

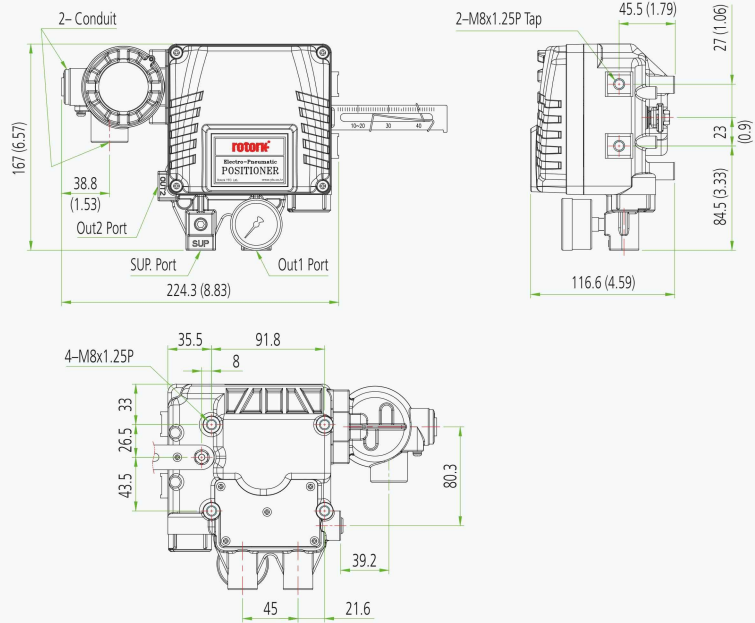
Electro-pneumatic positioners YT-1000 / YT-1050

Design features

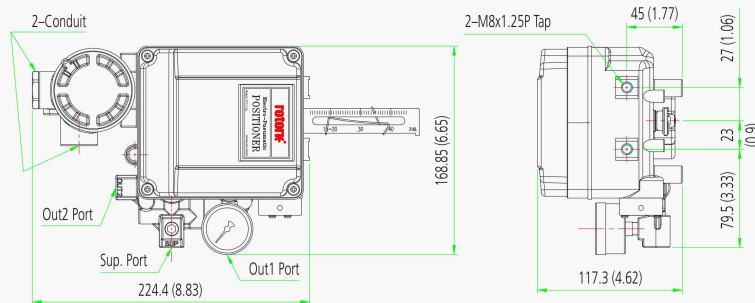
- **Simple zero and span adjustment.** Internal hand dials and locking screws for 4-20 mA range adjustments.
- **Reverse and direct-acting settings.** Full and ½ split range setting by simple adjustment.
- **High vibration resistant.** No resonance between 5 to 200 Hz.
- **Internal Analogue Output.** Available on weatherproof model only.
- **Auto / manual switch.** Internal adjustment with lock screw safety.



YT-1000 aluminium enclosure



YT-1050 STS316 enclosure



Dimensions: mm (Inches *)

Electro-pneumatic positioners YT-1000 / YT-1050

Item type	YT-1000	YT-1050
Input signal	4-20 mA DC	
Impedance	250 ± 15 Ω	
Supply pressure	0.14 to 0.7 MPa = 1.4 to 7 bar = 20 to 102 psi	
Stroke	Linear type	10 to 150 mm (0.4 to 6")
	Rotary type	55 to 100°
Air connection	Rc ¼, ¼ NPT, G ¼	¼ NPT
Gauge connection	⅛ NPT	
Conduit	G(NPT) ½, M20	G ½, ½ NPT
Explosion protection type	ATEX / IECEx: (II 2 G) Ex dmb IIB T5, Ex ia IIC T6 (YT-1000 only)	
	INMETRO: (II 2 G) Ex dmb IIB T5	
	UKEX: II 2G Ex db mb IIB T5 Gb, NEMA 4X	
	KCs Ex dmb IIB T5/T4 / Ex dmb IIC T5 / Ex ia IIB T6 Gb	KCs Ex dmb IIB T5
	CSA (Class I, Zone 1) Ex dm IIB T5	
	FM CL I, Div 1, Groups C, D T5; CL II, III, Div 1, Groups E, F, G T5; Type 4X	
	CCC, NEPSI Ex db mb IIB T5 Gb Ex db mb IIC T6 Gb Ex ia IIC T6 Gb	CCC Ex d mb IIB T5 Gb
	TIIS Ex dmb IIB T5	
	NEPSI Ex d mb IIB T5 Gb Ex d mb IIC T6 Gb Ex ia IIC T6 Ga	NEPSI Ex d mb IIB T5 Gb
	PESO Ex db mb IIB T5 Gb Ex ia IIC T6 Gb	PESO Ex db mb IIB T5 Gb
Ingress protection	YT-1000: IP66, TYPE 4X (FM) YT-1050: IP66 (excluding the pressure gauges)	
Linearity	Single	± 1% F.S.
	Double	± 2% F.S.
Hysteresis	± 1% F.S.	
Sensitivity	Single	± 0.2% F.S.
	Double	± 0.5% F.S.
Repeatability	± 0.5% F.S.	
Air consumption	2.5 LPM (sup = 0.14 MPa) 0.8 CFM (sup = 20 psi)	
Flow capacity	80 LPM (sup = 0.14 MPa) 2.83 CFM (sup = 20 psi)	
Material	Aluminium diecasting	Stainless steel 316
Weight	YT-1000L: 2.7 kg (6.1 lb) YT-1000R: 2.8 kg (6.2 lb) YT-1050: 5.71 kg (12.6 lb)	

YT-1000L Product code

YT-1000 - L - S - N - 1 - 1 - 4 - S - 0

Model

YT-1000 = Aluminium

Motion type

L = Linear

Acting type

S = Single D = Double

Explosion protection¹

N = Non-explosion proof
 M² = Ex db mb IIB T5 Gb: ATEX, IECEx, KCs, NEPSI, UKEX, PESO
 T = Ex db mb IIB T5 Gb: INMETRO
 A = Ex d m IIB T5: CSA
 F = Flameproof enclosure & encapsulation: FM
 C = Ex dmb IIC T5: KCs
 X = Ex dmb IIB T5: TIIS
 Z³ = Ex db mb IIB T5 Gb: CCC, NEPSI
 B⁴ = Ex db mb IIC T6 Gb: CCC, NEPSI
 G = Ex ia IIC T6 Gb: CCC, NEPSI
 i = Ex ia IIC T6 Gb: ATEX, IECEx, KCs, UKEX, PESO

Lever type

Linear
 1 = 10 to 40 mm
 2 = 30 to 70 mm
 3 = 60 to 100 mm
 4 = 100 to 150 mm

Orifice type

1 = Ø1 2 = Ø2 3 = None

Conduit & air connection

1 = G ½ - Rc ¼ (N/A for FM, CSA)
 2 = G ½ - ¼ NPT (N/A for FM, CSA)
 3 = G ½ - G ¼ (N/A for FM, CSA)
 4 = M20 - ¼ NPT
 5 = ½ NPT - ¼ NPT

Operating temp. (non-explosion proof)⁵

S = -20 to +70 °C (-4 to +158 °F)
 H = -20 to +120 °C (-4 to +248 °F)
 L = -40 to +70 °C (-40 to +158 °F)

Option

0 = None
 2⁶ = 4-20 mA Analogue Output (internal, without LCD, non-explosion proof)
 3⁷ = 4-20 mA Analogue Output with LCD (internal with LCD, non-explosion proof)

YT-1000L Notes:

- M (except KCs), T, F, X, Z, B, G, i are only available for operating temperature S. M (only KCs) is only available for operating temperature S and H. A, C are only available operating temperature S and L.
- Please put the name of the certificate in a purchase order.
- 3, 4. Z and B are only available for conduit & air connection 4 and 5.
- This option is just the normal operating temperature of the product and is not related to explosion protection temperature. See certificates for explosion protection temperature.
- 6, 7. Only available for operating temperature S and L.

See page 28 for YT-1000R and YT-1050 product code charts.

YT-1000R Product code

YT-1000 - R - S - N - 1 - 1 - 4 - S - 0 - 0

Model

YT-1000 = Aluminium

Motion type

R = Rotary

Acting type

S = Single D = Double

Explosion protection¹

N = Non-explosion proof
 M² = Ex db mb IIB T5 Gb: ATEX, IECEx, KCs, NEPSI, UKEX, PESO
 T = Ex db mb IIB T5 Gb: INMETRO
 A = Ex d m IIB T5: CSA
 F = Flameproof enclosure & encapsulation: FM
 C = Ex dmb IIC T5: KCs
 X = Ex dmb IIB T5: TIIS
 Z³ = Ex db mb IIB T5 Gb: CCC, NEPSI
 B⁴ = Ex db mb IIC T6 Gb: CCC, NEPSI
 G = Ex ia IIC T6 Gb: CCC, NEPSI
 i = Ex ia IIC T6 Gb: ATEX, IECEx, KCs, UKEX, PESO

Lever type

1 = M6 X 34L
 2 = M6 X 63L
 3 = M8 X 34L
 4 = M8 X 63L
 5 = NAMUR

Orifice type

1 = Φ1 2 = Φ2 3 = None

Conduit & air connection

1 = G ½ - Rc ¼ (N/A for FM, CSA)
 2 = G ½ - ¼ NPT (N/A for FM, CSA)
 3 = G ½ - G ¼ (N/A for FM, CSA)
 4 = M20 - ¼ NPT
 5 = ½ NPT - ¼ NPT

Operating temp. (non-explosion proof)⁵

S = -20 to +70 °C (-4 to +158 °F)
 H = -20 to +120 °C (-4 to +248 °F)
 L = -40 to +70 °C (-40 to +158 °F)

Option 1

0 = None (std)
 1⁶ = Dome cover

Option 2

0 = None
 1⁷ = 4-20 mA Analogue Output (internal, without LCD, non-explosion proof)
 2⁸ = 4-20 mA Analogue Output (external, SPTM-6V, explosion proof)
 3⁹ = Limit switch (2ea, internal, non-explosion proof)
 4¹⁰ = Limit switch (2ea, external, YT-850 (non-explosion proof) or YT-870 (explosion proof))
 5¹¹ = 4-20 mA Analogue Output + limit switch (2ea) (internal, non-explosion proof)
 6¹² = SPTM + limit switch (2ea) (external, YT-870, explosion proof)

YT-1000R Notes:

- M (except KCs), T, F, X, Z, B, G, i are only available for operating temperature S. M (only KCs) is only available for operating temperature S and H. A, C are only available operating temperature S and L.
- Please put the name of the certificate in a purchase order.
- 4, Z and B are only available for conduit & air connection 4 and 5.
- This option is just the normal operating temperature of the product and is not related to explosion protection temperature. See certificates for explosion protection temperature.
- 1 in **Option 1** + 0 in **Option 2** is available for Explosion protection M (ATEX, IECEx, KCs and NEPSI only), A, C, Z, B, G, i (ATEX, IECEx and KCs only) and N. There is also with LCD type. So if you would like to order this, please fill in "4-20 mA Analog Output (Internal, With LCD)" on the order form.
- Only available for operating temperature S and L.
- The nameplate of the external product, SPTM-6V, is KCs+NEPSI. The conduit entries of SPTM-6V is G ½. For NEPSI it is ½ NPT. SPTM-6V (Explosion protection for Ex d IIC) is certified with KCs and NEPSI so this option is available for Explosion protection M (KCs and NEPSI only), C, i (KCs only) and N. This option is only available for 0 in **Option 1**.

YT-1050 Product code

YT-1050 - L - S - N - 1 - 1 - 2 - S

Model

YT-1050 = STS316

Motion type

L = Linear R = Rotary

Acting type

S = Single D = Double

Explosion protection¹³

N = Non-explosion proof
 M¹⁴ = Ex db mb IIB T5 Gb: ATEX, IECEx, KCs, UKEX, PESO
 T = Ex db mb IIB T5 Gb: INMETRO
 Z = Ex db mb IIB T5 Gb: CCC, NEPSI

Lever type

Linear	Rotary
1 = 10 to 40 mm	1 = M6 X 34L
2 = 30 to 70 mm	2 = M6 X 63L
3 = 60 to 100 mm	3 = M8 X 34L
4 = 100 to 150 mm	4 = M8 X 63L
	5 = NAMUR

Orifice type

1 = Φ1 2 = Φ2 3 = None

Conduit & air connection

1 = G ½ - R ¼ (N/A for CCC)
 5 = ½ NPT - ¼ NPT (CCC only)

Operating temp. (non-explosion proof)¹⁵

S = -20 to +70 °C (-4 to +158 °F)
 H = -20 to +120 °C (-4 to +248 °F)
 L = -40 to +70 °C (-40 to +158 °F)

- 9,10,11,12. Only available for operating temperature S, and 1 in **Option 1**.
- Mechanical switch (SPDT) is only available for YT-850. The conduit entry of YT-850 is G ½.
- Mechanical switch (SPDT) and Inductive proximity (Autonics) are available for YT-870.
 YT-870 has two types of nameplates, KCs+ATEX+IECEx+CSA and CCC. The conduit entry of YT-870 is G ¾. For CSA and CCC it is ½ NPT. YT-870 (Explosion protection for Ex d IIC) is certified with KCs, ATEX, IECEx, CSA and CCC so this option is available for Explosion protection M (ATEX, IECEx and KCs only), A, C, Z, B, G, i (ATEX, IECEx and KCs only) and N.

YT-1050 Notes:

- M (except KCs), T and Z are only available for operating temperature S. M (only KCs) is only available for operating temperature S and H.
- Please put the name of the certificate in a purchase order.
- This option is just the normal operating temperature of the product and is not related to explosion protection temperature. See certificates for explosion protection temperature.