



The art of power and perfection

PNEUMATIC ACTUATORS

ACT-200

PDS-AC-200 Rev. 5



Manufacturing program:

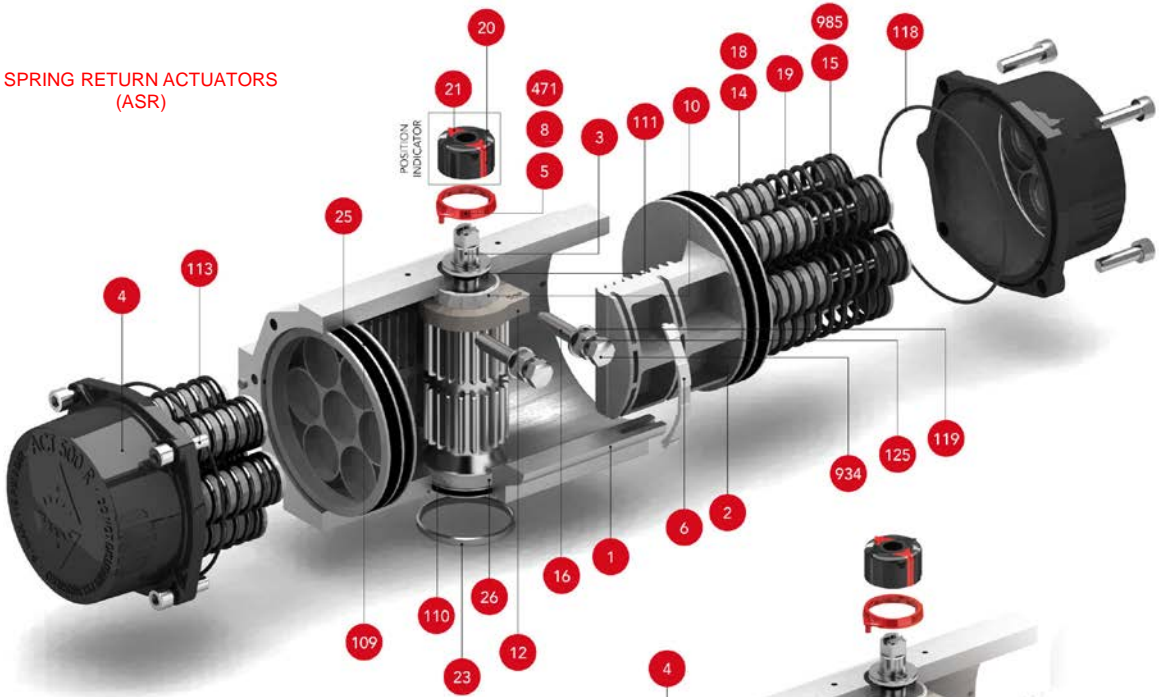
Ex II 2 G D c – LCIE 05 AR 022

Quality & Environmental Management:



TECHNICAL FEATURES

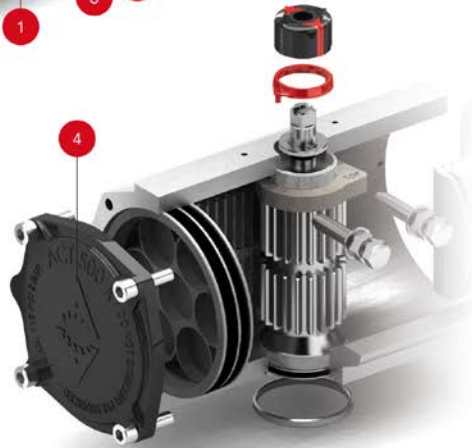
SPRING RETURN ACTUATORS (ASR)



POSITION INDICATOR



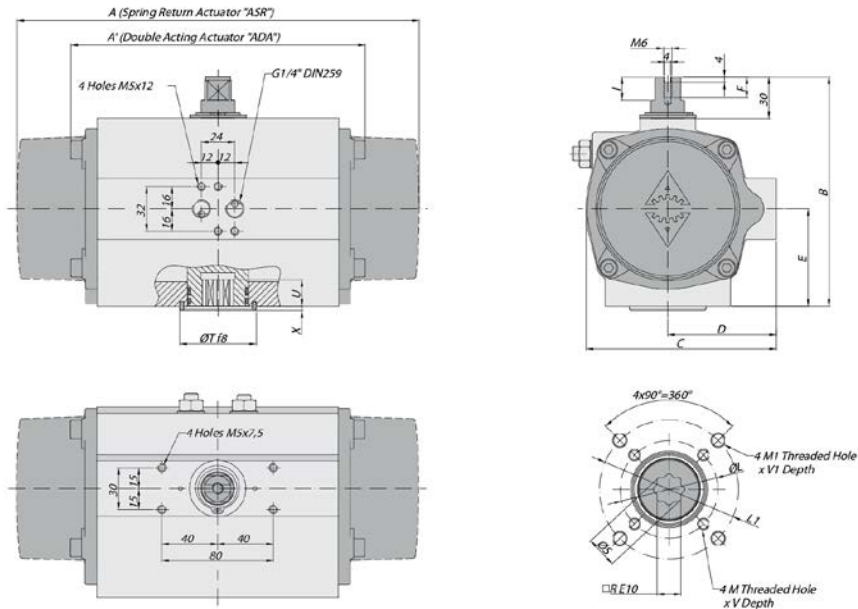
DOUBLE ACTING ACTUATORS (ADA)



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 |
|-----|-----|-----|-------|----|----|----|------|----|------|----------|----|-------|----------|-----|---------|----|---|----|
| 299 | 225 | 165 | 135,5 | 78 | 70 | 12 | 12,5 | 17 | 22,5 | F07 | 70 | M8x16 | F10 | 102 | M10x16 | 55 | 3 | 23 |

(*) 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) | |

| 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 | 104,6 | 1,19 | 1,2 | D | 0,15 | D | 0,22 | NBR "O" Ring | FPM "O" Ring | Silicone "O" Ring |
| | | | | | | S | 0,5 | S | 0,6 | -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 | 88 | | 102 | | 117 | | 131 | | 146 | | 161 | | 175 | | 190 | | 205 | | 234 | | 234 | | 5,6 |

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° | 0° | 90° | END | STAR |
| S06 | 61 | 49 | 76 | 63 | 90 | 78 | 105 | 92 | 119 | 107 | 134 | 122 | 149 | 136 | 163 | 151 | 178 | 166 | 207 | 195 | 31 | 46 | 6,5 | |
| S08 | | | 67 | 50 | 81 | 65 | 96 | 79 | 111 | 94 | 125 | 109 | 140 | 123 | 154 | 138 | 169 | 152 | 198 | 182 | 42 | 61 | 6,7 | |
| S10 | | | | | 72 | 52 | 87 | 66 | 102 | 81 | 116 | 96 | 131 | 110 | 146 | 125 | 160 | 139 | 189 | 169 | 52 | 77 | 6,9 | |
| S12 | | | | | | 78 | 53 | 93 | 68 | 107 | 83 | 122 | 97 | 137 | 112 | 151 | 126 | 180 | 156 | 63 | 92 | 7,0 | | |
| S14 (A) | | | | | | | | | 99 | 70 | 113 | 84 | 128 | 99 | 142 | 113 | 172 | 143 | 73 | 107 | 7,3 | | | |

(A) Standard construction.



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