

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

VRLA-12A-D

04.84.10 - X - 57 - Z

**RE 18321-83**

Edition: 07.2017

Replaces: 03.2016

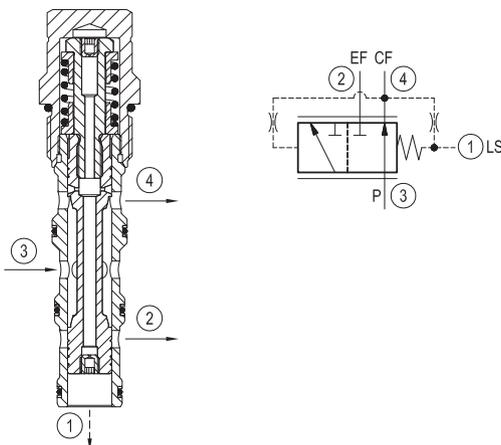


Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. inlet flow	100 l/min. (26 gpm)
Max. priority flow	80 l/min. (21 gpm)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	81 - 95 Nm (60 - 70 ft-lbs)
Weight	0.32 kg (0.71 lbs)
MTTFD	150 years see RE 18350-51
Cavity	CA-12A-4N (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

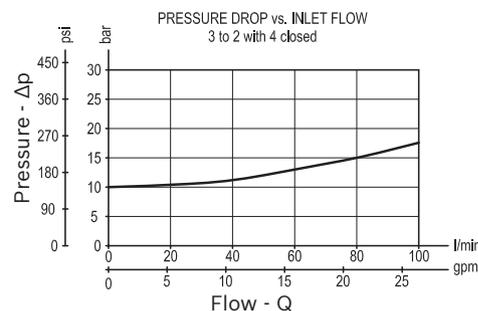
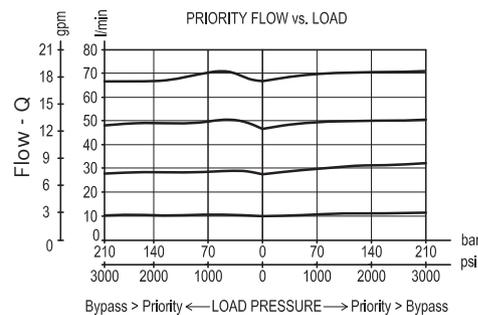
1) Only external seals for 10 valves

**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**

<b>04.84.10</b>	<b>X</b>	<b>57</b>	<b>Z</b>	<b>00</b>	<b>*</b>
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Logic element, pressure compensator with dynamic load sense

Series O/A to L unchanged performances and dimensions

Version and options standard

LS orifice diameter mm (inches)

<b>05</b>	0.5 (0.02)
<b>07</b>	0.7 (0.03)
<b>10</b>	1.0 (0.04)

	SPRINGS
	Bias spring bar (psi)
<b>10</b>	10 (145) ± 15%

**57** Common cavity, Size 12

**Preferred types**

Type	Material number
048410055710000	R930001086
048410075710000	R930001089
048410105710000	R930001097

Type	Material number

**Dimensions**

