

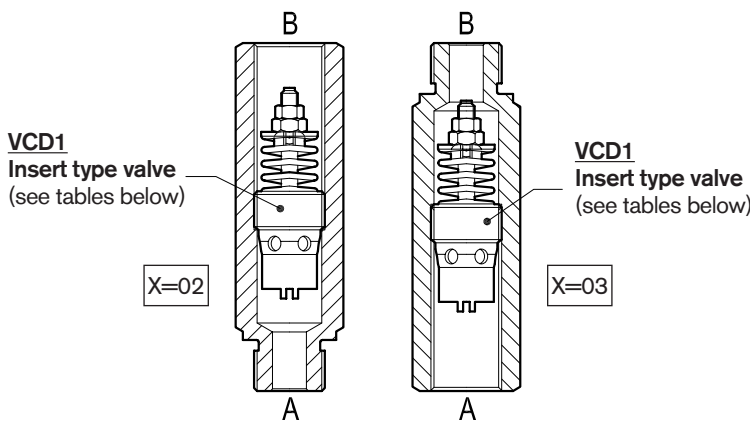
Flow control valves

Pressure compensated partially adjustable flow regulators, with male-female sleeve

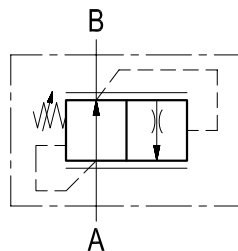


VCDC-H-MF (G1/2 - G3/4)

OE.22.03-X-Y-Z



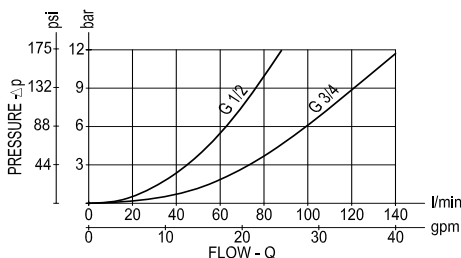
X	Male or female regulated port
02	female regulated port B
03	male regulated port B



Description

This valve is composed by a sleeve with an inserted pressure compensated flow regulator cartridge (VCD1); it controls the oil flow from B to A, and prevents it from exceeding the adjusted value regardless of working pressure, while establishing a minimum pressure differential between the two ports. The inserted cartridge is available in different sizes (as well as the sleeve), and each size is available with different orifices, each one for a specific flow range (see Performance Diagram and Flow Range "Z" table). For each selected size and flow range, the pressure compensated flow can be tuned finely by changing the spring load (see table of Dimensions). In the reverse direction, A to B, the valve behaves as a fixed restriction, and it allows free flow depending from the pressure available (see Performance diagram). The valve can be ordered with MALE "A" port (X = 02), or FEMALE "A" port (X = 03).

Performance



Note: the inserted flow regulator cartridge is available with a number of different orifices for different flow ranges, as specified by the "Z" table: when ordering please specify the needed Flow Range ("Z table"), as well as the needed Port Size ("Y table").

Customer tailored flow adjustments are available on request: for details, please consult us.

Advantages

- Compact design and inline mounting for space saving.
- Mounting position is unrestricted
- The inserted flow regulator cartridge can be purchased separately for easy service or for modifications to the original flow adjustment (see data sheet RE 18329-80).

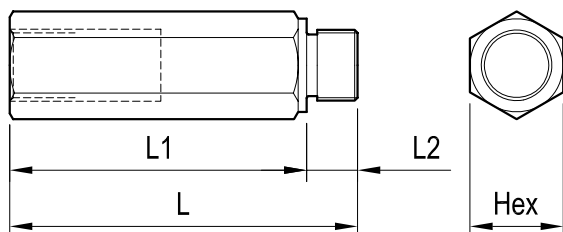
Technical data

VCD1 Code	Ports A-B	Pressure P max bar (psi)	Flow Q max l/min (gpm)	Weight kg (lbs)
0T.F3.01.02.03...	G 1/2	315 (4568)	67 (18)	0.04 (0.09)
0T.F3.01.02.04...	G 3/4	315 (4568)	150 (40)	0.07 (0.15)

Steel body, zinc plated

Special ports available on request.

Dimensions



Ports size / Dimensions

Y	Ports	L mm (inches)	L1 mm (inches)	L2 mm (inches)	Hex mm (inches)	Sleeve code
03	G 1/2	96 (3.78)	82 (3.23)	14 (0.55)	27 (1.06)	OC.51.01.027
04	G 3/4	110 (4.33)	94 (3.70)	16 (0.63)	32 (1.26)	OC.51.01.028

Z	REGULATED FLOW RANGE l/min (gpm)			
	G 1/4	G 3/8	G 1/2	G 3/4
01	-	2.5-4.0 (0.66-1.06)	16-21 (4.23-5.55)	37-50 (9.78-13.21)
02	1-1.6 (0.26-0.42)	4.0-6.3 (1.06-1.67)	21-28 (5.55-7.40)	50-67 (13.21-17.7)
03	1.6-2.5 (0.42-0.66)	6.3-10 (1.67-2.64)	28-37 (7.40-9.78)	67-90 (17.7-23.78)
04	2.5-4.0 (0.66-1.06)	10-16 (2.64-4.23)	37-50 (9.78-13.21)	90-120 (23.78-31.7)
05	4.0-6.3 (1.06-1.66)	16-25 (4.23-6.61)	50-67 (13.21-17.7)	120-150 (31.7-39.63)
06	6.3-10 (1.66-2.64)	-	-	-

Applications

Typical applications are the control of the maximum speed of an actuator (double or single acting cylinder, or motor), which is generally achieved by regulating the maximum flow out from the actuator (or meter-OUT). The flow, and consequently the maximum actuator speed, will vary slightly with changes in fluid viscosity, but will be largely independent from the load and from the working pressure.

Ordering code

OE.22.03	X	Y	Z
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Pressure compensated partially adjustable flow regulators, with male-female sleeve

Regulated flow range see table "Z"

Male or female regulated port see table "X"

Ports size / Dimensions see table "Y"

Type	Material number	Type	Material number	Type	Material number
OE2203020301	R932007291	OE2203030301	R932007295		
OE2203020302	R934001711	OE2203030302	R934001716		
OE2203020303	R932007292	OE2203030303	R931000432		
OE2203020304	R932007293	OE2203030304	R931000434		
OE2203020305	R932007294	OE2203030305	R931001457		
OE2203020401	R932007296	OE2203030401	R934001717		
OE2203020402	R934001712	OE2203030402	R932007298		
OE2203020403	R934001713	OE2203030403	R932007299		
OE2203020404	R934001714	OE2203030404	R934001718		
OE2203020405	R932007297	OE2203030405	R932007300		