



## Table of Contents

1.1	Application.....	2
1.2	Mounting location .....	2
<b>2</b>	<b>Function .....</b>	<b>2</b>
2.1	Characteristics.....	2
<b>3</b>	<b>Technical Data .....</b>	<b>3</b>
<b>4</b>	<b>Ordering Information.....</b>	<b>3</b>
<b>5</b>	<b>Description of Characteristics in Accordance with Type Code .....</b>	<b>4</b>
5.1	Variant .....	4
5.2	Connections .....	4
5.3	Eingangsvolumenstrom.....	4
5.4	Zulässiger Maximaldruck .....	4
5.5	Teilungsverhältnis .....	4
<b>6</b>	<b>Installation .....</b>	<b>4</b>
6.1	General remarks .....	4
6.2	Installation – space .....	4
6.3	Dimensions BEISPIEL!!!.....	5
<b>7</b>	<b>Notes, Standards and Safety Requirements .....</b>	<b>6</b>
7.1	General remarks .....	6
7.2	Standards.....	6
<b>8</b>	<b>Zubehör .....</b>	<b>Fehler! Textmarke nicht definiert.</b>

## Product Description

The flow divider is used for hydraulic motors that are to be operated in the open or closed circuit at the same speed.

### 1.1 Application

Cylinder application, hydraulic motor application

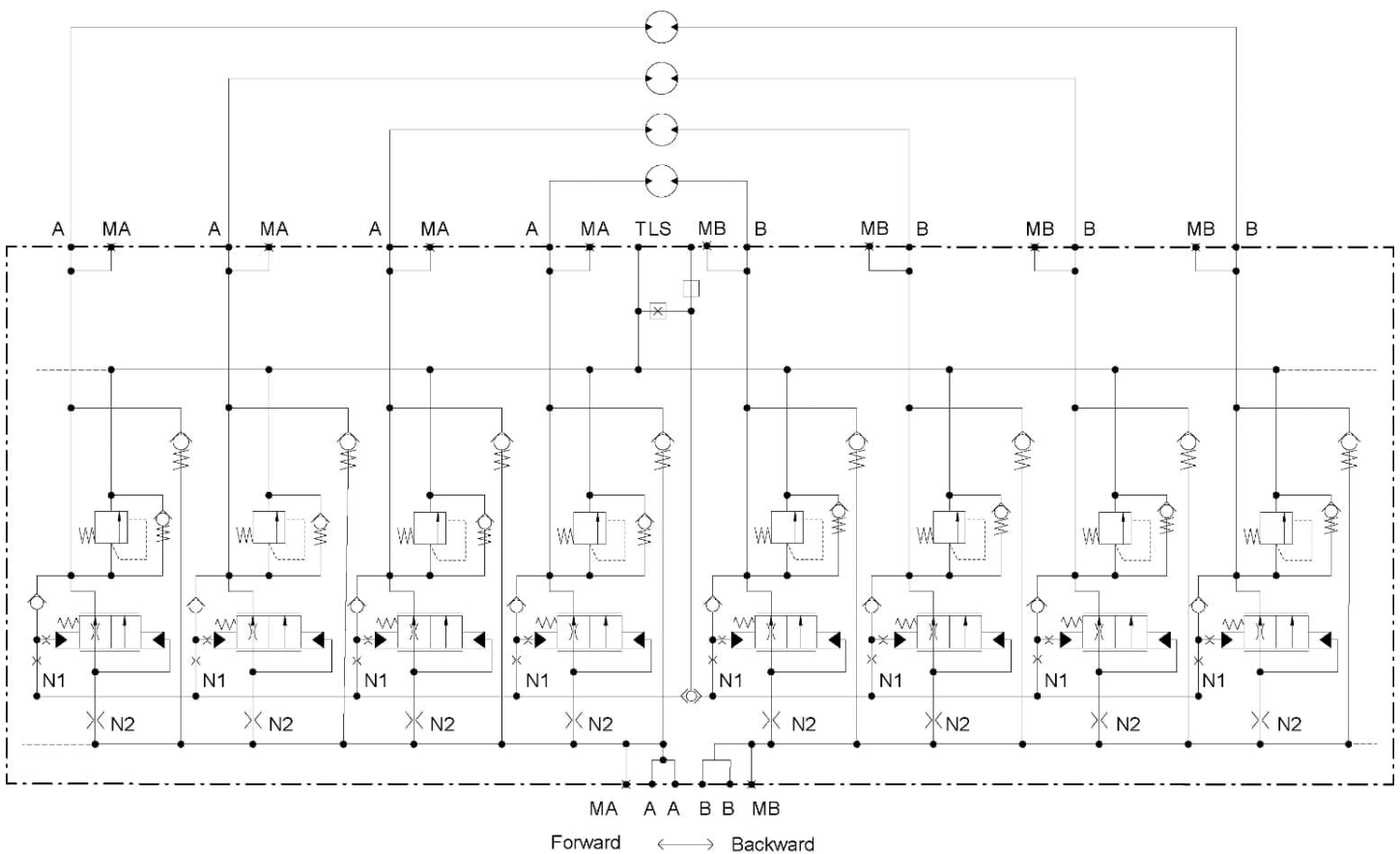
### 1.2 Mounting location

Any

## 2 Function

The flow divider ensures load flow independent flow volume distribution for up to 6 consumers. The valve consists of an input section for the pump connections A and B. One consumer can be controlled in both directions per section, making the flow divider type FDV-1X suitable for double-acting consumers, e.g. Hydromotors on travel drives (forward backward). The load pressure independent volume flow distribution is realized by pressure compensators and fixed orifices. Different division ratios can be realized by adapting the fixed orifices. The valve works according to the LUDV principle, which enables simple adjustment of the division ratios and simple adjustment of the division accuracy.

Wiring diagram example 4 fold::



### 2.1 Characteristics

- Modular structure for up to 6 consumers
- Application for consumers with high demands on the accuracy of the volume flow
- Maximum input volume flow 330l / min
- Integrated pressure relief valve with suction function

### 3 Technical Data

Criteria	Unit	Value
Installation position		Any
Weight	kg	4-fold: 30.7 5-fold: 35.7 6-fold: 40.7
Maximum operating pressure (A, B)	bar	420
Maximum recommended tank pressure (T)	bar	< 8
Maximum input volume flow (P)	l/min	360
Volume flow A to B	l/min	60
surface		surface primed
Hydraulic fluid		Mineral oil (HL, HLP) according to DIN 51524, other liquids on request
Hydraulic fluid temperature range	°C	-25 to +80
ambient temperature	°C	< +50
viscosity range	mm <sup>2</sup> /s	2,8 - 500
pollution degree		Filtering according to NAS 1638, class 9, with a minimum retention rate of $\beta_{10} \geq 75$

Port	Size	Norm	Annotation
A, B	SAE1"	ISO 6162-2 - P25M / SAJ 518-1 CD62	Supply port
A(x). B(x)	G1/2	ISO 1179-1	Actuator port
T	G 1	ISO 1179-1	Tank
LS	G1/4	ISO 1179-1	Load sensing port
MA, MB	G1/4	ISO 1179-1	Measuring port

### 4 Ordering Information

FDV		05E	360	420	1
00	01	02	03	04	05

00	Product group	Flow divider	<b>FDV</b>
01	Design	Number of partial streams	Flow divider 4-fach Flow divider 5-fach Flow divider 6-fach
			<b>4</b>
			<b>5</b>
			<b>6</b>
02	Connections	A, B – supply line SAE 1" ISO 6162-2-P25M (SAE J518-1Code62)	<b>05E</b>
03	Input volume flow	Supply line 360 l/min (consumer port 60 l/min)	<b>360</b>
04	Permissible maximum pressure	420 bar	<b>420</b>
05	Division ratio	1:1 (other on request)	<b>1</b>

Unfortunately, various configurations cannot be implemented for technical reasons. If you have any questions, please contact us for advice.

Nachfolgend aufgeführte Versionen sind verfügbare Standardversionen. Weitere Versionen im Rahmen der im Typenschlüssel vorgegebenen Optionsmöglichkeiten sind auf Anfrage konfigurierbar.

Designation	Type code	Part Nr
FDV – SAE1" – 360 L – 420bar – 4fach – 1:1	FDV - X - 05E - 360 - 420 - 4 - 1	133.991.004.9
FDV – SAE1" – 360 L – 420bar – 5fach – 1:1	FDV - X - 05E - 360 - 420 - 5 - 1	133.991.005.9
FDV – SAE1" – 360 L – 420bar – 6fach – 1:1	FDV - X - 05E - 360 - 420 - 6 - 1	133.991.006.9

## 5 Description of Characteristics in Accordance with Type Code

### 5.1 Variant

Number of partial flows: Flow divider 4-fold, 5-fold, 6-fold

### 5.2 Connections

A, B – supply line SAE 1" ISO 6162-2-P25M (SAE J518-1Code62)

### 5.3 Eingangsvolumenstrom

Supply line 360 l/min (consumer load 60 l/min)

### 5.4 Zulässiger Maximaldruck

420 bar

### 5.5 Teilungsverhältnis

1:1 (others on request)

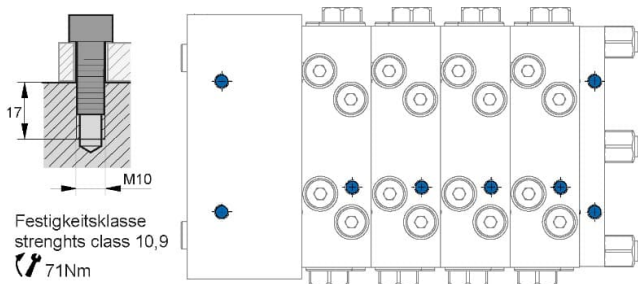
## 6 Installation

### 6.1 General remarks

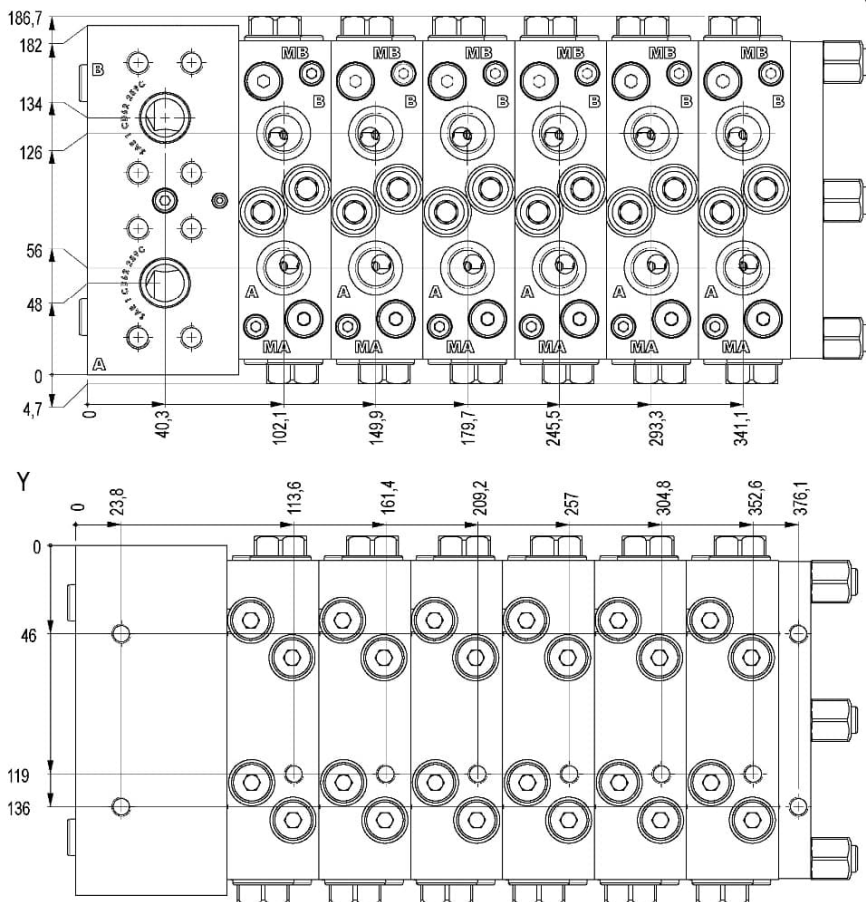
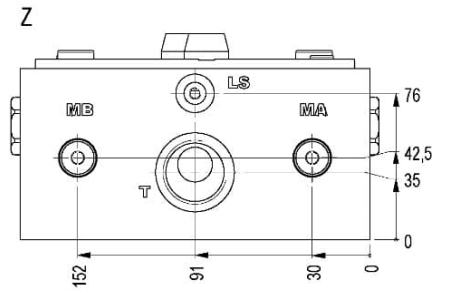
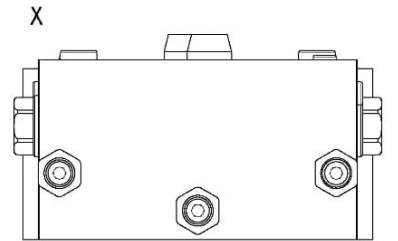
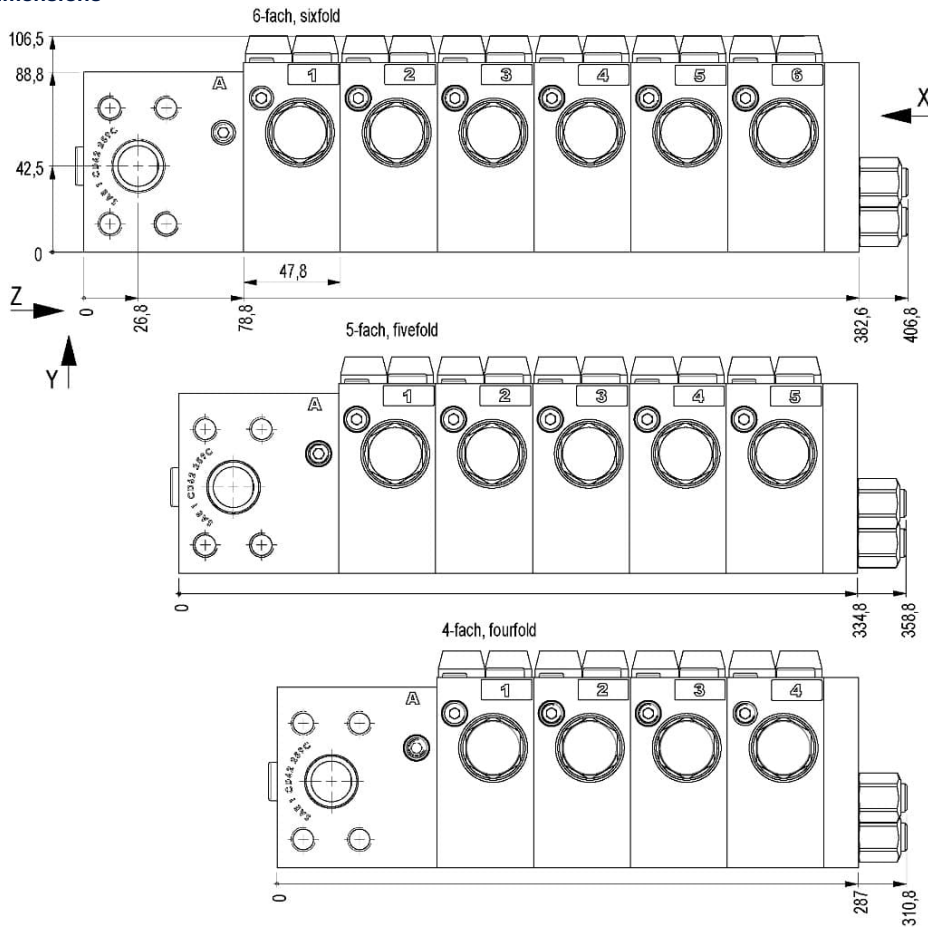
- Observe the installation and safety instructions of the construction machine manufacturer
- Only technically permissible changes may be made to the construction machine.
- The user must ensure that the device is suitable for its use
- Use only for the purpose intended by the manufacturer
- The hydraulic system must be depressurized before assembly / disassembly
- May only be set by specialist personnel
- May only be opened with the approval of the manufacturer, otherwise the warranty claim expires
- The enclosed connection proposal is not guaranteed. The functionality and the technical details of the construction machine must be checked.

### 6.2 Installation – space

- Pay attention to the evenness of the support element.
- Ensure that the assembly is free of tension.
- Make sure there is sufficient space for setting and assembly work.



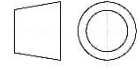
### 6.3 Dimensions



## 7 Notes, Standards and Safety Requirements

### 7.1 General remarks

- The views in drawings are shown in accordance with the European normal projection variant
- A comma ( , ) is used as a decimal point in drawings
- All dimensions are given in mm



### 7.2 Standards

The following standards are to be observed because of the surface temperatures on the load control valve:

- EN 563, Temperatures on surfaces that can be touched.
- EN 982, Safety-technical requirements for fluid-technical systems and their components.

## 8 Accessories