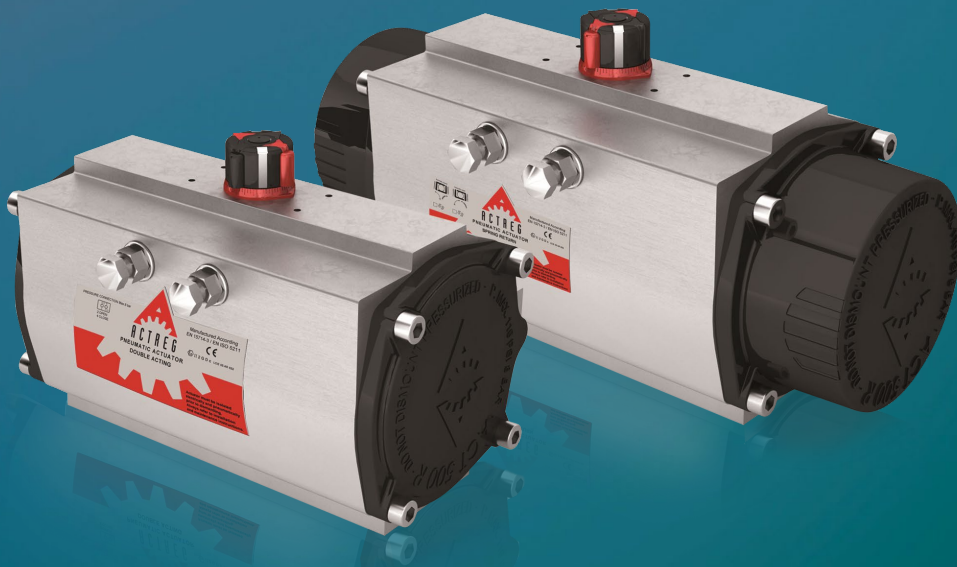




PNEUMATIC ACTUATORS RACK & PINION ACT - 2100

TECHNICAL FEATURES



GENERAL CHARACTERISTICS

DESIGN STANDARDS	CERTIFICATES
Conformity with 2014/68/EU Pressure equipment device (PED) and 2006/42/EC European Machinery Directive	ATEX - Ex II 2 G D
Conformity with EN 15714-3 Pneumatic part-turn actuators for industrial valves	SIL Capability certification SC3
Mounting devices according to NAMUR VDI / VDE 3845 Std.	Quality certification ISO 9001 / Environmental certification ISO 14001
Valve connection according to ISO 5211	IP68 – 1.5m / 30 min.

Max. Pressure	Rotation	Screw stroke Adjustment	Piston Ø (mm)	Air Volume (L)		Stroke Time (sec) Tested at 6 bar. ASR with 14 springs.		Seals material acc. to operating temperature (°C)		
				Opening	Closing	Opening	Closing	STD (standard)	H (high temp.)	L (low temp.)
8 bar	90° ±5°	For 1° Need ¼ Turn	237	11,6	10,2	ADA 2,3 ASR 3,3	ADA 2,6 ASR 3,7	NBR O-Ring (-30° to +100°)	FKM O-Ring (-15° to +150°)	Silicone O-Ring (-60° to +80°)

ACTUATOR CODIFICATION

<u>ASR</u>	<u>2100</u>	<u>F16</u>	<u>S14</u>	<u>FC</u>	-	<u>L</u>	<u>F38</u>	<u>K</u>	<u>C5</u>	<u>-RALXXXX</u>
1	2	3	4	5		6	7	8	9	10

ACTUATOR BASIC FEATURES
1 – Acting type
ASR – Single Acting
ADA – Double Acting
2 – Actuator size:
2100 – for ASR
2100 – for ADA
3 – Flange connection
F14 acc. to ISO 5211
F16 acc. to ISO 5211
4 – Number of springs (only for ASR):
S06 / 08 / 10 / 12 / 14 – for ASR 2100
5 – Fail Position (only for ASR):
FC – Fail Close
FO – Fail Open

ACTUATOR OPTIONAL FEATURES
6 – Operating range temperature
Std – (-30 / 100) °C
H (high) – (-15 / 150) °C
L (low) – (-40 / 80) °C
E (extreme low) – (-60 / 80) °C
7 – Air inlet connection not standard
F38 – Air inlet 3/8" G
F12 – Air inlet 1/2" G
8 – Optional features (all combinable)
K – Locking device
R – Stroke regulation
U – Imperial threads
9 – Corrosive coating protection
Std – Protection C3
C4 – Protection C4
C5 – Protection C5
10 – Painting RAL
Std – End caps painted RAL 9005 / Body not painted
RALXXXX – RAL specified by the customer

DOUBLE ACTING ACTUATOR "ADA" TORQUE OUTPUT IN Nm

TYPE	Output Torque For Double Acting in Nm																		Weight (Kg)		
	3 bar		3,5 bar		4 bar		4,5 bar		5 bar		5,5 bar		6 bar		6,5 bar		7 bar			8 bar	
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°		0°	90°
ADA	1086		1267		1448		1629		1810		1991		2172		2353		2534		2896		49,7

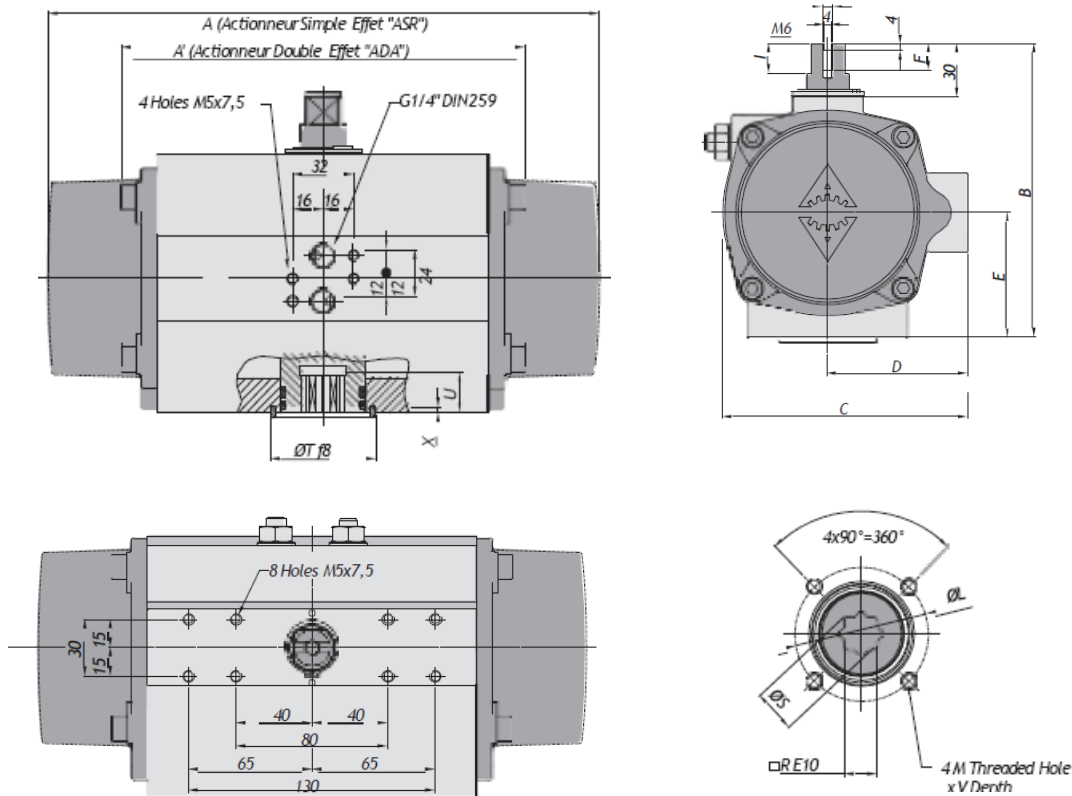
SPRING RETURN ACTUATOR "ASR" TORQUE OUTPUT IN Nm

TYPE	Output Torque for Spring Return in Nm																				Spring		Weight (Kg)
Pressure	3 bar		3,5 bar		4 bar		4,5 bar		5 bar		5,5 bar		6 bar		6,5 bar		7 bar		8 bar		stroke		
Position	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	END	START	
S06	702	509	883	690	1064	871	1245	1052	1426	1233	1607	1414	1788	1595	1969	1776	2150	1957	2512	2319	384	577	60,3
S08	574	316	755	497	936	678	1117	859	1298	1040	1479	1221	1660	1402	1841	1583	2022	1764	2384	2126	512	770	62,5
S10			627	305	808	486	989	667	1170	848	1351	1029	1532	1210	1713	1391	1894	1572	2256	1934	640	962	64,2
S12							861	474	1042	655	1223	836	1404	1017	1585	1198	1766	1379	2128	1741	768	1154	66,3
S14									914	463	1095	644	1276	825	1457	1006	1638	1187	2000	1549	896	1347	68,0

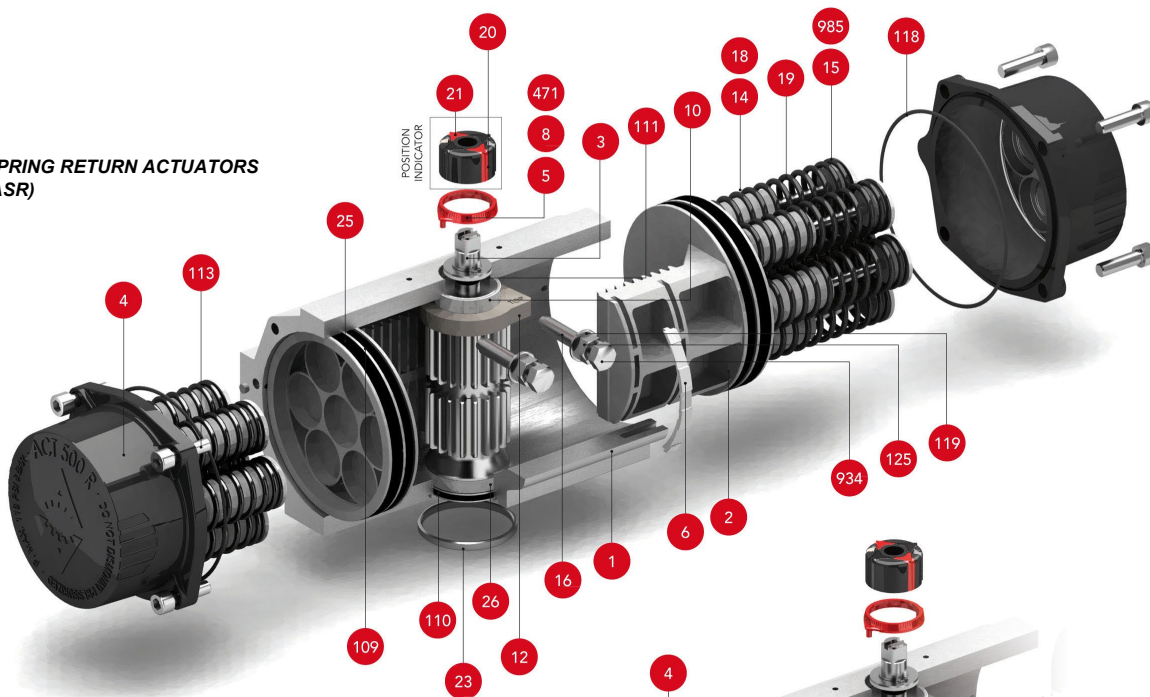
DIMENSIONS

A	A'	B	C	D	E	F	I	R	ØS	ISO 5211	ØL	M x V	ISO 5211	ØL1	M1 x V1	ØT	X	U
702	510	313	276,5	148	147	16	18,6	46	60,1	F14	140	M16x29	-	-	-	130	4	50
702	510	313	276,5	148	147	16	18,6	46	60,1	F16	165	M20x29	-	-	-	130	4	50

(*) Dimensions in mm.



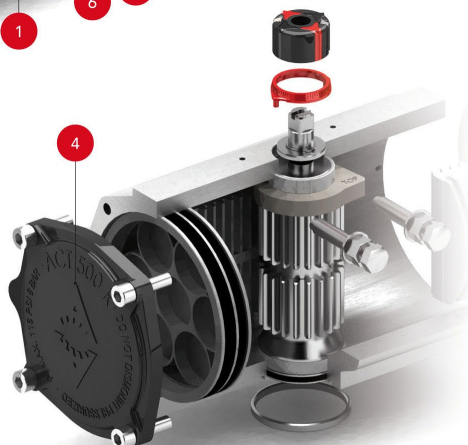
SPRING RETURN ACTUATORS (ASR)



POSITION INDICATOR



DOUBLE ACTING ACTUATOR (ADA)



PARTS & MATERIALS

Item	Description	Material	Spare parts	Item	Description	Material	Spare parts
1	Body	Aluminium Hard Anodized	-	23	Centering Ring	Nickel Plated Carbon Steel	-
2	Piston	Aluminium	-	24	Plug Air Stop	NBR / FKM / Silicone	2
3	Pinion	Nickel Plated Carbon Steel	-	25	Slide Guide	Polyamide PA 6.6 + 30% G.F.	2
4	End Caps	Aluminium Epoxy Coated	-	26	Lower Pinion Bearing	Hostalen RCH 1000	1
5	Soft Pinion Washer	Polyamide PA 6.6	1	109	O-Ring – Piston	NBR / FKM / Silicone	2
6	Slide piston	Polyamide PA 6.6 + 30% G.F.	2	110	O-Ring – Base pinion	NBR / FKM / Silicone	1
8	Pinion Washer	Stainless Steel	-	111	O-Ring – Top pinion	NBR / FKM / Silicone	1
10	Upper Pinion Bearing	Hostalen RCH 1000	1	113	Bolt	Stainless Steel	-
12	Stop	ASTM A-105	-	118	O-Ring – End cap	NBR / FKM / Silicone	2
14	(*) Spring Long Support	Polyamide PA 6.6	-	119	O-Ring – Adjusting screw	NBR / FKM / Silicone	2
15	(*) Spring Short Support	Polyamide PA 6.6	-	125	Washer	Stainless Steel	-
16	Leveling Screw	Stainless Steel	-	913	Set Screw	Stainless Steel	-
18	(*) Bolt	Stainless Steel	-	471	External Circlip	Stainless Steel	1
19	(*) Spring	DIN 2076 -D-5.6	-	934	Nut	Stainless Steel	-
20	Position Indicator	Polyamide	-	985	(*) Nut	Stainless Steel	-
21	Cam	Polyamide	-				

(*) Only for ASR series.



Corrosive protection

Corrosive protection acc. to ISO 12944-5.

Optional features (all combinable)

Locking device

Stroke Regulation

Imperial threads

Accessories

Limit switch Box (Atex Ia / DX)

Declutchable Gear Operator (DG)

Custom features

Other options available upon request. Please contact ACTREG



For further information visit our website
www.actreg.com



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