

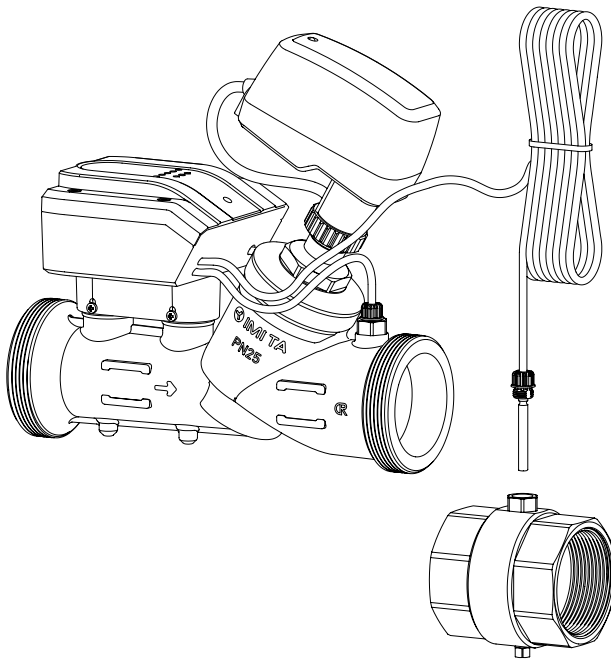


TA-Smart

DN 20-50



TA-Smart

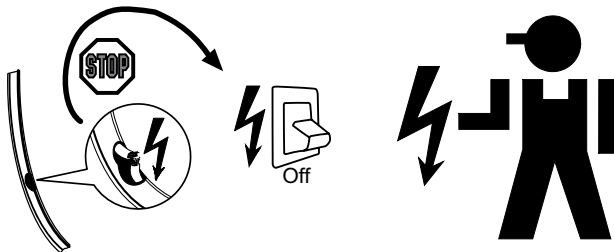




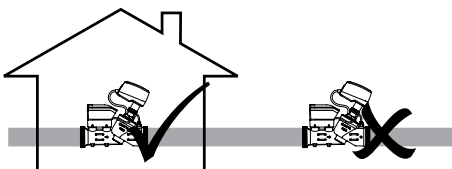
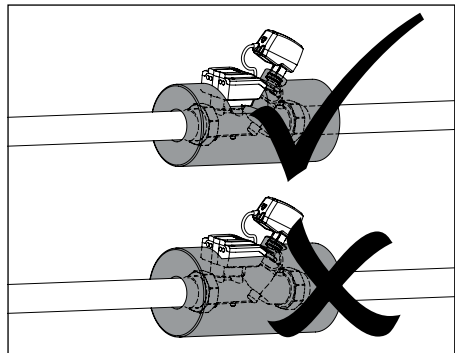
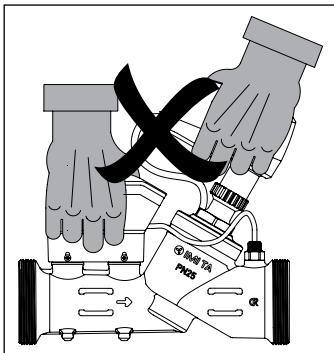
- Intendent use: For measuring and control in heating and cooling systems.
- The water quality requirements described in VDI2035 should be respected
- TA-Smart can be cleansed with a dampened cloth and a lenient cleaning-agent.
- Insulated wires and cables shall retard flame propogation with a flammability RATING of UL 2556 VW-1 or equivalent.



24 VAC/VDC operating only with safety isolating transformer according EN 61558-2-6



Service/Repair →  IMI Hydronic Engineering



If the TA-Smart is used in any other application than specified by IMI Hydronic Engineering the protection provided by the equipment may be impaired

Technical specifications valid at an altitude of max. 2000 m.



-20°C - +70°C (-4°F - +158°F)

(5-95%RH, non-condensing)



0°C - +50°C (32°F - +122°F)

(5-95%RH, non-condensing)



Input signal: 0-10 VDC

Flow setting: q_{nom}

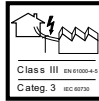
Output signal: 0-10 VDC

Media: H₂O

Control mode: Flow

Characteristic: EQM

(A)



Software
A
EN 60730

Type
1AB
EN 60730

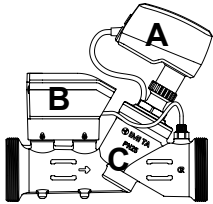
IP54
EN 60730



(B)

BACnet MS/TP, BACnet IP, Modbus RTU, Modbus TCP

Proportional: 0(2)-10 VDC 47 kΩ
0(4)-20 mA, 500 Ω



Power supply

24 VAC +6%/-10%, 50/60 Hz ±15%
24 VDC +15%/-10%

Power consumption

- Operating (DN 20-50) < 5.6 VA (VAC); < 4.0 W (VDC)
- Standby < 3.3 VA (VAC); < 1.9 W (VDC)




IP54
EN 60730

Contains Transmitter
Module FCC ID:
X8WBC840M

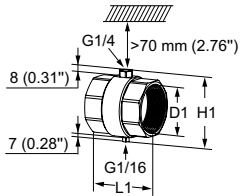
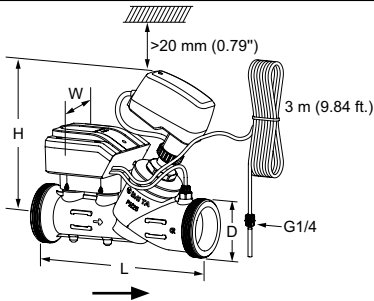
(C)

-10°C - +110°C (14°F - +230°F)
Water and water-glycol mixtures (0-57%).

PN 25 (362 psi)

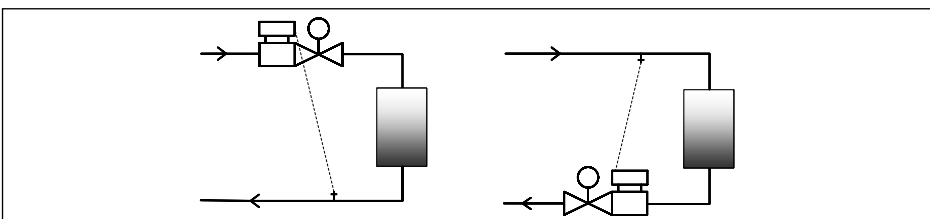
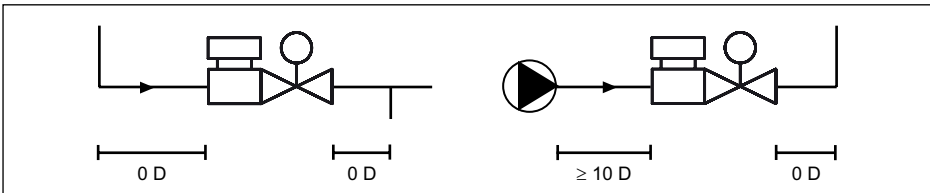
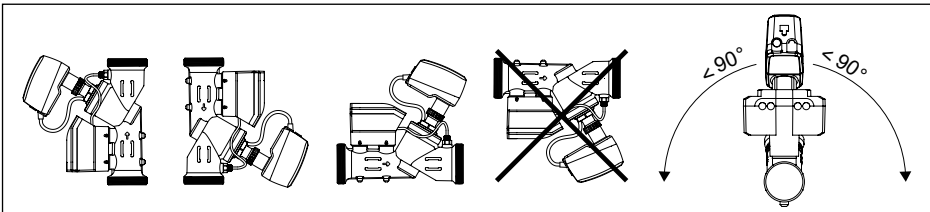
ΔpV  min. 5 kPa (0.7 psi)

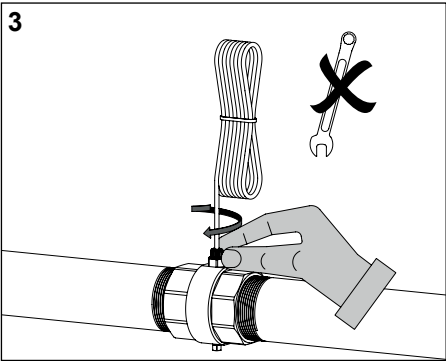
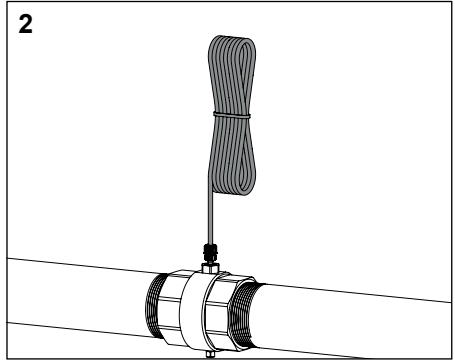
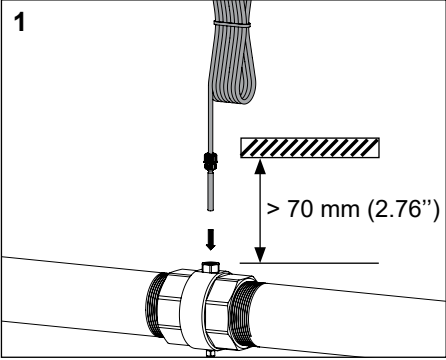
 max. 400 kPa (58 psi)



ISO				
DN	D	L [mm]	H [mm]	W [mm]
20	G1	180	174	97
25	G1 1/4	187	174	97
32	G1 1/2	226	223	97
40	G2	232	227	97
50	G2 1/2	245	235	97
Size	D	L [in]	H [in]	W [in]
3/4"	G1	7.09	6.85	3.82
1"	G1 1/4	7.36	6.85	3.82
1 1/4"	G1 1/2	8.90	8.78	3.82
1 1/2"	G2	9.13	8.94	3.82
2"	G2 1/2	9.65	9.25	3.82

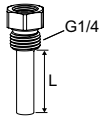
ISO			NPT		
D1	L1 [mm]	H1 [mm]	D1	L1 [mm]	H1 [mm]
G3/4	60	56	3/4"	55	56
G1	62	61	1"	64	61
G1 1/4	70	71	1 1/4"	66	70
G1 1/2	70	77	1 1/2"	67	76
G2	78	89	2"	68	89
			D1	L1 [in]	H1 [in]
			3/4"	2.17	2.20
			1"	2.52	2.40
			1 1/4"	2.60	2.76
			1 1/2"	2.64	2.99
			2"	2.68	3.50



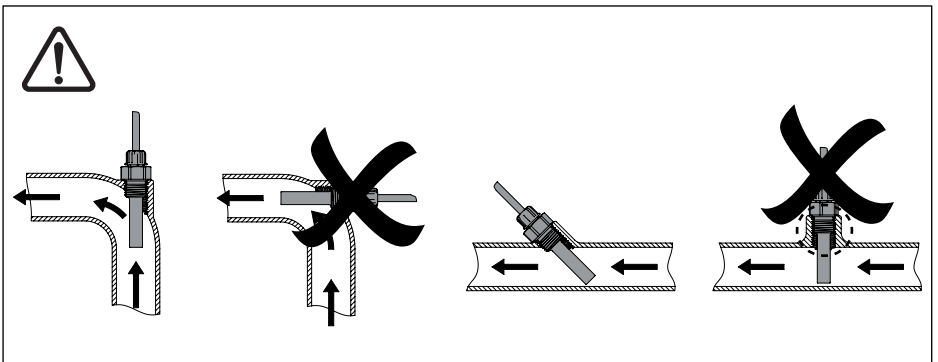
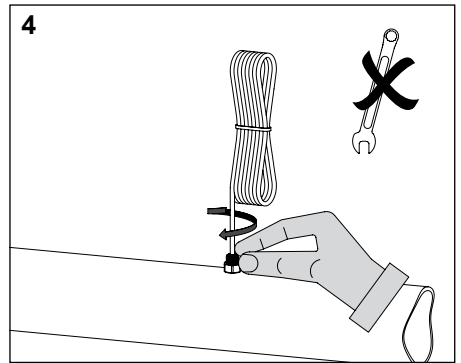
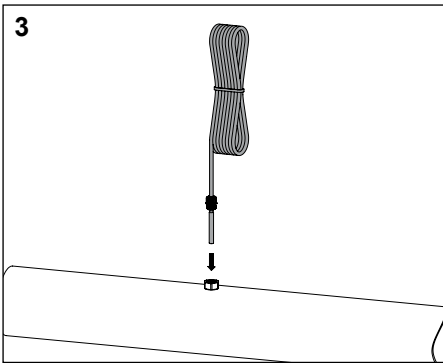
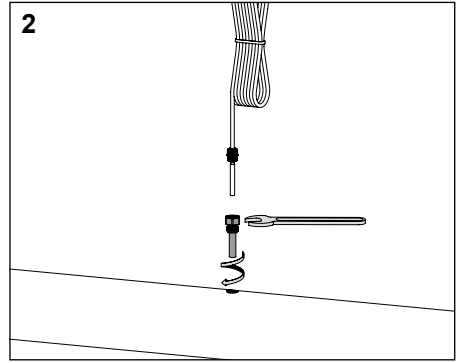
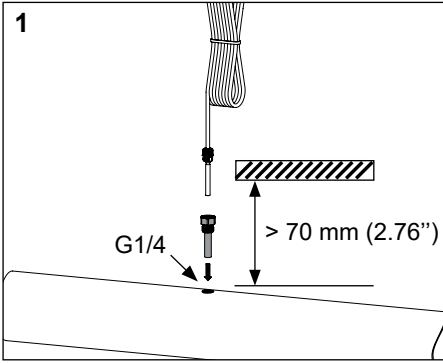


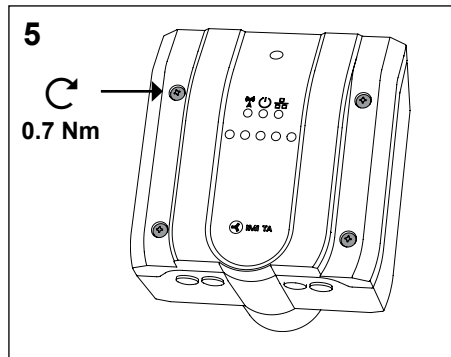
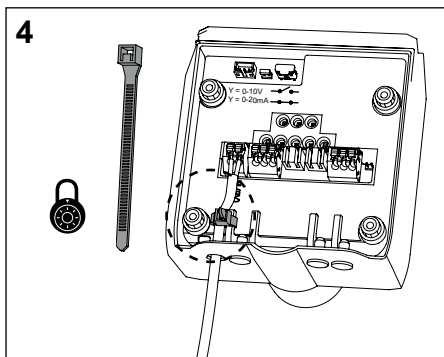
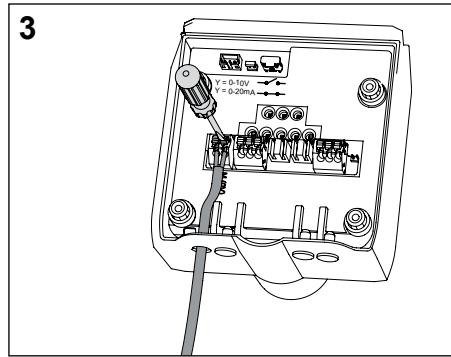
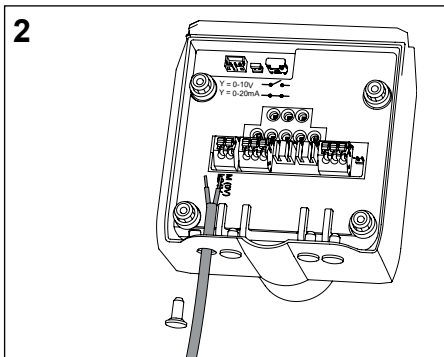
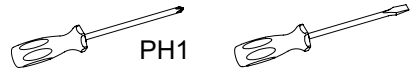
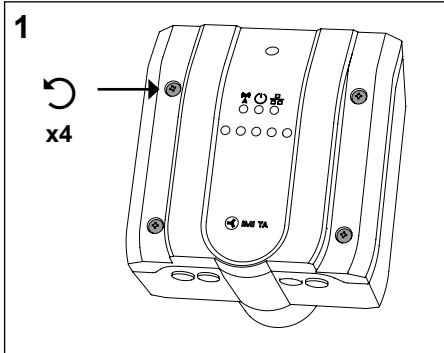
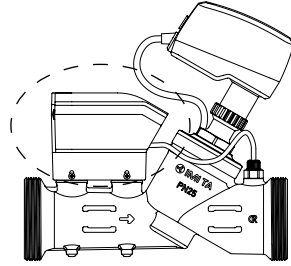
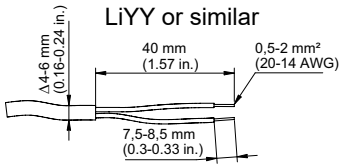


Optional!



Art. No.
DN 20-25: 322230-00401 (L = 14 mm)
DN 32-80: 322230-00400 (L = 30 mm)





Wiring diagrams

Terminal	Description
L24	Power supply 24 VAC/VDC
M*	Neutral for power supply 24 VAC/VDC and signals
X _v	Output signal 0(2)-10 VDC, max. 8 mA or min. load resistance 1.25 kΩ
M (0V)*	Neutral for signal
Y	Input signal 0(2)-10 VDC, 47 kΩ or Input signal 0(4)-20 mA, 500 Ω (selectable by jumper XX)
Ethernet	
RX -	Ethernet connector wire position 6
RX +	Ethernet connector wire position 3
TX -	Ethernet connector wire position 2
TX +	Ethernet connector wire position 1
RS485	
A	RS485 Data +
B	RS485 Data -
M (0V)*	Neutral for signal

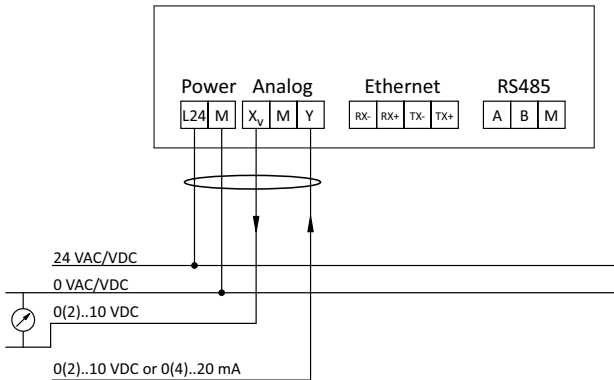
USB Only for IMI use
 Serial Debug Only for IMI use

*) All M terminals are internally connected.

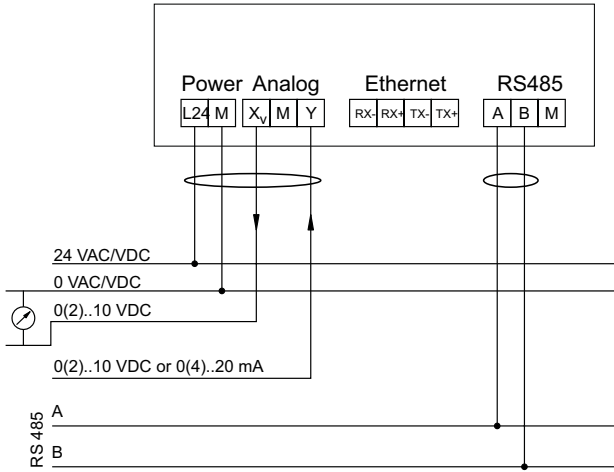


24 VAC/VDC operating only with safety isolating transformer according EN 61558-2-6

Standard



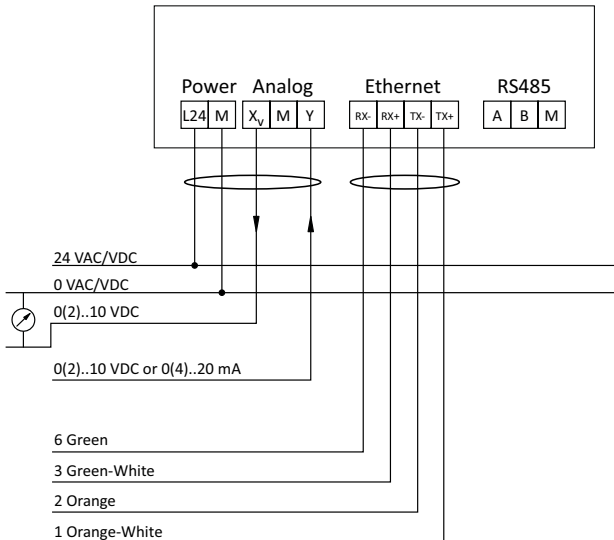
Modbus RTU / BACnet MS/TP



Note:

1. A, B and M terminals are NOT isolated from all other terminals.
2. GND (M - 0V) is common to power supply, analog signals and RS 485.
3. In case of AC power supply, L24 and M should be connected to the same phase for each TA-Smart.
4. GND (0V) of RS 485 should be connected to 0 VAC/VDC on the controller side.
5. GND (0V) of analog input/output should be connected to 0 VAC/VDC on the controller side.

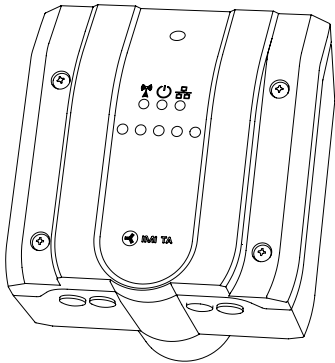
Modbus TCP / BACnet IP



Note:

- Ethernet cable shall be Cat 5e or Cat 6 cable. Wire colour indication is for T568B pinout.

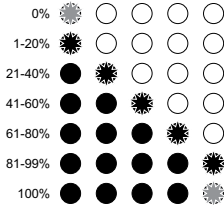
LED



LED	Colour	Description	
⏻	Green	-----	Status OK
	Green	-----	Initiating (start up)
	Red	-----	Error (→ HyTune, Cloud, Bus)
	Off	-----	No power supply
📶	Blue	=====	Bluetooth active
	Blue	-----	Bluetooth active (no device connected)
	Off	-----	Wireless deactivated (or no power supply)
🌐	Green	=====	Ethernet connected
	Green	-----	Data being transferred (Ethernet or RS485, if Ethernet not connected)
	Off	-----	Ethernet and RS485 not connected (or no power supply)

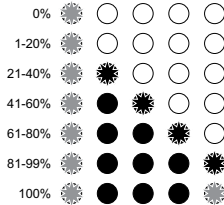
Operation

- OFF
- Yellow
- Green



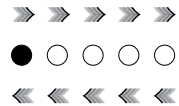
Calibration

- OFF
- Yellow
- Green



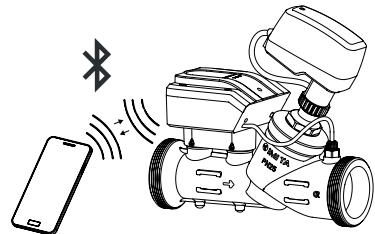
Identification

- Green



HyTune app

For setting of control parameters use HyTune app



We reserve the right to introduce technical alterations without prior notice.