

CODE: **PTS-KB-6X050-B2V**

DESCRIPTION: Temperature Sensor PT1000 Class B, AISI316 sheath, Ø 6 mm, M12, Transmitter 0..10 V

POWER SUPPLY: 24V DC $\pm$ 10%

OPERATING TEMPERATURE: 0°C / +150°C (range)

IMMERSED MATERIAL: Steel AISI 316L (food grade)

FITTING MATERIAL: N.A.

SENSOR INSULATION: MgO Magnesium Oxide >20Mohm @ 25°C (500VDC)

TIP TAPERING: NO

CERTIFICATION: NO

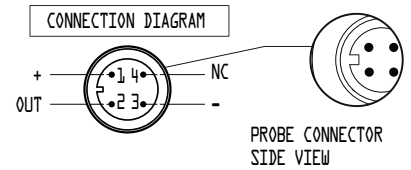
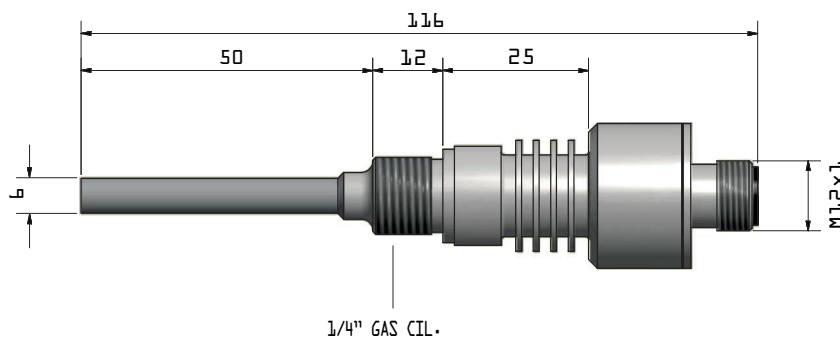
TOTAL LENGTH (E): 50 mm

SHEATH EXT. Ø (S): 6 mm

SHEATH INT. Ø: 5 mm

RTD RESPONSE: 7,5 sec

COMPLIANCE



PIN1 = +
 PIN2 = OUT
 PIN3 = -

°C	OUT (V)
0	0
+75	5
+150	10



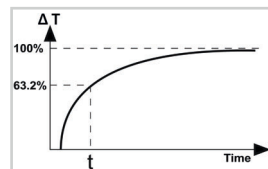
T. MAX 150° C

Insulation: >20 MOhm @ 25° C
 (500 VDC)

GENERAL TOLERANCE EN 22768-m	DRAWER: Matteo Cardi	PROD. CODE:
LINEAR DIMENSION: mm	CONTROL: Daniele Longhin	PTS-KB-6X050-B2V
UNAUTHORIZED REPRODUCTION FORBIDDEN	DRAWING/ED.: PTS_0022	DESCRIPTION: PT1000B, AISI316, Ø 6 mm, M12, Tr. 0..10V, 0/150°C
	REV./DATE: 00 / 30/01/2024	

STANDARD DIN EN 60751

Temperature C°	Tolerance PT1000 B Class (+/- C°)
-200	1.3
-100	0.8
0	0.3
100	0.8
200	1.3
300	1.8
400	2.3
500	2.8



RTD response time with steel tube AISI-316/304 MgO insulated, conforming to B.S. 1904/1984/CEI60751. 50mm immersion in water at a speed of 1m/sec. Calculated on 63.2 % of the thermal jump, depending on stem diameter and thickness.

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Ordering Code:

PTS-

Sensor type	
1B	PT100 CLASS B
KA	PT1000 CLASS A
KB	PT1000 CLASS B
5A	PT500 CLASS A
PK	PTC 1000 OHM
P2	PTC 120 OHM
N1	NTC 10K (β3435K)
N2	NTC 10K (β3694K)
N3	NTC 2252 (β3976K)
TH	NI100
I2	NI120
TK	THERMOCOUPLE K
TJ	THERMOCOUPLE J
TS	THERMOCOUPLE S

Sheath diameter and length (S x L)	
Examples:	
6X050	Ext. Ø 6 mm x 50 mm
6X100	Ext. Ø 6 mm x 100 mm
6X200	Ext. Ø 6 mm x 200 mm
6X400	Ext. Ø 6 mm x 400 mm
8X250	Ext. Ø 8 mm x 250 mm
4X050	Ext. Ø 4 mm x 50 mm
AX150	Ext. Ø 10 mm x 150 mm
6X1M0	Ext. Ø 6 mm x 1 m
8X1M5	Ext. Ø 8 mm x 1,5 m
...	

Process connection	
Examples:	
0	NN
1	1/8" MALE GAS FIXED UNDERHEAD
2	1/4" MALE GAS FIXED UNDERHEAD
3	1/2" MALE GAS FIXED UNDERHEAD
4	1" MALE GAS FIXED UNDERHEAD
...	
6	1/8" MALE NPT GAS FIXED UNDERHEAD
7	1/4" MALE NPT GAS FIXED UNDERHEAD
8	1/2" MALE NPT GAS FIXED UNDERHEAD
9	1" MALE NPT GAS FIXED UNDERHEAD
...	
A	1/8" MALE GAS SLIDING
B	1/4" MALE GAS SLIDING
C	1/2" MALE GAS SLIDING
D	1" MALE GAS SLIDING

Sheath material	
A	STEEL AISI304 SHEATH
B	STEEL AISI316 SHEATH
C	STEEL AISI308 SHEATH
M	STEEL AISI304 SHEATH, MgO INSULATION
N	INCONELL600 SHEATH
K	SINGLE CERAMIC SHEATH
Y	DOUBLE CERAMIC SHEATH

Head/Cable/Connector	
Examples:	
A	HEAD DIN A
B	HEAD DIN B
C	HEAD MINI DIN
T	HEAD DIN A ATEX
X	HEAD DIN B ATEX
Y	HEAD MINI DIN ATEX
M	CONNECTOR M12 4 PIN
R	CONN. M12 4 PIN + TRANSM. 4..20 mA / -50..+150 °C
V	CONN. M12 4 PIN + TRANSM. 0..10 V / 0..+150 °C
W	CONN. M12 4 PIN + TRANSM. 0..10 V / -100..+100 °C
...	
1	GSC SILICONE CABLE 2m
2	PVC CABLE 2m
3	TTS CABLE 2m
4	SPECIAL CABLE 2m
5	GSC SILICONE CABLE 3m
6	PVC CABLE 3m
7	TTS CABLE 3m
8	SPECIAL CABLE 3m
9	FREE
Z	CUSTOM

Suggested cables:



CODE:

CAB-M12FD5A3R

PVC 5 poles M12 female straight cable



CODE:

CAB-M12FA5A3R

PVC 5 poles M12 female angled cable

OPERATING TEMPERATURE:	-25°C / +80°C
HOUSING / MOLDED BODY:	TPU
INSERT:	TPU
CONTACT:	CuSn pre-nickel and 0.3 microns gold-plated
KNURLED SCREW:	CuZn, nickel-plated
O-RING:	FKM
PROTECTION DEGREE:	IP67 in locked position
CONTACT RESISTANCE:	≤ 5 mΩ
NOMINAL CURRENT AT 40°C:	4 A
NOMINAL/RATED VOLTAGE:	240 V / 250 V
TEST VOLTAGE:	2.0 kV eff. /60 s
INSULATION RESISTANCE:	> 10 ⁹ Ω
POLLUTION DEGREE:	3