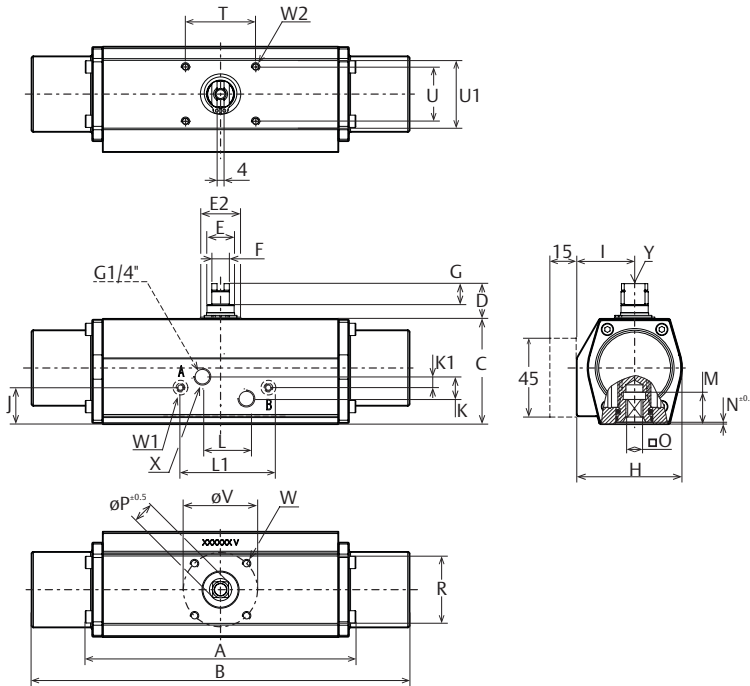


Data sheet F12 180° Rotation

Metric - ISO5211



| Dim. in mm | | Size 12 | | | | | | | | | | | | | | | | | | |
|------------|--------|---------|----|----|------|------|------|-------|-------|----|------|-----|------|------|------|---|--------|--------|------|--|
| A (FD) | B (FS) | C | D | E | E2 | F | G | H | I | J | K | K1 | L | L1 | M | N | O max. | O min. | P | |
| 155 | 216 | 60 | 20 | 16 | 23 | 10 | 12 | 60 | 33 | 21 | 12.7 | 6.4 | 25.4 | 50.8 | 16.5 | 1 | 9.14 | 9.05 | 12.1 | |
| R | R1 | T | U | V | W | W1 | W2 | X | Y | | | | | | | | | | | |
| 40 | 40 | 40 | 31 | 42 | M6x8 | M4x5 | M4x5 | G1/8" | M6x12 | | | | | | | | | | | |

| Principle | | |
|----------------------------------|--|----------------|
| Pneumatic rack & pinion actuator | | |
| General Data | | |
| Bore | | 46 mm |
| Stroke | | 25.2 mm |
| Weight | SR ⁽³⁾ | 0.99 kg |
| | DA ⁽³⁾ | 0.84 kg |
| Volume | Port A | 0.13 L |
| | Port B | 0.11 L |
| Air connection | | 2x 1/8" BSP |
| Pressure range | MOP ⁽³⁾ | 8.3 barg |
| | SR ⁽³⁾ | 3-8.3 barg |
| | DA ⁽³⁾ | 0.2 - 8.3 barg |
| Pressure media | Clean, dry or lubricated air or inert gas. | |
| Cycle speed DA ⁽²⁾ | Open | 0.5 Sec. |
| | Close | 0.4 Sec. |
| Cycle speed SR ⁽²⁾ | Open | 0.5 Sec. |
| | Close | 0.4 Sec. |
| Temperature range | -20 °C to +80 °C | |
| Lubrication | Lubricated for life ⁽¹⁾ | |
| Rotation angle | 180° | |
| Finish | Polyurethan powder coat | |

1. According EN 15714-3.
2. Test conditions:
Solenoid with flow capacity: 0.6 m³/hr;
Pipe diameter: 6 mm; Medium: clean air,
Supply pressure: 5.5 barg ~ 80 psig;
Load: with average load; Stroke: 90°;
Temperature: Room temperature
3. SR = Spring-Return, DA = Double-Acting
MOP = Maximum Operating Pressure

| Torque Output F12 180° | | | | | | | | | | | | | | | | | | | | |
|------------------------|----------------------|-----|------------------------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|------|
| Spring-Return | | | | | | | | | | | | | | | | | | | | |
| Spring set | Spring Stroke Torque | | Air Stroke Torque (Nm) | | | | | | | | | | | | | | | | | |
| | | | 3.0 barg | | 3.5 barg | | 4.0 barg | | 4.5 barg | | 5.0 barg | | 5.5 barg | | 6.0 barg | | 7.0 barg | | 8.0 barg | |
| | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | | |
| 20 | 7.1 | 4.5 | - | - | - | - | 5.2 | 2.1 | 6.5 | 3.4 | 7.8 | 4.7 | 9.1 | 6.0 | 10.4 | 7.3 | 13.0 | 9.9 | 15.6 | 12.5 |
| Double-Acting | | | 7.3 | | 8.5 | | 9.7 | | 10.9 | | 12.2 | | 13.4 | | 14.6 | | 17.1 | | 19.6 | |

Notes:

- Volume is the actual free air volume at 1 atm
- Flange and square drive to ISO5211
- For further information regarding options, materials, certifications and additional execution please contact your Regional Sales Office.

European Directives:

- PED: Suitable for use with group 2 gases according to Pressure Equipment Directive (PED) 2014/68/EU
- ATEX: Suitable for use in hazardous areas classified II 2 GD, zones 1 or 2 (gases) and 21 or 22 (dust) according to ATEX Directive 2014/34/EU
- For the Configuration Code please consult EFG.02.01.EN