

# Check valve Shuttle

Q<sub>max</sub> = 2 gpm, p<sub>max</sub> = 3600 psi direct acting, ball type Type series: RWA-2...

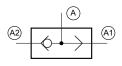


- Screw-in cartridge valve
- For cavity AE
- Untreated
- With two alternative inlets (the unused one is closed) and one outlet
- For drawing pilot oil from two separate power circuits

### Description

The cartridge shuttle valves, series RW..., are size 2, screw-in valves with a G1/8" mounting thread. They are designed on the proven ball/seat design. These valves are suitable for installation in control blocks

#### Symbol



and are used to draw pilot oil from two separate power circuits. The valve can be used as a logic element. For self-assembly, please refer to the section related data sheets.



# Technical data

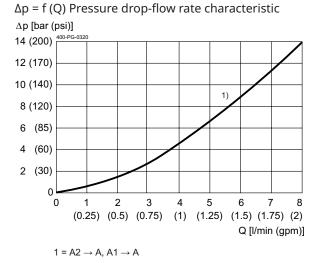
General Characteristics	Description, value, unit
Function group	Check valve
Function	Shuttle
Design	Screw-in cartridge valve
Controls	direct acting
Characteristic	ball type
Construction size	nominal size 2
Thread size	G 1/8"
Mounting attitude	unrestricted
Weight	0.022 lb
Cavity acc. factory standard	For cavity AE
Tightening torque steel	7 ft·lb
Tightening torque aluminium	7 ft·lb
Tightening torque tolerance	± 10 %
Minimum ambient temperature	- 13 °F
Maximum ambient temperature	+ 176 °F
Surface protection	Untreated
Available seal types	several seal types available, see ordering code
Seal kit order number	NBR: DS-190-N FKM: DS-190-V

Hydraulic Characteristics	Description, value, unit
Maximum operating pressure	3600 psi
Maximum flow rate	2 gpm
Flow direction	see symbol
Hydraulic fluid	HL and HLP mineral oil according to DIN 51 524; other fluids on request!
Minimum fluid temperature	- 13 °F
Maximum fluid temperature	+ 176 °F
Viscosity range	10 650 mm²/s (cSt)
Recommended viscosity range	15 250 mm²/s (cSt)
Minimum fluid cleanliness (cleanlineless class according to ISO 4406:1999)	class 20/18/15



# Performance graphs

measured with oil viscosity 33.0 mm<sup>2</sup>/s (cSt)

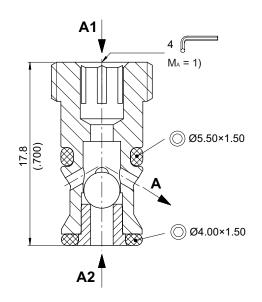


measured with on viscosity 55.0 min 75 (CSt)



## Dimensions and sectional view

Beispiel für die Masseinheit: Example for the dimensional units: 0.79 = 0.79 mm millimeter (.031) = 0.031" inch



#### Installation information



#### NOTE!

1) When fitting the screw-in cartridge valve, use the specified tightening torque. The value can be found in the chapter "Technical data".



#### ATTENTION!

Only qualified personnel with mechanical skills may carry out any maintenance work. Generally, the only work that should ever be undertaken is to check, and possibly replace, the seals. When changing seals, oil or grease the new seals thoroughly before fitting them.



**NOTE!** The seals are

The seals are not available individually. The seal kit order number can be found in the chapter "Technical data".



# Ordering code

		Ex.	R W A - 2 1
R	= check valve		
W	= shuttle function		
A Q Y R	<ul> <li>standard model according to valid data sheet (standard)</li> <li>special model after consultation</li> </ul>		
2	= nominal size 2		
(blank) V	<ul> <li>NBR (nitril-butadien-rubber / BUNA) seals (standard)</li> <li>FKM (fluorocarbon rubber / VITON) seals (special seals - please consult BUCHER)</li> </ul>		
1 9	= technical design no. (omit when ordering)		

## Related data sheets

Reference	Description
400-P-040011	Form tools
400-P-040121	Cavity AE

info.ch@bucherhydraulics.com

www.bucherhydraulics.com

© 2021 by Bucher Hydraulics AG Frutigen, 3714 Frutigen, Switzerland

All rights reserved.

Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.