GIBSON valves

Actuators

Pneumatic
Electric
Hidraulic

Actuators

Pneumatic
Electric
Hidraulic

Ghibson offers a wide range of actuators and accessories for valve automation.
Normally supplied as part of complete assemblies with valves divided into the following types:

- **Pneumatic** actuators are based on rack and pinion technology, very compact and resistant. Available with different options for any kind of industrial applications and ambient conditions.
- **Electric** actuators are available in different versions for ON-OFF and/or regulating applications. Electric actuators also include Atex versions as well a wide range of customizations.
- Ghibson's own manufactured **hydraulic** actuators (ARES series) are designed to fulfill the specific requirement in industrial applications: compact design and high performance are the main characteristics of this product range.

Pneumatic actuators

DVP DIGITAL VALVES PLATFORM
visit **ghibson.it/dvp** to download 2D and 3D technical drawing.

GHIBSON
Zola Predosa
Bologna

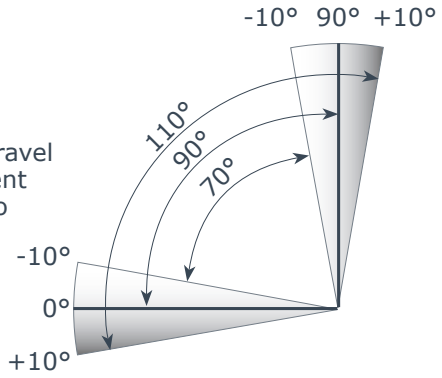
Pneumatic Actuators — DA double acting - SR spring return

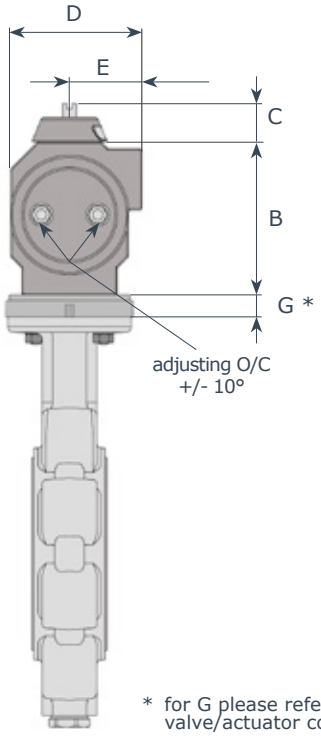
Features:

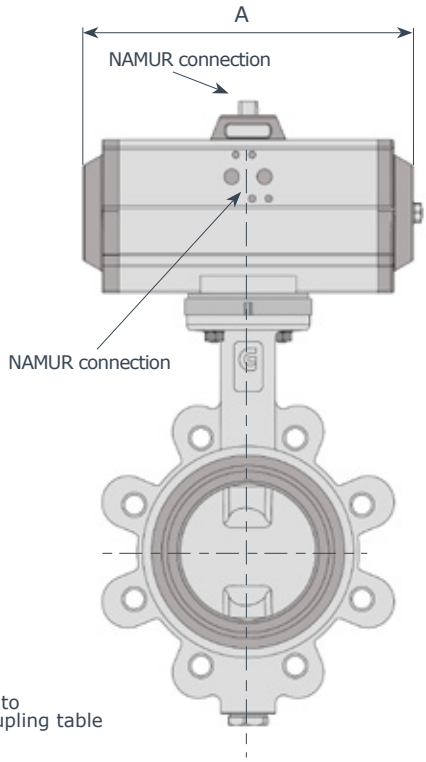
Max air pressure: **10 bar**
Temperature: **-20°C / +80°C**
on request: **-50°C / +150°C**
torque at 5.6 Bar: **31 Nm / 3564 Nm**
Double travel stop open/close: **±10°**

MT series actuators feature a bi-directional travel stop. Side located stops allow a ±10° adjustment in both closing and opening directions, so guarantee a range of adjustment between 70° and 110° of actuator stroke.

Stops can be modified on request to allow higher closing/opening angles







* for G please refer to valve/actuator coupling table

Mod. MT: double acting
Mod. MTS: single acting spring return

Operating media:
dry/clear air : P max 10 Bar

Temperature:
O-Rings NBR -20° C/+100° C
O-Rings FKM -15° C/+150° C
O-Rings Silicon -50° C/+ 80° C

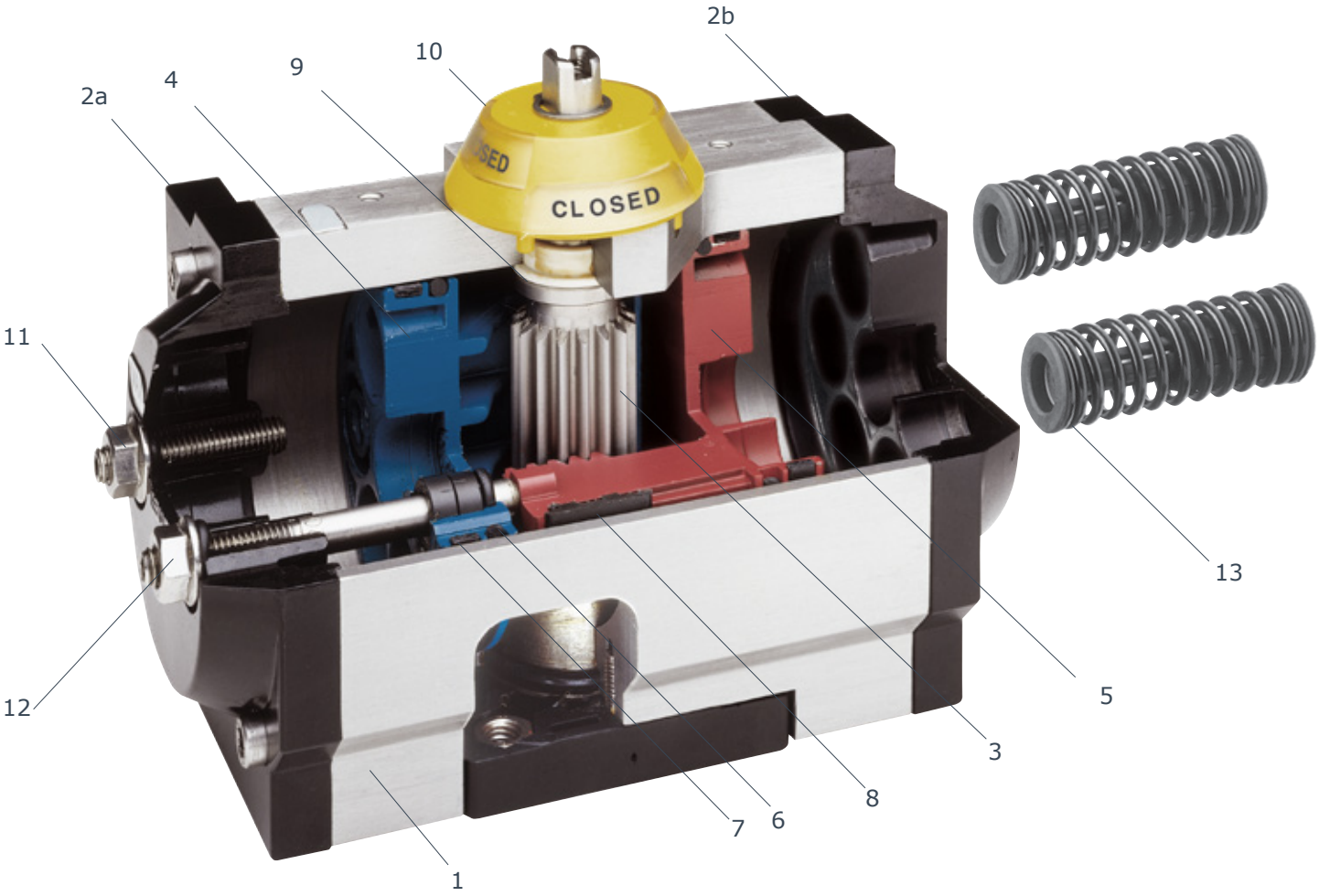
Rotation: 90°
Regulation range: +/- 10°
Lubrification For Life

Flange:
ISO 5211/DIN 3337
connection for solenoid valve, switches box:
NAMUR VDI / VDE 3845

DA	SR	A	B	C	D	E	DA	SR	A	B	C	D	E
MT 10	**MTS 10**	119	70	20	67	27	**MT 45**	**MTS 45**	351	168.5	30	145	73
MT 15	**MTS 15**	165	81	30	81	47	**MT 50**	**MTS 50**	361	202	30	181	91
MT 17	**MTS 17**	197	81	30	81	47	**MT 55**	**MTS 55**	418	202	30	181	91
MT 20	**MTS 20**	177	98	30	96	54	**MT 60**	**MTS 60**	444	274	30	232	116
MT 25	**MTS 25**	239	98	30	96	54	**MT 65**	**MTS 65**	502	274	30	232	116
MT 30	**MTS 30**	230	117	30	114	62	**MT 70**	**MTS 70**	587	332	30	332	166
MT 35	**MTS 35**	246	154	30	131	65.5	**MT 75**	**MTS 75**	677	332	30	332	166
MT 40	**MTS 40**	290	154	30	131	65.5							

* MTS / MTS4 : same dimensions

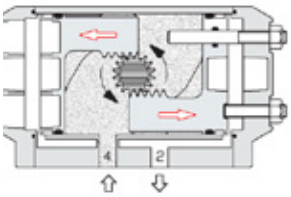
Pneumatic Actuators rack & pinion MT series



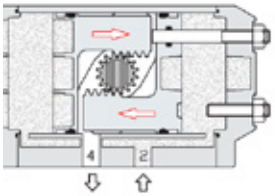
item.	part	material
1	body	• anodized aluminium ASTM B210
2a	left end cap	• die-cast aluminium UNI 5076
2b	right end cap	• die-cast aluminium UNI 5076
3	pinion	• steel SAE 11L14 • nickel coated steel acc. to ASTM B733
4	left piston	• die-cast aluminium UNI 5076
5	right piston	• die-cast aluminium UNI 5076
6	piston O-ring	• NBR
7	bearing pad	• techno-polymer
8	piston skate	• techno-polymer
9	bearing pad upper pinion	• techno-polymer
10	position indicator	• techno-polymer
11	open travel stop	• stainless steel AISI 304
12	close travel stop	• stainless steel AISI 304
13	spring SR mod.	• spring steel

Options body and end cap:
hard anodizing or PTFE coating or epoxy powder coated units or electroless nickel plating.

Torque chart double acting - Nm



4: inlet air / 2: outlet air



2: inlet air / 4: outlet air

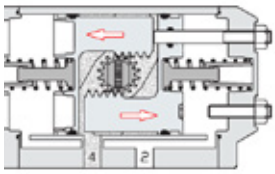
TIPO/TYPE	2 Bar	3 Bar	4 Bar	5 Bar	5,62 Bar	6 Bar	7 Bar	8 Bar	9 Bar	10 Bar
MT 10	2.52	5.0	10.1	12.6	14.1	15.1	17.6	10.5	--	--
MT 15	11	17	22	28	31	33	39	44	50	55
MT 17	15	22	29	36	41	44	51	58	65	73
MT 20	20	30	40	50	57	60	70	80	90	100
MT 25	30	45	60	76	85	91	106	121	136	151
MT 30	40	60	80	101	113	121	141	161	181	201
MT 35	64	97	129	161	180	193	226	258	290	322
MT 40	81	121	161	202	226	242	282	323	363	403
MT 45	126	189	252	315	353	377	440	503	566	629
MT 50	181	272	362	453	509	544	634	725	815	906
MT 55	242	362	483	604	676	725	846	966	1087	1208
MT 60	366	550	733	916	1030	1099	1282	1466	1649	1832
MT 65	483	725	966	1208	1358	1450	1691	1933	2174	2416
MT 70	946	1419	1892	2365	2658	2838	3311	3784	--	--
MT 75	1268	1903	2537	3171	3564	3805	4439	5074	--	--

Torque chart single acting 90° - Nm

phase 1

start

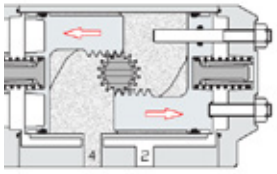
inlet air - working air



4: inlet air

end

inlet air - working air

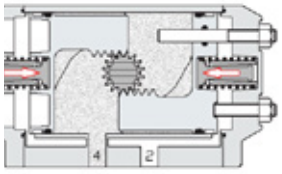


4: inlet air

phase 2

start

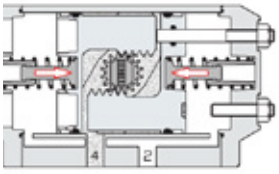
outlet air - working springs



4: outlet air

end

outlet air - working springs



4: outlet air

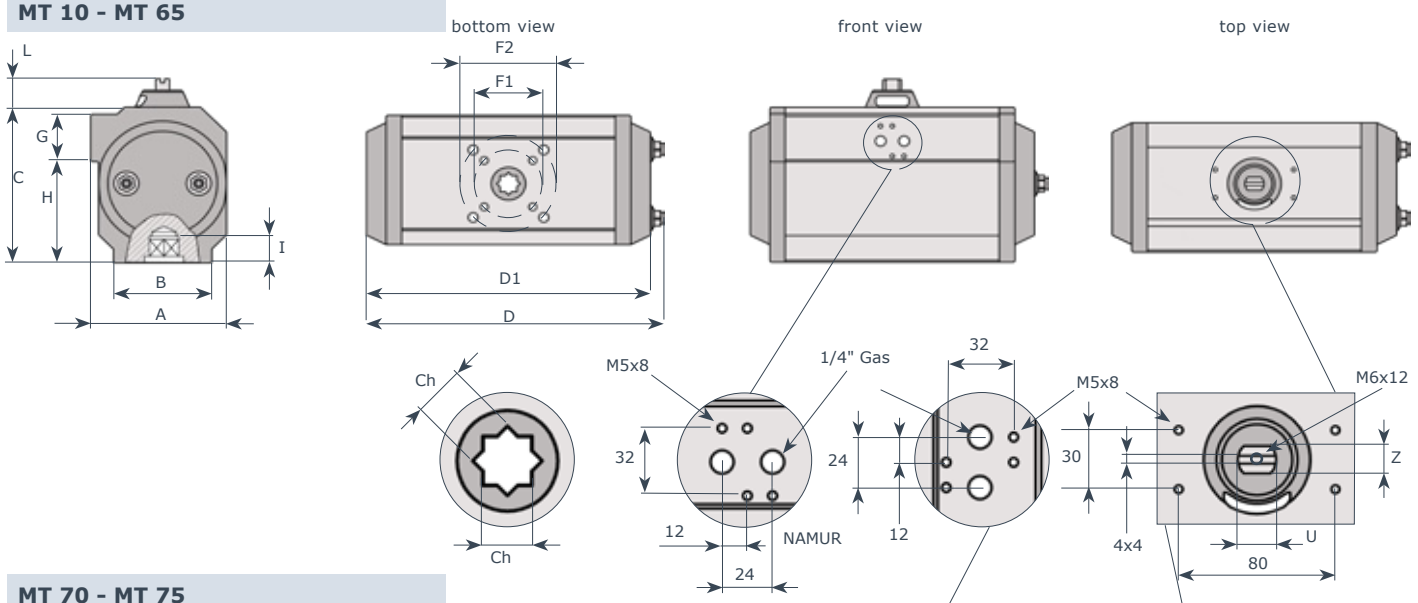
type	springs	phase 1														phase 2	
		3 bar		4 bar		5 bar		5.6 bar		6 bar		7 bar		8 Bar			
		start	end	start	end	start	end	start	end	start	end	start	end	start	end	start	end
MT 10	1+1	5,1	3,9	7,6	6,4	10,1	8,9	11,6	10,4	12,6	11,4	15,1	13,9	17,7	13,9	3,7	2,5
	2+2	2,6	0,2	5,1	2,7	7,6	5,2	9,1	6,7	10,1	7,7	12,6	10,2	15,2	10,2	7,4	5,0
	3+3	--	--	--	--	5,1	1,5	6,6	3,0	7,6	4,0	10,1	6,5	12,7	6,5	11,2	7,5
MT 15	2+2	10,5	8,1	16,0	13,6	21,5	19,1	24,6	22,5	27	24,6	32,5	30,1	38	35,6	8,4	6,0
	3+3	7,4	3,9	12,9	9,4	18,4	14,9	21,8	18,3	23,9	20,4	29,4	25,9	34,9	31,4	12,6	9,1
	4+4	--	--	9,9	5,1	15,4	10,6	18,8	14	20,9	16,1	26,4	21,6	31,9	27,1	16,9	12,1
	5+5	--	--	6,9	0,9	12,4	6,4	15,8	9,8	17,9	11,9	23,4	17,4	28,9	22,9	21,1	15,1
	7+5	--	--	--	--	9,4	2,2	12,8	5,6	14,9	7,7	20,4	13,2	25,9	18,7	25,3	18,1
MT 17	2+2	14,5	11,2	21,8	18,5	29,0	25,7	33,4	30,1	36,3	33	43,5	40,2	50,8	47,5	10,5	7,2
	3+3	10,9	6,0	18,2	13,3	25,4	20,5	29,8	24,9	32,7	27,8	39,9	35	47,2	42,3	15,7	10,8
	4+4	7,3	0,8	14,6	8,1	21,8	15,3	26,2	19,7	29,1	22,6	36,3	29,8	43,6	37,1	20,9	14,4
	5+5	--	--	10,9	2,9	18,1	10,1	22,5	14,5	25,4	17,4	32,6	24,6	39,9	31,9	26,1	18,1
	7+5	--	--	--	--	14,5	4,8	18,9	9,2	21,8	12,1	29	19,3	36,3	26,6	31,4	21,7
MT 20	2+2	19,6	16,2	29,6	26,2	39,6	36,2	46,1	42,7	49,6	46,2	59,6	56,2	69,6	66,2	13,8	10,4
	3+3	14,4	9,2	24,4	19,2	34,4	29,2	40,9	35,7	44,4	39,2	54,4	49,2	64,4	59,2	20,8	15,6
	4+4	9,2	2,3	19,2	12,3	29,2	22,3	35,7	28,8	39,2	32,3	49,2	42,3	59,2	52,3	27,7	20,8
	5+5	--	--	14,0	5,4	24,0	15,4	30,5	21,9	34	25,4	44	35,4	54	45,4	34,6	26,0
	7+5	--	--	--	--	18,8	8,4	25,3	14,9	28,8	18,4	38,8	28,4	48,8	38,4	41,6	31,2

Torque chart — single acting 90° - Nm

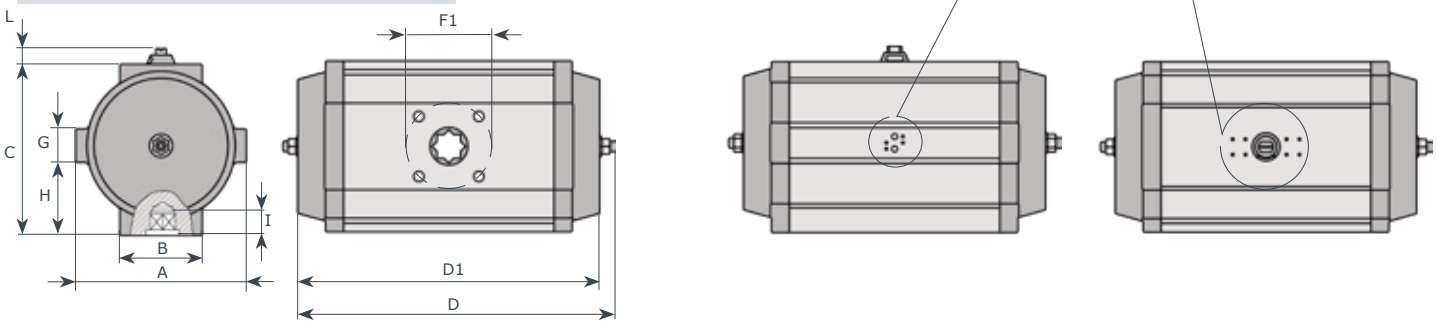
type	springs	phase 1														phase 2	
		3 bar		4 bar		5 bar		5.6 bar		6 bar		7 bar		8 Bar			
		start	end	start	end	start	end	start	end	start	end	start	end	start	end	start	end
MT 25	2+2	31,3	23,2	46,4	38,3	61,5	53,4	70,5	62,4	76,6	68,5	91,7	83,6	106,8	98,7	22,1	14,0
	3+3	24,4	12,1	39,5	27,2	54,6	42,3	63,6	51,3	69,7	57,4	84,8	72,5	99,9	87,6	33,2	20,9
	4+4	17,4	1,1	32,5	16,2	47,6	31,3	56,6	40,3	62,7	46,4	77,8	61,5	92,9	76,6	44,2	27,9
	5+5	--	--	25,5	5,1	40,6	20,2	49,6	29,2	55,7	35,3	70,8	50,4	85,9	65,5	55,3	34,9
	7+5	--	--	--	--	33,6	9,2	42,6	18,2	48,7	24,3	63,8	39,4	78,9	54,5	66,3	41,9
MT 30	2+2	39,2	32,0	59,3	52,1	79,4	72,2	91,6	84,4	99,5	92,3	119,6	112,4	139,7	132,5	28,3	21,1
	3+3	28,7	17,9	48,8	38,0	68,9	58,1	81,4	70,3	89	78,2	109,1	98,3	129,2	118,4	42,4	31,6
	4+4	18,1	3,7	38,2	23,8	58,3	43,9	70,5	56,1	78,4	64	98,5	84,1	118,6	104,2	56,6	42,2
	5+5	--	--	27,7	9,7	47,8	29,8	60	42	67,9	49,9	88	70	108,1	90,1	70,7	52,7
	7+5	--	--	--	--	37,3	15,6	49,5	27,8	54,7	35,7	77,5	55,8	97,6	75,9	84,9	63,2
MT 35	2+2	62,0	50,1	94,2	82,3	126,5	114,6	145,8	133,9	158,7	146,8	190,9	179	223,1	211,2	46,5	34,6
	3+3	44,6	26,9	76,8	59,1	109,1	91,4	128,4	110,7	141,3	123,6	173,5	155,8	205,7	188	69,7	52,0
	4+4	27,2	3,6	59,5	35,8	91,8	68,1	111,1	87,4	124	100,3	156,2	132,5	188,4	164,7	93,0	69,3
	5+5	--	--	42,2	12,6	74,5	44,9	93,8	64,2	106,7	77,1	138,9	109,3	171,1	141,4	116,2	86,6
	7+5	--	--	--	--	57,1	21,6	76,4	40,9	89,3	53,8	121,5	86	153,7	118,2	139,5	104,0
MT 40	2+2	79,0	63,9	119,3	104,2	159,6	144,5	183,8	168,7	199,9	184,8	240,3	225,2	280,6	265,5	57,0	41,9
	3+3	58,1	35,4	98,4	75,7	138,7	116	162,9	140,2	179	156,3	219,4	196,7	259,7	237	85,5	62,8
	4+4	37,2	6,8	77,5	47,1	117,8	87,4	142	111,6	158,1	127,7	198,5	168,1	238,8	208,4	114,1	83,7
	5+5	--	--	56,5	18,6	96,8	58,9	121	83,1	137,1	99,2	177,5	139,6	217,8	179,9	142,6	104,7
	7+5	--	--	--	--	75,9	30,4	100,1	54,6	116,2	70,7	156,6	111,1	196,9	151,4	171,1	125,6
MT 45	2+2	125,6	88,3	188,5	151,2	251,4	214,1	289,6	252,3	314,3	277	377,2	339,9	440,1	402,8	100,4	63,1
	3+3	94,0	38,1	156,9	101,0	219,8	163,9	258	202,1	282,7	226,8	345,6	289,7	408,5	352,6	150,6	94,7
	4+4	--	--	125,4	50,8	188,3	113,7	226,5	151,9	251,2	176,6	314,1	239,5	377	302,4	200,8	126,2
	5+5	--	--	--	--	156,7	63,5	194,9	101,7	219,6	126,4	282,5	189,3	345,4	252,2	251,0	157,8
	7+5	--	--	--	--	125,2	13,3	163,4	51,5	188,1	76,2	251	139,1	313,9	202	301,2	189,3
MT 50	2+2	173,7	147,5	264,3	238,1	354,9	328,7	411,1	384,9	445,5	419,3	536,1	509,9	626,7	600,5	124,3	98,1
	3+3	124,6	85,3	215,2	175,9	305,8	266,5	362	322,7	396,4	357,1	487	447,7	577,6	538,2	186,5	147,2
	4+4	--	--	166,2	113,8	256,8	204,4	313	260,6	347,4	295	438	385,6	528,6	476,2	248,6	196,2
	5+5	--	--	117,1	51,6	207,7	142,2	263,9	198,4	298,3	232,8	388,9	323,4	479,5	414	310,8	245,3
	7+5	--	--	--	--	158,7	80,1	214,9	136,3	249,3	170,7	339,9	261,3	430,5	351,9	372,9	294,3
MT55	2+2	243,2	194,4	364,0	315,2	484,8	436	557,3	508,5	605,6	556,8	726,4	677,6	847,2	798,4	167,9	119,1
	3+3	183,6	110,5	304,0	231,3	425,2	352,1	497,7	424,6	546	472,9	666,8	593,7	787,6	714,5	251,8	178,7
	4+4	124,0	26,6	244,8	147,4	365,6	268,2	438,1	340,7	486,4	389	607,2	509,8	728	630,6	335,7	238,3
	5+5	--	--	185,3	63,4	306,1	184,2	378,6	256,7	426,8	305	547,7	425,8	668,5	546,6	419,7	297,8
	7+5	--	--	--	--	246,5	100,3	319	172,8	367,3	221,1	488,1	341,9	608,9	462,7	503,6	357,4
MT 60	2+2	356,5	307,4	539,7	490,6	722,9	763,8	836,5	787,4	906,1	857	1089,3	1040,2	1272,5	1223,4	242,2	193,1
	3+3	260,0	186,2	443,2	369,4	626,4	552,6	740	666,2	812,6	735,8	992,8	919	1176	1102,2	363,4	289,6
	4+4	163,4	65,1	346,6	248,3	529,8	431,5	643,4	545,1	713	614,7	896,2	797,9	1079,4	981,1	484,5	386,2
	5+5	--	--	250,1	127,2	433,3	310,4	546,9	424	616,5	493,6	799,7	676,8	982,9	860	605,6	482,7
	7+5	--	--	153,5	6,2	336,7	189,4	450,3	303	519,9	372,6	703,1	555,8	886,3	739	726,6	579,3
MT 65	2+2	489,6	404,7	731,2	649,3	972,8	890,9	1122,6	1040,7	1214,4	1132,5	1456,6	1374,1	1697,6	1615,5	317,1	235,2
	3+3	372	249,1	613,6	490,7	855,2	732,3	1005	882,1	1096,8	973,9	1338,4	1215,5	1580	1457,1	475,7	352,8
	4+4	254,3	90,6	495,9	332,2	737,5	573,8	887,3	723,6	979,1	815,4	1220,7	1057	1462,3	1298,6	634,2	470,5
	5+5	--	--	378,3	173,6	619,9	415,2	769,7	565	861,5	656,8	1103,1	898,4	1344,7	1140	792,8	588,1
	7+5	--	--	260,8	14,8	502,4	256,4	652,2	406,2	744	498	985,6	739,6	1227,2	981,2	951,6	705,6
MT 70	2+2	1073	940	1546	1413	2019	1886	2312	2179	2492	2359	2965	2832	3438	3305	479	346
	3+3	900	700	1373	1173	1846	1646	2139	1939	2319	2119	2792	2592	3265	3065	719	519
	4+4	727	461	1200	934	1673	1407	1966	1700	2146	1880	2619	2353	3092	2826	958	692
	5+5	--	--	1026	694	1499	1167	1792	1460	1972	1640	2445	2113	2918	2586	1198	866
	6+6	--	--	853t	454	1326	927	1619	1220	1799	1400	2272	1873	2745	2346	1438	1039
	7+7	--	--	--	--	1153	688	1446	981	1626	1161	2099	1634	2572	2107	1677	1212
	8+8	--	--	--	--	--	--	1273	741	1453	921	1926	1394	2399	1867	1917	1385
MT 75	2+2	1500	1261	2134	1895	2768	2529	3161	2922	3402	3163	4036	3797	4671	4432	642	403
	3+3	1299	940	1933	1574	2567	2208	2960	2601	3201	2842	3835	3476	4470	4111	936	604
	4+4	1098	619	1732	1253	2366	1887	2759	2280	3000	2521	3634	3155	4269	3790	1284	805
	5+5	--	--	1530	933	2164	1567	2557	1960	2798	2201	3432	2835	4067	3470	1604	1007
	6+6	--	--	1329	612	1963	1246	2356	1639	2597	1880	3231	2514	3866	3149	1925	1208
	7+7	--	--	--	--	1761	925	2154	1318	2395	1559	3029	2193	3664	2828	2246	1410
	8+8	--	--	--	--	1560	604	1953	997	2194	1238	2828	1872	3463	2507	2567	1611

Pneumatic actuators dimensions

MT 10 - MT 65



MT 70 - MT 75



tipo/type	A	B	C	D	D1	F1	F2	G	H	I	Ch	L	U	Z
MT10	-	53	71	119	-	-	F03	45	26	12,5	11	20	12/14	9/11
MT15	81	62	81	175	165	F05	F07	45	36	19	14	30	12	10
MT17	81	62	81	207	197	F05	F07	45	36	19	14	30	12	10
MT20	96	76,5	98	186	177	F05	F07	45	53	19	17	30	14	10
MT25	96	76,5	98	248	239	F05	F07	45	53	23	17	30	14	10
MT30	114	90,5	117	241	230	F05	F07	45	72	23	17	30	19,5	14
MT35	131	95,5	154	261	246	F07	F10	45	109	30	22	30	19,5	14
MT40	131	95,5	154	305	290	F07	F10	45	109	30	22	30	19,5	14
MT45	145	98,5	168,5	367	351	F07	F10	45	123.5	30	22	30	28	20
MT50	181	124,5	202	380,5	361	F10	F12	45	157	31	27	30	28	20
MT55	181	124,5	202	428	418	F10	F12	45	157	37	27	30	28	20
MT60	232	140	274	467	444	F10	F14	45	212	41	36	30	28	20
MT65	232	140	274	525	502	F10	F14	45	212	50	36	30	28	20
MT70	332	160	332	636	587	F16	//	55	283	64	46	30	45	36
MT75	332	160	332	734	677	F16	//	55	283	64	46	30	45	36

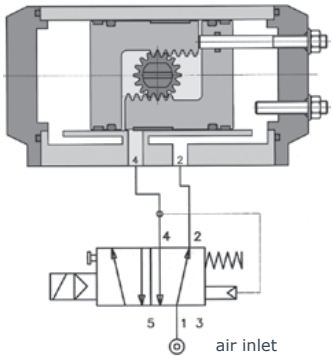
Weight and air consumption full cycle

type	weight (kg)		air consumption (N Lt)	
	DA	SR	DA	SR
MT10	0.570	0.655	0.22	0.13
MT15	1.60	1.79	0.41	0.18
MT17	1.92	2.16	0.55	0.25
MT20	2.35	2.73	0.71	0.29
MT25	3.25	3.77	1.10	0.48
MT30	4.15	4.88	1.40	0.65
MT35	6.80	8.24	2.45	1.20
MT40	8.10	9.78	3.05	1.60

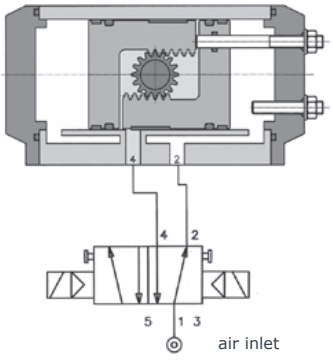
type	weight (kg)		air consumption (N Lt)	
	DA	SR	DA	SR
MT45	11.17	13.73	4.40	1.85
MT50	16.20	19,56	4.60	2.50
MT55	19.90	24.72	9.00	4.10
MT60	27.95	37.73	12.50	6.50
MT65	38.40	48.00	16.60	7.10
MT70	66.80	82.96	27.10	9.60
MT75	81.60	98.00	31.40	11.70

Pneumatic actuators Double - Single acting

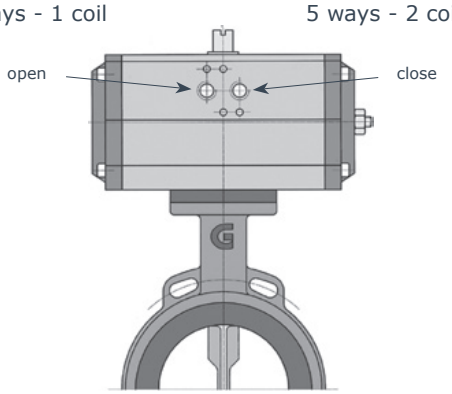
double acting actuator - 5 ways solenoid valve



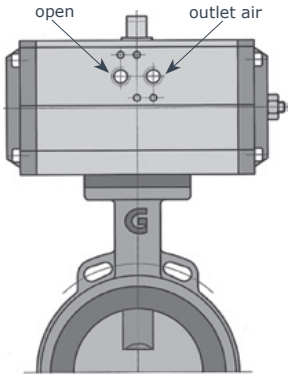
5 ways - 1 coil



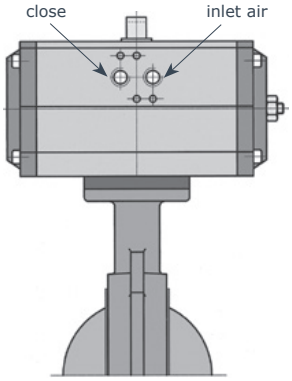
5 ways - 2 coils



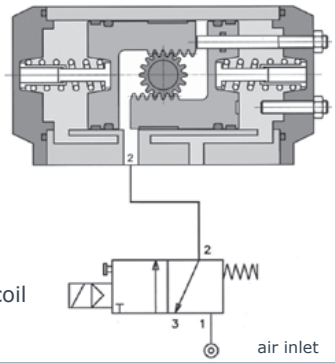
single acting actuator - 3 ways solenoid valve



normally closed valve



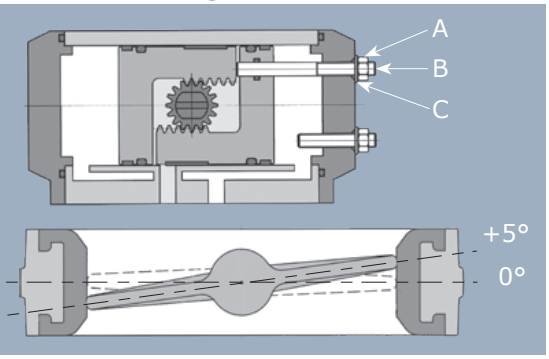
normally open valve



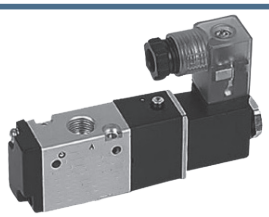
3 ways - 1 coil

Adjustement of valve closing angle
Ghibson butterfly valves are tested and supplied with a closing angle adjustment at +5°.
In case this angle should be modified, operate as follows:

1. let the valve in semi-open position,
2. close compressed air supply,
3. loosen nMT A,
4. rotate B screws anticlockwise to reduce closing angle, or clockwire to enlarge it,
5. tighten A nut, paying attention that C packing is not damaged,
6. re-connect compressed air and close the valve.



Options



IP65 NAMUR solenoid valves
Namur coupling 3/5 ways 1/2 coils.
Working pressure:
min. 2 bar - max. 10 bar
working temperature:
-20°C +80°C
Screw manual operation.
Standard voltage: 24V CC/CA-110V CA-220V CA
Different voltages on request.
Available also in explosion proof and intrinsecally safe with ATEX certification.

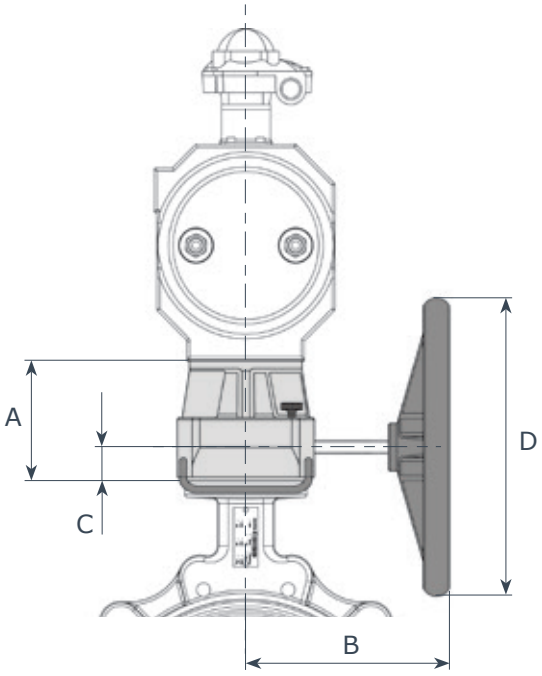
IP67 BOXES
Electromechanical switches
SPDT 3A 250 VAC/3A 24 VDC
NAMUR proximity switches
P+F NJ4-12GK-N EEx ia IIC T6
2 wires not amplified
P+F PNP NO NBN4-12GM 50
E2 3 wires amplified 10-30 DC 200 mA P+F NO NBN4 - 12GM4O ZO
2 wires amplified 6-60V DC 4-100 mAP+F SJ 3,5N
2 wires not amplified
EEx ia II C T6

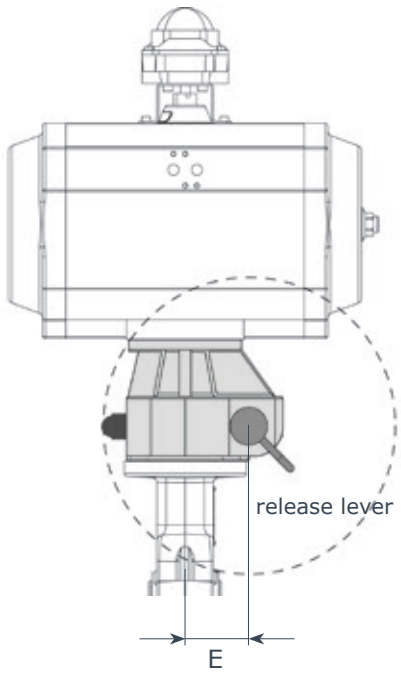
EXPLOSION-PROOF BOXES
Electromechanical switches
SPDT 5A 250VAC/3A 24V DC
NAMUR proximity switches
P+F NJ4-12GK-N EEx ia IIC T6
2 wires not amplified
P+F PNP NO NBN4-12GM 50
E2 3 wires amplified 10-30 DC 200 mA P+F NO NBN4 - 12GM4O ZO
2 wires amplified 6-60V DC 4-100 mAP+F SJ 3,5N
2 wires not amplified
EEx ia II C T6

Pneumatic Positioner
Electro-pneumatic positioner
The positioner provides accurate positioning of buttefly valve disc.
It can be used with 3-15 PSI, pneumatic control signal, or with 4-20 mA electric signal by means of the proper trasducer.
OutpMT signal can be 4-20 mA or of resistive type. Transmitter can be easily applied also on positioner already installed.
Standard cam regulates rotation on a 90° angle with 3-15 PSI signal or 3-9 PSI or 9-15 PSI.

Declutchable manual gearboxes: aluminium GD serie

A declutchable manual gear should be inserted between valve and actuator, in order to secure valve operation in case of emergency. In normal conditions, the gearbox is declutched so that the handweel does not rotate when working the actuator.
In case of emergency (air failure) the gearbox can be easily engaged by means of the side lever and the valve can be easily operated by means af the handwheel.





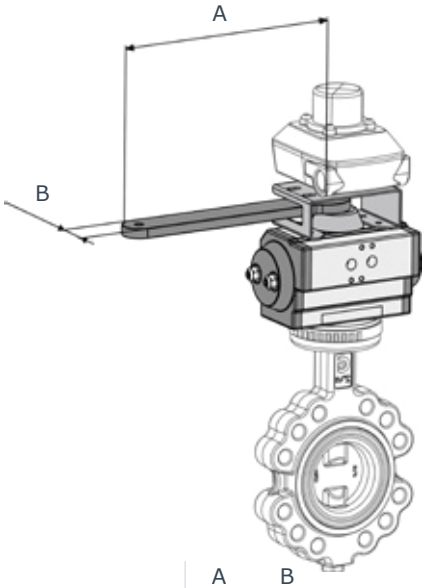
GD Series

body:	aluminium	shalt:	stainless steel
worm gears:	steel	handwheel:	steel
sector gear:	ductile iron	protection:	IP65
		T:	-20 / +120 °C

	A	B	C	D	E	gear ratio	outpMT Nm	weight Kg
GD070	118	150	34	200	52.2	1:38	360	3.5
GD102	125	180	35,5	300	65	1:36	810	5.6
GD140	162	300	50	400	85	1:50	1310	12.5
GD165	181	395	61	600	105	1:55	2800	22.5
GD254	205	406	80	700	130	1:52	5500	26

Ø valve	DA actuator double action	SR actuator spring return	emergency gearbox type
DN 40÷150	MT 20÷45	MTS 20÷35	GD070
DN 40÷300	MT 35÷55	MTS 35÷50	GD102
DN 200÷400	MT 50÷65	MTS 55÷65	GD140
DN 450÷600	MT 60	MTS 70÷75	GD165
DN 600÷800	MT 70÷75	≈	GD254

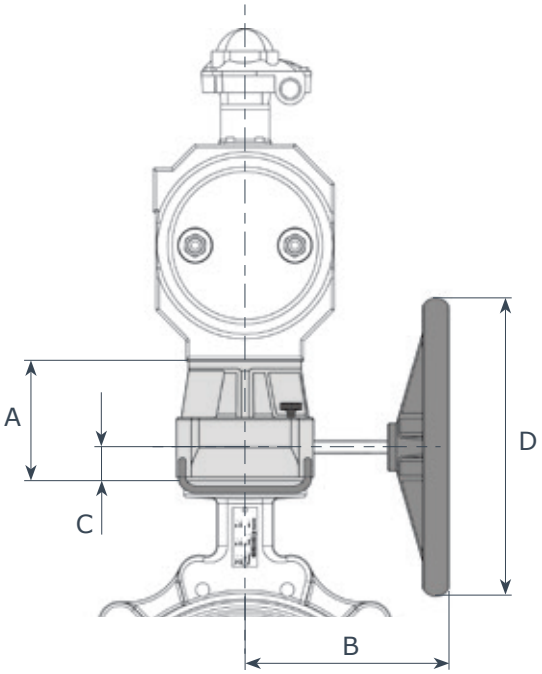
Emergency lever
(only double acting)

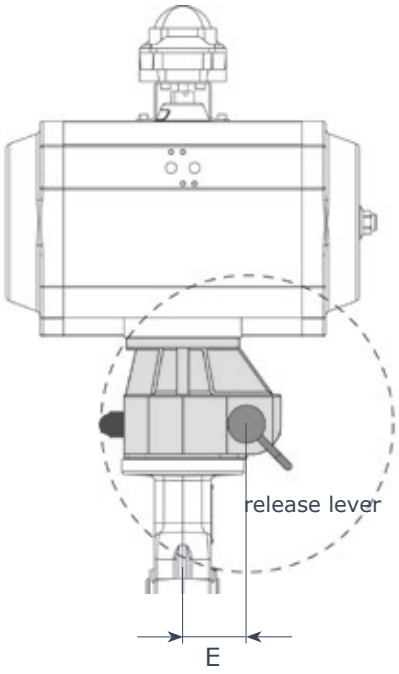


	A	B
MT10 ÷ MT20	218	35
MT25 ÷ MT35	218	35
MT40 ÷ MT50	385	40

Declutchable manual gearboxes: Cast Iron - ILGD serie

A declutchable manual gear should be inserted between valve and actuator, in order to secure valve operation in case of emergency. In normal conditions, the gearbox is declutched so that the handweel does not rotate when working the actuator.
In case of emergency (air failure) the gearbox can be easily engaged by means of the side lever and the valve can be easily operated by means af the handwheel.





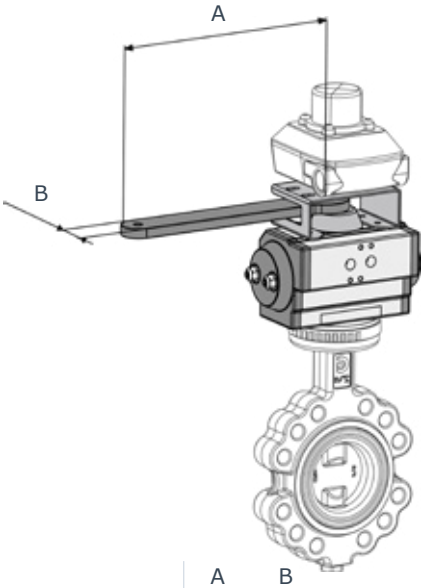
ILGD Series

body:	ductile iron GGG40	shalt:	steel
worm gears:	steel	handwheel:	steel
sector gear:	ductile iron	protection:	IP65 (on req.)
		T:	-20 / +120 °C

	A	B	C	D	E	ratio	uscita Nm	weight Kg
ILGD 200	122	216	42	200	53.2	1:35	250	7.3
ILGD 600	145	260	51	250	64.5	1:46	750	17
ILGD 900	160	290	56.5	400	84.5	1:45	1450	21
ILGD 1500	175	333	55	400	107.5	1:57	2485	34
ILGD 2400	194	364	62	600	127	1:68	3390	54
ILGD 5000	209	406	72	800	155	1:104	7450	80

Ø valve	DA actuator double action	SR actuator spring return	emergency gearbox type
DN 40÷150	MT 15÷45	MTS 15÷35	ILGD 200
DN 40÷300	MT 35÷55	MTS 35÷55	ILGD 600
DN 200÷400	MT 50÷65	MTS 50÷65	ILGD 900
DN 350÷600	MT 60÷70	MTS 60÷70	ILGD 1500
DN 450÷600	MT 75	MTS 70÷75	ILGD 2400
DN 600÷800	MT 70÷75	≈	ILGD 5000

Emergency lever
(only double acting)

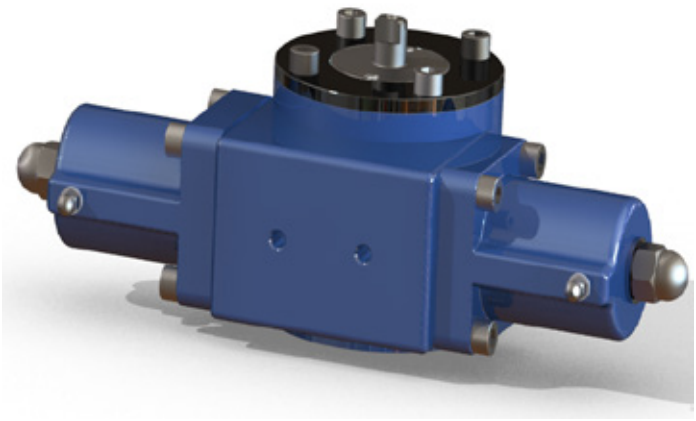


	A	B
MT10 ÷ MT20	218	35
MT25 ÷ MT35	218	35
MT40 ÷ MT50	385	40

Hydraulic actuators ARES type

Features:

Compact design
90° rotation ±5°
Travel adjusment in both direction of rotation
Flange ISO 5211
Double or single acting with spring return



Accessories

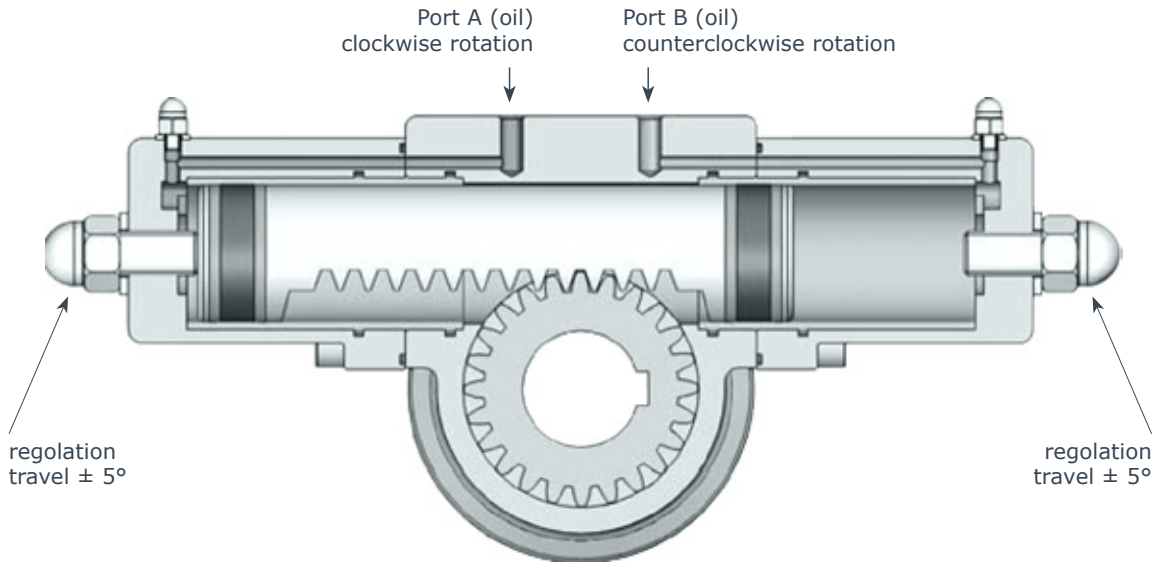
- Manual emergency control with decluchable override or hydraulic pump
- Limit switch boxes available with a wide range of switches and position transmitters
- Hydraulic circuits with solenoid valves, electro-hydraulic supply system, accumulator, etc..., for valve operation and control.

ARES DA type double acting

- Tecnical features:
  - » ductile iron cast body
  - » steel rack and pinion
  - » NBR seats
- fluid material:
  - » hydraulic oil type : HPL DIN51524-2 / ISO 6743-4. Viscosity 15/200 cst
- working pressure: 10 - 120 bar
- working temperature: -20°C / +80°C

No routine maintenance or lubrication is required.

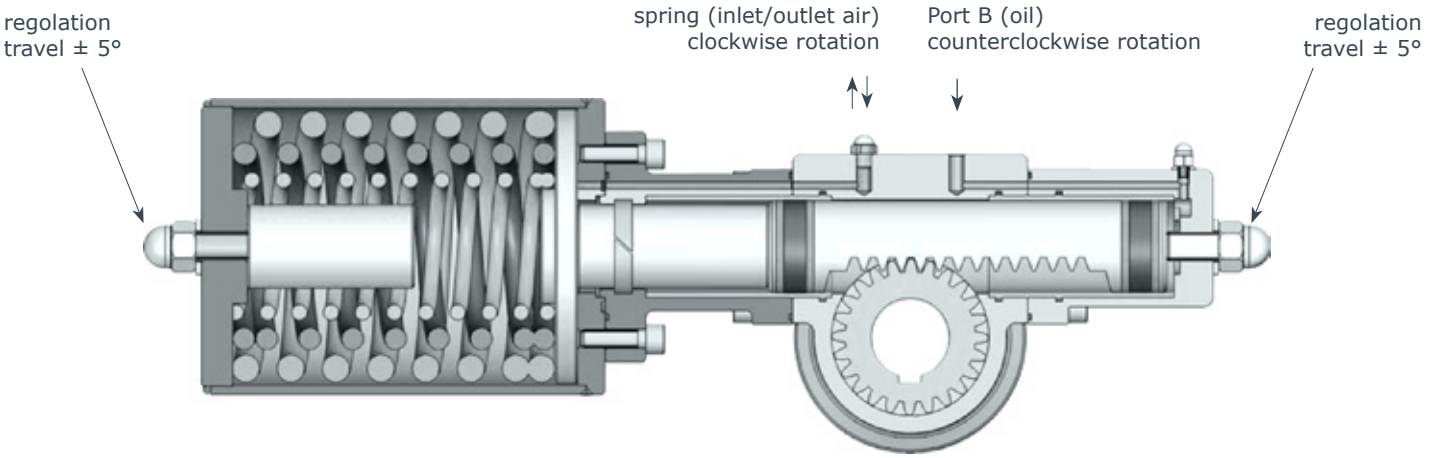
All movings parts are lubricated with heavy duty grease.

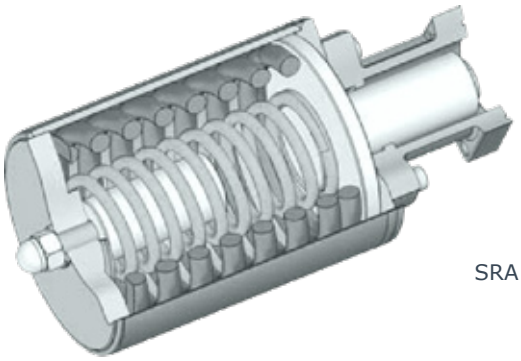


Torque hydraulic actuators double acting DA - Nm

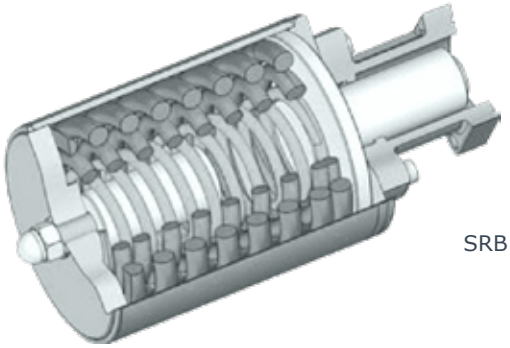
TIPO/TYPE	10 Bar	20 Bar	30 Bar	40 Bar	50 Bar	60 Bar	70 Bar	80 Bar	90 Bar	100 Bar	110 Bar	120 Bar
ARES 28DA	19	38	57	74	93	112	129	148	167	185	203	221
ARES 40DA	40	80	110	150	190	230	260	300	340	380	410	450
ARES 50DA	80	150	230	310	380	460	530	610	690	760	840	920
ARES 63DA	150	300	460	610	760	910	1070	1220	1370	1520	1680	1830
ARES 80DA	260	530	790	1050	1320	1580	1840	2100	2370	2630	2890	3160

ARES - SR type single acting





SRA



SRB

Single acting ARES actuators with spring return can be equipped with two different types of spring cartridges depending upon the torque required:

- **SRA** with reduced thrust
- **SRB** with the maximum thrust

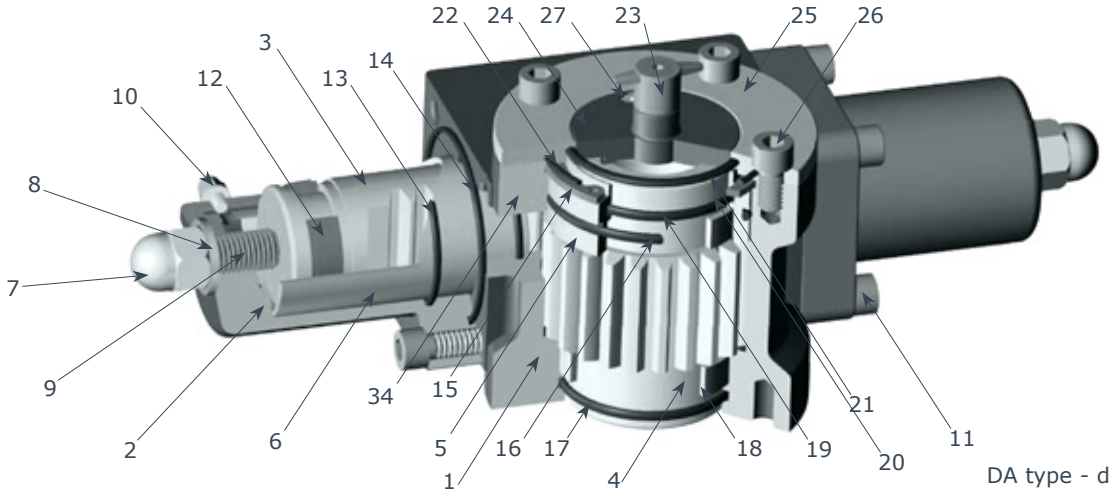
The spring cartridge torque values are indicated in following tables.

Remarks:
dimensioning the actuator please carefully select the spring cartridge because if it is necessary to modify the torque it is not possible to remove or add springs bMT it is necessary to substitute the complete cartridge.

Torque hydraulic actuators single acting SRA / SRB - Nm

type	spring cartridge	springs torque Nm		40 Bar		60 Bar		90 Bar		120 Bar	
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
ARES 40SR	SRA	81	121	67	28	144	104	255	216	≈	≈
	SRB	162	242	≈	≈	≈	≈	175	96	288	208
ARES 50SR	SRA	164	243	143	64	294	215	523	443	--	--
	SRB	328	486	≈	≈	≈	≈	360	201	588	430
ARES 63SR	SRA	328	493	280	115	585	420	1035	873	≈	≈
	SRB	656	986	≈	≈	≈	≈	710	381	1170	840
ARES 80SR	SRA	560	840	486	207	1010	730	1804	1524	≈	≈
	SRB	1120	1680	≈	≈	≈	≈	1245	686	2020	1460

Hydraulic actuators ARES type

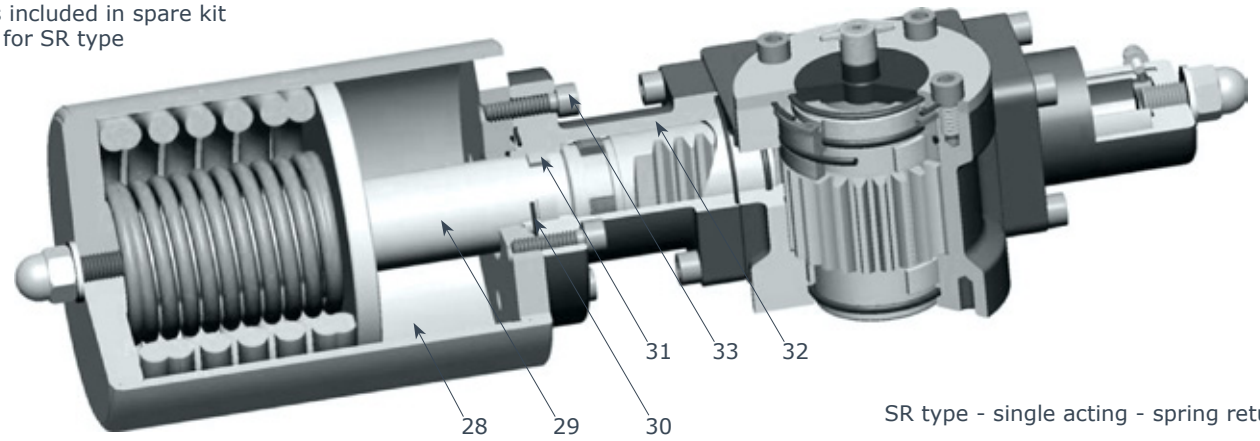


DA type - double acting

item	part	material	coating	q.ty DA	q.ty SR
1	Body	Ductile iron	Epoxi coated	1	1
2	End cap	Ductile iron	Epoxi coated	2	1
3	Piston rack	Steel	--	1	1
4	Pinion	Steel	--	1	1
5	Pinion cap	Steel	--	1	1
6	Cylinder	Steel	Lapped	2	2
7	Adjustement nut	Stainless steel	--	2	2
8	Bleed nut	Steel + NBR	--	2	2
9	Adjustement screw	Steel	--	2	1
10	Bleed screw	Steel	--	2	1
11	Endcap screw	Steel	--	8	8
◊ 12	Piston seal	Reinforced POM+NBR	--	2	2
◊ 13	O Ring	NBR	--	2	3
◊ 14	O Ring	NBR	--	2	2
15	Snap ring	Steel	--	1	1
◊ 16	O Ring	NBR	--	1	1
◊ 17	O Ring	NBR	--	1	1

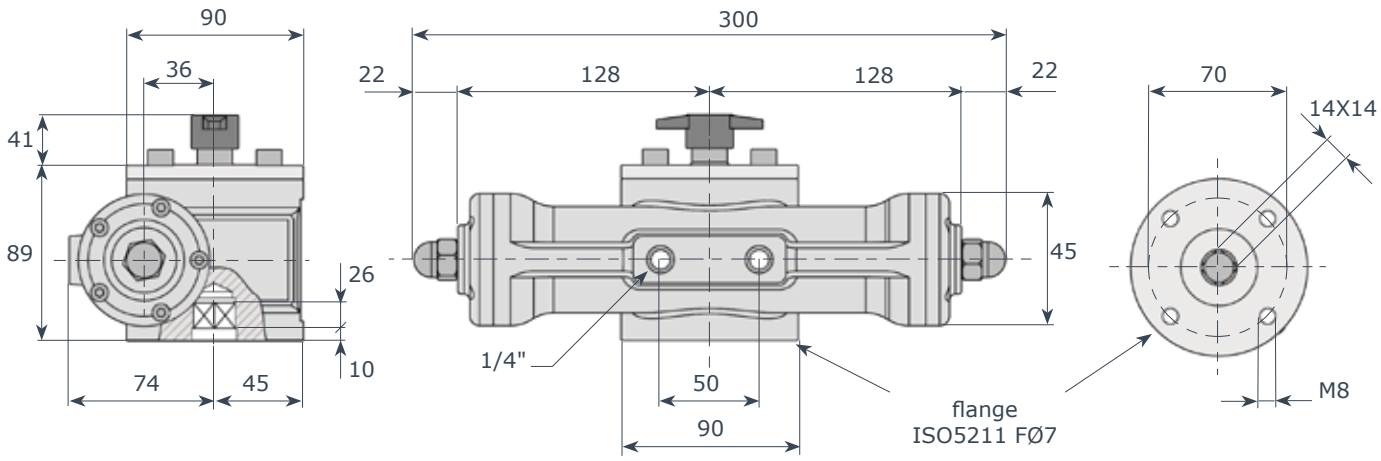
item	part	material	coating	q.ty DA	q.ty SR
◊ 18	Lower pinion guide band	Reinforced POM	--	1	1
◊ 19	O Ring	NBR	--	1	1
◊ 20	Upper pinion guide band	Reinforced POM	--	1	1
◊ 21	O Ring	NBR	--	1	1
◊ 22	O Ring	NBR	--	1	1
23	Position indicator	Polyamide	--	1	1
24	Position indicator flange	Aluminium	Anodized	1	1
25	Upper flange	Aluminium	Anodized	1	1
26	Flange screw	Steel	--	4	4
27	Flange screw	Steel	--	2	2
28	Springs cartridge	Steel	Epoxi coated	--	1
29	Piston extension	Steel	Chromium plated	--	1
◊ *30	O Ring	NBR	--	--	1
31	Extension guide band	Reinforced POM	--	--	1
32	Springs cartridge bracket	Ductile iron	Epoxi coated	--	1
33	Screw	Stee	--	--	4
◊ 34	O-ring	NBR	--	2	2

◊ parts included in spare kit
* only for SR type

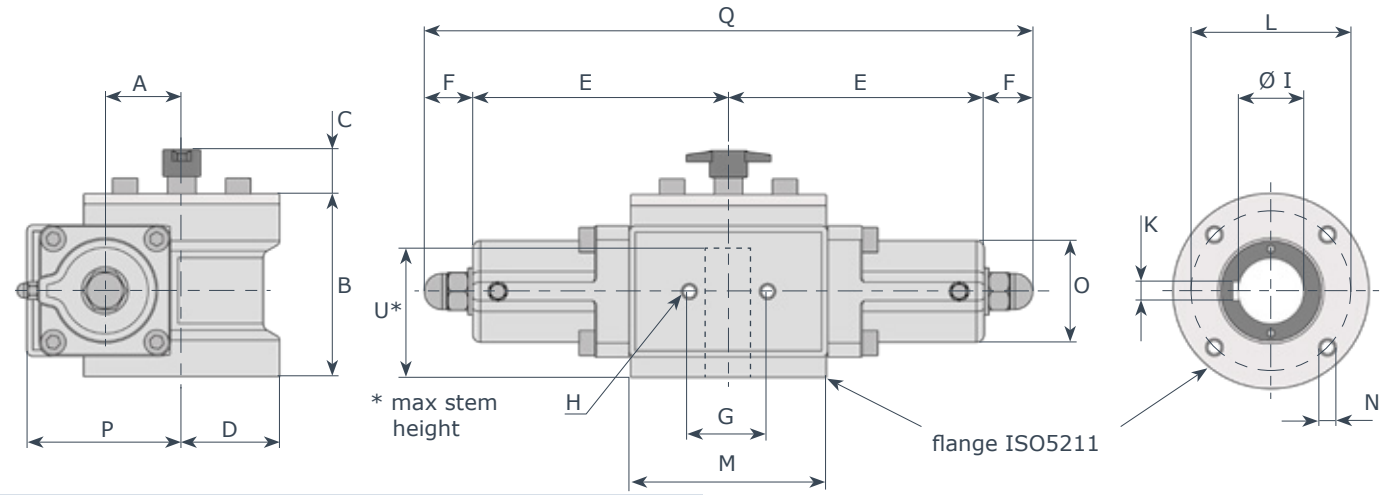


SR type - single acting - spring return

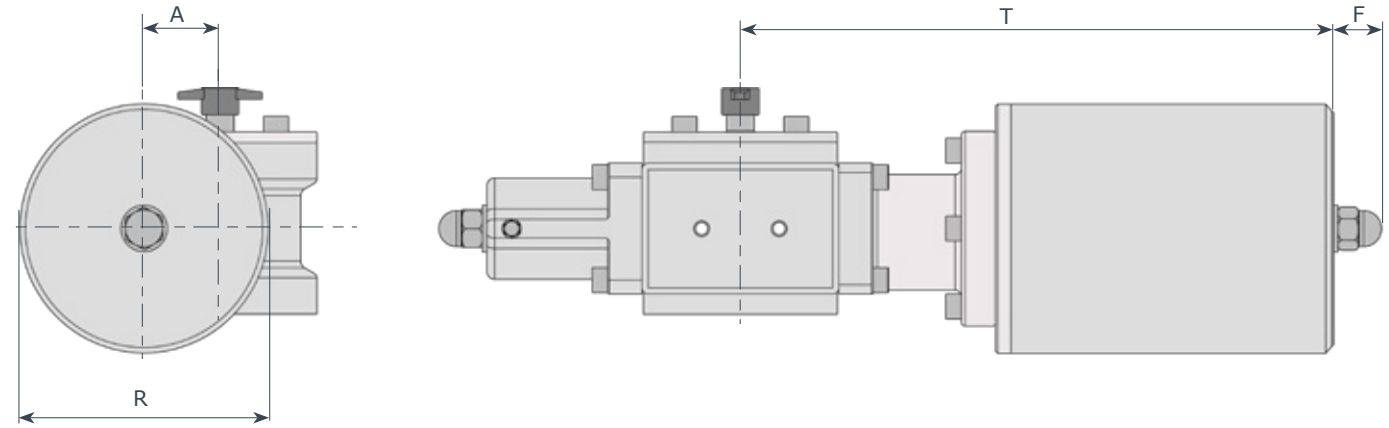
Hydraulic actuators ARES type



ARES H 28 - DA weight 8,5 Kg - volume 32 cmc



ARES H 40 / H 50 / H 63 / H 80 DA



ARES H 40 / H 50 / H 63 / H 80 SR

mod	ISO 5211	A	B	C	D	E	F	G	H	Ø I	K	L	M	N	O	P	Q	R	T	U*	DA Kg	SR Kg	vol. cm³
H 40	F07	40	102	41	45	143	30	50	1/4"	28	8	70	90	M8	55	85	346	140	325	93	12	29	59
H 50	F10	50	117	41	62.5	164	30	50	3/8"	42	12	102	125	M10	66	100	387	160	390	108	19	45	120
H 63	F12	63	127	41	75	201	40	50	3/8"	50	14	125	150	M12	80	125	482	210	545	118	30	75	239
H 80	F14	80	157	41	87.5	225	45	50	3/8"	60	18	140	175	M16	106	163	540	240	575	148	52	120	414

MORE THAN 35 YEARS OF HIGH QUALITY EXPERIENCE

Ghibson Italia can now boast of more than 35 years of experience in manufacturing of industrial valves.
In these 35 years we have designed and manufactured in our facilities in Italy butterfly valves and check valves, for the most different industrial applications.

We export our products all over the world always providing our customers with the best assistance during all the phases: design, installation, maintenance.

MARKET SEGMENTS

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Power Plant
Nuclear Plant
HVAC
Chemical & Petrochemical
Powder Conveying Systems
Food & Beverage

APPLICATIONS

Steam isolation - Vacuum service - Refining
Cooling Water systems - Metallurgical processes
Powder transportation & storage
Oil field recovery - Liquid natural gas
Steam service - Steam Turbine
Saltwater Service - District heating & cooling
Hot Air & Smokes
Chemicals storage & trasportation
Food & Beverage processes

DEPARTMENTS

- **RESEARCH & DEVELOPMENT**
- **DESIGN**
- **CUSTOMIZATION**
- **PRODUCTION & LOGISTIC**
- **SALES & MARKETING**
- **QUALITY CONTROL**
- **CERTIFICATIONS**
- **PACKING AND SHIPPING**
- **AFTER SALES SUPPORT**

WIDE RANGE OF PRODUCTS

Very large choice of materials including valves of every alloy of carbon or stainless steel, bronze, aluminium, as well as with PTFE or Polypropylene.

We manufacture rubber seated valves with many elastomer types (EPDM, NBR, FKM, Silicone, Carboxidate among others), as well as PTFE, RTFE seated valves with many different coatings such as Halar, Rilsan, PFA, Chenisil, etc.

We can offer a total assistance:

- before selling we can start from dimensioning the valves and actuators, make selection of materials for all parts upon knowing the specification, prepare all types of drawings etc.
- after selling we make final documentation, provide installation supervision, undertake commissioning etc.

BUTTERFLY VALVES
Rubber Seated
PTFE Seated
High Performance
Damper Valves

ACTUATORS & OPTIONS
Pneumatic - Electric - Hydraulic

CONTROL SYSTEMS

CUSTOMIZED VALVES

CHECK VALVES
Disc type
Swing type
Dual plate

CERTIFICATIONS

GHIBSON valves

not just valves, but solutions

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