



## PNEUMATIC ACTUATORS

### ACT- 300

#### TECHNICAL FEATURES



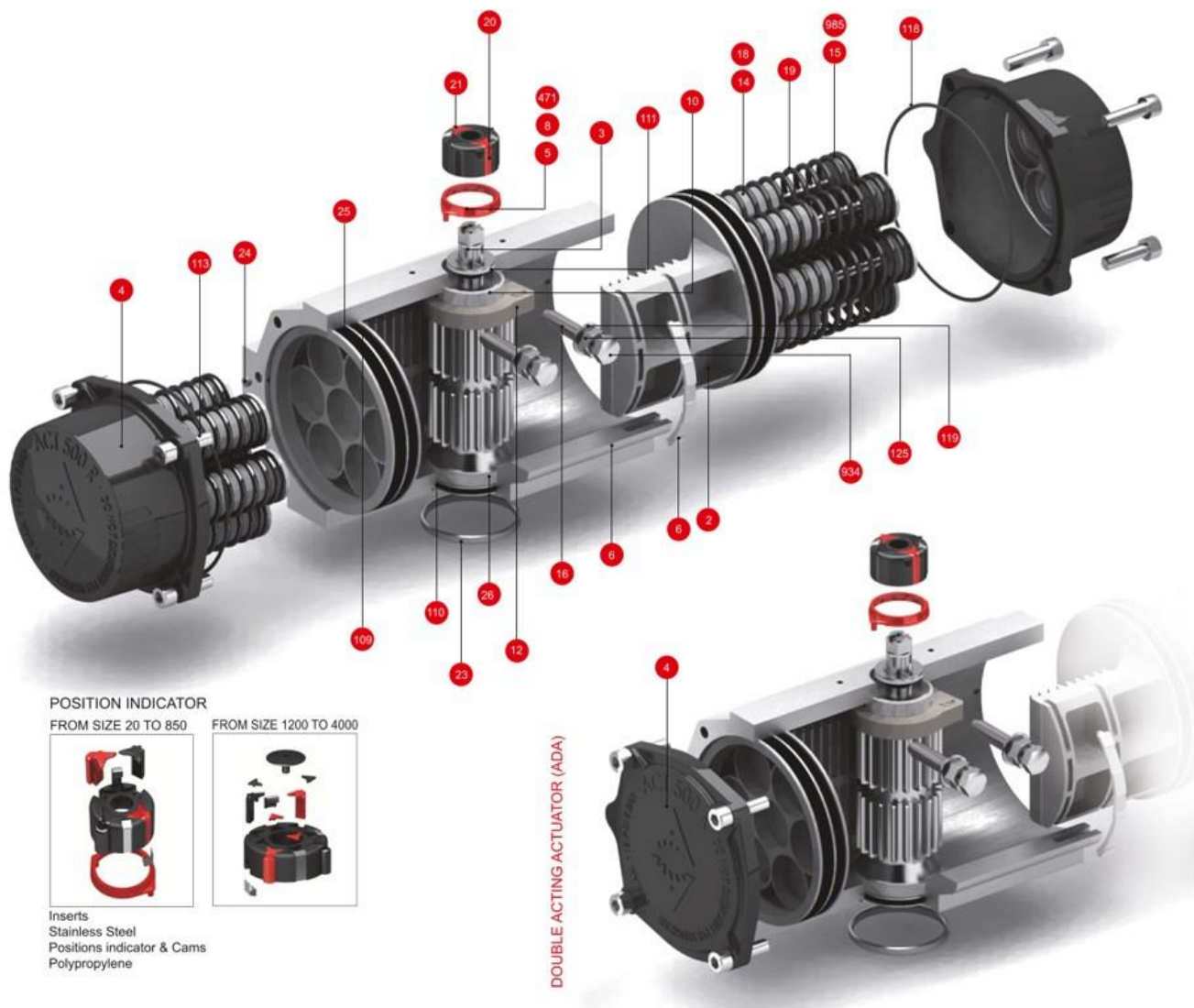
Manufacturing program:



Quality Management:



SPRING RETURN ACTUATOR (ASR)



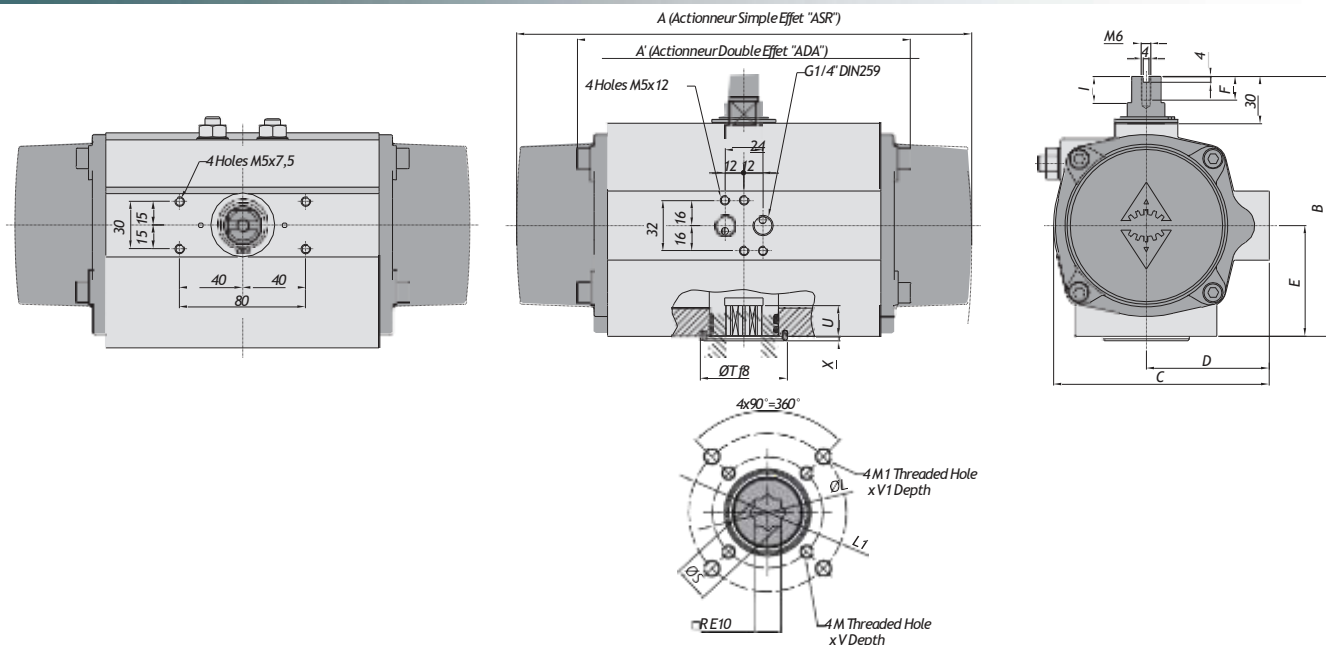
### PARTS & MATERIALS

| 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 DIN-934          | Stainless Steel             |
| 20   | Position Indicator     | Polyamide                   | 985  | Nut DIN-985          | Stainless Steel             |

\*Standard construction

# PNEUMATIC ACTUATORS ACT - 300

## Dimensions, general characteristics & torque



### 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  |
|-------|-----|-----|-------|----|----|----|------|----|------|----------|----|-------|----------|-----|---------|----|---|----|
| 348,5 | 273 | 182 | 152,5 | 86 | 80 | 12 | 12,5 | 22 | 28,5 | F07      | 70 | M8x16 | F10      | 102 | M10x16  | 70 | 3 | 24 |

(\*) Dimensions in mm.

### GENERAL CHARACTERISTICS

| DESIGN STANDARDS            | Serie ADA     | Actuator                |
|-----------------------------|---------------|-------------------------|
|                             | Serie ASR     | Actuator                |
| 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 | According to EN 15714-3 |

### TESTS AND CERTIFICATES

|                   |          |                                      |
|-------------------|----------|--------------------------------------|
| Quality assurance | ISO 9001 | SIL3 Capable (In 1002 Configuration) |
|-------------------|----------|--------------------------------------|

| Max. Pressure | Rotation | Screw stroke Adjustment | Chamber Ø (mm) | Air Volume (L) |         | Stroke Time (S)* |          |                |                 | Operating Temperature (°C) |                         |  |  |
|---------------|----------|-------------------------|----------------|----------------|---------|------------------|----------|----------------|-----------------|----------------------------|-------------------------|--|--|
|               |          |                         |                | Opening        | Closing | Opening          | Closing  | STD (standard) | HT (high temp.) | LT (low temp.)             | ELT (extreme low temp.) |  |  |
| 8 bar         | 90° ± 5° | For 1° Need ¼ Turn      | 120,5          | 1,96           | 1,73    | ADA 0,30         | ADA 0,40 | NBR "O" Ring   | FKM "O" Ring    | Silicone "O" Ring          | Silicone "O" Ring       |  |  |
|               |          |                         |                |                |         | ASR 0,70         | ASR 0,85 | -30° to +100°  | -15° to +150°   | -40° to +80°               | -60° to +80°            |  |  |

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

| TYPE     | Output Torque For Double Acting in Nm |                |              |                |              |                |                  |                |              |              |  |  | Weight (Kg) |
|----------|---------------------------------------|----------------|--------------|----------------|--------------|----------------|------------------|----------------|--------------|--------------|--|--|-------------|
| Pressure | 3 bar 0° 90°                          | 3,5 bar 0° 90° | 4 bar 0° 90° | 4,5 bar 0° 90° | 5 bar 0° 90° | 5,5 bar 0° 90° | 6 bar (A) 0° 90° | 6,5 bar 0° 90° | 7 bar 0° 90° | 8 bar 0° 90° |  |  |             |
| D        | 145                                   | 170            | 194          | 218            | 242          | 267            | 291              | 315            | 339          | 388          |  |  | 8,5         |

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

| TYPE     | Output Torque for Spring Return in Nm |     |         |     |       |     |         |     |       |     |         |     |           |     |         |     |       |     |       |     | Spring stroke |      | Weight (Kg) |
|----------|---------------------------------------|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-----------|-----|---------|-----|-------|-----|-------|-----|---------------|------|-------------|
| Pressure | 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 |     | END           | STAR |             |
|          | 0°                                    | 90° | 0°      | 90° | 0°    | 90° | 0°      | 90° | 0°    | 90° | 0°      | 90° | 0°        | 90° | 0°      | 90° | 0°    | 90° | 0°    | 90° |               |      |             |
| S06      | 102                                   | 75  | 126     | 99  | 151   | 123 | 175     | 148 | 199   | 172 | 223     | 196 | 247       | 220 | 272     | 245 | 296   | 269 | 344   | 317 | 51            | 83   | 9,65        |
| S08      |                                       |     | 112     | 76  | 136   | 100 | 160     | 124 | 185   | 148 | 209     | 173 | 233       | 197 | 257     | 221 | 281   | 245 | 330   | 294 | 68            | 111  | 9,92        |
| S10      |                                       |     |         |     | 122   | 76  | 146     | 101 | 170   | 125 | 194     | 149 | 219       | 173 | 243     | 198 | 267   | 222 | 315   | 270 | 85            | 138  | 10,20       |
| S12      |                                       |     |         |     |       |     | 131     | 77  | 156   | 101 | 180     | 128 | 204       | 150 | 228     | 174 | 253   | 198 | 301   | 247 | 102           | 166  | 10,50       |
| S14 (A)  |                                       |     |         |     |       |     |         |     |       |     | 165     | 102 | 190       | 126 | 214     | 151 | 238   | 175 | 287   | 223 | 119           | 193  | 10,80       |

(A) Standard construction

\* 20° temperature, without air restrictions, without external resistant load at 6 bar and 14 springs configuration.



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