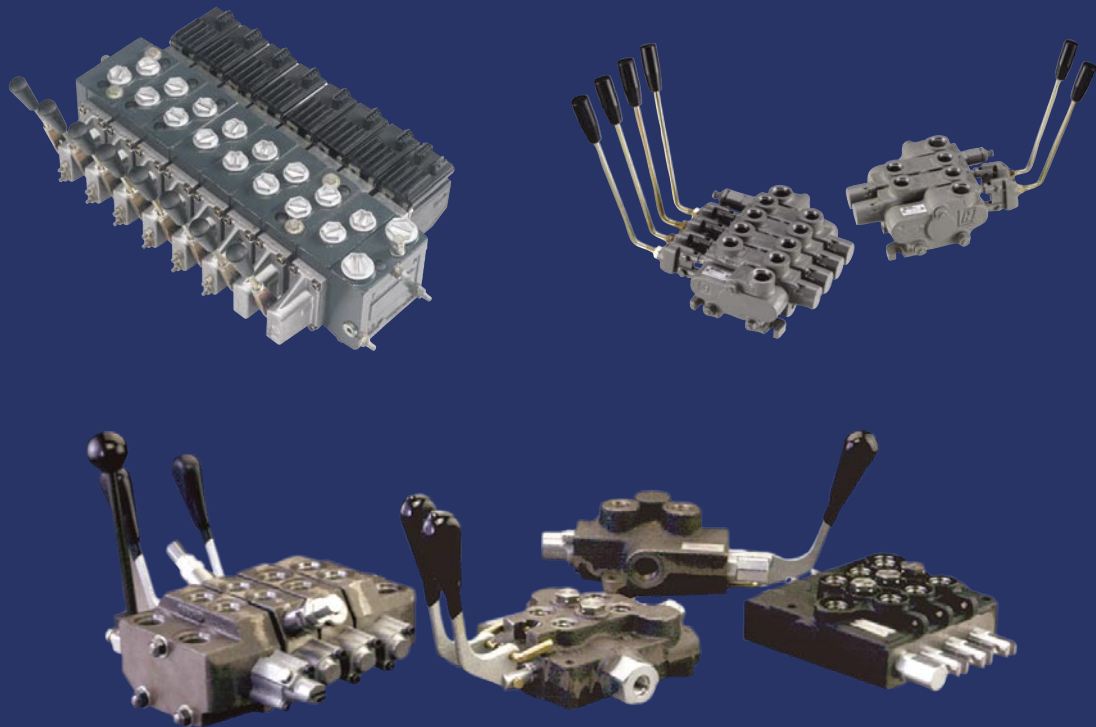


Directional control valves

Selection and flexibility for every application



**SAUER
DANFOSS**

What really matters is inside

Valves

Applications

PVG - proportional load sensing modular valve system



- Emergency vehicles
 - Utility mowers
 - Digger derricks
 - Ag sprayers
 - Backhoe loaders
 - Truck-mounted cranes
 - Combines
 - Forklift trucks
 - Aerial lifts
 - Forestry harvesters
 - Ag tractors
 - Telehandlers
-

CDS - modular directional control valve solutions



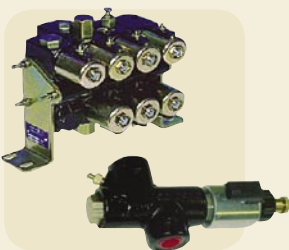
- Backhoe loaders
 - Combines
 - Ag tractors
 - Truck-mounted cranes
 - Aerial lifts
 - Ag sprayers
 - Ag implement applications
 - Refuse trucks
 - Car transporters
 - Trenching and boring equipment
 - Pavers
-

Monoblock - compact directional control valve solutions



- Forklift trucks
 - Aerial lifts
 - Sweepers
 - Trenchers
 - 3-point hitch
 - Car haulers
 - Mini-excavators
 - Skid-steer loaders
 - Small backhoes
 - Ag and garden tractors
 - Golf course mowers
 - Tree removal equipment
-

EHV Specialty - electro-hydraulic directional control valve solutions



- Combines
- Chisel plows
- Pavers
- Ag implements
- Street sweepers
- Flight simulators
- Excavators

Valves

Quick selection matrix

High flow modular valves

l/min [US gal/min]

Valve Series	40 [11]	80 [21]	120 [32]	160 [42]	200 [53]	240 [63]	Number of Sections	Circuit
PVG 120					180 [48]		1 to 8	Parallel

Modular valves

l/min [US gal/min]

Valve Series	20 [5]	40 [11]	60 [16]	80 [26]	100 [26]	120 [32]	Number of Sections	Circuit
PVG 32						100 [26.4]	1 to 10	Parallel
CDS 100						100 [26.4]	1 to 12	Series/Parallel Tandem
CDS 60			60 [16]				1 to 12	Series/Parallel Tandem
1681			57 [15]				1 to 7	Parallel
1125		38 [10]					1 to 8	Parallel

Monoblock valves

l/min [US gal/min]

Valve Series	20 [5]	40 [11]	60 [16]	80 [26]	100 [26]	120 [32]	Number of Spools	Circuit
1421					95 [25]		1	Tandem
1025				78 [21]			1	Tandem
1225				78 [21]			2	Tandem
1612				78 [21]			1	Tandem
1622			64 [17]				2	Series
1632			64 [17]				3	Series
1617		38 [10]					1	Parallel
1627		38 [10]					2	Parallel
1637		38 [10]					3	Parallel
1618		38 [10]					1	Parallel
1638		38 [10]					3	Parallel
1635		26 [7]					3	Tandem
1500		26 [7]					1	Tandem
1530		23 [6]					1	Tandem



Indicates maximum working pressure rated at 350 bar [5000 psi]



Indicates maximum working pressure rated at 240 bar [3500 psi]



Indicates maximum working pressure rated at 210 bar [3000 psi]

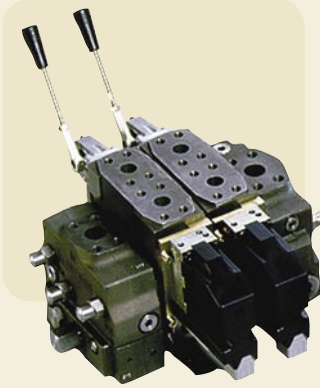


Indicates maximum working pressure rated at 104 bar [1500 psi]

Modular valve solutions

Features

PVG 120



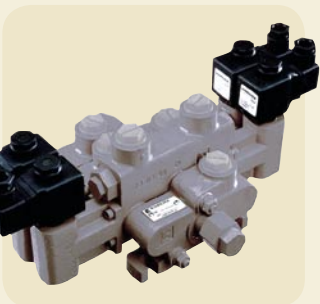
- 350 bar [5075 psi] 180 l/min [48 US gal/min] (pressure compensated)
- 240 l/min [63 US gal/min] max. non pressure compensated work flow
- 40 bar [580 psi] max. tank pressure
- 1 to 8 work sections per valve group
- Parallel / load independent flow control circuit
- SAE / BSP thread and flange porting
- Interface for PVG 32
- Spools — field replaceable / balanced and imbalanced flow control
- Work port relief / anti-cav. / pressure limiting
- Multi voltage 11-32VDC on-off / proportional pilot operator
- Electronic controls — joysticks / flow / CAN-bus
- Hydraulic operator
- Internal pressure reducer for hydraulic operator pilot

PVG 32



- 350 bar [5075 psi] 100 l/min [26 US gal/min] (pressure compensated)
- 128 l/min [34 US gal/min] max. non pressure compensated work flow
- 40 bar [580 psi] max. tank pressure
- 1 to 10 work sections per valve group
- Parallel / load independent flow control circuit
- SAE / BSP thread porting
- Mid-inlet flow to 227 l/min [60 US gal/min]
- Spools — field replaceable / balanced and imbalanced flow control
- Float position options
- Work port relief / anti-cav. / independent A/B pressure limiting
- Multi voltage 11-32VDC on-off / proportional pilot operator
- Electronic controls — joysticks / flow / CAN-bus
- Hydraulic operator
- Internal pressure reducer for hydraulic operator pilot

CDS 60

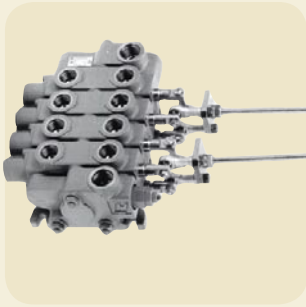


- 210 bar [3000 psi] 60 l/min [15 US gal/min]
- 40 bar [580 psi] max. tank pressure
- 1 to 12 work sections per valve group
- Parallel / tandem / series metered circuits
- SAE / BSP / Metric thread porting
- Priority flow control inlet
- Mid-inlet
- Float position options
- Work port relief / anti-cav. / metering / load-holding
- 12/24VDC on-off solenoid pilot operator
- Mechanical joystick operator
- Remote lever and cable operator
- Hydraulic / pneumatic operator
- Power beyond / pressure bypass

Modular and specialty valves

Features

CDS 100



- 210 bar [3000 psi] 100 l/min [25 US gal/min]
- 40 bar [580 psi] max. tank pressure
- 1 to 12 work sections per valve group
- Parallel / tandem
- SAE / BSP / Metric thread porting
- Priority flow control inlet
- Mid-inlet
- Float position options
- Work port relief / anti-cav. / metering / load-holding
- 12/24 VDC on-off solenoid pilot operator
- Mechanical joystick operator
- Remote lever and cable operator
- Hydraulic / pneumatic operator
- Power beyond / pressure bypass

1681



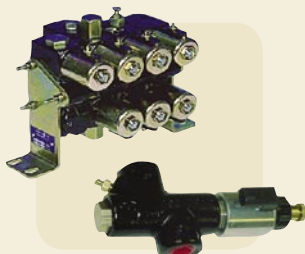
- 207 bar [3000 psi] 57 l/min [15 US gal/min] mono / modular design
- 70 bar [1000 psi] max. tank pressure
- Work port leakage less than 10.0 cm³/min [0.61 in³/min]
- 1 to 7 work sections per valve group
- Parallel metered circuit
- Priority #1 spool / float optional
- Work port relief / anti-cav. / metering / load-holding
- Mechanical joystick operator
- Power beyond

1125



- 207 bar [3000 psi] 38 l/min [10 US gal/min] mono / modular design
- 70 bar [1000 psi] max. tank pressure
- 1 to 8 work sections per valve group
- Parallel metered circuit
- Clevis spool end
- Priority #1 spool / float optional
- Work port relief / anti-cav. / metering / load-holding
- Mechanical joystick operator
- Power beyond convertible

EHV Specialty Valves



Solenoid operated modular directional control valve

- 207 bar [3000 psi] 38 l/min [10 US gal/min]
- 1 to 8 work sections per valve group
- Parallel circuit
- Work port relief / anti-cav. / metering / load-holding
- 12/24 VDC on-off solenoid pilot operator
- Power beyond convertible

Bi-directional proportional flow control valve

- 138 bar [2000 psi] 38 l/min [10 US gal/min] max. (less than 5% hysteresis)
- Manual override
- 12/24 VDC max. current is 2.2/1.1 amps
- Low pressure drop — smooth transition between low flow and high flow
- Applications: Bi-directional motor / cylinder flow control

Monoblock valves

Features

1421



- 207 bar [3000 psi] 95 l/min [25 US gal/min]
- 70 bar [1000 psi] max. tank pressure
- Single spool cast-iron monoblock
- Tandem metered circuit
- Clevis spool end
- Float detent optional
- Main relief
- Power beyond

1025 and 1225



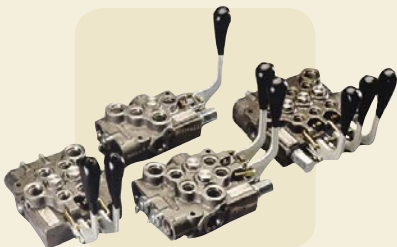
- 207 bar [3000 psi] 76 l/min [20 US gal/min]
- 70 bar [1000 psi] max. tank pressure
- Single or double spool cast-iron monoblock
- Tandem metered circuit
- Clevis spool end
- Float detent optional
- Main relief
- Power beyond convertible

1612, 1622, and 1632



- 207 bar [3000 psi] 76 l/min [20 US gal/min] (1612 only)
- 64 l/min [17 US gal/min] max. flow for 1622 / 1632
- Work port leakage less than 10.0 cm³/min [0.61 in³/min]
- 70 bar [1000 psi] max. tank pressure
- Single, double, or triple spool cast-iron monoblock
- Tandem metered circuit (1612 only)
- Series metered circuit (1622 / 1632 only)
- Clevis spool end
- Float detent optional
- Regenerative circuit option available for 1622 / 1632
- Work port relief
- Main relief
- Power beyond convertible

1617, 1627, and 1637

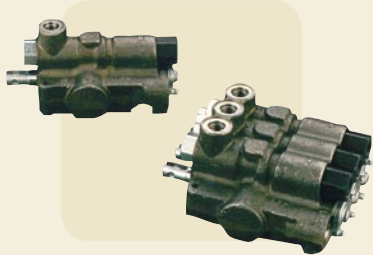


- 207 bar [3000 psi] 38 l/min [10 US gal/min]
- Work port leakage less than 13 cm³/min [0.79 in³/min]
- 70 bar [1000 psi] max. tank pressure
- Single, double, or triple spool cast-iron monoblock
- All porting options machined and plugged
- Parallel metered circuit
- Clevis spool end
- Float detent optional
- Main relief
- Power beyond convertible
- Mechanical joystick operator

Monoblock valves

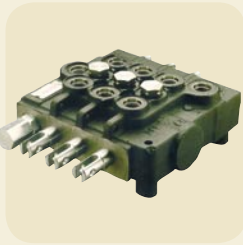
Features

1618 and 1638



- 207 bar [3000 psi] 38 l/min [10 US gal/min]
- Work port leakage less than 1 cm³/min [0.061 in³/min]
- 70 bar [1000 psi] max. tank pressure
- Single or triple spool cast-iron monoblock
- Parallel metered circuit
- Clevis spool end
- Float detent optional
- Main relief
- Power beyond convertible
- Mechanical joystick operator

1635



- 207 bar [3000 psi] 26 l/min [7 US gal/min]
- Work port leakage less than 10.0 cm³/min [0.61 in³/min]
- 70 bar [1000 psi] max. tank pressure
- Triple spool cast-iron monoblock
- Tandem metered circuit
- Clevis spool end
- Float detent optional
- Main relief
- Power beyond convertible
- Mechanical joystick operator

1500



- 138 bar [2000 psi] 26 l/min [7 US gal/min]
- Work port leakage less than 6 cm³/min [0.36 in³/min]
- 70 bar [1000 psi] max. tank pressure
- Single spool cast-iron monoblock
- Tandem metered circuit
- Clevis spool end
- Main relief
- Power beyond convertible

1530



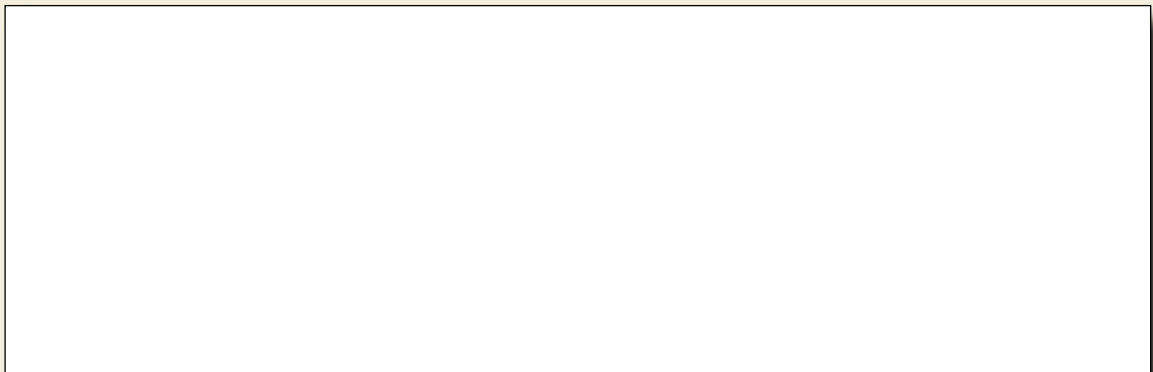
- 103 bar [1500 psi] 23 l/min [6 US gal/min]
- Work port leakage less than 3 cm³/min [0.18 in³/min]
- 14 bar [200 psi] max. tank pressure
- Single spool cast-iron monoblock
- Tandem metered circuit
- Clevis spool end

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