

Flowmeter with threshold detector for highly viscous mediums

8072

DN15-100 mm

- Indication, monitoring, transmitting and On/Off control in one device
- Selectable outputs (transistor or relay)
- Automatic calibration: Teach-In
- Process value output: 4-20 mA



Complete sensor consisting of Type SE32 and fitting Type S070

This positive displacement flowmeter/threshold detector with display is designed for use in slightly viscous fluid like glue, honey or oil and specially to switch a valve and to establish a monitoring system or an On/Off control loop. The switching points can be configured with the 3-keys below the display. The 8072 is available with On/Off output, or with 4-20 mA process value outputs.

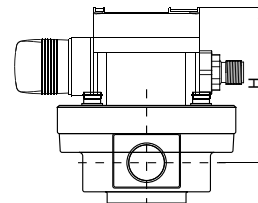
Technical Data

General data	
Compatibility	With fittings S070 (see corresponding data sheet)
Materials	
Housing, cover	PC, glass fibre reinforced
Front panel folio / Screws	Polyester / Stainless steel
Cable plug, connector M12	PA
Wetted parts materials	
Fitting	Aluminium, stainless steel (316F/1.4401)
Rotor	PPS, Aluminium, stainless steel (316F/1.4401)
Shaft / Seal	Stainless steel / FKM or FEP/PTFE
Display	8 digit LCD with backlighting
Electrical connections	Cable plug acc. to EN 175301-803 Free positionable male M12 connector, 5 pins or male M12 connector, 8 pins
Voltage supply cable	0.5 mm ² max. cross section; max. 100 m length, shielded
Complete device data (fitting S070 + electronic module SE32)	
Pipe diameter	DN15-100 mm
Measuring range	2-1200 l/min (0.26-320 gpm) for viscosity > 5 mPa.s 3-616 l/min (0.78-320 gpm) for viscosity < 5 mPa.s
Medium temperature	
Fitting in aluminium	0 °C to +80 °C
Fitting in stainless steel	0 °C to +100 °C
Fluid pressure max.	55 bar (threaded process connection) 55 bar ¹⁾ 18 bar / 12 bar / 10 bar
Viscosity	1 Pa.s max. (higher on request)
Accuracy²⁾	±1% of Reading
Operating mode	Threshold: window or hysteresis
Repeatability²⁾	≤ 0.03% of Reading

¹⁾ or in accordance to the value of the used flanges

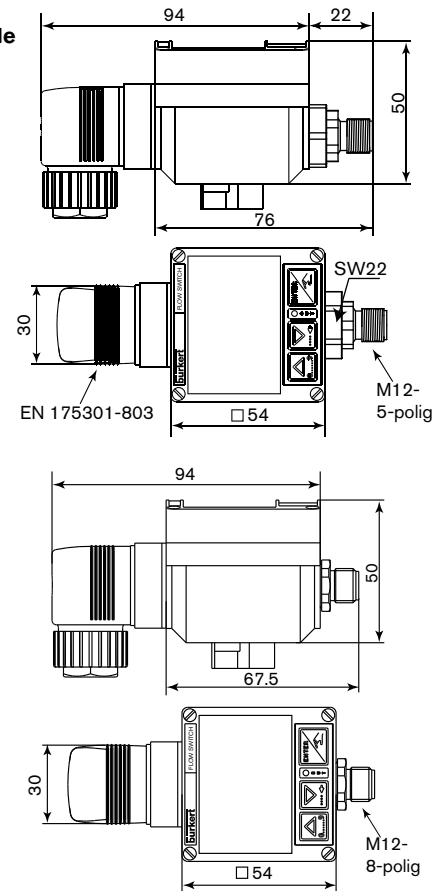
²⁾ Under reference conditions i.e. measuring fluid = water, ambient and water temperature = 20 °C, applying the minimum inlet and outlet pipe straights, matched inside pipe dimensions.

Envelope Dimensions [mm] (see datasheet for details)



DN	H
15	85
25	100
40	117
50	135
80	175
100	176

Electronics module SE32



DN15 DN25 DN40 DN50 DN80

Threaded connection

DN25 DN40 DN50 DN80 DN100

Flanged connection

Ordering Chart

Orifice DN [mm]	Process connection	Flow rate		Body material	Oval wheels material	Seal material	Item no.
		> 5 cps	< 5 cps				
Fitting S070							
15	G 1/2"	2 - 30 l/min	3 - 25 l/min	Aluminium	PPS	FKM	443 985
				Stainless steel	Stainless steel	FKM	443 990
	NPT 1/2"	2 - 30 l/min	3 - 25 l/min	Aluminium	PPS	FKM	443 995
				Stainless steel	Stainless steel	FKM	444 000
25	G 1"	6 - 120 l/min	10 - 100 l/min	Aluminium	PPS	FKM	443 986
				Stainless steel	Stainless steel	FKM	443 991
	NPT 1"	6 - 120 l/min	10 - 100 l/min	Aluminium	PPS	FKM	443 996
				Stainless steel	Stainless steel	FKM	444 001
	25 mm DIN 16 Flange	6 - 120 l/min	10 - 100 l/min	Aluminium	PPS	FKM	553 637
				Stainless steel	Stainless steel	FKM	553 634
	1" ANSI 150 LB Flange	6 - 120 l/min	10 - 100 l/min	Aluminium	PPS	FKM	553 636
				Stainless steel	Stainless steel	FKM	553 633
40	G 1 1/2"	10 - 250 l/min	15 - 235 l/min	Aluminium	PPS	FKM	443 987
				Stainless steel	Stainless steel	FKM	443 992
	NPT 1 1/2"	10 - 250 l/min	15 - 235 l/min	Aluminium	PPS	FKM	443 997
				Stainless steel	Stainless steel	FKM	444 002
	40 mm DIN 16 Flange	10 - 250 l/min	15 - 235 l/min	Aluminium	PPS	FKM	443 988
				Stainless steel	Stainless steel	FKM	443 993
	1 1/2" ANSI 150 LB Flange	10 - 250 l/min	15 - 235 l/min	Aluminium	PPS	FKM	443 998
				Stainless steel	Stainless steel	FKM	444 003
50	G 2"	15 - 350 l/min	30 - 300 l/min	Aluminium	PPS	FKM	553 640
				Stainless steel	Stainless steel	FKM	553 641
	50 mm DIN 16 Flange	15 - 350 l/min	30 - 300 l/min	Aluminium	PPS	FKM	443 989
				Stainless steel	Stainless steel	FKM	443 994
	2" ANSI 150 LB Flange	15 - 350 l/min	30 - 300 l/min	Aluminium	PPS	FKM	443 999
				Stainless steel	Stainless steel	FKM	444 004
80	G 3"	20 - 733 l/min	66 - 616 l/min	Aluminium	Aluminium	FKM	553 642
				Stainless steel	Stainless steel	FKM	553 643
	80 mm DIN 16 Flange	20 - 733 l/min	66 - 616 l/min	Aluminium	Aluminium	FKM	553 645
				Stainless steel	Stainless steel	FKM	553 644
3" ANSI 150 LB Flange	20 - 733 l/min	66 - 616 l/min	Aluminium	Aluminium	FKM	553 644	
			Stainless steel	Stainless steel	FKM	553 644	
100	100 mm DIN 16 Flange	120 - 1200 l/min	-	Aluminium	Aluminium	FKM	553 647
	4" ANSI 150 LB Flange	120 - 1200 l/min	-	Aluminium	Aluminium	FKM	553 646

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Note about ordering a complete sensor: Switch 8072 consists of an INLINE Fitting, Type S070, and an Electronic module, Type SE32.

Please order the INLINE Fitting and the Electronic module separately!

Ordering Chart

Supply voltage	Inputs	Outputs	Electrical Connection	Item no.
Switch electronic module, Type SE32				
12 - 30V DC	none	Transistor NPN	Cable plug DIN EN 175301-803	436 474
		Transistor PNP	Cable plug DIN EN 175301-803	434 871
		Transistor NPN / PNP	5-pin plug M12 (adjustable)	436 473
		Relay	5-pin plug M12 (adjustable) and cable plug DIN EN 175301-803	436 475
	4 - 20 mA1)	4 - 20 mA2) + Relay	8-pin plug M12 (adjustable) and cable plug DIN EN 175301-803	444 699

¹⁾ External setpoint

²⁾ Process value

Accessories

Description	Item no.
Female M12 connector, 5 pins, with plastic threaded locking ring	917 116
Female M12 connector, 5 pins, moulded on cable (2 m, shielded)	438 680
Female M12 connector, 8 pins, with plastic threaded locking ring	444 799
Female M12 connector, 8 pins, moulded on cable (2 m, shielded)	444 800
Cable plug EN 175301-803 with cable gland (Type 2508)	438 811
Cable plug EN 175301-803 with NPT 1/2" reduction without cable gland (Type 2509)	162 673

Spare parts for fitting	Orifice		Material	Item no.
	[mm]	[inch]		
Oval Wheel	DN 15	1/2	PPS	550 933
			Stainless steel	550 934
	DN 25	1	PPS	550 937
			Stainless steel	550 938
	DN 40	1 1/2	PPS	550 941
			Stainless steel	550 942
	DN 50	2	PPS	550 945
			Stainless steel	550 946
O-Ring	DN 15	1/2	EPDM	550 929
			FKM	550 930
	DN 25	1	EPDM	550 935
			FKM	550 936
	DN 40	1 1/2	EPDM	550 939
			FKM	550 940
	DN 50	2	EPDM	550 943
			FKM	550 944

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