

**Pressure Relief Valves, Directly Operated**

Rated pressure	160 and 320 bar
Size	6; 10; 16; 25; 40 mm
Pressure range (in three pressure stages)	4–320 bar
Flow rate	10; 16; 40; 100; 250 dm <sup>3</sup> /min

- Valves of cartridge type and for line mounting

**Pressure Relief Valves, Directly Operated**

Rated pressure	160 bar
Size	16; 40 mm
Pressure range (in three pressure stages)	4–160 bar
Flow rate	40; 250 dm <sup>3</sup> /min

- For sub-plate mounting

**Safety Valves, Directly Operated**

Rated pressure	160 bar
Size	16; 25 mm
Pressure range (in three pressure stages)	4–176 bar
Flow rate	40 and 100 dm <sup>3</sup> /min

- Internally drained
- Valves of cartridge type and for line mounting
- For hydraulic installation with accumulator operation

**Safety Valves, Directly Operated and Pilot-Operated**

Rated pressure	200–320 bar
Size	4; 6; 10; 20 mm
Pressure range	4–320 bar
Flow rate	2.5–400 dm <sup>3</sup> /min

- Internally drained
- Valves of cartridge type and for line mounting
- For hydraulic systems with accumulator operation

**Pressure Relief Valves, Directly Operated and Pilot-Operated**

Rated pressure	200–320 bar
Size	4; 6; 10; 20 mm
Pressure range	4–320 bar
Flow rate	16; 40; 100 and 400 dm <sup>3</sup> /min

- Valves of cartridge type and for line mounting
- For sub-plate mounting and for device mounting

**Pressure Regulators, Pilot-Operated**

Rated pressure	320 bar
Size	6; 10; 20 mm
Differential pressure	10–320 bar
Flow rate	40; 100 and 250 dm <sup>3</sup> /min

- Valves of cartridge type and for line mounting (for sub-plate mounting of sizes 10 and 20)

**Differential Pressure Regulators**

Rated pressure	320 bar
Size	10; 20 mm
Differential pressure	6 bar
Flow rate	70 and 160 dm <sup>3</sup> /min

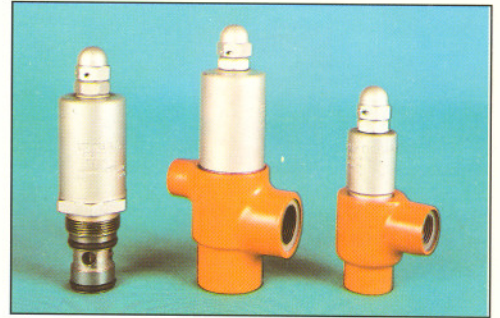
- Valves of cartridge type

**Pressure Control Valves with Extended Function**

Rated pressure	320 bar
Size	10; 20 mm
Pressure range	4–320 bar
Flow rate	100 and 400 dm <sup>3</sup> /min

- Combination of main control unit, yoke units and the appropriate mounting elements; the pilot-operated pressure control valves are connected in parallel and act successively singly on the main – pressure-relief valve
- For sub-plate mounting

1



1

1

1

1

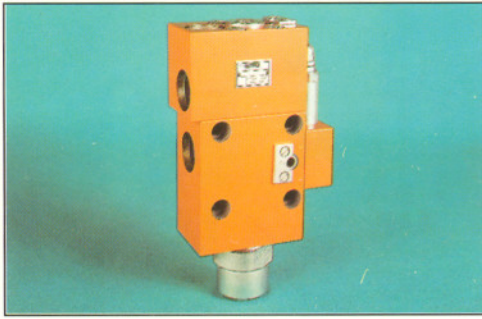


1



1

1



**Lowering and Brake Valve Combination**

Rated pressure 320 bar  
 Size 20 mm  
 Flow rate 250 dm<sup>3</sup>/min

- Main function is the motion control of tensioned, doubly pressurizable hydraulic actuators
- Constructions with pressure control or compound control

1

**Pressure Relief Blocks HYS 06-11005**

Rated pressure 320 bar  
 Size 6 mm  
 Flow rate 40 dm<sup>3</sup>/min  
 Rated pressure 160 bar  
 Size 10; 16 and 25 mm  
 Flow rate 16; 40 and 100 dm<sup>3</sup>/min

- For line mounting
- Optional with port thread:  
 M 18 x 1.5; M 22 x 1.5; M 26 x 1.5, TGL 35001/01  
 G 3/8-A; G 1/2-A; G 3/4-A; form X, DIN 3852 part 2
- Special port body

6



**Restrictor Valves**

Rated pressure 320 bar  
 Size 6; 10; 20 mm  
 Flow rate 25; 63\*; 250 dm<sup>3</sup>/min  
 Flow rate, nom. 10; 40; 100 dm<sup>3</sup>/min

- Valve of cartridge type and for line mounting
- Optional with or without check valve
- \*) Valve of cartridge type up to 90 dm<sup>3</sup>/min

1



**Series Flow Control Valves**

Rated pressure 320 bar  
 Size 6; 10; 20 mm  
 Flow rate 16\*\*); 63\*\*); 160 dm<sup>3</sup>/min

- Valve of cartridge type and for line mounting
- For sub-plate mounting
- \*\*) Sub-plate mounting only sizes 6 and 10  
 flow rate, max. 12 and 60 dm<sup>3</sup>/min

1



**By-Pass Flow Control Valves**

Rated pressure 320 bar  
 Size 6; 10; 20 mm  
 Flow rate 10\*\*); 63\*\*); 160 dm<sup>3</sup>/min  
 Flow rate, nom. 10; 40; 100 dm<sup>3</sup>/min

- Valve of cartridge type and for line mountings
- For sub-plate mounting
- \*\*) Sub-plate mounting only sizes 6 and 10  
 flow rate, max. 12 and 40 dm<sup>3</sup>/min

1

**Check-Valves, Not Pilot Controlled  
Construction A – Line mounting**

1

Rated pressure	160 and 320 bar
Size	6 ... 80 mm
Opening pressure	0; 1; 3; 5 bar
Flow rate	up to 1000 dm <sup>3</sup> /min

**Construction B – Sub-Plate Mounting**

Rated pressure	320 bar
Size	16; 32 mm
Opening pressure	1 bar
Flow rate	up to 250 dm <sup>3</sup> /min

**Check Valves**

1

Rated pressure	320 bar
Size	4; 6; 10; 20 mm
Opening pressure	0; 0.5; 1; 3; 5; 8 bar
Flow rate	10; 40; 100; 250 dm <sup>3</sup> /min

- Optional with and without restriction
- Cartridge valves of plug-in and screw-in type

**Check Valves, Pilot-Controlled**

1

Rated pressure	160 and 320 bar
Size	8 ... 80 mm
Flow rate	up to 1000 dm <sup>3</sup> /min

- For line mounting
- AD: externally drained type
- AN: internally drained type

**Double-Acting Check Valves, Pilot-Controlled**

1

Rated pressure	160 and 320 bar
Size	8 ... 80 mm
Flow rate	up to 1000 dm <sup>3</sup> /min

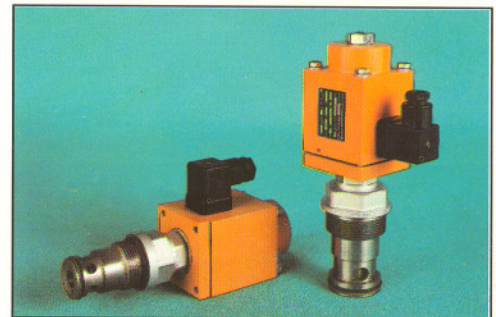
- For line mounting

**Check Valves, Pilot-Controlled**

1

Rated pressure	320 bar
Size	10; 20 mm
Flow rate	100 and 250 dm <sup>3</sup> /min

- Hydraulically and electromagnetically pilot-controlled
- Normal and inverse switching function
- Cartridge type

**High-Pressure Shuttle Valve**

1

Rated pressure	320 bar
Size	6 mm
Minimum differential pressure	0.5 bar
Flow rate	25 dm <sup>3</sup> /min

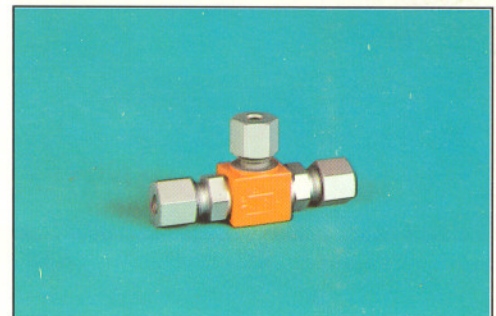
- For line mounting

**Low-Pressure Shuttle Valve**

1

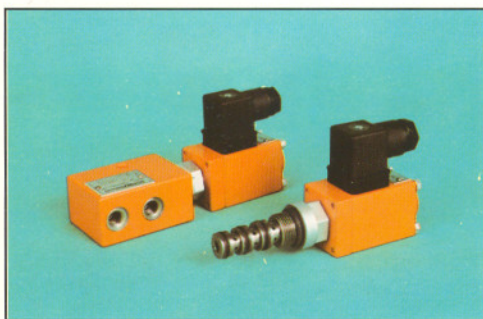
Rated pressure	320 bar
Size	6 mm
Minimum differential pressure	5 bar
Flow rate	25 dm <sup>3</sup> /min

- For line mounting

**Shuttle Valve Combination for Cylinder Attachment**

Rated pressure	320 bar
Size	6 mm
Flow rate	40 dm <sup>3</sup> /min

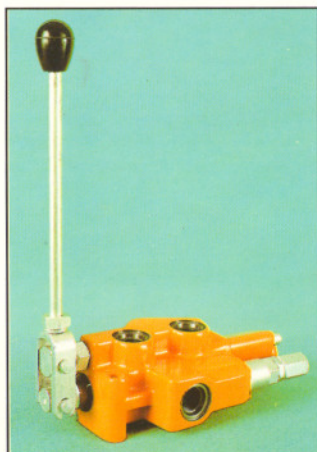
- Main function: pilot-controlled check valve
- Additional functions: pressure relief or emergency lowering
- Pipe break protection


**Directional Control Valves, Cartridge Type (26223/20)**

7

Rated pressure	320 bar
Size	4 mm
Flow rate, max.	10 dm <sup>3</sup> /min

- Two-position valve with two or three main ports in six different switching functions
- Electromagnetic control
- With linking unit as line mounting device


**Directional Control Valves, Line Mounting (26223/30)**

7

Rated pressure	210 bar
Size	10 mm
Flow rate, max.	60 dm <sup>3</sup> /min

- Two- and three-position valves in ten different switching functions
- Optional with integrated primary pressure relief
- Manual control mechanism, mechanical and hydraulic control mechanisms
- Optional port thread:

G<sup>3</sup>/<sub>8</sub>-A form X, DIN 3852 part 2  
 M 18 x 1.5 form X, DIN 3852 part 1  
 M 18 x 1.5, TGL 35001/03

**Directional Control Valves, Line Mounting (10925)**

7

Rated pressure	160 bar
Size	8 and 13 mm
Flow rate	16 and 40 dm <sup>3</sup> /min

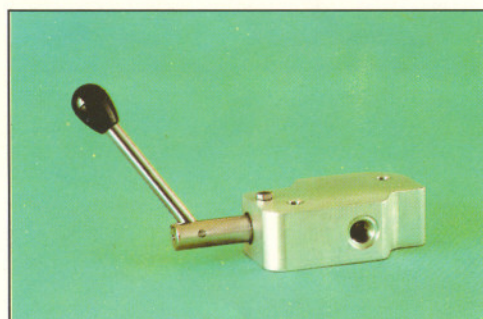
- Two- and three-position valves in twelve different switching functions
- Manual, mechanical and hydraulic control mechanisms

**Directional Control Valves, Line Mounting (10928)**

8

Rated pressure	320 bar
Sizes / flow rate	32 mm / up to 400 dm <sup>3</sup> /min 50 mm / up to 700 dm <sup>3</sup> /min

- Two- and three-position valves in ten different switching functions
- Mechanical, hydraulic, pneumohydraulic and electrohydraulic control


**Plug Valves**

6

Rated pressure	45 bar
Size	6 mm

- For line mounting and sub-plate mounting
- Port thread G 3/8 A DIN-ISO 228

**Directional Control Valves for Sub-Plate Mounting (10935/01)**

8

Rated pressure	160 and 250 bar
Size	32, 40 mm
Flow rate	800, 1000 dm <sup>3</sup> /min

- Electrohydraulic control  
Various types of control with and without pilot valve
- Mechanical control
- Additional units for ganged sub-plates

**Directional Control Valves for Sub-Plate Mounting (10 935/02)**

8

Rated pressure	160 and 320 bar
Sizes / flow rate	13 mm / up to 63 dm <sup>3</sup> /min 16 mm / up to 100 dm <sup>3</sup> /min 20 mm / up to 100 dm <sup>3</sup> /min 25 mm / up to 250 dm <sup>3</sup> /min

- Electrohydraulic control  
Various control types with and without pilot valve
- Mechanical control
- Additional units for ganged sub-plates

**Directional Control Valves for Sub-Plate Mounting(26 223/60)**

8

Rated pressure	320 bar
<b>Size 4</b>	
Flow rate	up to 20 dm <sup>3</sup> /min

- With electromagnetic control
- Two- and three-position valves with various switching functions

**Size 6****Series 0**

Flow rate	up to 60 dm <sup>3</sup> /min
- With electromagnetic (solenoid of size 45), mechanical, hydraulic and pneumatic control	
- Two- and three-positions valves with various switching functions	

**Series 1**

Flow rate	up to 50 dm <sup>3</sup> /min
- With electromagnetic control (solenoids with central thread and exchangeable coil)	
- Two- and three-position valves with various switching functions	

**Series 2**

Flow rate	up to 60 dm <sup>3</sup> /min
- With electromagnetic control (solenoids of size 35)	
- Two- and three-position valves with various switching functions	

**Series 3**

Flow rate	up to 80 dm <sup>3</sup> /min
- With electromagnetic control (solenoids with central thread and exchangeable coil)	
- Two- and three-position valves with various switching functions	

**Size 10****Series 0**

Flow rate	up to 120 dm <sup>3</sup> /min
- With electromagnetic (solenoids of size 60), mechanical, hydraulic and pneumatic control	
- Two- and three-position valves with various switching functions	
- Control mechanisms with switch position indication	

**Series 1**

Flow rate	up to 120 dm <sup>3</sup> /min
- With electromagnetic control (solenoid with central thread and exchangeable coil)	
- Two- and three-position valves with various switching functions	

**Directional Control Valves, Size 10, with Electrohydraulic Piloting**

Flow rate	up to 140 dm <sup>3</sup> /min
-----------	--------------------------------

Pilot valve of size 06, series 1

- With electrohydraulic, mechanical and hydraulic control
- Control mechanisms with switch position indication

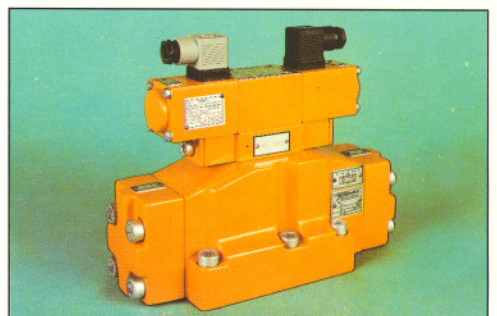
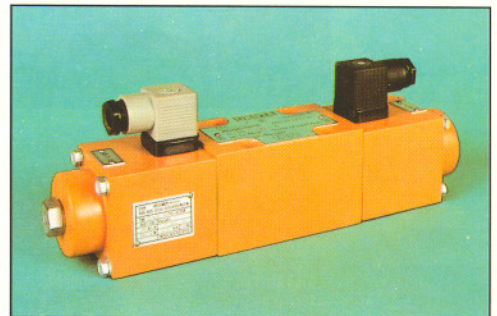
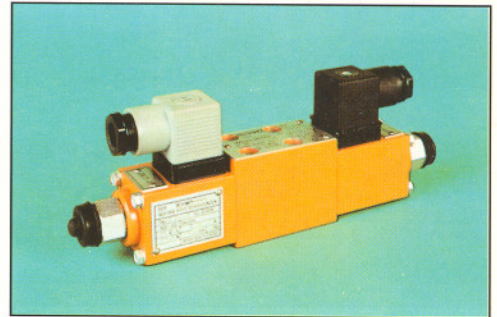
**Directional Control Valves for Sub-Plate Mounting (26 223/40)**

8

**Size 20**

Rated pressure	320 bar
Flow rate	up to 600 dm <sup>3</sup> /min

- With electrohydraulic, mechanical and hydraulic control
- Control mechanisms with inductive switch position indication



**Ganged Directional Control – Check Valves (10917)** 6

Rated pressure 160 bar  
 Size 16 mm  
 Flow rate 50 dm<sup>3</sup>/min

- Three-position valves with five different switching functions
- Linkable with up to six control mechanisms
- Manual control mechanisms and mechanical control mechanisms
- Possibility of hydraulic disengagement
- Optional with primary pressure relief

**Directional Control Valves, Series RTE 06** 6

Operating pressure 210 (350) bar  
 Size 6 mm  
 Flow rate 35 (26) dm<sup>3</sup>/min

- Electromagnetic control
- Load holding function
- Integrated control line system enables various superimposed control functions
- Linkable with up to eight control mechanisms
- Extensible functions by cartridges
- Port thread according to customer request

**Directional Control Valves for Ganged Linkage (21 527)** 7

Rated pressure 160 bar  
 Sizes 13, 16 and 20 mm  
 Flow rates 40, 63 and 160 dm<sup>3</sup>/min

- Two- and three-position valves in five different switching functions
- Manual control mechanisms, mechanical, hydraulic and electrohydraulic control mechanisms

**Valve Linking System HYS 06-11 008** 7

Rated pressure 240 bar  
 Size 6 mm  
 Flow rate 40 dm<sup>3</sup>/min

- Three-position valves with five different switching functions
- Linkable with up to six control mechanisms
- Electromagnetic control, manual control mechanisms, mechanical control mechanisms
- Possibility of hydraulic disengagement
- Option with primary pressure relief

**Circuit-Related Valve Blocks** 2/6

Rated pressure 160 and 320 bar  
 - With directional control, pressure control, flow control and check valves for sub-plate mounting and cartridge-type mounting

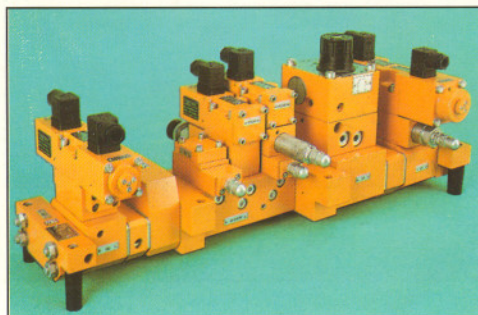
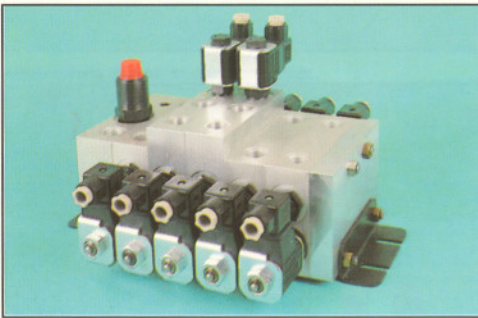
**Valve Linking System for Sub-Plate Mounting (26 215)** 8

**Combinations, Sizes 04, 06, 10 and 20, consisting of:**

- Directional control valves, 26 223/40 and 26 223/60
- Modular valves 26 215/30 and 26 215/33 with pressure control, flow control and check valves
- Sub-plates 26 263/50 or valve multiple sub-plates 36 492/05 and ganged sub-plates 26 215/20 each in combination with modular valves 26 215/30

**Circuit-Related Combinations, consisting of:** 8

- Directional control valves 26 223/40 and 26 223/60
- Pressure control, flow control and check valves
- Modular valves 26 215/30 and 26 215/33
- Circuit-related valve blocks
- Hydraulic special valves according to customer request



**Ganged Valve Linking System (26 216)****Monobloc and Segmental Construction**

Rated pressure	320 bar
Sizes	20 and 32 mm
Flow rate	160 and 400 dm <sup>3</sup> /min

- Three- and four-position valves
- Manual control mechanism, mechanical, hydraulic and electrohydraulic control mechanisms
- With primary pressure relief, optional with secondary pressure relief
- Load-independent oil flow metering
- Special functions conditioned by the system can be realised

**Segmental Construction**

Rated pressure	320 bar
Size	10 mm
Flow rate	70 dm <sup>3</sup> /min

- Three- and four-position valves
- Linkable with up to six control mechanisms
- Manual control mechanisms, mechanical, hydraulic and electrohydraulic control mechanisms
- Optional with primary and secondary pressure relief
- Load-independent oil flow metering
- Optional with holding valves
- Special functions conditioned by the system can be realised

**Segmental Construction**

Rated pressure	320 bar
Size	6 mm
Flow rate	40 dm <sup>3</sup> /min

- Three- and four-position valves
- Linkable with up to eight control mechanisms
- Manual control mechanism, mechanical control mechanisms
- Optional with pressure relief
- Holding function via sliding spool at minimum leakage
- Special functions conditioned by the system can be realised
- Electromagnetic control by cartridges in special segments can be realised

**Final Control Element (Remote Control Valve) in Hand Lever Version**

Rated pressure	63 bar
Size	6 mm
Flow rate	10 dm <sup>3</sup> /min

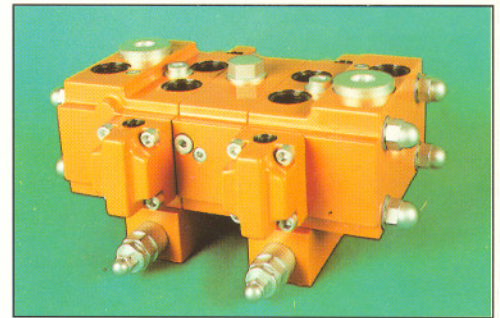
- With and without detent, locking in any position
- Single, double and triple lever
- Preferably used for the drive of directional control valves (26 616), axial piston pumps (37 072) and axial piston motors (43 332)

**Control Units for Steering Gears**

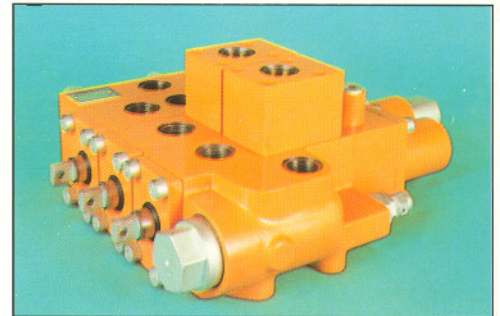
Hydraulic control units for the mounting in steering gears operating with hydraulic force amplification

Rated pressure	130 bar
Nominal sizes	HK 410, 420, 430, 440 HK 510, 520, 530, 540

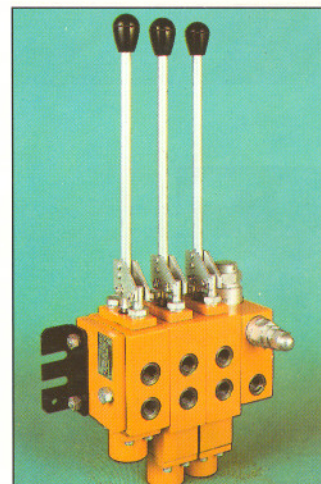
6



6



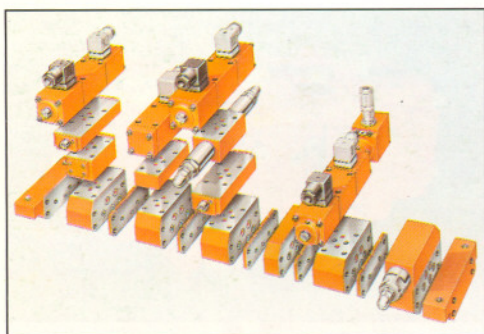
6



1



5



### Ganged Sub-Plates (26 215/20)

9

Rated pressure	160 and	320 bar
Sizes	6	10 mm
Flow rates	up to 40, up to 70 dm <sup>3</sup> /min	

- Ganged sub-plates for the accommodation of:  
Directional control valves, flow control and pressure relief valves, pressure regulators and spring-loaded check valves in the mounting system of sub-plate mounting
- Connecting plates for:  
Directional control valves, flow control and pressure relief valves, pressure regulators, differential pressure regulators, restrictor valves and spring-loaded check valves in the cartridge mounting system
- Baffle plates, blocking plates, plates for pressure measurements, end plates and adapters

### Modular Valves (Sandwich Arrangement) (26 215/30)

9

Rated pressure	320 bar	
Sizes	6	10 mm
Flow rate	up to 40, up to 70 dm <sup>3</sup> /min	

- Intermediate plate valves in various subassemblies as one-way restrictor valves, spring-loaded check valves, pilot-controlled, rectifier plate, differential pressure regulator
- Connecting plates for pressure relief valves, pressure regulators, pressure switches (line mountings)
- Fixed restrictor plates, and plate for pressure measurement

### Modular Valve (Sandwich Arrangement) 06-301/0 (26 215/30)

7

Rated pressure	320 bar	
Size	6 mm	
Flow rate	40 dm <sup>3</sup> /min	

- Intermediate plate valve as one-way restrictor valve

### Modular Valves (Sandwich Arrangement) (26 215/33) for Directional Control Valves 26 223/40, Size 20

8

Rated pressure	320 bar	
Size	20 mm	
Flow rate	up to 600 dm <sup>3</sup> /min	

- Intermediate plate valves in various subassemblies as one-way restrictor valves and pilot-controlled check valve
- Connecting plates for pressure relief valves and pressure regulators
- Constant throttle plates, end plates, plate for pressure measurement



### Sub-plates (26 263/50) for Directional Control Valves 26 223/40 and 26 223/60

8

Rated pressure	320 bar	
Sizes	4, 6, 10 und 20 mm	

- Ports for tubes at the side or opposite to the valve mounting surface
- Ports optional with metric thread or with English thread
- Linkable with modular valves (sandwich arrangement) 26 215/30

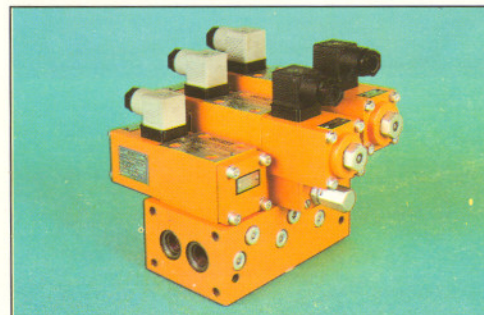
### Valve Multiple Sub-Plates (36 492)

8

for the building-up of valve combination with directional control valves 26 223/40 and 26 223/60

Rated pressure	320 bar	
Sizes	4, 6 and 10 mm	
Size	20 mm	

- Ports for tubes opposite to the valve mounting surface
- Up to eight valve mounting surfaces
- Optional with primary pressure relief valve
- Ports with metric thread
- Linkable with ganged sub-plates 26 215/20, modular valves 26 215/30 and 26 215/33
- Multiple sub-plates can be combined with flow control valves for sub-plate mounting





**Two-Port Cartridge Valves**

Rated pressure	320 bar
Sizes	16, 25, 32 mm
Flow rate	250, 500, 1000 dm <sup>3</sup> /min

**Dominating functions:**

- Directional control valve function
- Pressure reducing function
- Pressure relief function
- Differential pressure function

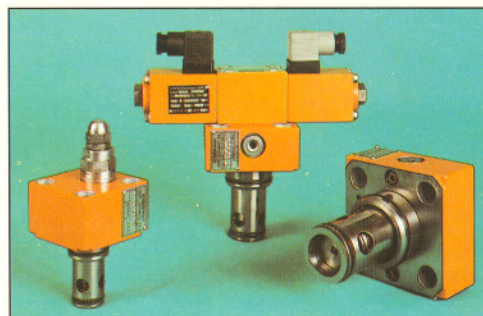
**Constructions**

- Directional control valve functions, completable with stroke limitation or electric switch position indication, switching accuracy  $0.1 \pm 0.05$  mm
- Completable with pilot units inclusive of proportional technique and/or linking units

**Circuit-Related Valve Block with Two-Port Cartridge Valves**

- For high-grade hydraulic controls
- For short switching times and differently high acceleration and deceleration processes

5



5

