

Positive Displacement Flow Fitting for Indicators, Sensors, Switches, Transmitters and Controllers



S070

Positive Displacement Fitting

PRELIMINARY
Index 15
dd. 07.09.01

- ✓ For high viscose fluids
- ✓ Closed pipe system, i.e. sensor inside fitting
- ✓ Electronics available for:
 - Indication
 - Monitoring
 - Transmitting
 - ON/OFF control
 - Batch control

Flow - ON/OFF
Continuous & Batch Control

S070

Picture showing Fitting Type S070 Stainless Steel with Sensor Electronic SE32

This positive displacement fitting is specially designed for high viscose fluids like glue, honey or oil.

The connection to the electronic SE30, SE32, SE35 and SE35 batch with hall sensor is done with the „easy to connect“ quarter-turn technique.

Process Specification

Process connections

- Threaded
- Flanged
- 1/2" up to 1 1/2" (G or NPT)
- 40 mm or 50 mm DIN 16
- 1 1/2" or 2" ANSI 150 LB

Flow rate

- >5 cps
- <5 cps
- 1 up to 350 l/min (0.26 up to 93 gpm)
- 3 up to 300 l/min (6.6 up to 79 gpm)

Accuracy

±0.5% (of reading)

Wetted parts

- Rotor
- Shaft
- Gasket
- Body
- Stainless steel 316 / 1.4401
- PPS
- Stainless steel 316 / 1.4401
- Hastalloy C
- FPM
- Aluminum
- Stainless Steel 316 / 1.4401
- PPS

Max. viscosity

1000 centipoise

Environment Specifications

Enclosure

IP66 (NEMA 6)

Fluid temperature (max.)

- Aluminum body
- Stainless Steel body
- PPS body
- 80°C (176°F)
- 120°C (248°F)
- 80°C (176°F)

Ambient temperature range

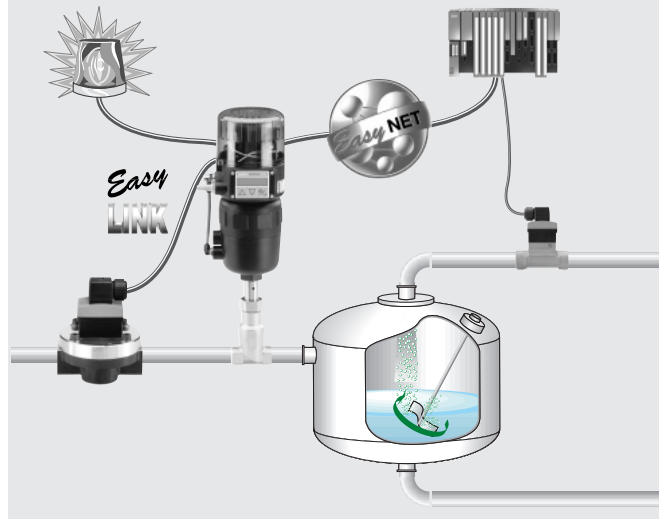
0 up to +60°C (32 up to 140°F)

Fluid pressure (max.)

- Aluminum body
- Stainless Steel body
- PPS body
- 55 bar (800 psi)
- 55 bar (800 psi)
- 10 bar (150 psi)

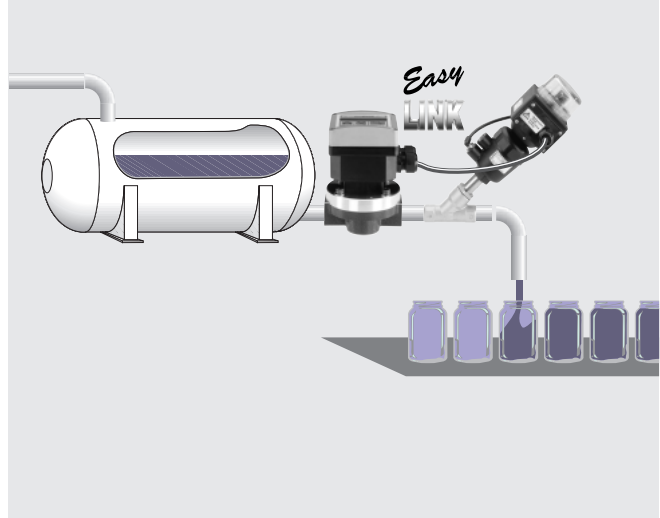
Application Example: Dosing

Easy Continuous Control using flow sensor and globe valve with TOP Control HEAD



Application Example: Batching

Easy ON/OFF Control using batch controller and angle seat valve with Mini TOP Control HEAD



Positive Displacement Flow Fitting for Indicators, Sensors, Switches, Transmitters and Controllers

Specifications - Ordering Chart (Other Versions on Request) for Fitting Type S070

Aluminum Fitting Type S070 - Worldwide

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [l/min]	<5 cps [l/min]					
15	G 1/2"	1 - 30	3 - 25	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 985 J
25	G 1"	6 - 120	10 - 100	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 986 K
40	G 1 1/2"	10 - 250	15 - 235	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 987 L
40	40 mm DIN 16 flange	10 - 250	15 - 235	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 988 V
50	50 mm DIN 16 flange	15 - 350	33 - 300	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 989 W

Stainless Steel Fitting Type S070 - Worldwide

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [l/min]	<5 cps [l/min]					
15	G 1/2"	1 - 30	3 - 25	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	443 990 T
25	G 1"	6 - 120	10 - 100	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	443 991 Q
40	G 1 1/2"	10 - 250	15 - 235	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	443 992 R
40	40 mm DIN 16 flange	10 - 250	15 - 235	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	443 993 J
50	50 mm DIN 16 flange	15 - 350	33 - 300	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	443 994 K

PPS Fitting Type S070 - Worldwide

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [l/min]	<5 cps [l/min]					
25	G 1/2"	3 - 80	8 - 70	PPS	PPS	Hastalloy C	FPM	448 661 R

Aluminum Fitting Type S070 - North America

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [gpm]	<5 cps [gpm]					
15	NPT 1/2"	0.26 - 8.00	0.80 - 6.60	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 995 L
25	NPT 1"	1.60 - 32.00	2.60 - 26.00	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 996 M
40	NPT 1 1/2"	6.60 - 66.00	4.00 - 62.00	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 997 N
40	1 1/2" ANSI 150LB flange	6.60 - 66.00	4.00 - 62.00	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 998 X
50	2" ANSI 150LB flange	4.00 - 93.00	9.00 - 79.25	Aluminum	PPS	SSt 316 / 1.4401	FPM	443 999 Y

Stainless Steel Fitting Type S070 - North America

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [gpm]	<5 cps [gpm]					
15	NPT 1/2"	0.26 - 8.00	0.80 - 6.60	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	444 000 F
25	NPT 1"	1.60 - 32.00	2.60 - 26.00	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	444 001 U
40	NPT 1 1/2"	6.60 - 66.00	4.00 - 62.00	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	444 002 V
40	1 1/2" ANSI 150LB flange	6.60 - 66.00	4.00 - 62.00	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	444 003 W
50	2" ANSI 150LB flange	4.00 - 93.00	9.00 - 79.25	SSt 316 / 1.4401	SSt 316 / 1.4401	SSt 316 / 1.4401	FPM	444 004 X

PPS Fitting Type S070 - North America

Orifice DN [mm]	Process connection	Flow rate - range		Body material	Rotor material	Shaft material	Gasket material	Item-No.
		>5 cps [gpm]	<5 cps [gpm]					
25	NPT 1/2"	0.80 - 18.50	2.00 - 18.50	PPS	PPS	Hastalloy C	FPM	448 662 J

Positive Displacement Flow Fitting for Indicators, Sensors, Switches, Transmitters and Controllers

Specifications - Ordering Chart for Electronics (Other Versions on Request)

Flow Sensors Type SE30

Voltage supply	Output	Electrical connection	Item-No.
12 – 30 VDC	Frequency	Cable plug 2508, PG9	423 913 D
from 8025	Frequency	Cable plug 2508, PG9	423 914 E

Flow Transmitters / Batch Controllers Type SE35

Voltage supply	Output	Electrical connection	Item-No.
12 – 30 VDC	4 20 mA, pulse	Cable plug 2508, PG9	444 005 Y
12 – 30 VDC	4 20 mA, pulse	1xPG13,5	444 006 Z
12 – 30 VDC	2 x relais	2xPG13,5	434 162 P
12 – 30 VDC	4 20 mA, pulse, 2 x relais	2xPG13,5	444 007 S
12 – 30 VDC	Batch	2xPG13,5	443 360 J
12 – 30 VDC	Profibus DP	2xPG13,5 + M12	444 008 B
115/230 VAC	4 20 mA, pulse	2xPG13,5	423 922 E
115/230 VAC	2 x relais	2xPG13,5	423 923 F
115/230 VAC	4 20 mA, pulse, 2 x relais	2xPG13,5	423 924 G
115/230 VAC	4 20 mA, pulse reed relay	2xPG13,5	423 925 H
115/230 VAC	Batch	2xPG13,5	423 926 A
12 – 30 VDC	4 20 mA, pulse	Cable plug 2508, G1/2"	444 009 C
12 – 30 VDC	4 20 mA, pulse	1xG1/2"	444 010 Y
12 – 30 VDC	4 20 mA, pulse, 2 x relais	2xG1/2"	444 011 M
115/230 VAC	4 20 mA, pulse	2xG1/2"	423 933 H
115/230 VAC	2 x relais	2xG1/2"	423 934 A
115/230 VAC	4 20 mA, pulse, 2 x relais	2xG1/2"	423 935 B
115/230 VAC	4 20 mA, pulse reed relay	2xG1/2"	423 936 C
115/230 VAC	Batch	2xG1/2"	423 937 D

Flow Switches Type SE32

Voltage supply	Output	Electrical connection	Item-No.
12 – 30 VDC	NPN	Cable plug 2508, PG9	436 474 J
12 – 30 VDC	PNP	Cable plug 2508, PG9	434 871 N
12 – 30 VDC	NPN and PNP	M12 plug, 5 pin	436 473 R
12 – 30 VDC	Relay	M12 + cable plug 2508, PG9	436 475 K
12 – 30 VDC	NPN	Cable plug 2508, G1/2"	438 763 D
12 – 30 VDC	PNP	Cable plug 2508, G1/2"	438 687 S
12 – 30 VDC	Relay	M12 + cable plug 2508, G1/2"	438 764 E

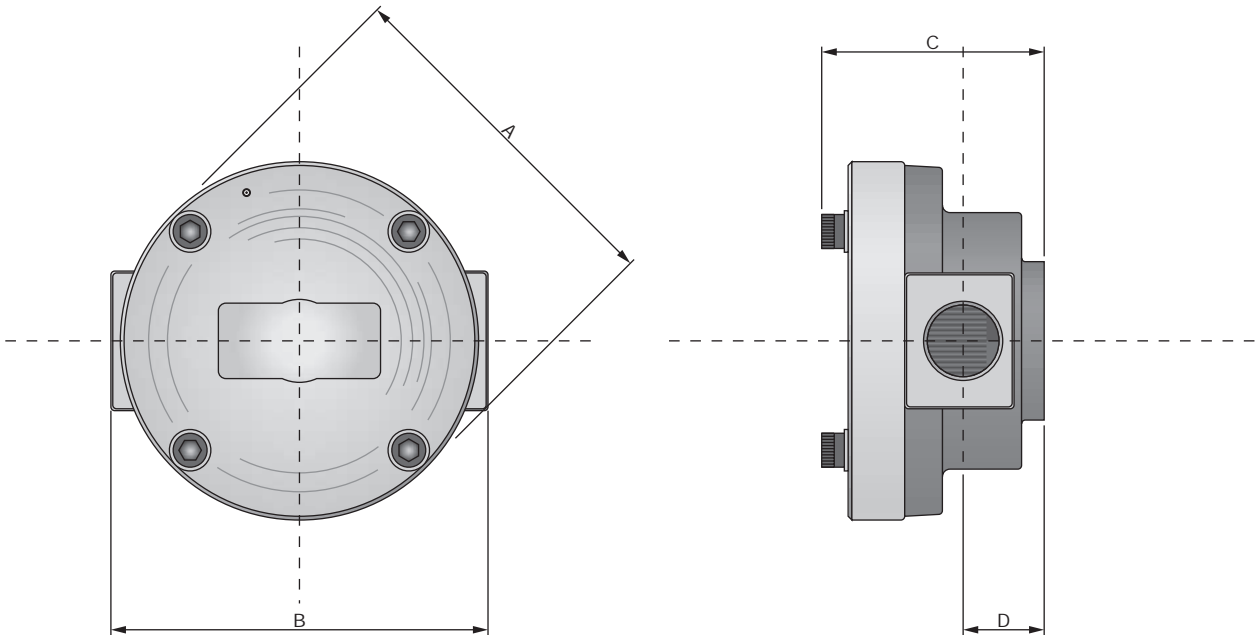
Accessories

Description	Item-No.
M12 5 pins female cable connector with plastic threaded locking ring	917 116 D
M12 5 pins female connector moulded on cable (2 m, shielded)	438 680 F

Has to be ordered separately

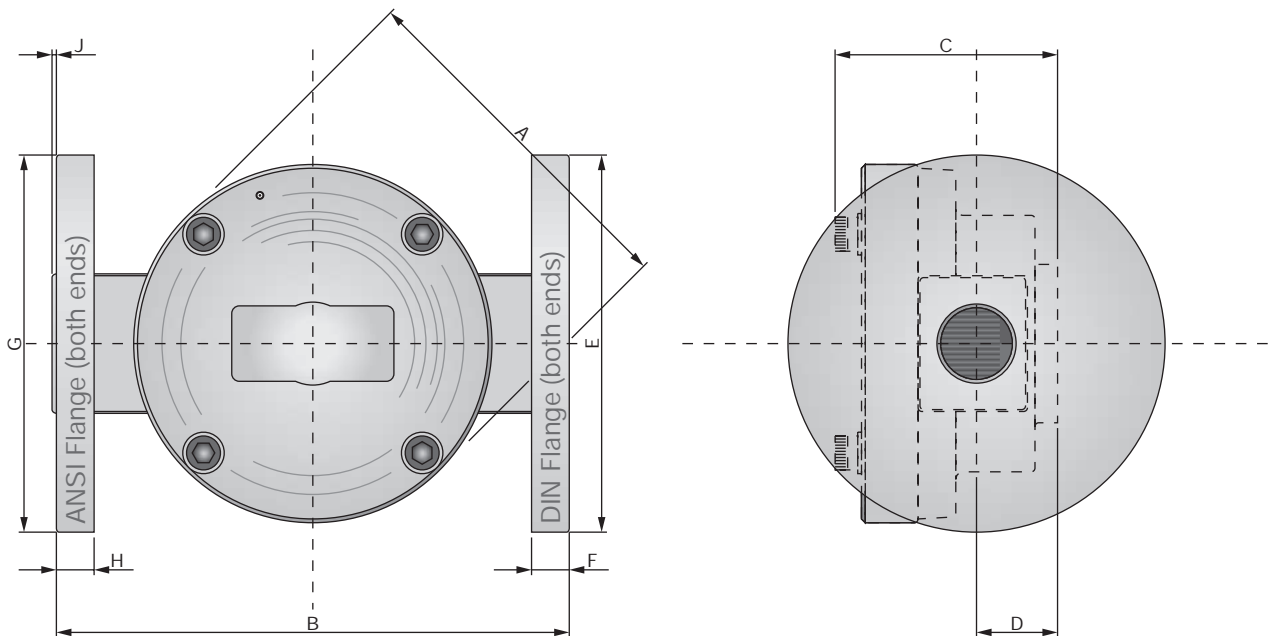
Positive Displacement Flow Fitting for Indicators, Sensors, Switches, Transmitters and Controllers

Dimensions [mm] Type S070 Threaded



Orifice DN [mm]	A [mm]	B St. Steel [mm]	Aluminum [mm]	C [mm]	D [mm]
15	96	100	100	61	20
25	112	143	133	91	35
40	144	150	150	120	45

Dimensions [mm] Type S070 Flanged



Orifice DN [mm]	A [mm]	B St. Steel [mm]	Aluminum [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	J [mm]
40	144	212	212	120	45	150	16	127	17.5	1.6
50	178	240	240	150	55	165	18	152	19.0	1.6

In case of special application requirements, please consult for advice.

We reserve the right to make technical changes without notice.
012-GB/ 1-0226