



Paddle Flow Monitor for liquids



measuring
•
monitoring
•
analysing

PSR/PSE



- Switching ranges:
2.5 - 4.8 ... 383 - 533 l/min water
- p_{\max} : 250 bar, t_{\max} : 110 °C
- Connection:
G 1/4 ... G 1 1/2,
1/4" NPT ... 1 1/2" NPT
- Material:
brass or stainless steel
- Replaceable stainless steel
paddle

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Order Details Standard Version (Example: PSR-1108 3 R08 R 1)



Standard switch. ranges ¹⁾		Nominal size	Q _{max} l/min water	Model ³⁾		Connection	Contact	Cable length
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel			
2.3-4.5	2-3.3	DN 8	30	PSR-1108 3...	PSR-1208 3...	R08 = G ¼ N08 = ¼" NPT	R = N/O contact (standard CE) C = N/O contact (cCSAus) U = changeover contact (standard CE) D = changeover contact (cCSAus)	PVC cable 1 = 1.5 m (standard) 2 = 2.0 m ²⁾ 4 = 3.0 m ²⁾ 6 = 4.0 m ²⁾ 8 = 5.0 m ²⁾ P = PVC cable, special length ³⁾ S = silicone cable ^{3) 4)} G = yellow PUR cable ^{3) 4)}
3-6	3-4.2	DN 10	40	PSR-1110 3...	PSR-1210 3...	R10 = G ¾ N10 = ¾" NPT		
3-6	3-5.6	DN 15	45	PSR-1115 3...	PSR-1215 3...	R15 = G ½ N15 = ½" NPT		
7.7-13.4	5-9.5	DN 20	80	PSR-1120 6...	PSR-1220 6...	R20 = G ¾ N20 = ¾" NPT		
11-17.5	11-16.5	DN 25	130	PSR-1125 8...	PSR-1225 8...	R25 = G 1 N25 = 1" NPT		
22-36	20-34	DN 32	160	PSR-1132 B...	PSR-1232 B...	R32 = G 1 ¼ N32 = 1 ¼" NPT		
38-64	38-62	DN 40	300	PSR-1140 B...	PSR-1240 B...	R40 = G 1 ½ N40 = 1 ½" NPT		



Special switch. ranges ¹⁾		Nominal size	Q _{max} l/min water	Model ³⁾		Connection	Contact	Cable length
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel			
4.7-5.8	4.7-5.8	DN 8	30	PSR-1108 2...	PSR-1208 2...	R08 = G ¼ N08 = ¼" NPT	R = N/O contact (standard CE) C = N/O contact (cCSAus) U = Changeover contact (standard CE) D = Changeover contact (cCSAus)	PVC cable 1 = 1.5 m (standard) 2 = 2.0 m ²⁾ 4 = 3.0 m ²⁾ 6 = 4.0 m ²⁾ 8 = 5.0 m ²⁾ P = PVC cable, special length ³⁾ S = silicone cable ^{3) 4)} G = yellow PUR cable ^{3) 4)}
5.7-7.7	5.3-8	DN 8	30	PSR-1108 1...	PSR-1208 1...	R10 = G ¾ N10 = ¾" NPT		
4.5-6	4.5-6	DN 10	40	PSR-1110 2...	PSR-1210 2...	R15 = G ½ N15 = ½" NPT		
6.2-8.5	5.6-8	DN 10	40	PSR-1110 1...	PSR-1210 1...	R20 = G ¾ N20 = ¾" NPT		
6-8.1	5.9-8	DN 15	45	PSR-1115 2...	PSR-1215 2...	R25 = G 1 N25 = 1" NPT		
7.2-11	7.2-10.7	DN 15	45	PSR-1115 1...	PSR-1215 1...			
16.6-25.5	16.6-25.5	DN 20	80	PSR-1120 5...	PSR-1220 5...			
10-24	11-24	DN 20	80	PSR-1120 4...	PSR-1220 4...			
30-47	31.1-47	DN 20	80	PSR-1120 1...	PSR-1220 1...			
12-26	12-25	DN 25	130	PSR-1125 7...	PSR-1225 7...			
25-35	24.3-34.3	DN 25	130	PSR-1125 5...	PSR-1225 5...			
14-37	14-37	DN 25	130	PSR-1125 4...	PSR-1225 4...			
45-68	44-67	DN 25	130	PSR-1125 1...	PSR-1225 1...			



Standard switch. ranges ¹⁾		for pipes with diameter [mm]	Q _{max} m ³ /h water	Model ³⁾		Connection	Contact	Cable length
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel			
68-90	61-83	50	30	PSE-1149 8...	PSE-1249 8...	R15 = G ½ N15 = ½" NPT	R = N/O contact (standard CE) C = N/O contact (cCSAus) U = Changeover contact (standard CE) D = Changeover contact (cCSAus)	PVC cable 1 = 1.5 m (standard) 2 = 2.0 m ²⁾ 4 = 3.0 m ²⁾ 6 = 4.0 m ²⁾ 8 = 5.0 m ²⁾ P = PVC cable, special length ³⁾ S = silicone cable ^{3) 4)} G = yellow PUR cable ^{3) 4)}
183-250	170-233	80	100					
320-400	300-383	100	150					
700-917	667-900	150	200					
50-62	43-58	50	30	PSE-1152 0...	PSE-1252 0...	R15 = G ½ N15 = ½" NPT		
155-183	143-167	80	100					
217-267	200-250	100	150					
558-600	517-592	150	200					
92-113	70-103	100	150	PSE-1114 9...	PSE-1214 9...	R15 = G ½ N15 = ½" NPT		
200-283	167-233	150	200					
383-533	333-467	200	200					

¹⁾ Listed values are valid only for horizontal installation ²⁾ Only for N/O contact »R« and »C«
³⁾ Length as described ⁴⁾ Only for N/O contact »R«



Paddle Flow Monitor Model PSR/PSE

Order Details ATEX- and IECEx Version (Example: PSR-2208 3 R08 R 1 H)



Standard switch. ranges ¹⁾		Nominal size	Q _{max} l/min water	Model		Connection	Contact	Cable length	Special version
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel				
2.3-4.5	2-3.3	DN 8	30	PSR-2108 3...	PSR-2208 3...	R08 = G ¼ N08 = ¼ NPT	R = N/O contact (ATEX, IECEX) U = Changeover contact (ATEX, IECEX)	PVC cable 1 = 1.5 m (standard) P = PVC cable, special length ²⁾	without = standard (not for PSx-22...) H = temperature of medium / ambient temperature +110 °C (only for PSx-22...), marking acc. to certificate
3-6	3-4.2	DN 10	40	PSR-2110 3...	PSR-2210 3...	R10 = G ¾ N10 = ¾" NPT			
3-6	3-5.6	DN 15	45	PSR-2115 3...	PSR-2215 3...	R15 = G ½ N15 = ½" NPT			
7.7-13.4	5-9.5	DN 20	80	PSR-2120 6...	PSR-2220 6...	R20 = G ¾ N20 = ¾" NPT			
11-17.5	11-16.5	DN 25	130	PSR-2125 8...	PSR-2225 8...	R25 = G 1 N25 = 1" NPT			
22-36	20-34	DN 32	160	PSR-2132 B...	PSR-2232 B...	R32 = G 1 ¼ N32 = 1 ¼" NPT			
38-64	38-62	DN 40	300	PSR-2140 B...	PSR-2240 B...	R40 = G 1 ½ N40 = 1 ½" NPT			



Special switch. ranges ¹⁾		Nominal size	Q _{max} l/min water	Model		Connection	Contact	Cable length	Special version
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel				
4.7-5.8	4.7-5.8	DN 8	30	PSR-2108 2...	PSR-2208 2...	R08 = G ¼ N08 = ¼" NPT	R = N/O contact (ATEX, IECEX) U = Changeover contact (ATEX, IECEX)	PVC cable 1 = 1.5 m (standard) P = PVC cable, special length ²⁾	without = standard (not for PSx-22...) H = temperature of medium / ambient temperature +110 °C (only for PSx-22...), marking acc. to certificate
5.7-7.7	5.3-8	DN 8	30	PSR-2108 1...	PSR-2208 1...	R08 = G ¼ N08 = ¼" NPT			
4.5-6	4.5-6	DN 10	40	PSR-2110 2...	PSR-2210 2...	R10 = G ¾ N10 = ¾" NPT			
6.2-8.5	5.6-8	DN 10	40	PSR-2110 1...	PSR-2210 1...	R10 = G ¾ N10 = ¾" NPT			
6-8.1	5.9-8	DN 15	45	PSR-2115 2...	PSR-2215 2...	R15 = G ½ N15 = ½" NPT			
7.2-11	7.2-10.7	DN 15	45	PSR-2115 1...	PSR-2215 1...	R15 = G ½ N15 = ½" NPT			
16.6-25.5	16.6-25.5	DN 20	80	PSR-2120 5...	PSR-2220 5...	R20 = G ¾ N20 = ¾" NPT			
10-24	11-24	DN 20	80	PSR-2120 4...	PSR-2220 4...	R20 = G ¾ N20 = ¾" NPT			
30-47	31.1-47	DN 20	80	PSR-2120 1...	PSR-2220 1...	R20 = G ¾ N20 = ¾" NPT			
12-26	12-25	DN 25	130	PSR-2125 7...	PSR-2225 7...	R25 = G 1 N25 = 1" NPT			
25-35	24.3-34.3	DN 25	130	PSR-2125 5...	PSR-2225 5...	R25 = G 1 N25 = 1" NPT			
14-37	14-37	DN 25	130	PSR-2125 4...	PSR-2225 4...	R25 = G 1 N25 = 1" NPT			
45-68	44-67	DN 25	130	PSR-2125 1...	PSR-2225 1...	R25 = G 1 N25 = 1" NPT			



Standard switch. ranges ¹⁾		for pipes with diameter [mm]	Q _{max} m³/h water	Model		Connection	Contact	Cable length	Special version
Rising flow rate l/min water	Falling flow rate l/min water			Material brass	Material st. steel				
68-90	61-83	50	30	PSE-2149 8...	PSE-2249 8...	R15 = G ½ N15 = ½" NPT	R = N/O contact (ATEX, IECEX) U = Changeover contact (ATEX, IECEX)	PVC cable 1 = 1.5 m (standard) P = PVC cable, special length ²⁾	without = standard (not for PSx-22...) H = temperature of medium / ambient temperature +110 °C (only for PSx-22...), marking acc. to certificate
183-250	170-233	80	100						
320-400	300-383	100	150						
700-917	667-900	150	200	PSE-2152 0...	PSE-2252 0...	R15 = G ½ N15 = ½" NPT			
50-62	43-58	50	30						
155-183	143-167	80	100						
217-267	200-250	100	150	PSE-2114 9...	PSE-2214 9...	R15 = G ½ N15 = ½" NPT			
558-600	517-592	150	200						
92-113	70-103	100	150						
200-283	167-233	150	200						
383-533	333-467	200	200						

¹⁾ Listed values are valid only for horizontal installation ²⁾ Length as described

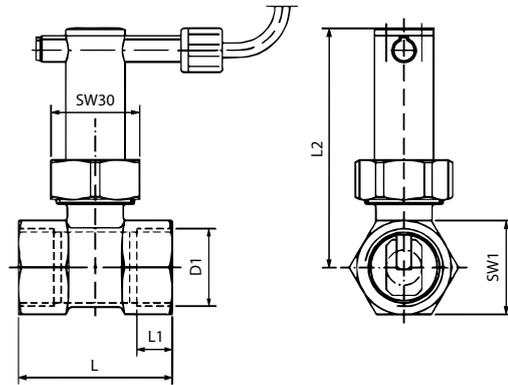
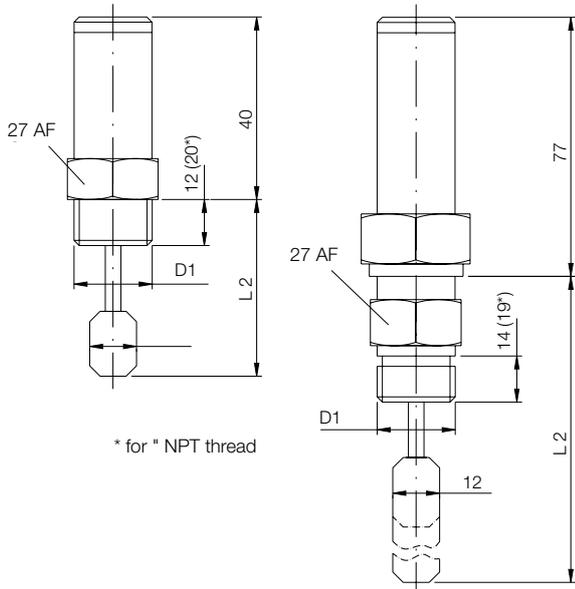


Dimensions [mm]

Model: PSE-...49

Model: PSE-...52
PSE-...14

Model: PSR



Model	D1	L ₂ [mm]
PSE-...498 R...	G ½	51
PSE-...520 R...	G ½	72
PSE-...149 R...	G ½	130
PSE-...498 N...	½" NPT	59
PSE-...520 N...	½" NPT	72
PSE-...149 N...	½" NPT	130

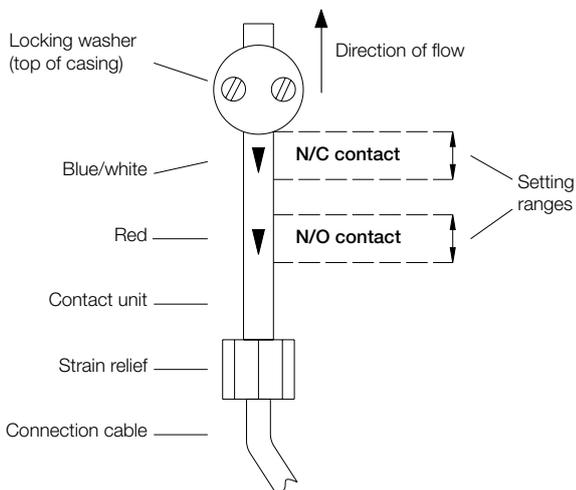
Model	D1	SW1		L [mm]		L1 [mm]		L2 [mm]
		G	NPT	G	NPT	G	NPT (Ms/VA)	
PSR-...08	G ¼	27		50		12	10	80
PSR-...10	G ⅜	27		50		10	10,5	80
PSR-...15	G ½	27		50		12	14	80
PSR-...20	G ¾	32		52		15	14	82
PSR-...25	G 1	39		56		15	15/17	84
PSR-...32	G 1 ¼	46	50	50	66	10	17,5	89
PSR-...40	G 1 ½	55	60	50	66	10	17,5	92

L1 = Usable thread length

Switching point setting

To set the switching point loosen the locking washer at the top of the casing and move the contact unit. A blue, white/red arrow located on the contact unit serves as an adjustment aid.

The front edge of the locking washer serves as adjustment mark.



N/O contact

The switching volume can be adjusted at the red arrow. The minimum switching values specified in the table are set by moving the contact unit in the flow direction. The maximum switching values given in the table are set by moving the contact unit against the direction of flow.

N/C contact

The switching volume can be adjusted at the blue (white) arrow. The minimum switching values specified in the table are set by moving the contact unit in the flow direction. The maximum switching values given in the table are set by moving the contact unit against the direction of flow. Firmly tighten locking washer again when settings have been made.