



Valve Positioners and Accessories



Keeping the World Flowing

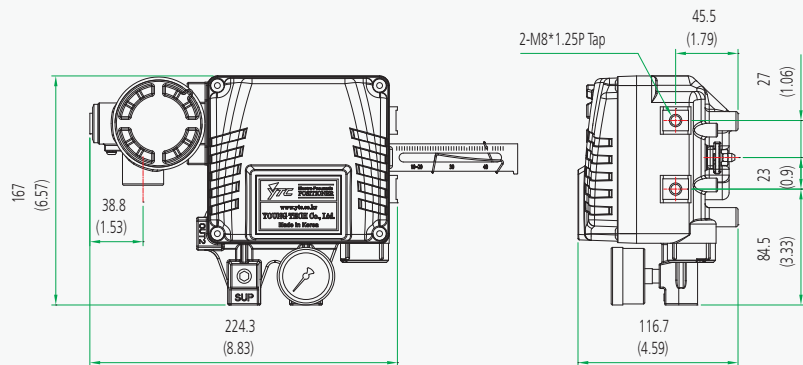
Electro-Pneumatic Positioners YT-1000 / YT-1050

Design features

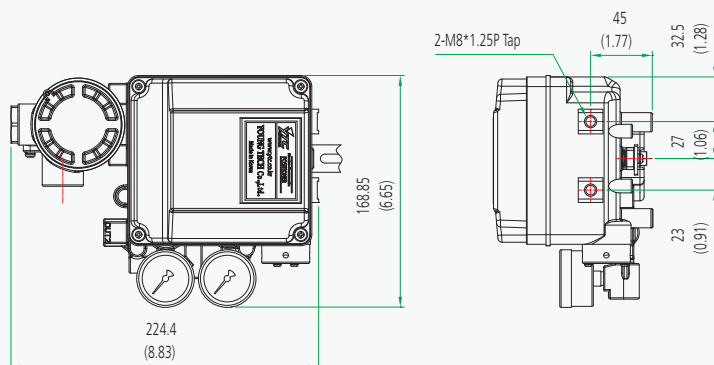
- **Simple zero and span adjustment.** Internal hand dials and locking screws for adjustments.
- **Reverse & Direct Acting Settings.** Full and 1/2 split range setting by simple adjustment.
- **High vibration resistant.** No resonance between 5 to 200 Hz.
- **Internal feedback option.** Available on weatherproof model only.
- **Auto / Manual switch.** Internal adjustment with lock screw safety.



YT-1000 Aluminum Enclosure



YT-1050 STS316 Enclosure



Dimensions: mm (Inches ")

Electro-Pneumatic Positioners YT-1000 / YT-1050

Item Type		YT-1000	YT-1050
Input Signal		4 to 20 mA DC	
Impedance		250 ± 15 Ω	
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)	
Stroke	Linear Type	10 to 150 mm	
	Rotary Type	0 to 90°	
Air Connection		PT(NPT,G)1/4	NPT 1/4
Gauge Connection		PT(NPT)1/8	NPT 1/8
Conduit		G(PF,NPT)1/2, M20	G 1/2 (PF 1/2)
Explosion Protection Type		ATEX (II 2 G) Ex dmb IIB T5	
		IECEX (II 2 G) EEx mb IIB T5	
		KCs Ex dmb IIB T5/T4 / Ex d IIC T5 IP66 / Ex ia IIB T6 Gb	KCs Ex dmb IIB T5
		TS Ex db mb IIB T5 Gb X	-
		CSA (Class I, Zone 1) Ex dm IIB T5	
		FM XP-S/II/1/CD/T5 Ta=60°C; DIP/II,III/1/EF/G/T5 Ta=60°C; Type 4X	
		NEPSI Ex dmb IIC T6 Gb	
		TIIS Ex dmb IIB T5	
		IP66	
		-20 to 70 °C (-4 to 158 °F)	
		-20 to 60 °C (-4 to 140 °F)	
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)	
Flow Capacity		80 LPM (sup = 0.14 MPa)	
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)	

Product Code

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

Model

YT-1000 = Aluminum
YT-1050 = STS316

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

N = Non-Explosion
M = ATEX, IECEX, TS, KCs
A = CSA, FM (YT-1000 only)
C = Ex d KCs, NEPSI (YT-1000 only)
I = Exia KCs (YT-1000 only)
X = TIIS (YT-1000 only)

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 = Ø1
2 = Ø2
3 = None

Conduit & Air Connection

YT-1000	YT-1050
1 = G1/2 - PT1/4	2 = G1/2 - NPT1/4
2 = G1/2 - NPT1/4	
3 = G1/2 - G1/4	
4 = M20 - NPT1/4	
5 = NPT1/2 - NPT1/4	

Operating Temp.

S = -20 to 60 °C
H = -20 to 120 °C
L = -40 to 60 °C

Option 1

YT-1000L	YT-1000R
0 = None	0 = None (St'd)
2 = 4 to 20 mA feedback (Smart Type)	1 = Dome Cover
3 = 4 to 20 mA feedback with LCD (Smart Type)	

Option 2 (YT-1000R only)

0 = None
1 = 4 to 20 mA feedback (Internal - only for non-explosion area protection)
2 = 4 to 20 mA feedback (External)
3 = Limit Switch (Internal - only for non-explosion area protection)
4 = Limit Switch (External)
5 = 4 to 20 mA feedback + Limit Switch
(Internal - only for non-explosion area protection)
6 = SPTM + Limit Switch (External)

Smart Positioners YT-3300 / YT-3350 / YT-3301 / YT-3303

Torque motor technology with communications

Design features

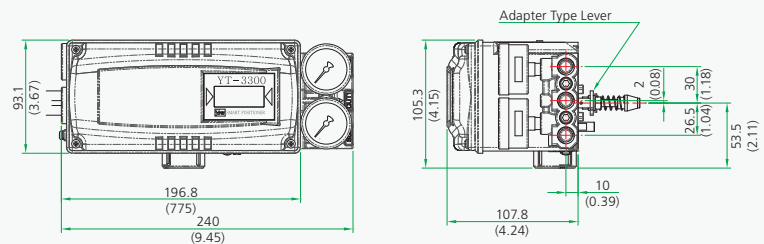
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.
- **Partial Stroke Test (PST).** Fully adjustable Partial Stroke Test. All functionality can be performed and selected locally, through push buttons, or remotely with communication protocol.
- **Feedback signal.** Analogue and Digital feedback signals with 4 to 20 mA, mechanical and proximity switch options (Limit switch options for YT-3300 and YT-3350 models).
- **PID control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **Auto / Manual switch.** Enables closed-loop automatic valve position control or manual positioning via the A/M switch. The manual mode is useful for troubleshooting, calibration, system testing or as a manual bypass.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.
- **Remote Mounting Option (YT-3301 model).** Remote sensor via cable to enable the positioner to be mounted away from extreme temperature.



YT-3300 Aluminium Enclosure

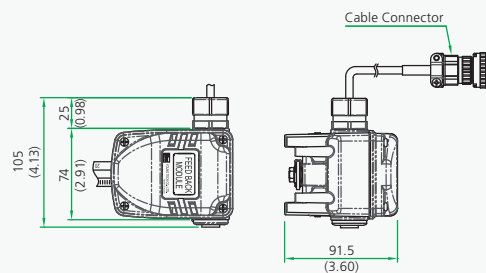


YT-3350 STS316 Enclosure

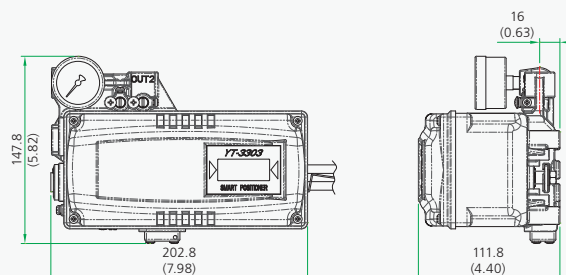


Dimensions: mm (Inches ")

YT-3301 Remote Mounting Option



YT-3303 Left Side Mounting Option



Smart Positioners YT-3300 / YT-3350 / YT-3301 / YT-3303

Item Type		YT-3300	YT-3303	YT-3350	YT-3301
Input Signal		4 to 20 mA DC			
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)			
Stroke	Linear Type	10 to 150 mm			
	Rotary Type	0 to 90°			
Impedance		Max. 500 Ω @ 20 mA DC			
Air Connection		PT(NPT,G)1/4	NPT1/4	PT(NPT,G)1/4	
Gauge Connection		PT(NPT)1/8	NPT1/8	PT(NPT)1/8	
Conduit		G(PF,NPT)1/2, M20	G(PF)1/2	G(PF,NPT)1/2, M20	
Operating Temp.	Standard Type	-30 to 85 °C (-22 to 185 °F)			
	Low Temp. Type	-40 to 85 °C (-40 to 185 °F)			
	LCD	-30 to 85 °C (-22 to 185 °F)			
	Explosion Temp.	-40 to 60 °C (T5) -40 to 40 °C (T6)			
	Remote Sensor	-		-40 to 120 °C (-40 to 248 °F)	
Linearity		±0.5% F.S.			
Hysteresis		±0.5% F.S.			
Sensitivity		±0.2% F.S.			
Repeatability		±0.3% F.S.			
Air Consumption		Below 2 LPM (sup = 0.14 MPa)			
Flow Capacity		70 LPM (sup = 0.14 MPa)			
Output Characteristics		Linear, EQ%, Quick Open user set (18 Point)			
Material		Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	
Ingress Protection		IP66			
Explosion Protection Type		ATEX, IECEx Ex ia IIC T5/T6 Gb, EX iaD IIIC T100°C/T85°C Db IP66			
		NEPSI Ex ia IIC T5/T6			
		KCs Ex ia IIC T5/T6, EX iaD IIIC T100°C/T85°C			
		CSA Certification in progress			
		FM Class I, Div 1, Groups ABCD Class I, Zone 0 AEx ia IIC Class II/III, Div 1, Groups EFG Class I, II, III, Div 2, Groups ABCDEFG NEMA Type 4X IP66 AMBIENT TEMP: -40 - 60°C (T5) / -40 - 40°C (T6)			
Communication (Option)		HART (ver.7)			
L/S Rating	Mechanical Type (Omron)	AC 125 V, 3 A DC 30 V, 2 A	-	AC 125 V, 3 A DC 30 V, 2 A	-
	Proximity Type (P&F)	DC 8.2 V 8.2 mA	-	DC 8.2 V 8.2 mA	-
Weight	Body	2 kg (4.4 lb)		5.1 kg (11.2 lb)	2 kg (4.4 lb)
	Remote Sensor	-			0.9 kg (2.0 lb)

Product Code

YT-3301 - L - S - N - 2 - 4 - 2 - 4 - S - (1)

Model

YT-3300 = Aluminium housing
YT-3301 = Aluminium housing with remote sensor
YT-3303 = Aluminium housing with right side lever
YT-3350 = Stainless steel housing

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Area Protection

N = Safe Area
I = Intrinsically Safe ATEX, IECEx, NEPSI, KCs
A = Intrinsically Safe CSA, FM

Lever Type

Linear	Rotary	
0 = 10 to 40 mm	1 = M6 x 34L	fork type
1 = 20 to 100 mm	2 = M6 x 63L	
2 = 90 to 150 mm	3 = M8 x 34L	
3 = 16 to 30 mm	4 = M8 x 63L	
4 = 16 to 60 mm	5 = NAMUR	
5 = 16 to 100 mm		roller type
6 = 90 to 150 mm		

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communications

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback
2 = Limit Switch - Mechanical Type (YT-3300 and YT-3350 only)
3 = Limit Switch - Proximity Type (YT-3300 and YT-3350 only)
4 = 4 to 20 mA + Limit Switch - Mechanical Type (YT-3300 and YT-3350 only)
5 = 4 to 20 mA + Limit Switch - Proximity Type (YT-3300 and YT-3350 only)

Operating Temp.

S = -30 to 85 °C
L = -40 to 85 °C

Cable Length (YT-3301 only)

Option for YT-3301 only. Standard cable length is 5 m.

1 = 5 m
2 = 10 m
3 = 15 m
4 = 20 m

Smart Positioners YT-3400 / YT-3450

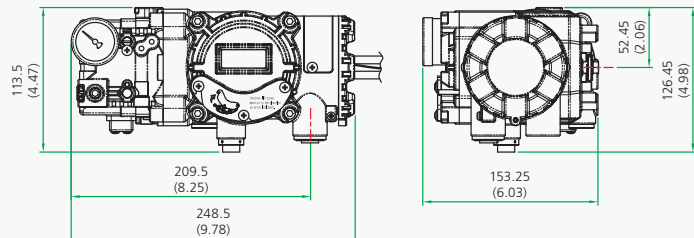
Torque motor technology with communications

Design features

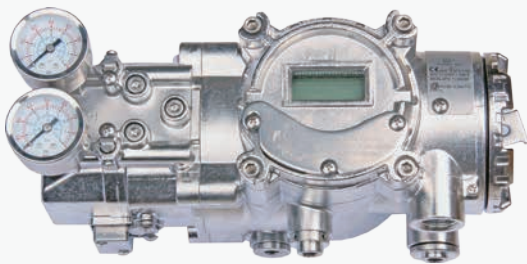
- **Explosionproof / Flameproof Housing.** Global certification for Zone 1 and Division 1 installations.
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.
- **Partial Stroke Test (PST).** Fully adjustable Partial Stroke Test, with single or double set positions, all functionality can be performed and selected locally, through push buttons, or remotely with communication protocol.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA, mechanical and transistor switch options.
- **Auto / Manual switch.** Enables closed-loop automatic valve position control or manual positioning via the Open / Close buttons. The manual mode is useful for troubleshooting, calibration, system testing or as a manual bypass.
- **PID control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.



YT-3400 Aluminium Enclosure



YT-3450 STS316 Enclosure



Dimensions: mm (Inches ")

Smart Positioners YT-3400 / YT-3450

Item Type		YT-3400	YT-3450
Input Signal		4 to 20 mA DC	
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)	
Stroke	Linear Type	10 to 150 mm	
	Rotary Type	0 to 90°	
Impedance		Max. 450 Ω @ 20 mA DC	
Air Connection		PT(NPT,G)1/4	NPT1/4
Gauge Connection		PT(NPT)1/8	NPT1/8
Conduit		G(PF,NPT)1/2, M20	G(PF)1/2
Operating Temp.	Standard Type	-30 to 85 °C (-22 to 185 °F)	
	Low Temp. Type	-40 to 85 °C (-40 to 185 °F)	
	LCD Operating Temp.	-30 to 85 °C (-22 to 185 °F)	
	Explosion Temp.	-40 to 80 °C (T5) / -40 to 70 °C (T6)	
Linearity		±0.5% F.S.	
Hysteresis		±0.5% F.S.	
Sensitivity		±0.2% F.S.	
Repeatability		±0.3% F.S.	
Air Consumption		Below 2 LPM (sup = 0.14 MPa)	
Flow Capacity		70 LPM (sup = 0.14 MPa)	
Output Characteristics		Linear, EQ%, Quick Open user set (18 Point)	
Material		Aluminium Diecasting	Stainless Steel 316
Ingress Protection		IP66	
Explosion Protection Type		ATEX, IECEx Ex db IIC T5/T6, Ex tb IIIC T85°C/T100°C	
		NEPSI Ex db IIC T5/T6, DIP A21 TA, T5/T6	
		KCs Ex d IIC T5/T6 IP66	
		CSA Ex db IIC T5 or T6 Class I, Zone 1, AEx db IIC T5 or T6, Class II, Division 1, Groups E, F and G; Ex tb IIC T85°C/T100°C AEx tb IIIC T85°C/T100°C	
		FM XP/I1/ABCD/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C I1/AEx db/IIC/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C DIP/II, III/1/EF/G/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C 21/AEx tb/IIIC/T85°C Ta= -40°C to +70°C, T100°C Ta= -40°C to +80°C; IP66	
Communication (Option)		HART (ver.7)	
Weight		3.4 kg (7.5 lb)	7.0 kg (15.4 lb)

Product Code

YT-3400 - L - S - C - 2 - 4 - 2 - 3 - S

Model

YT-3400 = Aluminium housing
YT-3450 = Stainless steel housing

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

C = ATEX, IECEx, NEPSI, KCs
E = EAC
A = CSA, FM

Lever Type

Linear	Rotary
1 = 10 to 40 mm	1 = M6 x 34L
2 = 20 to 70 mm	2 = M6 x 63L
3 = 50 to 100 mm	3 = M8 x 34L
4 = 100 to 150 mm	4 = M8 x 63L
	5 = NAMUR

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communication

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback
2 = Limit switch
3 = 4 to 20 mA feedback + Limit switch

Operating Temp.

S = -30 to 85 °C
L = -40 to 85 °C

Smart Positioners YT-2500 / YT-2501 / YT2550

Piezo technology with communications

Design features

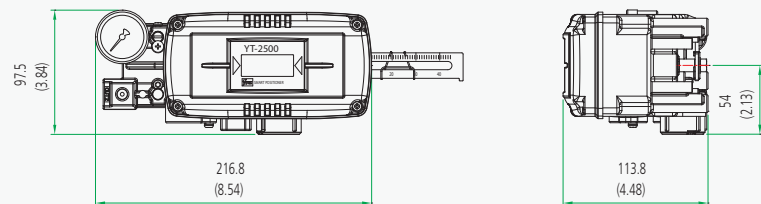
- **Fail Freeze and Fail Safe function.** Enables the valve maintain the last position (Fail Freeze) or move to a pre-determined position (Fail Safe) on the loss of electrical power supply or the pneumatic supply air.
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.
- **Low air consumption level.** Almost zero air leakage.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA, mechanical and proximity switch options.
- **PD control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.



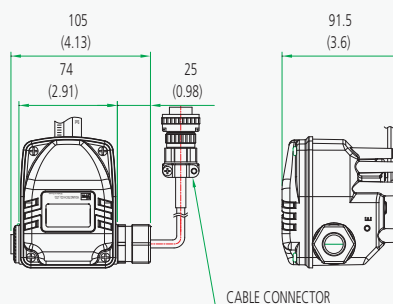
YT-2500 Aluminium Enclosure



YT-2550 Stainless Steel Enclosure



YT-2501 Remote Mounting Option



Dimensions: mm (Inches ")

Smart Positioners YT-2500 / YT-2501 / YT2550

Item Type		YT-2500	YT-2550	YT-2501
Input Signal		4 to 20 mA DC		
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)		
Stroke	Linear Type	10 to 150 mm		
	Rotary Type	0 to 90°		
Impedance		Max. 500 Ω @ 20 mA DC		
Air Connection		PT(NPT,G)1/4	NPT1/4	PT(NPT,G)1/4
Gauge Connection		PT(NPT)1/8	NPT1/8	PT(NPT)1/8
Conduit		G(PF,NPT)1/2, M20	G(PF)1/2	G(PF,NPT)1/2, M20
Operating Temp.	Standard Type	-30 to 80 °C (-22 to 176 °F)		
	LCD	-30 to 85 °C (-22 to 185 °F)		
	Explosion Temp.	-40 to 60 °C (T5) -40 to 40 °C (T6)		
	Remote Sensor	-		-40 to 120 °C (-40 to 248 °F)
Linearity		±0.5% F.S.		
Hysteresis		±0.5% F.S.		
Sensitivity		±0.2% F.S.		
Repeatability		±0.3% F.S.		
Air Consumption	Fail Freeze	0.01 LPM (sup = 0.14 MPa)		
	Fail Safe	6 LPM (sup = 0.14 MPa)		
Flow Capacity	Fail Freeze	60 LPM (sup = 0.14 MPa)		
	Fail Safe	40 LPM (sup = 0.14 MPa)		
Output Characteristics		Linear, EQ%, Quick Open user set (18 Point)		
Material		Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting
Ingress Protection		IP66		
Explosion Protection Type		ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex iaD IIC T85°C/T100°C IP6X		
		NEPSI Ex ia IIC T5/T6		-
		KCs Ex ia IIC T5/T6, EX iaD IIIC T100°C/T85°C		
Communication (Option)		HART (ver.5)		
L/S Rating	Mechanical Type (Omron)	AC 125 V, 3 A DC 30 V, 2 A		-
	Proximity Type (P&F)	DC 8.2 V 8.2 mA		-
Weight	Body	1.5 kg (3.3 lb)	2.9 kg (6.4 lb)	1.5 kg (3.3 lb)
	Linear Remote sensor	-	-	0.6 kg (1.3 lb)
	Rotary Remote sensor	-	-	0.9 kg (2.0 lb)

Product Code

YT-2501 - L - S - N - 2 - 4 - 2 - 3 - S - (1)

Model

YT-2500 = Aluminium housing
YT-2550 = Stainless steel house
YT-2501 = Aluminium housing with remote sensor

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

YT-2500, YT-2550 YT2501
N = Non-Explosion N = Non-Explosion
I = ATEX, IECEx, NEPSI, KCs I = ATEX, IECEx, KCs

Lever Type

Linear	Rotary
1 = 10 to 40 mm	1 = M6 x 34L
2 = 20 to 70 mm	2 = M6 x 63L
3 = 50 to 100 mm	3 = M8 x 34L
4 = 100 to 150 mm	4 = M8 x 63L
	5 = NAMUR (YT-2501)

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communications

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback
2 = Limit switch - Mechanical Type (YT-2500 and YT-2550 only)
3 = Limit switch - Proximity Type (YT-2500 and YT-2550 only)
4 = 4 to 20 mA feedback + Limit switch - Mechanical Type (YT-2500 and YT-2550 only)
5 = 4 to 20 mA feedback + Limit switch - Proximity Type (YT-2500 and YT-2550 only)

Fail Option

F = Fail Freeze
S = Fail Safe

Cable Length (YT-2501 only)

Option for YT-2501 only. Standard cable length is 5 m.

1 = 5 m
2 = 10 m
3 = 15 m
4 = 20 m

Smart Positioner YT-2600

Piezo technology with communications

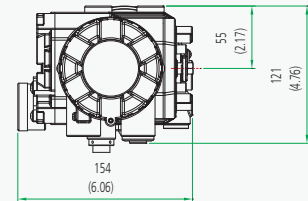
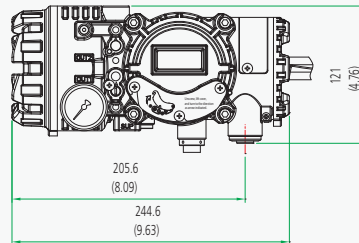
Design features

- **Fail Freeze and Fail Safe function.** Enables the valve maintain the last position (Fail Freeze) or move to a pre-determined position (Fail Safe) on the loss of electrical power supply or the pneumatic supply air.
- **Explosionproof / Flameproof Housing.** Global certification for Zone 1 and Division 1 installations
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.

- **Low air consumption level.** Almost zero air leakage.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA, transistor switch options.
- **PD control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.



YT-2600 Aluminium Exd Positioner



Dimensions: mm (Inches ")

Item Type		YT-2600
Input Signal		4 to 20 mA DC
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)
Stroke	Linear Type	10 to 150 mm
	Rotary Type	0 to 90°
Impedance		Max. 450 Ω @ 20 mA DC
Air Connection		PT(NPT,G)1/4
Gauge Connection		PT(NPT)1/8
Conduit		G(PF,NPT)1/2, M20
Operating Temp.	Standard Type	-30 to 80 °C (-22 to 176 °F)
	LCD	-30 to 85 °C (-22 to 185 °F)
	Explosion Temp.	-40 to 80 °C (T5) -40 to 70 °C (T6)
Linearity		±0.5% F.S.
Hysteresis		±0.5% F.S.
Sensitivity		±0.2% F.S.
Repeatability		±0.3% F.S.
Air Consumption	Fail Freeze	0.01 LPM (sup = 0.14 MPa)
	Fail Safe	6 LPM (sup = 0.14 MPa)
Flow Capacity	Fail Freeze	50 LPM (sup = 0.14 MPa)
	Fail Safe	40 LPM (sup = 0.14 MPa)
Output Characteristics		Linear, EQ%, Quick Open user set (18 Point)
Material		Aluminium Diecasting
Ingress Protection		IP66
Explosion Protection Type	ATEX, IECEx	Ex db IIC T5/T6, Ex tb IIIC T85°C/T100°C
	KCs	Exd IIC T5/T6 IP66
Communication (Option)		HART (ver.5)
Weight		3.0 kg (6.61 lb)

Product Code

YT-2600 - L - S - C - 2 - 4 - 2 - 3 - S

Model

YT-2600 = Aluminum housing

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

C = ATEX, IECEx, KCs

Lever Type

Linear	Rotary
1 = 10 to 40 mm	1 = M6 x 34L
2 = 20 to 70 mm	2 = M6 x 63L
3 = 50 to 100 mm	3 = M8 x 34L
4 = 100 to 150 mm	4 = M8 x 63L
	5 = NAMUR

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communications

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback
2 = Limit switch
3 = 4 to 20 mA feedback + Limit switch

Fail Option

F = Fail Freeze
S = Fail Safe

Smart Positioner YT-2700

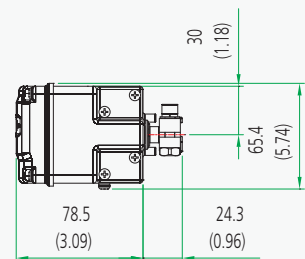
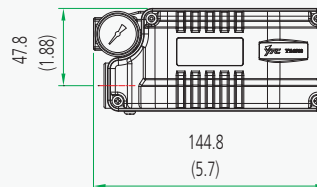
Piezo technology single acting

Design features

- **Fail Freeze and Fail Safe function.** Enables the valve maintain the last position (Fail Freeze) or move to a pre-determined position (Fail Safe) on the loss of electrical power supply or the pneumatic supply air.
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.
- **Low air consumption level.** Almost zero air leakage.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA.
- **PID control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.



YT-2700 Compact Aluminium Positioner



Dimensions: mm (Inches *)

Item Type		YT-2700
Input Signal		4 to 20 mA DC
Supply Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)
Stroke	Linear Type	5 to 35 mm
	Rotary Type	0 to 90°
Impedance		Max. 450 Ω @ 20 mA DC
Air Connection		PT(NPT)1/4
Gauge Connection		PT(NPT)1/8
Conduit		G1/2(PF1/2)
Operating Temp.	Standard Type	-30 to 80 °C (-22 to 176 °F)
	LCD	-30 to 85 °C (-22 to 185 °F)
	Explosion Temp.	-40 to 60 °C (T5) -40 to 40 °C (T6)
Linearity		±0.5% F.S.
Hysteresis		±0.5% F.S.
Sensitivity		±0.2% F.S.
Repeatability		±0.3% F.S.
Air Consumption	Fail Freeze	0.01 LPM (sup = 0.14 MPa)
	Fail Safe	6 LPM (sup = 0.14 MPa)
Flow Capacity	Fail Freeze	9 LPM (sup = 0.14 MPa)
	Fail Safe	40 LPM (sup = 0.14 MPa)
Output Characteristics		Linear, EQ%, Quick Open user set (18 Point)
Material		Aluminium Diecasting
Ingress Protection		IP66
Explosion Protection Type		KCs Ex ia IIC T5
Communication (Option)		HART (ver.5)
Weight		0.82 kg (1.8 lb)

Product Code

YT-2700 - L - S - N - 2 - 4 - 2 - 3 - S

Model

YT-2700 = Single acting positioner

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single

Explosion Protection

N = Non-Explosion
I = KCs

Lever Type

Linear
1 = 5 to 35 mm

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

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communications

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback

Fail Option

F = Fail Freeze
S = Fail Safe

IP Converters YT-930 / YT-940

Design features

- **Flameproof Housing (YT-940)** for Zone 1 installation.
- **High Accuracy and Sensitivity** with pressure sensor.
- **Analogue PID control.** High resolution proportional control
- **No effect from mounting orientation.**

Item Type	YT-930	YT-940
Input Signal	4 to 20 mA DC	
Output Signal	Standard	0.02 to 0.1 MPa (0.2 to 1.0 bar)
	Multirange	0 to 0.12 MPa (0 to 1.2 bar)
		0.04 to 0.2 MPa (0.4 to 2.0 bar)
Supply Pressure	Standard	0.13 to 0.16 MPa (1.3 to 1.6 bar)
	Minimum	0.2 bar greater than the maximum calibrated output pressure
	Maximum	0.24 MPa (2.4 bar)
Explosion Protection Type	ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex ia IIIC T100°C/ T85°C Db	FM Class I Division 1 Groups A,B,C,D Class II, III Division 1 Groups E,F,G Class I Zone 1 AEx d IIC T6 Ta=-40°C to +75°C, T5 Ta=-40°C to +85°C, Type 4X, IP66 Zone 21 AEx tb IIIC T85°C Ta=-40°C to +75°C, T100°C Ta=-40°C to +85°C, Type 4X, IP66 KCs Ex d IIC T5/T6
Air consumption	Below 2 LPM (sup = 0.14 MPa)	
Flow Capacity	70 LPM (sup = 0.14 MPa)	
Explosion Temp.	-40 to 60 °C (T5) / -40 to 40 °C (T6)	
Operating Temp.	-40 to 85 °C (-22 to 185 °F)	
Linearity	±0.5% F.S.	
Hysteresis	±0.5% F.S.	
Sensitivity	±0.2% F.S.	
Repeatability	±0.3% F.S.	
Air Connection	(N)PT 1/4	
Conduit	G 1.2 (PF 1/2)	
Ingress Protection	IP66	Type 4X, IP66
Impedance	Max. 313 Ω @ 20 mA DC	
Material	Aluminium Diecasting	
Weight	1.6 kg (3.53 lb)	3 kg (6.61 lb)



YT-930



YT-940



Product Code

YT-930 - N - 1 - 1 - L - 0 - 0

Model

YT-930 = Intrinsically Safety Type
YT-940 = Flameproof Type

Explosion Protection

YT-930
N = Non-Explosion
I = ATEX, IECEx
YT-940
C = KCs
A = FM, CSA

Output Pressure

1 = 0.02 to 0.1 MPa
2 = 0.00 to 0.12 MPa
3 = 0.04 to 0.2 MPa
4 = 0.00 to 0.23 MPa

Conduit - Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4

Operating Temp.

L = -40 to 85 °C

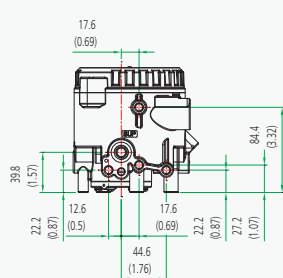
Option

0 = None
1 = Feedback Signal (4 to 20 mA DC)

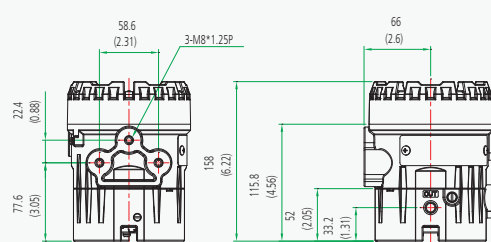
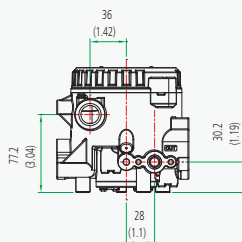
Gauge

0 = None
1 = 0 to 0.2 MPa
2 = 0 to 0.4 MPa

Dimensions: mm (Inches ")



YT-930



YT-940

Volume Boosters YT-300 / YT-305 / YT-320 / YT-325 / YT-310 / YT-315

Design features

- **Large flow capacity.** Specifically designed to be used in conjunction with valve positioners.
- **Optimal sensitivity.** Reacts to sudden change in supply pressure.
- **Fixed deadband.** Provides accurate and stable final positioning of the valve.
- **Internal by-pass control.** Improves system stability.



YT-300

YT-325

YT-315



Product Code

YT-300 - N - 1

Model

YT-300 = Aluminum 1/4"
YT-305 = Stainless Steel 1/4"
YT-320 = Aluminum 1/2"
YT-325 = Stainless Steel 1/2"
YT-310 = Aluminum 3/4"
YT-315 = Stainless Steel 3/4"

Connection Type

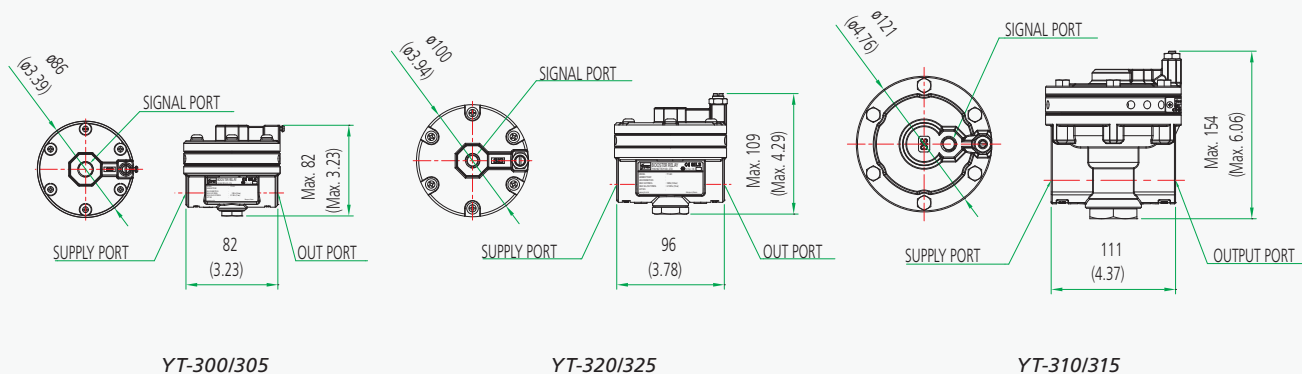
(YT-305/325/315 are only available in NPT connection)
N = PT
P = NPT

Operating Temp.

1 = -20 to 70 °C
2 = -20 to 120 °C
3 = -40 to 70 °C

Item Type		YT-300 YT-305	YT-320 YT-325	YT-310 YT-315
Max. Supply Pressure		1 MPa (10 bar)		
Max. Signal / Output Pressure		0.7 MPa (7 bar)		
Signal/Output Pressure Ratio		1:1		
Flow Capacity (Cv)	Exhaust	1.32	2.08	5.24
	Output	1.19	2.72	4.91
Supply/Output Connection		PT (NPT) 1/4	PT (NPT) 1/2	NPT 3/4
Signal Connection		PT (NPT) 1/4		NPT 1/4
Linearity		±1% F.S.		
Operating Temp.		-20 to 70 °C (-4 to 158 °F) (Standard type)		
Material	YT-300, YT-320, YT-310	Aluminium Diecasting		
	YT-305, YT-325, YT-315	Stainless Steel 316		
Weight	YT-300 YT-320 YT-310	0.5 kg (1.1 lb)	0.76 kg (1.7 lb)	2.3 kg (5.1 lb)
	YT-305 YT-325 YT-315	1.3 kg (2.9 lb)	1.9 kg (4.2 lb)	5 kg (11 lb)

Dimensions: mm (Inches ")

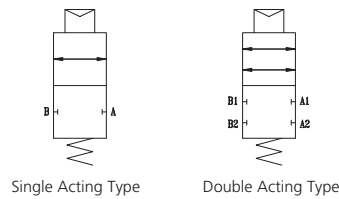


Lock-up Valves YT-400 / YT-405 / YT-430 / YT-435

Design features

- **Compact size.** No bracket is required.
- **Optimal sensitivity.** Detects small variation of the pressure - below 0.01 MPa.

Symbol



YT-400S

YT-405D

YT-430S

YT-435D



Item Type		YT-400	YT-405	YT-430	YT-435
Signal Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)			
Max. Supply Pressure		Max. 1 MPa (10 bar)			
Lock-Up Pressure		Max. 0.7 MPa (7 bar)			
Differential Pressure		Below 0.01 MPa (0.1 bar)			
Operating Temp.		-20 to 70 °C (-4 to 158 °F) (Standard type)			
Flow Capacity (Cv)		0.9		1.8	
Air Connection		PT (NPT) 1/4	NPT 1/4	NPT 3/8	
Signal Connection		PT (NPT) 1/4	NPT 1/4	NPT 1/4	
Material		Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	Stainless Steel 316
Weight	Single	0.45 kg (1.0 lb)	1.3 kg (2.2 lb)	1.3 kg (2.2 lb)	3.3 kg (7.3 lb)
	Double	0.7 kg (1.5 lb)	1.5 kg (3.3 lb)	2.3 kg (5.1 lb)	5.8 kg (12.8 lb)

Product Code

YT-400 - S - P - 1

Model

YT-400 = Aluminum 1/4"
YT-405 = Stainless Steel 1/4"
YT-430 = Aluminum 3/8"
YT-435 = Stainless Steel 3/8"

Acting Type

S = Single
D = Double

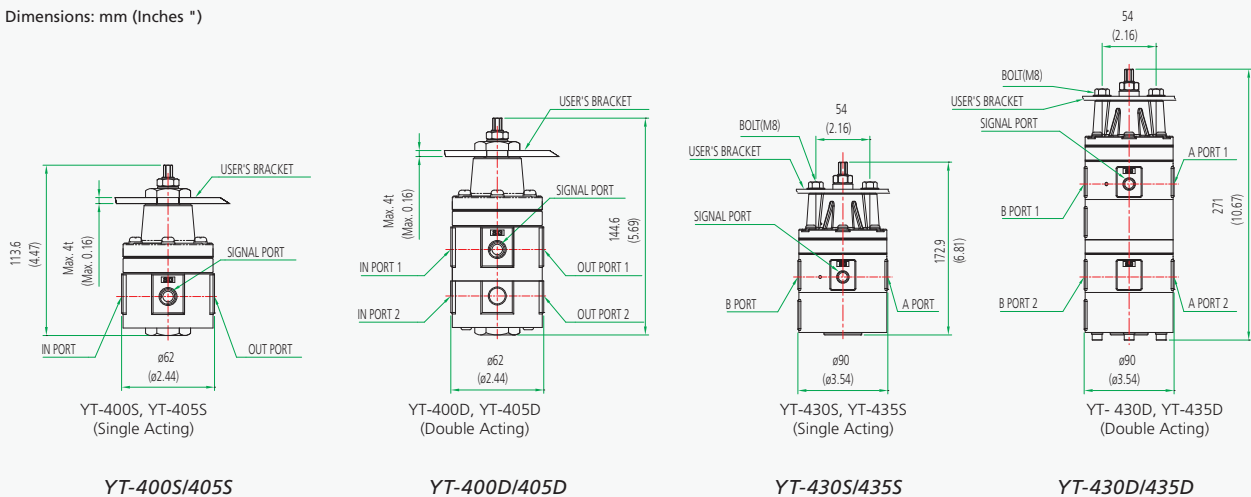
Connection Type (YT-405/435 are only available in NPT connection)

P = PT
N = NPT

Operating Temp.

1 = -20 to 70 °C
2 = -20 to 120 °C
3 = -40 to 70 °C

Dimensions: mm (Inches ")

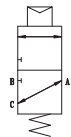


Snap Acting Relays YT-520 / YT-525 / YT-530 / YT-535

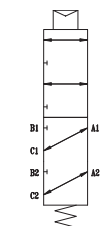
Design features

- **Rugged and reliable design.** Suitable for all environments.
- **Designed for valve actuation.** Changes the direction of the supply air to a 'fail-safe' circuit, or fail freeze in its last known position, on sudden loss of supply air pressure.

Symbol



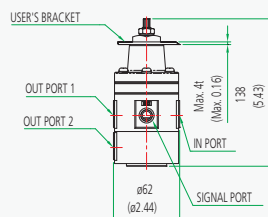
Single Acting Type



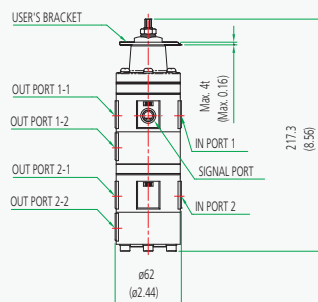
Double Acting Type

Item Type		YT-520	YT-525	YT-530	YT-535
Signal Pressure		0.14 to 0.7 MPa (1.4 to 7 bar)			
Max. Supply Pressure		1 MPa (10 bar)			
Operating Temp.		-20 to 70 °C (-4 to 158 °F) (Standard type)			
Signal Connection		NPT 1/4			
In / Output Connection		NPT 1/4		NPT 3/8	
Flow Capacity (Cv)		0.9		1.8	
Material		Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	Stainless Steel 316
Weight	Single	0.73 kg (1.8 lb)	1.66 kg (3.7 lb)	1.3 kg (2.2 lb)	3.3 kg (7.3 lb)
	Double	1.2 kg (2.7 lb)	3.1 kg (6.3 lb)	2.3kg (5.1 lb)	5.8kg (12.8 lb)

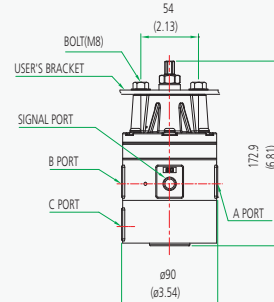
Dimensions: mm (Inches ")



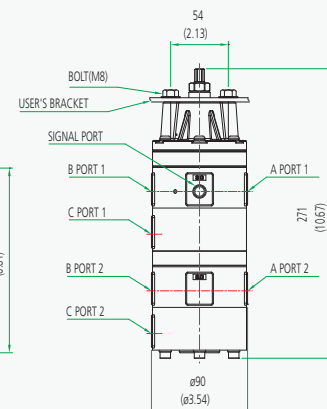
YT-520S/525S



YT-520D/525D



YT-530S/535S



YT-530D/535D



Product Code

YT-520 - S - 2 - 1

Model

YT-520 = Aluminum 1/4"
YT-525 = Stainless Steel 1/4"
YT-530 = Aluminum 3/8"
YT-535 = Stainless Steel 3/8"

Acting Type

S = Single
D = Double

Connection Type

2 = NPT

Operating Temp.

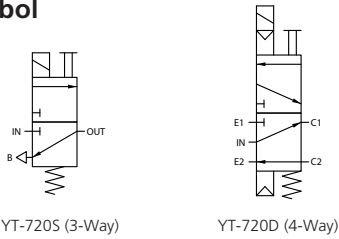
1 = -20 to 70 °C
2 = -20 to 120 °C
3 = -40 to 70 °C

Solenoid Valve YT-720

Design features

- **Balance spool type.** No require of backing spring.
- **AC and DC Power options.** Interchangeable AC and DC coils.
- **Manual override Options.** For maintenance or emergency operation.
- **Rotational Connection.** Coil assembly can be rotated.

Symbol



YT-720S (3-Way)

YT-720D (4-Way)



Item Type		YT-720S	YT-720D
Max. Supply Pressure		0 to 0.4 MPa 0 to 0.7 MPa	0.1 to 1 MPa
Flow Capacity (Cv)	Output	0.2 (Φ3) at 0.4 MPa 0.084 (Φ1.6) at 0.7 MPa	0.75
	Exhaust	0.093	N/A
Rating Current	AC 220 V	60 mA (11 W)	
	AC 110 V	130 mA (12 W)	
	DC 24 V	580 mA (14 W)	
Frequency		50 to 60 Hz	
Explosion Protection Type		KCs Ex d IIC T6	
Connection Type		PT (NPT) 1/4	
Conduit		G 1/2 (PF 1/2)	
Coil Insulation Grade		Class F	
Operating Temp.	Operating	-20 to 70 °C (-4 to 158 °F)	
	Explosion	-20 to 50 °C (-4 to 122 °F)	
Weight		0.8 kg (1.8 lb)	1.2 kg (2.6 lb)

Product Code

YT-720 - S - P - 1 - 1

Model
YT-720

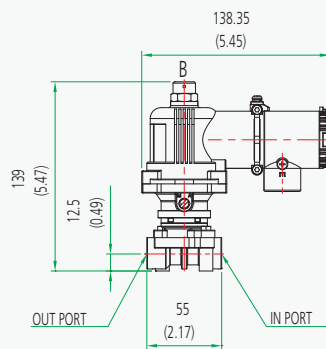
Valve Type
S = 3-Way
D = 4-Way

Connection Type
P = PT
N = NPT

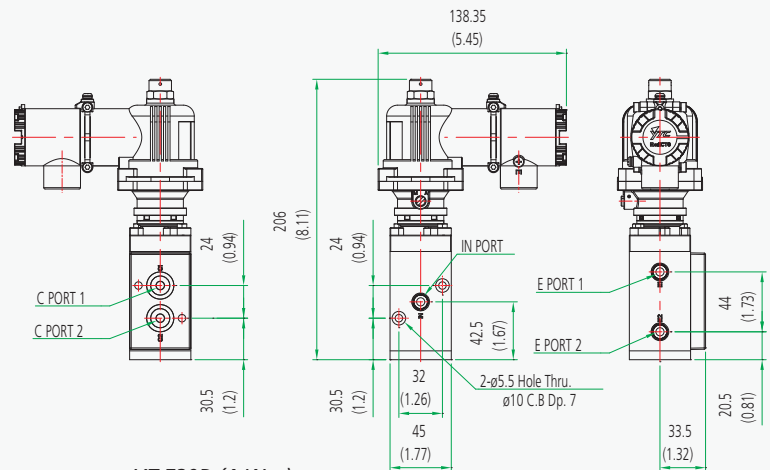
Power Source
1 = AC 110 V
2 = AC 220 V
3 = DC 24 V

Pressure
1 = 0 to 0.4 MPa (3-Way)
2 = 0 to 0.7 MPa (3-Way)
3 = 0 to 1.0 MPa (4-Way)

Dimensions: mm (Inches ")



YT-720S (3-Way)



YT-720D (4-Way)

Position Transmitter SPTM-5V

Design features

- **Convenient wiring: 2 wire type.**
- **High accuracy and reliability.** Stable Output and repeatability.
- **Simple change for RA v.s. DA action setting.**
- **Smart setting.** Easy setting of zero and span by pressing the buttons (2 or 5 points setup).



SPTM-5V



Item Type		SPTM-5VL	SPTM-5VR
Input Type		2 Wire	
Input Signal		0 to 30°	0 to 90°
Output Signal		4 to 20 mA DC	
Load Resistance		$R_L \leq \frac{V_s[v] - 9[v]}{I [mA]}$	
Supply Voltage		9 to 28 VDC	
Noise Range		50 mV p.p	
Conduit		G 1/2 (PF 1/2)	
Operating Temp.	Operating	-40 to 85 °C (-40 to 185 °F)	
	Explosion	20 to 60 °C (68 to 140 °F)	
	LCD	-30 to 85 °C (-22 to 185 °F)	
Linearity		±1% F.S.	
Hysteresis		±0.2% F.S.	
Sensitivity		±0.2% F.S.	
Explosion Protection Type		Ex ia IIC T5	
Ingress Protection		IP67	
Material		Aluminium Diecasting	
Weight		0.6 kg (1.3 lb)	

Product Code

SPTM-5V - L - I - 1 - 0

Model

SPTM-5V = Intrinsically Safety Aluminum

Motion Type

L = Linear
R = Rotary

Explosion Protection

I = Ex ia IIC T5

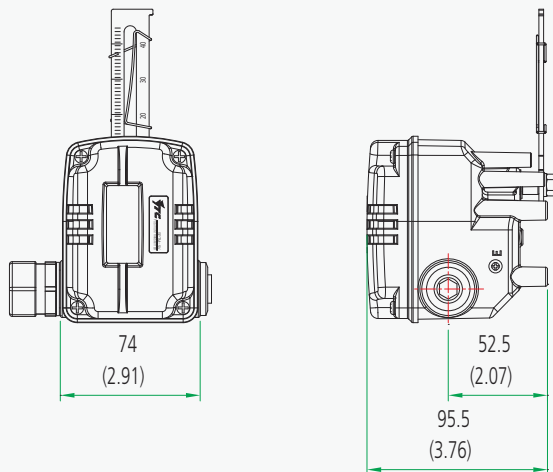
Lever Type

Linear
1 = 10 to 40 mm
2 = 20 to 70 mm
3 = 50 to 100 mm
4 = 100 to 150 mm

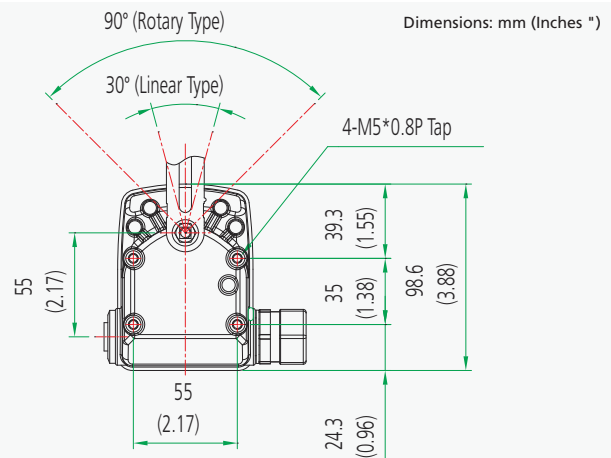
Rotary
1 = Standard
2 = NAMUR

Option

0 = None
1 = With LCD



SPTM-5V



Dimensions: mm (Inches ")

Position Transmitters SPTM-6V / SPTM-65V

Design features

- **Loop powered 2 wire type.**
- **High accuracy and reliability.** Stable Output and repeatability.
- **Reverse or Direct acting.** Easy to configure options.
- **Smart setting.** Easy setting of zero and span by pressing the buttons (2 or 5 points setup).



SPTM-6V



SPTM-65V



Item Type	SPTM-6V	SPTM-65V
Connection Type	2 Wire	
Input Signal	Linear	0 to 30°
	Rotary	0 to 90°
Output Signal	4 to 20 mA DC	
Load Resistance	$R_L \leq \frac{V_s[v] - 9[v]}{I [mA]}$	
Supply Voltage	9 to 28 VDC	
Noise Range	50 mV p.p	
Conduit	PF 1/2 (G 1/2)	
Operating Temp.	Operating	-40 to 85 °C (-40 to 185 °F)
	Explosion	-40 to 60 °C (-40 to 140 °F)
	LCD	-30 to 85 °C (-22 to 185 °F)
Linearity	±1% F.S.	
Hysteresis	±0.2% F.S.	
Sensitivity	±0.2% F.S.	
Explosion Protection Type	KCs Ex d IIC T6	
Ingress Protection	IP67	
Material	Aluminium Diecasting	Stainless Steel 316
Weight	1.3 kg (2.9 lb)	2.8 kg (6.17 lb)

Product Code

SPTM-6V - L - C - 1

Model

SPTM-6V = Flameproof Aluminum
SPTM-65V = Flameproof Stainless Steel

Motion Type

L = Linear
R = Rotary

Explosion Protection

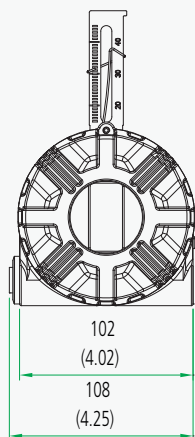
C = Ex d IIC T6

Lever Type

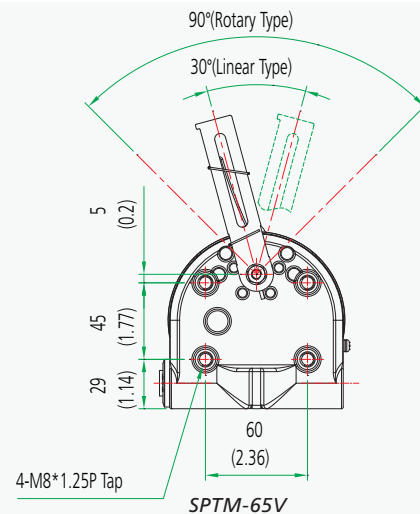
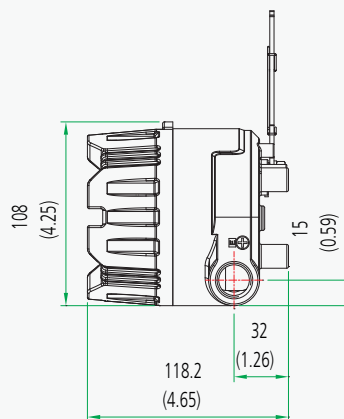
Linear
1 = 10 to 40 mm
2 = 20 to 70 mm
3 = 50 to 100 mm
4 = 100 to 150 mm

Rotary
1 = Standard
2 = NAMUR

Dimensions: mm (Inches ")



SPTM-6V



SPTM-65V

Limit Switch Box YT-850

Design features

- **Visual position indicator.** 360° viewing angle.
- **Multiple Output signals.** 8 contacts of terminal ports.
- **Universal Compatibility.** Suitable for any rotary motion actuator <IS05211>.
- **Easy configuration.** Simple adjustment of cam position.
- **Dual conduit entries.** Separate connections for power and signal cables.



YT-850



Item Type		YT-850M		YT-850P	
Switch Type		Mechanical Switch (2xSPDT)		Inductive Proximity Sensor	
		SS5GL (Omron)	SS10GL (Omron)	PSN17-5DNU (Autonics)	NJ2-V3-N (P&F)
Switch Rating	AC	250 V 3 A 125 V 5 A	250 V 10.1 A 125 V 10.1 A	-	-
	DC	250 V 0.2 A, 125 V 0.4 A, 30 V 4 A, 14 V 5 A, 8 V 5 A		12 - 24 VDC	8 VDC
Ingress Protection		IP67			
Operating Temp.		-20 to 80 °C (Standard)			
Conduit Entry		NPT1/2, G1/2, M20			
Terminal		8 Points			
Mounting Bracket		NAMUR VDI / VDE 3845, ISO 5211			
Material		Aluminium Diecasting			
Weight		880 g (1.94 lb)			

Product Code

YT-850 - M - 1 - 0

Model

YT-850 = Weatherproof Aluminum

Switching Type

M = Mechanical Switch (2xSPDT)

P = Proximity Type

Conduit

1 = NPT 1/2

3 = G 1/4

4 = M20

Bracket Type

0 = None

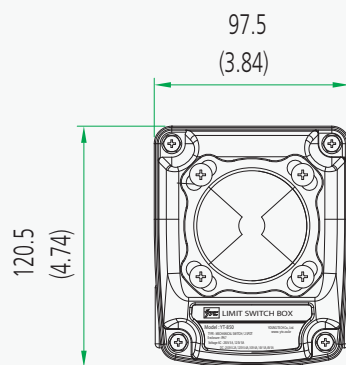
1 = ST-1 (30*80,H20)

2 = ST-2 (30*80,H30)

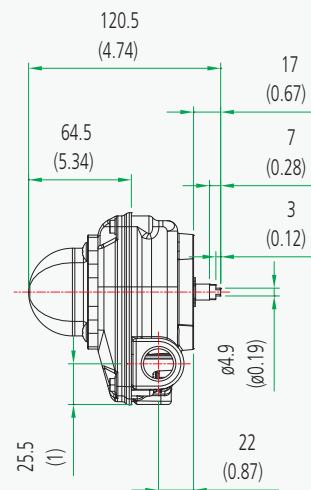
3 = ST-3 (30*130,H30)

4 = ST-4 (30*130,H50)

Dimensions: mm (Inches ")



YT-850



Limit Switch Boxes YT-870 / YT-875

Design features

- **Visual position indicator.** 360° viewing angle.
- **Multiple Output signals.** 8 contacts of terminal ports.
- **Universal Compatibility.** Suitable for any rotary motion actuator <ISO5211>.
- **Easy configuration.** Simple adjustment of cam position.
- **Dual conduit entries.** Separate connections for power and signal cables.

Item Type		YT-870M YT-875M		YT-870P YT-875P		YT-870D YT-875D
Switch Type		Mechanical Switch (2 x SPDT)		Inductive Proximity Sensor		Mechanical Switch (2 x DPDT)
		SS5GL (Omron)	SS10GL (Omron)	PS17-5DNU (Autonics)	NJ2-V3-N (P&F)	DZ-10G-1B (Omron)
Switch Rating	AC	250 V 5 A	250 V 10.1 A	-	-	125 or 250 VAC 10 A
		125 V 5 A	125 V 10.1 A			480 VAC 2 A
	DC	250 V 0.2 A, 125 V 0.4 A, 30 V 4 A, 14 V 5 A, 8 V 5 A		12 - 24 VDC	8.2 VDC	125 VDC 0.5 A
						250 VDC 0.25 A
Ingress Protection		IP67				
Explosion Protection Type		ATEX, IECEx Ex db IIC T6, Ex tb IIIC T85°C				
		CSA Ex db IIC T6 Class I, Zone 1, AEx db IIC T6 Class II, Division 1, Groups E, F and G, Ex tb IIIC T85°C Zone21, AEx tb IIIC T85°C				
		KCs Ex d IIC T6				
Operating Temp.		-20 to 60 °C				
Conduit Entry		NPT3/4 (G3/4, M20, NPT1/2)				
Terminal		8 Points				
Mounting Bracket		NAMUR VDI / VDE 3845, ISO 5211				
Material and Weight	YT-870	Aluminium Diecasting: 1.5 kg (3.3 lb)				
	YT-875	Stainless Steel 316: 3.5 kg (7.7 lb)				



YT-870

YT-875



Product Code

YT-870 - M - 1 - 0 - 0

Model

YT-870 = Flameproof Aluminum
YT-875 = Flameproof Stainless Steel

Switching Type

M = Mechanical Type (2 x SPDT)
P = Proximity Type
D = Mechanical Type (2 x DPDT)

Conduit

1 = NPT 3/4
2 = PF 3/4 (YT-870 only)
3 = M20 (YT-870 only)
4 = NPT 1/2 (YT-870 only)

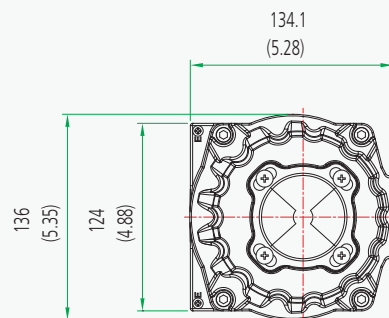
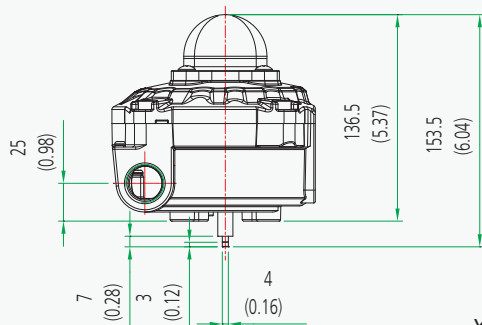
Bracket Type

0 = None
1 = ST-1 (30*80,H20)
2 = ST-2 (30*80,H30)
3 = ST-3 (30*130,H30)
4 = ST-4 (30*130,H50)

Option

0 = None
1 = SPTM

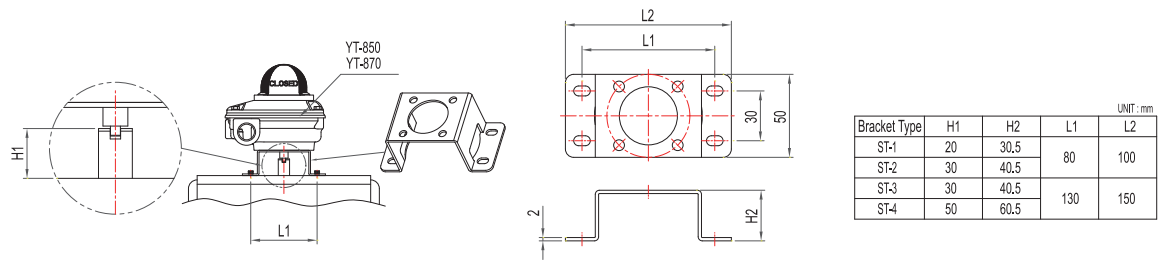
Dimensions: mm (Inches ")



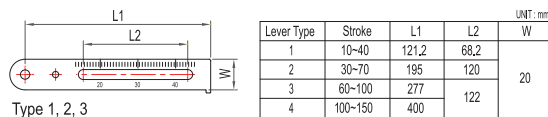
YT-870 / YT875

Brackets and Levers

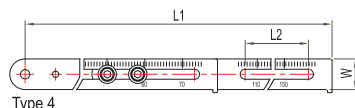
YT-850 & 870 & 875 Bracket Series



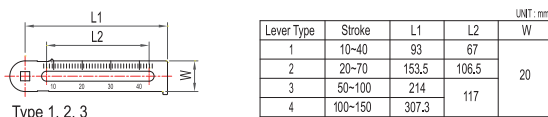
Lever Series



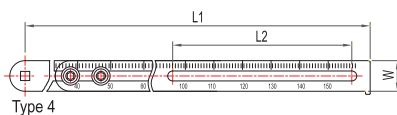
Type 1, 2, 3



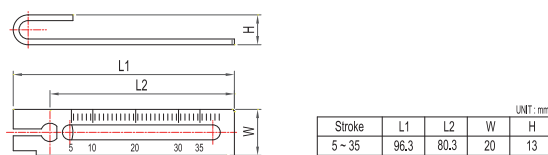
YT-1000 & 1200 Linear Type



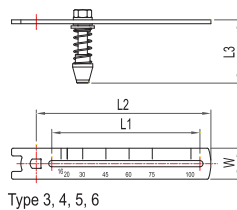
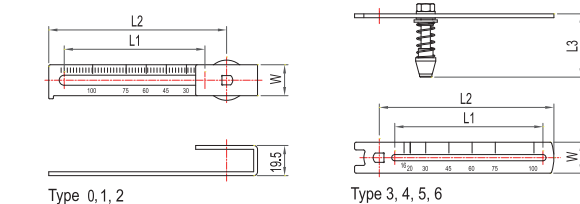
Type 1, 2, 3



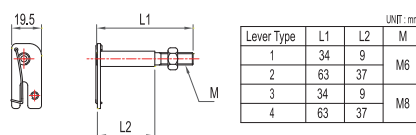
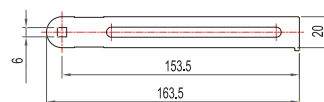
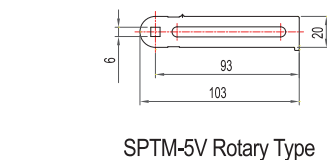
YT-2500 & 2550 & 2600 & 3303 & 3400 & 3450 & SPTM-5V & SPTM-6V & SPTM-65V Linear Type



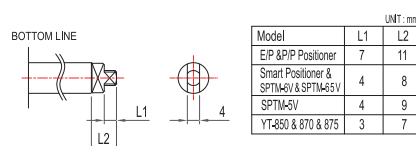
YT-2700 Linear Type



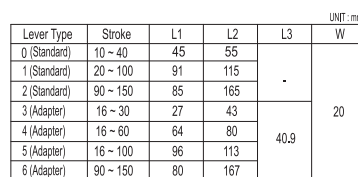
YT-3300 & YT-3350 Linear Type



Rotary Fork Lever Type



Rotary Namur Lever Type





Keeping the World Flowing



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