

# Sequence valves

Nominal diameter 4, pmax. 500 bar, with integrated check valve

700-2

Issue: 05/2025

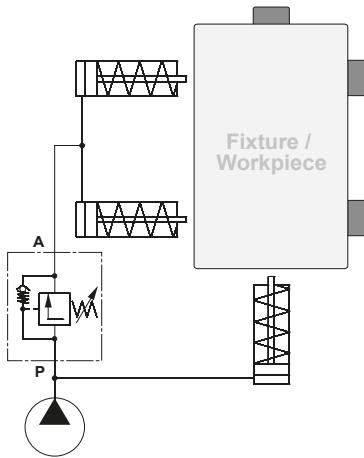
## Description:

The sequence valves are used in the clamping hydraulics as a directly controlled sequence valve.

The compact design allows space-saving installation directly in the fixture. The sequence valve is a poppet valve which operates without leakage oil compared to a spool valve. The inlet and outlet pressures of the sequence valves are always identical. As a result this type of valve is ideal for use in sequence control systems.

With single-acting cylinders, only one supply line from the pressure supplier (see data sheet 430-1) is required for operation.

The design allows valve combinations that can be flanged together to form a block using a common P-connection and standard parts.



## Application example:

The drawing shows symbolically a clamping device as it can be used e.g. in manufacturing. When pressure is applied, the single-acting cylinder [1] clamps.

When the set opening pressure has been reached, the inlet valve [A1] opens and actuates the swing clamp [2].

## Pressure medium:

Hydraulic oil according to DIN 51524 TI.1 to 3; ISO VG 10 to 68 according to DIN 51519

## Valve combinations:

Combinations of sequence valves are assembled from an inlet valve (P) and a maximum of four flange-mounted series valves. These are supplied with pressure oil through holes. Sealing between the valve housings is provided by O-rings. In order to ensure proper functioning with sequence controls (Parallel connection), there should be a certain minimum pressure difference from valve to valve.

This should be set higher for the different versions:

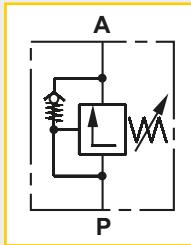
25 bar for the → ZSV-160... version

35 bar for the → ZSV-315... version

50 bar for the → ZSV-500... version



Webcode: 070002



## Advantages:

- ☒ space-saving installation options
- ☒ quick installation due to flange
- ☒ ideal for pressure sequence control
- ☒ operation with one supply line possible
- ☒ valve combinations parallel connection
- ☒ valve combinations series connection
- ☒ Integrated check valve

## Accessoires (optional):

Designation: Order Nr.

### Threaded rods:

M5 x 072 (für 2 valves) 7005-024

M5 x 102 (für 3 valves) 7005-025

M5 x 132 (für 4 valves) 7005-026

M5 x 162 (für 5 valves) 7005-027

### Sealing rings:

O-Ring 7 x 1,5 6010-002

O-Ring 8 x 1,5 6011-002

U-seal 7,3 x 10,2 6006-003

### Screws:

Cylinder head screw 7006-022

M6 x 12, DIN 912 7006-022

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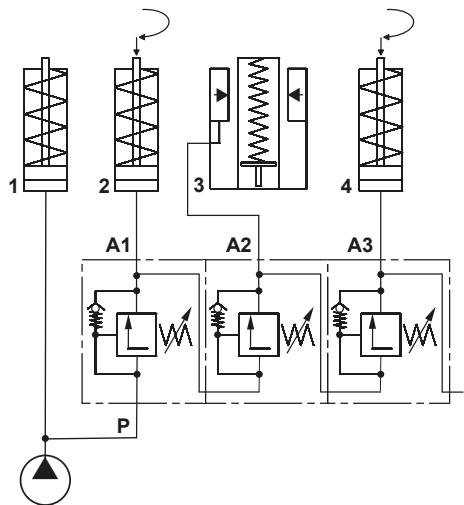
+49 6401 225999-0

sales@hydrokomp.de

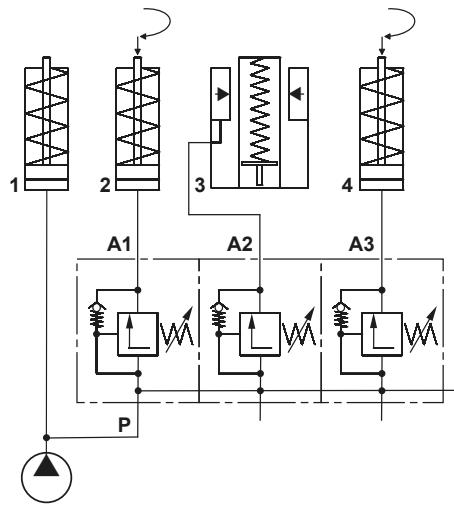
Siemenstr. 16  
35325 Mücke (Germany)

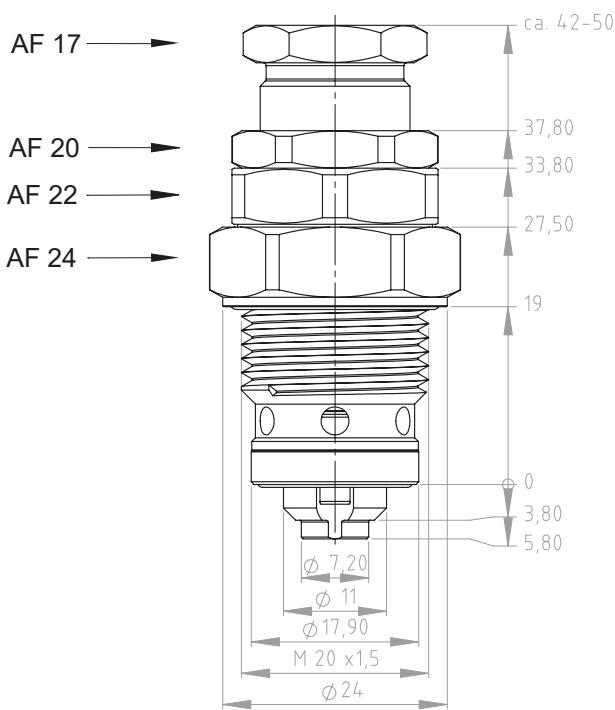
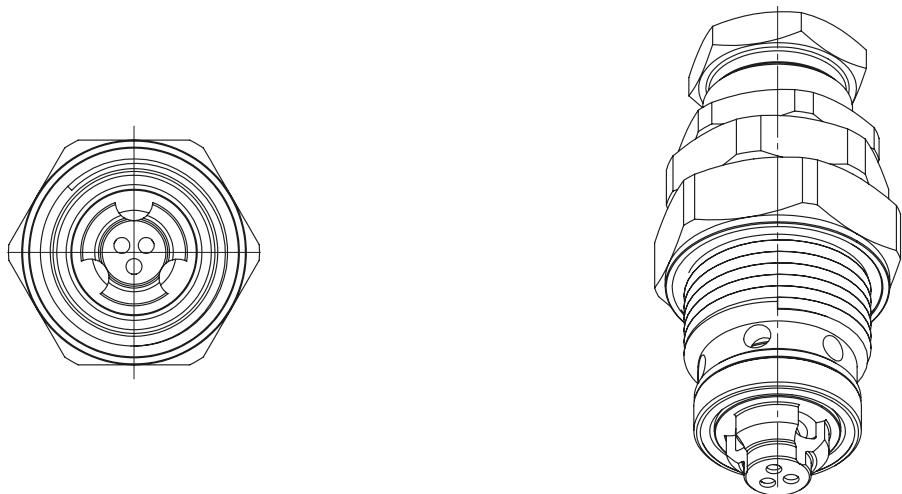
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## Series connection:

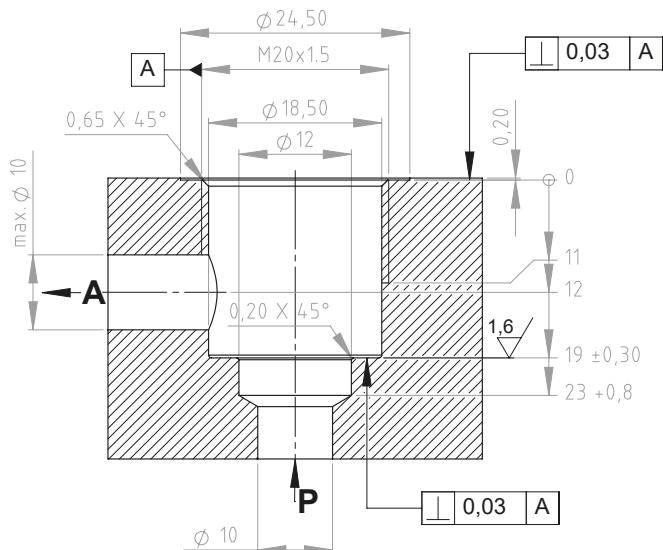


## Parallel connection:





### Installation contour:



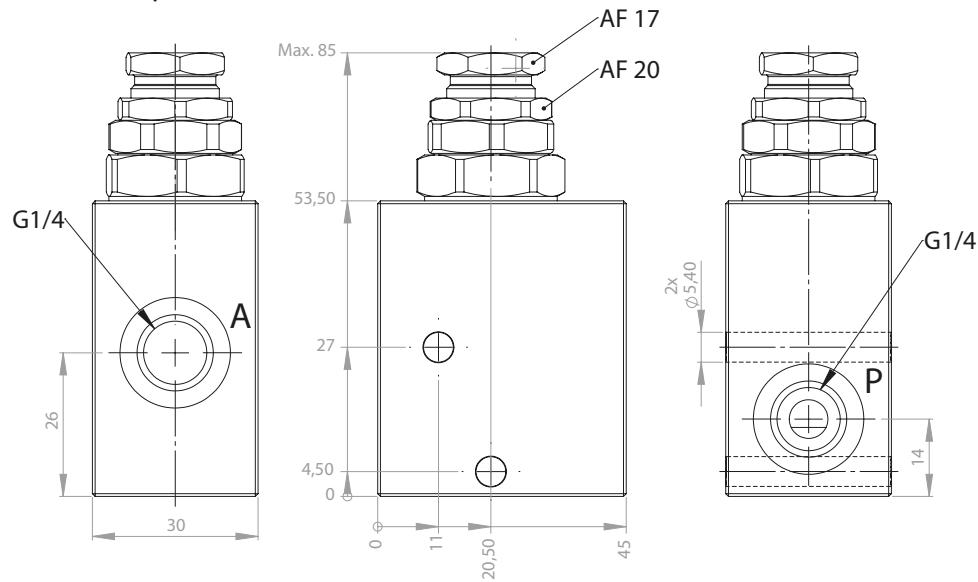
### Technical data:

#### Directly controlled sequence valve, threaded type

max. Operating pressure [bar]	500	500	500	500
max. Volume flow [l/min]	12	12	12	12
<b>Adjusting range [bar]</b>	<b>15-80</b>	<b>30-160</b>	<b>60-315</b>	<b>100-500</b>
Pressure change per revolution [bar]	9	15	32	49
Weight approx. [kg]	0,1	0,1	0,1	0,1
<b>Order number</b>	<b>ZSV-080-5-009</b>	<b>ZSV-160-5-009</b>	<b>ZSV-315-5-009</b>	<b>ZSV-500-5-009</b>



## Threaded port G1/4

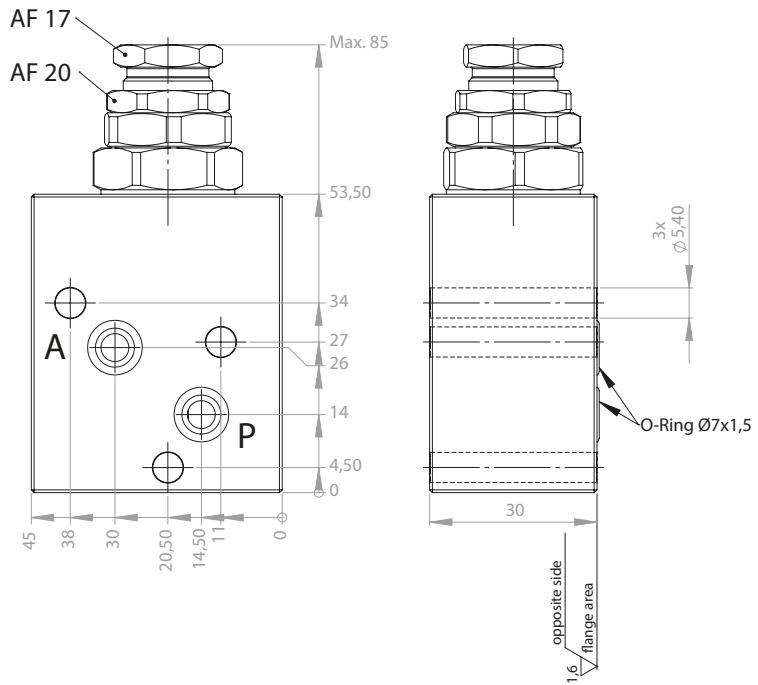


## Technical data:

## Directly controlled sequence valves with threaded connection

max. Operating pressure	[bar]	500	500	500	500
max. Volume flow	[l/min]	12	12	12	12
<b>Adjusting range</b>	<b>[bar]</b>	<b>15-80</b>	<b>30-160</b>	<b>60-315</b>	<b>100-500</b>
Pressure change per revolution	[bar]	9	15	32	49
Weight approx.	[kg]	0,60	0,60	0,60	0,60
<b>Order number</b>		<b>ZSV-080-5-021</b>	<b>ZSV-160-5-021</b>	<b>ZSV-315-5-021</b>	<b>ZSV-500-5-021</b>

## Manifold connection with O-ring



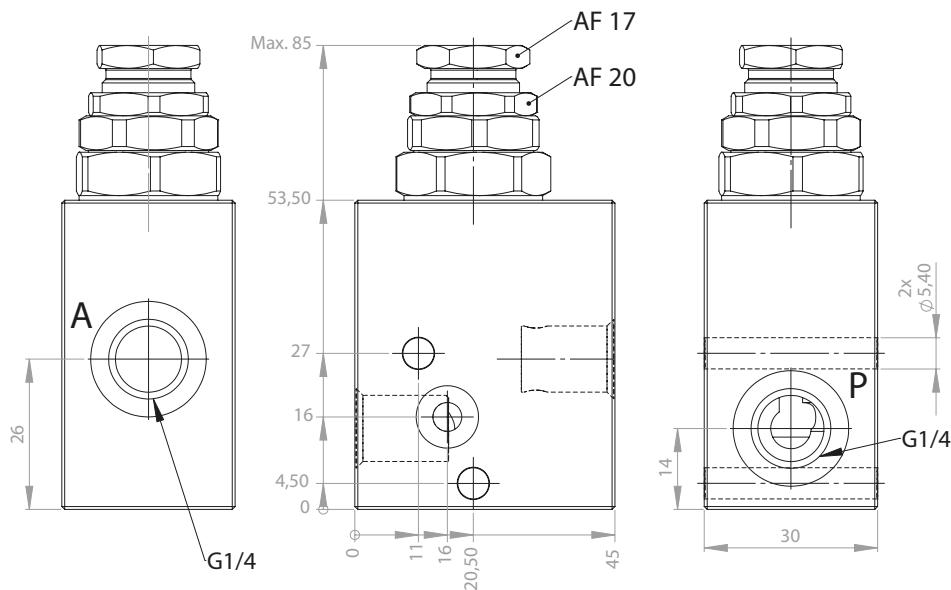
## Technical data:

## Directly controlled sequence valves for manifold connection with O-ring

max. Operating pressure	[bar]	500	500	500	500
max. Volume flow	[l/min]	12	12	12	12
<b>Adjusting range</b>	<b>[bar]</b>	<b>15-80</b>	<b>30-160</b>	<b>60-315</b>	<b>100-500</b>
Pressure change per revolution	[bar]	9	15	32	49
Weight approx.	[kg]	0,60	0,60	0,60	0,60
<b>Order number</b>		<b>ZSV-080-5-022</b>	<b>ZSV-160-5-022</b>	<b>ZSV-315-5-022</b>	<b>ZSV-500-5-022</b>



## Inlet valve

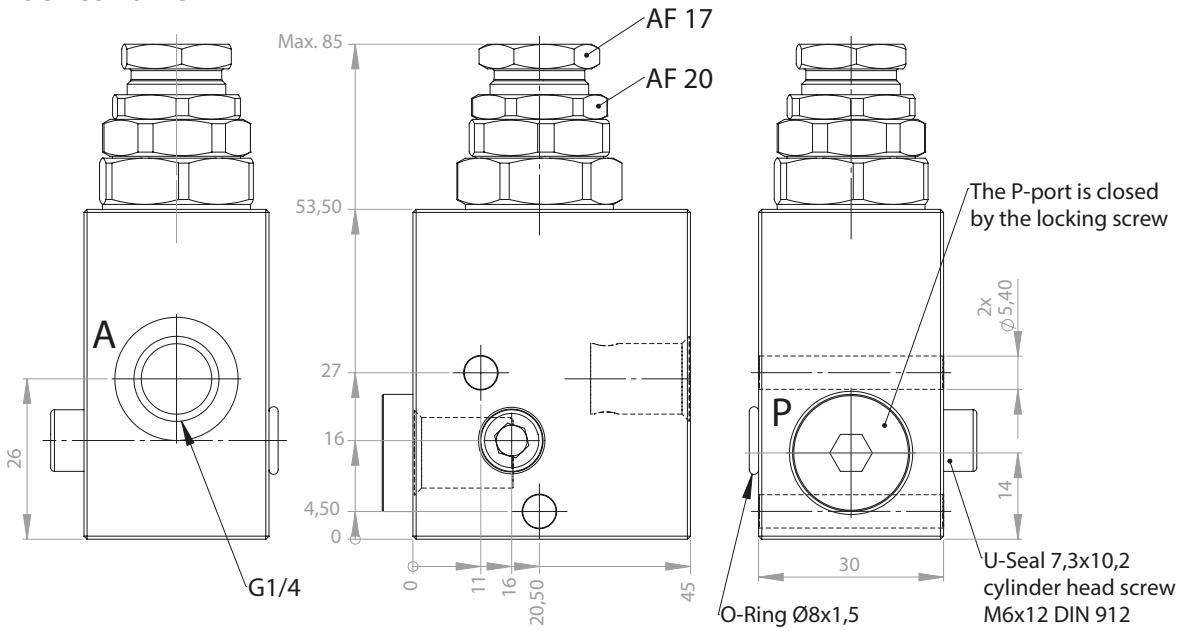


## Technical data:

## Inlet valve with threaded connection

max. Operating pressure [l/min]	500	500	500	500	500
max. Volume flow [bar]	12	12	12	12	12
Adjusting range [bar]	15-80	30-160	60-315	100-500	100-500
Pressure change per revolution [kg]	9	15	32	49	49
Weight approx. [kg]	0,60	0,60	0,60	0,60	0,60
Order number	ZSV-080-5-023	ZSV-160-5-023	ZSV-315-5-023	ZSV-500-5-023	ZSV-500-5-023

## Series valve



Screw plugs and sealing rings are included in the scope of delivery.

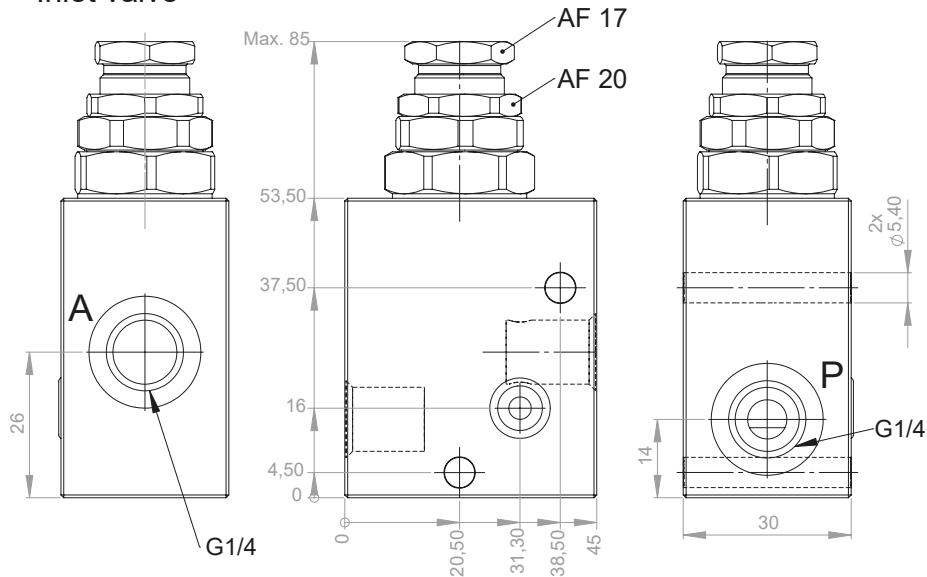
## Technical data:

## Series valves with threaded connection

max. Operating pressure [bar]	500	500	500	500	500
max. Volume flow [l/min]	30	30	30	30	30
Adjusting range [bar]	15-80	30-160	60-315	100-500	100-500
Pressure change per revolution [bar]	9	15	32	49	49
Weight approx. [kg]	0,60	0,60	0,60	0,60	0,60
Order number	ZSV-080-5-024	ZSV-160-5-024	ZSV-315-5-024	ZSV-500-5-024	ZSV-500-5-024



## Inlet valve

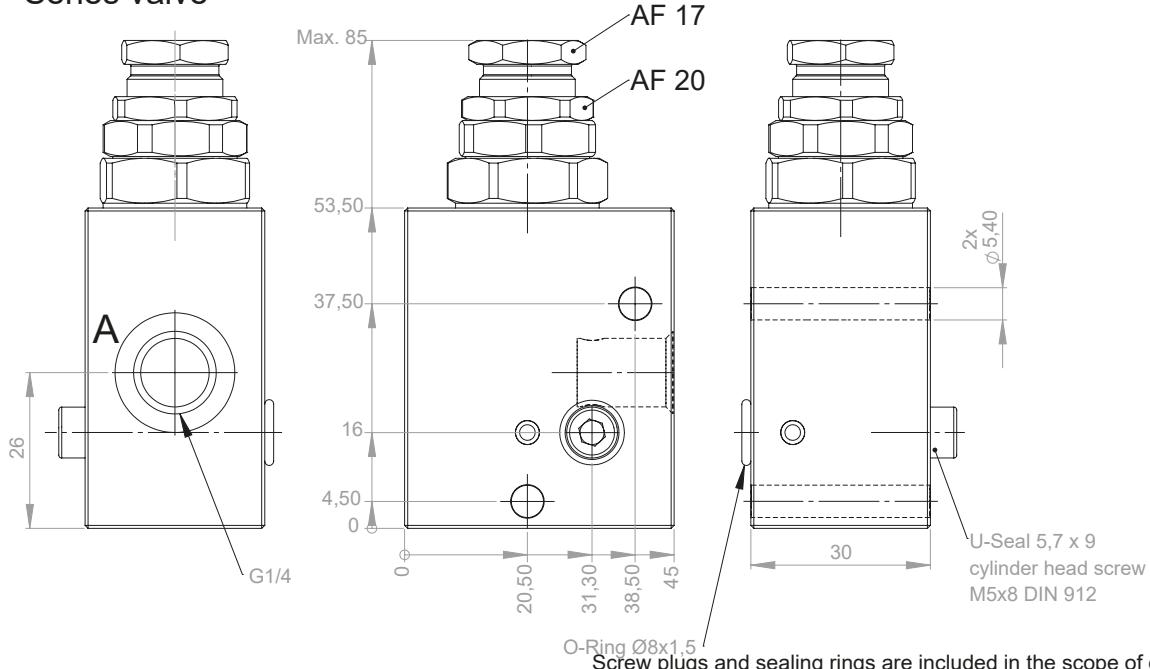


## Technical data:

## Inlet valve with threaded connection

max. Operating pressure [l/min]	500	500	500	500	500
max. Volume flow [bar]	12	12	12	12	12
<b>Adjusting range</b> [bar]	<b>15-80</b>	<b>30-160</b>	<b>60-315</b>	<b>100-500</b>	
Pressure change per revolution [kg]	9	15	32	49	
Weight approx. [kg]	0,60	0,60	0,60	0,60	0,60
<b>Order number</b>	<b>ZSV-080-5-025</b>	<b>ZSV-160-5-025</b>	<b>ZSV-315-5-025</b>	<b>ZSV-500-5-025</b>	

## Series valve



## Technical data:

## Series valves with threaded connection

max. Operating pressure [bar]	500	500	500	500	500
max. Volume flow [l/min]	30	30	30	30	30
<b>Adjusting range</b> [bar]	<b>15-80</b>	<b>30-160</b>	<b>60-315</b>	<b>100-500</b>	
Pressure change per revolution [bar]	9	15	32	49	
Weight approx. [kg]	0,60	0,60	0,60	0,60	0,60
<b>Order number</b>	<b>ZSV-080-5-026</b>	<b>ZSV-160-5-026</b>	<b>ZSV-315-5-026</b>	<b>ZSV-500-5-026</b>	