

Relief, pilot operated spool type

Common cavity, Size 12

VSPN-12A

04.12.10 - X - 57 - Z

RE 18318-09

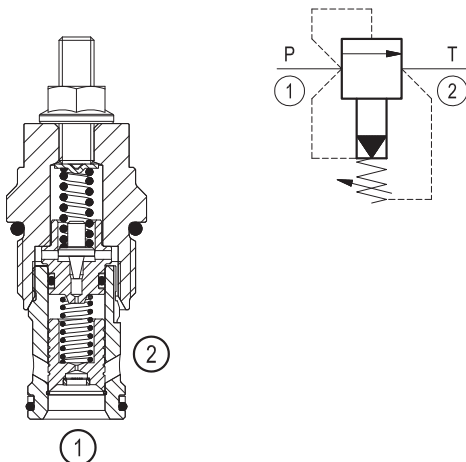
Edition: 10.2018

Replaces: 03.2016



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.



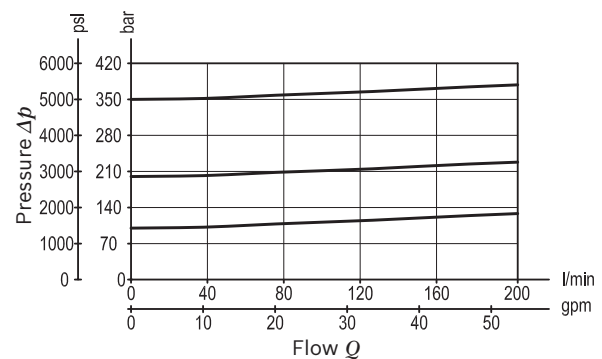
Technical data

Max. operating pressure port 1 (P)	420 bar (6000 psi)
Max. pressure admitted port 2 (T)	140 bar (2000 psi)
Flow range	5 - 200 l/min (1.3 - 53 gpm)
Max. internal leakage ¹⁾	350 cm ³ /min. (21 cu.in./min.)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	81 - 95 Nm (60 - 70 ft-lbs)
Weight	0.2 kg (0.5 lbs)
Cavity	CA-12A-2N (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG12A2010520100 material no: R901111377
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /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

1) Measured at 200 bar (2900 psi)

2) Only external seals for 10 valves

Characteristic curve



Ordering code

04.12.10	X	57	Z	00	*
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Adjustments

03 Leakproof hex. socket screw

57 Common cavity, Size 12

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
10	35-140 (500-2000)	48 (696)	100 (1450)
20	70-280 (1000-4000)	88 (1276)	200 (2900)
35	140-420 (2000-6000)	140 (2030)	350 (5000)

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

Preferred types

Type	Material number
041210035710000	R930000334
041210035720000	R930000335
041210035735000	R930000336

Type	Material number

Dimensions

Leakproof hex. socket screw

Technical drawing of the VSPN-12A relief valve. The drawing shows a side view of the valve with various dimensions and specifications. The main body has a diameter of Ø 22.22 (0.88) mm. The top section has a diameter of Ø 32 (1.26) mm. The total height of the valve is 48 (1.89) mm. The height of the top section is 42.5 (1.67) mm. The height of the bottom section is 45 (1.77) mm. The drawing also shows the following specifications: Hex 4 (0.16) mm, Hex 13 12-15 Nm, Hex (0.51) (9-11) ft-lb, Hex 24 (0.94) mm, 1 1/16-12 UN-2A, and an option for a tamper resistant cap with ordering code 11.04.23.002 and material number R930000752.