

RE 18316-02/03.22 1/2 Replaces: 12.21

Flow control valves Fixed orifice restrictors with reverse flow check



Series



Description

The "B-A" flow is restricted by a calibrated orifice, while flow "A-B" is always allowed through the incorporated check valve. Pressure compensation is not provided and flow depends from pressure drop and oil viscosity.

The valve is composed by an hexagonal threaded sleeve with a special inserted cartridge (GSU1): the cartridge is available in different orifice sizes, and can be fitted in either direction (see drawing).

Performance



 Δp curves vs. flow in "A-B" free flow direction

Advantages

-Compact design and inline mounting for space saving.

-Three sizes provide great adaptability to the system. -Mounting position is unrestricted.

-Low Δp in the free flow direction.

Technical data

Code	Pressure P max bar (psi)	Flow Q max l/min (gpm)	Weight kg (lbs)
GSU 2-14	300 (4300)	15 (4)	0.07 (0.15)
GSU 2-38	300 (4300)	30 (8)	0.1 (0.22)
GSU 2-12	300 (4300)	70 (18)	0.19 (0.42)
GSU 3-14	300 (4300)	15 (4)	0.08 (0.18)
GSU 3-38	300 (4300)	30 (8)	0.1 (0.22)
GSU 3-12	300 (4300)	70 (18)	0.17 (0.37)

Steel body, zinc plated





Ports size / Dimensions

Code	Ports size A-B	L mm (inches)	L1 mm (inches)	L2 mm (inches)	L3 mm (inches)	Hex mm (inches)
GSU 2-14	G 1/4	10 (0.39)	50 (1.96)	/	/	19 (0.75)
GSU 2-38	G 3/8	12 (0.47)	55 (2.17)	/	/	22 (0.87)
GSU 2-12	G 1/2	14 (0.55)	70	/	/	27 (1.06)
GSU 3-14	G 1/4	/	/	13 (0.51)	48 (1.89)	19 (0.75)
GSU 3-38	G 3/8	/	/	13 (0.51)	52 (2.05)	22 (0.87)
GSU 3-12	G 1/2	/	/	14 (0.55)	60 (2.36)	27 (1.06)

Applications

The GSU Series valve is a cost effective noncompensated flow control which can be employed in a variety of cases when a one-way restrictor is needed. The smallest sizes can be used also as dampeners for pressure peaks, control of brake engagement.





Application example



Free flow Controlled flow
Controlled flow

Possible to apply the insert in both directions

Ordering code





example 1: GSU2.14.200 = M/F - G 1/4 - hole 2 mm (0.079 inches) example 2: GSU3.14.075 = F/F - G 1/4 - hole 0.75 mm (0.030 inches)

Туре	Material number	Туре	Material number	Туре	Material number
GSU2.12.100	R932006953	GSU3.14.075	R932500245		
GSU2.12.200	R932006955	GSU3.38.100	R932500249		
GSU2.14.075	R932500236	GSU3.38.150	R932500250		
GSU2.14.200	R932006956				
GSU2.38.075	R932500237				
GSU2.38.100	R932500239				
GSU3.12.000	R932006959				
GSU3.12.150	R932006958				
GSU3.14.000	R932006960				

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