

# Relief, pilot operated spool type

## Common cavity, Size 16

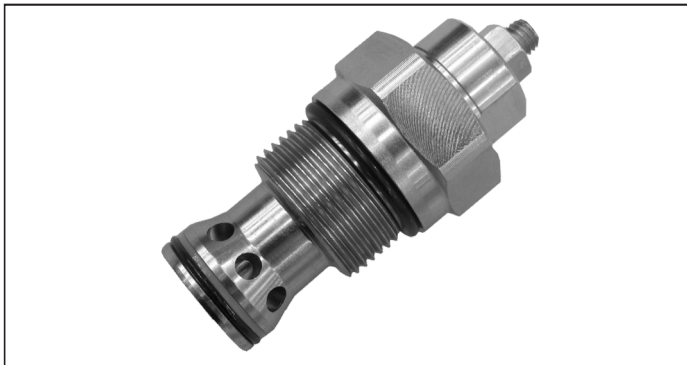
VSPN-16A

04.12.11 - X - 27 - Z

**RE 18318-10**

Edition: 03.2016

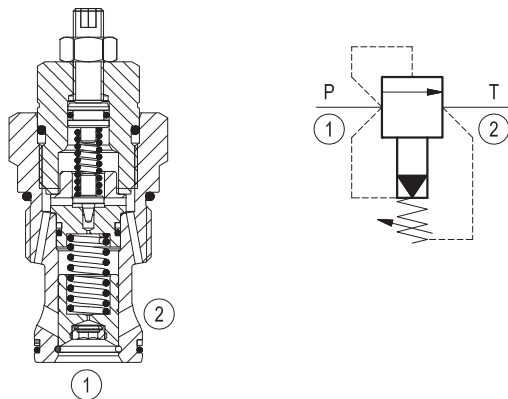
Replaces: 05.2010



Technical data	
Max. operating pressure port 1 (P)	420 bar (6000 psi)
Max. pressure admitted port 2 (T)	140 bar (2000 psi)
Flow range	8 - 300 l/min (2 - 79 gpm)
Max. internal leakage <sup>1)</sup>	350 cm <sup>3</sup> /min. (21 cu.in./min.)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	108 - 122 Nm (80 - 90 ft-lbs)
Weight <sup>2)</sup>	0.45 kg (0.99 lbs)
Cavity	CA-16A-2N (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit <sup>3)</sup>	Code: RG16A2010520100 material no: R901111386
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 position	No restrictions
Other Technical Data	See data sheet 18350-50

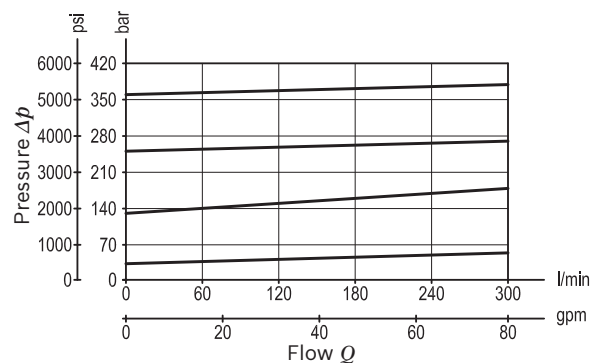
### Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the conical, pilot-stage poppet from its seat. This action exhausts oil above the main-stage piston (spool type), allowing it to shift and provide relief flow through 2 to tank. Pressure at 2 is additive to the relief setting of the valve. Pilot operation is protected from contamination by a filter screen at the bottom of the main piston.



- 1) Measured at 200 bar (2900 psi)
- 2) Standard version X=03 type
- 3) Only external seals for 10 valves

### Characteristic curve



**Ordering code**

<b>04.12.11</b>	<b>X</b>	<b>27</b>	<b>Z</b>	<b>00</b>	<b>*</b>
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Relief, pilot operated spool type

Adjustments

**03** O-Ring seal on adjust screw

**04** Handknob and locknut

**27** Common cavity, Size 16

Series 0/A to L  
unchanged performances and dimensions

Version and options standard

		SPRINGS		
		Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) Q=5 l/min
for X= 03	<b>10</b>	35-140 (500-2000)	48 (696)	100 (1450)
	<b>20</b>	70-280 (1000-4000)	88 (1276)	200 (2900)
	<b>35</b>	140-420 (2000-6000)	140 (2030)	350 (5000)
for X= 04	<b>35</b>	35-350 (500-5000)	66 (957)	350 (5000)

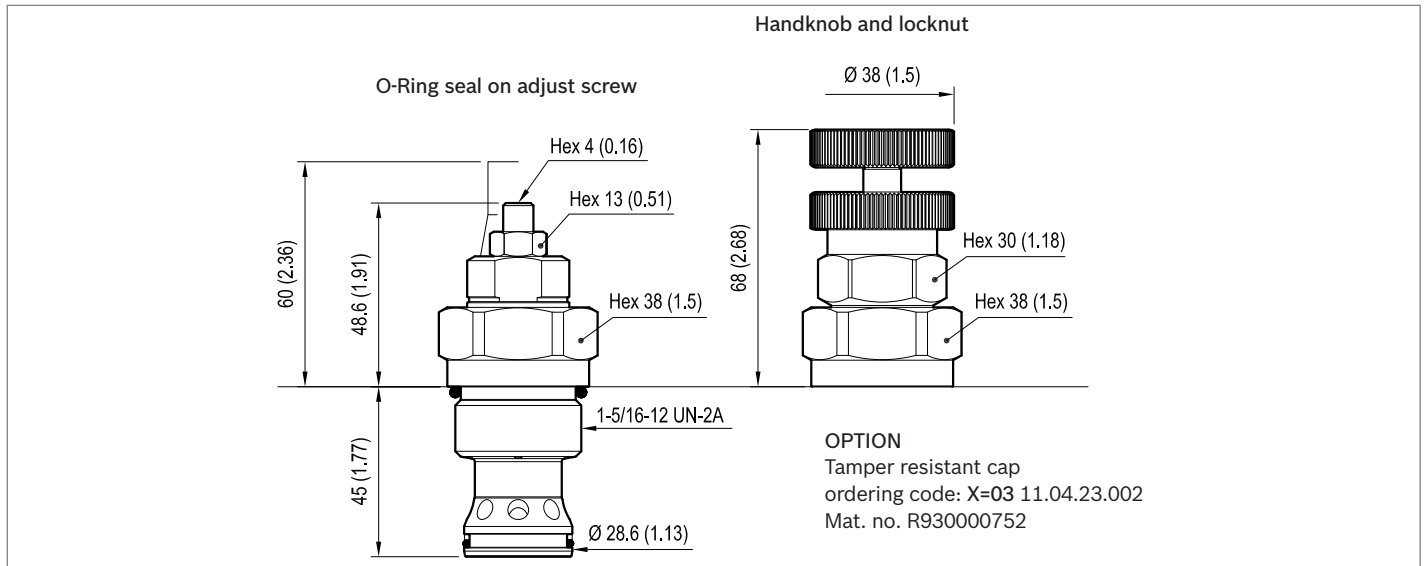
**Note:** Special settings available. Contact factory authorized representative for ordering code.

**Preferred types**

Type	Material number
041211032710000	R930001025
041211032720000	R930001026
041211032735000	R930001027
041211042735000	R930001024

Type	Material number

**Dimensions**



**Bosch Rexroth Oil Control S.p.A.**

Via Leonardo da Vinci 5  
P.O. Box no. 5  
41015 Nonantola – Modena, Italy  
Tel. +39 059 887 611  
Fax +39 059 547 848  
compact-hydraulics-cv@boschrexroth.com  
www.boschrexroth.com/compacthydraulics

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