

Product Information

OMNIPLUS-F

Flow meter and Thermometer OMNIPLUS-F



IO-Link

- Flow transmitter for water and other liquids with integrated temperature measurement
- Fast response time
- Integrated volume meter with preset
- Measuring method without moving parts, no wear
- Wetted material stainless steel
- 1 analog output (20 mA / 10 V)
- 2 versatile configurable switching outputs
- IO-Link interface
- High-resolution graphic LCD
- Parameters programmable with multifunction ring
- Waterproof all-metal housing (IP67)
- Mineral glass front, scratch-proof and chemically resistant

Technical data

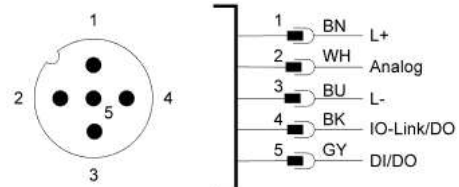
Measuring principle	calorimetric / thermal	
Measurement media	Liquids Media configurable on the device	
Measuring range	Flow: 2...300 cm/s Temperature: corresponding to specified media temperature range	
Measurement uncertainty	Flow: ±(7 % measurement + 2 % FS) Temperature: ±2 °C (Flow speed > 2 cm/s)	
Response time	in water (25 °C) at an average flow speed: approx. 1-2 sec.	
Operating pressure	Connection type	PN
	008, 015	PN100 (PN200 on request)
	013, 018	up to PN100 (depending on T-piece)
	012	up to PN40 (depending on assembly material)
Media temperature	Connection type	Range
	008 / 013 / 015 / 018	-20...+ 90 °C
	012	-20...+100 °C
Ambient temperature	-20...+70 °C	
Storage temperature	-30...+80 °C	

Wetted materials	Stainless steel 1.4571 Fluororubber (O-ring for connection type 013)	
Non-wetted materials	Housing	Stainless steel 1.4305
	Glass	Mineral glass, hardened
	Magnet	NeFeB
	Ring	POM
Supply voltage	18...30 V DC	
Current consumption	< 130 mA (SIO mode, outputs not under load)	
IO-Link Specification	IO-Link revision	V1.1
	Bit rate	COM2 (38400 Bit/s)
	Minimum cycle time	4 ms
	SIO mode	yes
	Port class	A compatible
	Block parameterization	yes
	Data storage	yes
Analog output	Current:	4...20 mA 0...20 mA
	Voltage:	0...10 V 2...10 V 0...5 V 1...5 V 0.5...4.5 V
Switching outputs	2 transistor outputs push-pull, parameterizable as NPN o.C. Short-circuit and reverse polarity resistant I _{out} = 100 mA max per output Configurable on the device as <ul style="list-style-type: none"> ● Limit switch ● Frequency output ● Pulse output ● Signal output for preset counter 	
Signal input	Reset input for volume meter (alternative to switch output at Pin 5)	
Display	graphic 1.2 inch LCD (transflective) 128 x 64 pixel White backlight, red on alarm notification	
Electr. connection	M12x1 circular connector, 5-pin	
Protection class	IP65 / IP67	
Weight	approx. 0.30 kg	
Compliance	CE	

Connection diagram

Circular connector M12 x 1

Pin assignment



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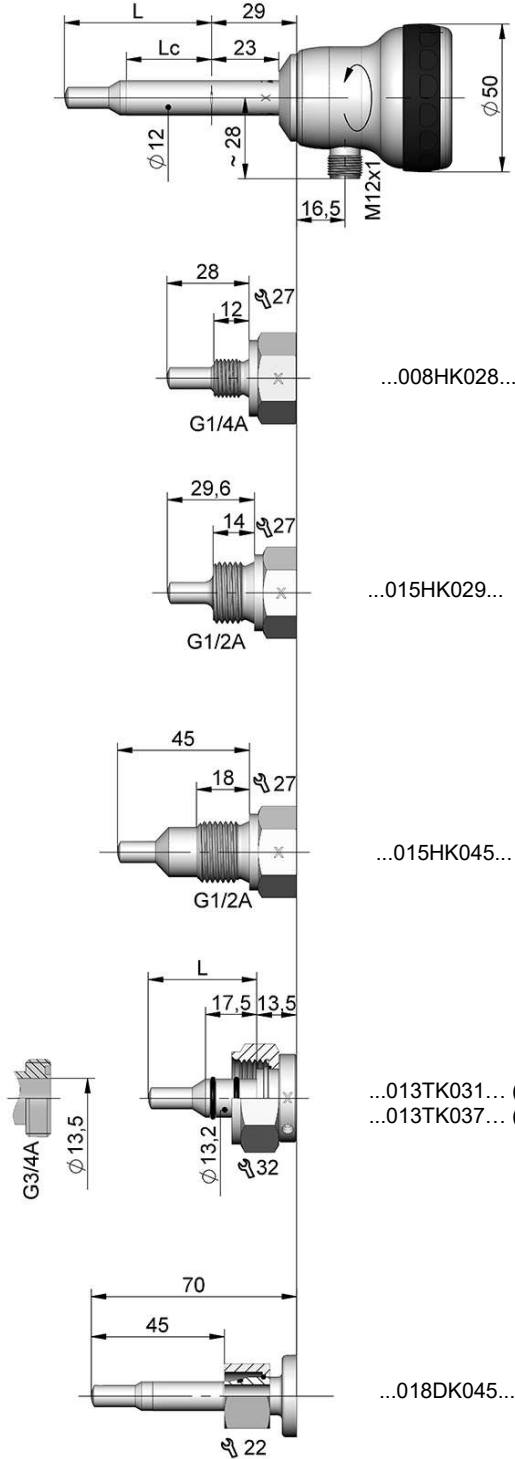
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Dimensions

Ordering Code

OMNIPLUS-F-

...012VK100.. (L = 100 mm)
...012VK150.. (L = 150 mm)



OMNIPLUS-F- 1. - 2.

1. Sensor	
012VK100	Push-in sensor Ø 12, L = 100 mm
012VK150	Push-in sensor Ø 12, L = 150 mm
012VKxxx	Push-in sensor Ø 12, length = xxx on request
008HK028	Thread G ¼A, L = 28.0 mm
015HK029	Thread G ½A, L = 29.6 mm
015HK045	Thread G ½A, L = 45.0 mm
013TK031	System fastening Ø 13.2 for T-piece with connection G ¾ and G ½
013TK037	System fastening Ø 13.2 for T-piece with connection G ¾..G 2
018DK045	Sealing cone 24°, M18 x 1,5, L = 45 mm
2. Oil-filled	
T	Oil-filled version for applications with high air humidity and heavily fluctuating temperatures