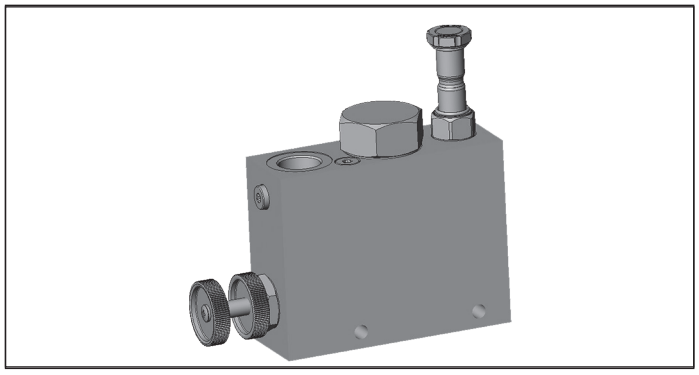
rexroth
A Bosch Company

Flow regulator
3 way, pressure compensated with relief and solenoid control

VRFC3-VS-VEI

0M.36.03 - X - Y

RE 18309-47
Edition: 03.2018
Replaces: 03.2016



Description

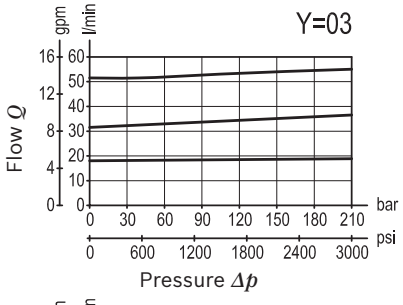
A constant pressure compensated flow rate is established from E to R, while a minimum pressure differential of appr. 5 bar (70 psi) exists between the two ports. Input flow supplied to E in excess of the regulated output at R is by-passed to T. Output flow can be varied from closed to the nominal maximum rating of the valve and it can be dumped to Tank in two ways: 1) by a N.O. solenoid cartridge which determines Regulated flow dumping when de-energized; 2) by a pilot relief cartridge which determines Regulated flow dumping if the maximum allowed pressure is reached. Reverse flow from R to E is limited by the selected opening of the restrictor and is not pressure compensated. Flow from T to E or from T to R is not permitted.

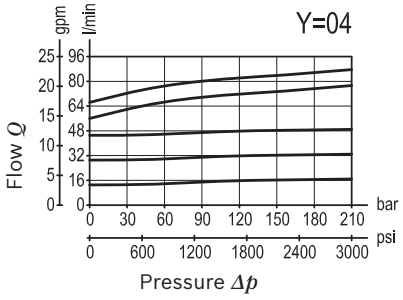
Technical data

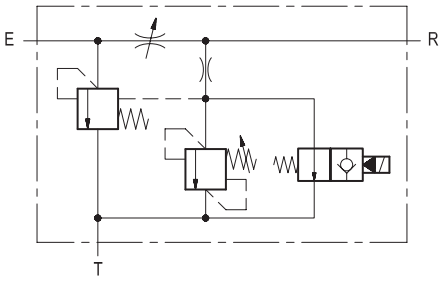
Operating pressure	210 bar (3000 psi)
Adj. relief valve: range 105-210 bar (1523-3000 psi) Standard setting: 210 bar (3000 psi)	
QE= max. inlet flow “E” port (see “Dimensions”)	
QR= max. regulated flow “R” port (see “Dimensions”)	
Flow range adjustment	0 - 3 turns
Pressure drop from E-T: cracking pressure 6 bar (90 psi), full flow 12 bar (175 psi)	
Weight	see “Dimensions”
Manifold material	Aluminium
Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.	
Fluid	Mineral oil (HL, HLP) according to DIN 51524
Fluid temperature range	-20 °C to 80 (-4 to 176 °F)
Viscosity range	20 to 380 mm^2/s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
The coil must be ordered separately	
Other technical data	see data sheet 18350-50

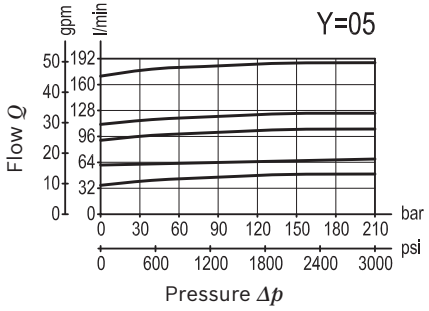
Note: for applications outside these parameters, please consult us.

Characteristic curve









Ordering code

0M.36.03	X	Y

Flow regulator
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Adjustments		
70	Handknob and locknut	
80	Screw and locknut	
40	Graduated handknob	

Port sizes	E - R - T
03	G 1/2
04	G 3/4
05	G 1

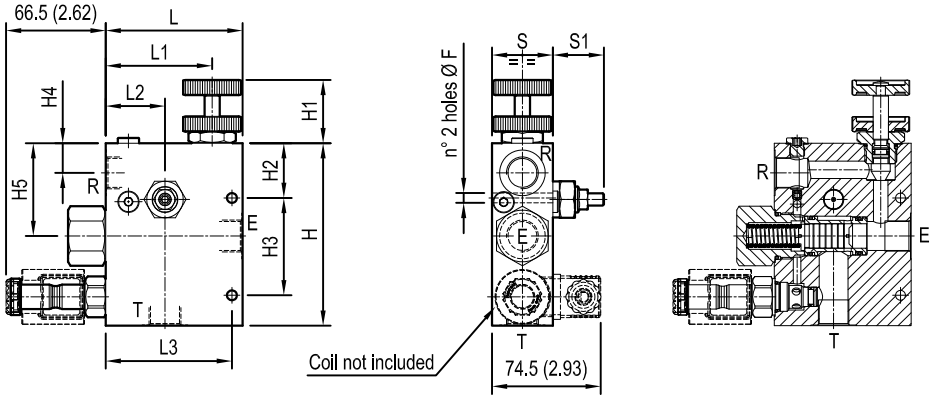
Tamper resistant cap code
ordering code 11.04.23.002
Mat. no. R930000752

Preferred types

Type	Material number
0M360370030000D	R930068961
0M360370040000C	R930067634
0M360370050000B	R930069286
0M360380030000B	R930069287

Type	Material number
0M360380040000A	R930069288
0M360380050000A	R930069289
0M360340030000D	R930069290
0M360340040000A	R930067638

Dimensions



30 (1.18)	60 (2.36)	100 (3.94)	46 (1.81)	83 (3.27)	110 (3.94)	90 (3.54)	28 (1.1)	75 (2.95)	60 (2.36)	40 (1.58)	155 (6.1)	8.5 (0.34)	190 l/min 50 gpm	280 l/min 74 gpm	G 1	3.1 (6.8)
30 (1.18)	50 (1.97)	100 (3.94)	44 (1.73)	81 (3.19)	110 (4.33)	75 (2.95)	23 (0.91)	74 (2.91)	46 (1.81)	40 (1.58)	140 (5.51)	8.5 (0.34)	90 l/min 24 gpm	150 l/min 40 gpm	G 3/4	2.7 (6)
30 (1.18)	40 (1.58)	83 (3.27)	39 (1.54)	70 (2.76)	90 (3.54)	60 (2.36)	17.5 (0.69)	64 (2.52)	36 (1.42)	40 (1.58)	120 (4.72)	6.5 (0.26)	55 l/min 15 gpm	90 l/min 24 gpm	G 1/2	1.68 (3.7)
S1	S	L3	L2	L1	L	H5	H4	H3	H2	H1	H	F	QR	QE	Y	Weight kg (lbs)

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