

Logic element, pressure compensator
with dynamic load sense
Common cavity, Size 16

VRLA-16A-D

04.84.10 - X - 27 - Z

RE 18321-84

Edition: 03.2016

Replaces: 10.2009

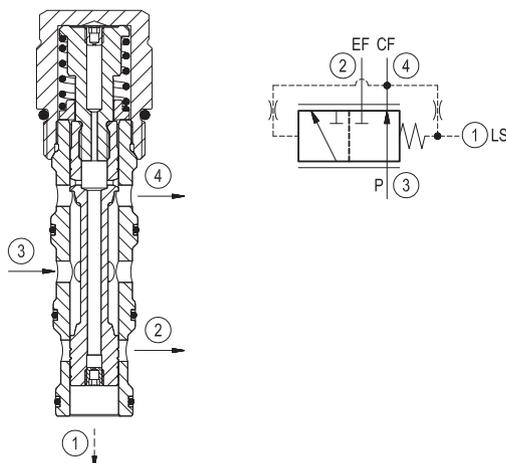


Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. inlet flow	160 l/min. (42 gpm)
Max. priority flow	140 l/min. (37 gpm)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	108 - 122 Nm (80 - 90 ft-lbs)
Weight	0.5 kg (1.1 lbs)
Cavity	CA-16A-4N (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ¹⁾	Code: RG16A4010530100 material no: R930000973
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	No restrictions
Other Technical Data	See data sheet 18350-50

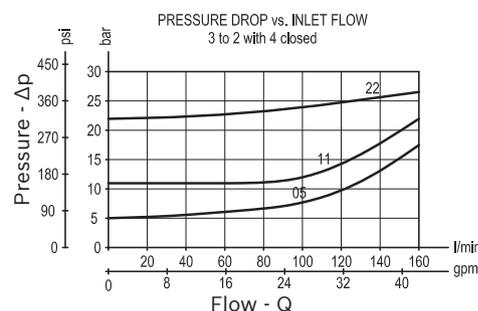
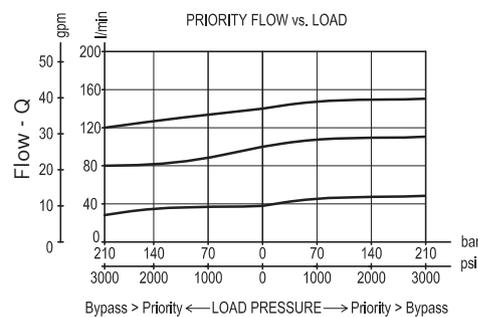
1) Only external seals for 10 valves

Description

The valve delivers priority flow, from 0 to max. available, on demand to port 4, while compensating for load changes downstream. In neutral, all input flow at 3 is given to the priority port 4. Pressure at 4 is applied to the spool against a spring force so that increasing pressure causes increasing by-pass of input flow to port 2. Load sense pressure at port 1, obtained between the downstream control and the load, assists the spring, and moves the spool back toward supplying priority flow. Comparison between priority outlet and LS pressure seeks a constant differential pressure over the control valve. As load and flow control change, the priority flow is increased or decreased to satisfy the demand establishing that differential. An orifice connects the priority outlet port and the spring chamber, giving a small pressure assist to the spring, enhancing response time to provide priority flow in the event that load sense pressure momentarily drops.



Characteristic curve



Ordering code

04.84.10	X	27	Z	00	*
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Logic element, pressure compensator with dynamic load sense

Series 0/A to L
unchanged performances and dimensions

Version and options standard

LS orifice diameter mm (inches)

05	0.5 (0.02)
06	0.6 (0.02)
08	0.8 (0.03)
10	1.0 (0.04)

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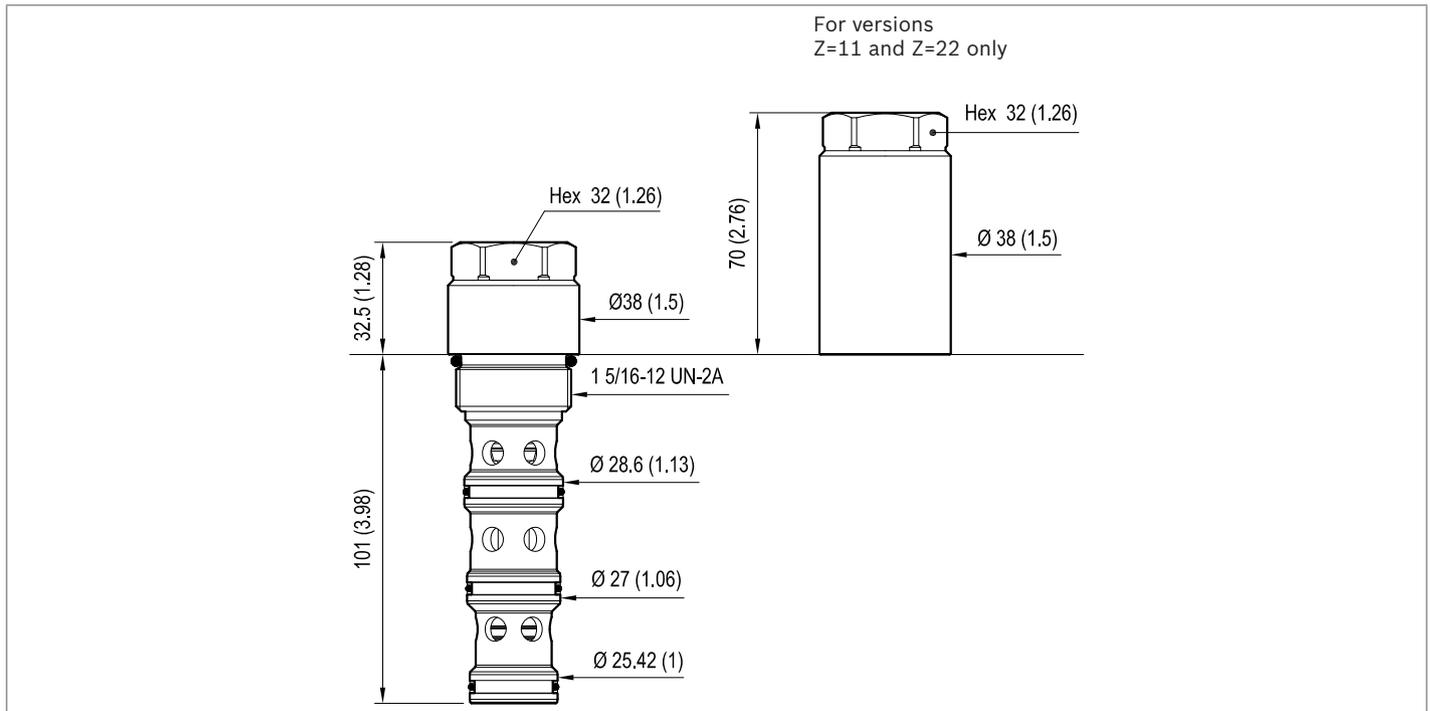
SPRINGS	
Bias spring bar (psi)	
05	5.5 (80) ± 20% for X=06, 08, 10
11	11 (160) ± 15% for X=05, 08, 10
22	22 (320) ± 15% for X=05, 08, 10

Preferred types

Type	Material number
048410052711000	R930001084
048410052722000	R930001085
048410062705000	R930001088
048410082705000	R930001090
048410082711000	R930001091

Type	Material number
048410082722000	R930001092
048410102705000	R930001094
048410102711000	R930001095
048410102722000	R930001096

Dimensions



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