

Lock valve Shuttle valve

$Q_{\max} = 50 \text{ l/min}$, $p_{\max} = 350 \text{ bar}$

ball type,

Type series: DRKE-G-08-...



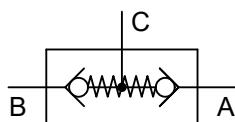
- Screw-in cartridge valve
- Can replace two check valves as a double check valve
- Lower Δp compared to check valves made by other manufacturers
- High pressure rating
- No pressure loss during load changes

Description

The DRKE series shuttle valve is characterized by very high pressure load capacity and extremely low Δp . The 3-way shuttle valve shuts off whichever of the inlet ports A or B is at the lower pressure. Port C is thus always connected to the higher pressure. The shuttle valve in ball-type design is very robust, extremely leak-proof and insensitive to contamination. Valve

seat, ball and body are hardened. The valve seat, ball, and housing are hardened. Sealing of the valve in the installation bore is achieved by a metallic sealing edge and a back-up ring. The valve is available in nominal size 04 (with rotor seal) and nominal size 08 (with O-ring and back-up ring).

Symbol



Technical data

General characteristics	Description, value, unit
Function group	Lock valve
Function	Shuttle valve
Design	Screw-in cartridge valve

General characteristics		Description, value, unit
Characteristic		ball type
Construction size		nominal size 08
Thread size		G 3/8"
Mounting attitude		unrestricted
Weight		0.034 kg
Tightening torque steel		30 Nm

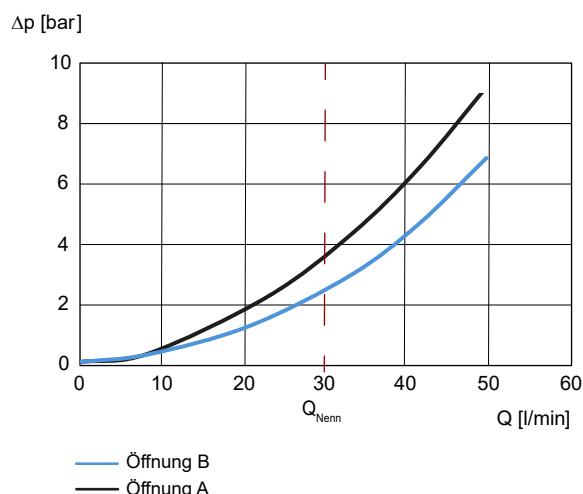
Hydraulic characteristics		Description, value, unit
Maximum operating pressure		350 bar
Maximum flow rate		50 l/min
Nominal flow rate		30 l/min
Flow direction		see symbol
Hydraulic fluid		HL and HLP mineral oil according to DIN 51 524; other fluids on request!
Minimum fluid temperature		- 20 °C
Maximum fluid temperature		+ 110 °C
Viscosity range		10 ... 500 mm ² /s (cSt)
Minimum fluid cleanliness (cleanliness class according to ISO 4406:1999)		class 20/18/15

i **NOTE!**
For other values please contact Bucher Hydraulics.

Performance graphs

measured with oil viscosity 33.0 mm²/s (cSt)

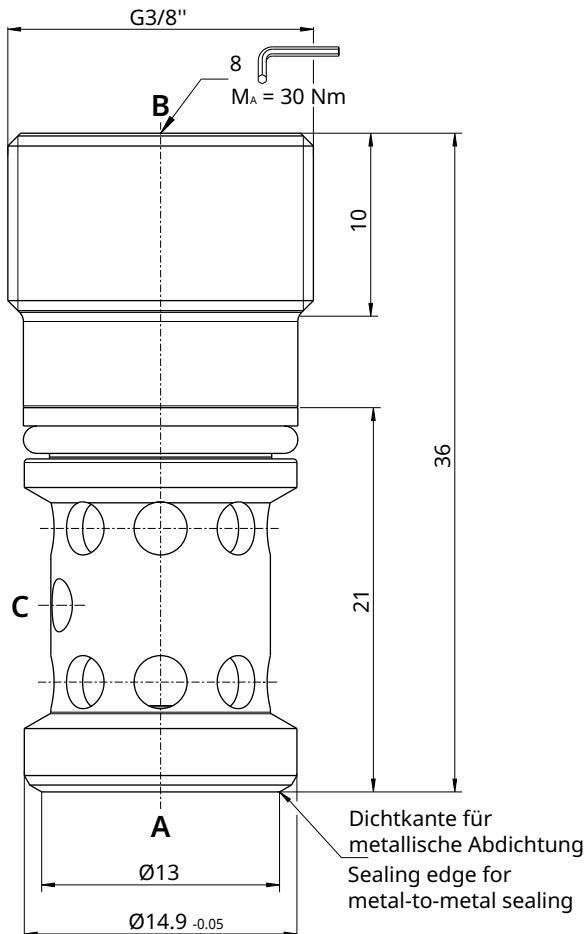
$\Delta p = f(Q)$ Pressure drop-flow rate characteristic



Dimensions and sectional view

Beispiel für die Maßeinheit:
Example for the dimensional units:
0.79 = 0.79 mm millimeter

Die angegebenen Maße gelten für den eingebauten Zustand.
The dimensions specified apply to the mounted state.



Für Bohrungsform WRG-01-08
For cavity WRG-01-08

Installation information



NOTE!

When fitting the screw-in cartridge valve, use the specified tightening torque. The value can be found in the chapter "Technical data".
Orifices or nozzles are to be placed after the check valve. If this is not possible, a right-angled bore must be designated between the check valve and the nozzle. (see data sheet 170-P-059000).



ATTENTION!

When fitting the valve, make sure that it is firmly seated on the sealing surface and that it is not deformed by the use of excessive force.

Application Notes



NOTE!

The maximum operating pressure must not be exceeded even when pressure peaks occur. In applications such as accumulator circuits, where sudden pressure can be applied to the valve in the free-flow direction, ensure that the specified flow ratings are not exceeded. Buyers bear the sole responsibility for ensuring that the valve is suitable for their applications and must be substantiated by trials or testing, if necessary.

Ordering code

Ex. **DRKE** - **G** - **08** -

DRKE = double check valve, ball type, screw-in design

G = screw-in thread G3/8"

08 = nominal size 08, Q_{Nenn} 30 l/min

(blank) = NBR (nitril-butadien-rubber / BUNA) seals (**standard**)

V = FKM (fluorocarbon rubber / VITON) seals

Related data sheets

Reference	Description
170-P-059000	Using nozzles or orifices before a Check Valve
170-P-080082	Cavity WRG-01-08