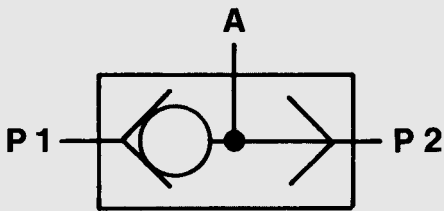


## Shuttle Valves WVT



Up to 350 bar  
Up to 80 l/min



Shuttle valves in T coupling

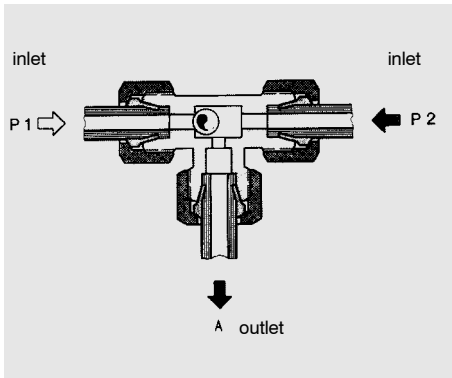
# 1. DESCRIPTION

## 1.1. GENERAL

HYDAC shuttle valves WVT... are shut-off valves with two inlets and one outlet. The inlet with the higher pressure is automatically connected to the outlet whilst the other inlet is shut off (DIN-ISO 1219).

## 1.2. FUNCTION

HYDAC shuttle valves WVT are of ball seat valve construction. The switching procedure is automatic.



## 1.3. APPLICATION

HYDAC shuttle valves WVT are particularly suitable for use in control circuits with pilot operated and remote controlled directional valves, with variable and control pumps and in logic circuits.

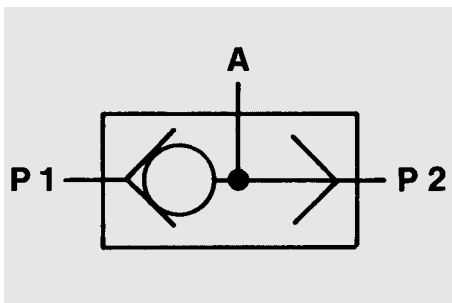
## 1.4. NOTE

Always follow coupling manufacturer's instructions when fitting to pipe.

# 2. TECHNICAL SPECIFICATIONS

## 2.1. GENERAL

### 2.1.1. Designation and symbol Shuttle valve



## 2.1.2. Model Code (also order example)

WVT - 6S - X

Shuttle valve

Type of connection

T = solderless coupling with compression fitting (T coupling)

Connection size

6 S }  
8 S } OD pipe  
10 S } use pipe to DIN 2391  
12 S }

Series

(Determined by manufacturer)

## Standard types

Stock No. (= order no.)	Model Code
710 133	WVT- 6 S-X
710 134	WVT- 8 S-X
710 140	WVT- 10 S-X
710 132	WVT- 12 S-X

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 Inline mounting

## 2.1.5. Mounting position Optional

## 2.1.6. Weights WVT- 6 S...135 g WVT- 8 S...155 g WVT- 10 S...210 g WVT- 12 S...280 g

## 2.1.7. Flow direction See hydraulic symbol

## 2.1.8. Ambient temperature range

min. -20 °C  
max. +80 °C

## 2.1.9. Material Steel

## 2.1.10. Surface treatment Valve body and coupling nut electrogalvanized to DIN 50961 - Fe/Zn r 8 C

## 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. Pressure fluid

Hydraulic oil to DIN 51524 Part 1 & 2.  
For other media, please contact our Technical/Sales Department.

### 2.2.4. Temperature range (fluid)

min.  $-20$  °C  
max.  $+80$  °C

### 2.2.5. Viscosity range

min.  $2.8$  mm<sup>2</sup>/s  
max.  $380$  mm<sup>2</sup>/s

### 2.2.6. Filtration

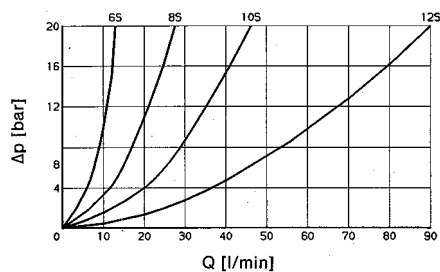
ISO 4406 class 21/19/16  
(NAS 1638 class 10).

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

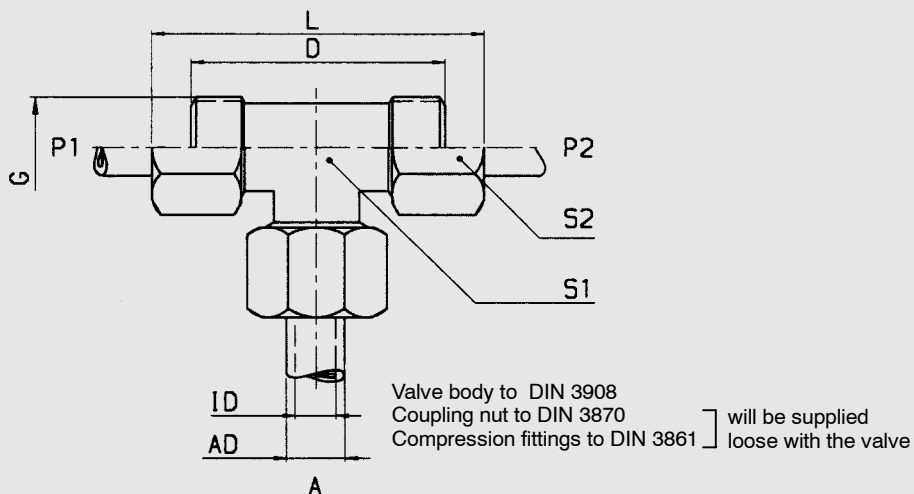
The fitting of filters and regular replacement of elements guarantees correct functioning, reduces wear and tear and increases the working life.

### 2.2.7. $\Delta p$ -Q curve

Pressure drop  $\Delta p$  depending on flow rate Q, measured at  $40$  mm<sup>2</sup>/s and  $t_{oil} = 42$  °C



## 3. DIMENSIONS



Type	G	L	D	AD	ID <sub>max</sub>	S <sub>1</sub>	S <sub>2</sub>
WVT- 6 S-X	M 14 x 1.5	62	46	6	4	14	17
WVT- 8 S-X	M 16 x 1.5	64	48	8	5	17	19
WVT- 10 S-X	M 18 x 1.5	68	50	10	7	19	22
WVT- 12 S-X	M 20 x 1.5	76	58	12	8	22	24

## 4. PLEASE NOTE

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.  
Subject to technical modifications.