



Zertifiziertes
QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Flow restrictors

for flow rates 0.5 L/min to 280 L/min



measuring
•
monitoring
•
analysing



- $p_{max.}$ 200 bar
- $t_{max.}$ +300 °C
- Connections:
Screw thread G ½, G ¾,
G 1½, G 2, G 2¼, G 2½
and ¾ NPT
- no auxiliary power required
- easy to assemble
- compact design
- reliable - no wearing parts
- energy-saving
- easy to fit



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Model:
REG



Design

KOBOLD model REG flow restrictors serve to keep constant quantities of liquids in pipework systems. The REG rate regulators are ideally suited for the simple restriction to a preset value of throughputs of water, or of liquids similar to water. The flow restrictors ensure equilibrium, particularly in systems with many users and resulting pressure fluctuations caused by random flow conditions. In other words, the desired throughput is not exceeded.

Constant flow is achieved by two stainless steel diaphragms that are crosswise mounted and riveted together. The gap between the spring-loaded stainless steel plate and seal face is continuously varied as the differential pressure changes. As the differential pressure decreases the gap widens, and it closes as the pressure increases, thus maintaining a constant flow volume through the device.

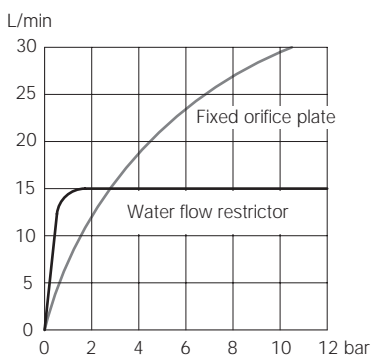
Notable benefits

- no auxiliary power required
- easy to assemble
- compact design
- reliable - no wearing parts
- energy-saving
- easy to fit

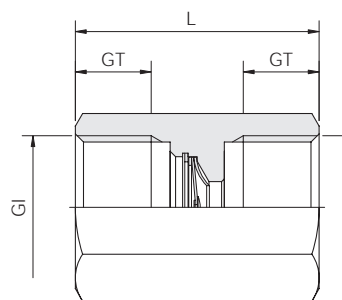
Technical details

Connections	female thread G 1/2, G 3/4 female/male thread G 1/2-G 3/4 male thread G 3/4 female thread 3/4 NPT female/male thread 3/4 NPT
	multiple element G 1 1/2, G 2, G 2 1/4, G 2 1/2 male thread
Service temperature	-10...+300 °C
Operating pressure	max. 200 bar
Differential pressure	min. 1.5 bar
Differential pressure	max. 10 bar
Materials <i>(see drawing for details)</i>	brass and stainless steel all stainless steel
Viscosity	max. 30 mm ² /s

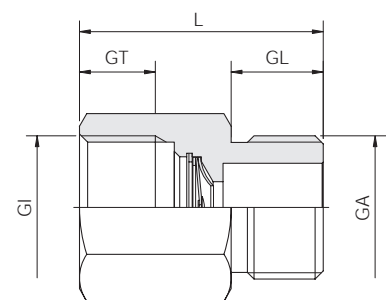
Differential pressure curve



REG-1x/REG-2x/REG-5x

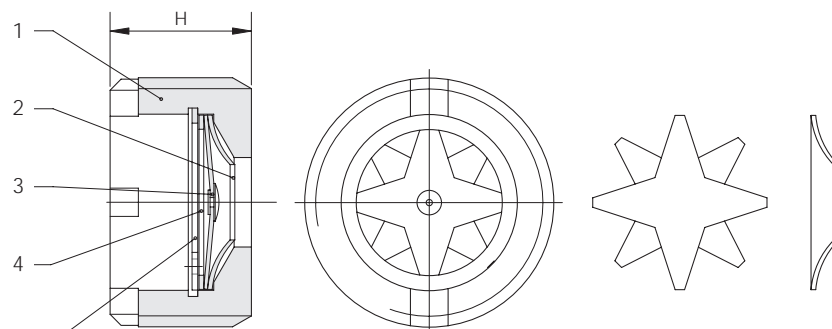


REG-3x/REG-4x/REG-6x



REG-0x/REG-7x with design and materials

- | | |
|---------------|---------------------------------|
| 1 Valve body | brass Ms 58 or st. steel 1.4301 |
| 2 Pan | st. steel 1.4301 |
| 3 Spring star | st. steel 1.4310 |
| 4 Ring | st. steel 1.4301 |
| 5 Circlip | st. steel 1.4122 |





Dimensions and order details single elements G screw thread (example: REG-0101)

Dimensions		Male thread G 3/4		Female/female thread* G 1/2		Female/female thread* G 3/4		Female/male thread* G 1/2		Female/male thread* G 3/4			
L		-		36 (42)		45 (50)		36 (42)		45 (50)			
GT		-		12 (14)		14 (16)		13 (14)		14 (16)			
GL		-		-		-		12 (14)		17 (16)			
GI		-		G 1/2		G 3/4		G 1/2		G 3/4			
GA		-		-		-		G 1/2		G 3/4			
SW		-		24 (27)		30 (36)		24 (27)		30 (36)			
H		15		-		-		-		-			
Through-put L/min	Tolerance L/min	Brass		Stainless steel		Brass		Stainless steel		Brass		Stainless steel	
0,5	± 0.2	REG-0100	REG-0200	REG-1100	REG-1200	REG-2100	REG-2200	REG-3100	REG-3200	REG-4100	REG-4200		
1	± 0.2	REG-0101	REG-0201	REG-1101	REG-1201	REG-2101	REG-2201	REG-3101	REG-3201	REG-4101	REG-4201		
2	± 0.2	REG-0102	REG-0202	REG-1102	REG-1202	REG-2102	REG-2202	REG-3102	REG-3202	REG-4102	REG-4202		
3	± 0.4	REG-0103	REG-0203	REG-1103	REG-1203	REG-2103	REG-2203	REG-3103	REG-3203	REG-4103	REG-4203		
4	± 0.4	REG-0104	REG-0204	REG-1104	REG-1204	REG-2104	REG-2204	REG-3104	REG-3204	REG-4104	REG-4204		
6	± 0.5	REG-0106	REG-0206	REG-1106	REG-1206	REG-2106	REG-2206	REG-3106	REG-3206	REG-4106	REG-4206		
8	± 0.5	REG-0108	REG-0208	REG-1108	REG-1208	REG-2108	REG-2208	REG-3108	REG-3208	REG-4108	REG-4208		
10	± 0.7	REG-0110	REG-0210	REG-1110	REG-1210	REG-2110	REG-2210	REG-3110	REG-3210	REG-4110	REG-4210		
12	± 0.7	REG-0112	REG-0212	REG-1112	REG-1212	REG-2112	REG-2212	REG-3112	REG-3212	REG-4112	REG-4212		
16	± 1.2	REG-0116	REG-0216	REG-1116	REG-1216	REG-2116	REG-2216	REG-3116	REG-3216	REG-4116	REG-4216		
20	± 1.2	REG-0120	REG-0220	REG-1120	REG-1220	REG-2120	REG-2220	REG-3120	REG-3220	REG-4120	REG-4220		
25	± 1.5	REG-0125	REG-0225	REG-1125	REG-1225	REG-2125	REG-2225	REG-3125	REG-3225	REG-4125	REG-4225		
30	± 1.5	REG-0130	REG-0230	REG-1130	REG-1230	REG-2130	REG-2230	REG-3130	REG-3230	REG-4130	REG-4230		
40	± 2	REG-0140	REG-0240	REG-1140	REG-1240	REG-2140	REG-2240	REG-3140	REG-3240	REG-4140	REG-4240		

* Value given in brackets for instrument design with longer thread (add D to the order code).

Dimensions and order details single elements NPT screw thread (example: REG-5101)

Dimensions		Female/female thread 3/4 NPT		Female/male thread 3/4 NPT	
L		45		45	
GT		14		14	
GL		-		17	
GI		3/4 NPT		3/4 NPT	
GA		-		3/4 NPT	
SW		30		30	
H		-		-	
Through-put L/min	Tolerance L/min	Brass		Stainless steel	
0,5	± 0.2	REG-5100	REG-5200	REG-6100	REG-6200
1	± 0.2	REG-5101	REG-5201	REG-6101	REG-6201
2	± 0.2	REG-5102	REG-5202	REG-6102	REG-6202
3	± 0.4	REG-5103	REG-5203	REG-6103	REG-6203
4	± 0.4	REG-5104	REG-5204	REG-6104	REG-6204
6	± 0.5	REG-5106	REG-5206	REG-6106	REG-6206
8	± 0.5	REG-5108	REG-5208	REG-6108	REG-6208
10	± 0.7	REG-5110	REG-5210	REG-6110	REG-6210
12	± 0.7	REG-5112	REG-5212	REG-6112	REG-6212
16	± 1.2	REG-5116	REG-5216	REG-6116	REG-6216
20	± 1.2	REG-5120	REG-5220	REG-6120	REG-6220
25	± 1.5	REG-5125	REG-5225	REG-6125	REG-6225
30	± 1.5	REG-5130	REG-5230	REG-6130	REG-6230
40	± 2	REG-5140	REG-5240	REG-6140	REG-6240

Ordering details multiple element (example: REG-92 R402 060)

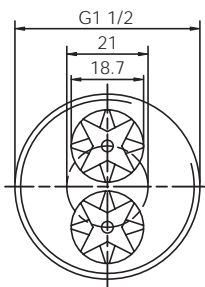
Design	Size	Throughput* in L/min
REG-92... Multiple element made of stainless steel 1.4301	..R402.. = G 1½; twofold	000...080
	..R403.. = G 1½; threefold	000...120
	..R503.. = G 2; threefold	000...120
	..R504.. = G 2; fourfold	000...160
	..R585.. = G 2¼; fivefold	000...200
	..R656.. = G 2½; sixfold	000...240
	..R657.. = G 2½; sevenfold	000...280

*The throughput is calculated by adding the regulating inserts (see also single elements).

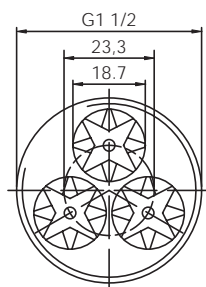
Example: The throughput 55 L/min is obtained with one restrictor with two regulating inserts (30 plus 25 L/min).

Dimensions

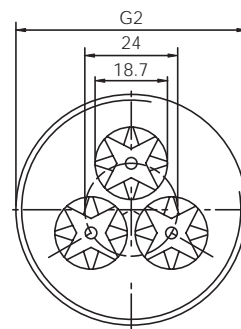
REG-92R402



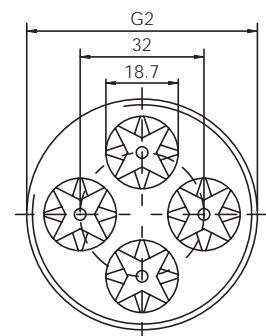
REG-92R403



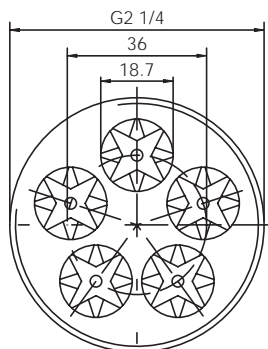
REG-92R503



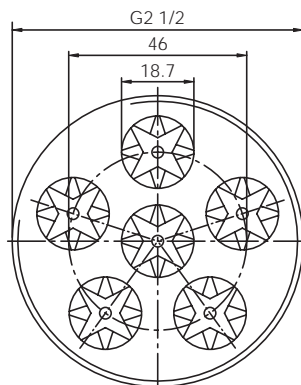
REG-92R504



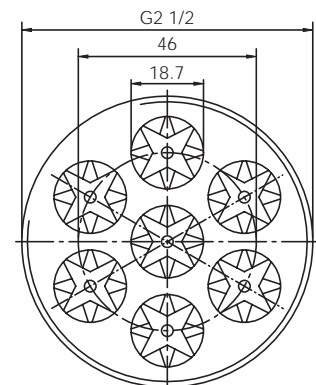
REG-92R585



REG-92R656



REG-92R657



Thickness: 15 mm