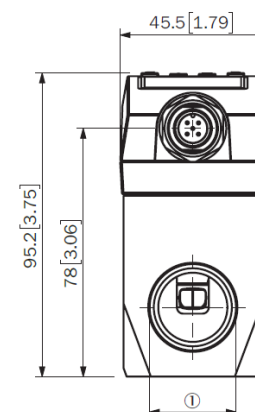
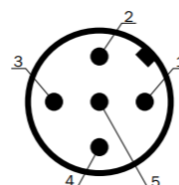
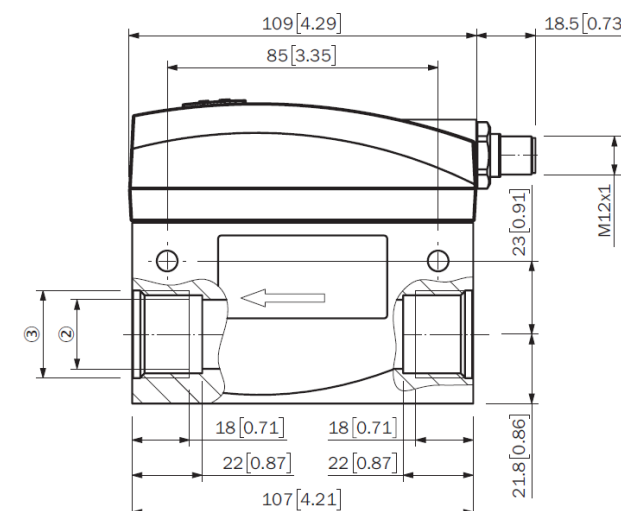


DATA SHEET | ENGLISH

ELECTRICAL CONNECTION

Pin	Assignment
1	Ub+
3	0 V
4	OUT 1 / IO-Link
5	OUT 2
2	OUT 3 (analog)


BODY

PROCESS CONNECTION

DN	1	2	3
15	G1/2"	ø16.1	ø22
20	G3/4"	ø21.7	ø27.5
25	G1"	ø27.3	ø33.5

General data

Measurement types	flow / pressure / temperature
Measurement principle	Calorimetric (flow, temperature), piezoresistive (pressure)
Operating medium	Compressed air (air quality ISO 8573-1:2010), helium, argon, nitrogen, carbon dioxide
Protection class	IP65 / IP67
MTTF (40°C)	>100 years

Ordering information

product number	product description
60101503	F.Core DN15, IO-Link, G1/2", 1590l/min
60102003	F.Core DN20, IO-Link, G3/4", 2827l/min
60102503	F.Core DN25, IO-Link, G1", 4418l/min

Accessories

product number	product description
60990001	Inlet / outlet pipe set for F.Core, G1", DN25
60990002	Inlet / outlet pipe set for F.Core, G1/2", DN15
60990003	Inlet / outlet pipe set for F.Core, G3/4", DN20

Electrical data

Electrical connection	M12x1, 5-pole
Operating voltage	17...30 VDC
Power consumption	< 12 W at 24VDC without output load
Overload / Short-circuit / reverse polarity protection	yes / yes* / yes
Indication	OLED-Display 128x128 px, rotary (4x 90°)
Initialization time	≤ 10 s

Output

Output signal	1 analog output 4...20 mA + 1 digital/analog output (PNP, NPN, push-pull, 4...20 mA → switchable) + 1 digital output (PNP, NPN, push-pull → switchable), IO-Link v1.1 (COM3 /230K4 baud)
Output load	4...20 mA, max. 500 Ohm at U _v > 15 V
Digital output	max. 100 mA
Inductive load	≤ 1 H
Capacitive load	≤ 100 nF (2.5 nF, IO-Link mode)

Performance

Accuracy of sensor element (standard measuring range)	± 3 % from measured value + 0.3 % of the measuring range end value according to ISO 8573-1:2010 [3:4:4]
Accuracy of sensor element (extended measuring range)	± 8 % from measured value + 1 % of the measuring range end value
Reproducibility	± 1.5 % from measured value
Response time	< 0.3 s

Mechanical data

Housing material	PC+ABS, PA66+PA6I GF50, PC, TPE, 1.4301
Wetted parts	1.4305, PA6, Viton®, aluminum
Process connection	G1/2", G3/4", G1"
Minimum flow velocity	≥ 0.5 m/s
Maximum flow velocity	≤ 150 m/s
Weight	approx. 800 g

Measuring range

nominal width	DN15	DN20	DN25
standard measuring range	5.3 – 1,060 l/min	9.4 – 1,885 l/min	14.7 – 2,945 l/min
extended measuring range	1,060 – 1,590 l/min	1,885 – 2,827 l/min	2,945 – 4,418 l/min

Operating conditions

Ambient temperature	Operation: -20°...+60°C Storage: -40°...+85°C
Max. rel. humidity (not condensing)	90 %
Process temperature	-20°...+60°C
Process pressure	0...16 bar / 0...232 psi

*All connections are reverse polarity and overload protected. OUT 1 and OUT 2 are short-circuit protected.