



The art of power and perfection

# PNEUMATIC ACTUATORS

## ACT-4000

PDS-AC-4000 Rev. 7



Manufacturing program:

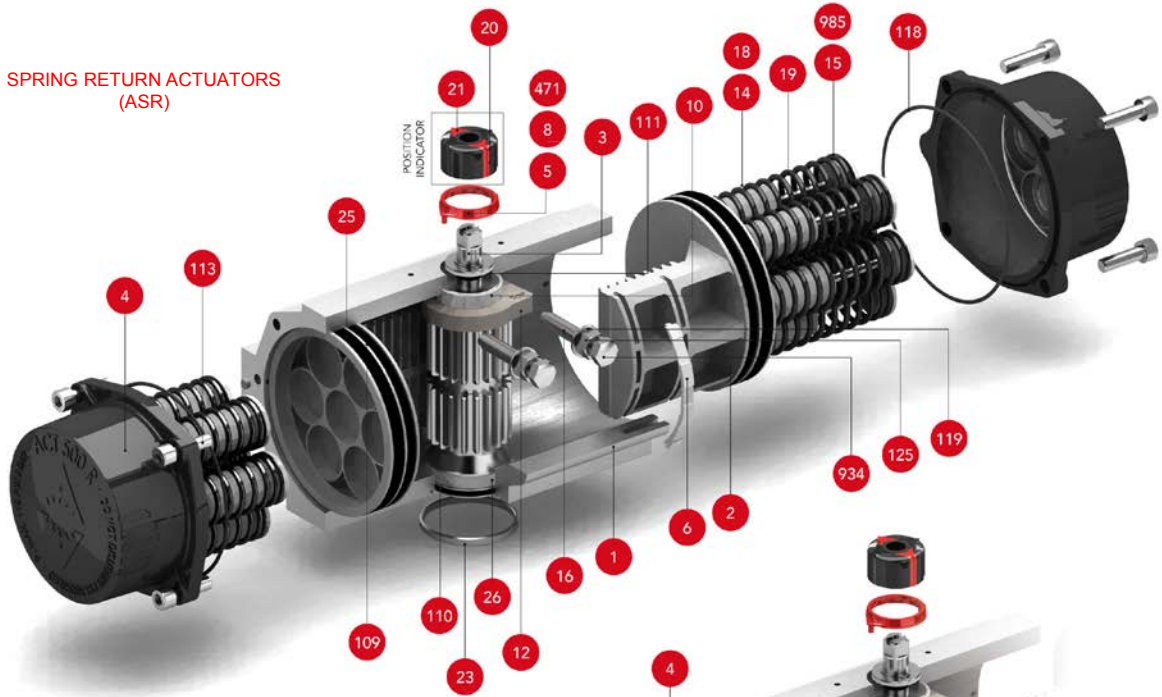
Ex II 2 G D c – LCIE 05 AR 022

Quality & Environmental Management:



## TECHNICAL FEATURES

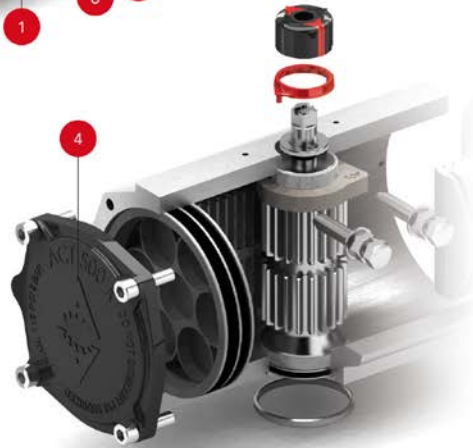
### SPRING RETURN ACTUATORS (ASR)



POSITION INDICATOR



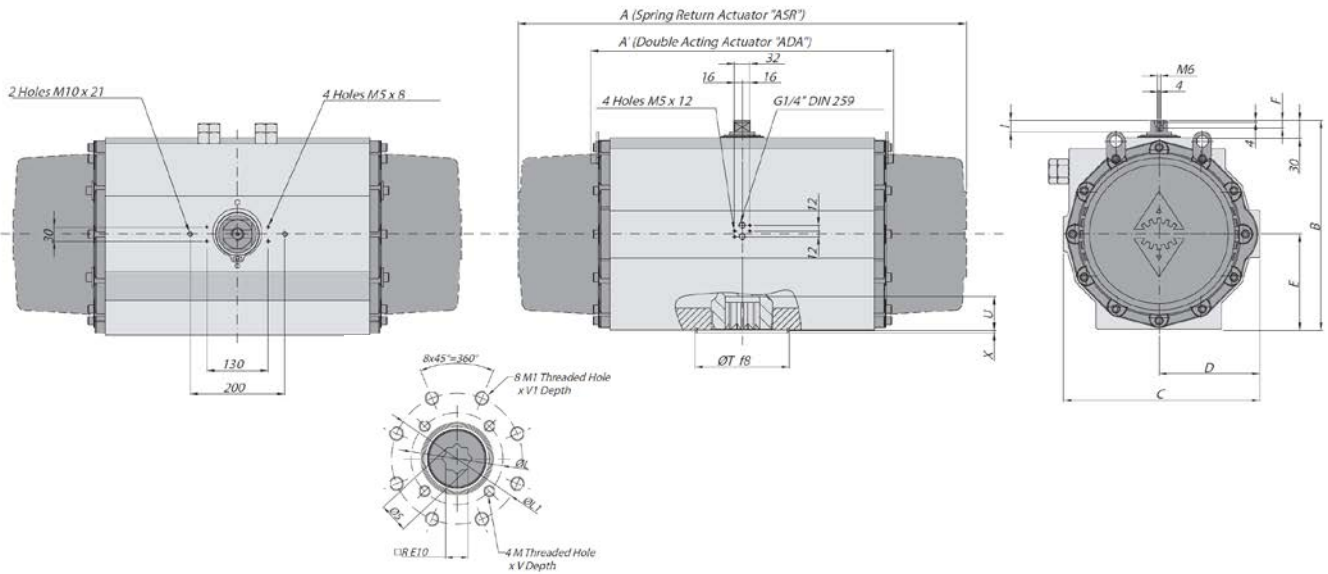
### DOUBLE ACTING ACTUATORS (ADA)



## 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	Leveling 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
940	630	434	415	213	201	16	18,6	55	72,5	F16	165	M20X30	F25	254	M16X30	200	4	60

(\*) Dimensions in mm.

### GENERAL CHARACTERISTICS

DESIGN STANDARDS	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 CERTIFICATEDES

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	340	24	22,5	D	3,00	D	3,50	NBR "O" Ring	FPM "O" Ring	Silicone "O" Ring
						S	4,30	S	5,00	-30° to +100°	-15° to +150°	-40° to +80°

### DOUBLE ACTING ACTUADOR "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 (A)		6,5 bar		7 bar		8 bar		
Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
D	2408		2809		3210		3612		4013		4414		4816		5217		5618		6421		129,4	

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

TYPE	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			
Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	END	STAR	
S06	1763	1262	2165	1663	2566	2065	2967	2466	3369	2867	3770	3269									758	1348	158,7
S08	1549	880	1950	1282	2351	1683	2752	2084	3154	2485	3555	2887	3956	3288	4358	3689	4759	4091	5068	4399	1011	1797	164,7
S10					2136	1301	2538	1702	2939	2104	3340	2505	3742	2906	4143	3307	4544	3709	4853	4017	1264	2246	170,8
S12							2323	1320	2724	1722	3125	2123	3527	2524	3928	2926	4329	3327	4638	3636	1516	2696	176,9
S14 (A)											2911	1741	3312	2142	3713	2544	4115	2945	4423	3254	1769	3145	182,9

(A) Standard construction.



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