RE 18316-65/10.09

1/2

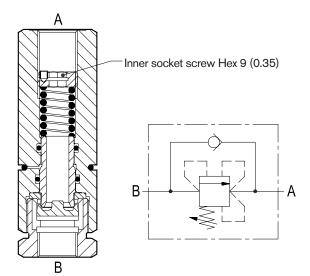
Sequence valves

Direct acting poppet type pressure compensated



VSQ-CC-LM (G1/2)

05.21.17.00-Y-Z



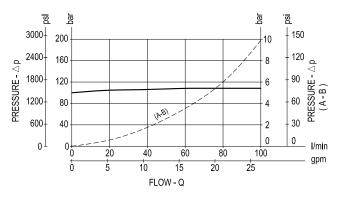
Description

They are composed by a pressure compensated relief valve (opening "B-A"), and by an annular check valve "A-B". Initially the flow goes to a first line connected in parallel to the B side, not shown here, and pressure increases until reaching the selected relief setting; then the relief valve opens and the second circuit is supplied out of A port, while the actuator connected to the B side remains pressurized.

The valve applies a balanced relief piston allowing relief operation at the valve setting independent of back-pressure at A (back-pressure is not additive). With line pressure equal or higher than setting, after valve opening, the full pressure is transferred from B to A.

The incorporated check valve allows the reverse motion of the actuators which happens without specific control of the sequence, only depending from the load/pressure conditions.

Performance



Advantages

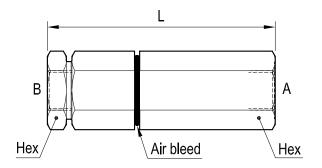
- -Very compact design and inline mounting for space saving.
- -Mounting position is unrestricted.
- -Low Δp for B-A flow.

Technical data

| Port A-B | Pressure P max bar (psi) | Flow Q max I/min (gpm) | Weight kg (lbs) | |
|-------------|--------------------------|-------------------------------------|--------------------|--|
| G 1/2 | 350 (5000) | 100 (27) | 0.38 (0.84) | |

For a good performance, the pressure in the secondary circuit should not drop below 20 bar (290 psi).

Dimensions



Ports size / Dimensions

| Υ | Port A-B | L mm (inches) | Hex mm (inches) |
|----|-------------|---------------------|-----------------------|
| 03 | G 1/2 | 120.5 (4.74) | 36 (1.42) |

| Springs | | | | | | | |
|---------|-----------------------------------|--|--|---------------|--|--|--|
| Z | Adj. press. range bar (psi) | Pres. increase bar/turn (psi/turn) | Std. setting bar (psi) Q=5 I/min | Ordering code | | | |
| 10 | 50-140 (725-2000) | 20 (290) | 100 (1450) | 03.51.01.251 | | | |

The relief setting is adjustable by turning the internal ring nut (hexagon 9 mm): to turn the nut loosen first the little locking screw, then tighten it again after the adjustment. For the spring selection, refer to the table.

Applications

They are employed to control the sequence of two or more cylinders or motors, when the second actuator requires less pressure to move, but the pressure needed is not negligible. The pressure at A needed to operate the second actuator is not additive to the relief setting and this results also in energy saving. The incorporated check valve allows free reverse motion without specific control of the sequence.

Ordering code

| | 05.21.17.0 | 0 | Υ | Z | | |
|------------------------------------|------------|---|----|---------|---------------------------------|---------------------|
| Direct acting poppet type pressure | | | | | Sp | rings see table "Z" |
| compensated | | | Po | rts siz | size / Dimensions see table "Y" | |

| Type 052117000310000 | Material number R930001451 | Туре | Material number | Туре | Material number |
|-----------------------------|-------------------------------|------|-----------------|------|-----------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Bosch Rexroth Oil Control S.p.A. Fimma Division (Rge 2) Via G. Bovio, 7 Z.l. Mancasale 42124 Reggio Emilia, Italy Tel. +39 0522 517 277

Tel. +39 0522 517 277
Fax +39 0522 517 125
cartridges@oilcontrol.com
www.boschrexroth.com

© 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.