



The art of power and perfection

# PNEUMATIC ACTUATORS

## ACT-1750

PDS-AC-1750 Rev. 5



Manufacturing program:

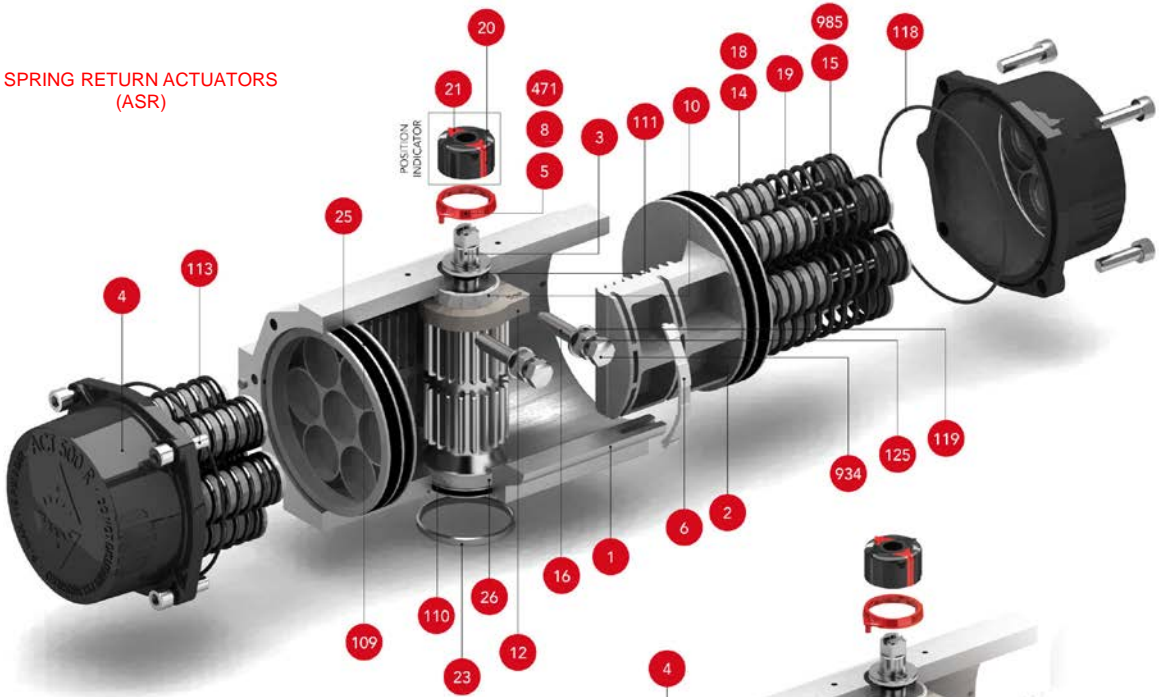
Ex II 2 G D c – LCIE 05 AR 022

Quality & Environmental Management:



## TECHNICAL FEATURES

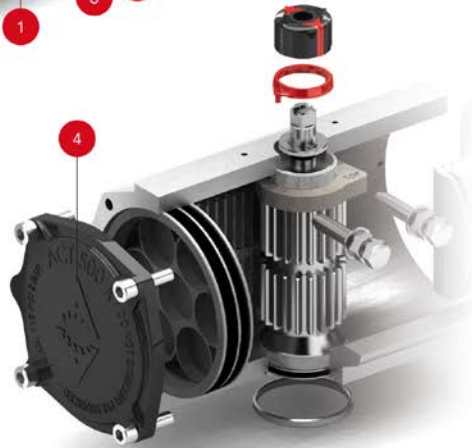
### SPRING RETURN ACTUATORS (ASR)



### POSITION INDICATOR



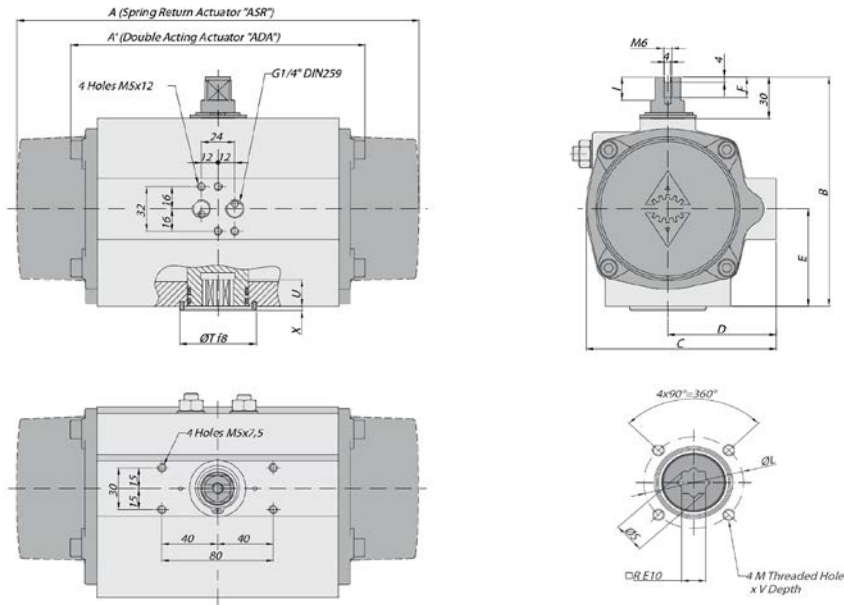
### DOUBLE ACTING ACTUATORS (ADA)



## PARTS & MATERIALS

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

(\*) Only for serie ASR.



### 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
601	461	280	242,5	131	130	16	18,6	36	48,5	F14	140	M16X26				100	4	50

(\*) Dimensions in mm.

### GENERAL CHARACTERISTICS

<b>DESIGN STANDARDS</b>	Serie ADA	Actuator	Double	Acting
	Serie ASR	Actuator	Spring	Return
Mounting of solenoid valves	NAMUR Std.			
Mounting of devices	NAMUR VDI		NAMUR VDE 3845 Std.	
Coupling according	ISO 5211		DIN 3337	
Marking	Ex II 2 G D c LCIE 05 AR 022		According to EN 15714-3	

### TESTS AND CERTIFICATES

Quality assurance	ISO 9001	Safety Integral level 3 (SIL3)		
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Max. Pressure	Rotation	Screw stroke Adjustment	Chamber Ø (mm)	Air Volume (L)		Stroke Time Sec. (A)		Operating Temperature (°C)		
				Opening	Closing	Opening	Closing	STD (standard)	HT (high temp.)	LT (low temp.)
8 bar	90° ±5°	For 1° Need ¼ Turn	210	9,8	9,3	D 1,8	D 2,0	NBR "O" Ring	FPM "O" Ring	Silicone "O" Ring
						S 2,8	S 3,2	-30° to +100°	-15° to +150°	-40° to +80°

### DOUBLE ACTING ACTUATOR "ADA" TORQUE OUTPUT IN Nm

TYPE Pressure	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 (A)		6,5 bar		7 bar		8 bar	
D	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	32,5
		707		824		942		1060		1178		1295		1413		1531		1649		1884	

### SPRING RETURN ACTUATOR "ASR" TORQUE OUTPUT IN Nm

TYPE Pressure	Output Torque for Spring Return in Nm												Spring stroke		Weight (Kg)								
	3 bar		3,5 bar		4 bar		4,5 bar		5 bar		5,5 bar		6 bar (A)			6,5 bar		7 bar		8 bar			
S06	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	END	STAR	39,3
S08	477	349	595	466	712	584	830	702	948	820	1066	937	1183	1055	1301	1173	1419	1291	1654	1526	270	421	39,3
S08	400	229	518	347	636	465	754	582	871	700	989	818	1107	936	1225	1053	1342	1171	1578	1407	360	562	41,0
S10			441	228	559	345	677	463	795	581	912	699	1030	816	1148	934	1266	1052	1501	1287	451	702	42,7
S12					600	344	718	461	836	579	954	697	1071	815	1189	933	1425	1168	1654	1407	541	843	44,4
S14 (A)					642	342	759	460	877	578	695	695	1113	813	1348	1049	1631	1348	1631	1348	631	983	46,0

(A) Standard construction.



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