

# Logic element, pressure compensator with static load sense Common cavity, Size 12

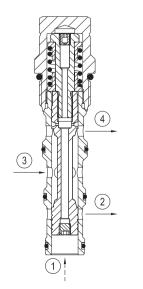
VRLA-12A-S 04.84.09.00.57 - Z

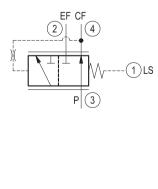
**RE 18321-87**Edition: 07.2017
Replaces: 03.2016



## 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.

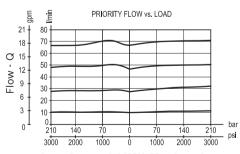




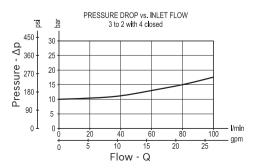
Technical data		
Max. operating pressure	350 bar (5000 psi)	
Max. inlet flow	100 l/min. (26 gpm)	
Max. priority flow	80 l/min. (21 gpm)	
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)	
Installation torque	81 - 95 Nm (60 - 70 ft-lbs)	
Weight	0.32 kg (0.71 lbs)	
MTTFD	150 years see RE 18350-51	
Cavity	CA-12A-4N (see data sheet 18325-70)	
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory	
Seal kit <sup>1)</sup>	Code: RG12A4010530100	
	material no: R930001660	
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 18350-50	

<sup>1)</sup> Only external seals for 10 valves

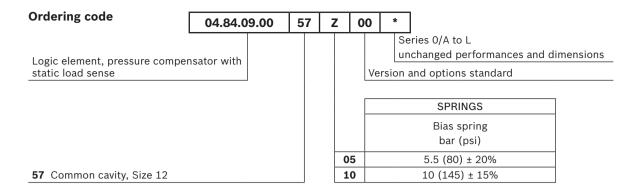
### Characteristic curve



Bypass > Priority ← LOAD PRESSURE → Priority > Bypass



RE 18321-87/07.2017, Bosch Rexroth Oil Control S.p.A.

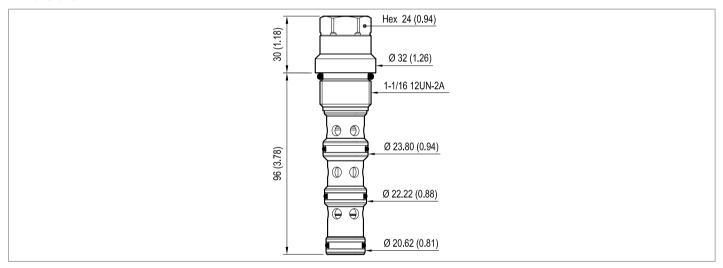


### **Preferred types**

Туре	Material number	-
048409005705000	R930008062	
048409005710000	R930001081	

Туре	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 ® This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging. Subject to change.