## Rexroth Bosch Group

# Pressure reducing and relieving, pilot operated spool type Common cavity, Size 10

### VRPX-10A



### Description

Initially, flow passes freely from 2 to 1. When the pressure at 1 exceeds the pressure setting, the conical poppet in the upper, pilot stage is lifted from its seat. This allows the main-stage piston to shift, restricting input flow at 2. This increases the pressure drop through the valve and maintains consistent pressure at 1. The spring chamber is drained at 3 to prevent a build-up of back-pressure against the spool. Additionally, if pressure at 1 rises above the pressure setting, flow is relieved to 3 until the setting is re-attained.





04.93.07 - X - 85 - Z

RE 18318-56

Edition: 03.2016 Replaces: 07.2012

Technical data		
Max. operating pressure port 2 (P)	350 bar (5000 psi)	
Max. pressure admitted port 1 (A)	280 bar (4000 psi)	
Max. flow	60 l/min (16 gpm)	
Standard internal pilot orifice diameter	0.6 mm	
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)	
Installation torque	41 - 47 Nm (30 - 35 ft-lbs)	
Weight <sup>1)</sup>	0.2 kg (0.44 lbs)	
Cavity	CA-10A-3N (see data sheet 18325-70)	
Lines bodies and standard	Please refer to section "Hydraulic	
assemblies	integrated circuit" or consult factory	
Seal kit <sup>2)</sup>	Code: RG10A3010520100	
	material no: R901111369	
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm²/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) Standard version X=03 type

2) Only external seals for 10 valves

#### **Characteristic curve**





representative for ordering code.

#### **Preferred types**

Туре	Material number	Туре	Material number
049307038505000	R930006982		
049307038510000	R901104118		
049307038520000	R901106468		
049307048535000	R930005596		

#### 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.