FLOWMETER SERIES FLUX 0

The flowmeters FLUX 0 series are miniaturized devices used to measure air flow rate. They come complete with push-in pipe fittings. Numerous functions can be viewed and set on a three-colour display. They have 2 digital and one analogue outputs, each of which can be freely set to measure the instantaneous flow rate, the accumulated flow rate or the pressure, therefore they can perform the function of flowmeter, flow switch, pressure gauge or pressure switch. They feature reduced dimensions, with a width of only 17 mm.

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TECHNICAL DATA		FLUX 0	FLUX 0	
Measured flow range	Nl/min	50 L 0 - 50	200 L 0 - 200	
Direction of flow	INI/ MIN			
	bar	Unidirectional		
Working pressure range		-0.9 to 8 -0.09 to 0.8		
	MPa			
	psi	-13 to 116		
Maximum admissible pressure	bar	10		
Pipe diameter for push-in fitting	mm	8		
Connecting cable	VDC	12 to 24 ± 10%, ripple max 10%		
Current consumption	mA	≤ 50		
Power cable		Cable Ø 4 length 2 m, oil resistant, 26 AGW (6 x 0.15 mm ²)		
Weight	g	100 (including cable)		
DISPLAY				
Instant flow rate				
Display range	Nl/min	0 - 50	0 - 200	
Minimum setting scale	NI/min	0.1	1	
	ft³/min	1	1	
Cumulative flow rate	,			
Display range		9999999.9	99999999	
Minimum setting scale	N	0.1	1	
Minimoni Sching Scale	ft ³	1	1	
Pressure				
Display range	kPa	-100 to 1000		
Minimum setting scale	kPa			
,	bar 0.01		0.01	
	psi	0.1		
PRECISION				
Flow rate				
Guaranteed measuring range		2 to 100 % FS		
Display accuracy		± 3 % FS ± 1 digit ▲		
Analogue output accuracy		± 5 % FS 🔺		
Repeatability		± 1 % FS ± 1 digit ■		
Linearity		± 3 % FS ■		
Temperature characteristic		± 2 % FS for a temperature range of 15-35°C; ± 5 % FS for a temperature range of 0-15°C or 35-50°C ■		
Pressure characteristic			±1 digit *	
Pressure			С. С	
Guaranteed measuring range		0 to 1	100 % FS	
Display accuracy		± 2 % FS ± 1 digit ●		
Analogue output accuracy		± 2.5 % FS ●		
Repeatability		± 2.3 % 13 ° °		
		± 1 % FS ●		
Linearity				

▲ Data valid under these conditions: input pressure 3 bar, output pressure 1 bar, temperature 25°C

■ Data valid under these conditions: output pressure 1 bar, temperature 25°C

* Data valid under these conditions: -90 to 800 kPa, output pressure 1 bar, temperature 25°C

• Data valid under these conditions: flow rate 0 NI/min, temperature 25°C

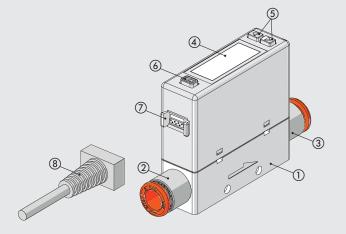
FLOWMETER SERIES FLUX 0



DIGITAL OUTPUTS 2 PNP N° outputs 2 PNP Max current mA Max voltage VDC Residual voltage V Response time, with flow rate setting ms Response time, with pressure setting ms Response mode, with flow rate setting ms Response mode, with pressure setting ms Response mode, with pressure mode setting More-point setting mode, hysteresis mode, window comparison mode. cumulative mode, cumulative pulse mode ◆ Normally open or normally closed Maijustable Short-circuit protection at output NI/impulse Cumulative pulse output NI/impulse ft ² /impulse 0.5 2 7	TECHNICAL DATA		FLUX 0 50 L	FLUX 0 200 L
Max current mA 125 Max voltage VDC 24 Residual voltage VDC 31.5 V Response time, with flow rate setting ms 50, 80, 120, 200, 400, 800, 1500 (default 800) Response time, with gressure setting ms 2.5, 52, 100, 250, 500, 1000, 1500 (default 2.5) Response mode, with flow rate setting Mtysteresis mode, window comparison mode, cumulative pulse mode ◆ Normally open or normally closed Physteresis Short-circuit protection of output VI Short-circuit protection of output NI/impulse ff ⁴ /impulse 0.5 2 Response time, with flow rate setting ms 32.5, 25, 100, 250, 500, 1000, 1500 (default 2.5) ANALOGUE OUTPUT Version with current MA 4 to 20, with ≤ 300 Ω impedance Response time, with flow rate setting ms ≤ 50 AMBIENT CONDITIONS Fluid Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 μm filter and a 0.01 μm oil purifier are recommended IP 40 I ho 5, 1 kΩ impedance Pagenes fime, with flow rate setting ms ≤ 50 AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 μm filter and a 0.01 μm oil purifier are recommended IP 40 I ho 50 Storage temperature ange °C O to 60, but without condensate or ice Ambient humidity I humidity I humidity Als to 85% relative humidity, no condensate I nou condensate or ice Ambient humidity I humidity Als to 85% relative humidity, no condensate I nou condensate or ice I nou Cole bot XE for one minute between casing and cable	DIGITAL OUTPUTS			
Max current mA 125 Max voltage VDC 24 Residual voltage VDC 31.5 V Response time, with flow rate setting ms 50, 80, 120, 200, 400, 800, 1500 (default 800) Response time, with gressure setting ms 2.5, 52, 100, 250, 500, 1000, 1500 (default 2.5) Response mode, with flow rate setting Mtysteresis mode, window comparison mode, cumulative pulse mode ◆ Normally open or normally closed Physteresis Short-circuit protection of output VI Short-circuit protection of output NI/impulse ff ⁴ /impulse 0.5 2 Response time, with flow rate setting ms 32.5, 25, 100, 250, 500, 1000, 1500 (default 2.5) ANALOGUE OUTPUT Version with current MA 4 to 20, with ≤ 300 Ω impedance Response time, with flow rate setting ms ≤ 50 AMBIENT CONDITIONS Fluid Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 μm filter and a 0.01 μm oil purifier are recommended IP 40 I ho 5, 1 kΩ impedance Pagenes fime, with flow rate setting ms ≤ 50 AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 μm filter and a 0.01 μm oil purifier are recommended IP 40 I ho 50 Storage temperature ange °C O to 60, but without condensate or ice Ambient humidity I humidity I humidity Als to 85% relative humidity, no condensate I nou condensate or ice Ambient humidity I humidity Als to 85% relative humidity, no condensate I nou condensate or ice I nou Cole bot XE for one minute between casing and cable	N ° outputs		2 PNP	
Residual voltage ∨ ≤ 1.5 V Response time, with flow rate setting ms 50, 80, 120, 200, 400, 800, 1500 (default 800) Response time, with pressure setting ms 2,5, 25, 100, 250, 500, 1000 (default 2.5) Response mode, with flow rate setting Hysteresis mode, window comparison mode, cumulative pulse mode ◆ Normally open or normally closed One-point setting mode, hysteresis mode, window comparison mode. Normally open or normally closed ◆ Short-circuit protection at output N/impulse 2 Cumulative pulse output N/impulse 2 ANALOCUE OUTPUT Yes Version with ressure setting ms Response time, with flow rate setting ms Response time, with flow rate setting mA Version with voltage V 1 to 5, 1 kΩ impedance Version with voltage V 1 to 5, 1 kΩ impedance Kesponse time, with flow rate setting ms ≤ 100 Response time, with flow rate setting ms ≤ 50 AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 µm filter and a 0.01 µm oil purifier are recommended Degree of protection IP 40 IP 40 IP 40 <td>Max current</td> <td>mA</td> <td colspan="2">125</td>	Max current	mA	125	
Response time, with flow rate setting ms 50, 80, 120, 200, 400, 800, 1500 (default 800) Response time, with pressure setting ms 2.5, 25, 100, 250, 500, 1000, 1500 (default 2.5) Response mode, with flow rate setting Hysteresis mode, window comparison mode, cumulative mode, cumulative pulse mode ◆ Normally open or normally closed Normally open or normally closed Physteresis Adjustable Short-circuit protection at output NI/impulse ff²/impulse 0.5 ff²/impulse 2 ANALOGUE OUTPUT Yes Version with rotsure setting ms Response time, with flow rate setting ms MALOGUE OUTPUT Yes Version with voltage V Version with rotsure setting ms Response time, with flow rate setting ms Sons Eime, with flow rate setting ms Version with voltage V Version with voltage V Version with ressure setting ms Response time, with flow rate setting ms Response time, with flow rate setting ms Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas.	Max voltage	VDC	24	
Response time, with pressure setting ms 2.5, 25, 100, 250, 500, 1000, 1500 (default 2.5) Response mode, with flow rate setting Hysteresis mode, window comparison mode, cumulative mode, cumulative pulse mode ◆ Response mode, with pressure mode setting Normally open or normally closed Hysteresis Adjustable Short-circuit protection at output NI/impulse Cumulative pulse output NI/impulse fif/impulse 0.5 fif/impulse 0.5 Version with voltage V Version with voltage V AMALOGUE OUTPUT Yes Version with voltage V Version with voltage V AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 µm filter and a 0.01 µm oil purifier are recommended IP 40 Degree of protection IP 40 Temperature range °C Anbient humidity Oto 60, but without condensate or ice Anbient humidity 0 to 60, but without condensate or ice	Residual voltage	V	≤ 1.5 V	
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Response mode, with pressure mode setting One-point setting mode, hysteresis mode, window comparison mode. Normally open or normally closed ◆ Hysteresis Adjustable Short-circuit protection at output NI/impulse Cumulative pulse output NI/impulse ff*/impulse 0.5 ANALOGUE OUTPUT 2 Version with voltage V Version with voltage V Version with flow rate setting ms Response time, with flow rate setting ms Response time, with pressure setting ms AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 µm filter and a 0.01 µm oil purifier are recommended IP 40 Degree of protection IP 40 Temperature mode 0 to 50 Storage temperature °C Anbient humidity 35 to 85% relative humidity; no condensate or ice Anbient humidity 1000 VAC for one minute between casing and cable	Response mode, with flow rate setting		Hysteresis mode, window comparison mode, cumulative mode, cumulative pulse mode 🔶	
Hysteresis Adjustable Short-circuit protection at output NI/impulse 0.5 2 Cumulative pulse output NI/impulse 0.5 2 ff³/impulse 2 7 ANALOGUE OUTPUT It o 5, 1 kΩ impedance 7 Version with voltage V 1 to 5, 1 kΩ impedance Version with current mA 4 to 20, with ≤ 300 Ω impedance Response time, with flow rate setting ms ≤ 100 Response time, with pressure setting ms ≤ 50 AMBIENT CONDITIONS Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 µm filter and a 0.01 µm oil purifier are recommended Degree of protection IP 40 IP 40 IP 40 Temperature range °C 0 to 50 Storage temperature °C Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable				
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Version with voltage V Version with voltage V Version with voltage MA Response time, with flow rate setting ms Response time, with pressure setting ms AMBIENT CONDITIONS Fluid Filtered, dried and unlubricated air, inert non-corrosive and non-explosive gas. A 5 μm filter and a 0.01 μm oil purifier are recommended Image: Protection IP 40 Temperature range °C Storage temperature °C Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable				
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Degree of protection IP 40 Temperature range °C 0 to 50 Storage temperature °C 0 to 60, but without condensate or ice Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable	Fluid			
Temperature range °C 0 to 50 Storage temperature °C 0 to 60, but without condensate or ice Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable				
Storage temperature °C 0 to 60 , but without condensate or ice Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable	5 I			
Ambient humidity 35 to 85% relative humidity; no condensate Insulation voltage 1000 VAC for one minute between casing and cable	1 0	-		
Insulation voltage 1000 VAC for one minute between casing and cable	0 1	°C		
Resistance of Insulation Min. 50 MΩ (at 500VDC between casing and cable)	0			
	Vibration admitted		1.5 mm amplitude or 10 g with scanning every minute from 10 to 55 Hz at 10 Hz, for 2 hours in each direction x, y and z	
	Impact		100 m/s² (10 g), 3 times in each direction x, y and z	
Electromagnetic compatibility (EMC) IEC 61000-6-2, IEC 61000-6-4	Electromagnetic compatibility (EMC)		IEC 61000-6-2,	IEC 61000-6-4

• Refer to the user manual for further details

COMPONENTS



- BODY: technopolymer
 INPUT AUTOMATIC FITTING: nickel-plated brass and technopolymer
 OUTPUT AUTOMATIC FITTING: nickel-plated brass and
- technopolymer ④ DISPLAY LCD

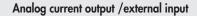
- (5) BUTTON: silicone.
- Used to select the operating mode, ON/FF switching and value setting
- 6 BUTTON: silicone. Used to select the operating mode and confirm the set values
- ⑦ CONNECTOR
- (a) CONNECTOR WITH CABLE: length 2 meters

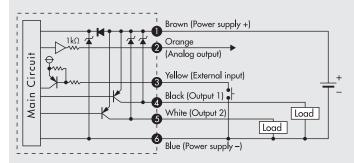
UNITS

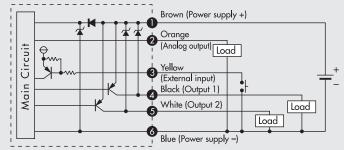
FLOWMETER SERIES FLUX 0

WIRING DIAGRAMS

Analog voltage output /external input

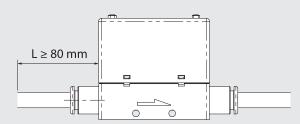






	PIN	Cable color	Function
	1	Brown	Power supply (12 to 24 VDC)
_2	2	Orange	Analog voltage output: 1 to 5 V
(3)			Analog current output: 4 to 20 mA
õ	3	Yellow	External input
-(4)	4	Black	Output 1 (Max. load current: 125 mA)
(5)	5	White	Output 2 (Max. load current: 125 mA)
6	6	Blue	OV (GND)

PNEUMATIC CONNECTION



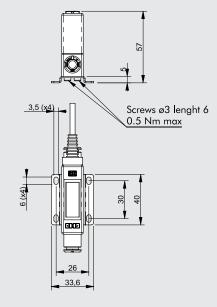
The input pipe must have a straight section of at least 80 mm in length or more, otherwise the measurement will be inaccurate.

NOTES

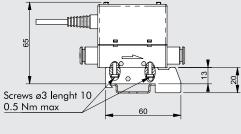


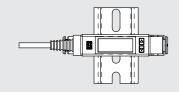
FIXING OPTIONS





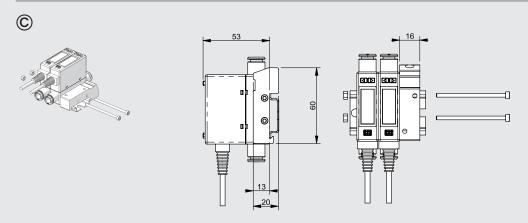




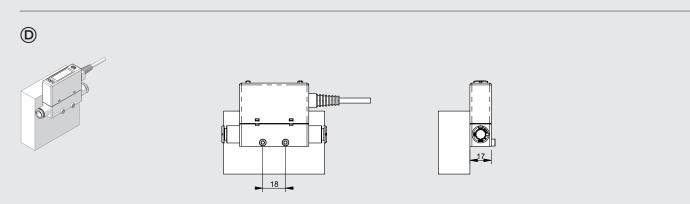


Fixing with bracket code 90009A001 using the included Ø3 self-tapping screws and M3 screws

Single fixing on DIN bar with code bracket 90009A002 using the included $\varnothing3$ self-tapping screws

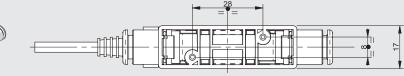


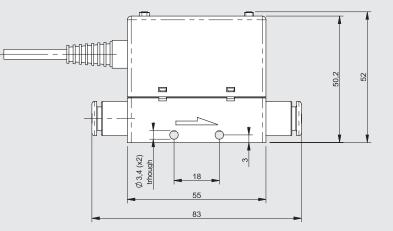
Multiple fixing on DIN bar with code bracket 90009A002 using the lateral holes Ø3.4 with M3 screws and nuts

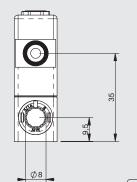


C6









UNITS

C6

 Code
 Description

 9000958A2
 Flowmeter FLUX 0 50L Ø8 PNP 4-20 mA 2 m

 9000958V2
 Flowmeter FLUX 0 50L Ø8 PNP 1-5V 2 m

 9000978A2
 Flowmeter FLUX 0 200L Ø8 PNP 4-20 mA 2 m

 9000978V2
 Flowmeter FLUX 0 200L Ø8 PNP 1-5V 2 m

ACCESSORIES



Code 90009A001

Code

Description Fixing bracket FLUX 0

Note: Comes complete with two 3x6 screws for plastic (max. torque 0.5 Nm)

CONNECTION BRACKETS ON BAR OMEGA (DIN EN 50022)



90009A002 Connection brackets on DIN bar FLUX 0

Description

Note: Comes complete with two 3x10 screws for plastic (max. torque 0.5 Nm)