

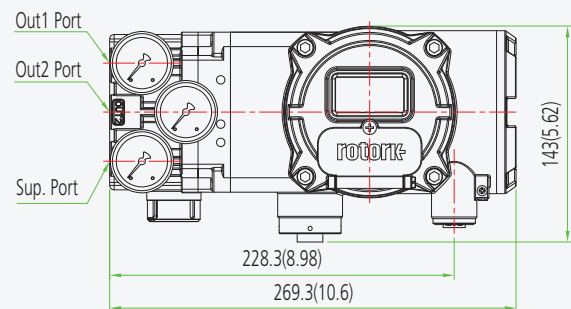
Next-generation intelligent valve positioners

Design features

- **Simple installation and commissioning.** Easy setup and integration with all control systems.
- **Reliable operation.** Contactless position feedback with no mechanical wear and built-in intelligence using internal pressure sensors.
- **Rugged construction.** Engineered for operation in harsh environments.
- **Digitalisation.** Advanced online diagnostics enable predictive maintenance.
- **Data accessibility.** Seamless integration with all main DCS and AMS systems through configurable Digital Output and Input options.
- **Energy savings.** High capacity combined with optimised supply air consumption.
- **Simple system design.** High capacity reduces the need for volume boosters and accessories.

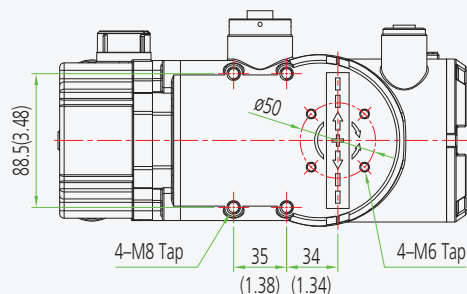
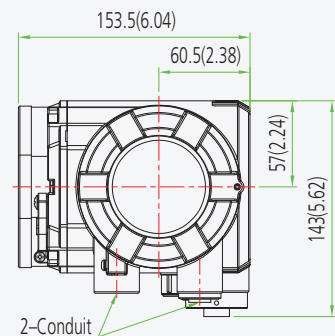
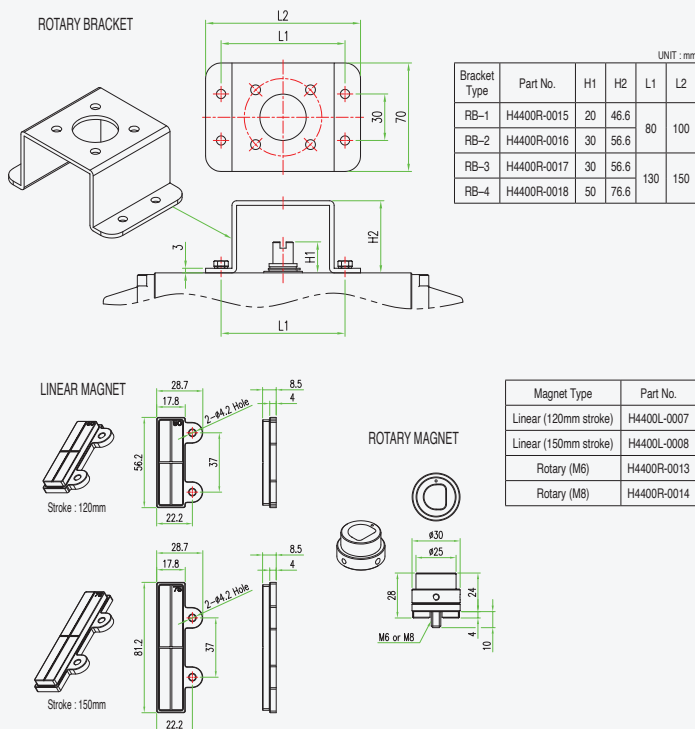


RTP-4000 aluminium enclosure



RP-4000 bracket & magnet

(ordered separately)



Dimensions: mm (Inches ")

Item type		RTP-4000
Power supply		Loop powered from 4-20 mA control signal
Min. operating current		3.8 mA
Load voltage		11.0 VDC at 20 mA DC 10.0 VDC at 4 mA DC
Input impedance		Max. 550 Ω at 20 mA DC
Control system compliance voltage		28 VDC max.
Protection		Over current protection Reverse polarity protection
Digital communication		HART 7
4-20 mA analog output (optional)		One isolated output signal: 4-20mA Supply voltage: 9-28 VDC NAMUR NE43: Failure high (> 21 mA) or Failure low (< 3.6 mA).
Discrete switch input (optional)		One isolated input Max. supply voltage: 30 VDC, Max. 4 mA OFF at 0-5 VDC ON at 10-30 VDC
Discrete switch output (optional)		Two isolated outputs Maximum supply voltage: 30 VDC Max. ON state current $\leq$ 1 A ON state voltage drop $\leq$ 1 V OFF state current: $\leq$ 0.1 mA
Wire size		14-26 AWG
LUI usable range		-40 to +85 °C. LCD is not readable below -40 °C. The LCD PCBA supports 180° rotation. Four flame proof push buttons
Acting type		Single or Double
Supply pressure		1.4 to 9 bar (0.14 to 0.9 MPa). Do not exceed actuator rating.
Flow capacity		195 LPM / 413 SCFH (avg.) at 1.4 bar supply pressure 550 LPM / 1165 SCFH (avg.) at 5.5 bar supply pressure
Steady-state air consumption	Single-acting	2.4 LPM (avg.) at 4 bar supply
	Double-acting	2.7 LPM (avg.) at 4 bar supply
Supply medium		Air or nitrogen. It must be clean, dry and free of corrosive contaminants.
Air quality		According to ISA7.0.0.1 or ISO8573-1 Oil content: Class 3 (< 1 ppm) Solid particles: Class 6 (size $\leq$ 5 microns) Pressure dew point: At least 10°C below minimum anticipated ambient temperature to ensure no risk of condensation.
Input signal or air supply failure	Single	Actuator output 1 vents to atmosphere
	Double	Actuator output 1 vents to atmosphere and actuator output 2 goes to supply pressure
Operating ambient temperature	Standard	-40 to +85 °C (-40 to +185 °F)
	Arctic option	-55 to +85 °C (-67 to +185 °F)
Storage/transport temperature		Same as the ambient temperature
Relative humidity		0-90 % non-condensing
Humidity effect		IEC61514-2 < 0.3% for 48 hours at 40 °C and 93 % RH
Temperature effect		Typ. 0.01% / °C over -40 to +85°C
Vibration		ANSI/ISA-75.13.01
EMC emissions and immunity		Emissions: Class A (IEC 61000-6-4) Immunity: Performance Criteria A (IEC 61000-4 series)
Usable altitude		Up to 2,000 m
Linearity		$\pm$ 0.5% F.S.
Hysteresis		$\pm$ 0.5% F.S.
Sensitivity		$\pm$ 0.3% F.S.
Repeatability		$\pm$ 0.3% F.S.

Item type		RTP-4000
Stroke range	Linear	6-120 mm, 6-150 mm
	Rotary	55-110°
Output characteristics		Linear, Quick Open, EQ %, User Set (9 or 21 points)
Housing and cover material		Low copper aluminum alloy (copper < 0.4%) Polyester powder coating
Electrical enclosure protection		IP66
Magnet holder, magnet bracket and rotary mounting bracket		Stainless Steel 316L
Air connection		Supply pressure: ¼ NPT Out pressure: ¼ NPT Exhausts: ¾ NPT (pending) Tubing: ¾ inch (10 mm) recommended
Cable entry		M20x1.5P or ½ NPT
Gauge connection		¾ NPT
Weight		4.95 kg (10.91 lbs) 5.15 kg (11.35 lbs), including 3 pressure gauges

Product code

RPT-4400 S - D - 4 - 2 - 1 - A - 1 - S

Acting type

S = Single
D = Double

Explosion protection

D = ATEX, IECEx, UKCA¹
Z¹ = NEPSI, CCC
K¹ = KCS
A¹ = FM, CSA
P¹ = PESO
B¹ = INMETRO
E¹ = EAC
U¹ = ECAS

Conduit & air connection

4 = M20x1.5P - ¼ NPT
5 = ½ NPT - ¼ NPT

Communication

2 = HART protocol communication

Input/Output

0 = None
1 = 4-20 mA analogue output
2 = Discrete switch input and output
3 = 4-20 mA analogue output + discrete switch input and output

Diagnostics

A = Advanced
P = Premium

Pressure gauge

0 = None
1 = Three pressure gauges

Ambient operating temperature

S = -40 to 85 °C (-40 to 185 °F)
L = -55 to 85 °C (-67 to 185 °F)

Notes:

1. Certification pending.