



The art of power and perfection

# PNEUMATIC ACTUATORS

## ACT-2100

PDS-AC-2100 Rev. 5



Manufacturing program:

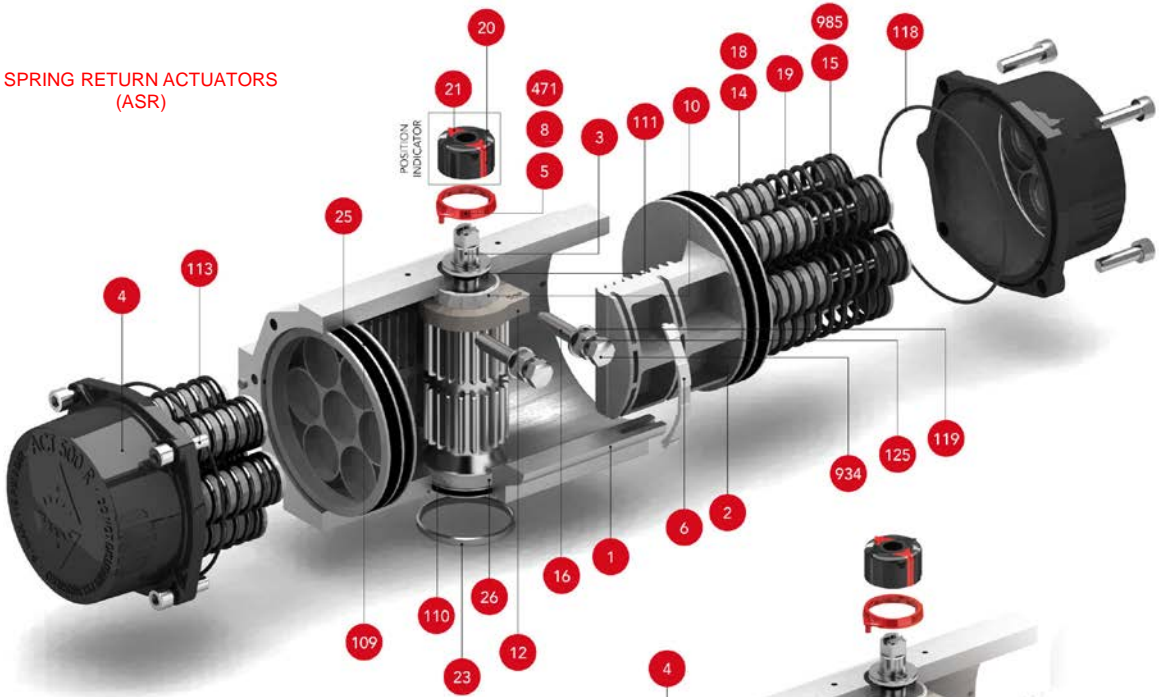
Ex II 2 G D c – LCIE 05 AR 022

Quality & Environmental Management:



## TECHNICAL FEATURES

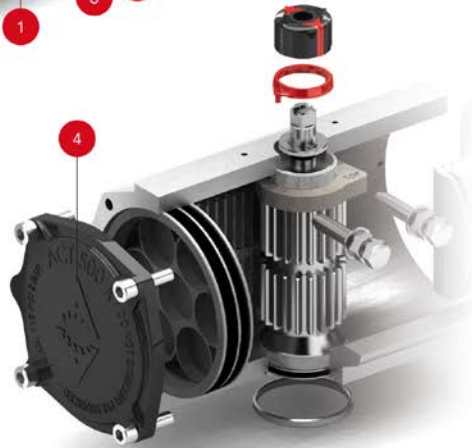
### SPRING RETURN ACTUATORS (ASR)



### POSITION INDICATOR



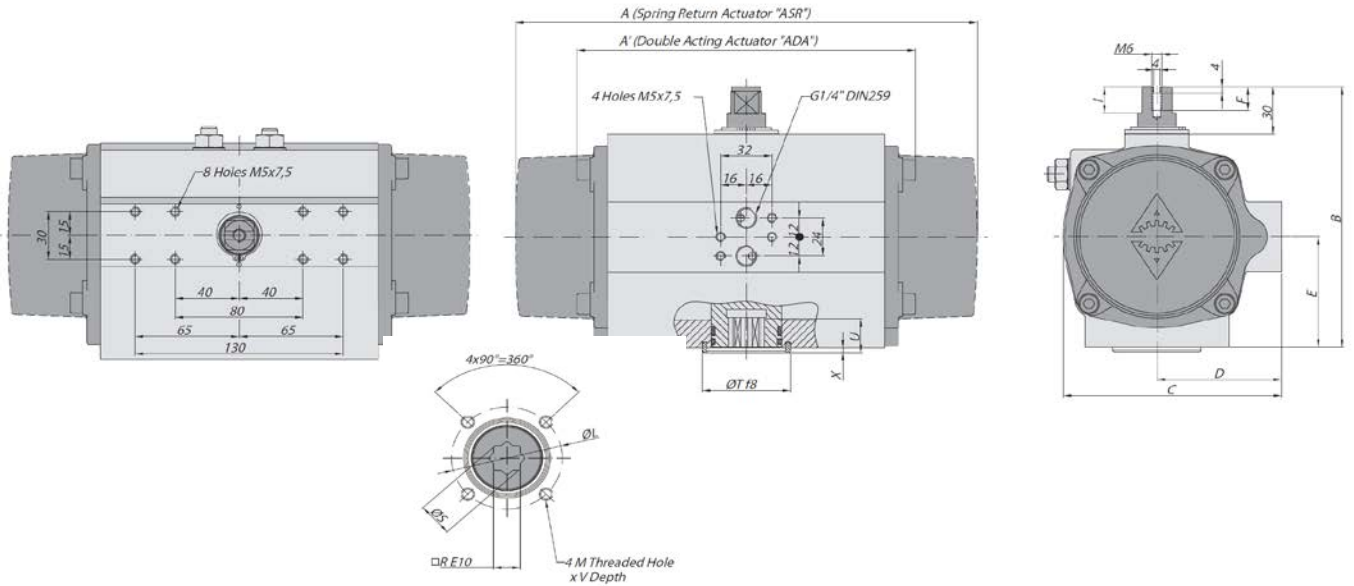
### DOUBLE ACTING ACTUATORS (ADA)



## 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
702	510	313	276,5	148	147	16	18,6	46	60,1	F16	165	M20X29				130	4	50

(\*) 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 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	237	11,6	10,2	D 2,3	D 2,6	NBR "O" Ring	FPM "O" Ring	Silicone "O" Ring
						S 3,3	S 3,7	-30° to +100°	-15° to +150°	-40° to +80°

### 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 (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	1087		1267		1448		1629		1810		1991		2172		2353		2534		2896		49	

### 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	702	509	883	690	1064	871	1245	1052	1426	1233	1607	1414	1788	1595	1969	1776	2150	1957	2512	2319	384	577	60,0
S08	574	316	755	497	936	678	1117	859	1298	1040	1479	1221	1660	1402	1841	1583	2022	1764	2384	2126	512	770	62,0
S10			627	305	808	486	989	667	1170	848	1351	1029	1532	1210	1713	1391	1894	1572	2256	1934	640	962	64,0
S12							861	474	1042	655	1223	836	1404	1017	1585	1198	1766	1379	2128	1741	768	1154	66,0
S14 (A)									914	463	1095	644	1276	825	1457	1006	1638	1187	2000	1549	896	1347	68,0

(A) Standard construction.



**ACTREG, S.A. (Headquarters)**

C/ Cantabria, 2  
Polígono Industrial Les Salines  
08830 Sant Boi del Llobregat  
Barcelona (Spain)  
Phone +34 93 661 44 10  
Fax +34 93 654 33 93

[actreg@actreg.com](mailto:actreg@actreg.com)

**ACTREG do Brasil, Sorocaba (SP)**

Avenida Liberdade, 4565  
Bairro Iporanga - Sorocaba - SP  
CEP 18.087-170  
Sao Paulo, Brasil  
Phone: 0055 (0) 15 3228 1010  
Fax: 055 (0) 15 3235 9511

[actreg@actregdobrasil.com.br](mailto:actreg@actregdobrasil.com.br)

**ACTREG Shangai Actuator Co. Ltd.**

No.658, Block A, Qiang Ye Road  
SheShan Industrial Zone  
SongJiang District, Shanghai  
P.R.C. 201602

Phone: 0086 21 57796818  
Fax: 0086 21 57792426

[sale@actreg.net.cn](mailto:sale@actreg.net.cn)

**ACTREG UK, LTD**

Units 2 & 3 Henson Close  
Telford Way Industrial Estate  
Kettering Northants NN 16 8PZ  
United Kingdom

Phone: 0044 1536412525  
Fax: 0044 1536521616

[sales@actreg.co.uk](mailto:sales@actreg.co.uk)

**ACTREG North America**

20201 Clark Graham  
Baie D'Urfè, Québec  
H9X 3T5 Canada

Phone: 001 514 457 5777  
Fax: 001 514 457 1348

Toll Free: 1 800 667 4819  
[jr@trueline.ca](mailto:jr@trueline.ca)

For further information visit our website

[www.actreg.com](http://www.actreg.com)