



YT-3300



YT-3350



YT-3303



YT-3301



Fig. L-17: YT-3350 Intrinsic safety type (CCC)

2.4 Product Code

2.4.1 YT-3300 / 3350 series follows suffix symbols as follows.

YT-3300 / 3350		1	2	3	4	5	6	7	8
1	Motion Type	L : Linear (Positioner is attached the right yoke of actuator.)							
		R : Rotary							
2	Acting type	S : Single							
		D : Double							
3	Explosion Proof	1) N : Non-Explosion							
		i : ATEX, IECEx, KCs, NEPSI, INMETRO 2) : Ex ia IIC T5/T6 Gb, Ex iaD IIIC T100°C/T85°C Db, IP66							
		A : FM, CSA : Class I, Division 1&2 Groups ABCD T5/T6 Class II, Division 1&2 Groups EFG T100°C/T85°C; Class III Class I, Zone 0, AEx ia IIC T5/T6, Ex ia IIC T5/T6 Ga; Ex tb IIIC T100°C/T85°C Db							
		AG : FM, CSA + Tapped Exhaust							
		E : Intrinsic safety for EAC							
		Z : Intrinsic safety for CCC							

4	Lever Type	Linear	0 : 10 ~ 40 mm (Standard type) 1 : 20 ~ 100 mm (Standard type) 2 : 90 ~ 150 mm (Standard type) 3 : 16 ~ 30 mm (Adapter type) 4 : 16 ~ 60 mm (Adapter type) 5 : 16 ~ 100 mm (Adapter type) 6 : 90 ~ 150 mm (Adapter type)
		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-3350 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		0 : None 1 : + Position Transmitter 2 : + Limit Switch(Mechanical Type) ³⁾ 3 : + Limit Switch(Inductive Proximity Type) ⁴⁾ 4 : + Position Transmitter and Limit Switch (Mechanical Type) ⁵⁾ 5 : + Position Transmitter and Limit Switch (Inductive Proximity Type) ⁶⁾
8	Operating Temp. (Non-explosion proof) ⁷⁾		S : -30 ~ 85 °C (-22 ~ 185 °F, except EAC explosion proof) L : -40 ~ 85 °C (-40 ~ 185 °F) A : -55 ~ 85 °C (-67 ~ 185 °F, only EAC explosion proof)

¹⁾ In case of EAC non-explosion type, put “EAC” in a purchase order.

²⁾ In case of INMETRO, put “INMETRO” in a purchase order.

^{3) 5)} These options are only available for “S”, “L” in 8 operating temp.

^{4) 6)} These options are only available for “S” in 8 operating temp.

⁷⁾ This option is just the normal operating temperature of the product and is not related to explosion proof temperature. See “2.6 Certificates” for explosion proof temperature.

2.4.2 YT-3303 series follows suffix symbols as follows.

YT-3303 1 2 3 4 5 6 7 8

1 Motion Type	L :	Linear (Positioner is attached the left yoke of actuator.)
	R :	Rotary
2 Acting type	S :	Single
	D :	Double
3 Explosion Proof	N :	Non-Explosion
	i :	ATEX, IECEx, KCs, INMETRO ¹⁾ : Ex ia IIC T5/T6 Gb, Ex iaD IIIC T100°C/T85°C Db, IP66
	A :	FM, CSA : Class I, Division 1&2 Groups ABCD T5/T6 Class II, Division 1&2 Groups EFG T100°C/T85°C; Class III Class I, Zone 0, AEx ia IIC T5/T6, Ex ia IIC T5/T6 Ga; Ex tb IIIC T100°C/T85°C Db
	AG :	FM, CSA + Tapped Exhaust
	E :	Intrinsic safety for EAC
	Z :	Intrinsic safety for 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
	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	Operating Temp. (Non-explosion proof) ²⁾	S : -30 ~ 85 °C (-22 ~ 185 °F, except EAC explosion proof)
		L : -40 ~ 85 °C (-40 ~ 185 °F)
		A : -55 ~ 85 °C (-67 ~ 185 °F, only EAC explosion proof)

¹⁾ In case of INMETRO, put "INMETRO" in a purchase order sheet.

²⁾ This option is just the normal operating temperature of the product and is not related to explosion proof temperature. See "2.6 Certificates" for explosion proof temperature.

2.4.3 YT-3301 series follows suffix symbols as follows.

YT-3301 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 : ATEX, IECEx, KCs, INMETRO ¹⁾ : Ex ia IIC T5/T6 Gb, Ex iaD IIIC T100°C/T85°C Db, IP66
		A : FM & CSA : Class I, Division 1&2 Groups ABCD T5/T6 Class II, Division 1&2 Groups EFG T100°C/T85°C; Class III Class I, Zone 0, AEx ia IIC T5/T6, Ex ia IIC T5/T6 Ga; Ex tb IIIC T100°C/T85°C Db
		AG : FM, CSA + Tapped Exhaust
		E : Intrinsic safety for EAC
		Z : Intrinsic safety for 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	Operating Temp. (Non-explosion proof) ²⁾	S : -30 ~ 85 °C (-22 ~ 185 °F, except EAC explosion proof)
		L : -40 ~ 85 °C (-40 ~ 185 °F)
		A : -55 ~ 85 °C (-67 ~ 185 °F, only EAC explosion proof)
9	Cable Length ³⁾	1 : 5m
		2 : 10m
		3 : 15m
		4 : 20m

¹⁾ In case of INMETRO, put "INMETRO" in a purchase order sheet.

²⁾ Maximum cable length is 20m.

³⁾ This option is just the normal operating temperature of the product and is not related to explosion proof temperature. See "2.6 Certificates" for explosion proof temperature.

2.5 Product Specification

2.5.1 YT-3300 / 3303 / 3350 Specification

Model	YT-3300 / 3303		YT-3350	
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	3.2 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 1/4 NPT or G 1/4		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	
Tapped Exhaust (Only AG option of Product code)	1/4 NPT			
Ingress Protection	IP66, Type 4X(FM)			
Explosion Proof	1. None-explosion proof 2. Intrinsic safety : ATEX, IECEx, KCs, NEPSI, EAC, INMETRO, FM, CSA, CCC ※ NEPSI only for YT-3300/3350 ※ See “2.6 Certificates” for details			

Operating Temperature	Standard Type	-30 ~ 85 °C (-22 ~ 185 °F) Inductive proximity limit switch internal type : -25 ~ 85 °C (-13 ~ 185 °F) Except EAC explosion proof	
	Low Temp. Type	-40 ~ 85 °C (-40 ~ 185 °F)	
	Arctic Temp. Type	-55 ~ 85 °C (-67 ~ 185 °F, only EAC explosion proof)	
Ambient Temperature Of Explosion Proof		T5	-40 ~ 60 °C (-40 ~ 140 °F) EAC : -55 ~ 60 °C (-67 ~ 140 °F)
		T6	-40 ~ 40 °C (-40 ~ 104 °F) EAC : -55 ~ 40 °C (-67 ~ 104 °F)
Linearity		± 0.5 % F.S.	
Hysteresis		± 0.5 % F.S.	
Sensitivity		± 0.2 % F.S.	
Repeatability		± 0.3 % F.S.	
Flow Capacity		70 LPM (Sup. = 0.14 MPa)	
Air Consumption		Below 2 LPM (Sup. = 0.14 MPa @ idle)	
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 7)	
Feedback Signal (Option)		4 ~ 20 mA (DC 9 ~ 28 V)	
L/S Rating (Option) (Except YT-3303)	Mechanical	AC 125 V 3 A / DC 30 V 2 A	
	Inductive Proximity	DC 8.2 V 8.2 mA	
Weight		2 kg (4.4 lb)	5.1 kg (11.2 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-3301 Specification

Model	YT-3301	
Housing Material	Aluminum	
Motion Type	Linear	Rotary
Acting Type	Single / Double	
Input Signal	4 ~ 20 mA DC	
Minimum Current Signal	3.2 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 1/4 NPT or G 1/4		
Gauge Connection			Rc 1/8 or 1/8 NPT		
Conduit Entry			G 1/2 or 1/2 NPT or M20x1.5P		
Tapped Exhaust (Only AG option of Product code)			1/4 NPT		
Ingress Protection	Positioner module		IP54		
	Feedback sensor		IP66, Type 4X(FM)		
Explosion Proof			1. None-explosion proof 2. Intrinsic safety : ATEX, IECEx, KCs, EAC, INMETRO, FM, CSA, CCC ※ See “2.6 Certificates” for details		
Operating Temperature	Sensor		-55 ~ 120 °C (-67 ~ 248 °F)		
	Body	Standard	-30 ~ 85 °C (-22 ~ 185 °F, except EAC explosion proof)		
		Low temp.	-40 ~ 85 °C (-40 ~ 185 °F)		
		Arctic temp.	-55 ~ 85 °C (-67 ~ 185 °F, only EAC explosion proof)		
Ambient Temperature Of Explosion proof		T5	-40 ~ 60 °C (-40 ~ 140 °F) EAC : -55 ~ 60 °C (-67 ~ 140 °F)		
		T6	-40 ~ 40 °C (-40 ~ 104 °F) EAC : -55 ~ 40 °C (-67 ~ 104 °F)		
Linearity			± 0.5 % F.S.		
Hysteresis			± 0.5 % F.S.		
Sensitivity			± 0.2 % F.S		
Repeatability			± 0.3 % F.S.		
Flow Capacity			70 LPM (Sup. = 0.14 MPa)		
Air Consumption			Below 2 LPM (Sup. = 0.14 MPa @ idle)		
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 7)		
Feedback Signal (Option)			4 ~ 20mA (DC 9 ~ 28 V)		
Weight	Positioner		2.2 kg (4.9 lb)		
	Remote 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.