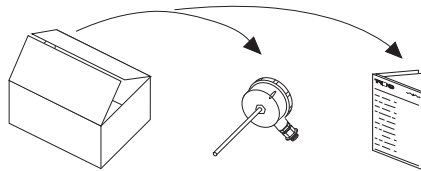


PRT Insertion Temperature Sensor

Important: Retain these instructions



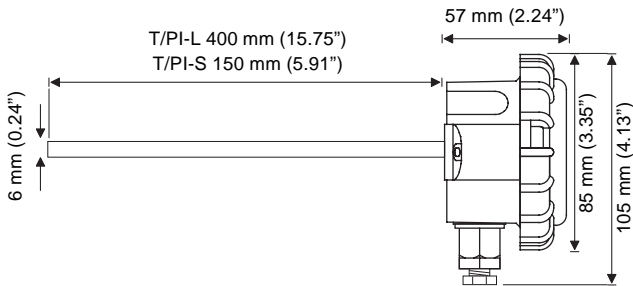
UNPACKING



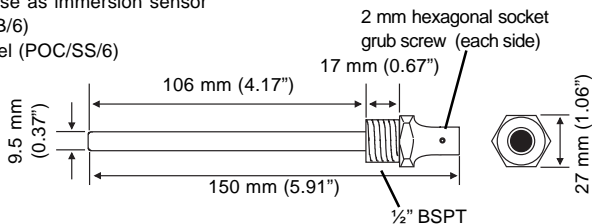
T/PI Installation
Instructions TG200825

Installation

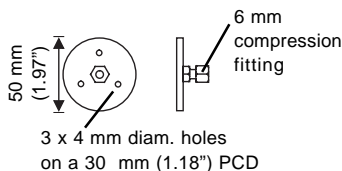
1 Dimensions



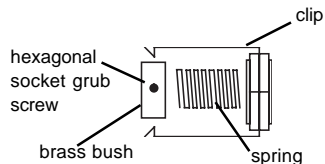
Pockets for use as immersion sensor
Brass (POC/B/6)
Stainless Steel (POC/SS/6)



Mounting flange for use as duct sensor
ACC/DF/6



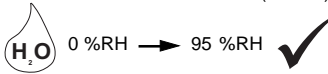
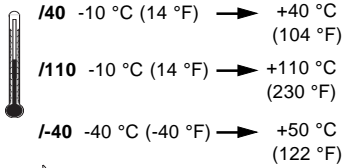
Universal Fitting Kit for immersion sensor
use in existing pockets



Installation (continued)

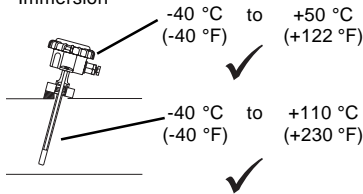
2 Requirements

a Measurement range



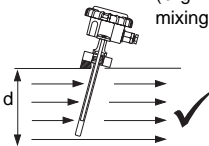
Protection : IP67 (NEMA6)

b Immersion

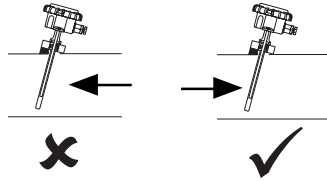


c Immersion

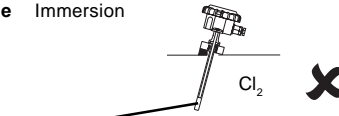
Ensure no stratification (e.g. downstream of mixing valves, junctions)



d Immersion

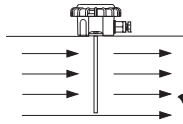


e Immersion



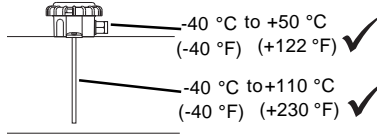
Note that POC/SS/6 or POC/B/6 are NOT suitable for use in chlorine rich environments

f Duct



Ensure no stratification (e.g. downstream of mixing dampers, heating coils, cooling coils) otherwise use averaging sensor.

g Duct

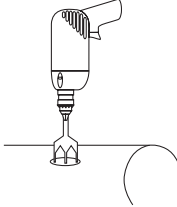


Installation (continued)

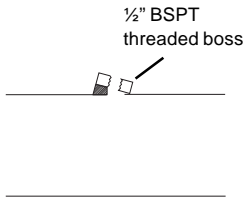
3 Install Immersion Sensor

a Install Pocket (if installing new pocket)

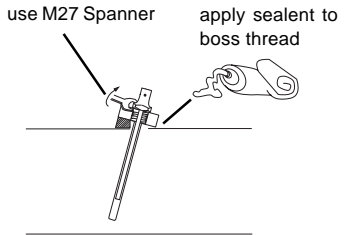
a1 Drill hole for boss



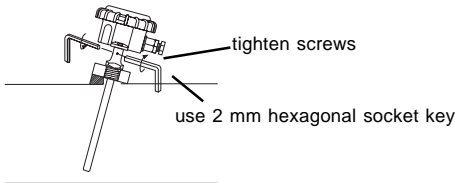
a2 Fix threaded boss



a3 *Screw pocket into boss

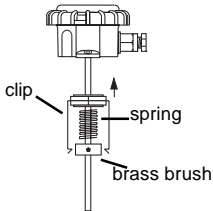


b Install Sensor into Pocket If using compatible pocket

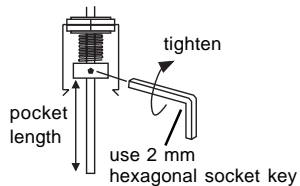


c Install Sensor into Pocket If using Universal Fixing Kit

c1 Push adaptor onto probe



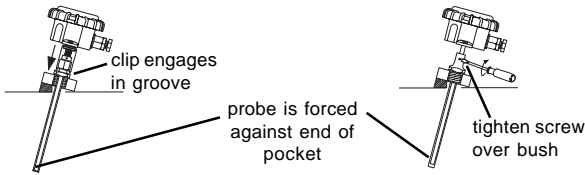
c2 Adjust probe length



c3 *Mount in pocket

if pocket has clip retaining groove, push clip over pocket

if pocket has grub screw, discard spring and clip



*If used for chilled water ensure pocket is sealed around probe or fill pocket with thermally conducting oil to avoid the build up of condensation in bottom of pocket.

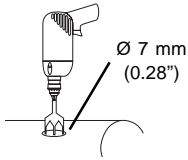
Installation (continued)

4 Install Duct Sensor

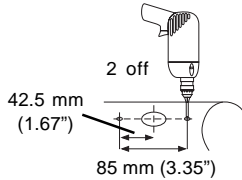
either

a Direct mount sensor on duct

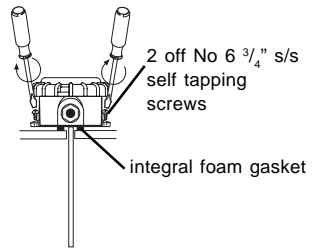
a1 Drill hole in duct



a2 Drill 2 pilot holes



a3

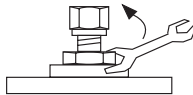


or

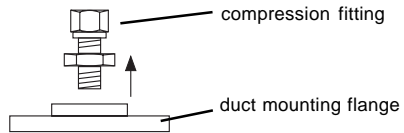
b Use compression fitting

b1 Separate compression fitting

(1) Loosen nut



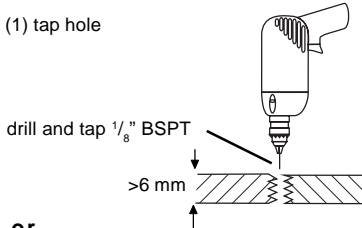
(2) Unscrew fitting



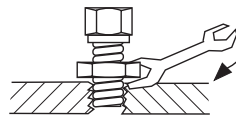
either

b2 (for thicker material) use compression fitting only

(1) tap hole



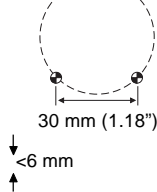
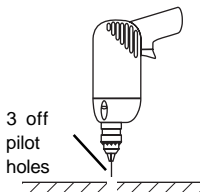
(2) screw in fitting



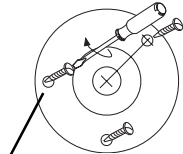
or

b3 (for thinner material) use complete mounting flange

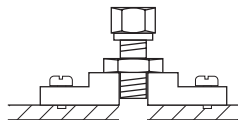
(1) drill 3 holes



(2) screw on flange

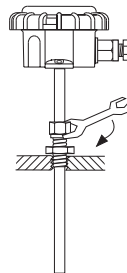


(3) mounted flange

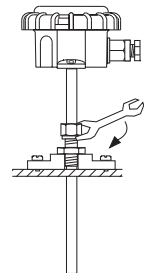


b4 Adjust depth of probe

either



or



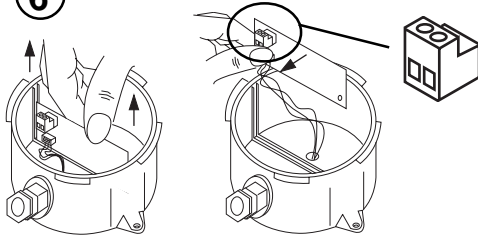
3 off No 6 3/4 inch s/s self tapping screws

Installation (continued)

5 Remove Lid



6 Remove Connector

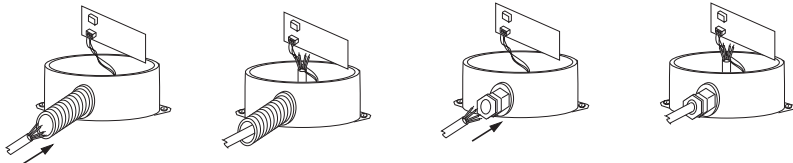


Caution: This unit contains static sensitive devices. Suitable anti-static precautions should be taken throughout the operation to prevent damage to the units. BS EN100015/ 1 Basic Specification: protection of electrostatic sensitive devices.

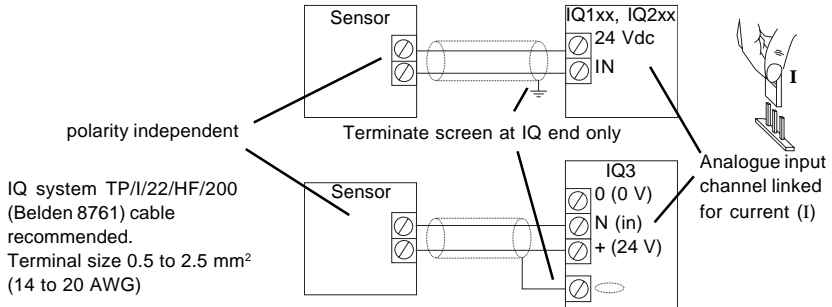
7 Insert Cable

either use M20 flexible conduit

or use M16 cable gland



8 Wire to Controller

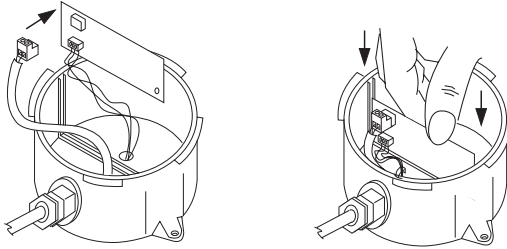


IQ system TP//22/HF/200 (Belden 8761) cable recommended. Terminal size 0.5 to 2.5 mm² (14 to 20 AWG)

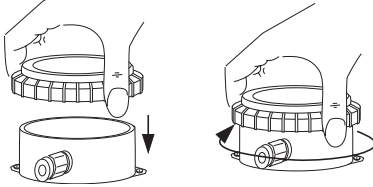
Note that if connecting to an IQ2xx controller (including /ADL or /OC), do not connect directly to C (+24V), instead connect to AUX+ (+24V).

Installation (continued)

9 Replace Connector

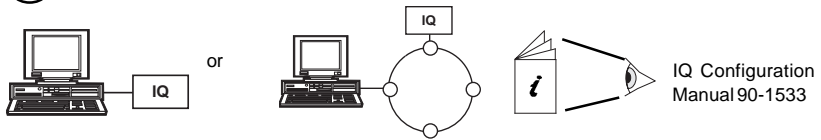


10 Replace Lid



Note that IP67 (NEMA6) rating is only achieved if the sensor is correctly installed with cable or conduit connection fully tightened.

11 Configure IQ



Installation (continued)

12 Set up IQ Sensor Type

It is recommended to use SET (Software Tool) for the setting of the sensor type module. For all IQ2 series controllers with firmware version 2.1 or greater, or IQ3 series controllers, the following SET Unique Sensor References should be used:

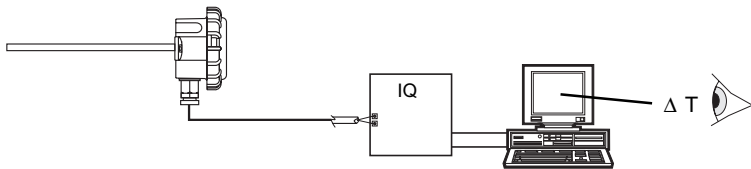
- PRT I -10+40** (T/PI/40, °C)
- PRT I +14+104 F** (T/PI/40, °F)
- PRT I -10+110** (T/PI/110, °C)
- PRT I +14+230 F** (T/PI/110, °F)
- PRT I -40+50** (T/PI/-40, °C)
- PRT I -40+122 F** (T/PI/-40, °F)

Alternatively set scaling mode to 5 (characterise) and enter scaling manually as defined in the appropriate table below. Note that for IQ3, the scaling mode and exponent do not need to be set up.


For all other IQ controllers see Sensor Scaling Reference Card TB100521A

Unit	/40		/110		/-40		
Y input type	2 (current)		2 (current)		2 (current)		
E Exponent	3		3		3		
	Units	°C	°F	°C	°F	°C	°F
U Upper	40	104	110	230	50	122	
L Lower	-10	14	-10	14	-40	-40	
P Points	2	2	2	2	2	2	
x lx	Ox	Ox	Ox	Ox	Ox	Ox	
1	4	-10	14	-10	14	-40	-40
2	20	40	104	110	230	50	122

13 Test System



Disposal



WEEE Directive :

At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.
Do not burn.

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Ecublens, Route du Bois 37, Switzerland by its Authorized Representative, Trend Control Systems Limited.

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