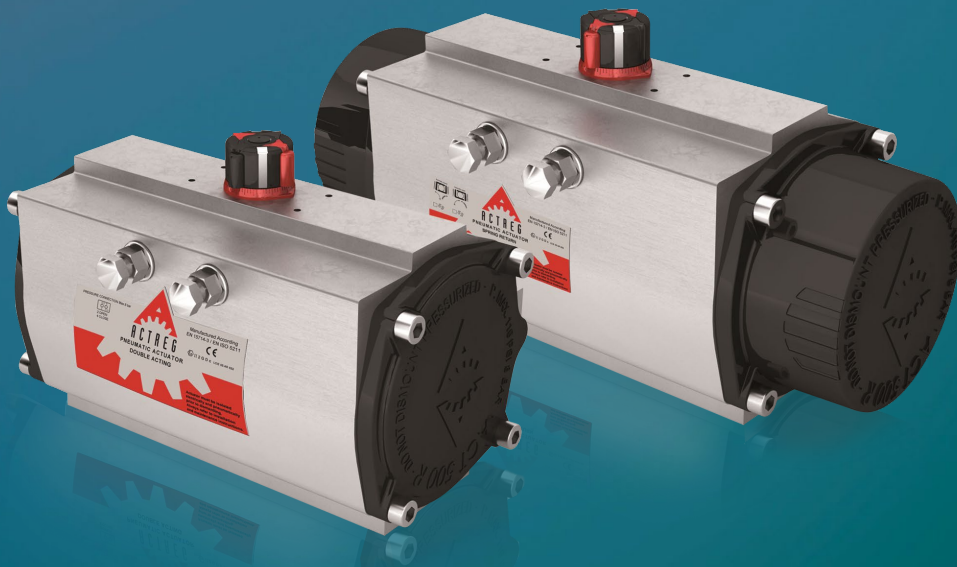




PNEUMATIC ACTUATORS RACK & PINION ACT - 0020

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 8 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	45	0,13	0,09	ADA 0,04 ASR 0,12	ADA 0,09 ASR 0,18	NBR O-Ring (-30° to +100°)	FKM O-Ring (-15° to +150°)	Silicone O-Ring (-60° to +80°)

ACTUATOR CODIFICATION

<u>ASR</u>	<u>0020</u>	<u>F0305</u>	<u>S04</u>	<u>FC</u>	-	<u>L</u>	<u>K</u>	<u>C5</u>	<u>RALXXXX</u>
1	2	3	4	5		6	7	8	9

ACTUATOR BASIC FEATURES
1 – Acting type
ASR – Single Acting
ADA – Double Acting
2 – Actuator size:
0020 – for ASR
0020 – for ADA
3 – Flange connection
F03 – F05 acc. to ISO 5211
F04 acc. to ISO 5211
F05 acc. to ISO 5211
4 – Number of springs (only for ASR):
S04 / S06 / S08 – for ASR 0020
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 – Optional features (all combinable)
K – Locking device
R – Stroke regulation
U – Imperial threads
8 – Corrosive coating protection
Std – Protection C3
C4 – Protection C4
C5 – Protection C5
9 – 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	9,7		11,4		13		14,6		16,2		17,8		19,5		21,1		23		26		1,4

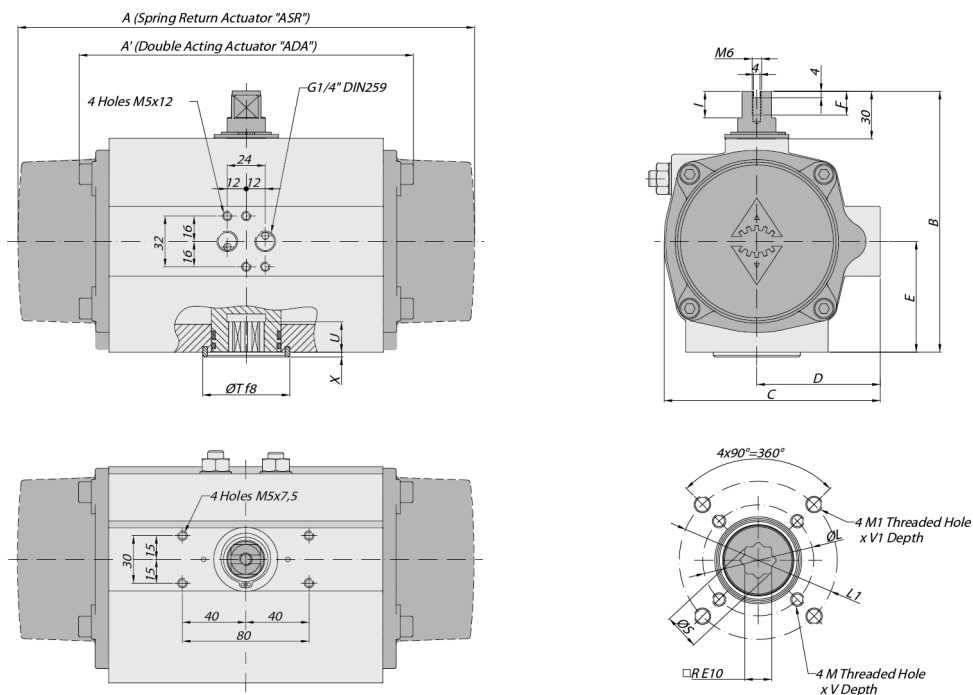
SPRING RETURN ACTUATOR "ASR" TORQUE OUTPUT IN Nm

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	
S04			8	5	9	7	11	8	13	10	14	12	16	13	17	15	19	17	22	20	4	7	1,51
S06									11	7	12	9	14	10	15	12	17	13	20	17	7	11	1,54
S08											10	5	12	7	14	9	15	10	18	14	9	15	1,56

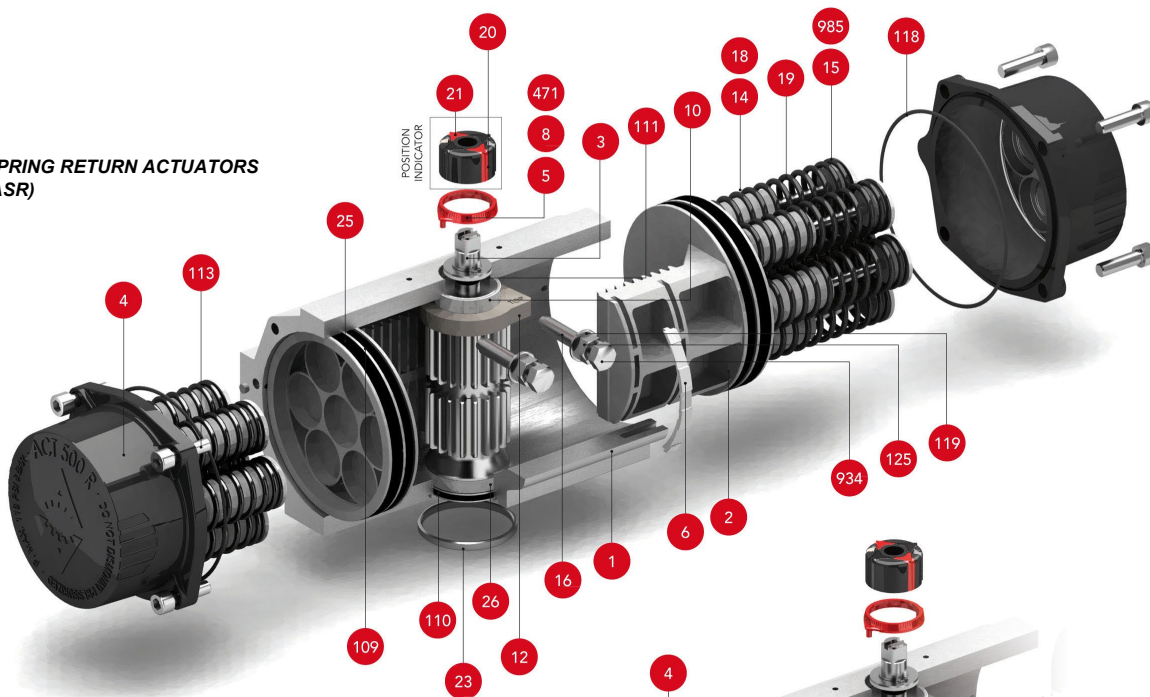
DIMENSIONS

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
163	145	96	76	48	34	9	12,5	9	12,5	F03	36	M5x8	F05	50	M6x10	25	2	10
163	145	96	76	48	34	9	12,5	14	18,1	F05	50	M6x10	-	-	-	35	3	12
163	145	96	76	48	34	9	12,5	14	18,1	F04	42	M5x10	-	-	-	35	3	12

(*) Dimensions in mm.



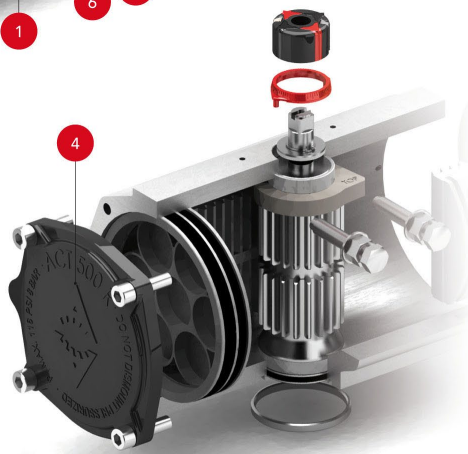
SPRING RETURN ACTUATORS (ASR)



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 / EX d)

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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