

- Shuttle valve size 04 ... size 10
- Spherical poppet-type, Screw-in design
- up to 50 l/min, 350 bar (500 bar on request)



Description

The WRVCG units are screw-in shuttle valves with mounting threads from G1/8" to G1/2". Other thread forms are available on request.

The valve closes the ports A or B depending on their pressure. Port C is always connected to the higher pressure.

The units are spherical poppet valves with hardened seats and poppet.

An external o-ring with backup ring seals the leakage path between the valve and cavity wall.

Advantages:

- virtually leak-free
- high pressure rating
- compact construction

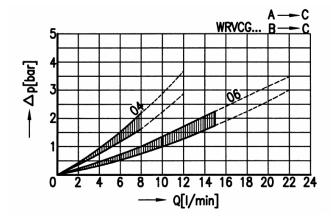
Technical Data

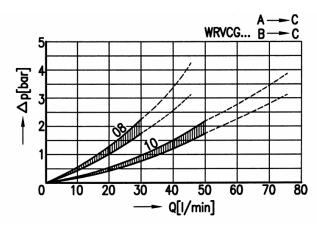
General Specifications	WRVCG
Design:	spherical poppet design
Mounting method:	screw-in cartridge
Size:	nominal 04 10 (see table Dimensions)
Mounting position:	unrestricted

Hydraulic Specifications				
No-flow direction:	$A \rightarrow B, B \rightarrow A \text{ (see symbol)}$			
Max. pressure:	350 bar (500 bar on request)			
Max. flow:	50 l/min			
Fluid:	hydraulic oils HL and HLP according DIN 51524			
Temperature range:	-30°C +80°C			
Viscosity range:	10 500 mm²/s (cSt)			
Min. fluid cleanliness:	18/14 to ISO 4406 / CETOP RP70H 8 9 to NAS 1638			

Characteristics

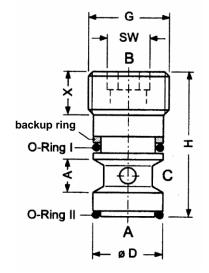
oil viscosity 33 mm²/s (cSt)

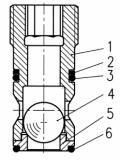






Dimensions



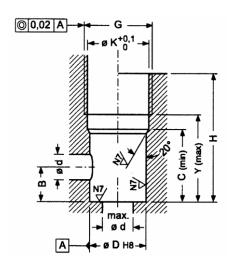


Item	Qty.	Description				
1	1	Valve body				
2	1	Backup ring				
3	1	O-ring I				
4	1	Valve poppet				
5	1	Valve seat				
6	1	O-ring II				

	Q _{Nom.} = Q _{max} (I/min)	G	øD	н	Α	х	sw	Tightening torque (Nm)	o-ring I (1 pce)	o-ring II (1 pce)	Back-up ring PTFE (1 pce)
WRVCG-04	8	G1/8"	8,5	24	4	7	5	5	6,2 x 1,0	6,2 x 1,0	8,5 / 6,5 x 1,0
WRVCG-06	15	G1/4"	11,5	30	6	10	6	10	9,0 x 1,0	8,0 x 1,5	11,5 / 9,8 x 1,0
WRVCG-08	30	G3/8"	15,0	36	8	10	8	20	12,0 x 1,5	12,0 x 1,5	15,0 / 12,3 x 1,0
WRVCG-10	50	G1/2"	18,5	45	10	12	10	40	15,0 x 1,5	15,0 x 1,5	18,5 / 15,8 x 1,0

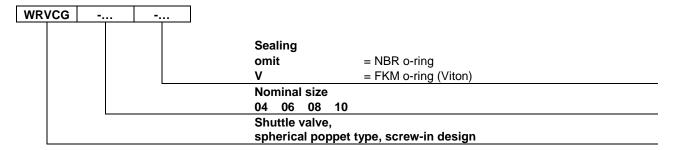
Cavity

	øK	ød	В	С	Υ
WRVCG-04	8,70	4	5,7	14,30	15,5
WRVCG-06	11,75	6	8,0	15,85	18,0
WRVCG-08	15,25	8	10,0	21,85	24,0
WRVCG-10	19,00	10	14,0	25,70	29,0





Type code



Options on request:

- with metric or UNF thread
- special materials
- customised design

Ordering example

- Shuttle valve, spherical poppet type, screw-in design
- Nominal size 06, G 1/4"

Type code WRVCG-06

Design and installation notes

The installation dimensions and tolerances must be maintained.

Use the specified tightening torque when fitting the valve. Special fitting tools (pin spanners) are available.

Referring to the free-flow direction, nozzles and orifices must not be situated directly before the check valve.

When fitting the valve, take particular care to ensure that:

- the valve is firmly seated on the sealing surface
- valve components are not deformed by the use of excessive force

Recommendation: before installing the valve, fit the $\mbox{O-ring}$ in the cavity.

Application notes

The maximum operating pressure must not be exceeded and any pressure peaks must be taken into consideration.

The specified nominal flow rate must not be exceeded. 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 selected products are suitable for their applications. Buyers normally establish this by undertaking qualification programs on test stands, or evaluating the performance of prototype machines or systems.