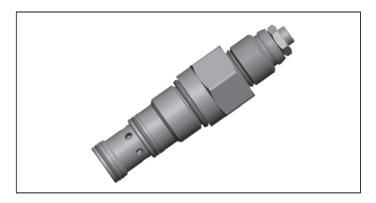


# Counterbalance, vented guided poppet type Common cavity, Size 12

VBST-12A

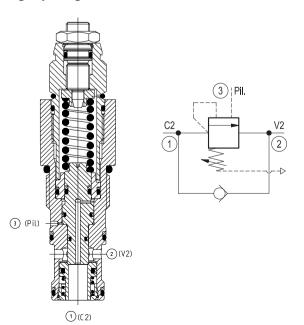
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**RE 18320-13**Edition: 07.2023
Replaces: 03.2016



# Description

When pressure at 2 rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from 2 to 1. When load pressure at 1 rises above the pressure setting, the direct-acting, relief function is activated and flow is relieved from 1 to 2. With pilot pressure at 3, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from 1 to 2. The spring chamber is vented to atmosphere allowing operation of all functions independent of back-pressure at 2. Valve design prevents spring going solid and complete unscrewing during adjusting.

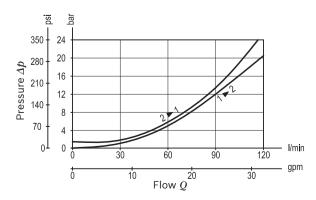


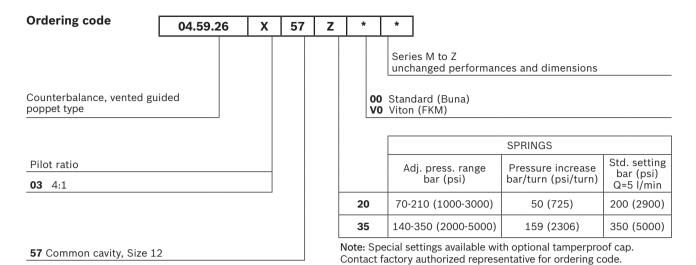
| Technical data                            |  |  |  |
|---|--|--|--|
| Max. operating pressure                   | 350 bar (5000 psi)   |  |  |
| Max. flow                                 | 120 l/min (32 gpm)   |  |  |
| Max. internal leakage <sup>1)</sup>       | 15 drops/min.  |  |  |
| Fluid temperature range                   | -30 to 100 °C (-22 to 212 °F)  |  |  |
| Installation torque                       | 81 - 95 Nm (60 - 70 ft-lbs)  |  |  |
| Weight                                    | 0.39 kg (0.86 lbs)   |  |  |
| MTTFD                                     | 150 years see RE 18350-51  |  |  |
| Cavity                                    | CA-12A-3C (see data sheet 18325-70)  |  |  |
| Adjustment                                | according to ISO 4413 with sealed<br>adjustment screw to prevent oil<br>leakage during adjustment                  |  |  |
| Salt spray test                           | 500h according to DIN EN ISO<br>9227:2017-07   |  |  |
| Lines bodies and standard assemblies      | Please refer to section "Hydraulic integrated circuit" or consult factory  |  |  |
| Seal kit <sup>2)</sup>                    | Code: RG12A9010520100  |  |  |
|   | material no: R901111379  |  |  |
| Fluids                                    | Mineral-based or synthetics with<br>lubricating properties<br>at viscosities of 10 to 500 mm <sup>2</sup> /s (cSt) |  |  |
| Recommended degree of fluid contamination | Nominal value max. 10µm (NAS 8) /<br>ISO 4406 19/17/14   |  |  |
| Installation position                     | No restrictions  |  |  |
| Other Technical Data                      | See data sheet 18350-50  |  |  |

Pressure setting: at least 1.3 times the load induced pressure and maximum 1.5 times catalogue max nominal setting.

- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

### **Characteristic curve**



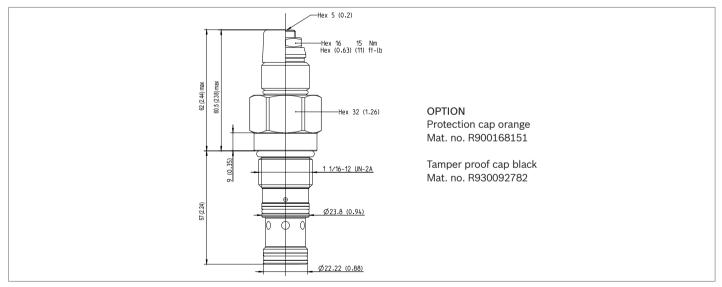


**Preferred types** 

| Туре            | Material number |
|-----------------|-----------------|
| 04592603572000M | R930081332      |
| 04592603573500M | R930081333      |

| Туре | Material number |
|------|-----------------|
|      |                 |
|      |                 |

# **Dimensions**



## Bosch Rexroth Oil Control S.p.A.

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