

Smart Positioners YT-2500 / YT-2550 / YT-2501

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 = 20 to 102 psi			
Stroke	Linear Type	10 to 150 mm (0.4 to 6")		
	Rotary Type	55 to 110°		
Impedance	Max. 500 Ω @ 20 mA DC			
Air Connection	Rc 1/4, 1/4 NPT, G 1/4	1/4 NPT	Rc 1/4, 1/4 NPT, G 1/4	
Gauge Connection	Rc 1/8, 1/8 NPT	1/8 NPT	Rc 1/8, 1/8 NPT	
Conduit	G 1/2, 1/2 NPT, M20x1.5P	G 1/2	G 1/2, 1/2 NPT, M20x1.5P	
Operating Temp.	Standard Type	-30 to +80 °C (-22 to +176 °F) ¹		
	Explosion Temp.	-30 to +60 °C (-22 to +140 °F) (T5) -30 to +40 °C (-22 to +104 °F) (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) 0 CFM (sup = 20 psi)		
	Fail-safe	0.06 LPM (sup = 0.14 MPa) 0.002 CFM (sup = 20 psi)		
Flow Capacity	Fail-freeze	60 LPM (sup = 0.14 MPa) 2.12 CFM (sup = 20 psi)		
	Fail-safe	40 LPM (sup = 0.14 MPa) 1.41 CFM (sup = 20 psi)		
Output Characteristics	Linear, EQ%, Quick Open, User Set (5 or 18 Points)			
Material	Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	
Ingress Protection	IP66			
Explosion Protection Type	ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex ia IIIc T85°C/T100°C IP6X			
	CCC Ex ia IIC T5/T6 Gb Ex iaD 21 T100/T85			
	KCs Ex ia IIC T5/T6, EX iaD IIIc T100°C/T85°C			
	NEPSI (only YT-2500) Ex ia IIC T5/T6 Gb Ex iaD 21 T100/T85			
	EAC (only YT-2500) 1Ex ia IIC T6...T5 Gb X Ex ia IIIc T85°C...T100°C Db X IP66			
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)	1.6 kg (3.4 lb)
	Linear Remote sensor	-	-	0.6 kg (1.3 lb)
	Rotary Remote sensor	-	-	1.0 kg (2.1 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

N = Non-Explosion
i = ATEX, IECEx, KCs, NEPSI (only YT-2500)
E = EAC (only YT-2500)
Z = CCC

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 - Rc1/4
2 = G1/2 - 1/4 NPT (YT-2550 only available with conduit connection code 2)
3 = G1/2 - G1/4
4 = M20-1/4 NPT (YT-2501 will come with electrical conduit adaptors)
5 = 1/2 NPT-1/4 NPT (YT-2501 will come with electrical conduit adaptors)

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)¹
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)¹

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

Notes:

1. Inductive proximity limit switch internal type: -25 to +80 °C (-13 to 176 °F).

Smart Positioner YT-2600

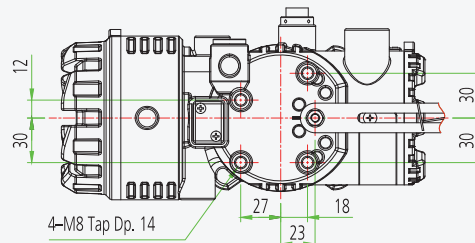
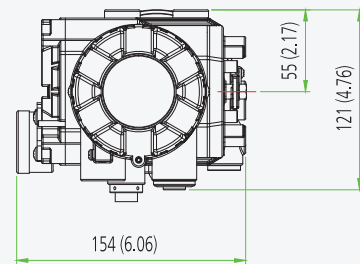
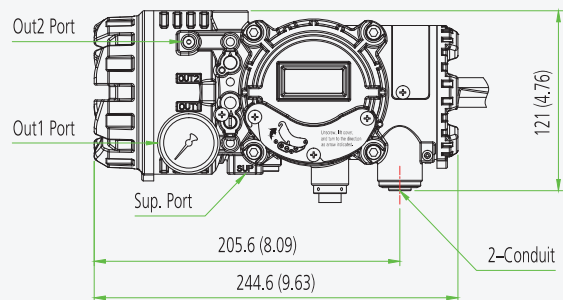
Piezo technology with communications

Design features

- **Fail-freeze and fail-safe functions.** 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.** Four robust and positive acting pushbuttons for field configuration.



YT-2600 Aluminium Ex d Positioner



Dimensions: mm (Inches ")

Smart Positioner YT-2600

Item Type	YT-2600	
Input Signal	4 to 20 mA DC	
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	0 to 90°
Impedance	Max. 450 Ω @ 20 mA DC	
Air Connection	Rc 1/4, 1/4 NPT, G 1/4	
Gauge Connection	Rc 1/8, 1/8 NPT	
Conduit	G 1/2, 1/2 NPT, M20x1.5P	
Operating Temp.	Standard Type	-30 to +80 °C (-22 to +176 °F)
	Explosion Temp.	-30 to +80 °C (-22 to +176 °F) (T5) -30 to +70 °C (-22 to +158 °F) (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) 0 CFM (sup = 20 psi)
	Fail-safe	0.06 LPM (sup = 0.14 MPa) 0.002 CFM (sup = 20 psi)
Flow Capacity	Fail-freeze	50 LPM (sup = 0.14 MPa) 1.77 CFM (sup = 20 psi)
	Fail-safe	40 LPM (sup = 0.14 MPa) 1.41 CFM (sup = 20 psi)
Output Characteristics	Linear, EQ%, Quick Open, User Set (5 or 18 Points)	
Material	Aluminium Diecasting	
Ingress Protection	IP66	
Explosion Protection Type	ATEX, IECEx, KCs Ex db IIC T5/T6, Ex tb IIIC T85°C/T100°C EAC 1Ex d IIC T6/T5 Gb X Ex tb IIIC T85°C/T100°C Db X IP66	
	CCC Ex d IIC T5/T6 Gb Ex tD A21 IP66 T85°C/T100°C	
	EAC 1Ex d IIC T6...T5 Gb X Ex tb IIIC T85°C...T100°C Db X IP66	
	Communication (Option)	
Weight	3.0 kg (6.61 lb)	

Product Code

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

Model

YT-2600 = Aluminium housing

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

C = ATEX, IECEx, KCs E = EAC
Z = CCC

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 - Rc1/4 (N/A for CCC)
2 = G1/2 - 1/4 NPT (N/A for CCC)
3 = G1/2 - G1/4 (N/A for CCC)
4 = M20x1.5P - 1/4 NPT
5 = 1/2 NPT - 1/4 NPT

Communications

0 = None
2 = HART protocol communication

Output Options

0 = None
1 = 4 to 20 mA feedback
2 = Limit switch¹
3 = 4 to 20 mA feedback + Limit switch¹

Fail Option

F = Fail-freeze
S = Fail-safe

Notes:

1. Limit switch: DC 24V (50mA) and transistor type.

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 Pressure	Standard	1 0.02 ~ 0.1 MPa (0.2 ~ 1.0 bar)
	Multi-range	2 0.00 ~ 0.12 MPa (0 ~ 1.2 bar)
		3 0.04 ~ 0.2 MPa (0.4 ~ 2.0 bar)
		4 0.00 ~ 0.23 MPa (0 ~ 2.3 bar)
Supply Pressure	Standard	1 0.13 ~ 0.16 MPa (1.3 ~ 1.6 bar)
	Multi-range	2 0.14 ~ 0.16 MPa (1.4 ~ 1.6 bar)
		3 0.22 ~ 0.24 MPa (2.2 ~ 2.4 bar)
		4 0.25 ~ 0.27 MPa (2.5 ~ 2.7 bar)
Explosion Protection Type	ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex ia IIC T100°C/ T85°C Db	FM, CSA 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 IIC 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) Below 0.08 CFM (sup = 20 psi)	
Flow Capacity	70 LPM (sup = 0.14 MPa) 2.47 CFM (sup = 20 psi)	
Explosion Temp.	-40 to +60 °C (T5) / -40 to +40 °C (T6)	-40 to +85 °C (T5) / -40 to +75 °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	Rc 1/4, 1/4 NPT	
Conduit	G 1/2	
Ingress Protection	IP66	Type 4X, IP66
Impedance	Max. 390Ω @20mA DC	Max. 390Ω @20mA DC
Material	Aluminium Diecasting	
Weight	1.6 kg (3.53 lb)	2.5 kg (5.6 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, 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 - Rc1/4
2 = G1/2 - 1/4 NPT

Operating Temp. (Non-explosionproof)¹

L = -40 to +85 °C (-40 to +185 °F)

Option

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

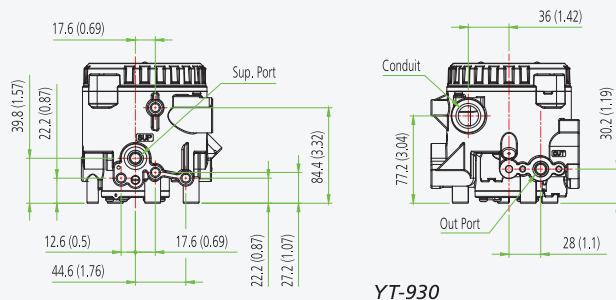
Gauge

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

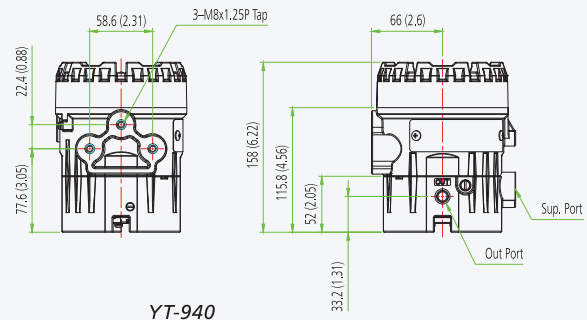
Notes:

1. 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.

Dimensions: mm (Inches ")



YT-930



YT-940

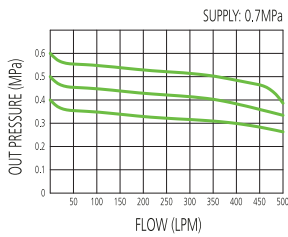
Air Filter Regulators YT-200 / YT-205 / YT-220 / YT-225

Design features

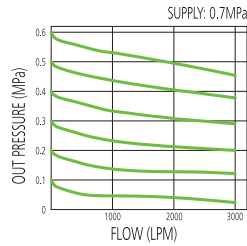
- **Stable output and repeatability.** Provides constant control under variable flow rates and supply pressures.
- **Relief flow capability.** Discharges pressure if outer pressure is higher than set pressure.
- **Light weight and compact size.** Reduces installation costs.
- **Five micron filter.** Protects pneumatic instruments from dirty air.
- **Manual or auto draining option**



YT-200 / YT-205 Flow (LPM)



YT-220 / YT-225 Flow (LPM)



Product Code

YT-200 - A - N - 0 - 1 - 0

Model

- YT-200 = Aluminium 1/4"
- YT-205 = Stainless Steel 1/4"
- YT-220 = Aluminium 1/2"
- YT-225 = Stainless Steel 1/2"

Adjustable Range

- A = 0 to 0.42 MPa
- B = 0 to 0.84 MPa

Connection Type

- P = Rc (N/A for YT-205/225)
- N = NPT

Gauge

- 0 = None
- 1 = 0 to 0.4 MPa
- 2 = 0 to 1.0 MPa

Operating Temp.

- 1 = -20 to +70 °C (-4 to +158 °F) (N/A for EAC)
- 2 = -20 to +120 °C (-4 to +248 °F) (N/A for EAC)
- 3 = -40 to +70 °C (-40 to +158 °F)
- 4 = -50 to +70 °C (-58 to +158 °F) (only EAC)

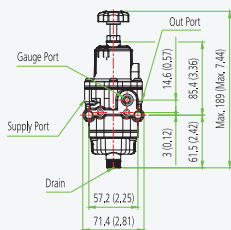
Option

- 0 = Manual drain
- 1 = Auto drain¹

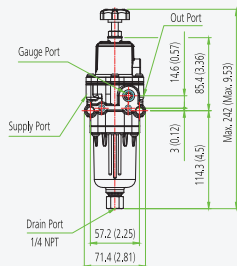
Notes:

- 1. Only "1" of Operating Temp. is available

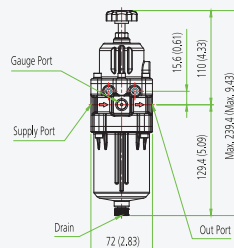
Item Type	YT-200	YT-220	YT-205	YT-225
Max. Supply Pressure	1.7 MPa = 17 bar = 246.5 psi			
Max. Output Pressure	0.42 MPa (A Type), 0.84 MPa (B Type) 60.9 psi (A Type), 121.8 psi (B Type)			
Air Connection	Rc 1/4, 1/4 NPT	Rc 1/2, 1/2 NPT	1/4 NPT	1/2 NPT
Gauge Connection	Rc 1/4, 1/4 NPT	Rc 1/4, 1/4 NPT	1/4 NPT	1/4 NPT
Operating Temp.	-20 to +70 °C (-4 to +158 °F) (Standard type)			
Min. Filtering Size	5 micron			
Material	Aluminium Diecasting		Stainless Steel 316	
Weight (Manual drain)	0.62 kg (1.4 lb)	0.88 kg (2 lb)	1.5 kg (3.3 lb)	2.2 kg (4.8 lb)



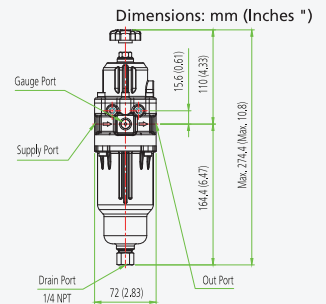
YT-200/205 Manual drain



YT-200/205 Auto drain



YT-220/225 Manual drain



YT-220/225 Auto drain

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 bypass control.** Improves system stability.



YT-300

YT-325

YT-315



Item Type		YT-300 YT-305	YT-320 YT-325	YT-310 YT-315
Max. Supply Pressure		1 MPa = 10 bar = 145 psi		
Max. Signal / Output Pressure		0.7 MPa = 7 bar = 102 psi		
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		Rc 1/4, 1/4 NPT	Rc 1/2, 1/2 NPT	3/4 NPT
Signal Connection		Rc 1/4, 1/4 NPT		1/4 NPT
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)

Product Code

YT-300 - N - 1

Model

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

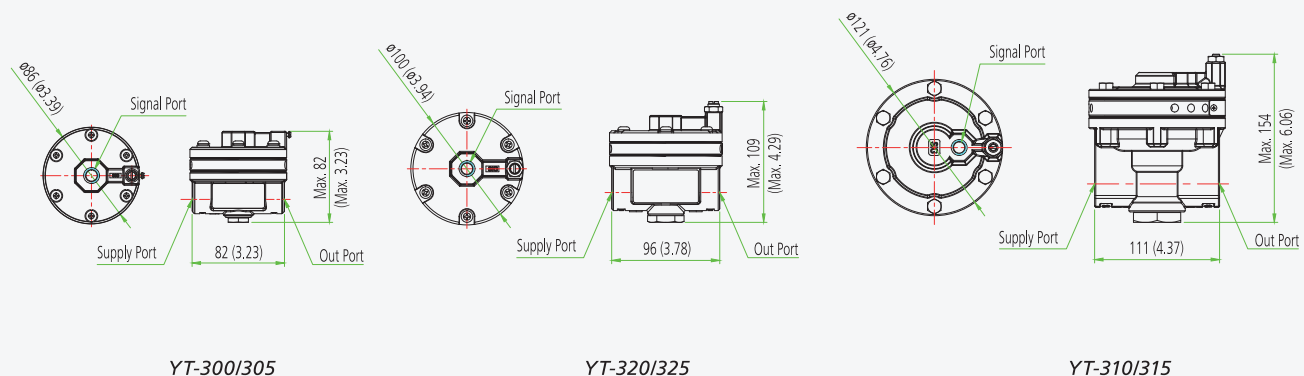
Connection Type

(YT-305/325/310/315 are only available in NPT connection)
 P = Rc
 N = NPT

Operating Temp.

1 = -20 to +70 °C (-4 to +158 °F) (N/A for EAC)
 2 = -20 to +120 °C (-4 to +248 °F) (N/A for EAC)
 3 = -40 to +70 °C (-40 to +158 °F)
 4 = -60 to +70 °C (-76 to +158 °F) (only EAC)

Dimensions: mm (Inches ")

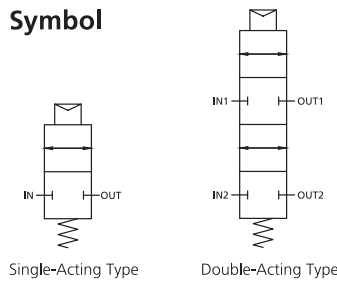


Lock-up Valves YT-400 / YT-405 / YT-430 / YT-435

Design features

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

Symbol



Single-Acting Type

Double-Acting Type



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 = 20 to 102 psi			
Max. Supply Pressure	Max. 1 MPa = 10 bar = 145 psi			
Signal Pressure Setting Range	Max. 0.7 MPa = 7 bar = 102 psi			
Hysteresis	Below 0.01 MPa = 0.1 bar = 1.45 psi			
Operating Temp.	-20 to +70 °C (-4 to +158 °F) (Standard type)			
Flow Capacity (Cv)	0.9		1.8	
Air Connection	Rc 1/4, 1/4 NPT	1/4 NPT	3/8 NPT	
Signal Connection	Rc 1/4, 1/4 NPT	1/4 NPT	1/4 NPT	
Material	Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	Stainless Steel 316
Weight	Single	0.47 kg (1.1 lb)	1.3 kg (3.3 lb)	3.3 kg (7.3 lb)
	Double	0.66 kg (1.5 lb)	1.5 kg (3.3 lb)	2.7 kg (6 lb)

Product Code

YT-400 - S - P - 1

Model

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

Acting Type

S = Single
 D = Double

Connection Type (YT-405/430/435 are only available in NPT connection)

P = Rc
 N = NPT

Operating Temp.

1 = -20 to +70 °C (-4 to +158 °F) (N/A for EAC)
 2 = -20 to +120 °C (-4 to +248 °F) (N/A for EAC)
 3 = -40 to +70 °C (-40 to +158 °F)
 4 = -50 to +70 °C (-58 to +158 °F) (only EAC)

Dimensions: mm (Inches ")

