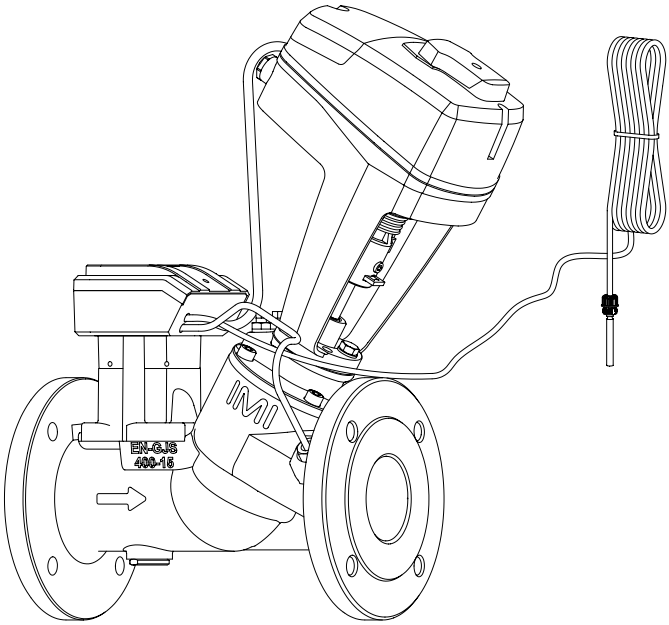
311 489-02
08.2021

IMI TA

TA-Smart

DN 65-80

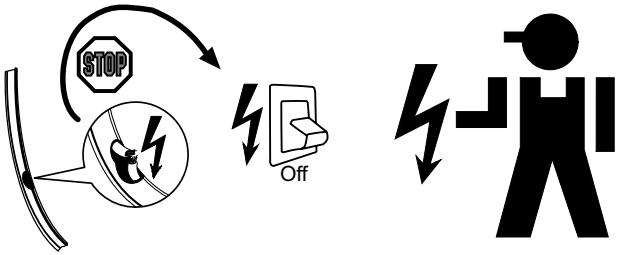
TA-Smart



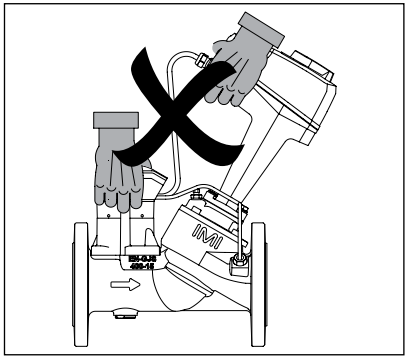
IMI Hydronic Engineering

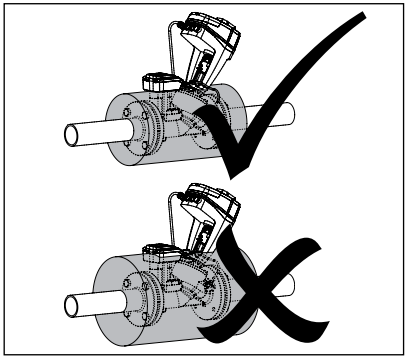
- Intendent use: For measuring and control in heating and cooling systems.
- The water quality requirements described in VDI2035 should be respected
- TA-Smart can be cleansed with a damped cloth and a lenient cleaning-agent.
- Insulated wires and cables shall retard flame propagation with a flammability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

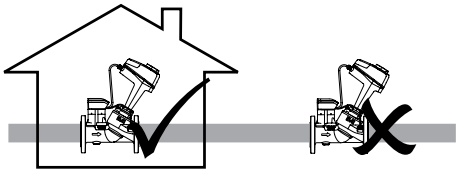
24 VAC/VDC operating only with safety isolating transformer according EN 61558-2-6



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

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

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

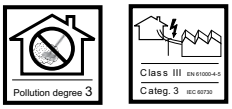
-20°C - +70°C (-4°F - +158°F) (5-95%RH, non-condensing)

0°C - +50°C (32°F - +122°F) (5-95%RH, non-condensing)

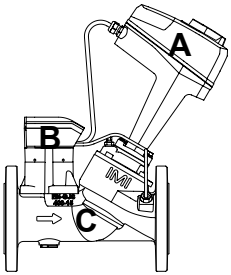
Input signal: 0-10 VDC
Output signal: 0-10 VDC
Control mode: Flow

Flow setting: q_{nom}
Media: H_2O
Characteristic: EQM

Ⓐ



CE
EN 60730



Ⓑ

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 32-50) - Standby	 < 5.6 VA (VAC); < 4.0 W (VDC) < 3.3 VA (VAC); < 1.9 W (VDC)

CE
EN 61010

FC
Contains Transmitter Module FCC ID: X8WBC840M

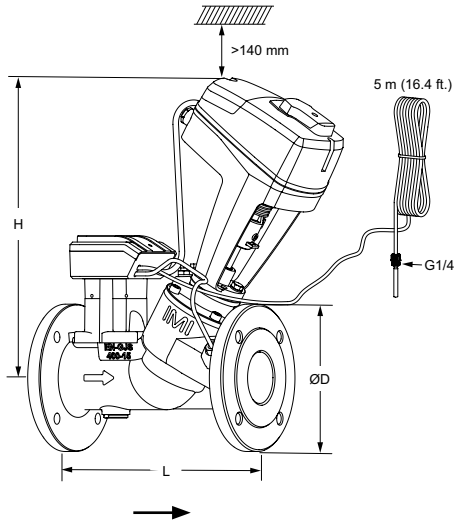
IP54
EN 60730

Ⓒ

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

PN 16/25 (Class 150)

ΔpV ▶ min. 5 kPa (0.7 psi) ▶ max. 400 kPa (58 psi)

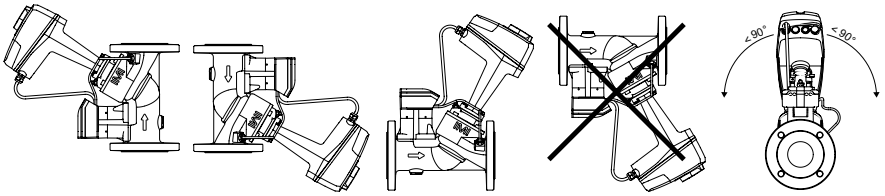


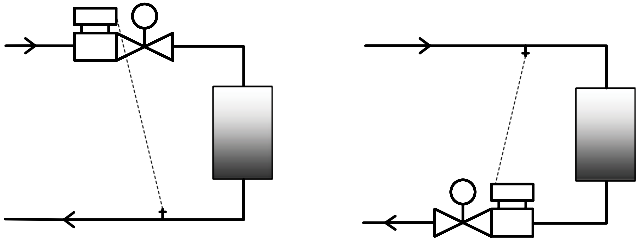
DN PN 16	D [mm]	No of bolts	L [mm]	H [mm]
65	185	4	290	377
80	200	8	310	380

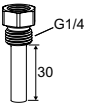
DN PN 25	D [mm]	No of bolts	L [mm]	H [mm]
65	185	8	290	377
80	200	8	310	380

Size ANSI	D [mm]	No of bolts	L [mm]	H [mm]
2 1/2”	180	4	290	377
3”	190	4	310	380

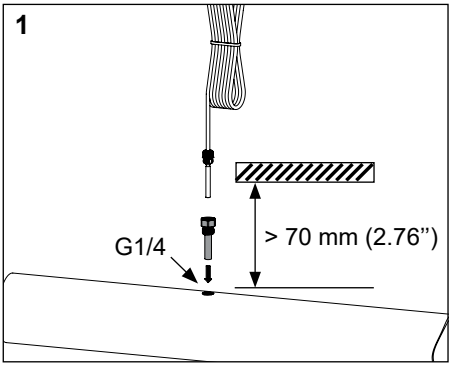
Size ANSI	D [in]	No of bolts	L [in]	H [in]
2 1/2”	7.09	4	11.42	14.84
3”	7.48	4	12.20	14.96

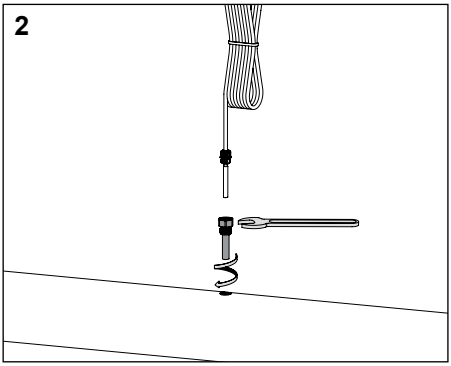


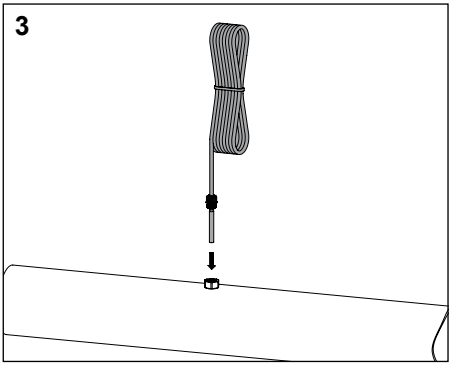


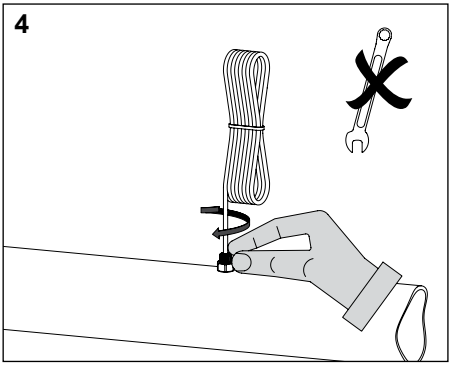


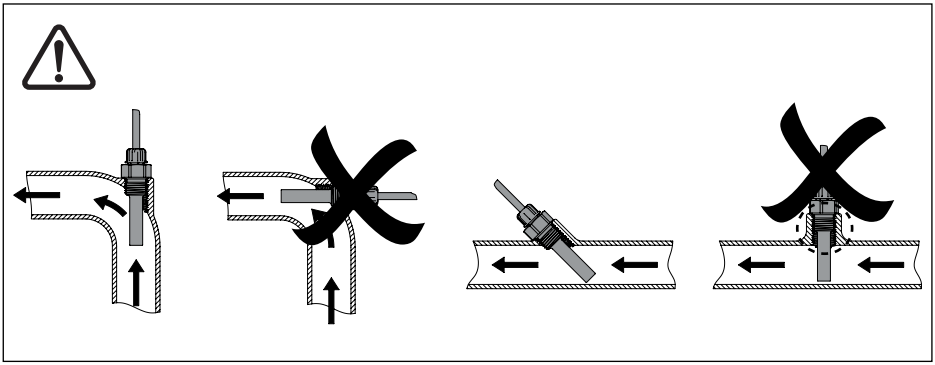
Art. No. 322230-00400

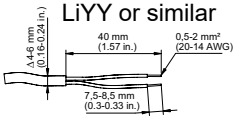


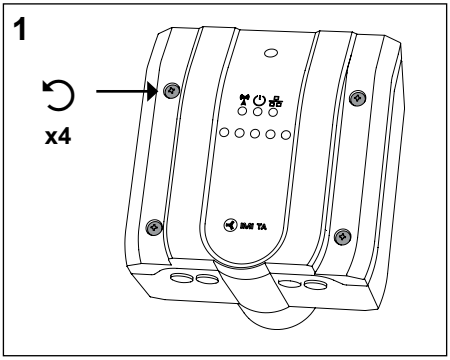


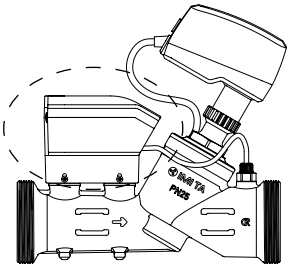


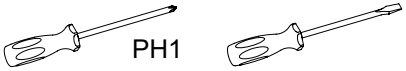


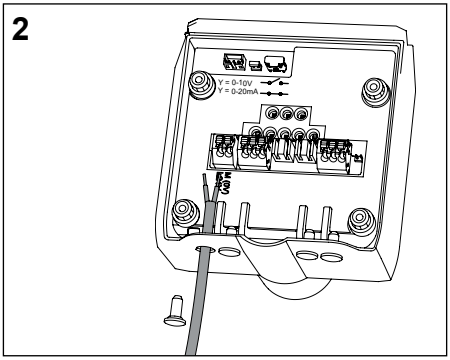


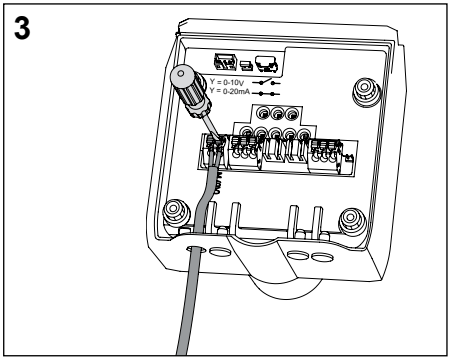

LiYY or similar
Δ 4-6 mm
(0.16-0.24 in.)
40 mm
(1.57 in.)
0,5-2 mm²
(20-14 AWG)
7,5-8,5 mm
(0.3-0.33 in.)

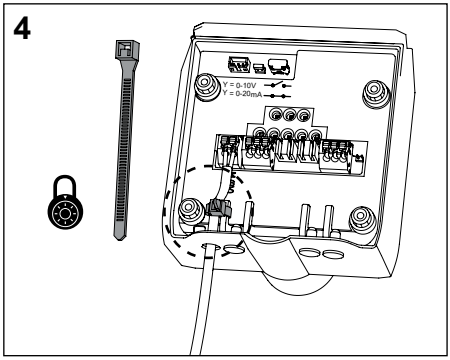

1
x4

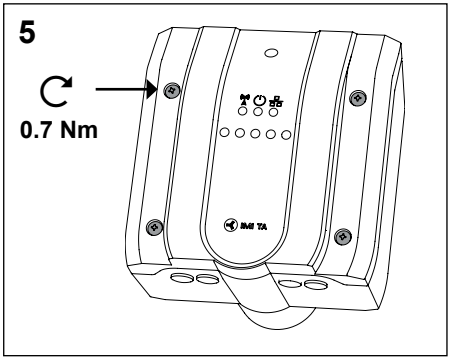

PN25


PH1


2
Y = 0-10V
Y = 0-20mA


3
Y = 0-10V
Y = 0-20mA


4
Y = 0-10V
Y = 0-20mA


5
0.7 Nm

Wiring diagrams

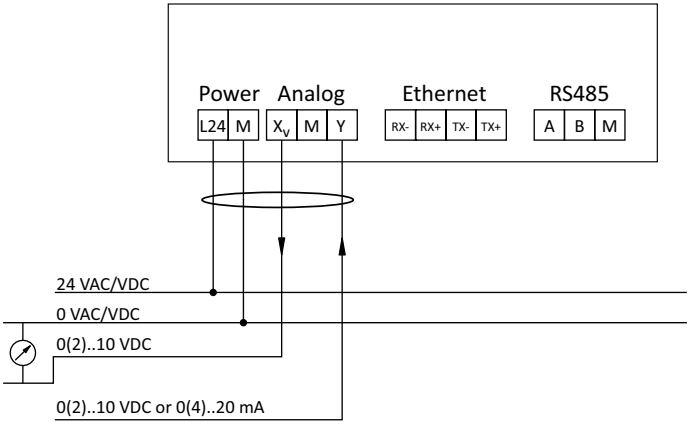
Terminal	Description
L24	Power supply 24 VAC/VDC
M*	Neutral for power supply 24 VAC/VDC and signals
X_V	Output signal 0(2)-10 VDC, max. 8 mA or min. load resistance 1.25 kΩ
M (0V)*	Neutral for signal
Y	Input signal 0(2)-10 VDC, 47 kΩ or Input signal 0(4)-20 mA, 500 Ω (selectable by jumper XX)
Ethernet	
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

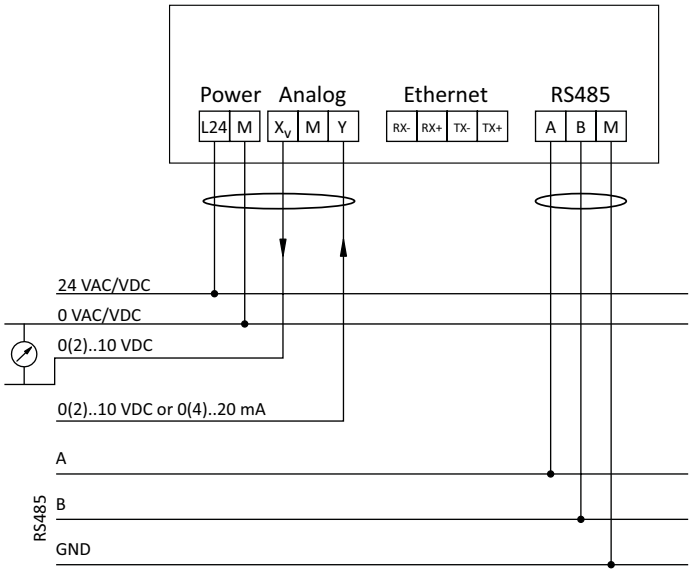
*) All M terminals are internally connected.

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

Standard

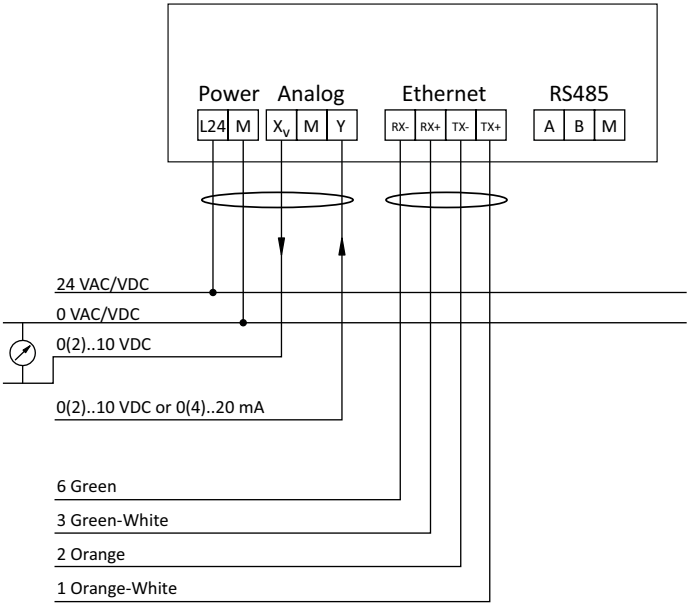


Modbus RTU / BACnet MS/TP



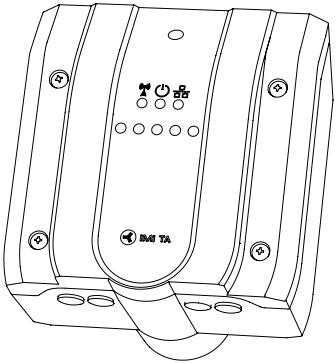
Note:
- A, B and M terminals are NOT isolated from all other terminals.

Modbus TCP / BACnet IP



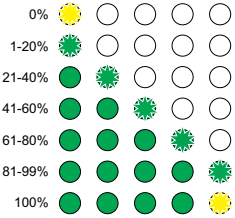
Note:
- Ethernet cable shall be Cat 5e or Cat 6 cable. Wire colour indication is for T568B pinout.

LED

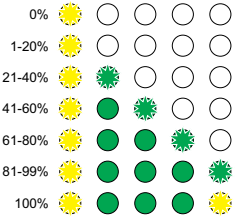


LED	Colour		Description
	Green	– – – – –	Status OK
	Green	----------	Initiating (start up)
	Red	– – – – –	Error (→ HyTune, Cloud, Bus)
	Off		No power supply
	Blue	————	Bluetooth active
	Blue	– – – – –	Bluetooth active (no device connected)
	Off		Wireless disactivated (or no power supply)
	Green	————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

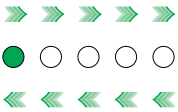
Operation



Calibration



Identification



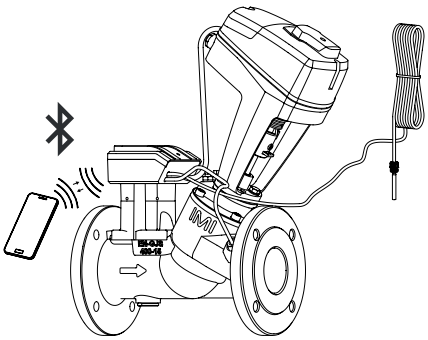
HyTune app

For setting of control parameters use HyTune app

HyTune app

Download on the App Store

ANDROID APP ON Google Play



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IMI Hydronic Engineering

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www.imi-hydronic.com