

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA  
SISTEMS**

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

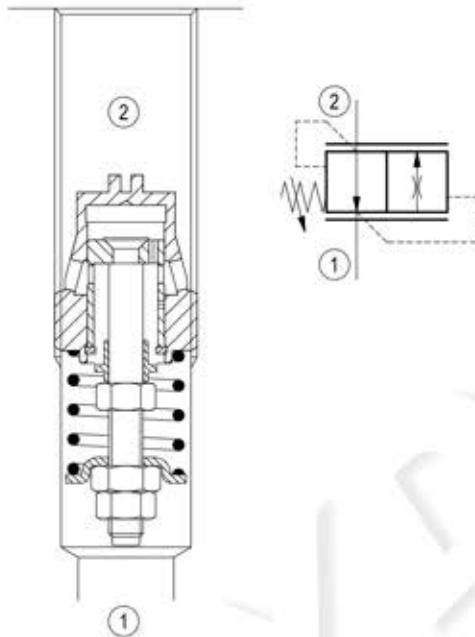
RE 18329-80/03.16 1/2  
Replaces: RE 18329-80/02.16

# Insert type Flow control, 2-way pressure compensated, partially adjustable



VCD1

OT.F3.01 - X - Y - Z



## Description

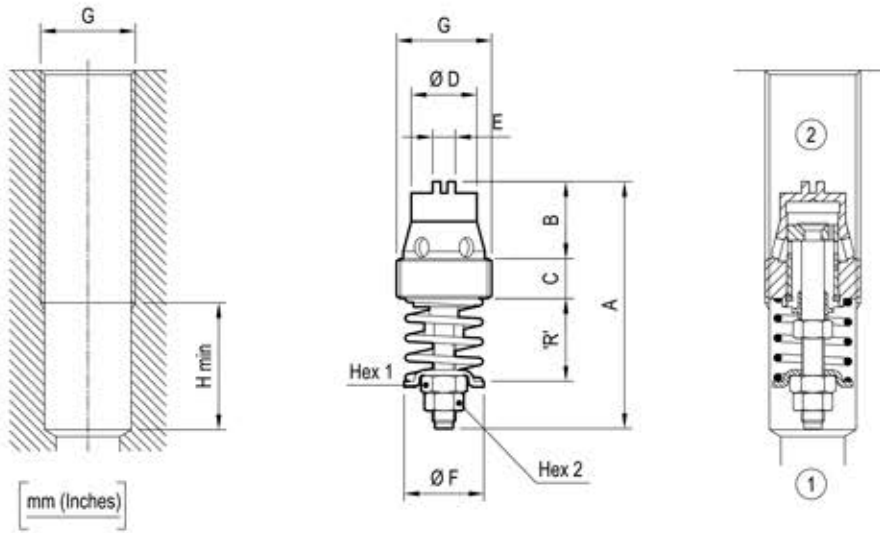
These valves can be used either as lowering control devices or as two ways flow regulators. In the first option, they keep the lowering speed largely independent from the load, while, in the second option, they limit flow to the preset value which can be adjusted within the regulate flow path. On the opposite flow direction, from 2 to 1, the valve is acting as a free flow check reducing the pressure drop to low values (see diagram  $\Delta P - Q$ ).

## Technical data

Max. operating pressure	bar (psi)	315 (4500)
Max. flow	l/min. (gpm)	see "Flow range adjustment" table and "Performance" graphs
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	see "Dimensions" table
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Lines bodies and standard assemblies		Please refer to section "Hydraulic integrated circuit" or consult factory
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

Note: available also as "Sleeve valve for line mounting"  
See data sheets RE 18316-14, RE 18316-15,  
RE 18316-16 and RE 18316-17

# Dimensions

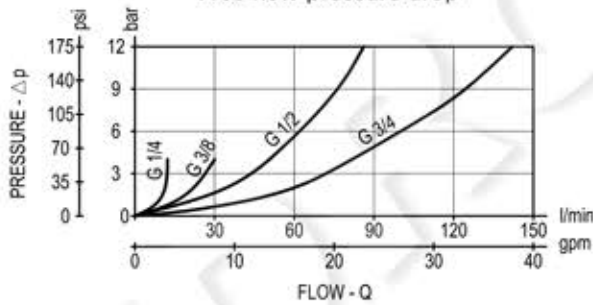


G *	A	B	C	D	E	F	Hex 1	Hex 2	H	Weight kg (lbs)	Inst. torque Nm (ft-lbs)	Flow max. l/min. (gpm)
G 1/4	38.3 (1.51)	12.5 (0.49)	7 (0.28)	10 (0.39)	4 (0.16)	10.3 (0.41)	5.5 (0.22)	4.5 (0.18)	22 (0.87)	0.012 (0.027)	6 (4)	10 (3)
G 3/8	43 (1.69)	13.5 (0.53)	7 (0.28)	11.5 (0.45)	4 (0.16)	14 (0.55)	7 (0.28)	6 (0.24)	23 (0.91)	0.025 (0.055)	8 (6)	25 (7)
G 1/2	49 (1.93)	16 (0.63)	8 (0.32)	15 (0.59)	6 (0.24)	18.2 (0.72)	7 (0.28)	6 (0.24)	27 (1.06)	0.038 (0.084)	12 (9)	67 (18)
G 3/4	60 (2.36)	21 (0.83)	10 (0.39)	20 (0.79)	6 (0.24)	23 (0.91)	7 (0.28)	6 (0.24)	31 (1.22)	0.070 (0.154)	15 (11)	150 (40)

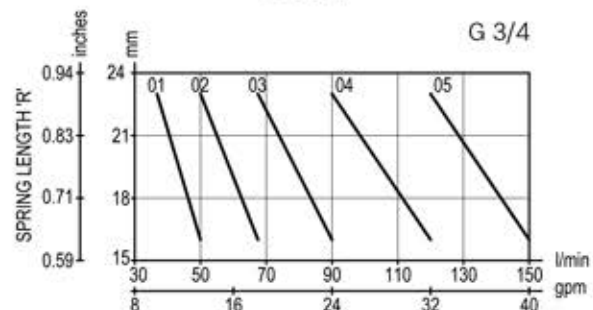
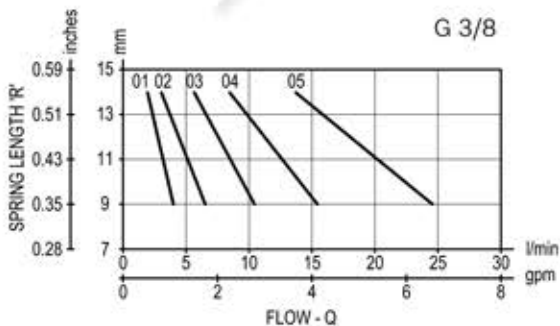
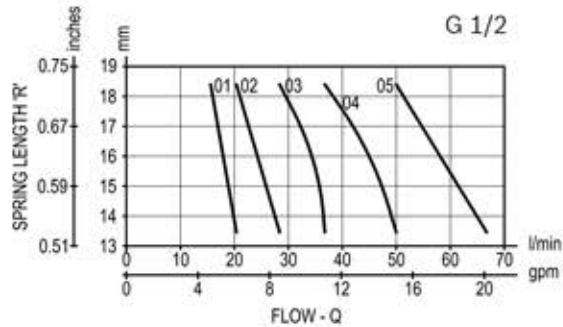
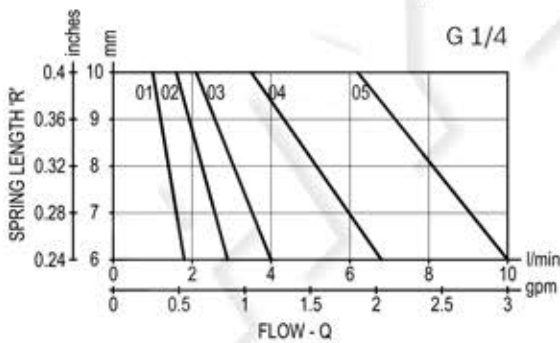
\* Thread in accordance with ISO 228-1 Note: Metric versions available on request. Consult factory.

# Performance

Free flow pressure drop



Performance curves: spring's length - flow (regulated flow) with nominal pressure of 50 bar (725 psi). Curves represent the obtained flow range related to orifices 01-02-03-04-05.



## Ordering code

OT.F3.01	X	Y	Z	*
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Series O/A to L  
unchanged performances and dimensions

Insert type - Flow control

Adjustments

= 02 Locking nut + counter nut  
see graphs ( 'R' - Q )

Port sizes

= 09 G 1/4

= 02 G 3/8

= 03 G 1/2

= 04 G 3/4

	Flow range adjustment l/min. (gpm)			
	for Y = 09	for Y = 02	for Y = 03	for Y = 04
= 01	1-1.6 (0.26-0.42)	2.5-4 (0.66-1.06)	16-21 (4.23-5.55)	37-50 (9.78-13.2)
= 02	1.6-2.5 (0.42-0.66)	4-6.3 (1.6-1.67)	21-28 (5.55-7.4)	50-67 (13.2-17.7)
= 03	2.5-4 (0.66-1.06)	6.3-10 (1.67-2.64)	28-37 (7.4-9.78)	67-90 (17.7-23.8)
= 04	4-6.3 (1.6-1.67)	10-16 (2.64-4.23)	37-50 (9.78-13.2)	90-120 (23.8-31.7)
= 05	6.3-10 (1.67-2.64)	16-25 (4.23-6.61)	50-67 (13.2-17.7)	120-150 (31.7-39.6)

Special flow settings available.

Please contact factory authorized representative for ordering code

Note: Metric versions available on request. Consult factory.

Type	Material number	Type	Material number
OTF301020201000	R931002328		
OTF301020202000	R931002329		
OTF301020203000	R931000012		
OTF301020204000	R931000013		
OTF301020205000	R931000424		
OTF301020301000	R931002330		
OTF301020302000	R931002332		
OTF301020303000	R931002034		
OTF301020304000	R931000342		
OTF301020305000	R931002333		
OTF301020401000	R931000014		
OTF301020402000	R931002334		
OTF301020403000	R931002335		
OTF301020404000	R931002336		
OTF301020405000	R931002337		
OTF301020901000	R931000015		
OTF301020902000	R931002324		
OTF301020903000	R931002325		
OTF301020904000	R931002326		
OTF301020905000	R931002327		