

# 1123-1125 Butterfly valve with ADA pneumatic actuator

## MAIN CHARACTERISTICS

The 1123-1125 wafer butterfly valves are dedicated to the automatic shut off of standard fluids lines. The construction includes a long neck for pipes insulation. The packing at the stem has a double tightness thought PTFE rings.

The motorization through ADA actuator is available in double effect and spring return types with numerous accessories.

## AVAILABLE MODELS

Size from DN 40 to DN 300

Wafer type connection for flange PN10/16 - ANSI 150

## CLASSIFICATION FOLLOWING PED

Category III : homologation CE 0035

## LIMITS OF USE

Size	DN 40 to DN 300	DN 350 to DN 600
PS	16 bar	10 bar
TS	110°C	

## OPTIONS

Special coating for actuator

Oversized actuator

Stainless steel actuator

Manual gear box

Limits switches : all types

Position detector : all types

NAMUR solenoid pilot valves : all types

## OVERALL DIMENSIONS

To know the overall dimensions of the 1125+ADA assembly, see the attached drawing on page 3 of this document.



## ACTUATOR TYPE ADA

See our technical data sheet FT 1510 on page 4.

## MOTORIZATION WITH ADA ACTUATOR

The actuators are sized for following operating conditions :

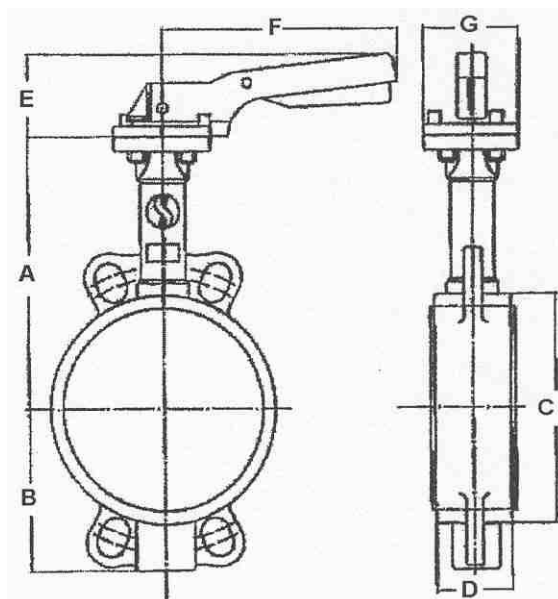
- 6 bar compressed air supply,
- max. pressure differential up/downstream : 10 bar

Size	Double effect	Spring return
40	ADA 20	ASR 40
50	ADA 20	ASR 40
65	ADA 40	ASR 80
80	ADA 40	ASR 80
100	ADA 80	ASR 130
125	ADA 80	ASR 200
150	ADA 130	ASR 300
200	ADA 200	ASR 500
250	ADA 300	ASR 500
300	ADA 500	ASR 850

For any other operating conditions, please consult.

Modifications reserved

## 1123-1125 Butterfly valve with ADA pneumatic actuator



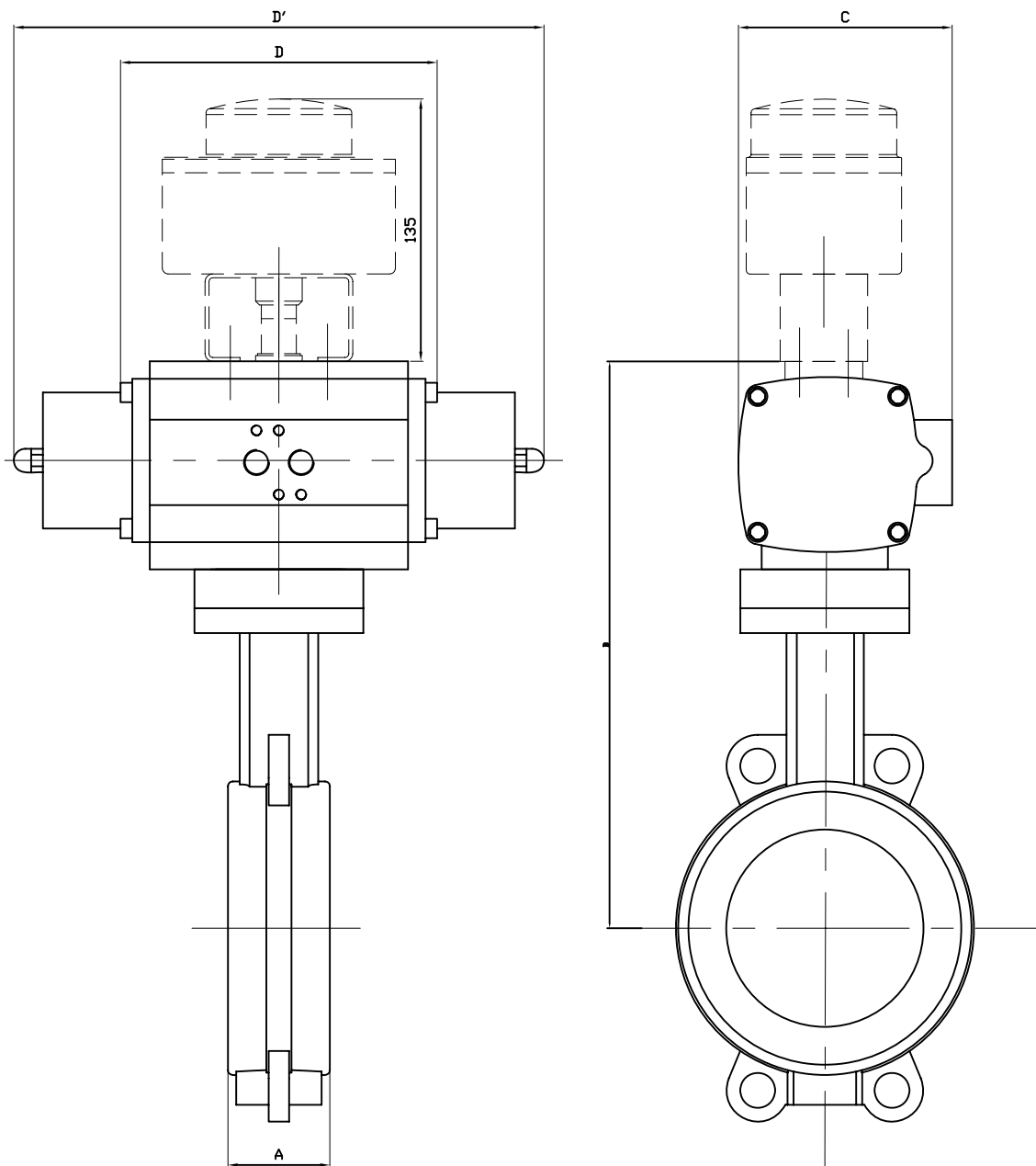
### DIMENSIONS (mm)

Size	40	50	65	80	100	125	150	200	250	300
A	130	136.5	142	158	180	192	215	242	280	310
B	61	77	87.5	95	107	121.5	144	171	205	235
ØC	82	95	109	127	152	180	207	260	315	370
D	33	43	46	46	52	56	56	60	68	78
E	74	74	74	74	74	79	79	37	37	37
F	200	200	200	200	200	278	278	355	507	507
ØG	65	65	65	65	65	90	90	125	150	150
Axe	9	9	9	9	11	14	14	17	22	27
Iso	F05	F05	F05	F05	F05	F07	F07	F10	F12	F12
Weight (Kg)	2.15	2.65	3.05	3.9	4.5	7	7.9	14.5	22.75	31.75

### CONSTRUCTION

TYPE	1123	1125
Item	Material	Material
Body	Cast iron EN GJL-250	Cast iron EN GJL-250
Stem	Stainless steel 416	Stainless steel 416
Disc	Stainless steel 1.4408	Nickel plated cast iron EN GJS-400-15
Liner	EPDM	EPDM
Packing	NBR	NBR
Lever	Aluminium	Aluminium
Ring	PTFE	PTFE

Modifications reserved

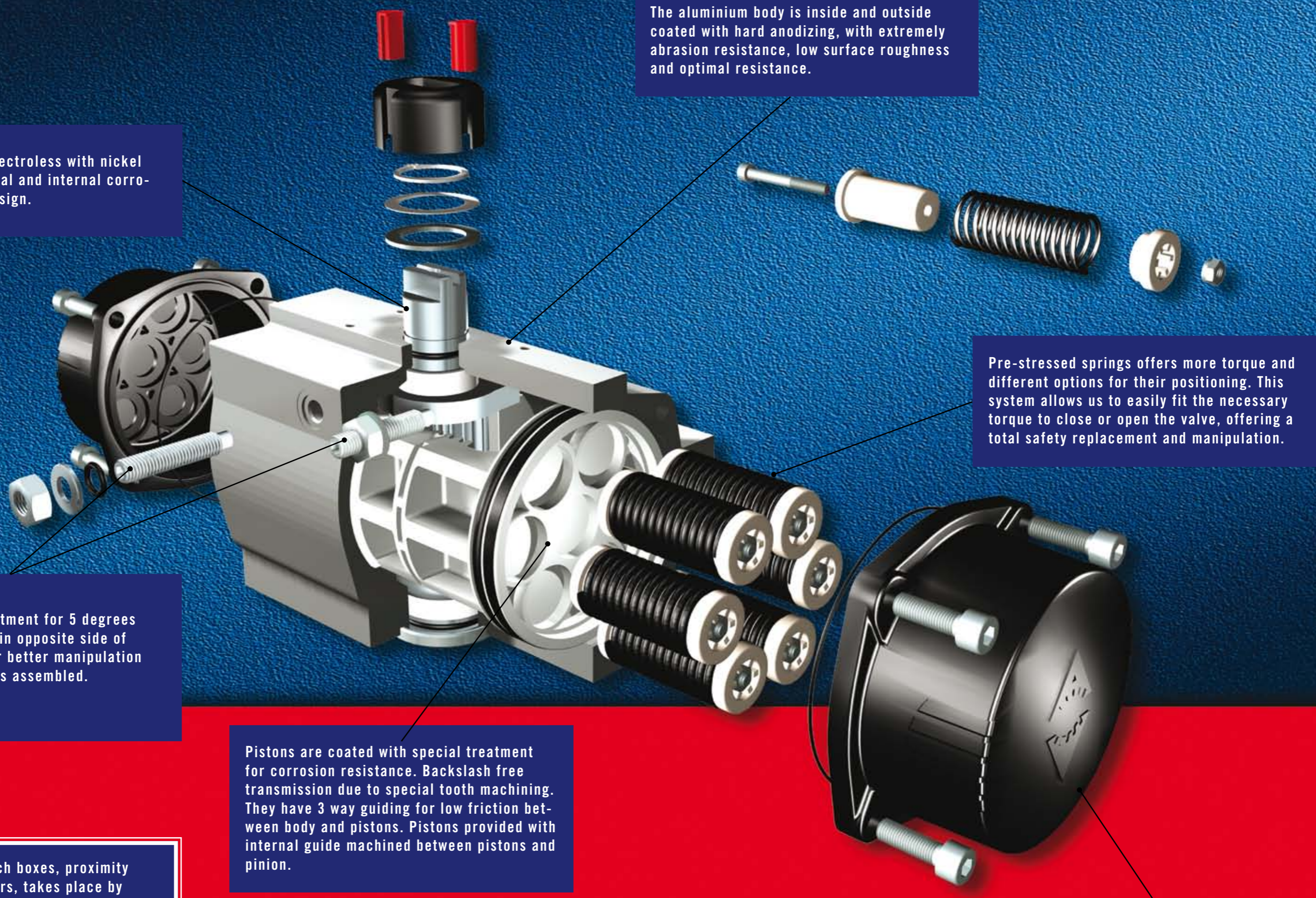


DN	1 1/2"		2"		2 1/2"		3"		4"		5"		6"		8"		10"		12"	
ACTREG	20 DE	40 SE	20 DE	40 SE	40 DE	80 SE	40 DE	80 SE	80 DE	130 SE	80 DE	200 SE	130 DE	300 SE	200 DE	500 SE	300 DE	850 SE	500 DE	1200 SE
A	33		43		46		46		52		56		56		60		68		78	
B	216	235	223	242	247	269	263	285	307	316	325	353	357	393	397	431	512**	547**	559**	609**
C	76	90	76	90	90	111	90	111	111	121	111	135	121	151	135	172	151	192	172	212
D / D'	128	230	128	230	143	260	143	260	162	270	162	335	184	380	202	420	236	470	270	540

\*\* : montage avec arcade de 80

Informations données à titre indicatif et sous réserve de modifications éventuelles

				Ajout 1123		05/06/2006		A		
Ech:	Date :07/05/2004	Dessiné par : F.G.	Tolérances générales : +/- 0.2		Modifications		Date		REV.	
<p style="text-align: center;">Actionneur ACTREG + BFC Vanne papillon 1123-1125</p>					Matière :					
					Poids <Kg> :					
<p style="text-align: center;"><b>SECTORIEL</b></p> <p style="text-align: center;">45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER</p>					Traitement : SANS					
					Plan n° Ens 772A					



Carbon steel shaft electroless with nickel plated against external and internal corrosion. Anti-blowout design.

The aluminium body is inside and outside coated with hard anodizing, with extremely abrasion resistance, low surface roughness and optimal resistance.

Pre-stressed springs offers more torque and different options for their positioning. This system allows us to easily fit the necessary torque to close or open the valve, offering a total safety replacement and manipulation.

External stroke adjustment for 5 degrees regulation, designed in opposite side of Namur connection for better manipulation when solenoid valve is assembled.

Pistons are coated with special treatment for corrosion resistance. Backlash free transmission due to special tooth machining. They have 3 way guiding for low friction between body and pistons. Pistons provided with internal guide machined between pistons and pinion.

The assembly of switch boxes, proximity switches or positioners, takes place by means of the Namur connection VDI/VDE 3845, carried out like standard in all our models. The height of the axis to fulfil this Norm is of 30mm, for all our products, with which it entails that with a single model of Box or positioner, we can cover all our manufacturing range.

Every single actuator is tested and provided with a unique serial number for traceability. This heat number is stamped in the body.

Different end caps for double or single acting for fast and safety identification without the need to read the label, in addition less air consumption in double acting actuators. Epoxy coated as standard protected against environment corrosion.



ADA 10



SIZES:  
20 TO 2100



SIZE: 2500



SIZE: 4000



## TYPES OF ACTUATORS DOUBLE ACTING & SPRING RETURN

### GENERAL CHARACTERISTICS

- ADA type: Double acting.
- ASR type: Spring return.
- Rack and pinion design.
- Linear torque.
- Rotation angle  $90^\circ \pm 5^\circ$
- Antifriction sliding bearings.
- Long life without maintenance.
- Protected against environmental corrosion:
  - Hard anodized Aluminium body,
  - Electroless Nickel Plated pinion,
  - Epoxy coated end caps,
  - Stainless steel bolts, studs and nuts.
- Working temperature:  $-30^\circ\text{C}$  to  $100^\circ\text{C}$  in Standard Construction
  - $-15^\circ\text{C}$  to  $150^\circ\text{C}$  with FKM O-rings
  - $-40^\circ\text{C}$  to  $80^\circ\text{C}$  with Silicone O-rings
- Maximum working pressure: 8 bar (116 psig). (Except ADA10 at 10 bar)
- Total safety for springs replacement.
- Mounting of solenoid valves acc. NAMUR Std.
- Mounting of devices acc. NAMUR VDI/VDE 3845 Std.
- Coupling according to ISO 5211 and DIN 3337 (Octagonal drive)
- Position indicator can be used also to operate mechanical limit switches.

### OPTIONS ON REQUEST

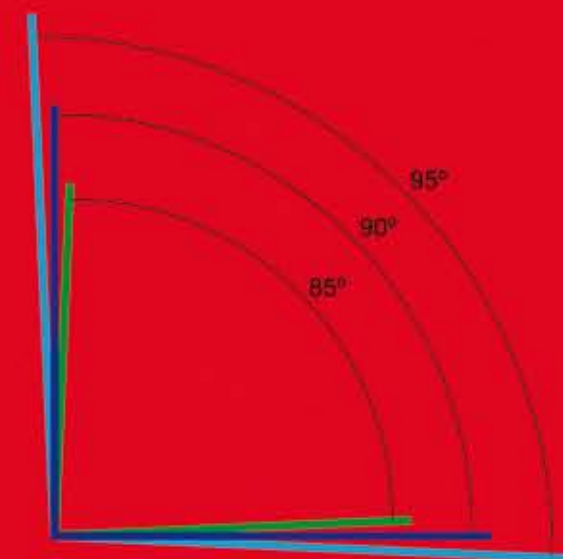
- Epoxy coated body.
- Electroless Nickel Plated body and end caps.
- High temperature construction.
- Low temperature construction.
- Stainless steel pinion
- Fast acting actuators
- Actuators with 100% travel adjustment stroke.

### BI-DIRECTIONAL TRAVEL STOPS

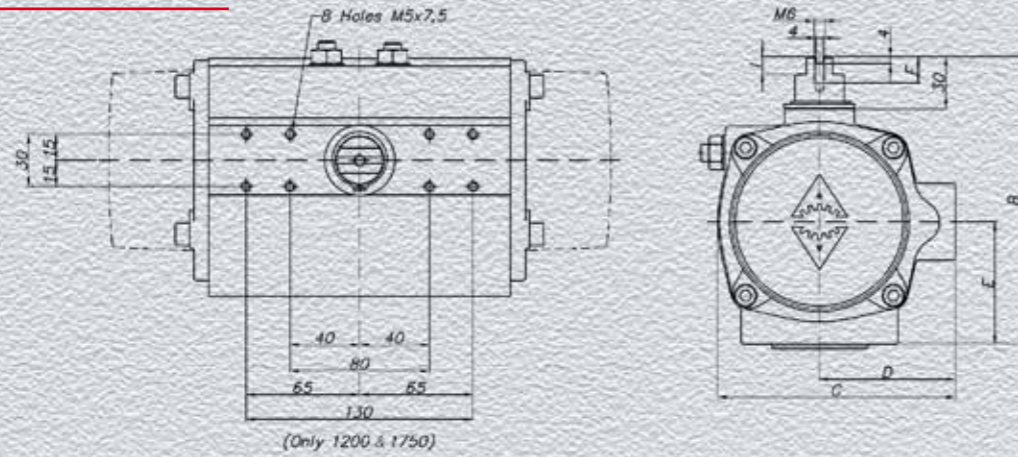
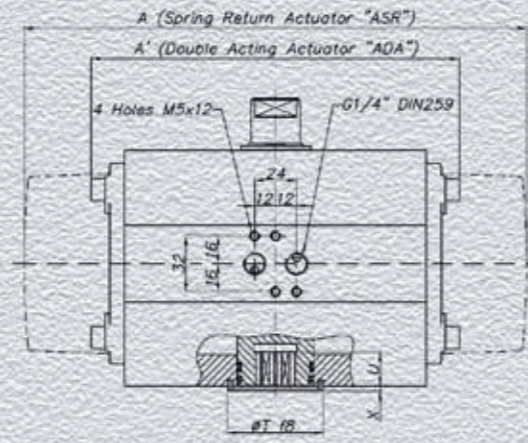
ACTREG pneumatic actuators are provided with bi-directional pinion travel stops.

Side located stops allow a full  $\pm 5^\circ$  travel adjustment between  $85^\circ$  and  $95^\circ$ . These travel stops are designed to absorb the maximum rated torque of the actuator and the maximum impact loads associated with recommended travel speed.

Adjustment of the counterclockwise and clockwise rotation limits is accomplished by unscrewing the locking nuts, turning the respective left and right stop studs to reduce or increase the travel angle and screwing the locking nuts.



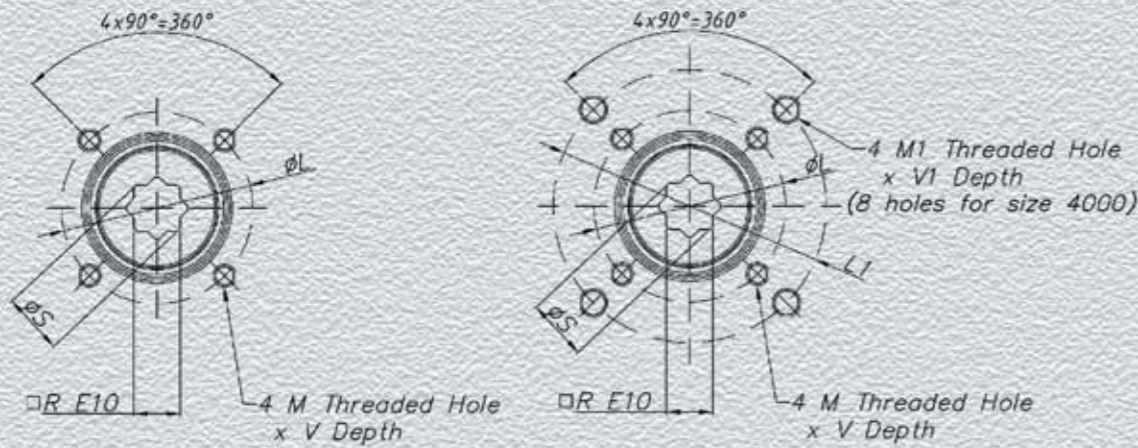
- 20
- 40
- 80
- 130
- SIZES: •200
- 300
- 500
- 850
- 1200
- 1750
- 2100



ISO 5211 DETAIL

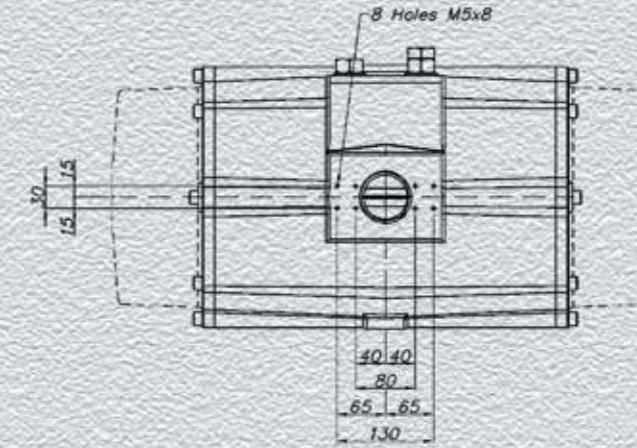
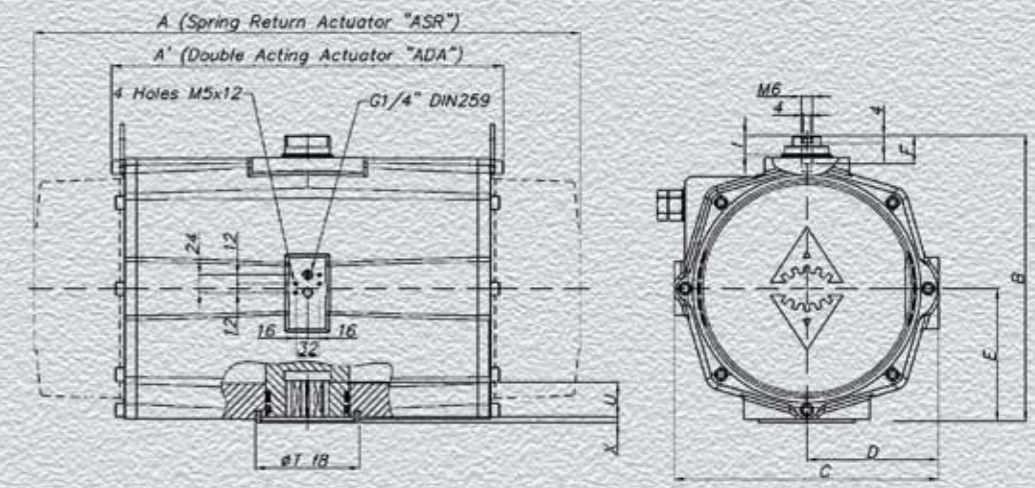
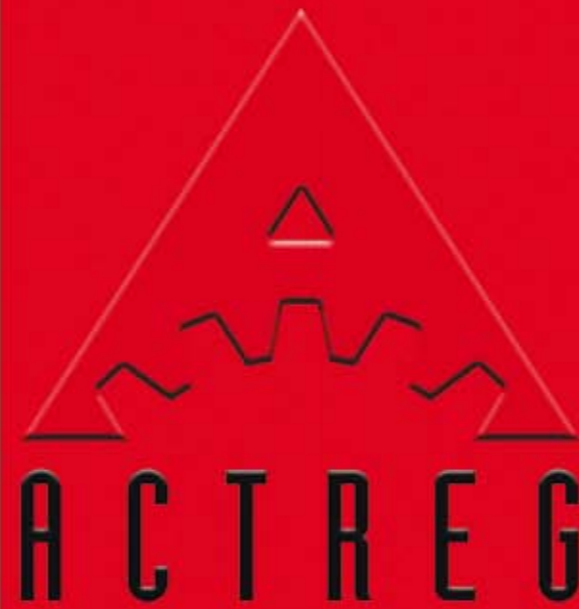
SIZES: •20•40•500•1750•2100•2500

SIZES: •20•40•130  
200•300•850•1200•4000

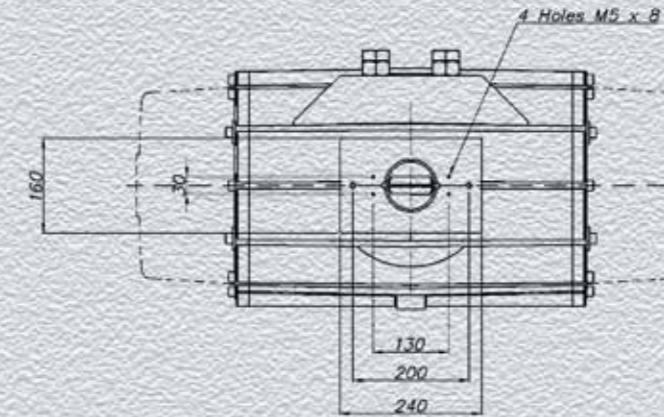
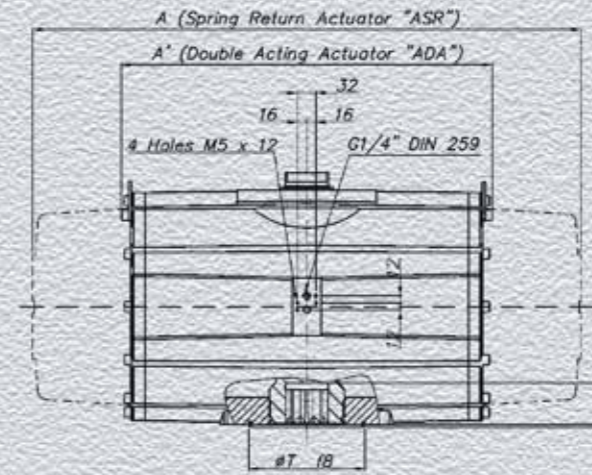


DOUBLE ACTING & SPRING RETURN ACTUATORS GENERAL DIMENSIONS IN mm

SIZE	A	A'	B	C	D	E	F	I	R	ρS	ISO 5211	ρL	MxV	ISO 5211	ρL1	M1xV1	ρT	X	U
20	163	145	96	76	48	34	9	6	9	12,5	F03	36	M5x8				25	2	10
20	163	145	96	76	48	34	9	6	14	18,1	F05	50	M6x10				35	3	12
20	163	145	96	76	48	34	9	6	14	18,1	F04	42	M5x10				35	3	12
40	195	158	115	91	56	45	9	6	14	18,1	F04	42	M5x10				35	3	12
40	195	158	115	91	56	45	9	6	14	18,1	F05	50	M6x10				35	3	12
80	217	177	137	111	66	55	12	8	17	22,5	F05	50	M6x10	F07	70	M8x16	55	3	19
130	258	196	147	122	71	60	15	8	17	22,5	F05	50	M6x10	F07	70	M8x16	55	3	22
200	299	225	165	135,5	78	70	15	10	17	22,5	F07	70	M8x16	F10	102	M10x16	55	3	23
300	348,5	273	182	152,5	86	80	16	12	22	28,5	F07	70	M8x16	F10	102	M10x16	70	3	24
500	397	304	199	173	96	85	17	15	22	28,5	F10	102	M10x16				70	3	32
850	473	372	221	191,5	106	98	15	15	27	36,5	F10	102	M10x17	F12	125	M12x20	85	3	39
1200	560	439	249	212,5	116	114	16	15	36	48,5	F10	102	M10x17	F14	140	M16x26	100	4	48
1750	601	461	280	242,5	131	130	16	15	36	48,5	F14	140	M16x26				100	4	50
2100	702	510	313	276,5	148	147	16	15	46	65,1	F16	165	M20x29				130	4	50



SIZES: •2500

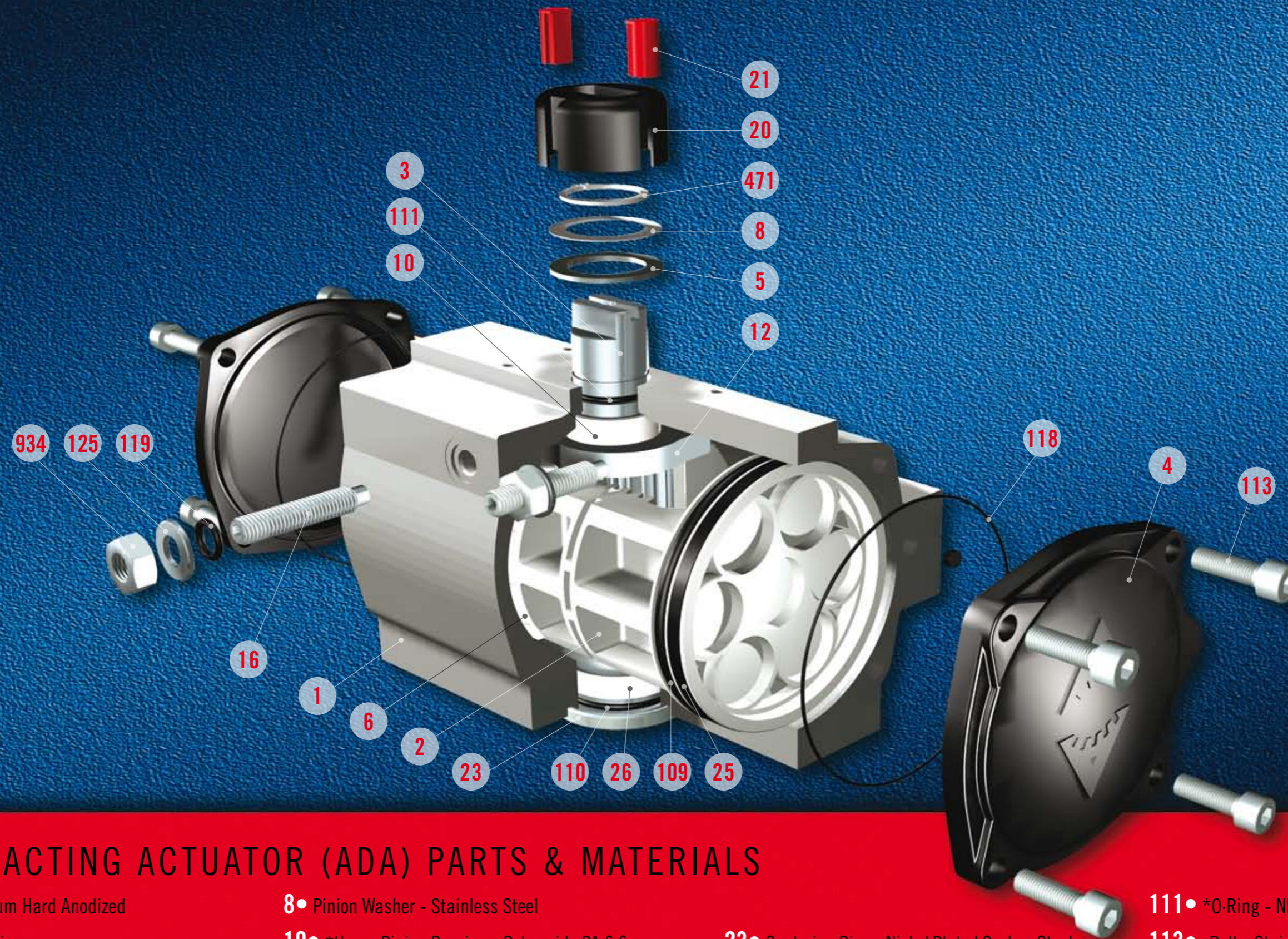


SIZES: •4000

DOUBLE ACTING & SPRING RETURN ACTUATORS GENERAL DIMENSIONS IN mm

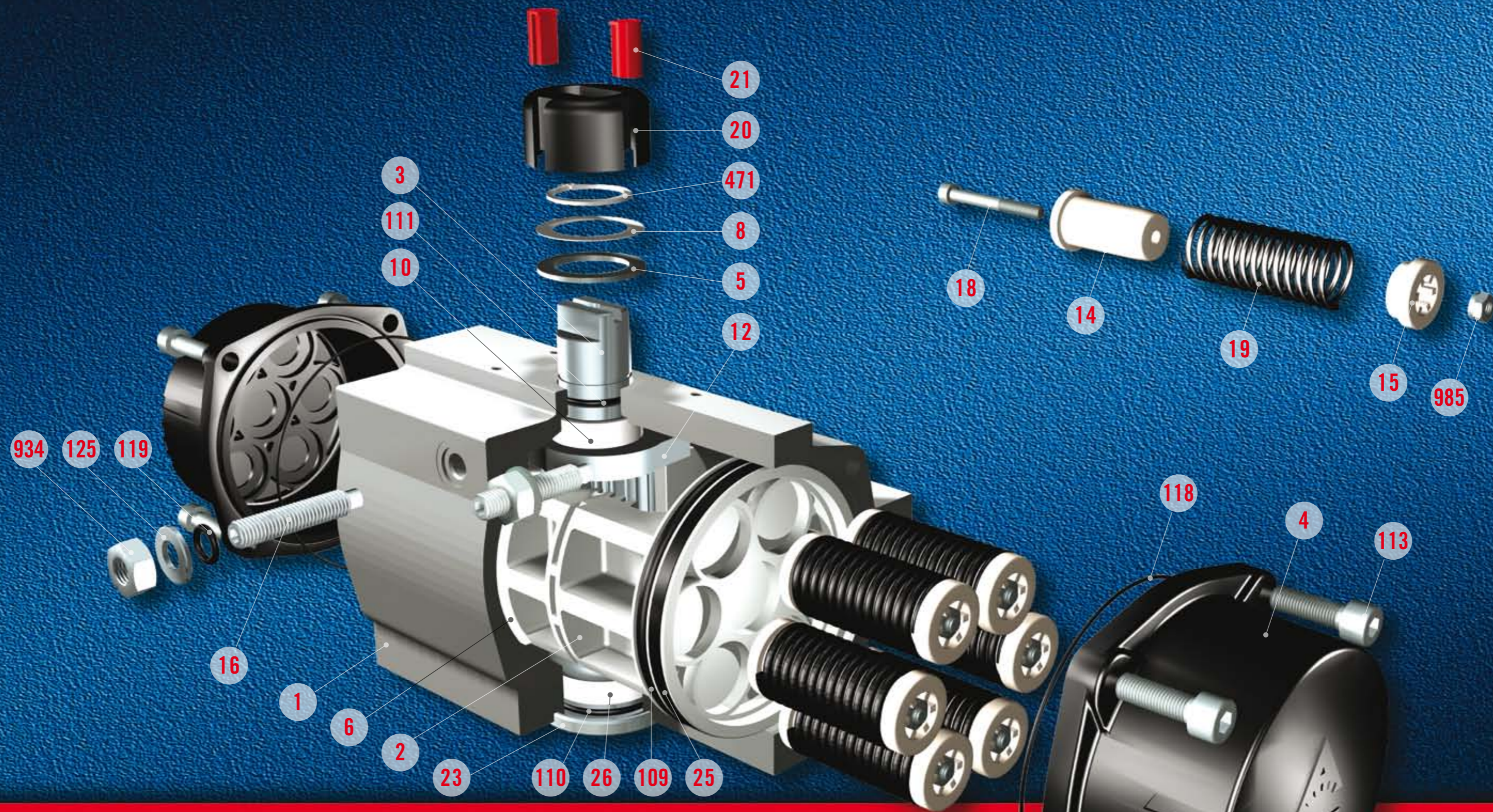
SIZE	A	A'	B	C	D	E	F	I	R	ρS	ISO 5211	ρL	MxV	ISO 5211	ρL1	M1xV1	ρT	X	U
2500	738	518	383	356	177,5	176,5	16	15	46	60,2	F16	165	M20x29				130	4	58
4000	940	630	434	415	213	201	16	15	55	72,5	F16	165	M20x30	F25	254	M16x30	200	4	60

NOTE: See page 8 for the ISO Detail.



## DOUBLE ACTING ACTUATOR (ADA) PARTS & MATERIALS

- |  |  |   |                                     |
|--|--|---|-------------------------------------|
| 1• Body - Aluminium Hard Anodized              | 8• Pinion Washer - Stainless Steel   | 23• Centering Ring - Nickel Plated Carbon Steel | 111• *O-Ring - NBR                  |
| 2• Piston - Aluminium                          | 10• *Upper Pinion Bearing - Polyamide PA 6,6<br>Size 500 & greater in Reinforced Br. | 25• *Slide Guide - Polyamide PA 6,6 + 30% G.F.  | 113• Bolt - Stainless Steel         |
| 3• Pinion - Nickel Plated Carbon Steel         | 12• Stop - ASTM A-105  | 26• *Lower Pinion Bearing - Polyamide PA 6,6    | 118• *O-Ring - NBR                  |
| 4• End Caps - Aluminium Epoxy Coated           | 16• Adjustment Stroke Screw - Stainless Steel  | 41• **Stop Washer Pinion - Stainless Steel      | 119• *O-Ring - NBR                  |
| 5• *Soft Washer Pinion - Polyamide PA 6.6      | 20• Position Indicator - Polyamide   | 109• *O-Ring - NBR                              | 125• Washer - Stainless Steel       |
| 6• *Slide Piston - Polyamide PA 6,6 + 30% G.F. | 21• Cam - Polyamide  | 110• *O-Ring - NBR                              | 471• *Slip Washer - Stainless Steel |
| 7• **Lug - Nickel Plated Carbon Steel          |  |   | 934• Nut - Stainless Steel          |



## SPRING RETURN ACTUATOR (ASR) PARTS & MATERIALS

- |  |  |   |                                     |
|--|--|---|-------------------------------------|
| 1• Body - Aluminium Hard Anodized              | 10• *Upper Pinion Bearing - Polyamide PA 6,6<br>Size 500 & greater in Reinforced Br. | 20• Position Indicator - Polyamide              | 111• *O-Ring - NBR                  |
| 2• Piston - Aluminium                          | 12• Stop - ASTM A-105  | 21• Cam - Polyamide                             | 113• Bolt - Stainless Steel         |
| 3• Pinion - Nickel Plated Carbon Steel         | 14• Spring's Long Support - Polyamide PA 6.6   | 23• Centering Ring - Nickel Plated Carbon Steel | 118• *O-Ring - NBR                  |
| 4• End Caps - Aluminium Epoxy Coated           | 15• Spring's Short Support - Polyamide PA 6.6  | 25• *Slide Guide - Polyamide PA 6,6 + 30% G.F.  | 119• *O-Ring - NBR                  |
| 5• *Soft Washer Pinion- Polyamide PA 6.6       | 16• Adjustment Stroke Screw-Stainless Steel  | 26• *Lower Pinion Bearing - Polyamide PA 6,6    | 125• Washer - Stainless Steel       |
| 6• *Slide Piston - Polyamide PA 6,6 + 30% G.F. | 18• Bolt - Stainless Steel   | 41• **Stop Washer Pinion - Stainless Steel      | 471• *Slip Washer - Stainless Steel |
| 7• **Lug - Nickel Plated Carbon Steel          | 19• Spring - DIN 2076 · D-5.6  | 109• *O-Ring - NBR                              | 934• Nut - Stainless Steel          |
| 8• Pinion Washer - Stainless Steel             |  | 110• *O-Ring - NBR                              | 985• Nut - Stainless Steel          |

\*Recommended spare parts  
\*\*Only for sizes 2500 & 4000



Table with 15 columns: Size, TYPE, Pressure, and torque output for 3 bar, 3.5 bar, 4 bar, 4.5 bar, 5 bar, 5.5 bar, 6 bar, 6.5 bar, 7 bar, 8 bar, 10 bar, and Weight (Kg).

▲ DOUBLE ACTING ACTUATOR TORQUE OUTPUT in Nm  
▼ SPRING RETURN ACTUATOR TORQUE OUTPUT in Nm

Table with 25 columns: Size, TYPE, Pressure, and torque output for 3 bar, 3.5 bar, 4 bar, 4.5 bar, 5 bar, 5.5 bar, 6 bar, 6.5 bar, 7 bar, 8 bar, Spring stroke, and Weight (Kg).

NOTE: A= STANDARD

Table with 25 columns: Size, TYPE, Pressure, and torque output for 43.5 psi, 50.8 psi, 58 psi, 65.3 psi, 72.5 psi, 80 psi, 87 psi, 94.3 psi, 102 psi, 116 psi, 130.5 psi, 145 psi, and Weight (lb).

▲ DOUBLE ACTING ACTUATOR TORQUE OUTPUT in ft lb  
▼ SPRING RETURN ACTUATOR TORQUE OUTPUT in ft lb

Table with 25 columns: Size, TYPE, Pressure, and torque output for 43.5 psi, 50.8 psi, 58 psi, 65.3 psi, 72.5 psi, 80 psi, 87 psi, 94.3 psi, 102 psi, 116 psi, Spring stroke, and Weight (lb).

NOTE: A= STANDARD