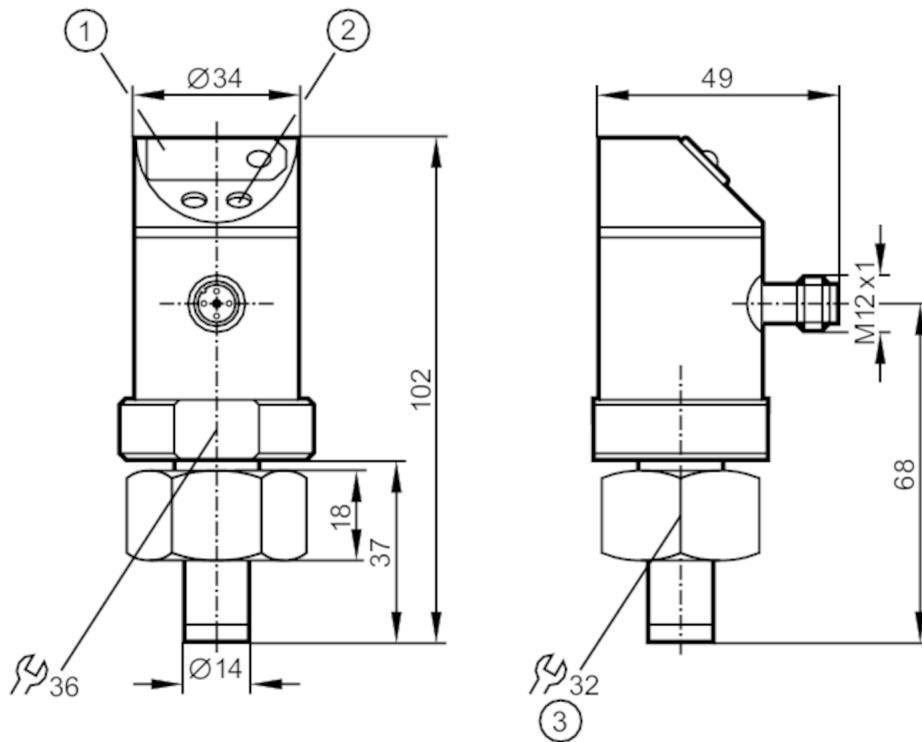


# SA3010



## Flow sensor

SAD18BBDFRKG/W/US-100-IPF



- 1 7-segment LED display
- 2 Programming buttons
- 3 Internal thread M26 x 1.5



Application	
Installation	T-pieces; ((DIN 2353): QL 18-18-18 (NW 15 mm) / QL 22-18-22 (NW 19 mm) / QL 28-18-28 (NW 24 mm))
Media	water
Medium temperature [°C]	0...80
Pressure rating [bar]	30
Electrical data	
Operating voltage [V]	20...28 DC
Current consumption [mA]	< 80
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	10
Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1

# SA3010



## Flow sensor

SAD18BBDFRKG/W/US-100-IPF

Outputs	
Total number of outputs	2
Output signal	switching signal; analog signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250; (per output)
Number of analog outputs	1
Analog current output [mA]	4...20; (scalable)
Max. load [ $\Omega$ ]	500
Analog voltage output [V]	0...10; (scalable)
Min. load resistance [ $\Omega$ ]	2000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes
Measuring/setting range	
Measuring range [l/min]	0...10
Display range [l/min]	0...12
Set point SP [l/min]	0.1...12
Reset point rP [l/min]	0...11.9
Analog start point ASP [l/min]	0...8
Analog end point AEP [l/min]	4...12
In steps of [l/min]	0.1
Accuracy / deviations	
Flow monitoring	
Repeatability [% of the measured value]	3 (Q < 30%) / 7 (Q < 100%)
Max. temperature gradient of medium [K/min]	200
Accuracy (in the measuring range)	$\pm 10$
Reaction times	
Flow monitoring	
Response time [s]	5; (10%...90%)
Delay time programmable dS, dr [s]	0...50
Software / programming	
Parameter setting options	hysteresis / window; normally open / closed; switching logic; current/voltage output; inside pipe diameter; Start-up delay; adaptation of displayed values; display can be rotated and switched off; Display unit

# SA3010



## Flow sensor

SAD18BBDFRKG/W/US-100-IPF

Operating conditions		
Ambient temperature	[°C]	-20...60
Protection		IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
MTTF	[years]	184
Mechanical data		
Weight	[g]	330.5
Material		stainless steel (1.4404 / 316L); PBT; PC; PA; EPDM/X; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM 70 Shore A
Displays / operating elements		
Display	Switching status	2 x LED, red
	Measured values	7-segment LED display
	Programming	7-segment LED display
Display unit		l/min; gal/min; l/h; gal/h; m <sup>3</sup> /h
Remarks		
Remarks		NW = nominal diameter
Pack quantity		1 pcs.

### Electrical connection

Connector: 1 x M12; Contacts: gold-plated



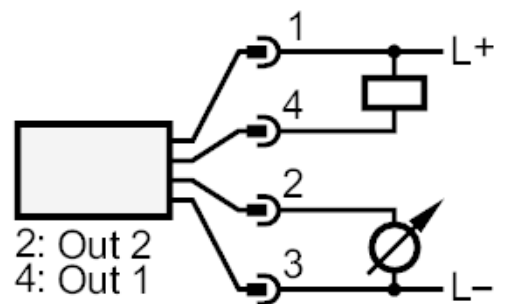
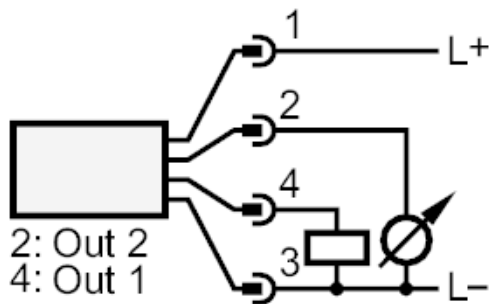
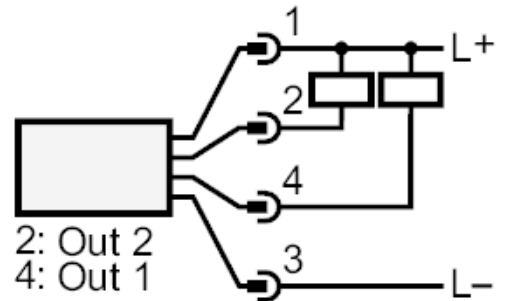
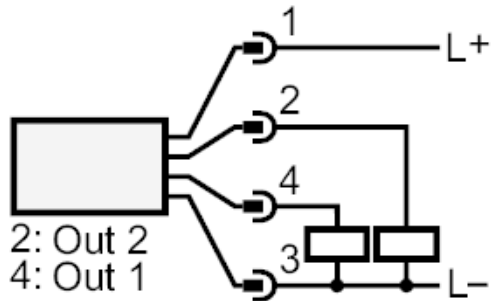
# SA3010



## Flow sensor

SAD18BBDFRKG/W/US-100-IPF

### Connection



OUT1: Switching output  
OUT2: Switching output  
analog output