

pro^{sense} Thermowells for RTD Probes with M12 Cable Connector



Overview

- All thermowells are pre-built stock items
- Thermowells for ProSense RTD probes with M12 cable connector
- All wetted parts are 316 stainless steel
- 600°F (315°C) temperature and 232 psi (16 bar) pressure rating
- CF06-25N or CF10-50N fitting required to mount RTD probes in thermowell
- 3-year warranty



Thermowells for RTD Probes with M12 Cable Connector										
Part Number	Pcs/Pkg	Wt(lb)	Price	I.D.	Overall Length	Male Process Threads	Female Probe Threads	Wetted Material	Temperature/Pressure Rating	Use With
RTDTW-06-010-50N	1	0.10	\$28.00	7 mm (0.28")	113 mm (4.4")	1/2" NPT	1/4" NPT	316 SS	600°F (315°C) max; 232 psi (16 bar) max	RTD0100-06-010-H CF06-25N
RTDTW-06-020-50N	1	0.20	\$30.00		213 mm (8.4")					RTD0100-06-020-H CF06-25N
RTDTW-06-030-50N	1	0.30	\$33.25		313 mm (12.3")					RTD0100-06-030-H CF06-25N
RTDTW-10-010-50N	1	0.10	\$28.00	11 mm (0.43")	92 mm (3.62")	1/2" NPT	1/2" NPT	316 SS	600°F (315°C) max; 232 psi (16 bar) max	RTD0100-10-010-H CF10-50N
RTDTW-10-020-50N	1	0.15	\$30.00		192 mm (7.55")					CF10-50N
RTDTW-10-030-50N	1	0.22	\$33.25		292 mm (11.48")					CF10-50N
RTDTW-10-050-50N	1	0.10	\$36.00		492 mm (19.37")					RTD0100-10-050-H CF10-50N

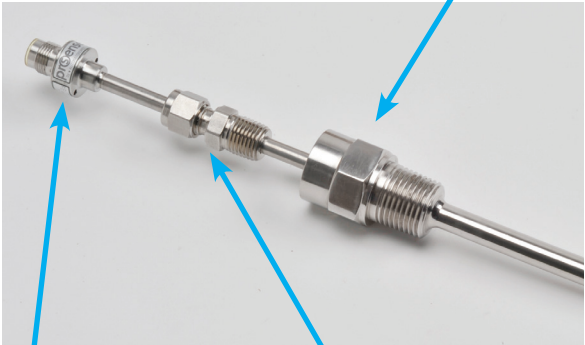


NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE THERMOWELL'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED.
www.automationdirect.com/static/specs/prosensechemresistance.pdf



NOTE: RESPONSE TIME IS REDUCED WHEN INSTALLED IN A THERMOWELL. BE SURE TO INSTALL THE PROBE SO THAT IT CONTACTS THE END OF THE THERMOWELL FOR FASTER RESPONSE.. THERMAL COMPOUND MAY BE USED DEPENDING ON APPLICATION

RTD & Thermowell Assembly Example



RTD0100 Series Probe

CF06-25N or CF10-50N Compression Fitting

RTDTW Series Thermowell

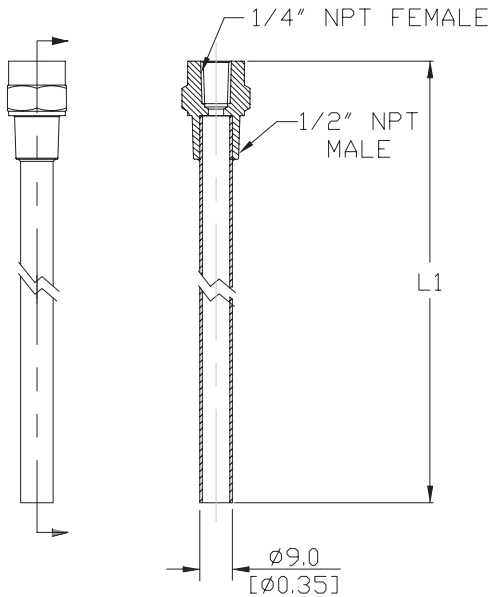
Note: Once tightened compression fitting cannot be re-adjusted

pro^{ense}® Thermowells for RTD Probes with M12 Cable Connector

Dimensions

inches [mm]

RTDTW-06 Series



Part Number	L1
RTDTW-06-010-50N	113 mm [4.4]
RTDTW-06-020-50N	213 mm [8.4]
RTDTW-06-030-50N	313 mm [12.3]

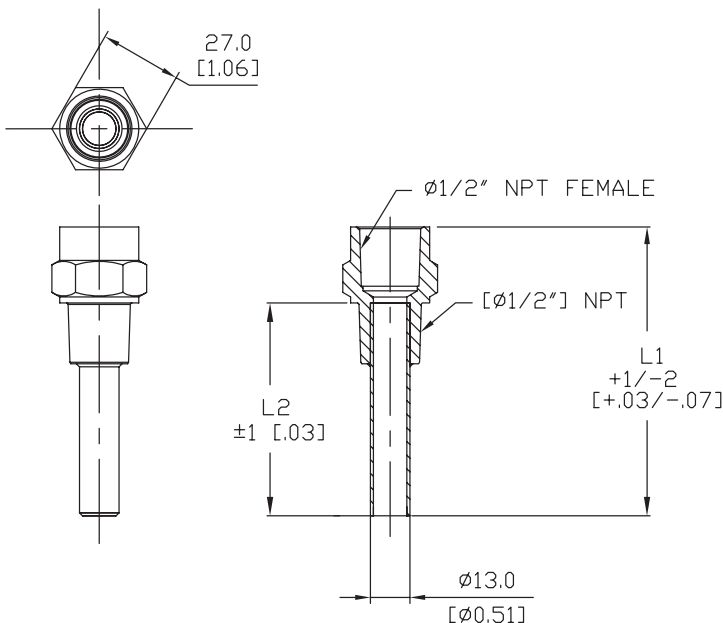
Torque threads to 40 lb-ft [54.23 Nm]*

** Torque values are for reference. Actual torque required for a proper seal of NPT threads is influenced by tolerance, sealant, lubricant, etc.*

Dimensions

inches [mm]

RTDTW-10 Series



Part Number	L1	L2
RTDTW-10-010-50N	92 mm [3.62]	70 mm [2.75]
RTDTW-10-020-50N	192 mm [7.55]	170 mm [6.69]
RTDTW-10-030-50N	292 mm [11.48]	270 mm [10.6]
RTDTW-10-050-50N	492 mm [19.37]	470 mm [18.47]

Torque threads to 40 lb-ft [54.23 Nm]*

prosense® RTD Probes with M12 Cable Connector



Overview

- All temperature sensors are pre-built stock items
- 100 ohm platinum RTD element
- Class A accuracy
- 316 stainless steel sheath to protect from harsh sensing applications
- 6 mm (0.24") diameter 3-wire or 10 mm (0.4") diameter 4-wire probes
- Probe lengths of 160 mm, 260 mm, 360 mm, and 560 mm
- 4-pin M12 cable connector plug for simplified wiring
- 3-year warranty



RTD Probes With M12 Cable Connector									
Part Number	Pcs/Pkg	Wt(lb)	Price	Type	Diameter	Length	Temperature Sensing Range	Mounting Fitting	Thermowell
RTD0100-06-010-H	1	0.10	\$29.00	PT 100, 3-wire	0.24 inch (6 mm)	6.3 inch (160 mm)	-40 to 302°F (-40 to 150°C), Wiring connection limited to -13 to 176°F (-25 to 80°C)	CF06-25N	RTDTW-06-010-50N CF06-25N
RTD0100-06-020-H	1	0.20	\$30.00	PT 100 3-wire	0.24 inch (6 mm)	10.2 inch (260 mm)		CF06-25N	RTDTW-06-020-50N CF06-25N
RTD0100-06-030-H	1	0.30	\$33.25	PT 100 3-wire	0.24 inch (6 mm)	14.2 inch (360 mm)		CF06-25N	RTDTW-06-030-50N CF06-25N
RTD0100-10-010-H	1	0.10	\$29.00	PT 100 4-wire	10 mm (0.4 inch)	160 mm (6.3 inch)		CF10-50N	RTDTW-10-010-50N CF10-50N

RTD Probes With M12 Cable Connector Technical Specifications	
Sensing Element	Single 100 ohm platinum (Pt100), TCR = 0.00385 Ω/Ω/°C
Initial Accuracy	DIN EN 60751, Class A, ± (0.15 + 0.002 t)°C
Probe	6 mm (0.24") or 10 mm (0.4"), 316 stainless steel sheath with single RTD element, 316 stainless steel wiring connection
Minimum Installation Depth	0.6" (15 mm)
Response Time	*t _{0.5} = 1 sec/ t _{0.9} = 3 sec (DIN EN 60751)
Wiring	M12 connector; gold-plated contacts, IP 68 / IP 69K, Class III

* t_{0.5} = a 50% of full scale change in output when immersed in water at 0.4m/s, t_{0.9} = a 90% FS change.



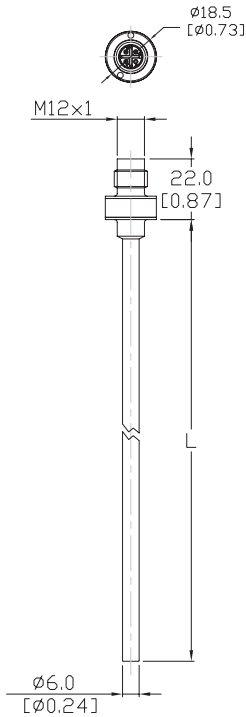
NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE SENSOR'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED.
www.automationdirect.com/static/specs/prosensechemresistance.pdf

pro^{sense} RTD Probes with M12 Cable Connector

Dimensions

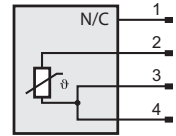
mm [inches]

RTD0100-06 Series



Part Number	Length	L
RTD0100-06-010-H	160 mm	[6.3]
RTD0100-06-020-H	260 mm	[10.2]
RTD0100-06-030-H	360 mm	[14.2]

Wiring Information



Cable Assembly Wiring Colors:

- Pin 1 - Brown
- Pin 2 - White
- Pin 3 - Blue
- Pin 4 - Black

Note: wiring colors are based on AutomationDirect CD12L and CD12M 4-pole cable assemblies.

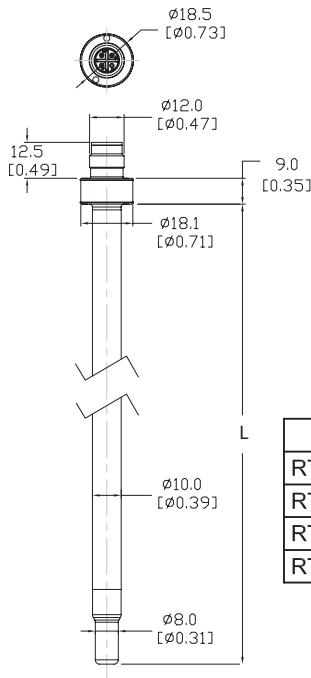


NOTE: MOUNT 0.24 (6 MM) INCH DIAMETER RTDs BY USING PROSENSE RTD^{TW} SERIES THERMOWELLS AND / OR CF06-25N COMPRESSION FITTING.

Dimensions

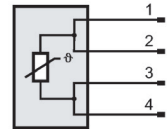
mm [inches]

RTD0100-10 Series



Part Number	Length	L
RTD0100-10-010-H	160 mm	[6.3]
RTD0100-10-020-H	260 mm	[10.2]
RTD0100-10-030-H	360 mm	[14.2]
RTD0100-10-050-H	560 mm	[22.0]

Wiring Information



Cable Assembly Wiring Colors:

- Pin 1 - Brown
- Pin 2 - White
- Pin 3 - Blue
- Pin 4 - Black

Note: wiring colors are based on AutomationDirect CD12L and CD12M 4-pole cable assemblies.



NOTE: MOUNT 10MM DIAMETER RTDs BY USING PROSENSE RTD^{TW} SERIES THERMOWELLS AND / OR CF10-50N COMPRESSION FITTING.