



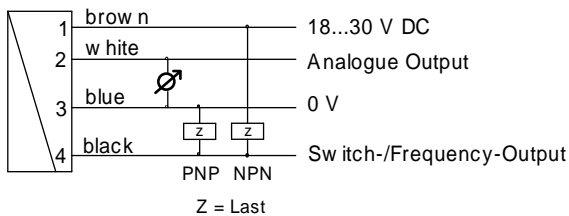
- * universal flowmeter with dynamic flap
- * switching output and/or analogue output (4 - 20 mA/0 - 10 V)
- * IP67 type of protection
- * infinitely rotatable cable outlet for precise alignment
- * robust stainless-steel housing

PRINCIPLE

The circuitry of the omni is able to detect, display and convert the measuring values of the flow meter (3.5.XF.1). The output signal can be an analog signal (4..20 mA or 0..10 V) plus a programmable electronic max. or a min. switch. Analog output and programmable switch point is also available separate. A flow-proportional frequency output is also available. More options see page 2. The design of the devices totally in metal makes them applicable in almost any industrial measurement task.

TERMINAL ASSIGNMENT

Before the electrical installation, make sure that the supply voltage corresponds to the data provided!



Please you use shielded cable, signal lines < 30m and power supply lines < 10m.

MOUNTING

The converters are connected by plugs to the flowmeter. There is no electrical connection between the local electronics and the flowmeter.

Please note that the flowmeter and the smart electronics are paired to one another (same production number) and please follow the mounting instructions for the relevant primary sensor or Flowmeter.

PROGRAMMING

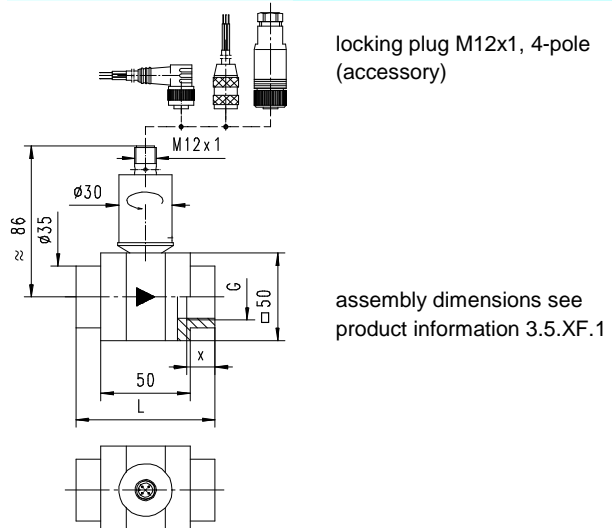
Designs with a limit switch have a magnetic contact by means of which the current measurement value can be assumed as a limit value. It is programmed by applying a magnet to the marking on the type plate for 0.5 to 2 seconds. If the contact time is too short or too long, no programming will take place (protection against magnetic fields). Immediately after programming, the switching output enters the OK state (LED on).



TECHNICAL DATA

measurement range	in different types 1..80 l/min (please see product information 3.5.XF.1)
accuracy	see product information
operating pressure	3.5.XF.1
reproducibility	1%
operating temperature	0...70°C with goose-neck 0...80°C
storage temperature	-20..80°C
supply voltage	18..30 VDC
power consumption	<1 W
analogue output	4(0)..20mA, 2(0)..10V across 500 Ohm resistor to 0V.
switching output	transistor output "push pull" short circuit proof, reverse polarity protected, I _{out} = 100 mA max.
display (only in case of switching output)	yellow LED (ON = OK /OFF = alarm)
connection	at locking plug M 12x1, 4-pole
protection class	IP 67
materials	
in contact with media	see product information 3.5.XF.1
electronic housing	stainless steel 1.4305

DIMENSIONS



NOMENCLATURE

Example:

Flex-	XF	I	U	R	I
A	B	C	D	E	F

A sensor family:

Flex-	Flex-system	●
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B for flowmeter:

XF	flowmeter XF	●
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C analogue output:

I	current output 4 - 20 mA	●
U	voltage output 0 - 10 V	●
K	no analogue output	●

D switch output:

U	push pull PNP and NPN	●
K	no switching output	●

E switching signal:

L	minimum switch	●
H	maximum switch	○
R	frequency output	●
K	no switching output	●

F inversion of output:

O	standard output	●
I	inverted output	●

Options:

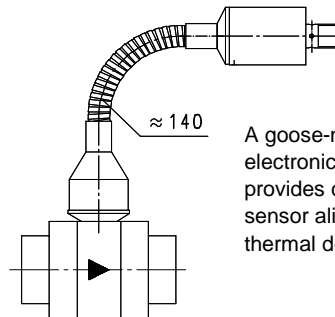
working range analogue output: (< measurement range of piston flow meter)	<input type="text"/> <input type="text"/> <input type="text"/> l/min
working range frequency output: (< measurement range of piston flow meter)	<input type="text"/> <input type="text"/> <input type="text"/> l/min
end frequency (max. 2000 Hz)	<input type="text"/> <input type="text"/> <input type="text"/> Hz
turn-on delay (from alarm to OK)	<input type="text"/> <input type="text"/> s
turn-off delay (von OK zu Alarm)	<input type="text"/> <input type="text"/> s
power-on delay (time after the supply is created; in this time the switching output is not activated)	<input type="text"/> <input type="text"/> s
switching output with permanent setting	<input type="text"/> <input type="text"/> <input type="text"/> l/min
special hysteresis (standard = 2% F.S.)	<input type="text"/> <input type="text"/> %
gooseneck	<input type="checkbox"/>

In case of empty fields, the standard setting will be selected automatically.

RELATED PRODUCTS



omni-XF
Electronic with backlit LCD, current output and two electronic limit switches, parametrisable via setting ring gauge.



A gooseneck (optional) between the electronics head and the primary sensor provides complete freedom in the sensor alignment. This option also gives thermal decoupling between both units.

ACCESSORIES

Locking plug M12x1

K	PU-	02	S	G	S	basic type specification
K						● assembled
KB04						● self makable cable 4-pole
	PU-					● material PUR
		02				● length 2 m
		05				● length 5 m
		10				● length 10 m
			S			● moulded-on plug
				G		● straight plug
				W		● angled plug 90°
					S	● shielded



All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories ✗ not recommendable