2.4 Product Code

2.4.1 YT-2500 / 2550 series follows suffix symbols as follows.

YT-2500 / 2550 [1] [2] [3] [4] [5] [6] [7] [8]

[1] Motion Type		L :	Linear
		R :	Rotary
[2] Acting type		S :	Single
		D :	Double
[3] Explosion Proof		[1)] N :	Non-Explosion
		i :	Intrinsic safety : YT-2500 → KCs, NEPSI, ATEX, IECEx
			YT-2550 → KCs, ATEX, IECEx
		E :	Intrinsic safety : YT-2500 → EAC
		Z :	Intrinsic safety : CCC
[4] Lever Type	Linear	1 :	10 ~ 40 mm
		2 :	20 ~ 70 mm
		3 :	50 ~ 100 mm
		4 :	100 ~ 150 mm
	Rotary	1 :	M6 x 34L
		2 :	M6 x 63L
		3 :	M8 x 34L
		4 :	M8 x 63L
		5 :	Namur
[5] Conduit – Air Connection Type		1 :	G 1/2 – Rc 1/4
		2 :	G 1/2 – 1/4 NPT (YT-2550 is available for No. 2 ONLY)
		3 :	G 1/2 – G 1/4
		4 :	M20x1.5P – 1/4 NPT
		5 :	1/2 NPT – 1/4 NPT
[6] Communication		0 :	None
		2 :	+ HART Communication
[7] Option [4)]		0 :	None
		1 :	+ Position Transmitter
		2 :	+ Limit Switch(Mechanical Type)
		3 :	+ Limit Switch(Inductive proximity Type) [2)]
		4 :	+ Position Transmitter and Limit Switch (Mechanical Type)
		5 :	+ Position Transmitter and Limit Switch (Inductive proximity Type) [3)]

8	Fail Option	F : Fail Freeze S : Fail Safe

[1] In case of EAC non-explosion type, put "EAC" in a purchase order.

[2] [3] Operating temp. of inductive proximity limit switch is from -25 °C~ .

[1] In case of YT-2550 Linear, Limit Switch options(2 ~ 5 in 7) cannot be selected.

2.4.2 YT-2501 series follows suffix symbols as follows.

YT-2501 [1] [2] [3] [4] [5] [6] [7] [8] [9]

[1] Motion Type		L :	Linear
		R :	Rotary
[2] Acting type		S :	Single
		D :	Double
[3] Explosion Proof		N :	Non-Explosion
		i :	Intrinsic safety : KCs, ATEX, IECEx
		Z :	Intrinsic safety : CCC
[4] Lever Type	Linear	1 :	10 ~ 40 mm
		2 :	20 ~ 70 mm
		3 :	50 ~ 100 mm
		4 :	100 ~ 150 mm
	Rotary	5 :	Namur
[5] Conduit – Air Connection Type		1 :	G 1/2 – Rc 1/4
		2 :	G 1/2 – 1/4 NPT
		3 :	G 1/2 – G 1/4
		4 :	M20x1.5P(Adapter type) – 1/4 NPT
		5 :	1/2 NPT(Adapter type) – 1/4 NPT
[6] Communication		0 :	None
		2 :	+ HART Communication
[7] Option		0 :	None
		1 :	+ Position Transmitter
[8] Fail Option		F :	Fail Freeze
		S :	Fail Safe
[9] Cable Length [1)]		1 :	5 m
		2 :	10 m
		3 :	15 m
		4 :	20 m

[1)] Maximum cable length is 20 m.

2.5 Product Specification

2.5.1 YT-2500 / 2550 Specification

Model		YT-2500		YT-2550	
Housing Material		Aluminum		Stainless steel 316	
Motion Type		Linear	Rotary	Linear	Rotary
Acting Type		Single / Double			
Input Signal		4 ~ 20 mA DC			
Minimum Current Signal		3.5 mA(Standard), 3.8 mA(HART Included)			
Supply Pressure		0.14 ~ 0.7 MPa (1.4 ~ 7 bar)			
Stroke		10 ~ 150 mm	55 ~ 110°	10 ~ 150 mm	55 ~ 110°
Impedance		Max. 500 Ω @ 20 mA DC			
Air Connection		Rc 1/4 or G 1/4 or 1/4 NPT		1/4 NPT	
Gauge Connection		Rc 1/8 or 1/8 NPT		1/8 NPT	
Conduit Entry		G 1/2 or 1/2 NPT or M20x1.5P		G 1/2	
Ingress Protection		IP66			
Explosion Proof		Ex ia IIC T5/T6 Gb, Ex ia IIIC T100°C/T85°C Db Ex iaD 21 T100/T85 ※ See "2.6 Certificates" for details			
Operating Temperature		-30 ~ 80 °C (-22 ~ 176 °F) Inductive proximity limit switch internal type :-25 ~ 80 °C (-13 ~ 176 °F)			
Ambient Temperature Of Explosion proof	T5	-30 ~ 60 °C (-22 ~ 140 °F)			
	T6	-30 ~ 40 °C (-22 ~ 104 °F)			
Linearity		± 0.5 % F.S.			
Hysteresis		± 0.5 % F.S.			
Sensitivity		± 0.2 % F.S.			
Repeatability		± 0.3 % F.S.			
Flow Capacity	Fail Freeze	60 LPM (Sup. = 0.14 MPa)			
	Fail Safe	40 LPM (Sup. = 0.14 MPa)			
Air Consumption	Fail Freeze	0.01 LPM (Sup. = 0.14 MPa)			
	Fail Safe	0.06 LPM (Sup. = 0.14 MPa)			
Output Characteristic		Linear, Quick Open, EQ%, User Set			
Vibration		No Resonance up to 100 Hz @ 6 G			
Humidity		5 ~ 95 % RH @ 40 °C			
Communication (Option)		HART Communication (HART 5)			
Feedback Signal (Option)		4 ~ 20 mA (DC 9 ~ 28 V)			
L/S Rating (Option)	Mechanical	AC 125 V 3 A / DC 30 V 2 A			
	Inductive Proximity	DC 8.2 V 8.2 mA			
Weight		1.5 kg (3.3 lb)		2.9 kg (6.4 lb)	
Painting		Polyester Powder Coating		-	

Tested under ambient temperature of 20 °C, absolute pressure of 760 mmHg, and humidity of 65 %.
Please contact Rotork YTC Limited for detailed testing specification.

2.5.2 YT-2501 Specification

Model		**YT-2501**	
Housing Material		Aluminum	
Motion Type		Linear	Rotary
Acting Type		Single / Double	
Input Signal		4 ~ 20 mA DC	
Minimum Current Signal		3.5 mA(Standard), 3.8 mA(Hart Included)	
Supply Pressure		0.14 ~ 0.7 MPa (1.4 ~ 7 bar)	
Stroke		10 ~ 150 mm	55 ~ 110°
Impedance		Max. 500 Ω @ 20 mA DC	
Air Connection		Rc 1/4 or G 1/4 or 1/4 NPT	
Gauge Connection		Rc 1/8 or 1/8 NPT	
Conduit Entry		G 1/2 or 1/2 NPT 1/2 or M20x1.5P	
Ingress Protection		IP66	
Explosion Proof		Ex ia IIC T5/T6 Gb, Ex ia IIIC T100°C/T85°C Db Ex iaD 21 T100/T85 ※ See "2.6 Certificates" for details	
Operating Temperature	**Sensor**	-40 ~ 120 °C (-40 ~ 248 °F)	
	Body	-30 ~ 80 °C (-22 ~ 176 °F)	
Ambient Temperature Of Explosion proof	**T5**	-30 ~ 60 °C (-22 ~ 140 °F)	
	T6	-30 ~ 40 °C (-22 ~ 104 °F)	
Linearity		± 0.5 % F.S.	
Hysteresis		± 0.5 % F.S.	
Sensitivity		± 0.2 % F.S	
Repeatability		± 0.3 % F.S.	
Flow Capacity	**Fail Freeze**	60 LPM (Sup. = 0.14 MPa)	
	Fail Safe	40 LPM (Sup. = 0.14 MPa)	
Air Consumption	**Fail Freeze**	0.01 LPM (Sup. = 0.14 MPa)	
	Fail Safe	0.06 LPM (Sup. = 0.14 MPa)	
Output Characteristic		Linear, Quick Open, EQ%, User Set	
Vibration		No Resonance up to 100 Hz @ 6 G	
Humidity		5 ~ 95 % RH @ 40 °C	
Communication (Option)		HART Communication (HART 5)	
Feedback Signal (Option)		4 ~ 20 mA (DC 9 ~ 28 V)	
Weight	**Positioner**	1.6 kg (3.4 lb)	
	Sensor	0.6 kg (1.2 lb)	1.0 kg (2.1 lb)
	Cable(5M)	0.6 kg (1.3 lb)	
Painting		Polyester Powder Coating	

Tested under ambient temperature of 20 °C, absolute pressure of 760 mmHg, and humidity of 65 %
Please contact Rotork YTC Limited for detailed testing specification.

2.6 Certifications

※ All certifications below are posted on Rotork YTC Limited homepage(www.ytc.co.kr).

➢ KCs (Korea)

Type : Intrinsic safety
Rating : Ex ia IIC T5/T6, Ex iaD IIIC T100°C/T85°C
Certification No. : 11-KB2BO-0163X(YT-2500)
10-KB2BO-0005X(YT-2500+LS(Dry contact))
14-KB2BO-0336X(YT-2500+LS(Non-contact))
11-KB2BO-0165X(YT-2550)
11-KB2BO-0166X(YT-2550+LS(Dry contact))
14-KB2BO-0337X(YT-2550+LS(Non-contact))
11-KB2BO-0164X(YT-2501)
Ambient temperature : -30 ~ +60°C (T5/T100°C), -30 ~ +40°C (T6/T85°C)

➢ ATEX

Type : Intrinsic safety
Rating : II 2G Ex ia IIC T5/T6 Gb, II 2D Ex ia IIIC T100°C/T85°C Db IP6X
Certification No. : EPS 11 ATEX 1 363 X
Ambient temperature : -30 ~ +60°C (T5), -30 ~ +40°C (T6)

➢ IECEx

Type : Intrinsic safety
Rating : Ex II 2G Ex ia IIC T5/T6 Gb, Ex II 2D Ex ia IIIC T100°C/T85°C Db IP6X
Certification No. : IECEx EPS 11.0009X
Ambient temperature : -30 ~ +60°C (T5/T100°C), -30 ~ +40°C (T6/T85°C)

➢ NEPSI (YT-2500 only)

Type : Intrinsic safety
Rating : Ex ia IIC T5/T6 Gb, Ex iaD 21 T100/T85
Certification No. : GYJ20.1531

➢ EAC (YT-2500 only)

Type : Intrinsic safety
Rating : 1Ex ia IIC «T6 ... T5» Gb X, Ex ia IIIC «T85°C ... T100°C» Db X IP66
Certification No. : RU C-KR.AM02.B.00104/19
Ambient temperature : -30 ~ +60°C (T5/T100°C), -30 ~ +40°C (T6/T85°C)

➢ CCC (China)

Type : Intrinsic safety
Rating : Ex ia IIC T5/T6 Gb, Ex iaD 21 T100/T85
Certification No. : 20200322307000618
Ambient temperature : -30 ~ +60°C (T5/T100°C), -30 ~ +40°C (T6/T85°C)

- **Electromagnetic Compatibility (EMC)**
  - EMC directive 2014/30/EC from April 2016
  - EC Directive for CE conformity marking

2.7 Parts and Assembly

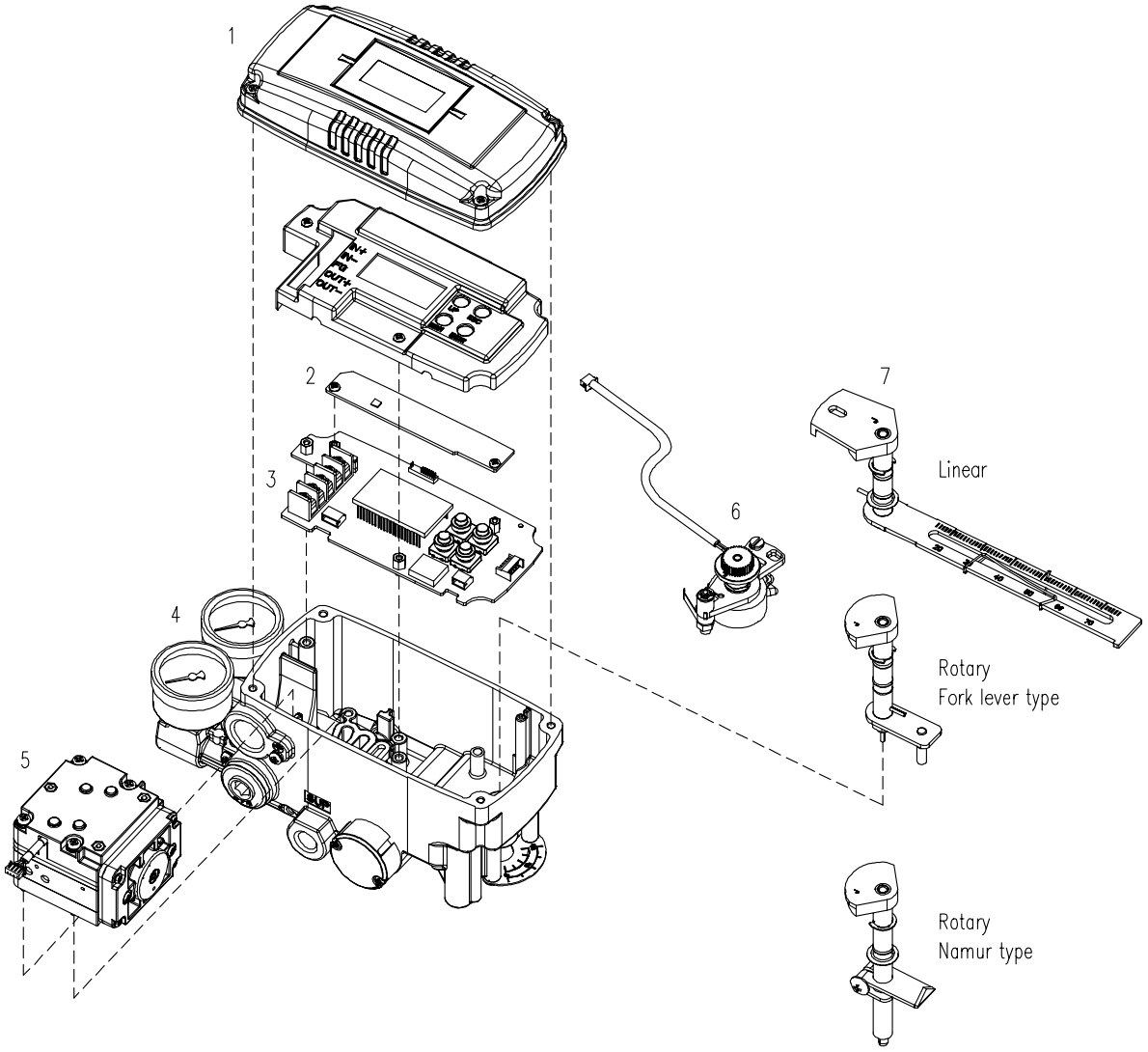


Fig. 2-1: YT-2500 / 2550 series exploded view

1. Base Cover
2. Option PCB
3. Main PCB
4. Pressure Gauge
5. Pilot
6. Potentiometer
7. Main shaft
8. Base body
9. Feedback Lever

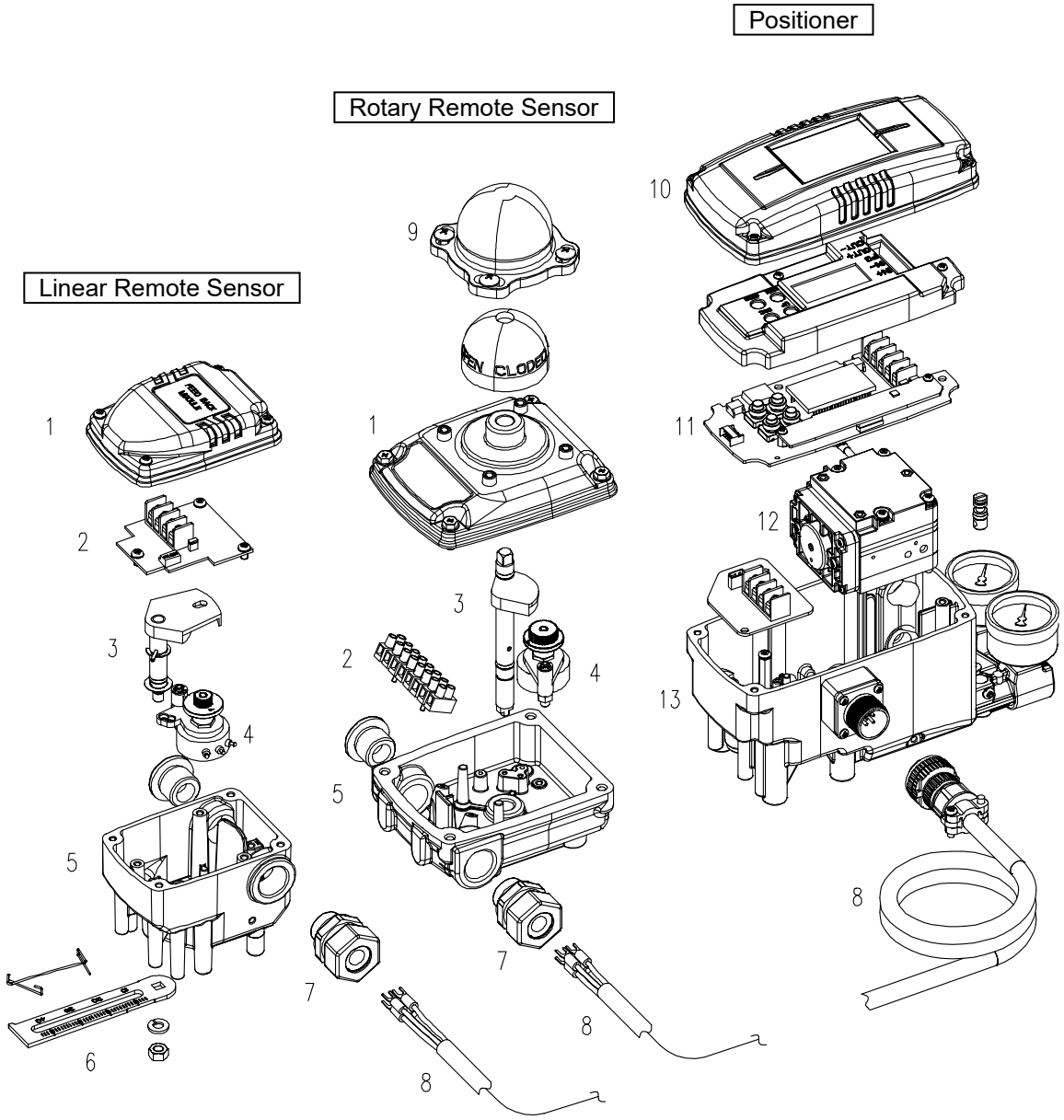


Fig. 2-2: YT-2501 exploded view

1. Base cover of Remote sensor
2. Terminal of Remote sensor
3. Main shaft of Remote sensor
4. Potentiometer of Remote sensor
5. Base body of Remote sensor
6. Lever of Remote sensor
7. Cable connector of Remote sensor
8. Remote cable
9. Dome cover of Remote sensor
10. Base cover of Positioner
11. PCB of Positioner
12. Pilot of Positioner
13. Base body of Positioner

2.8 Product Dimension

2.8.1 YT-2500

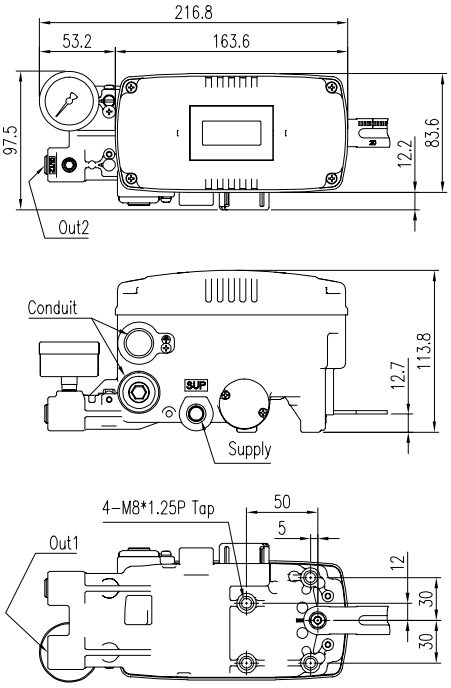


Fig. 2-3: YT-2500L

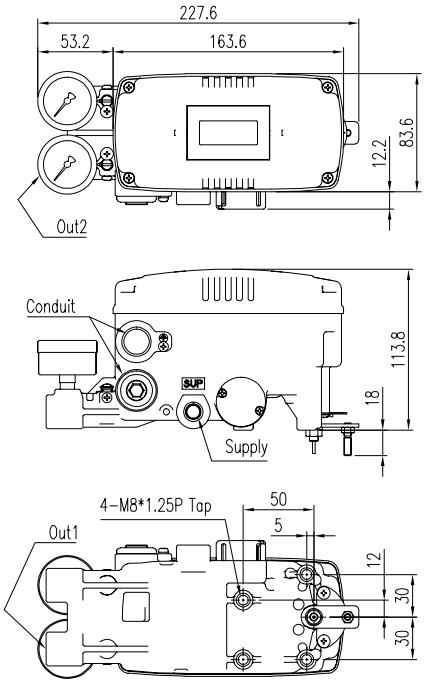


Fig. 2-4: YT-2500R (Fork Lever Type)

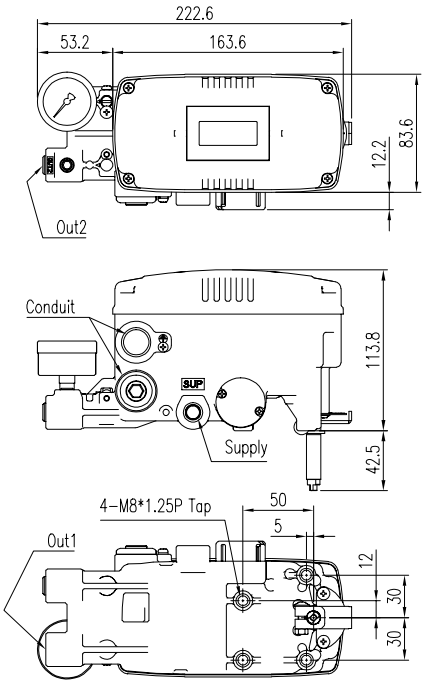


Fig. 2-5: YT-2500R (Namur Type)

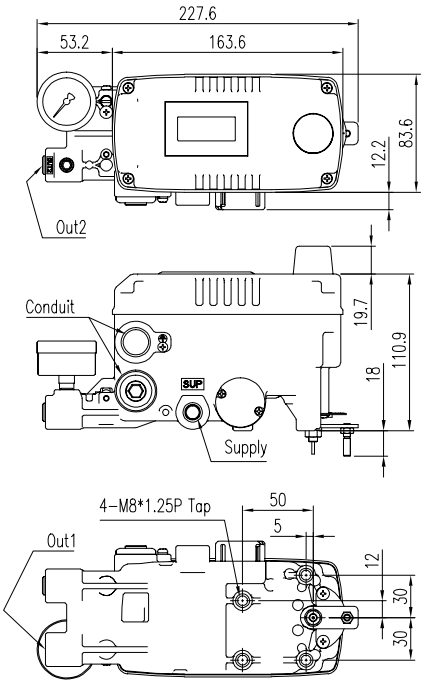


Fig. 2-6: YT-2500R (L/S Option)

2.8.2 YT-2550

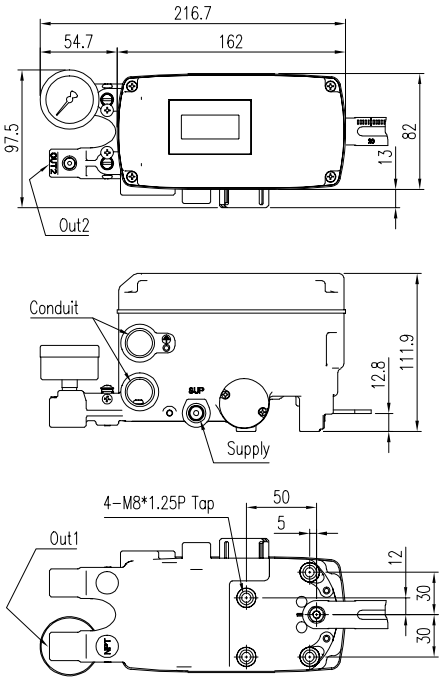


Fig. 2-7: YT-2550L

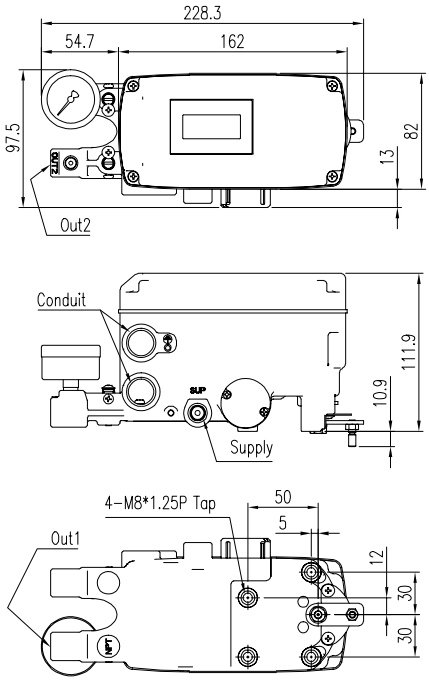
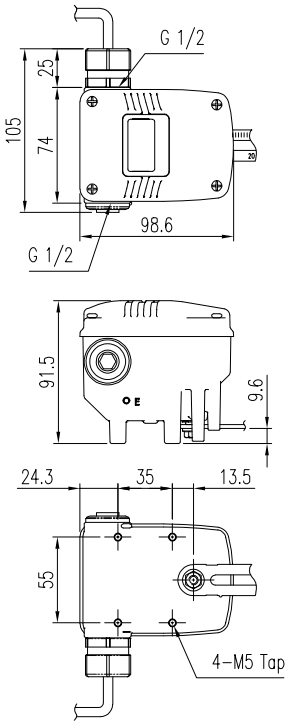


Fig. 2-8: YT-2550R

2.8.3 YT-2501



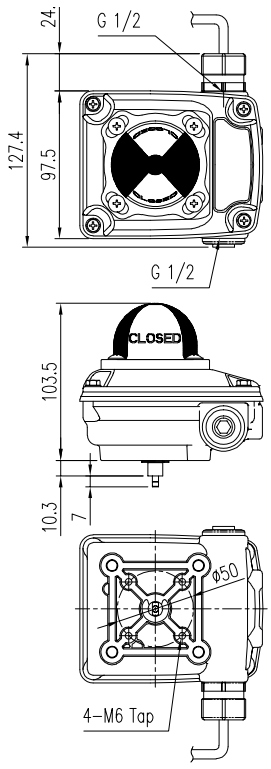


Fig. 2-10: Rotary Remote Sensor

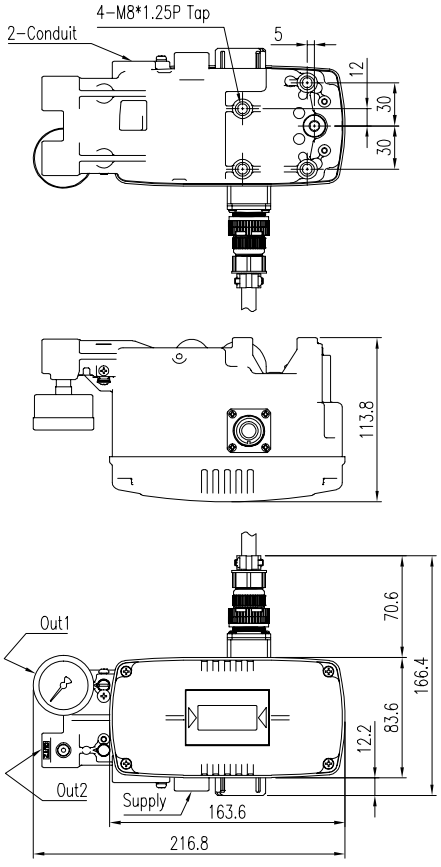


Fig. 2-9: Linear Remote Sensor

Fig. 2-11: YT-2501 Positioner