337	2629	2629	10506	4788	6045	13683	6771	9461
0.9S-0250-50-OP	5075	11462	5718	7718	7134	2407	2407	11055	5133	6629	14967	7567	10851	18888	9984	15073
0.9S-0250-60-OP	4423	11471	5718	7727	14028	6992	9842	19675	10470	15922	25313	13931	21994	30951	17383	28075
0.9S-0250-70-OP	3263	11462	5718	7727	22180	12002	18622	29854	16710	26889	37536	21401	35164	45210	26092	43439
0.9S-0350-45-OP	5075	17896	8417	10524	-	-	-	-	-	-	-	-	-	10435	1496	1496
0.9S-0350-50-OP	5075	17896	8408	10515	-	-	-	-	-	-	11727	2885	2885	15639	6426	7107
0.9S-0350-60-OP	4640	17896	8417	10524	10789	1876	1876	16427	6939	7948	22065	10515	14028	27712	14020	20109
0.9S-0350-70-OP	3408	17896	8417	10515	18932	8550	10647	26605	13338	18923	34288	18073	27198	41961	22791	35465
0.9S-0350-85-OP	2320	17843	8382	10462	33447	17560	26296	44767	24508	38492	56087	31438	50688	67407	38368	62885
0.9S-0400-50-OP	5075	21339	10665	14453	-	-	-	-	-	-	-	-	-	11683	2841	2841
0.9S-0400-60-OP	4858	21339	10665	14462	-	-	-	12471	3682	3682	18109	8019	9762	23747	11568	15843
0.9S-0400-70-OP	3553	21339	10665	14453	14975	5983	6381	22649	10878	14657	30332	15639	22932	38005	20357	31199
0.9S-0400-85-OP	2393	21286	10630	14400	29491	15117	22030	40811	22083	34226	52131	29022	46422	63451	35943	58619
0.9S-0700-60-OP	5075	29907	14498	18870	-	-	-	-	-	-	-	-	-	18808	5231	5231
0.9S-0700-70-OP	3770	29907	14489	18861	-	-	-	17702	4054	4054	25384	10736	12320	33058	15613	20596
0.9S-0700-85-OP	2538	29854	14453	18808	24543	10187	11417	35863	17365	23614	47183	24375	35819	58503	31341	48015

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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-20-OP	5075	2009	912	1080	2753	1319	1770	3018	1487	2062	3292	1655	2354	3567	1823	2646
0.3S-008A-28-OP	5075	2000	903	1062	6638	3708	5957	7169	4027	6532	7700	4355	7098	8231	4682	7674
0.3S-008A-35-OP	4713	1991	894	1053	11108	6443	10780	11940	6948	11674	12772	7452	12568	13604	7966	13462
0.3S-008B-20-OP	5075	3000	1009	1009	2708	549	549	2974	841	841	3248	1133	1133	3514	1372	1425
0.3S-008B-28-OP	5075	2983	1000	1000	6594	3319	4735	7125	3647	5310	7656	3974	5877	8187	4301	6452
0.3S-008B-35-OP	4858	2974	991	991	11063	6072	9559	11895	6576	10453	12727	7089	11347	13559	7594	12241
0.3S-008C-20-OP	5075	3602	1292	1292	-	-	-	2655	89	89	2921	381	381	3195	673	673
0.3S-008C-28-OP	5075	3593	1275	1275	6266	2983	3983	6797	3319	4558	7328	3647	5125	7859	3974	5700
0.3S-008C-35-OP	4930	3585	1275	1275	10745	5753	8806	11577	6257	9700	12400	6771	10594	13232	7275	11488
0.3S-0100-28-OP	5075	5824	2478	2708	4726	1213	1213	5257	1788	1788	5788	2266	2354	6319	2620	2930
0.3S-0100-35-OP	5075	5824	2478	2699	9196	4443	6036	10028	4956	6930	10860	5479	7824	11692	5983	8718
0.3S-0100-40-OP	3988	5806	2461	2682	12993	6789	10125	14073	7461	11294	15161	8125	12462	16241	8789	13630
0.3S-0100-45-OP	3118	5797	2461	2673	17303	9435	14763	18675	10276	16241	20047	11117	17719	21419	11957	19206
0.3S-0100-50-OP	2538	5788	2452	2664	22127	12391	19958	23817	13427	21791	25508	14462	23614	-	-	-
0.3S-0150-35-OP	5075	7408	3531	4514	7382	3301	4071	8205	3824	4965	9037	4346	5859	9869	4859	6753
0.3S-0150-40-OP	4205	7390	3523	4496	11170	5673	8160	12258	6337	9329	13338	7010	10497	14427	7674	11665
0.3S-0150-45-OP	3335	7382	3523	4487	15480	8320	12807	16852	9161	14285	18224	10001	15763	19596	10842	17241
0.3S-0150-50-OP	2683	7373	3514	4478	20304	11276	18002	21994	12311	19826	23693	13347	21649	25384	14382	23472
0.3S-0150-60-OP	1813	7382	3514	4478	-	-	-	-	-	-	-	-	-	-	-	-
0.9S-0200-40-OP	5075	9488	4425	5470	12568	6080	8267	13825	6859	9612	15073	7638	10966	16330	8408	12311
0.9S-0200-45-OP	5075	9479	4417	5461	17551	9161	13630	19135	10143	15347	20720	11117	17055	22313	12090	18764
0.9S-0200-50-OP	5075	9479	4417	5452	23127	12586	19640	25083	13789	21755	27039	14984	23862	29004	16188	25968
0.9S-0200-60-OP	4350	9479	4417	5452	36058	20498	33571	38881	22224	36616	41696	23950	39651	44519	25676	42696
0.9S-0250-40-OP	5075	11479	5726	7744	10285	4647	5806	11541	5434	7151	12789	6222	8506	14046	7001	9860
0.9S-0250-45-OP	5075	11471	5718	7727	15268	7753	11170	16852	8736	12887	18445	9709	14595	20029	10683	16303
0.9S-0250-50-OP	5075	11462	5718	7718	20844	11187	17179	22800	12391	19295	24764	13586	21401	26720	14790	23516
0.9S-0250-60-OP	4423	11471	5718	7727	33774	19109	31110	36598	20826	34155	39412	22552	37191	42236	24278	40236
0.9S-0250-70-OP	3263	11462	5718	7727	49051	28437	47573	52883	30783	51706	56724	33128	55848	60566	35474	59982
0.9S-0350-45-OP	5075	17896	8417	10524	12019	3204	3204	13612	4912	4912	15197	6134	6620	16781	7169	8337
0.9S-0350-50-OP	5075	17896	8408	10515	17595	7691	9214	19560	8939	11320	21516	10170	13435	23472	11391	15542
0.9S-0350-60-OP	4640	17896	8417	10524	30526	15763	23145	33350	17498	26189	36173	19233	29225	38988	20967	32261
0.9S-0350-70-OP	3408	17896	8417	10515	45803	25145	39607	49644	27490	43740	53476	29845	47883	57317	32190	52016
0.9S-0350-85-OP	2320	17843	8382	10462	73072	41829	68983	78727	45280	75090	-	-	-	-	-	-
0.9S-0400-50-OP	5075	21339	10665	14453	13639	4948	4948	15595	6399	7054	17560	7665	9169	19516	8913	11276
0.9S-0400-60-OP	4858	21339	10665	14462	26570	13320	18879	29393	15055	21923	32208	16799	24959	35031	18533	27995
0.9S-0400-70-OP	3553	21339	10665	14453	41846	22720	35341	45679	25065	39474	49520	27420	43616	53361	29774	47750
0.9S-0400-85-OP	2393	21286	10630	14400	69107	39404	64717	74771	42864	70824	-	-	-	-	-	-
0.9S-0700-60-OP	5075	29907	14498	18870	21622	8222	8275	24446	10125	11311	27269	11949	14347	30084	13745	17392
0.9S-0700-70-OP	3770	29907	14489	18861	36899	18011	24729	40740	20392	28871	44572	22764	33004	48414	25136	37138
0.9S-0700-85-OP	2538	29854	14453	18808	64168	34810	54113	69824	38279	60212	75488	41749	66310	-	-	-

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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
0.3S-008A-20-OP	5075	2009	912	1080	4107	2151	3231	4647	2487	3815	5187	2823	4390	8169	4647	7603
0.3S-008A-28-OP	5075	2000	903	1062	9293	5328	8815	10355	5983	9966	11417	6629	11108	17259	10196	17401
0.3S-008A-35-OP	4713	1991	894	1053	15259	8975	15250	16923	9992	17038	18578	11001	18826	25632	15312	26428
0.3S-008B-20-OP	5075	3000	1009	1009	4062	1726	2009	4602	2080	2593	5142	2416	3177	8125	4266	6390
0.3S-008B-28-OP	5075	2983	1000	1000	9249	4956	7594	10311	5603	8745	11373	6257	9886	17215	9833	16179
0.3S-008B-35-OP	4858	2974	991	991	15214	8612	14028	16878	9621	15816	18533	10639	17604	26419	15453	26101
0.3S-008C-20-OP	5075	3602	1292	1292	3735	1257	1257	4275	1717	1841	4824	2071	2425	7798	3939	5638
0.3S-008C-28-OP	5075	3593	1275	1275	8922	4629	6842	9984	5284	7992	11046	5939	9134	16896	9515	15427
0.3S-008C-35-OP	4930	3585	1275	1275	14896	8293	13276	16551	9311	15064	18215	10320	16852	26508	15391	25800
0.3S-0100-28-OP	5075	5824	2478	2708	7382	3301	4071	8444	3974	5222	9506	4638	6364	15347	8240	12657
0.3S-0100-35-OP	5075	5824	2478	2699	13347	7010	10506	15011	8028	12294	16666	9045	14082	25800	14639	23924
0.3S-0100-40-OP	3988	5806	2461	2682	18410	10116	15967	20578	11444	18303	22746	12772	20631	26543	15091	24720
0.3S-0100-45-OP	3118	5797	2461	2673	24163	13639	22162	-	-	-	-	-	-	26216	14896	24375
0.3S-0100-50-OP	2538	5788	2452	2664	-	-	-	-	-	-	-	-	-	26358	14984	24525
0.3S-0150-35-OP	5075	7408	3531	4514	11524	5886	8541	13188	6912	10329	14843	7930	12117	23977	13524	21959
0.3S-0150-40-OP	4205	7390	3523	4496	16595	9001	14002	18764	10329	16338	20932	11656	18675	26349	14975	24517
0.3S-0150-45-OP	3335	7382	3523	4487	22339	12524	20197	25083	14205	23154	-	-	-	26455	15037	24632
0.3S-0150-50-OP	2683	7373	3514	4478	-	-	-	-	-	-	-	-	-	26234	14905	24393
0.3S-0150-60-OP	1813	7382	3514	4478	-	-	-	-	-	-	-	-	-	25393	14391	23481
0.9S-0200-40-OP	5075	9488	4425	5470	18834	9948	15020	21339	11488	17719	23853	13028	20419	37633	21463	35279
0.9S-0200-45-OP	5075	9479	4417	5461	25481	14028	22180	28659	15976	25596	31827	17914	29022	49281	28579	47821
0.9S-0200-50-OP	5075	9479	4417	5452	32916	18578	30190	36837	20976	34412	40749	23375	38634	62292	36536	61849
0.9S-0200-60-OP	4350	9479	4417	5452	50157	29119	48768	55795	32562	54848	61442	36014	60929	78356	46343	79161
0.9S-0250-40-OP	5075	11479	5726	7744	16551	8550	12559	19056	10090	15259	21569	11630	17958	35350	20074	32819
0.9S-0250-45-OP	5075	11471	5718	7727	23198	12630	19719	26375	14577	23136	29544	16515	26561	46997	27190	45360
0.9S-0250-50-OP	5075	11462	5718	7718	30632	17188	27729	34553	19578	31951	38465	21976	36173	60008	35137	59389
0.9S-0250-60-OP	4423	11471	5718	7727	47874	27721	46307	53512	31172	52388	59158	34615	58468	77488	45811	78214
0.9S-0250-70-OP	3263	11462	5718	7727	68239	40165	68257	75922	44847	76524	-	-	-	77833	46024	78595
0.9S-0350-45-OP	5075	17896	8417	10524	19958	9196	11754	23127	11178	15170	26304	13152	18587	43749	23888	37394
0.9S-0350-50-OP	5075	17896	8408	10515	27393	13825	19764	31305	16241	23986	35226	18649	28207	56769	31854	51423
0.9S-0350-60-OP	4640	17896	8417	10524	44634	24428	38341	50272	27880	44422	55910	31332	50494	78471	45130	74807
0.9S-0350-70-OP	3408	17896	8417	10515	65000	36890	60291	72674	41581	68558	-	-	-	78426	45103	74762
0.9S-0350-85-OP	2320	17843	8382	10462	-	-	-	-	-	-	-	-	-	78727	45280	75090
0.9S-0400-50-OP	5075	21339	10665	14453	23428	11364	15498	27349	13798	19719	31270	16215	23941	52812	29438	47157
0.9S-0400-60-OP	4858	21339	10665	14462	40669	21994	34075	46307	25455	40156	51954	28907	46227	78745	45289	75099
0.9S-0400-70-OP	3553	21339	10665	14453	61035	34465	56025	68717	39165	64292	76391	43855	72567	78311	45024	74638
0.9S-0400-85-OP	2393	21286	10630	14400	-	-	-	-	-	-	-	-	-	77603	44590	73868
0.9S-0700-60-OP	5075	29907	14498	18870	35722	17277	23463	41368	20782	29544	47006	24269	35624	78028	43307	69054
0.9S-0700-70-OP	3770	29907	14489	18861	56087	29854	45413	63770	34571	53689	71443	39271	61955	79126	43979	70231
0.9S-0700-85-OP	2538	29854	14453	18808	-	-	-	-	-	-	-	-	-	78311	43484	69363

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 (lb-in) - Symmetric Yoke Design, Spring to Open Models 1.5S-1100-70-OP to 14S-8300-200-OP

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	5075	61052	23587	26234	-	-	-	-	-	-	-	-	-	32403	3443	3443
1.5S-1100-85-OP	3553	60982	23543	26163	-	-	-	35651	7585	7585	48750	22375	24322	61849	31535	41059
1.5S-1100-95-OP	2828	60929	23508	26110	35553	7470	7470	51918	24632	28367	68284	35925	49272	84649	46989	70178
1.5S-1100-110-OP	2103	60955	23525	26136	57884	28800	35987	79825	43732	64017	101766	58459	92039	123698	73107	120060
1.5S-1200-70-OP	5075	71222	29995	36350	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-85-OP	3770	71151	29951	36288	-	-	-	-	-	-	38607	11718	11718	51706	24596	28455
1.5S-1200-95-OP	3045	71098	29916	36226	-	-	-	41776	15772	15772	58141	29084	36669	74506	40244	57574
1.5S-1200-110-OP	2248	71125	29933	36262	47741	21764	23384	69682	36970	51414	91623	51759	79435	113555	66425	107457
3S-2000-70-OP	5075	103182	46050	58495	-	-	-	-	-	-	-	-	-	41041	1354	1354
3S-2000-85-OP	4133	103067	45980	58380	-	-	-	46493	8134	8134	68514	31473	35465	90534	46511	62805
3S-2000-95-OP	3335	102978	45927	58291	46343	7930	7930	73842	35173	42076	101341	53751	76223	128849	71992	110378
3S-2000-110-OP	2465	103023	45953	58335	83870	42015	54529	120742	66628	100306	157614	90959	146090	194486	115193	191867
6S-2500-85-OP	5075	146683	67062	87215	-	-	-	-	-	-	60628	8683	8683	86428	38191	40590
6S-2500-95-OP	5075	146577	67000	87109	-	-	-	66876	16409	16409	99093	47068	56255	131310	68823	96101
6S-2500-110-OP	3843	146630	67027	87162	78612	30933	30933	121813	62469	84356	165013	91172	137780	208205	119618	191212
6S-2500-125-OP	2973	146489	66947	87029	128823	67159	93030	184609	104094	162022	240395	140736	231013	296173	177307	300005
6S-2500-135-OP	2538	146391	66885	86923	165863	91738	138833	230925	134531	219313	295987	177192	299784	361057	219844	380255
6S-3800-85-OP	5075	199531	95969	131504	-	-	-	-	-	-	-	-	-	-	-	-
6S-3800-95-OP	5075	199425	95907	131398	-	-	-	-	-	-	-	-	-	85994	30641	30641
6S-3800-110-OP	4205	199478	95942	131460	-	-	-	76488	18888	18888	119689	58220	72319	162889	87198	125743
6S-3800-125-OP	3263	199337	95854	131319	83507	27561	27561	139284	71461	96553	195071	108492	165544	250848	145197	234536
6S-3800-135-OP	2755	199239	95792	131221	120538	58796	73373	185609	102244	153844	250671	145073	234315	315733	187742	314786
14S-5100-95-OP	5075	244183	115653	157419	-	-	-	-	-	-	-	-	-	75444	5558	5558
14S-5100-110-OP	5075	244245	115697	157481	-	-	-	-	-	-	111635	49874	51803	158039	82330	111068
14S-5100-125-OP	5075	244095	115600	157331	72771	2151	2151	132690	64876	78692	192610	105740	155224	252521	145913	231766
14S-5100-135-OP	4423	243980	115538	157225	112555	50555	52972	182441	98881	142240	252326	145790	231518	322212	192415	320787
14S-5100-145-OP	3843	244086	115600	157322	155596	80657	107953	236218	135009	210940	316839	188840	313927	397469	242626	416915
14S-5100-175-OP	2610	243767	115414	157021	302572	179316	295695	420003	257654	445706	537444	335939	595726	654876	414171	745738
14S-5100-200-OP	1958	243466	115228	156729	446104	275064	479038	599488	377272	674976	752871	479401	870914	-	-	-
14S-5400-110-OP	5075	314538	142851	186645	-	-	-	-	-	-	-	-	-	125026	23994	23994
14S-5400-125-OP	5075	314387	142754	186494	-	-	-	-	-	-	159597	68151	68151	219507	111617	144692
14S-5400-135-OP	4713	314272	142692	186388	-	-	-	149427	55167	55167	219313	111484	144435	289198	158933	233713
14S-5400-145-OP	4060	314379	142754	186485	122583	20879	20879	203204	100368	123866	283835	155313	226854	364456	209418	329841
14S-5400-175-OP	2755	314060	142568	186184	269558	145683	208621	386990	224490	358632	504431	302837	508644	621863	381175	658664
14S-5400-185-OP	2465	313945	142497	186069	324672	182777	279029	455911	270470	446671	587159	358022	614322	718398	445564	781964
14S-5400-200-OP	2103	313759	142382	185892	413091	241900	391964	566475	344223	587902	719858	446538	783840	873250	548720	979769
14S-8300-125-OP	5075	403284	184370	242466	-	-	-	-	-	-	-	-	-	160393	34562	34562
14S-8300-135-OP	5075	403169	184299	242360	-	-	-	-	-	-	160199	34314	34314	230084	108484	123592
14S-8300-145-OP	4350	403276	184361	242457	-	-	-	144090	13736	13736	224721	104660	116733	305342	160491	219720
14S-8300-175-OP	2973	402966	184175	242157	210444	94331	98500	327885	175785	248511	445317	254742	398523	562757	333151	548534
14S-8300-185-OP	2683	402842	184104	242041	265558	133248	168899	396806	222225	336550	528045	309998	504192	659284	397549	671843
14S-8300-200-OP	2248	402656	183998	241864	353977	193415	281843	507360	296199	477781	660744	398532	673710	814136	500855	869648

NOTES:

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- BTO: Break to Open
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Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	5075	61052	23587	26234	36846	9116	9116	41289	14790	14790	45732	20153	20463	50175	23393	26136
1.5S-1100-85-OP	3553	60982	23543	26163	68399	36005	49423	74948	40448	57787	81498	44864	66159	88047	49272	74523
1.5S-1100-95-OP	2828	60929	23508	26110	92827	52476	80630	101014	57955	91083	109192	63424	101527	117370	68885	111980
1.5S-1100-110-OP	2103	60955	23525	26136	-	-	-	-	-	-	-	-	-	-	-	-
1.5S-1200-70-OP	5075	71222	29995	36350	-	-	-	31146	2186	2186	35589	7859	7859	40032	13542	13542
1.5S-1200-85-OP	3770	71151	29951	36288	58256	29163	36819	64805	33659	45192	71355	38111	53556	77904	42537	61920
1.5S-1200-95-OP	3045	71098	29916	36226	82684	45758	68027	90871	51255	78480	99049	56733	88932	107227	62203	99376
1.5S-1200-110-OP	2248	71125	29933	36262	124530	73744	121477	-	-	-	-	-	-	-	-	-
3S-2000-70-OP	5075	103182	46050	58495	48511	10630	10630	55972	19896	19896	63442	27853	29163	70903	33146	38439
3S-2000-85-OP	4133	103067	45980	58380	101545	53883	76470	112546	61203	90136	123556	68496	103810	134567	75771	117476
3S-2000-95-OP	3335	102978	45927	58291	142603	81073	127451	156348	90127	144524	170103	99173	161597	183857	108200	178670
3S-2000-110-OP	2465	103023	45953	58335	212922	127300	214763	231359	139417	237651	249795	151525	260540	-	-	-
6S-2500-85-OP	5075	146683	67062	87215	99323	47228	56539	112219	56008	72488	125114	64681	88437	138010	73284	104395
6S-2500-95-OP	5075	146577	67000	87109	147418	79533	116024	163535	90198	135956	179644	100819	155879	195752	111431	175802
6S-2500-110-OP	3843	146630	67027	87162	229810	133797	217923	251406	147958	244635	273001	162119	271346	294606	176280	298067
6S-2500-125-OP	2973	146489	66947	87029	324061	195593	334496	351959	213878	368997	379848	232164	403488	407736	250450	437988
6S-2500-135-OP	2538	146391	66885	86923	393584	241174	420490	426119	262504	460726	458655	283835	500961	-	-	-
6S-3800-85-OP	5075	199531	95969	131504	-	-	-	66894	7027	7027	79798	22977	22977	92694	38926	38926
6S-3800-95-OP	5075	199425	95907	131398	102102	46042	50564	118211	57211	70487	134319	68124	90410	150427	78904	110333
6S-3800-110-OP	4205	199478	95942	131460	184485	101500	152454	206081	115750	179175	227686	129973	205886	249281	144161	232598
6S-3800-125-OP	3263	199337	95854	131319	278746	163491	269036	306634	181777	303528	334523	200062	338028	362412	218348	372519
6S-3800-135-OP	2755	199239	95792	131221	348268	209064	355021	380795	230394	395257	413330	251724	435492	445865	273054	475728
14S-5100-95-OP	5075	244183	115653	157419	92747	27667	27667	110050	48697	49768	127353	61141	71877	144657	73160	93977
14S-5100-110-OP	5075	244245	115697	157481	181237	98066	140709	204435	113706	170342	227632	129265	199974	250839	144789	229615
14S-5100-125-OP	5075	244095	115600	157331	282481	165916	270036	312440	185901	308307	342400	205886	346569	372351	225871	384839
14S-5100-135-OP	4423	243980	115538	157225	357154	215728	365430	392097	239041	410064	427040	262354	454698	461983	285667	499333
14S-5100-145-OP	3843	244086	115600	157322	437776	269514	468408	478091	296403	519902	518406	323256	571404	558712	350109	622898
14S-5100-175-OP	2610	243767	115414	157021	713601	453256	820739	772316	492332	895749	831032	531417	970759	889748	570493	1045760
14S-5100-200-OP	1958	243466	115228	156729	-	-	-	-	-	-	-	-	-	-	-	-
14S-5400-110-OP	5075	314538	142851	186645	148224	53627	53627	171421	77895	83268	194628	94384	112900	217826	110457	142532
14S-5400-125-OP	5075	314387	142754	186494	249467	132071	182954	279427	152348	221224	309387	172519	259495	339347	192619	297766
14S-5400-135-OP	4713	314272	142692	186388	324141	182423	278347	359084	205824	322990	394027	229190	367625	428969	252494	412259
14S-5400-145-OP	4060	314379	142754	186485	404762	236350	381335	445078	263239	432828	485393	290136	484322	525699	317025	535816
14S-5400-175-OP	2755	314060	142568	186184	680587	420349	733665	739303	459496	808675	798019	498607	883677	856735	537727	958687
14S-5400-185-OP	2465	313945	142497	186069	784017	489278	865789	849637	532992	949615	915256	576706	1033440	-	-	-
14S-5400-200-OP	2103	313759	142382	185892	-	-	-	-	-	-	-	-	-	-	-	-
14S-8300-125-OP	5075	403284	184370	242466	190353	72833	72833	220313	101500	111103	250273	122654	149374	280232	143338	187636
14S-8300-135-OP	5075	403169	184299	242360	265036	132885	168226	299978	156835	212861	334921	180546	257495	369864	204116	302138
14S-8300-145-OP	4350	403276	184361	242457	345657	187804	271214	385964	214949	322707	426279	242006	374201	466585	268974	425695
14S-8300-175-OP	2973	402966	184175	242157	621473	372325	623544	680189	411498	698545	738905	450671	773556	797630	489845	848566
14S-8300-185-OP	2683	402842	184104	242041	724903	441325	755668	790522	485101	839494	856142	528877	923310	921770	572626	1007136
14S-8300-200-OP	2248	402656	183998	241864	890828	552012	967617	-	-	-	-	-	-	-	-	-

NOTES:

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- BTO: Break to Open
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- ETO: End to Open

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
1.5S-1100-70-OP	5075	61052	23587	26234	59061	29615	37492	67938	35695	48838	76825	41714	60185	125690	74435	122609
1.5S-1100-85-OP	3553	60982	23543	26163	101146	58043	91260	114245	66797	107988	127353	75541	124725	130628	77718	128911
1.5S-1100-95-OP	2828	60929	23508	26110	-	-	-	-	-	-	-	-	-	129646	77072	127654
1.5S-1100-110-OP	2103	60955	23525	26136	-	-	-	-	-	-	-	-	-	129186	76763	127070
1.5S-1200-70-OP	5075	71222	29995	36350	48918	22605	24888	57795	28845	36235	66682	34934	47582	115547	67752	110006
1.5S-1200-85-OP	3770	71151	29951	36288	91003	51343	78657	104111	60114	95385	117210	68859	112121	130310	77595	128858
1.5S-1200-95-OP	3045	71098	29916	36226	123592	73116	120282	-	-	-	-	-	-	131779	78577	130734
1.5S-1200-110-OP	2248	71125	29933	36262	-	-	-	-	-	-	-	-	-	130009	77400	128477
3S-2000-70-OP	5075	103182	46050	58495	85835	43351	56972	100775	53370	75515	115706	63292	94057	197832	117387	196018
3S-2000-85-OP	4133	103067	45980	58380	156587	90278	144807	178599	104757	172147	200620	119220	199487	250158	151764	260991
3S-2000-95-OP	3335	102978	45927	58291	211356	126274	212816	238855	144338	246962	-	-	-	252609	153375	264036
3S-2000-110-OP	2465	103023	45953	58335	-	-	-	-	-	-	-	-	-	249795	151525	260540
6S-2500-85-OP	5075	146683	67062	87215	163810	90375	136293	189601	107386	168191	215392	124335	200098	357261	217357	375555
6S-2500-95-OP	5075	146577	67000	87109	227969	132593	215649	260194	153720	255503	292411	174838	295350	469621	291022	514521
6S-2500-110-OP	3843	146630	67027	87162	337798	204603	351490	380998	232925	404913	424199	261239	458345	478188	296642	525124
6S-2500-125-OP	2973	146489	66947	87029	463523	287021	506980	-	-	-	-	-	-	477463	296164	524230
6S-2500-135-OP	2538	146391	66885	86923	-	-	-	-	-	-	-	-	-	474914	294500	521079
6S-3800-85-OP	5075	199531	95969	131504	118485	57397	70824	144276	74798	102731	170067	91968	134629	311936	185246	310086
6S-3800-95-OP	5075	199425	95907	131398	182653	100288	150188	214870	121547	190034	247086	142718	229881	424296	258911	449052
6S-3800-110-OP	4205	199478	95942	131460	292482	172492	286021	335674	200815	339453	378874	229137	392876	486871	299934	526443
6S-3800-125-OP	3263	199337	95854	131319	418198	254919	441511	473975	291491	510502	-	-	-	487924	300633	527753
6S-3800-135-OP	2755	199239	95792	131221	-	-	-	-	-	-	-	-	-	478392	294385	515963
14S-5100-95-OP	5075	244183	115653	157419	179263	96730	138187	213870	120034	182396	248476	143214	226606	438820	270213	469745
14S-5100-110-OP	5075	244245	115697	157481	297235	175758	288880	343630	206709	348153	390035	237660	407427	645229	407745	733409
14S-5100-125-OP	5075	244095	115600	157331	432271	265841	461381	492190	305793	537913	552101	345710	614454	881641	565094	1035405
14S-5100-135-OP	4423	243980	115538	157225	531877	332231	588610	601762	378786	677879	671648	425340	767156	898776	576502	1057293
14S-5100-145-OP	3843	244086	115600	157322	639334	403824	725885	719964	457495	828873	800586	511149	931860	901360	578219	1060594
14S-5100-175-OP	2610	243767	115414	157021	-	-	-	-	-	-	-	-	-	889748	570493	1045760
14S-5100-200-OP	1958	243466	115228	156729	-	-	-	-	-	-	-	-	-	867913	555960	1017863
14S-5400-110-OP	5075	314538	142851	186645	264221	142072	201806	310626	173342	261079	357022	204443	320344	612215	374741	646335
14S-5400-125-OP	5075	314387	142754	186494	399257	232677	374298	459177	272647	450840	519088	312617	527372	848636	532328	948331
14S-5400-135-OP	4713	314272	142692	186388	498864	299120	501537	568749	345746	590805	638635	392363	680083	935648	590292	1059488
14S-5400-145-OP	4060	314379	142754	186485	606321	370811	638812	686951	424597	741799	767572	478321	844786	928815	585743	1050761
14S-5400-175-OP	2755	314060	142568	186184	-	-	-	-	-	-	-	-	-	915460	576839	1033697
14S-5400-185-OP	2465	313945	142497	186069	-	-	-	-	-	-	-	-	-	915256	576706	1033440
14S-5400-200-OP	2103	313759	142382	185892	-	-	-	-	-	-	-	-	-	911592	574263	1028758
14S-8300-125-OP	5075	403284	184370	242466	340143	184078	264177	400063	224411	340718	459982	264549	417251	789522	484437	838210
14S-8300-135-OP	5075	403169	184299	242360	439750	251016	391407	509635	297722	480684	579521	344338	569953	963900	600692	1060957
14S-8300-145-OP	4350	403276	184361	242457	547215	322787	528682	627837	376573	631669	708458	430359	734657	950332	591655	1043627
14S-8300-175-OP	2973	402966	184175	242157	915061	568156	998577	-	-	-	-	-	-	944419	587716	1036078
14S-8300-185-OP	2683	402842	184104	242041	-	-	-	-	-	-	-	-	-	954580	594478	1049053
14S-8300-200-OP	2248	402656	183998	241864	-	-	-	-	-	-	-	-	-	929169	577556	1016597

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 (lb-in) - Symmetric Yoke Design, Spring to Open Models 18S-9600-145-OP to 50S-15600-300-OP

Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					1160			1450			1740			2030		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	5075	636431	262416	311272	-	-	-	-	-	-	-	-	-	305882	38554	38554
18S-9600-175-OP	3988	636068	262195	310918	-	-	-	331806	71656	71656	466904	217914	244130	602001	311706	416596
18S-9600-185-OP	3553	635926	262115	310785	-	-	-	411091	172873	172873	562076	284348	365616	713052	387061	558358
18S-9600-200-OP	3045	635714	261982	310582	361828	109979	109979	538285	267930	335240	714733	388203	560509	891191	506750	785770
18S-9600-235-OP	2175	635139	261628	310024	629979	330770	452300	873587	494969	763298	1117204	657682	1074304	1360821	820146	1385311
18S-9800-145-OP	5075	807719	329248	386079	-	-	-	-	-	-	-	-	-	-	-	-
18S-9800-175-OP	4278	807357	329027	385725	-	-	-	-	-	-	383052	31934	31934	518149	204399	204399
18S-9800-185-OP	3843	807224	328947	385592	-	-	-	-	-	-	478215	153428	153428	629191	299191	346171
18S-9800-200-OP	3263	807003	328814	385388	-	-	-	454424	123052	123052	630873	300377	348312	807330	422216	573582
18S-9800-235-OP	2393	806427	328460	384831	546118	239059	240112	789735	410206	551110	1033352	574927	862116	1276960	738082	1173114
18S-10500-175-OP	4495	942109	385725	454309	-	-	-	-	-	-	-	-	-	443316	37474	37474
18S-10500-185-OP	3988	941976	385645	454185	-	-	-	-	-	-	-	-	-	554367	179237	179237
18S-10500-200-OP	3408	941764	385512	453973	-	-	-	-	-	-	556048	181387	181387	732506	349472	406648
18S-10500-235-OP	2465	941189	385158	453415	471294	73178	73178	714910	337037	384185	958519	505210	695182	1202135	669683	1006189
18S-11000-175-OP	4713	1056709	455513	564943	-	-	-	-	-	-	-	-	-	-	-	-
18S-11000-185-OP	4205	1056567	455424	564811	-	-	-	-	-	-	-	-	-	443166	37279	37279
18S-11000-200-OP	3625	1056355	455291	564598	-	-	-	-	-	-	444856	39430	39430	621305	264691	264691
18S-11000-235-OP	2610	1055779	454946	564049	-	-	-	603710	242227	242227	847327	429244	553225	1090943	594850	864231
32S-12000-175-OP	5075	1190913	483879	556703	-	-	-	-	-	-	-	-	-	-	-	-
32S-12000-200-OP	4713	1190506	483623	556305	-	-	-	-	-	-	639272	87499	87499	849539	348560	348560
32S-12000-235-OP	3408	1189842	483207	555641	-	-	-	828572	322521	322521	1118876	547145	682959	1409181	742737	1043388
32S-12000-250-OP	3045	1189523	483003	555323	690952	151658	151658	1019500	478799	559571	1348049	701891	967484	1676598	920540	1375398
32S-15000-175-OP	5075	1386169	584504	699360	-	-	-	-	-	-	-	-	-	-	-	-
32S-15000-200-OP	4930	1385762	584247	698953	-	-	-	-	-	-	-	-	-	701254	106678	106678
32S-15000-235-OP	3553	1385098	583840	698298	-	-	-	680286	80639	80639	970591	424314	441077	1260896	626253	801506
32S-15000-250-OP	3118	1384779	583636	697979	-	-	-	871215	317689	317689	1199763	584627	725602	1528312	806064	1133524
50S-15400-200-OP	5075	1501291	589761	654920	-	-	-	-	-	-	-	-	-	893501	166164	166164
50S-15400-235-OP	4205	1500547	589283	654185	-	-	-	870206	137231	137231	1192762	519831	537718	1515328	745083	938197
50S-15400-250-OP	3698	1500202	589062	653831	-	-	-	1082349	400620	400620	1447399	698661	853858	1812457	945464	1307096
50S-15400-300-OP	2538	1499733	588761	653380	1359369	637918	744569	1885050	993975	1397232	2410732	1342977	2049887	2936404	1689644	2702550
50S-15600-200-OP	5075	1570397	633563	723513	-	-	-	-	-	-	-	-	-	824554	80560	80560
50S-15600-235-OP	4278	1569654	633094	722779	-	-	-	801250	51626	51626	1123815	452105	452105	1446381	697952	852593
50S-15600-250-OP	3770	1569300	632873	722434	-	-	-	1013393	315016	315016	1378451	651141	768254	1743509	899210	1221492
50S-15600-300-OP	2610	1568840	632581	721973	1290422	589708	658965	1816103	947898	1311619	2341776	1297414	1964282	2867457	1644239	2616946

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 (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2175			2320			2465			2610		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	5075	636431	262416	311272	352251	97757	97757	398629	156959	156959	445007	202160	216162	491376	235244	275365
18S-9600-175-OP	3988	636068	262195	310918	669550	357641	502829	737099	403276	589062	804648	448715	675295	872197	494040	761527
18S-9600-185-OP	3553	635926	262115	310785	788540	437909	654725	864028	488553	751092	939516	539073	847468	1015004	589522	943835
18S-9600-200-OP	3045	635714	261982	310582	979415	565749	898395	1067639	624624	1011030	1155864	683464	1123656	1244097	742304	1236290
18S-9600-235-OP	2175	635139	261628	310024	1482633	901378	1540809	-	-	-	-	-	-	-	-	-
18S-9800-145-OP	5075	807719	329248	386079	-	-	-	-	-	-	361146	3974	3974	407515	63177	63177
18S-9800-175-OP	4278	807357	329027	385725	585698	268169	290641	653247	316087	376874	720787	362978	463107	788336	409259	549340
18S-9800-185-OP	3843	807224	328947	385592	704679	351844	442538	780167	403683	538904	855655	455061	635280	931152	506130	731647
18S-9800-200-OP	3263	807003	328814	385388	895554	482056	686207	983779	541577	798842	1072012	600869	911468	1160236	660018	1024103
18S-9800-235-OP	2393	806427	328460	384831	1398773	819358	1328621	1520577	900590	1484120	-	-	-	-	-	-
18S-10500-175-OP	4495	942109	385725	454309	510865	123707	123707	578414	209940	209940	645963	287242	296173	713512	336045	382406
18S-10500-185-OP	3988	941976	385645	454185	629855	275205	275604	705343	330230	371970	780831	383282	468346	856319	435430	564713
18S-10500-200-OP	3408	941764	385512	453973	820730	410931	519274	908954	471462	631908	997187	531479	744543	1085412	591124	857169
18S-10500-235-OP	2465	941189	385158	453415	1323948	751393	1161687	1445752	832856	1317186	1567565	914194	1472685	-	-	-
18S-11000-175-OP	4713	1056709	455513	564943	-	-	-	467222	67983	67983	534771	154215	154215	602320	240448	240448
18S-11000-185-OP	4205	1056567	455424	564811	518654	133646	133646	594151	230022	230022	669639	304590	326389	745127	358349	422756
18S-11000-200-OP	3625	1056355	455291	564598	709529	333213	377325	797762	395053	489951	885987	455769	602586	974211	515875	715211
18S-11000-235-OP	2610	1055779	454946	564049	1212747	676799	1019730	1334560	758492	1175229	1456364	839945	1330737	1578168	921266	1486236
32S-12000-175-OP	5075	1190913	483879	556703	585433	20649	20649	665922	120591	120591	746419	220525	220525	826917	320468	320468
32S-12000-200-OP	4713	1190506	483623	556305	954677	433430	479091	1059815	506661	609622	1164953	578494	740162	1270083	649539	870693
32S-12000-235-OP	3408	1189842	483207	555641	1554333	839432	1223607	1699486	935710	1403826	1844638	1031714	1584036	1989799	1127586	1764255
32S-12000-250-OP	3045	1189523	483003	555323	1840876	1029227	1579354	2005146	1137702	1783320	2169425	1245885	1987277	2333695	1354050	2191233
32S-15000-175-OP	5075	1386169	584504	699360	-	-	-	-	-	-	-	-	-	678631	78586	78586
32S-15000-200-OP	4930	1385762	584247	698953	806392	237209	237209	911530	367740	367740	1016659	457442	498280	1121797	531063	628810
32S-15000-235-OP	3553	1385098	583840	698298	1406048	724204	981725	1551200	821358	1161944	1696352	917991	1342154	1841505	1014234	1522373
32S-15000-250-OP	3118	1384779	583636	697979	1692591	915486	1337481	1856861	1024412	1541438	2021140	1133020	1745394	2185409	1241459	1949351
50S-15400-200-OP	5075	1501291	589761	654920	1010322	311201	311201	1127143	456238	456238	1243955	556774	601276	1360776	638891	746304
50S-15400-235-OP	3843	1500547	589283	654185	1676606	854257	1138437	1837894	962457	1338676	1999172	1070056	1538915	2160450	1177247	1739155
50S-15400-250-OP	3698	1500202	589062	653831	1994986	1067268	1533720	2177506	1188550	1760335	2360035	1309495	1986958	2542564	1430051	2213573
50S-15400-300-OP	2538	1499733	588761	653380	3199245	1862578	3028886	3462086	2035257	3355213	3724927	2207935	3681549	-	-	-
50S-15600-200-OP	5075	1570397	633563	723513	941375	225597	225597	1058187	370625	370625	1175008	506785	515662	1291820	590699	660700
50S-15600-235-OP	4278	1569654	633094	722779	1607659	807719	1052832	1768937	916292	1253071	1930225	1024156	1453311	2091503	1131480	1653550
50S-15600-250-OP	3770	1569300	632873	722434	1926029	1021359	1448107	2108558	1142835	1674730	2291087	1263825	1901345	2473616	1384514	2127968
50S-15600-300-OP	2610	1568840	632581	721973	3130298	1817280	2943282	3393139	1989958	3269609	3655970	2162637	3595936	3918811	2335315	3922272

NOTES:

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- MOP: Maximum Operating Pressure
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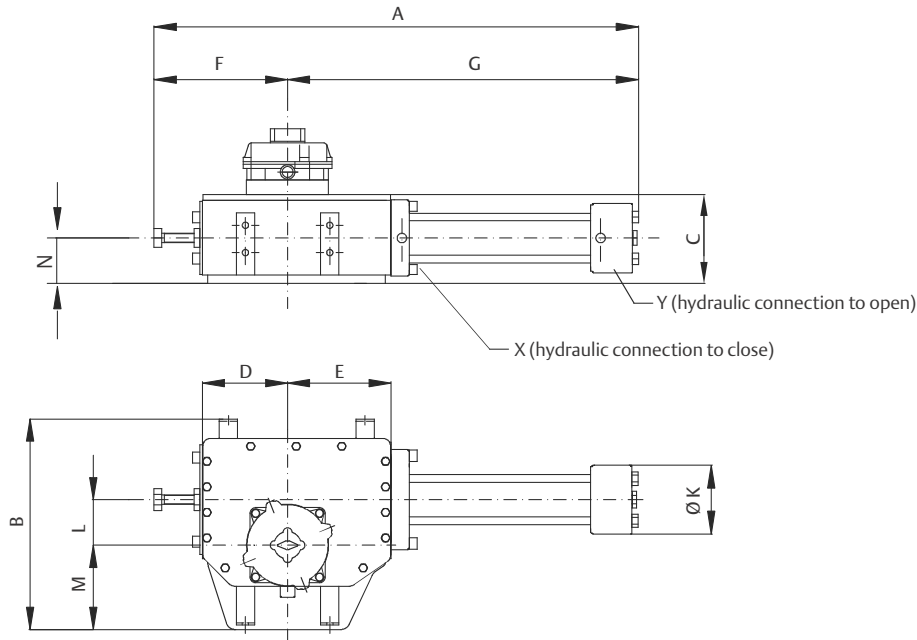
Model	MOP (psi)	BTO	RTO	ETO	Operating supply pressure (psi)											
					2900			3190			3480			MOT@MOP		
					BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC	BTC	RTC	ETC
18S-9600-145-OP	5075	636431	262416	311272	584123	299492	393770	676870	362598	512175	769626	425172	630572	1279739	766077	1281792
18S-9600-175-OP	3988	636068	262195	310918	1007295	584380	933993	1142393	674480	1106459	1277491	764572	1278925	1513912	922239	1580744
18S-9600-185-OP	3553	635926	262115	310785	1165980	690208	1136578	1316965	790894	1329312	1467941	891580	1522055	1505681	916752	1570238
18S-9600-200-OP	3045	635714	261982	310582	1420545	859974	1461551	-	-	-	-	-	-	1508779	918814	1574186
18S-9600-235-OP	2175	635139	261628	310024	-	-	-	-	-	-	-	-	-	1482633	901378	1540809
18S-9800-145-OP	5075	807719	329248	386079	500271	181582	181582	593018	273435	299978	685765	338754	418384	1195878	683853	1069604
18S-9800-175-OP	4278	807357	329027	385725	923434	500917	721805	1058532	591823	894271	1193630	682349	1066737	1565149	930311	1541013
18S-9800-185-OP	3843	807224	328947	385592	1082128	607657	924390	1233104	708750	1117124	1384080	809560	1309867	1572805	935418	1550793
18S-9800-200-OP	3263	807003	328814	385388	1336693	777954	1249363	1513142	895625	1474623	-	-	-	1557254	925045	1530941
18S-9800-235-OP	2393	806427	328460	384831	-	-	-	-	-	-	-	-	-	1581487	941206	1561874
18S-10500-175-OP	4495	942109	385725	454309	848610	430129	554871	983708	522327	727337	1118806	613614	899803	1591648	930249	1503433
18S-10500-185-OP	3988	941976	385645	454185	1007304	538320	757456	1158280	640192	950190	1309256	741551	1142933	1573469	918133	1480226
18S-10500-200-OP	3408	941764	385512	453973	1261860	709750	1082429	1438318	827881	1307698	-	-	-	1570654	916256	1476641
18S-10500-235-OP	2465	941189	385158	453415	-	-	-	-	-	-	-	-	-	1567565	914194	1472685
18S-11000-175-OP	4713	1056709	455513	564943	737418	352933	412914	872507	446547	585380	1007605	538533	757845	1581771	923664	1490829
18S-11000-185-OP	4205	1056567	455424	564811	896103	462682	615499	1047079	565227	808242	1198055	666948	1000976	1575504	919487	1482828
18S-11000-200-OP	3625	1056355	455291	564598	1150668	635068	940472	1327117	753517	1165741	1503574	871516	1391002	1591799	930355	1503627
18S-11000-235-OP	2610	1055779	454946	564049	-	-	-	-	-	-	-	-	-	1578168	921266	1486236
32S-12000-175-OP	5075	1190913	483879	556703	987903	456787	520344	1148889	567590	720221	1309884	676259	920097	2195322	1262940	2019423
32S-12000-200-OP	4713	1190506	483623	556305	1480359	790213	1131754	1690626	929833	1392816	1900902	1068870	1653887	2794554	1656816	2763408
32S-12000-235-OP	3408	1189842	483207	555641	2280104	1318771	2124684	2570408	1509557	2485122	-	-	-	2788137	1652603	2755442
32S-12000-250-OP	3045	1189523	483003	555323	2662244	1569893	2599147	-	-	-	-	-	-	2826522	1677819	2803103
32S-15000-175-OP	5075	1386169	584504	699360	839618	278462	278462	1000604	445972	478339	1161590	558482	678215	2047037	1150120	1777540
32S-15000-200-OP	4930	1385762	584247	698953	1332073	674409	889872	1542341	815437	1150934	1752617	955323	1412004	2803971	1648346	2717331
32S-15000-235-OP	3553	1385098	583840	698298	2131818	1206118	1882802	2422123	1397348	2243240	2712427	1588205	2603669	2785004	1635884	2693779
32S-15000-250-OP	3118	1384779	583636	697979	2513958	1457825	2357265	-	-	-	-	-	-	-	-	-
50S-15400-200-OP	5075	1501291	589761	654920	1594410	798771	1036379	1828043	955881	1326453	2061676	1111645	1616528	3346672	1959432	3211919
50S-15400-235-OP	4205	1500547	589283	654185	2483016	1390718	2139642	2805573	1603490	2540121	3128138	1815864	2940600	3966800	2366832	3981846
50S-15400-250-OP	3698	1500202	589062	653831	2907622	1670685	2666811	3272671	1910824	3120049	3637729	2150644	3573287	3911518	2330518	3913218
50S-15400-300-OP	2538	1499733	588761	653380	-	-	-	-	-	-	-	-	-	3856343	2294274	3844713
50S-15600-200-OP	5075	1570397	633563	723513	1525462	751969	950774	1759095	909680	1240849	1992729	1065772	1530914	3277716	1914134	3126315
50S-15600-235-OP	4278	1569654	633094	722779	2414060	1345181	2054029	2736625	1558077	2454517	3059191	1770504	2854995	3962357	2363920	3976341
50S-15600-250-OP	3770	1569300	632873	722434	2838666	1625281	2581206	3203724	1865526	3034444	3568773	2105346	3487682	3933831	2345174	3940920
50S-15600-300-OP	2610	1568840	632581	721973	-	-	-	-	-	-	-	-	-	3918811	2335315	3922272

NOTES:

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- MOP: Maximum Operating Pressure
- BTC: Break to Close
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- 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 (in.)

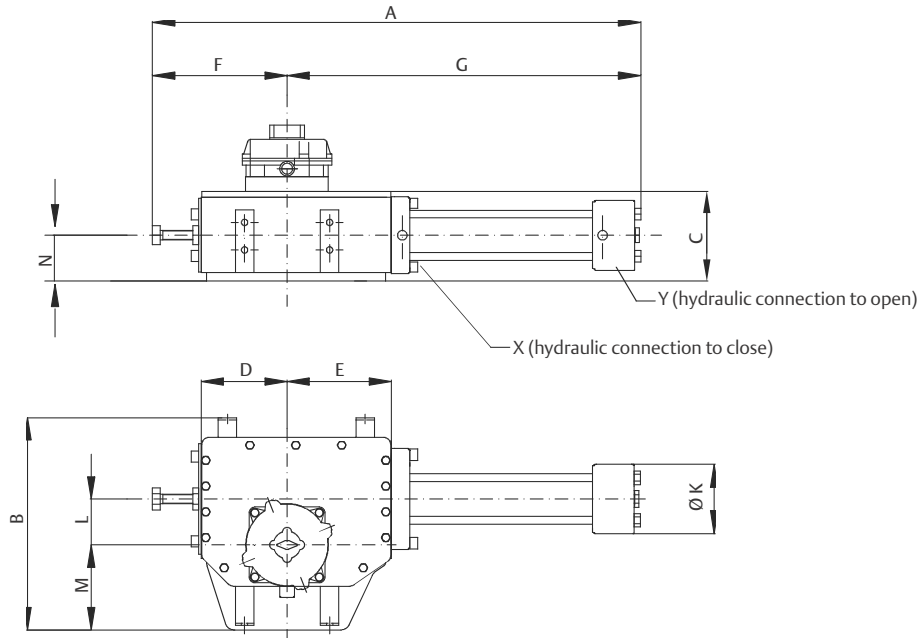
Model	A	B	C	D	E	F	G	ØK	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (lb)	Oil displacement (liters)
0.3-28	29.6	12.6	5.67	5.4	5.94	8.7	20.9	2.95	2.8	4.7	2.8	1/2	1/2	88	0.10
0.3-35	29.4	12.6	6.42	5.4	5.94	8.7	20.7	2.95	2.8	4.7	2.8	1/2	1/2	95	0.15
0.3-45	30.4	12.6	6.42	5.4	5.94	8.7	21.7	3.54	2.8	4.7	2.8	1/2	1/2	112	0.26
0.3-50	30.4	12.6	6.42	5.4	5.94	8.7	21.7	3.54	2.8	4.7	2.8	1/2	1/2	104	0.30
0.3-60	31.4	12.6	6.42	5.4	5.94	8.7	22.7	3.94	2.8	4.7	2.8	1/2	1/2	112	0.45
0.9-45	33	16.3	6.89	6.3	7.48	9.72	23.2	3.54	3.1	6.7	3.2	1/2	1/2	150	0.30
0.9-50	33	16.3	7.36	6.3	7.48	9.72	23.2	3.54	3.1	6.7	3.2	1/2	1/2	128	0.35
0.9-60	34	16.3	7.36	6.3	7.48	9.72	24.3	3.94	3.1	6.7	3.2	1/2	1/2	139	0.50
0.9-70	36.8	16.3	7.36	6.3	7.48	9.72	27	4.72	3.1	6.7	3.2	1/2	1/2	179	0.70
0.9-85	36.7	16.3	7.36	6.3	7.48	9.72	27	4.92	3.1	6.7	3.2	1/2	1/2	190	1.10
1.5-50	41.1	18.8	8.19	7.4	8.94	12.3	28.9	3.54	3.9	7.3	3.9	1/2	1/2	203	0.45
1.5-60	39.5	18.5	8.94	7.4	8.94	12.3	27.2	3.94	3.9	7.3	3.9	1/2	1/2	220	0.65
1.5-70	40.8	18.5	8.94	7.4	8.94	12.3	28.5	4.72	3.9	7.3	3.9	1/2	1/2	258	0.85
1.5-85	40.7	18.5	8.94	7.4	8.94	12.3	28.7	4.92	3.9	7.3	3.9	1/2	1/2	269	1.30
1.5-95	42.6	18.8	8.19	7.4	8.94	12.3	30.3	5.51	3.9	7.3	3.9	3/4	3/4	282	1.70

NOTE:

MHP manual override is available as an option.

OLGA-H Double-Acting Hydraulic Actuator

Overall Dimensions - Models 3-60 to 6-125



Dimensions (in.)

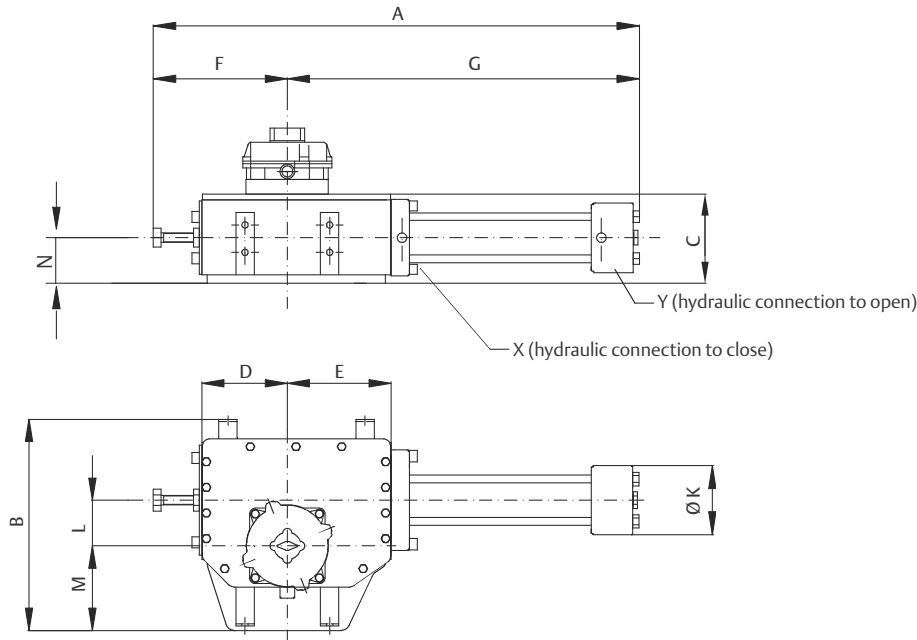
Model	A	B	C	D	E	F	G	Ø K	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (lb)	Oil displacement (liters)
3-60	53.7	23.1	9.21	11.2	13	16.1	37.6	3.94	6.3	8.46	4.2	1/2	1/2	403	1.0
3-70	54	23.1	9.21	11.2	13	16.1	37.9	4.72	6.3	8.46	4.2	1/2	1/2	425	1.4
3-85	54	23.1	9.21	11.2	13	16.1	37.9	4.92	6.3	8.46	4.2	1/2	1/2	437	2.0
3-90	58.2	23.1	8.46	11.2	13	16.1	42.1	5.51	6.3	8.46	4.2	3/4	3/4	425	2.3
3-95	58.1	23.1	9.21	11.2	13	16.1	42	5.51	6.3	8.46	4.2	3/4	3/4	522	2.5
3-110	59.5	23.1	9.21	11.2	13	16.1	43.4	6.69	6.3	8.46	4.2	3/4	3/4	540	3.4
6-70	60.6	29.1	11.7	12.9	14.9	18.3	42.2	4.72	7.3	10.2	5.5	1/2	1/2	705	1.6
6-85	65.5	29.1	11.7	12.9	14.9	22	43.5	4.92	7.3	10.2	5.5	1/2	1/2	721	2.4
6-90	62.1	29.1	11.7	12.9	14.9	18.3	43.9	5.51	7.3	10.2	5.5	3/4	3/4	833	2.6
9-95	62.3	29.1	11.7	12.9	14.9	18.3	43.9	5.51	7.3	10.2	5.5	3/4	3/4	838	2.6
6-110	63.7	29.1	11.7	12.9	14.9	18.3	45.4	6.69	7.3	10.2	5.5	3/4	3/4	855	2.9
6-125	66	29.1	11.7	12.9	14.9	18.3	47.7	7.48	7.3	10.2	5.5	3/4	3/4	899	3.2

NOTE:

MHP manual override is available as an option.

OLGA-H Double-Acting Hydraulic Actuator

Overall Dimensions - Models 14-85 to 80-200



Dimensions (in.)

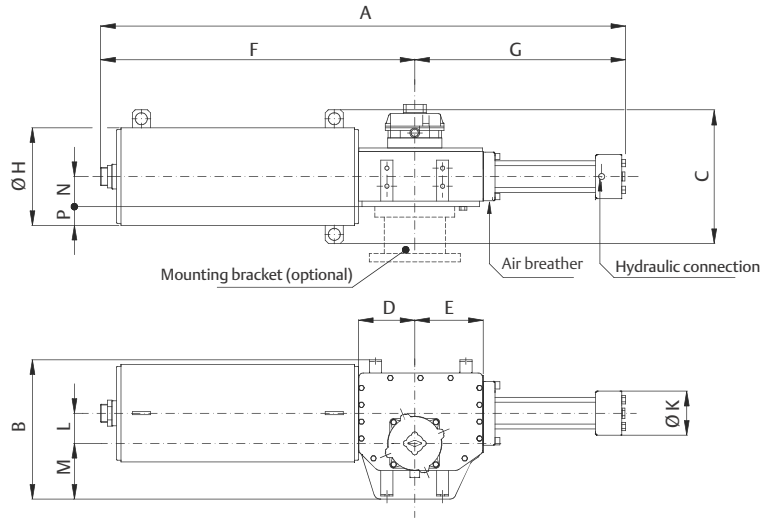
Model	A	B	C	D	E	F	G	ØK	L	M	N	Hydraulic connection (in.) (Y)	Hydraulic connection (in.) (X)	Weight (lb)	Oil displacement (liters)
14-85	66.7	34.4	15.4	14.8	17.1	19.6	47.1	4.9	7.9	13.0	7.6	1/2	1/2	1058	2.5
14-95	67.6	34.4	15.4	14.8	17.1	19.6	48.1	5.5	7.9	13.0	7.6	3/4	3/4	1076	3.2
14-110	69.7	34.4	15.4	14.8	17.1	19.6	50.1	6.7	7.9	13.0	7.6	3/4	3/4	1142	4.2
14-125	70.9	33.0	16.1	14.8	17.1	21.0	49.9	7.5	7.9	11.6	7.6	3/4	3/4	1389	5.4
14-135	71.1	33.0	16.1	14.8	17.1	21.0	50.2	7.9	7.9	11.6	7.6	3/4	3/4	1433	6.2
14-145	74.3	33.0	16.1	14.8	17.1	21.0	53.3	9.8	7.9	11.6	7.6	3/4	3/4	1532	7.3
14-175	74.4	33.0	16.1	14.8	17.1	21.0	53.4	11.0	7.9	11.6	7.6	3/4	3/4	1709	10.6
14-185	74.4	33.0	16.1	14.8	17.1	21.0	53.4	11.0	7.9	11.6	7.6	3/4	3/4	1810	12.0
14-200	77.1	33.0	16.1	14.8	17.1	21.0	56.1	12.6	7.9	11.6	7.6	3/4	3/4	1874	13.8
18-125	76.0	37.6	16.0	16.7	19.4	21.5	54.5	7.5	9.1	14.0	7.6	3/4	3/4	1640	6.4
18-145	78.5	37.0	16.0	16.7	19.4	22.9	55.6	9.8	9.1	13.4	7.6	3/4	3/4	1874	8.4
18-175	78.6	37.0	16.0	16.7	19.4	22.9	55.7	11.0	9.1	13.4	7.6	3/4	3/4	2039	12.2
18-185	78.6	37.0	16.0	16.7	19.4	22.9	55.7	11.0	9.1	13.4	7.6	3/4	3/4	1660	14.0
18-200	81.3	37.0	16.0	16.7	19.4	22.9	58.4	12.6	9.1	13.4	7.6	3/4	3/4	2205	15.9
32-145	89.0	41.5	18.0	19.9	23.0	24.4	64.6	9.8	10.6	15.6	9.2	3/4	3/4	2659	10.0
32-175	87.9	41.5	18.6	19.9	23.0	24.4	63.5	11.0	10.6	15.6	9.1	3/4	3/4	3263	14.3
32-200	90.2	41.5	18.6	19.9	23.0	24.4	65.7	12.6	10.6	15.6	9.1	3/4	3/4	3417	18.6
50-175	97.1	43.0	18.5	21.6	25.0	27.3	69.8	11.0	11.8	15.2	9.2	3/4	3/4	3208	16.0
50-200	99.1	43.0	18.5	21.6	25.0	27.3	71.9	12.6	11.8	15.2	9.2	3/4	3/4	3748	20.7
80-200	114.5	53.1	23.3	26.1	30.0	31.8	82.7	12.6	13.8	17.7	11.9	3/4	3/4	5930	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 (in.)

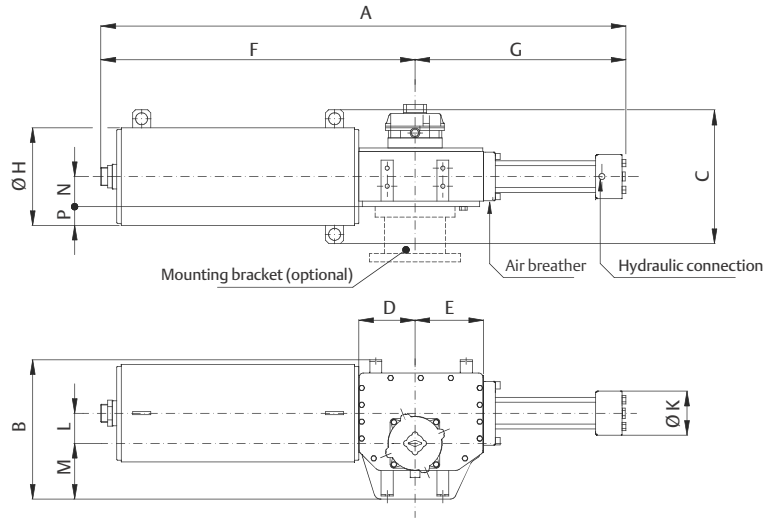
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
0.3-008A-20-CL	46.4	12.6	7.9	5.4	5.9	28.1	18.2	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008A-28-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008A-35-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-008B-20-CL	46.4	12.6	12.4	5.4	5.9	28.7	17.6	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008B-28-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008B-35-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-008-20-CL	46.4	12.6	12.4	5.4	5.9	28.7	17.6	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008-28-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008-35-CL	48.9	12.6	7.9	5.4	5.9	28.1	20.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-0100-28-CL	52.8	12.6	11.0	5.4	5.9	32.1	20.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.10
0.3-0100-35-CL	52.8	12.6	11.0	5.4	5.9	32.1	20.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.15
0.3-0100-40-CL	52.8	12.6	11.0	5.4	5.9	32.1	20.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.20
0.3-0100-45-CL	53.8	12.6	11.5	5.4	5.9	32.1	21.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	183	0.26
0.3-0100-50-CL	53.8	12.6	11.5	5.4	5.9	32.1	21.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	187	0.30
0.3-0150-35-CL	50.7	12.6	11.1	5.4	5.9	30.0	20.7	8.8	3.0	2.8	4.7	2.8	1.7	1/2	163	0.15
0.3-0150-40-CL	50.7	12.6	11.1	5.4	5.9	30.0	20.7	8.8	3.0	2.8	4.7	2.8	1.7	1/2	168	0.20
0.3-0150-45-CL	51.7	12.6	11.1	5.4	5.9	30.0	21.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	172	0.26
0.3-0150-50-CL	51.7	12.6	11.1	5.4	5.9	30.0	21.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	176	0.30
0.3-0150-60-CL	52.8	12.6	11.1	5.4	5.9	30.0	22.7	8.8	3.9	2.8	4.7	2.8	1.7	1/2	185	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 (in.)

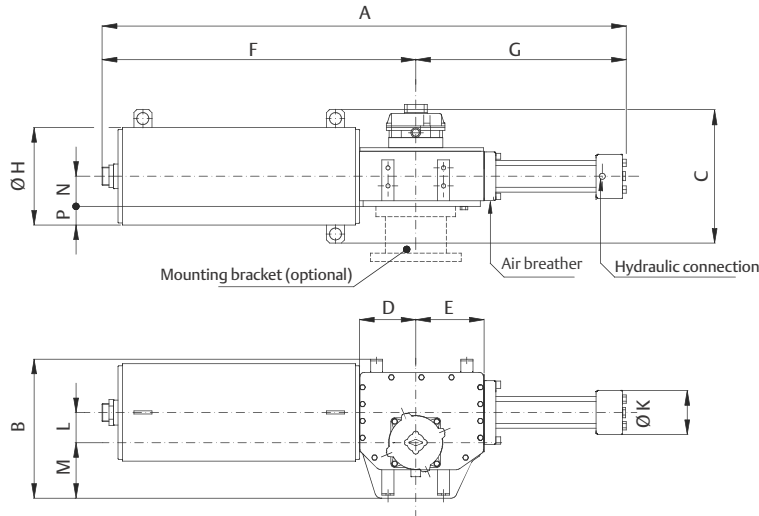
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
0.9-0200-40-CL	55.9	16.3	11.8	6.3	7.5	33.7	22.2	11.0	3.1	3.1	6.7	3.3	1.5	1/2	311	0.23
0.9-0200-45-CL	57.0	16.3	11.8	6.3	7.5	33.7	23.2	11.0	3.5	3.1	6.7	3.3	1.5	1/2	315	0.30
0.9-0200-50-CL	57.0	16.3	11.8	6.3	7.5	33.7	23.2	11.0	3.5	3.1	6.7	3.3	1.5	1/2	320	0.45
0.9-0200-60-CL	58.0	16.3	11.8	6.3	7.5	33.7	24.3	11.0	3.9	3.1	6.7	3.3	1.5	1/2	331	0.50
0.9-0250-40-CL	53.1	16.3	11.8	6.3	7.5	30.9	22.2	11.0	3.1	3.1	6.7	3.3	1.5	1/2	311	0.23
0.9-0250-45-CL	54.2	16.3	11.8	6.3	7.5	30.9	23.2	11.0	3.5	3.1	6.7	3.3	1.5	1/2	315	0.30
0.9-0250-50-CL	54.2	16.3	11.8	6.3	7.5	30.9	23.2	11.0	3.5	3.1	6.7	3.3	1.5	1/2	320	0.35
0.9-0250-60-CL	55.2	16.3	11.8	6.3	7.5	30.9	24.3	11.0	3.9	3.1	6.7	3.3	1.5	1/2	331	0.50
0.9-0250-70-CL	58.0	16.3	11.8	6.3	7.5	30.9	27.0	11.0	4.7	3.1	6.7	3.3	1.5	1/2	342	0.70
0.9-0350-45-CL	59.1	16.3	14.6	6.3	7.5	35.8	23.2	13.8	3.5	3.1	6.7	3.3	2.9	1/2	397	0.30
0.9-0350-50-CL	59.1	16.3	14.6	6.3	7.5	35.8	23.2	13.8	3.5	3.1	6.7	3.3	2.9	1/2	408	0.35
0.9-0350-60-CL	60.1	16.3	14.6	6.3	7.5	35.8	24.3	13.8	3.9	3.1	6.7	3.3	2.9	1/2	417	0.50
0.9-0350-70-CL	62.9	16.3	14.6	6.3	7.5	35.8	27.0	13.8	4.7	3.1	6.7	3.3	2.9	1/2	445	0.70
0.9-0350-85-CL	62.9	16.3	14.6	6.3	7.5	35.8	27.0	13.8	4.9	3.1	6.7	3.3	2.9	1/2	456	1.10
0.9-0400-50-CL	56.5	16.3	14.6	6.3	7.5	33.2	23.2	13.8	3.5	3.1	6.7	3.3	2.9	1/2	384	0.35
0.9-0400-60-CL	57.5	16.3	14.6	6.3	7.5	33.2	24.3	13.8	3.9	3.1	6.7	3.3	2.9	1/2	392	0.50
0.9-0400-70-CL	60.2	16.3	14.6	6.3	7.5	33.2	27.0	13.8	4.7	3.1	6.7	3.3	2.9	1/2	434	0.70
0.9-0400-85-CL	60.2	16.3	14.6	6.3	7.5	33.2	27.0	13.8	4.9	3.1	6.7	3.3	2.9	1/2	445	1.10
0.9-0700-60-CL	58.5	16.3	14.6	6.3	7.5	34.3	24.3	13.8	3.9	3.1	6.7	3.3	2.9	1/2	441	0.50
0.9-0700-70-CL	61.3	16.3	14.6	6.3	7.5	34.3	27.0	13.8	4.7	3.1	6.7	3.3	2.9	1/2	485	0.70
0.9-0700-85-CL	61.3	16.3	14.6	6.3	7.5	34.3	27.0	13.8	4.9	3.1	6.7	3.3	2.9	1/2	494	1.10
1.5-1100-70-CL	68.2	18.5	17.3	7.4	8.9	39.7	28.5	15.7	4.7	3.9	7.3	3.9	3.3	1/2	769	0.85
1.5-1100-85-CL	68.1	18.5	17.3	7.4	8.9	39.7	28.5	15.7	4.9	3.9	7.3	3.9	3.3	1/2	811	1.30
1.5-1100-95-CL	69.8	18.5	17.3	7.4	8.9	39.7	30.1	15.7	5.5	3.9	7.3	3.9	3.3	3/4	672	1.70
1.5-1100-110-CL	70.7	18.5	17.3	7.4	8.9	39.7	31.1	15.7	6.7	3.9	7.3	3.9	3.3	3/4	717	2.20
1.5-1200-70-CL	70.9	18.5	15.1	7.4	8.9	42.4	28.5	12.8	4.7	3.9	7.3	3.9	2.4	1/2	721	0.85
1.5-1200-85-CL	70.9	18.5	15.1	7.4	8.9	42.4	28.5	12.8	4.9	3.9	7.3	3.9	2.4	1/2	752	1.30
1.5-1200-95-CL	72.5	18.5	15.1	7.4	8.9	42.4	30.1	12.8	5.5	3.9	7.3	3.9	2.4	3/4	661	1.70
1.5-1200-110-CL	73.5	18.5	15.1	7.4	8.9	42.4	31.0	12.8	6.7	3.9	7.3	3.9	2.4	3/4	723	2.20
3-2000-70-CL	92.8	23.1	18.3	11.2	13.0	54.8	37.9	16.3	4.7	6.3	8.5	4.2	3.9	1/2	1312	1.40
3-2000-85-CL	92.8	23.1	18.3	11.2	13.0	54.8	37.9	16.3	4.9	6.3	8.5	4.2	3.9	1/2	1345	2.00
3-2000-95-CL	96.9	23.1	18.3	11.2	13.0	54.8	42.0	16.3	5.5	6.3	8.5	4.2	3.9	3/4	1396	2.50
3-2000-110-CL	98.3	23.1	18.3	11.2	13.0	54.8	43.4	16.3	6.7	6.3	8.5	4.2	3.9	3/4	1424	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 (in.)

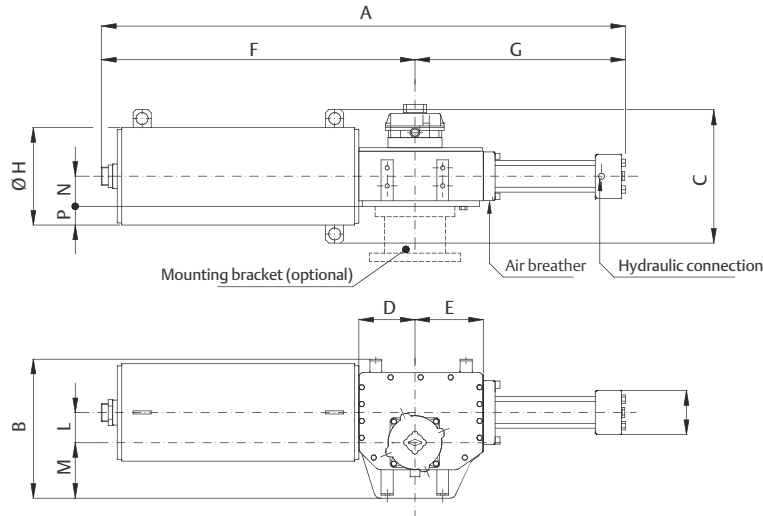
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
6-2500-85-CL	118.3	29.1	17.4	12.9	14.9	75.0	43.2	15.1	4.9	7.3	10.2	5.5	2.0	3/4	1819	2.4
6-2500-95-CL	119.0	29.1	17.4	12.9	14.9	75.0	43.9	15.1	5.5	7.3	10.2	5.5	2.0	3/4	1854	2.9
6-2500-110-CL	120.4	29.1	17.4	12.9	14.9	75.0	45.4	15.1	6.7	7.3	10.2	5.5	2.0	3/4	1876	3.9
6-2500-125-CL	122.7	29.1	17.4	12.9	14.9	75.0	47.7	15.1	7.5	7.3	10.2	5.5	2.0	3/4	1918	4.6
6-2500-135-CL	123.0	29.1	17.4	12.9	14.9	75.0	48.0	15.1	7.9	7.3	10.2	5.5	2.0	3/4	1949	5.8
6-3800-85-CL	127.3	29.1	23.6	12.9	14.9	84.1	43.2	20.9	4.9	7.3	10.2	5.5	4.9	3/4	3263	2.4
6-3800-95-CL	128.0	29.1	23.6	12.9	14.9	84.1	43.9	20.9	5.5	7.3	10.2	5.5	4.9	3/4	2985	2.9
6-3800-110-CL	129.4	29.1	23.6	12.9	14.9	84.1	45.4	20.9	6.7	7.3	10.2	5.5	4.9	3/4	3007	3.9
6-3800-125-CL	131.8	29.1	23.6	12.9	14.9	84.1	47.7	20.9	7.5	7.3	10.2	5.5	4.9	3/4	3051	4.6
6-3800-135-CL	132.0	29.1	23.6	12.9	14.9	84.1	48.0	20.9	7.9	7.3	10.2	5.5	4.9	3/4	3080	5.8
14-5100-95-CL	130.4	34.4	23.7	14.8	17.1	82.4	48.1	20.9	5.5	7.9	13.0	7.6	2.8	3/4	3389	3.2
14-5100-110-CL	132.5	34.4	23.7	14.8	17.1	82.4	50.1	20.9	6.7	7.9	13.0	7.6	2.8	3/4	3450	4.2
14-5100-125-CL	132.2	34.4	23.7	14.8	17.1	82.4	49.9	20.9	7.5	7.9	13.0	7.6	2.8	3/4	3532	5.4
14-5100-135-CL	132.5	34.4	23.7	14.8	17.1	82.4	50.2	20.9	7.9	7.9	13.0	7.6	2.8	3/4	3748	6.4
14-5100-145-CL	135.6	34.4	23.7	14.8	17.1	82.4	53.3	20.9	9.8	7.9	13.0	7.6	2.8	3/4	3893	7.3
14-5100-175-CL	135.8	34.4	23.7	14.8	17.1	82.4	53.4	20.9	9.8	7.9	13.0	7.6	2.8	3/4	4045	10.6
14-5100-200-CL	138.5	34.4	23.7	14.8	17.1	82.4	56.1	20.9	11.0	7.9	13.0	7.6	2.8	3/4	4321	13.8
14-5400-110-CL	130.4	34.4	23.7	14.8	17.1	80.3	50.1	20.9	6.7	7.9	13.0	7.6	2.8	3/4	3605	4.2
14-5400-125-CL	130.2	34.4	23.7	14.8	17.1	80.3	49.9	20.9	7.5	7.9	13.0	7.6	2.8	3/4	3638	5.4
14-5400-135-CL	130.5	34.4	23.7	14.8	17.1	80.3	50.2	20.9	7.9	7.9	13.0	7.6	2.8	3/4	3682	6.2
14-5400-145-CL	133.6	34.4	23.7	14.8	17.1	80.3	53.3	20.9	9.8	7.9	13.0	7.6	2.8	3/4	3770	7.3
14-5400-175-CL	133.7	34.4	23.7	14.8	17.1	80.3	53.4	20.9	9.8	7.9	11.6	7.6	2.8	3/4	3946	10.6
14-5400-185-CL	133.7	34.4	23.7	14.8	17.1	80.3	53.4	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4068	12
14-5400-200-CL	136.4	34.4	23.7	14.8	17.1	80.3	56.1	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4101	13.8
14-8300-125-CL	132.7	33.0	23.6	14.8	17.1	82.8	49.9	20.9	7.5	7.9	11.6	7.6	2.8	3/4	3748	5.4
14-8300-135-CL	133.0	33.0	23.6	14.8	17.1	82.8	50.2	20.9	7.9	7.9	11.6	7.6	2.8	3/4	3792	6.2
14-8300-145-CL	136.1	33.0	23.6	14.8	17.1	82.8	53.3	20.9	9.8	7.9	11.6	7.6	2.8	3/4	3880	7.3
14-8300-175-CL	136.2	33.0	23.6	14.8	17.1	82.8	53.4	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4057	10.6
14-8300-185-CL	136.2	33.0	23.6	14.8	17.1	82.8	53.4	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4178	12
14-8300-200-CL	138.9	33.0	23.6	14.8	17.1	82.8	56.1	20.9	12.6	7.9	11.6	7.6	2.8	3/4	4211	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 (in.)

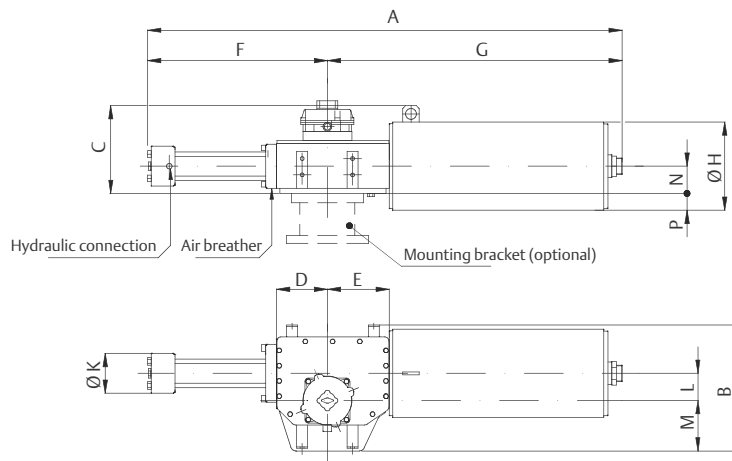
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
18-9600-145-CL	161.7	37.0	29.1	16.7	19.4	106.1	55.6	22.0	9.8	9.1	13.4	7.6	3.4	3/4	5886	8.4
18-9600-175-CL	161.8	37.0	29.1	16.7	19.4	106.1	55.7	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6063	12.2
18-9600-185-CL	161.8	37.0	29.1	16.7	19.4	106.1	55.7	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6089	14.0
18-9600-200-CL	164.5	37.0	29.1	16.7	19.4	106.1	58.4	22.0	12.6	9.1	13.4	7.6	3.4	3/4	6261	15.9
18-9600-235-CL	164.3	37.6	29.1	16.7	19.4	106.1	58.2	22.0	13.6	9.1	14.0	7.6	3.4	3/4	6433	21.0
18-9800-145-CL	161.3	37.0	29.1	16.7	19.4	105.7	55.6	22.0	9.8	9.1	13.4	7.6	3.4	3/4	6393	8.4
18-9800-175-CL	161.4	37.0	29.1	16.7	19.4	105.7	55.7	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6548	12.2
18-9800-185-CL	161.4	37.0	29.1	16.7	19.4	105.7	55.7	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6570	14.0
18-9800-200-CL	164.1	37.6	29.1	16.7	19.4	105.7	58.4	22.0	12.6	9.1	13.4	7.6	3.4	3/4	6724	15.9
18-9800-235-CL	163.9	37.6	29.1	16.7	19.4	105.7	58.2	22.0	13.6	9.1	13.4	7.6	3.4	3/4	6228	21.0
18-10500-175-CL	164.7	37.6	33.5	16.7	19.4	109.0	55.7	26.4	11.0	9.1	13.4	7.6	5.6	3/4	7297	12.2
18-10500-185-CL	164.7	37.6	33.5	16.7	19.4	109.0	55.7	26.4	11.0	9.1	13.4	7.6	5.6	3/4	7275	14.0
18-10500-200-CL	167.4	37.6	33.5	16.7	19.4	109.0	58.4	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7573	15.9
18-10500-235-CL	167.2	37.6	33.5	16.7	19.4	109.0	58.2	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7668	21.0
18-11000-175-CL	160.2	37.0	33.5	16.7	19.4	104.4	55.7	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7628	12.2
18-11000-185-CL	160.2	37.6	33.5	16.7	19.4	104.4	55.7	26.4	9.1	14.0	13.4	7.6	5.6	3/4	8647	14.0
18-11000-200-CL	162.8	37.0	33.5	16.7	19.4	104.4	58.4	26.4	12.6	9.1	13.4	7.6	5.6	3/4	7749	15.9
18-11000-235-CL	162.7	37.0	33.5	16.7	19.4	104.4	58.2	26.4	13.6	9.1	13.4	7.6	5.6	3/4	7992	21.0
32-12000-175-CL	178.0	41.9	38.6	19.9	23.0	114.5	63.5	31.5	11.0	10.6	15.6	9.2	10.2	3/4	10177	14.3
32-12000-200-CL	180.3	44.5	38.6	19.9	23.0	114.5	65.7	31.5	12.6	10.6	16.5	9.4	6.3	3/4	9921	18.6
32-12000-235-CL	179.3	41.9	38.6	19.9	23.0	113.7	65.6	31.5	13.6	10.6	15.6	9.2	10.2	3/4	9683	25.6
32-12000-250-CL	182.8	41.9	38.6	19.9	23.0	113.7	69.1	31.5	15.4	10.6	15.6	9.2	10.2	3/4	9729	29.0
32-15000-175-CL	178.0	41.9	38.6	19.9	23.0	114.5	63.5	31.5	11.0	10.6	15.6	9.2	10.2	3/4	9800	14.3
32-15000-200-CL	180.3	41.9	38.6	19.9	23.0	114.5	65.7	31.5	12.6	10.6	15.6	9.2	10.2	3/4	10042	18.6
32-15000-235-CL	180.1	41.9	38.6	19.9	23.0	114.5	65.6	31.5	13.6	10.6	15.6	9.2	10.2	3/4	10137	25.6
32-15000-250-CL	183.6	41.9	38.6	19.9	23.0	114.5	69.1	31.5	15.4	10.6	15.6	9.2	10.2	3/4	10514	29.0
50-15400-200-CL	191.0	43.0	38.6	21.6	24.9	119.2	71.9	31.5	12.6	11.8	15.2	9.2	10.1	3/4	12595	20.7
50-15400-235-CL	194.6	43.0	38.6	21.6	24.9	119.2	75.5	31.5	13.6	11.8	15.2	9.2	10.1	3/4	11363	28.6
50-15400-250-CL	190.1	42.8	38.6	21.6	24.9	119.2	70.9	31.5	15.4	11.8	15.0	9.2	10.1	3/4	11409	32.0
50-15400-300-CL	194.3	43.0	38.6	21.7	25.0	119.2	75.1	31.5	18.1	11.8	15.2	9.2	10.1	1	12641	46.0
50-15600-200-CL	191.0	43.0	38.6	21.6	24.9	119.2	71.9	31.5	12.6	6.0	15.2	9.2	10.1	3/4	12364	20.7
50-15600-235-CL	194.6	43.0	38.6	21.6	24.9	119.2	70.7	31.5	13.6	11.8	15.2	9.2	10.1	3/4	12505	28.6
50-15600-250-CL	190.1	42.8	38.6	21.6	24.9	119.2	70.9	31.5	15.4	11.8	15.0	9.2	10.1	3/4	11409	32.0
50-15600-300-CL	194.3	43.0	42.5	21.7	25.0	119.2	75.1	31.5	18.1	11.8	15.2	9.2	10.1	1	12170	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 (in.)

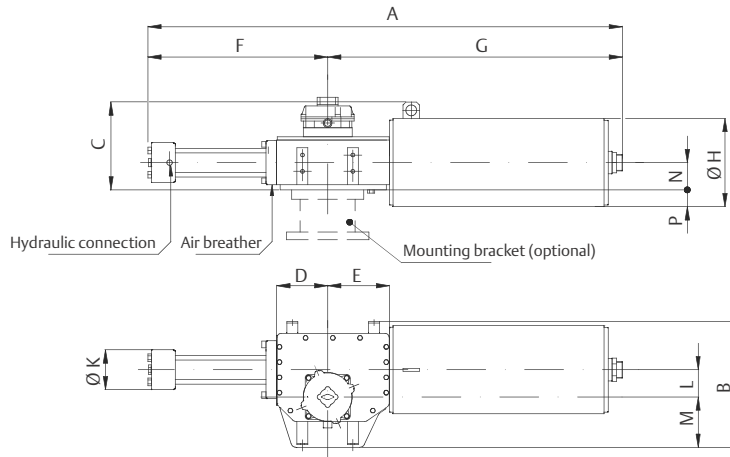
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
0.3-008A-20-OP	46.4	12.6	7.9	5.4	5.9	17.6	28.7	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008A-28-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008A-35-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-008B-20-OP	46.4	12.6	12.4	5.4	5.9	17.6	28.7	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008B-28-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008B-35-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-008-20-OP	46.4	12.6	12.4	5.4	5.9	17.6	28.7	5.9	2.1	2.8	4.7	2.8	0.2	3/8	132	0.05
0.3-008-28-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.10
0.3-008-35-OP	48.9	12.6	7.9	5.4	5.9	20.1	28.7	5.9	3.0	2.8	4.7	2.8	0.2	1/2	132	0.15
0.3-0100-28-OP	52.8	12.6	11.0	5.4	5.9	20.1	32.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.10
0.3-0100-35-OP	52.8	12.6	11.0	5.4	5.9	20.1	32.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.15
0.3-0100-40-OP	52.8	12.6	11.0	5.4	5.9	20.1	32.7	8.8	3.0	2.8	4.7	2.8	1.4	1/2	143	0.20
0.3-0100-45-OP	53.8	12.6	11.5	5.4	5.9	21.1	32.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	183	0.26
0.3-0100-50-OP	53.8	12.6	11.5	5.4	5.9	21.1	32.7	8.8	3.5	2.8	4.7	2.8	1.7	1/2	187	0.30
0.3-0150-35-OP	50.7	12.6	11.1	5.4	5.9	20.1	30.6	8.8	3.0	2.8	4.7	2.8	1.7	1/2	163	0.15
0.3-0150-40-OP	50.7	12.6	11.1	5.4	5.9	20.1	30.6	8.8	3.0	2.8	4.7	2.8	1.7	1/2	168	0.20
0.3-0150-45-OP	51.7	12.6	11.1	5.4	5.9	21.1	30.6	8.8	3.5	2.8	4.7	2.8	1.7	1/2	172	0.26
0.3-0150-50-OP	51.7	12.6	11.1	5.4	5.9	21.1	30.6	8.8	3.5	2.8	4.7	2.8	1.7	1/2	176	0.30
0.3-0150-60-OP	52.8	12.6	11.1	5.4	5.9	22.1	30.6	8.8	3.9	2.8	4.7	2.8	1.7	1/2	185	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 (in.)

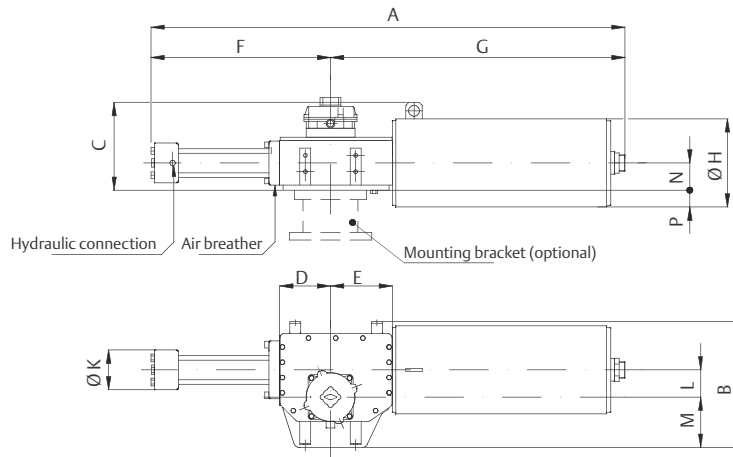
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
0.9-0200-40-OP	55.9	16.3	11.8	6.3	7.5	21.0	34.9	11.0	3.1	3.1	6.7	3.3	1.5	1/2	311	0.23
0.9-0200-45-OP	57.0	16.3	11.8	6.3	7.5	22.0	34.9	11.0	3.5	3.1	6.7	3.3	1.5	1/2	315	0.30
0.9-0200-50-OP	57.0	16.3	11.8	6.3	7.5	22.0	34.9	11.0	3.5	3.1	6.7	3.3	1.5	1/2	320	0.45
0.9-0200-60-OP	58.0	16.3	11.8	6.3	7.5	23.1	34.9	11.0	3.9	3.1	6.7	3.3	1.5	1/2	331	0.50
0.9-0250-40-OP	53.1	16.3	11.8	6.3	7.5	21.0	32.1	11.0	3.1	3.1	6.7	3.3	1.5	1/2	311	0.23
0.9-0250-45-OP	54.2	16.3	11.8	6.3	7.5	22.0	32.1	11.0	3.5	3.1	6.7	3.3	1.5	1/2	315	0.30
0.9-0250-50-OP	54.2	16.3	11.8	6.3	7.5	22.0	32.1	11.0	3.5	3.1	6.7	3.3	1.5	1/2	320	0.35
0.9-0250-60-OP	55.2	16.3	11.8	6.3	7.5	23.1	32.1	11.0	3.9	3.1	6.7	3.3	1.5	1/2	331	0.50
0.9-0250-70-OP	58.0	16.3	11.8	6.3	7.5	25.9	32.1	11.0	4.7	3.1	6.7	3.3	1.5	1/2	342	0.70
0.9-0350-45-OP	59.1	16.3	14.6	6.3	7.5	22.0	37.0	13.8	3.5	3.1	6.7	3.3	2.9	1/2	397	0.30
0.9-0350-50-OP	59.1	16.3	14.6	6.3	7.5	22.0	37.0	13.8	3.5	3.1	6.7	3.3	2.9	1/2	408	0.35
0.9-0350-60-OP	60.1	16.3	14.6	6.3	7.5	23.1	37.0	13.8	3.9	3.1	6.7	3.3	2.9	1/2	417	0.50
0.9-0350-70-OP	62.9	16.3	14.6	6.3	7.5	25.9	37.0	13.8	4.7	3.1	6.7	3.3	2.9	1/2	445	0.70
0.9-0350-85-OP	62.9	16.3	14.6	6.3	7.5	25.8	37.0	13.8	4.9	3.1	6.7	3.3	2.9	1/2	456	1.10
0.9-0400-50-OP	56.5	16.3	14.6	6.3	7.5	22.0	34.4	13.8	3.5	3.1	6.7	3.3	2.9	1/2	384	0.35
0.9-0400-60-OP	57.5	16.3	14.6	6.3	7.5	23.1	34.4	13.8	3.9	3.1	6.7	3.3	2.9	1/2	392	0.50
0.9-0400-70-OP	60.2	16.3	14.6	6.3	7.5	25.9	34.4	13.8	4.7	3.1	6.7	3.3	2.9	1/2	434	0.70
0.9-0400-85-OP	60.2	16.3	14.6	6.3	7.5	25.8	34.4	13.8	4.9	3.1	6.7	3.3	2.9	1/2	445	1.10
0.9-0700-60-OP	58.5	16.3	14.6	6.3	7.5	23.1	35.5	13.8	3.9	3.1	6.7	3.3	2.9	1/2	441	0.50
0.9-0700-70-OP	61.3	16.3	14.6	6.3	7.5	25.9	35.5	13.8	4.7	3.1	6.7	3.3	2.9	1/2	485	0.70
0.9-0700-85-OP	61.3	16.3	14.6	6.3	7.5	25.8	35.5	13.8	4.9	3.1	6.7	3.3	2.9	1/2	494	1.10
1.5-1100-70-OP	68.2	18.5	17.3	7.4	8.9	26.9	41.3	15.7	4.7	3.9	7.3	3.9	3.3	1/2	769	0.85
1.5-1100-85-OP	68.1	18.5	17.3	7.4	8.9	26.9	41.3	15.7	4.9	3.9	7.3	3.9	3.3	1/2	811	1.30
1.5-1100-95-OP	69.8	18.5	17.3	7.4	8.9	28.5	41.3	15.7	5.5	3.9	7.3	3.9	3.3	1/2	672	1.70
1.5-1100-110-OP	70.7	18.5	17.3	7.4	8.9	29.5	41.3	15.7	6.7	3.9	7.3	3.9	3.3	1/2	717	2.20
1.5-1200-70-OP	70.9	18.5	15.1	7.4	8.9	26.9	44.1	12.8	4.7	3.9	7.3	3.9	2.4	1/2	721	0.85
1.5-1200-85-OP	70.9	18.5	15.1	7.4	8.9	26.9	44.0	12.8	4.9	3.9	7.3	3.9	2.4	1/2	752	1.30
1.5-1200-95-OP	72.5	18.5	15.1	7.4	8.9	28.5	44.0	12.8	5.5	3.9	7.3	3.9	2.4	3/4	661	1.70
1.5-1200-110-OP	73.5	18.5	15.1	7.4	8.9	29.5	44.0	12.8	6.7	3.9	7.3	3.9	2.4	3/4	723	2.20
3-2000-70-OP	92.8	23.1	18.3	11.2	13.0	36.1	56.6	16.3	4.7	6.3	8.5	4.2	3.9	1/2	1312	1.40
3-2000-85-OP	92.8	23.1	18.3	11.2	13.0	36.1	56.6	16.3	4.9	6.3	8.5	4.2	3.9	1/2	1345	2.00
3-2000-95-OP	96.9	23.1	18.3	11.2	13.0	40.2	56.6	16.3	5.5	6.3	8.5	4.2	3.9	3/4	1396	2.50
3-2000-110-OP	98.3	23.1	18.3	11.2	13.0	41.7	56.6	16.3	6.7	6.3	8.5	4.2	3.9	3/4	1424	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 (in.)

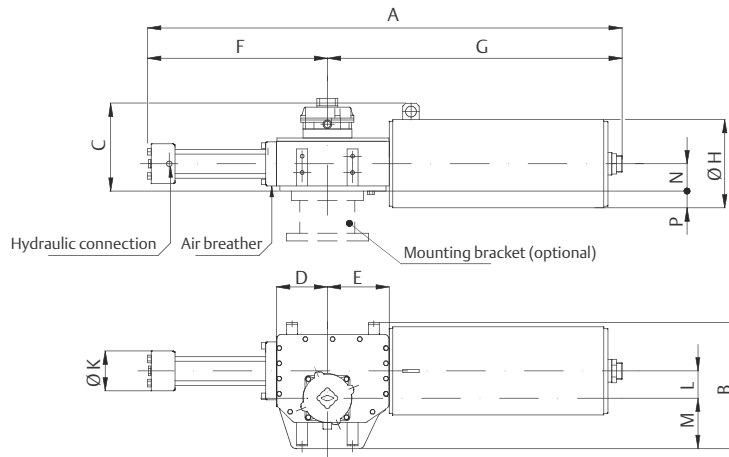
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
6-2500-85-OP	118.3	29.1	17.4	12.9	14.9	41.2	77.1	15.1	4.9	7.3	10.2	5.5	2.0	3/4	1819	2.4
6-2500-95-OP	119.0	29.1	17.4	12.9	14.9	41.9	77.1	15.1	5.5	7.3	10.2	5.5	2.0	3/4	1854	2.9
6-2500-110-OP	120.4	29.1	17.4	12.9	14.9	43.3	77.1	15.1	6.7	7.3	10.2	5.5	2.0	3/4	1876	3.9
6-2500-125-OP	122.7	29.1	17.4	12.9	14.9	45.6	77.1	15.1	7.5	7.3	10.2	5.5	2.0	3/4	1918	4.6
6-2500-135-OP	123.0	29.1	17.4	12.9	14.9	45.9	77.1	15.1	7.9	7.3	10.2	5.5	2.0	3/4	1949	5.8
6-3800-85-OP	127.3	29.1	23.6	12.9	14.9	41.2	86.1	20.9	4.9	7.3	10.2	5.5	4.9	3/4	3263	2.4
6-3800-95-OP	128.0	29.1	23.6	12.9	14.9	41.9	86.1	20.9	5.5	7.3	10.2	5.5	4.9	3/4	2985	2.9
6-3800-110-OP	129.4	29.1	23.6	12.9	14.9	43.3	86.1	20.9	6.7	7.3	10.2	5.5	4.9	3/4	3007	3.9
6-3800-125-OP	131.8	29.1	23.6	12.9	14.9	45.6	86.1	20.9	7.5	7.3	10.2	5.5	4.9	3/4	3051	4.6
6-3800-135-OP	132.0	29.1	23.6	12.9	14.9	45.9	86.1	20.9	7.9	7.3	10.2	5.5	4.9	3/4	3080	5.8
14-5100-95-OP	130.4	34.4	23.7	14.8	17.1	45.7	84.7	20.9	5.5	7.9	13.0	7.6	2.8	3/4	3389	3.2
14-5100-110-OP	132.5	34.4	23.7	14.8	17.1	47.8	84.7	20.9	6.7	7.9	13.0	7.6	2.8	3/4	3450	4.2
14-5100-125-OP	132.2	34.4	23.7	14.8	17.1	559.4	84.7	20.9	7.5	7.9	13.0	7.6	2.8	3/4	3532	5.4
14-5100-135-OP	132.5	34.4	23.7	14.8	17.1	47.8	84.7	20.9	7.9	7.9	13.0	7.6	2.8	3/4	3748	6.4
14-5100-145-OP	135.6	34.4	23.7	14.8	17.1	50.9	84.7	20.9	9.8	7.9	13.0	7.6	2.8	3/4	3893	7.3
14-5100-175-OP	135.8	34.4	23.7	14.8	17.1	51.1	84.7	20.9	9.8	7.9	13.0	7.6	2.8	3/4	4045	10.6
14-5100-200-OP	138.5	34.4	23.7	14.8	17.1	53.8	84.7	20.9	11.0	7.9	13.0	7.6	2.8	3/4	4321	13.8
14-5400-110-OP	130.4	34.4	23.7	14.8	17.1	47.8	82.6	20.9	6.7	7.9	13.0	7.6	2.8	3/4	3605	4.2
14-5400-125-OP	130.2	34.4	23.7	14.8	17.1	47.6	82.6	20.9	7.5	7.9	13.0	7.6	2.8	3/4	3638	5.4
14-5400-135-OP	130.5	34.4	23.7	14.8	17.1	47.8	82.6	20.9	7.9	7.9	13.0	7.6	2.8	3/4	3682	6.2
14-5400-145-OP	133.6	34.4	23.7	14.8	17.1	50.9	82.6	20.9	9.8	7.9	13.0	7.6	2.8	3/4	3770	7.3
14-5400-175-OP	133.7	34.4	23.7	14.8	17.1	51.1	82.6	20.9	9.8	7.9	11.6	7.6	2.8	3/4	3946	10.6
14-5400-185-OP	133.7	34.4	23.7	14.8	17.1	51.1	82.6	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4068	12.0
14-5400-200-OP	136.4	34.4	23.7	14.8	17.1	53.8	82.6	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4101	13.8
14-8300-125-OP	132.7	33.0	23.6	14.8	17.1	47.6	85.1	20.9	7.5	7.9	11.6	7.6	2.8	3/4	3748	5.4
14-8300-135-OP	133.0	33.0	23.6	14.8	17.1	47.8	85.1	20.9	7.9	7.9	11.6	7.6	2.8	3/4	3792	6.2
14-8300-145-OP	136.1	33.0	23.6	14.8	17.1	50.9	85.1	20.9	9.8	7.9	11.6	7.6	2.8	3/4	3880	7.3
14-8300-175-L	136.2	33.0	23.6	14.8	17.1	51.1	85.1	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4057	10.6
14-8300-185-OP	136.2	33.0	23.6	14.8	17.1	51.1	85.1	20.9	11.0	7.9	11.6	7.6	2.8	3/4	4178	12.0
14-8300-200-OP	138.9	33.0	23.6	14.8	17.1	53.8	85.1	20.9	12.6	7.9	11.6	7.6	2.8	3/4	4211	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 (in.)

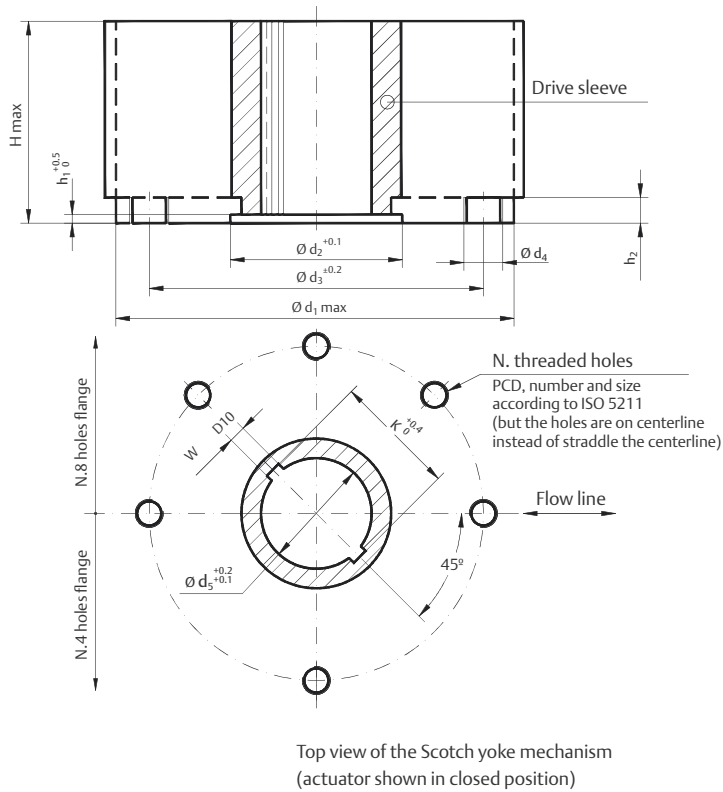
Model	A	B	C	D	E	F	G	ØH	ØK	L	M	N	P	Hydraulic connection NPT (in.)	Weight (lb)	Oil displacement (liters)
18-9600-145-OP	161.7	37.0	29.1	16.7	19.4	52.9	108.8	22.0	9.8	9.1	13.4	7.6	3.4	3/4	5886	8.4
18-9600-175-OP	161.8	37.0	29.1	16.7	19.4	53.0	108.8	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6063	12.2
18-9600-185-OP	161.8	37.0	29.1	16.7	19.4	53.0	108.8	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6089	14.0
18-9600-200-OP	164.5	37.0	29.1	16.7	19.4	55.7	108.8	22.0	12.6	9.1	13.4	7.6	3.4	3/4	6261	15.9
18-9600-235-OP	164.3	37.6	29.1	16.7	19.4	55.6	108.8	22.0	13.6	9.1	14.0	7.6	3.4	3/4	6433	21.0
18-9800-145-OP	161.3	37.0	29.1	16.7	19.4	52.9	108.4	22.0	9.8	9.1	13.4	7.6	3.4	3/4	6393	8.4
18-9800-175-OP	161.4	37.0	29.1	16.7	19.4	53.0	108.4	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6548	12.2
18-9800-185-OP	161.4	37.0	29.1	16.7	19.4	53.0	108.4	22.0	11.0	9.1	13.4	7.6	3.4	3/4	6570	14.0
18-9800-200-OP	164.1	37.6	29.1	16.7	19.4	55.7	108.4	22.0	12.6	9.1	13.4	7.6	3.4	3/4	6724	15.9
18-9800-235-OP	163.9	37.6	29.1	16.7	19.4	55.6	108.4	22.0	13.6	9.1	13.4	7.6	3.4	3/4	6228	21.0
18-10500-175-OP	164.7	37.6	33.5	16.7	19.4	53.0	111.7	26.4	11.0	9.1	13.4	7.6	5.6	3/4	7297	12.2
18-10500-185-OP	164.7	37.6	33.5	16.7	19.4	53.0	111.7	26.4	11.0	9.1	13.4	7.6	5.6	3/4	7275	14.0
18-10500-200-OP	167.4	37.6	33.5	16.7	19.4	55.7	111.7	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7573	15.9
18-10500-235-OP	167.2	37.6	33.5	16.7	19.4	55.6	111.7	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7668	21.0
18-11000-175-OP	160.2	37.0	33.5	16.7	19.4	53.0	107.1	26.4	9.1	14.0	13.4	7.6	5.6	3/4	7628	12.2
18-11000-185-OP	160.2	37.6	33.5	16.7	19.4	54.9	107.1	26.4	9.1	14.0	13.4	7.6	5.6	3/4	8647	14.0
18-11000-200-OP	162.8	37.0	33.5	16.7	19.4	55.7	107.1	26.4	12.6	9.1	13.4	7.6	5.6	3/4	7749	15.9
18-11000-235-OP	162.7	37.0	33.5	16.7	19.4	55.6	107.1	26.4	13.6	9.1	13.4	7.6	5.6	3/4	7992	21.0
32-12000-175-OP	178.0	41.9	38.6	19.9	23.0	59.7	117.7	31.5	11.0	10.6	15.6	9.2	10.2	3/4	10177	14.3
32-12000-200-OP	180.3	44.5	38.6	19.9	23.0	59.2	116.9	31.5	12.6	10.6	16.5	9.4	6.3	3/4	9921	18.6
32-12000-235-OP	179.3	41.9	38.6	19.9	23.0	62.4	116.9	31.5	13.6	10.6	15.6	9.2	10.2	3/4	9683	25.6
32-12000-250-OP	182.8	41.9	38.6	19.9	23.0	65.9	116.9	31.5	15.4	10.6	15.6	9.2	10.2	3/4	9729	29.0
32-15000-175-OP	178.0	41.9	38.6	19.9	23.0	60.4	117.7	31.5	11.0	10.6	15.6	9.2	10.2	3/4	9800	14.3
32-15000-200-OP	180.3	41.9	38.6	19.9	23.0	62.1	117.7	31.5	12.6	10.6	15.6	9.2	10.2	3/4	10042	18.6
32-15000-235-OP	180.1	41.9	38.6	19.9	23.0	62.4	117.7	31.5	13.6	10.6	15.6	9.2	10.2	3/4	10137	25.6
32-15000-250-OP	183.6	41.9	38.6	19.9	23.0	65.9	117.7	31.5	15.4	10.6	15.6	9.2	10.2	3/4	10514	29.0
50-15400-200-OP	191.0	43.0	38.6	21.7	25.0	68.5	122.5	31.5	12.6	11.8	15.2	9.2	10.1	3/4	12595	20.7
50-15400-235-OP	194.6	43.0	42.5	21.7	25.0	72.1	122.5	31.5	13.4	11.8	15.2	9.2	10.1	3/4	11363	28.6
50-15400-250-OP	190.1	43.0	42.5	21.7	25.0	67.6	122.5	31.5	15.4	11.8	15.2	9.2	10.1	3/4	11409	32.0
50-15400-300-OP	194.3	43.0	42.5	21.7	25.0	71.7	122.5	31.5	18.1	11.8	15.2	9.2	10.1	1	12641	46.0
50-15600-200-OP	190.6	43.0	42.5	21.7	25.0	68.0	122.5	31.5	12.6	11.8	15.2	9.2	10.1	3/4	12364	20.7
50-15600-235-OP	194.6	43.0	42.5	21.7	25.0	72.1	122.5	31.5	13.6	11.8	15.2	9.2	10.1	3/4	12505	28.6
50-15600-250-OP	190.1	43.0	42.5	21.7	25.0	67.6	122.5	31.5	15.4	11.8	15.2	9.2	10.1	3/4	11409	32.0
50-15600-300-OP	194.3	43.0	38.6	21.7	25.0	71.7	122.5	31.5	18.1	11.8	15.2	9.2	10.1	1	12170	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



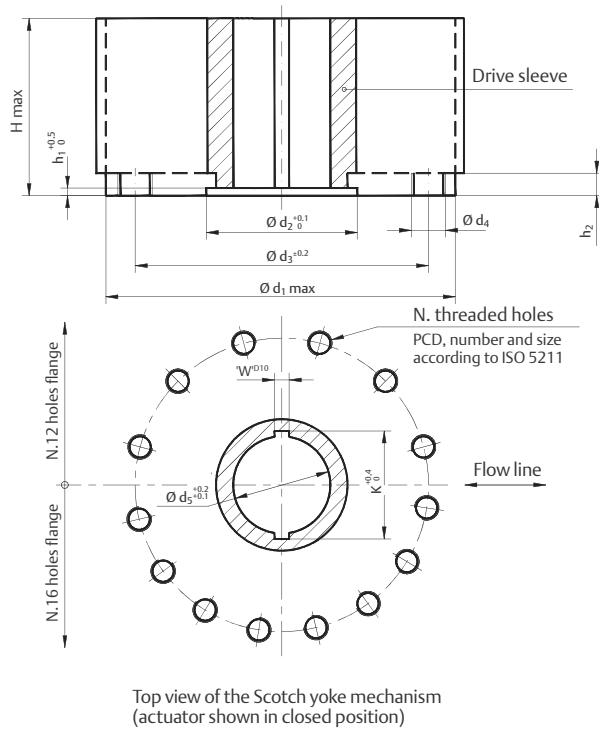
Coupling dimensions (in.) models 0.3 to 0.6

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
0.30	9.45	3.7	3.7	M20	0.2	0.2	0.7	5.0	2.8	0.5	3.0
0.90	12.20	4.4	4.4	M16	0.3	0.2	0.7	5.9	3.4	0.6	3.8
1.50	14.17	5.7	5.7	M20	0.3	0.2	0.7	7.5	4.4	0.7	4.7
3.00	16.93	7.7	7.7	M30	0.3	0.4	0.9	7.9	6.2	1.0	6.6
6.00	20.47	9.8	9.8	M36	0.3	0.6	1.1	10.2	7.9	1.1	8.4

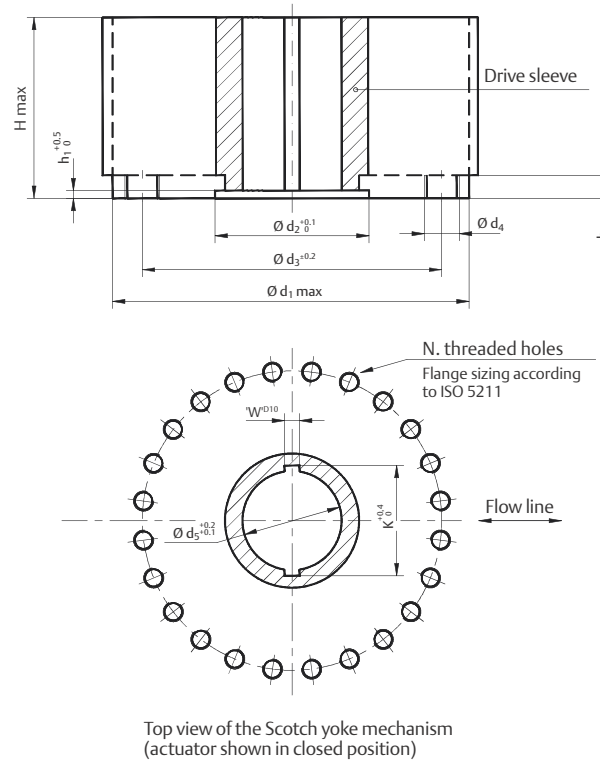
NOTE:

$\varnothing d_1$ is maximum adapter flange diameter.

Actuator models 14 to 32



Actuator models 50 to 80



Coupling dimensions (in.) 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	22.8	9.8	19.0	M36	0.5	0.4	1.1	13.4	6.9	1.8	7.7
18	26.8	11.4	23.7	M36	0.6	0.5	1.3	13.8	7.9	1.8	8.7
32	30.7	12.2	23.7	M36	0.6	0.5	1.3	15.7	8.7	2.0	9.6

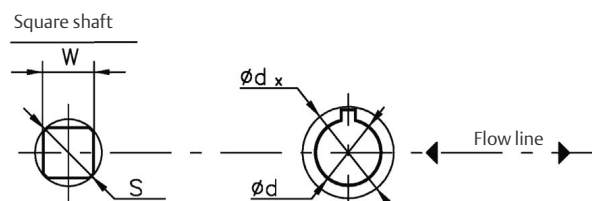
Coupling dimensions (in.) models 50 and 80

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	31.5	12.4	27.5	M36	0.9	0.4	1.3	16.9	9.4	2.2	10.4
80	35.4	14.6	32.0	M42	0.9	0.4	1.5	21.3	11.0	1.8	12.9

NOTE:

$\varnothing d_1$ is maximum adapter flange diameter.

Stem Acceptance



Stem acceptance dimensions for insert bushes (in.)

Housing size	Max. stem diameter with rectangular key d (bxh) ^[2] (inch)	Max. accepted diameter described by the key dx ^[3] (inch)	Max. accepted square stem (inch)		Max. accepted square stem height (inch) ^{**}
			W	S^*	
0.3	2.09 (0.63x0.39)	2.52	1.81	2.52	4.72
0.9	2.44 (0.71x0.43)	2.87	2.17	2.87	5.51
1.5	3.35 (0.87x0.55)	3.90	2.87	3.90	7.09
3	4.96 (1.26x0.71)	5.71	4.09	5.71	7.48
6	6.34 (1.57x0.87)	7.28	5.24	7.28	9.84
14	4.13 (1.10x0.63)	4.76	-	-	13.39
18	4.80 (1.26x0.71)	5.51	-	-	13.78
32	6.30 (1.57x0.87)	7.20	-	-	15.75
50	6.30 (1.57x0.87)	7.20	-	-	16.93
65	-	-	-	-	21.26
80	-	-	-	-	21.26
100	-	-	-	-	23.62

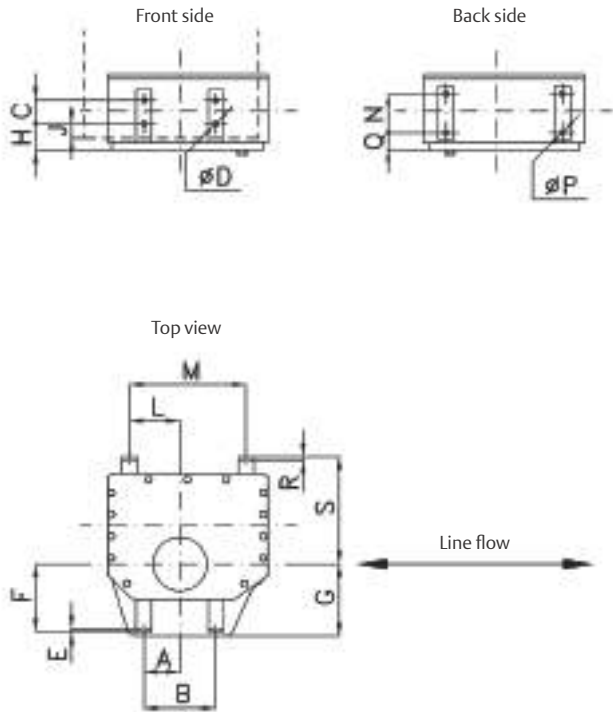
NOTES:

- 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.
 - Key according to UNI6604 or DIN 6885 sh.1 or ISO 773 or equivalent.
 - 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

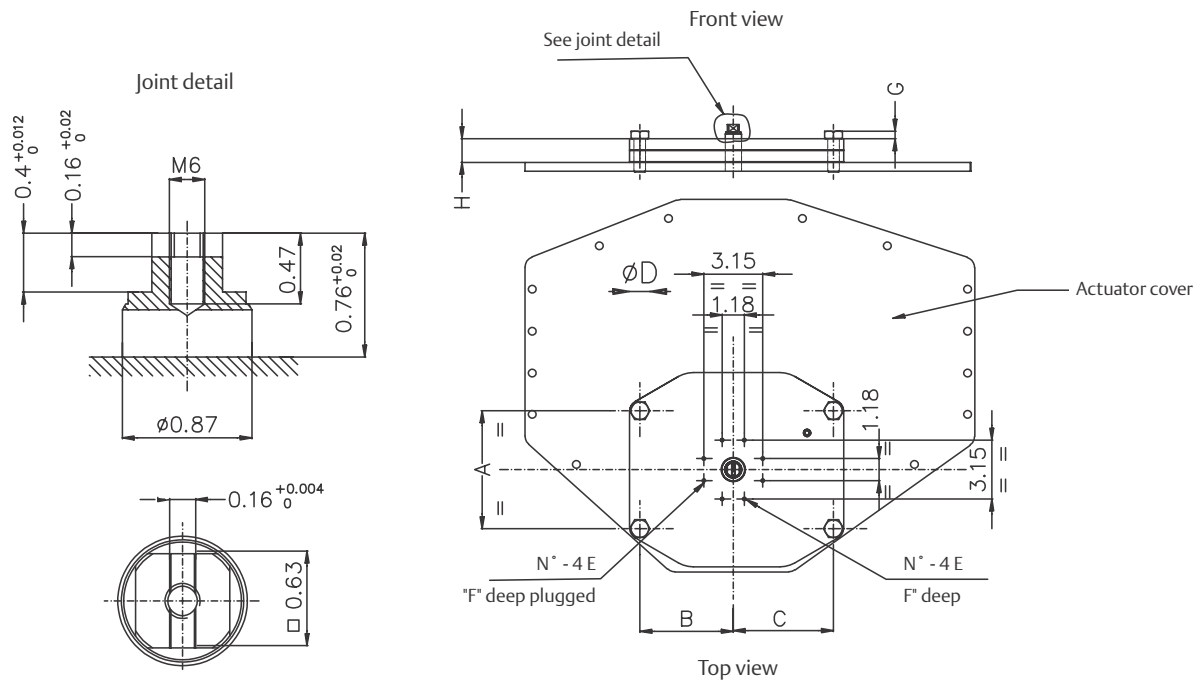
Actuator models 0.3 to 80



Accessories mounting dimensions (in.)

Actuator model	A	B	C	$\varnothing D$	E	F	G	H	J	L	M	N	$\varnothing P$	Q	R	S
0.3	3.1	6.1	2.4	0.6	0.2	4.4	4.7	1.5	0.5	3.6	7.9	2.4	0.6	1.4	0.2	7.9
0.9	3.6	7.3	2.4	0.6	0.2	6.1	6.7	2.4	1.4	3.3	7.9	2.4	0.6	1.9	0.2	9.6
1.5	3.6	7.3	2.4	0.6	0.2	6.9	7.3	2.4	1.4	5.1	11.8	3.9	0.6	1.8	0.2	11.2
3	4.6	9.3	3.3	0.9	0.3	8.0	8.5	2.2	1.0	9.1	19.7	3.9	0.6	2.1	0.2	14.6
6	5.4	17.9	4.5	0.9	0.3	9.8	10.2	2.3	0.9	8.8	19.7	3.9	0.6	3.4	0.3	18.9
14	12.4	24.8	7.9	1.1	0.4	8.9	13.0	3.8	2.2	8.7	19.7	6.7	1.1	3.9	0.3	21.4
18	12.4	24.8	7.9	1.1	0.4	9.3	13.4	2.8	1.3	12.0	26.8	8.5	1.1	3.1	0.4	23.6
32	12.4	24.8	7.9	1.1	0.4	15.2	15.6	2.8	1.3	16.3	35.0	8.5	1.1	5.9	0.4	26.0
50	15.3	33.9	9.8	1.2	0.5	14.6	15.2	3.0	1.4	18.6	40.6	8.5	1.1	6.4	0.4	42.2
80	19.7	39.4	9.8	1.2	0.6	17.2	17.7	4.2	2.0	19.7	43.3	8.5	1.1	10.6	0.6	35.4

Accessories Mounting Holes on Actuator Top (Cover and Yoke)



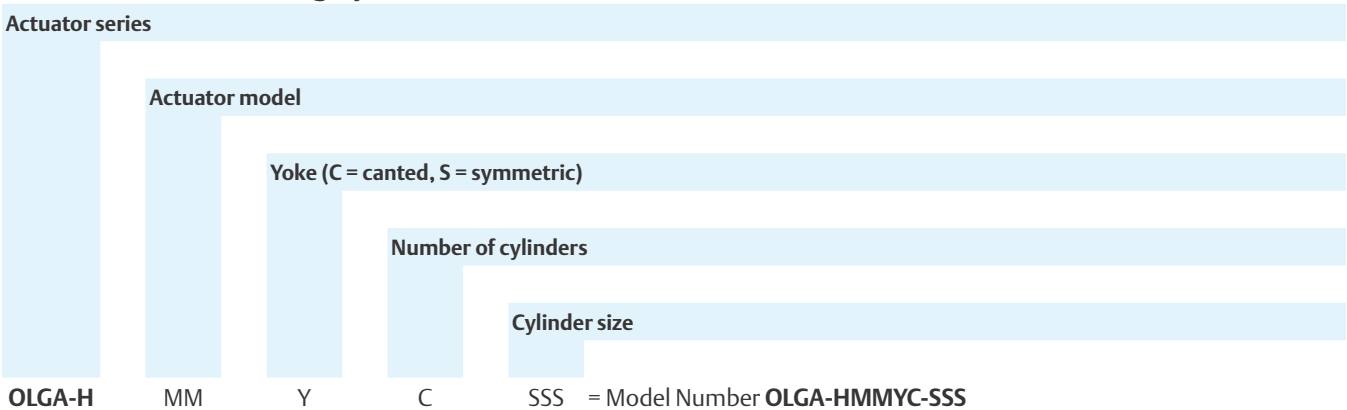
Dimensions (in.)

Actuator model	A	B	C	D	E	F	G	H
0.3	-	-	-	-	M5	0.35	-	1.26
0.9	-	-	-	-	M5	0.35	-	1.26
1.5	-	-	-	-	M5	0.35	-	1.26
3	6.30	5.00	5.35	1.18	M5	0.35	0.43	1.26
6	6.30	5.00	5.35	1.18	M5	0.35	0.43	1.26
14	6.30	5.00	5.35	1.18	M5	*9	0.43	1.26
*	0.43	1.26	4.29	1.18	M5	0.35	0.43	1.14
18	12.36	4.29	4.29	1.18	M5	0.35	0.43	1.14
32	12.36	4.29	4.29	1.18	M5	0.35	0.43	1.14
50	11.05	5.45	5.45	1.46	M5	0.35	0.51	1.26
65	16.14	7.09	7.09	1.73	M5	0.35	0.63	1.26
80	16.14	7.09	7.09	1.73	M5	0.35	0.63	1.26
100	18.11	8.07	8.07	1.73	M5	0.35	0.63	1.26

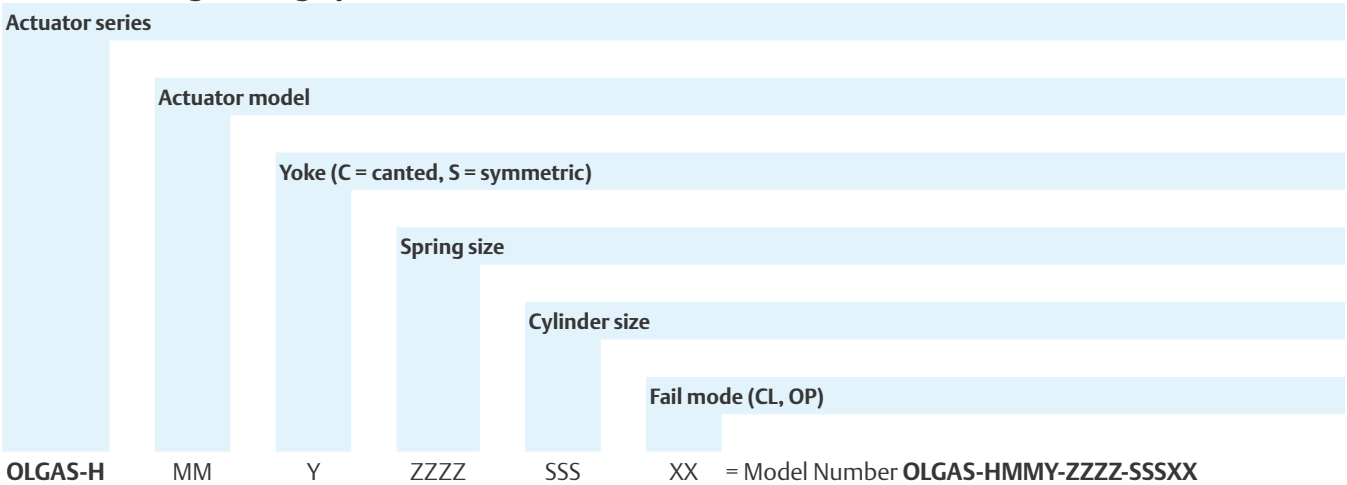
OLGA-H/OLGAS-H Hydraulic Actuators

Selection Guide

Scotch Yoke Double-Acting Hydraulic Actuators



Scotch Yoke Single Acting Hydraulic Actuators



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