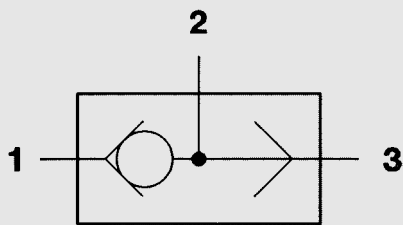


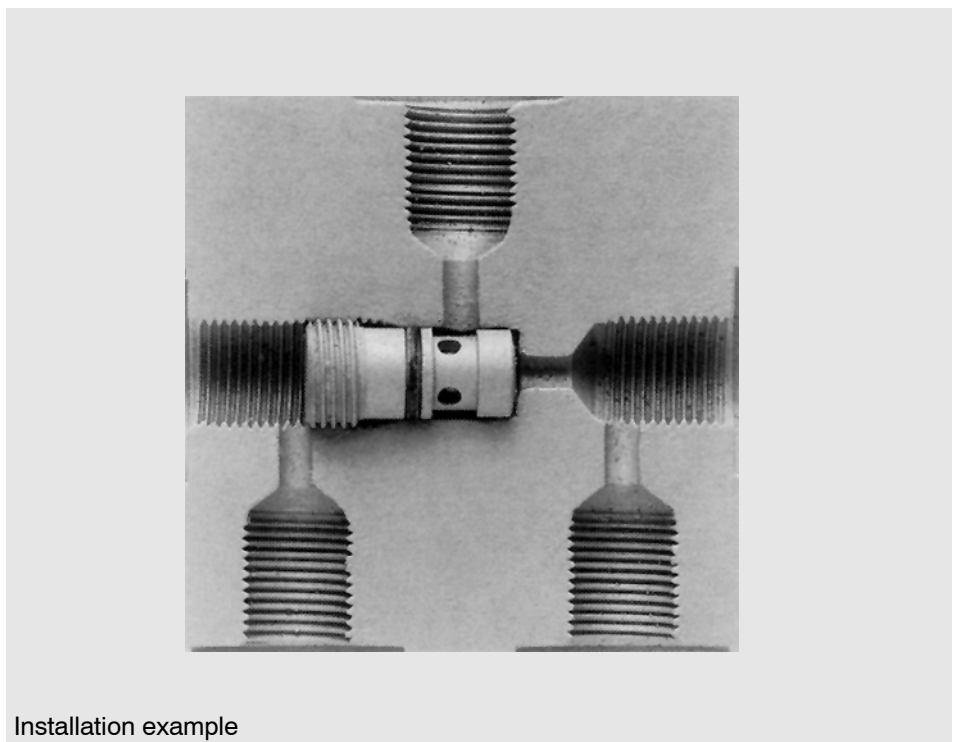
Shuttle Change-Over Valves WVE



up to 350 bar
up to 20 l/min



Cartridge valves



Installation example

1. DESCRIPTION

1.1. GENERAL

HYDAC shuttle valves WVE are shut-off valves for oil hydraulic systems with two inlets and one outlet. The inlet with the higher pressure is automatically connected to the outlet while the second inlet is shut off (DIN-ISO 1219).

1.2. FUNCTION

HYDAC shuttle valves WVE are cartridge valves with a ball-seat valve construction. Switching is automatic.

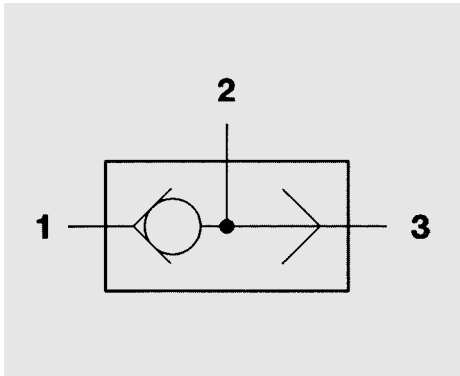
1.3. APPLICATION

HYDAC shuttle valves WVE are particularly suitable for fitting into block constructions, control units e.g. in 2-way cartridge valves, valve combinations, etc.

2. TECHNICAL SPECIFICATIONS

2.1. GENERAL

2.1.1. Designation and symbol Shuttle valve



2.1.2. Model code (also order example)

WVE - R 1/8 - 01 X

Shuttle valve

Connection size

R 1/8

R 1/4

other thread sizes
on request

Type

01 = standard

Series

(determined by manufacturer)

Standard models

Stock no. (=order no.)	Model code
710125	WVE-R1/8-01X
710126	WVE-R1/4-01X

Please quote stock no. when ordering.

Delivery for non-standard models is longer and the price is higher.

2.1.3. Type of construction

Ball seat valve

2.1.4. Type of mounting

Cartridge valve

2.1.5. Mounting position

Optional

2.1.6. Weight

R 1/8"... 5 g

R 1/4"...12 g

2.1.7. Flow direction

See hydraulic symbol

2.1.8. Ambient temperature range

Min. -20 °C

Max. +80 °C

2.1.9. Materials

Valve body: high tensile steel

Ball: roller bearing steel

Seal: compatible with hydraulic oil to DIN 51524, Part 1 and 2

2.1.10. Nominal size

R 1/8"...DN 2.5

R 1/4"...DN 4

2.2. HYDRAULIC DETAILS

2.2.1. Nominal pressure

$p_N = 350$ bar
across all ports

2.2.2. Switching overlap

Negative

2.2.3. Operating fluid

Hydraulic oil to DIN 51524
Part 1 and 2.

2.2.4. Temperature range (operating fluid)

Min. -20 °C

Max. +80 °C

2.2.5. Viscosity range

Min. 2.8 mm²/s

Max. 800 mm²/s

2.2.6. Filtration

Max. permissible contamination level to ISO 4406 Class 21/19/16, (NAS 1638, Class 10).

We recommend a filter with a minimum retention rate of $\beta_{20} \geq 100$.

The installation of filters and regular replacement of elements ensures correct functioning, reduces wear and tear and increases the service life.

2.2.7. Δp -Q graph

Pressure loss Δp dependent on flow rate Q, measured at $v = 36$ mm²/s and at $t_{oil} = 40$ °C.

