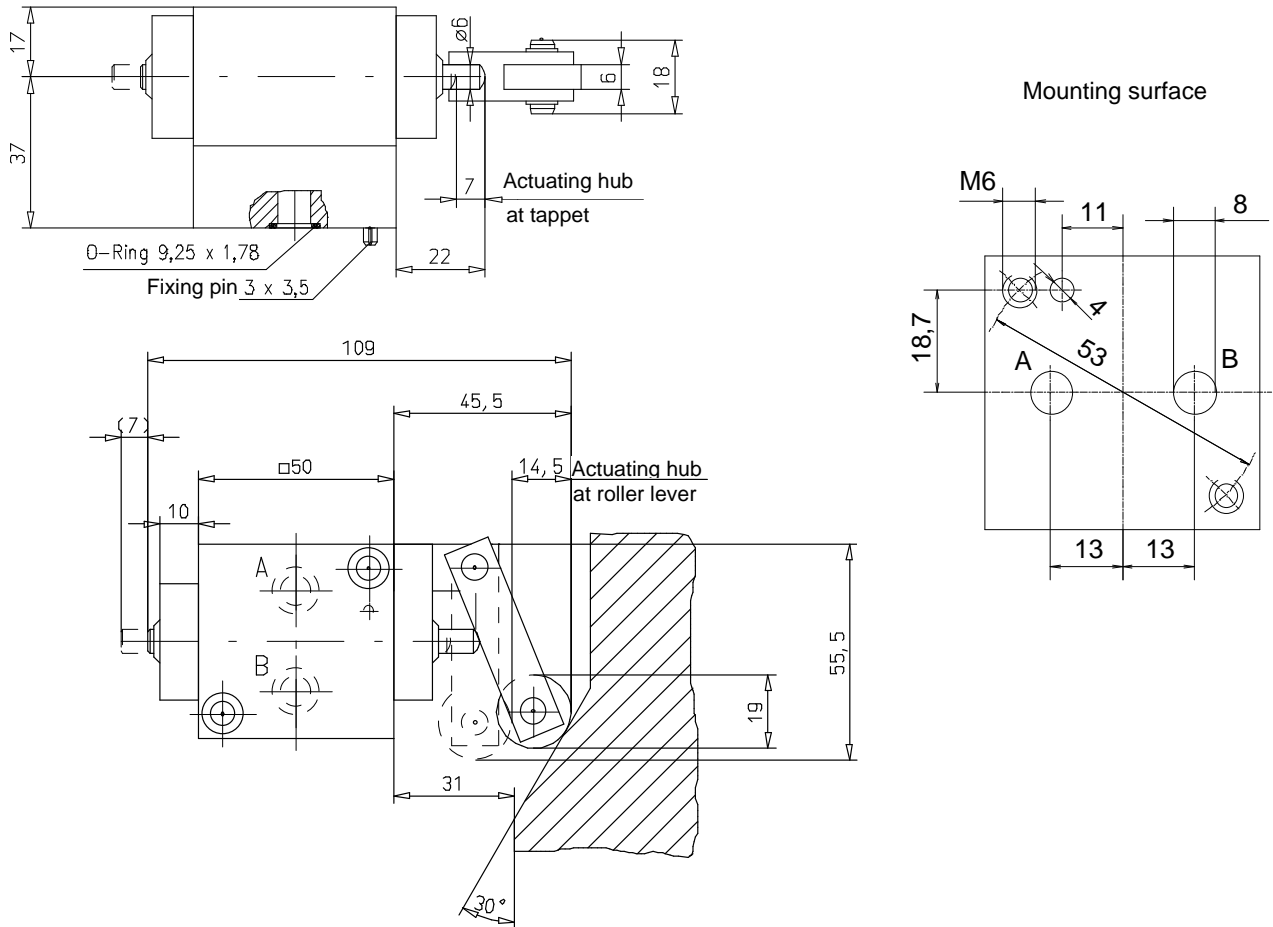


Throttle orifice are flow valves in which the volume flow depends on the throttle valve cross section and differential pressure. The control valve can be adjusted by means of orifice to ensure that, as far as possible, the equipment's efficiency by viscosity.

FEATURES

- 6 orifice size to set
- Valve static: closed or open
- volume flow tappet guide: progressive
- Assembly on connection plates with pipe joints or control block
- with or without by-pass check valve
- Standard sealing material Buna N (NBR), other materials possible
- For the volume-flow control in both flow directions, volume flow rectifier plate are available



ORDER INFORMATION

The scope includes the O rings at the mounting surface of the valve two fastening screws M6 x 55 DIN 912 -10.9 (M_A = 12,5 Nm)

Name — **Throttle orifice** **13 C** **R** **6** **G** **T** **M15**

Type series

Series code letter

By-pass check valve: R = with; **without** = without Code

Orifice size: 1; 2; 3; 4; 5; 6

Valve function: G = closed neutral position; O = open neutral position

type of Actuating: T = with lever; **without** = without Code

Supplementary data for special models

e.g. special sealing Viton (FKM) = **M 15**

ACCESSORY

Connecting plates:

see dimension sheet 9-74-020-0047

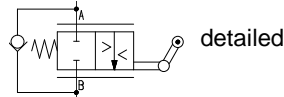
Flow rectifier plate:

see dimension sheet 71BZ (9-74-071-1004)

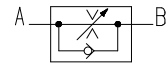
CHARACTERISTICS

1. General

Symbol (example)



detailed



simplified

Typen
Design

13 CR - X - G T
Adjustment throttle:
Check valve:

13 CR - X - XX
flat rotary valve with triangular notch
spring-loaded ball valve

Weight
Mounting position
Directing of volume flow
Ambiente temperature

1 kg
any
A to B; B to A unthrottled back flow with check valve
-25°C to +80°C

2. Hydraulic characteristics

Rated pressure / max. pressure

210 bar, for orifice size 4 - 6 max. permitted pressure difference 100 bar

Hydraulic fluid

Hydraulic oil according to DIN 51 524 and 51 525 and flame resistant hydraulic fluids of the group HFA, HFB and HFC. Use anhydrous and synthetic flame resistant hydraulic fluids take special sealing

Hydraulic fluid temperature range

-20°C to +80 °C

Viscosity range

5 - 350 mm²/s

Max. permissible volume flow via check valve

30 l/min

Contamination level / filtering

General permit table class 16/13 according to ISO 4406 or 7 according to NAS 1638 (recommended filter: minimum retaining rate $\beta_{5-10} \geq 75$)

3. type of actuation

mechanical via tappets

Adjusting force

50 - 100 N (according to operating pressure)

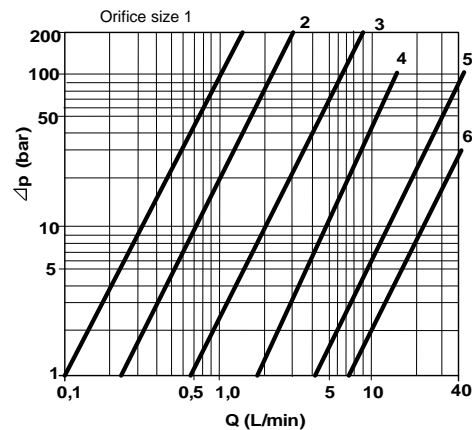
Adjusting hub

7 mm at tappet

CHARACTERISTICS

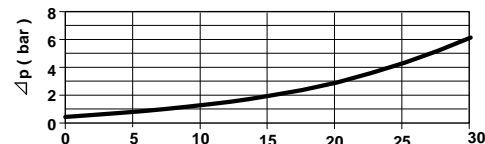
Δp -Q-characteristics; $\Delta p = f(Q)$

The volume flow dependency on the orifice size and pressure difference on the orifice, when the orifice is full open. Maximum orifice profiles of the orifice size in mm²:
1 = 0,1; 2 = 0,3; 3 = 1,0; 4 = 3,0; 5 = 8,3;
6 = 12,8



Δp -Q-characteristics; $\Delta p = f(Q)$

Fig. 2 shows the pressure loss of the valve for the volume flow direction B to through the by-pas return with the setting screen closed.



Valve description

1. Valve

With this valve the throttle profile can be adjusted between zero and the complied opening with a translation of 2:1. The throttle orifice is a flat slide and is useably like a shear-catch-principle so that a defined volume flow without leakage oil is achieved until very small values. For a wide range of application the rated flow is not affected by viscosity or contamination.

2. Materials

The valve components are made of structural steel. The external valve parts are black-finished, the tappet is not corrosion-resistant. All wear parts are hardened.

For applications in excess of the given specification, please contact Schiedrum.

All specified parameters are partially based on long user's experience and partly on measurements made in laboratories. The data are typical of the valve and can deviate in series. All measurements were carried out on a test stand with an oil viscosity of 36mm²/sec and a filter mesh of < 10 μm. All data given here should be used as description of the product only and they are not to understand as warranty in the sense of law.