

# SPECIFICATION

Dimensions (Unit: mm)			
	<b>JTR301</b>	<b>JTR301</b>	<b>JTR305</b>
Medium of the material	Liquid		Low Dielectric Liquid
Min. Dielectric coefficient (constant)	2.0		1.6
Measuring range	6m	20m	6m
Accuracy	± 5mm		
Repeatability	± 3mm		
Ambient temperature	-40~80°C		
Operating temperature	-40~150°C		
Operating pressure	0~60Bar(25°C)		
Power supply	16~30Vdc Loop Power, 16~30Vdc 4-Wire		
Analog output	4~20mA		
Current distinguishability	1.6uA		
Load impedance	(Vs-16)/0.022 Ohm for 2-Wire, 300 Ohm for 4-Wire>16V		
Digital communication	HART 7.0 for 2-Wire, Modbus for 4-Wire		
Housing material	Aluminum alloy		
Protection rating	IP67		
Antenna type	Tube/Rod type	Steel wire cable type	Coaxial type
Minimum connection	3/4"PF		
blind area	High dielectric coefficient ( ε > 10) : Upper blind area < 100mm · Lower blind area < 50mm Low dielectric coefficient ( ε < 10) : Upper blind area < 500mm · Lower blind area < 100mm		
Intrinsically safe parameters (option)	Power (V+,V-) : Ui=30V, li=100mA, Pi=0.7W, Ci=0uF, Li=0mH Analog out : Uo=13.65V, Io=69mA, Po=0.236W, Co=0.79uF, Lo=7468uH Digital (D+,D-) : Ui=12V, li=100mA, Pi=0.3W, Ci=0uF, Li=0mH; Uo=5.88V, Io=12.5mA, Po=18.5mW, Co=43uF, Lo=3555uH		

※It shall combine with the ex-proof fence meeting level Ex ia to form the intrinsically safe system.

# SPECIFICATION

Dimensions (Unit: mm)			
	<b>JTR302</b>	<b>JTR302</b>	<b>JTR30A</b>
Medium of the material	Solid		Liquid/Solid
Min. Dielectric coefficient (constant)	2.0		
Measuring range	6m	20m	6m
Accuracy	± 5mm		
Repeatability	± 3mm		
Ambient temperature	-40~80°C		
Operating temperature	-40~150°C		
Operating pressure	0~60Bar(25°C)		
Power supply	16~30Vdc Loop Power, 16~30Vdc 4-Wire		
Analog output	4~20mA		
Current distinguishability	1.6uA		
Load impedance	(Vs-16)/0.022 Ohm for 2-Wire, 300 Ohm for 4-Wire>16V		
Digital communication	HART 7.0 for 2-Wire, Modbus for 4-Wire		
Housing material	Aluminum alloy		
Protection rating	IP67		
Antenna type	Tube/Rod type	Steel wire cable type	Tube/Rod type
Minimum connection	1"PF		1"(3A)
blind area	High dielectric coefficient ( $\epsilon > 10$ ) : Upper blind area < 100mm · Lower blind area < 50mm Low dielectric coefficient ( $\epsilon < 10$ ) : Upper blind area < 500mm · Lower blind area < 100mm		
Intrinsically safe parameters (option)	Power (V+,V-) : $U_i=30V, I_i=100mA, P_i=0.7W, C_i=0\mu F, L_i=0mH$ Analog out : $U_o=13.65V, I_o=69mA, P_o=0.236W, C_o=0.79\mu F, L_o=7468\mu H$ Digital (D+,D-) : $U_i=12V, I_i=100mA, P_i=0.3W, C_i=0\mu F, L_i=0mH; U_o=5.88V, I_o=12.5mA, P_o=18.5mW, C_o=43\mu F, L_o=3555\mu H$		

※It shall combine with the ex-proof fence meeting level Ex ia to form the intrinsically safe system.

# SPECIFICATION (HIGH TEMPERATURE TYPE)



NEPSI Ex ia IIC T2~T4 Ga  
 IECEx Ex ia IIC T2~T6 Ga  
 ATEX 2277 Ex II 1G Ex ia IIC T2~T6 Ga  
 CSA Class I, Zone 0, AEx ia IIC T2~6 Ga;  
 Class I, Division 1, Groups A, B, C & D, T2~6

Dimensions (Unit: mm)			
	<b>JTR301</b>	<b>JTR302</b>	<b>JTR305</b>
Medium of the material	Liquid	Solid	Low Dielectric Liquid
Min. Dielectric coefficient (constant)	2.0		1.6
Measuring range	6m		
Accuracy	± 5mm		
Repeatability	± 3mm		
Ambient temperature	-40~80°C		
Operating temperature	-40~230°C		
Operating pressure	0~60Bar(25°C)		
Power supply	16~30Vdc Loop Power, 16~30Vdc 4-Wire		
Analog output	4~20mA		
Current distinguishability	1.6uA		
Load impedance	(Vs-16)/0.022 Ohm for 2-Wire, 300 Ohm for 4-Wire>16V		
Digital communication	HART 7.0 for 2-Wire, Modbus for 4-Wire		
Housing material	Aluminum alloy		
Protection rating	IP67		
Antenna type	Tube/Rod type		Coaxial type
Minimum connection	3/4"PF	1"PF	3/4"PF
blind area	High dielectric coefficient ( $\epsilon > 10$ ) : Upper blind area < 100mm · Lower blind area < 50mm Low dielectric coefficient ( $\epsilon < 10$ ) : Upper blind area < 500mm · Lower blind area < 100mm		
Intrinsically safe parameters (option)	Power (V+,V-) : $U_i=30V, I_i=100mA, P_i=0.7W, C_i=0\mu F, L_i=0mH$ Analog out : $U_o=13.65V, I_o=69mA, P_o=0.236W, C_o=0.79\mu F, L_o=7468\mu H$ Digital (D+,D-) : $U_i=12V, I_i=100mA, P_i=0.3W, C_i=0\mu F, L_i=0mH; U_o=5.88V, I_o=12.5mA, P_o=18.5mW, C_o=43\mu F, L_o=3555\mu H$		

※It shall combine with the ex-proof fence meeting level Ex ia to form the intrinsically safe system.

# ORDERING INFORMATION

JTR1 ⑤⑥⑦⑧-⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓

**⑤ ⑥ Model**

- 00: Standard
- 02: Hi-temperation
- 03: Sanitary

**⑦ ⑧ Certification**

- 00: None
- 1B: ATEX-Ex ia
- 2B: IECEX-Ex ia
- 6B: CSA
- 7B: NEPSI-Ex ia

**⑨ ⑩ Probe Type**

- A1: Rod type for liquid 6mm
- A2: Steel wire cable type for liquid 4mm
- A3: Coaxial type 21.7mm
- B1: rod type for solid
- B2: cable type for solid
- E1: Sanitary rod

**⑪ ⑫ Probe material**

- MA: SUS 304
- MB: SUS 316
- MC: SUS 316L

**Connection**

**⑬ ⑭**

- Flange
- AJ: JIS-RF
- AN: ANSI-RF
- AR: DIN-RF
- AI : 3A

Thread

- AA: JIS
- AC: ANSI

**⑮ ⑯**

- A7: 3/4"
- A8: 1"
- B1: 1-1/2"
- B2: 2"
- B5: 3"
- B7: 4"
- E1: DN40

**⑰ ⑱**

- 00: None
- 01: PT male
- 03: PF male
- 07: NPT male
- 13: GAS male
- 40: 5 kg/cm<sup>2</sup>
- 48: 150 Lbs
- 56: PN 6
- 57: PN10
- 59: PN25

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**JTR1** <sup>05</sup> <sup>06</sup> <sup>07</sup> <sup>08</sup> - <sup>09</sup> <sup>10</sup> <sup>11</sup> <sup>12</sup> <sup>13</sup> <sup>14</sup> <sup>15</sup> <sup>16</sup> <sup>17</sup> <sup>18</sup> <sup>19</sup> <sup>20</sup> <sup>21</sup> <sup>22</sup> <sup>23</sup>

**⑰ Output/input**

- B: Loop Power 16 ~ 30 Vdc with HART
- D: Loop Power 16 ~ 30 Vdc X 2 with HART
- E: 4-Wire 16 ~ 30Vdc 4~20mA with RS485
- H: 4-Wire 16 ~ 30Vdc, 4~20mA X2 with RS485

**⑳㉑㉒㉓ Length**

Code	Probe Length
0500~6000	500~6000mm
0500~A200	500~20000mm