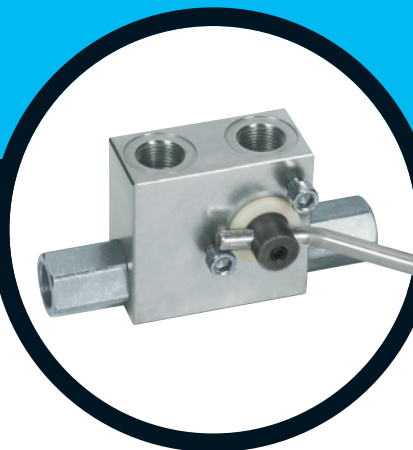
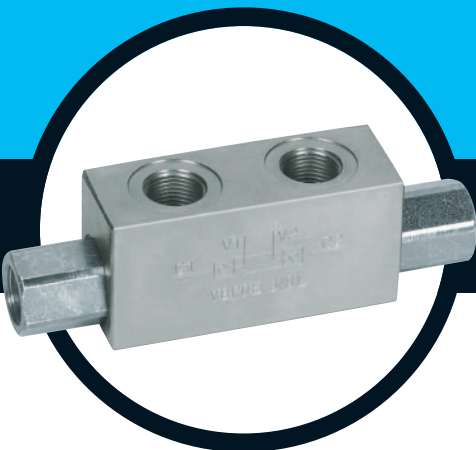


HYDRAULIC CARTRIDGE VALVES

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DOUBLE PILOT OPERATED CHECK VALVES

USE AND OPERATION

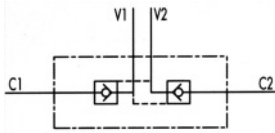
Pilot check valves are used to block the cylinder in both directions.

Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator.

ON REQUEST: WITHOUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PORTS BSP	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0010	VBPDE 1/4 L	1/4"	1:5,5	20	350	4	£30.98
V0020	VBPDE 3/8" L	3/8"	1:5,5	35	350	3	£37.16
V0030	VBPDE 1/2" L	1/2"	1:5	50	350	3	£44.48
V0050	VBPDE 3/8"	3/8"	1:5	45	350	3.5	£53.08
V0060	VBPDE 18	1/8"	1:5	45	350	3.5	£58.42
V0070	VBPDE 1/2"	1/2"	1:4	70	350	3.5	£56.65
V0040	VBPDE 3/4"	3/4"	1:4	100	300	2	£76.11



DOUBLE PILOT OPERATED CHECK VALVES FOR 12MM PIPE MOUNTING (DIN 2353)

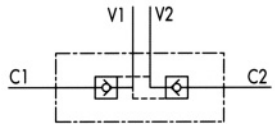
USE AND OPERATION

Pilot check valves are used to block the actuator in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. They are easily assembled on a cylinder. We supply on request fittings kit for mounting on cylinder with a specific centre distance.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator with the pipe.

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0090	VBPDE 1/4" L 2 CEXC 12L	1:5,5	20	350	4	£43.36
V0110	VBPDE 3/8" L 2 CEXC 12L	1:5,5	30	350	4	£43.36
V0091	VBPDE 1/4" L 2 CEXC-10L	XZ1:5,5	20	350	5.5	£46.94



DOUBLE PILOT OPERATED CHECK VALVE WITH ADJUSTABLE BANJO UNION

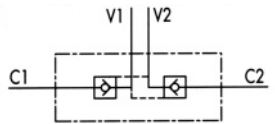
USE AND OPERATION

Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. This valve is ideal for very short distance centre cylinders. The check cartridge serves also as fixing banjo, allowing after nut releasing a 90° regulation

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow, connect c1 directly to the cylinder through the 3/8" screw and c2 to the cylinder through the banjo.

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0130	VBPDE 3/8" L 2 CC 12L	1:5,5	35	350	3	£46.92
V0135	VBPDE 1/2" L 2 CC 15L	1:5	50	350	3	£58.42



DOUBLE PILOT OPERATED CHECK VALVES - TYPE A

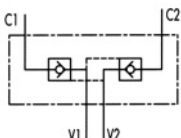
USE AND OPERATION

Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0178	VBPDE 1/4" A	1:5,5	20	350	4.5	47.78
V0180	VBPDE 3/8" A	1:5,5	30	350	4.5	£58.42
V0190	VBPDE 1/2" A	1:4,5	55	350	3	£81.43



DOUBLE PILOT OPERATED CHECK VALVES FLANGEABLE

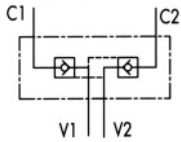
USE AND OPERATION

Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. The face mounting enables assembly directly on the cylinder

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator through the flanges

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0185	VBPDE 3/8" FL	1:5,5	30	350	4,5	£64.26
V0195	VBPDE 1/2" FL	1:4,5	55	350	3	£81.43
B5000	FLANGE FOR 3/8"					£17.25
B5500	FLANGE FOR 1/2"					£20.07



DOUBLE PILOT OPERATED CHECK VALVES FLANGEABLE BY SCREW

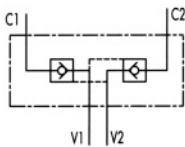
USE AND OPERATION

Pilot check valves are used to block the actuator in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. This valve can be fixed directly on cylinder through the drilled screw supplied with the valve

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator (c1 by the pipe and c2 by the screw)

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0178/FLV	VBPDE 1/4" A FLV	1:5,5	20	350	4,5	£64.60
V0180/FLV	VBPDE 3/4" A FLV	1:5,5	30	350	4,5	£81.43



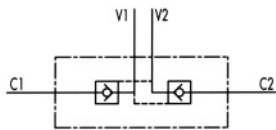
CYLINDRICAL DOUBLE PILOT OPERATED CHECK VALVE

USE AND OPERATION

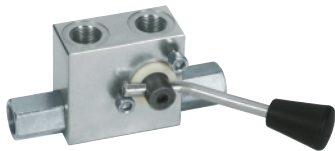
Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. Cylindrical type instead of standard one (parallelepiped)

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0055	VBPDE 3/8" CYLINDRICAL	1:5	45	350	3	£58.42



DOUBLE PILOT OPERATED CHECK VALVES WITH MANUAL SHUT-OFF

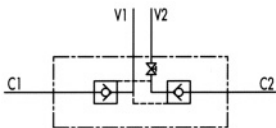
USE AND OPERATION

Pilot check valves are used to block the actuator in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. These valves are very safe, that's why they are ideal to be assembled on crane hydraulic cylinders.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

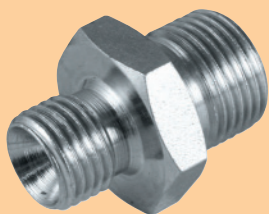
Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, RIGHT OR LEFT SIDE LEVER (TO SPECIFY IN THE ORDER)



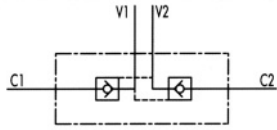
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0072	VBPDE 1/4" L C/RUBINETTO	1:5,5	20	350	4	£63.73
V0074	VBPDE 3/8" L C/RUBINETTO	1:5,5	30	350	3	£64.60
V0076	VBPDE 1/2" L C/RUBINETTO	1:5	50	350	3	£78.76
V0132*	VBPDE 1/4" L C/RUB. 2 CEXC 12L	1:5,5	20	350	4	£67.27
V0134*	VBPDE 3/8" L C/RUB. 2 CEXC 12L	1:5,5	30	350	4	£67.27
V0136*	VBPDE 1/2" L C/RUB.2 CC 15L	1:5	50	350	3	£83.19

* = Pipe DIN 2353



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DOUBLE PILOT OPERATED CHECK VALVES WITH LATERAL JOINS

USE AND OPERATION

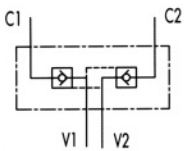
Pilot check valves are used to block the cylinder in both directions. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. The feature of this valve is the side position of the ports

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and c1 and c2 to the actuator

ON REQUEST: WITH OUT SEAL ON PILOT PISTON

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0181	VBPDE 1/4" AL	1:5,5	20	350	4	£47.78
V0182	VBPDE 3/8" AL	1:5,5	35	350	3	£56.65



DOUBLE PILOT OPERATED CHECK VALVES TO WELD

USE AND OPERATION

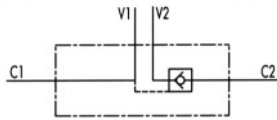
Having inside the check cartridge, the function of this valve is nearly the same of the pilot check valves, Directly weld on the cylinder. Q 70 available in the single operated type. The feature of this valve is the high pressure drop, so as to reduce speed and to limit vibrations.

Body: Steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow and weld c1 and c2 to the actuator. The check cartridge and pilot piston have to be mounted after installation of the valve, so they are supplied separately

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V1011	VBAS 70	1:5,5	25	350	3	£72.66
V1010	VBAS 80	1:5,5	25	350	2	£79.10
V1012	VBAS 90	1:5,5	25	350	2	£87.38

SINGLE PILOT OPERATED CHECK VALVES



SINGLE PILOT OPERATED CHECK VALVE

USE AND OPERATION

These valves are used to block the cylinder in one direction. The flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. They are easily assembled on cylinders.

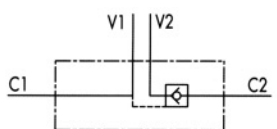
Specific distance-centre mounting fittings kit on request.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the flow to be blocked

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, 1 BAR SPRING, 8 BAR SPRING

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0220	VBPSE 1/4" L 4 VIE	15,5	20	350	4	£29.38
V0230	VBPSE 3/8" L 4 VIE	1:5,5	35	350	3	£34.30
V0240	VBPSE 1/2" L 4 VIE	1:5	50	350	6	£41.66
V0250	VBPSE 3/8" 4 VIE	1:5	45	350	8	£34.30
V0260	VBPSE 1/2" 4 VIE	1:4	70	350	3.5	£50.52
V0245	VBPSE 3/4" 4 VIE	1:4	100	350	2	£72.19



SINGLE PILOT OPERATED CHECK VALVES FOR 12MM PIPE MOUNTING (DIN 2353)

USE AND OPERATION

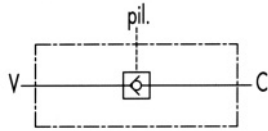
These valves are used to block the cylinder in one direction. The flow is free in one direction and blocked in the reverse direction until pilot pressure is applied

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: connect v1 and v2 to the pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the flow to be blocked

ON REQUEST: WITH OUT SEAL ON PILOT PISTON, WITH OUT NUT AND OLIVE, 1 BAR SPRING, 8 BAR SPRING

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0090/SE	VBPSE 1/4" L 2 CEXC	1:5,5	20	350	4	£39.70
V0110/SE	VBPSE 3/8" L 2 CEXC	1:5,5	30	350	4	£39.70
V0135/SE	VBPSE 1/2 L 2 CC	1:5	50	350	3	£52.33



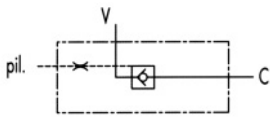
3 WAYS SINGLE PILOT OPERATED CHECK VALVES, IN LINE

USE AND OPERATION

These valves are used to block the cylinder in one direction. The flow is free in one direction and blocked in the reverse direction until pilot pressure is applied

Body: Yellow-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage
Applications: connect V to the pressure flow, c to the actuator's side you want the flow to be blocked and pil to the pilot line
ON REQUEST: 8 BAR SPRING

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0201	VBPSL 1/4"	1:9,8	15	350	2.5	£37.90
V0202	VBPSL 3/8"	1:6,5	30	300	5	£43.86
V0203	VBPSL 1/2"	1:4,6	45	300	3	£49.08
V0204	VBPSL 3/4"	1:4,4	80	250	0.5	£82.85
V0205	VBPSL 1"	1:3,5	120	220	1	£180.39



SINGLE PILOT OPERATED CHECK VALVES, HIGH PILOT

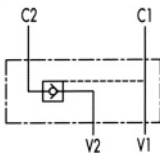
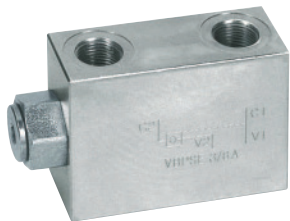
USE AND OPERATION

These valves are used to block the cylinder in one direction. The flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. Thanks to its high pilot ratio and to a time-lag locking device, it's suitable for circuits with heavy loads to avoid vibrations.

WARNING: Please ask the producer for use with distributors or open centre solenoid valves

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage
Applications: connect V to the pressure flow, c to the actuator's side you want the flow to be blocked and pil to the pilot line
ON REQUEST: 1 BAR SPRING, 8 BAR SPRING

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0273	VBL/3 SE 1/4"	1:8	20	350	4	£40.96
V0275	VBL/3 SE 3/8"	1:8	40	350	3.5	£46.91
V0277	VBL/3 SE 1/2"	1:7	70	350	3.5	£52.69



SINGLE PILOT OPERATED CHECK VALVES TYPE A

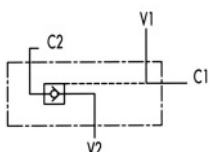
USE AND OPERATION

These valves are used to block the cylinder in one direction. flow is free in one direction and blocked in the reverse direction until pilot pressure is applied.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage
Applications: connect v1 to the pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the flow to be blocked

ON REQUEST: WITHOUT SEAL ON PILOT PISTON 1 BAR SPRING, 8 BAR SPRING

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0272	VBPSE 1/4" A	1:5,5	20	350	4.5	£48.17
V0274	VBPSE 3/8" A	1:5,5	30	350	4.5	£49.63
V0276	VBPSE 1/2" A	1:4,5	55	350	3	£59.56



SINGLE PILOT OPERATED CHECK VALVES FLANGEABLE

USE AND OPERATION

These valves are used to block the cylinder in one direction. flow is free in one direction and blocked in the reverse direction until pilot pressure is applied, This valve can be fixed directly on cylinder

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage
Applications: Connect v1 and v2 to the pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the flow to be blocked

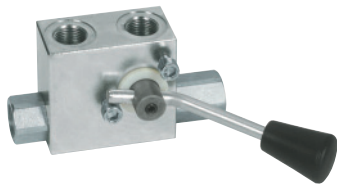
ON REQUEST: WITHOUT SEAL ON PILOT PISTON

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0268	VBPSE 1/4" FL	1:5,5	20	350	4.5	£53.78
V0269	VBPSE 3/8" FL	1:5,5	30	350	4.5	£55.05
V0270	VBPSE 1/2" FL	1:4,5	55	350	3	£67.67



FLOWFIT

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SINGLE PILOT OPERATED CHECK VALVES WITH MANUAL SHUT-OFF

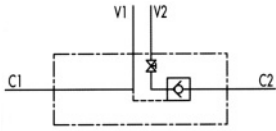
USE AND OPERATION

Pilot check valves are used to block the actuator in both direction. Flow is free in one direction and blocked in the reverse direction until pilot pressure is applied. These valves are very safe, that's why they are ideal to be assembled on crane hydraulic cylinders. The shut-off system enables to exclude and risk caused by possible manoeuvring errors.

Body: zinc-plated steel, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: Connect v1 and v2 to the pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the flow to be blocked

ON REQUEST: WITHOUT SEAL ON PILOT PISTON, RIGHT OF LEFT SIDE LEVER (TO SPECIFY IN THE ORDER)



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0072/SE	VBPSE 1/4" L C/RUBINETTO	1:5,5	20	350	4	£63.17
V0074/SE	VBPSE 3/8" L C/RUBINETTO	1:5,5	30	350	3	£63.17
V0076/SE	VBPSE 1/2" L C/RUBINETTO	1:5	50	350	3	£77.59
V0132/SE	VBPSE 1/4" L C/RUB.2 CEXC	1:5,5	20	350	4	£64.98
V0134/SE	VBPSE 3/8" L C/RUB.2 CEXC	1:5,5	30	350	4	£64.98
V0136/SE	VBPSE 1/2" L C/RUB.2 CC	1:5	50	350	3	£80.70



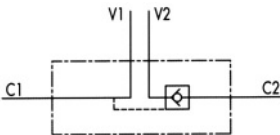
EXTERNAL SINGLE PILOT OPERATED CHECK VALVES

USE AND OPERATION

These valves are used to block the cylinder in one direction. The flow is free in one direction and blocked in the reverse one until pilot pressure is applied. Separated mounting enables valves to be insensitive to back pressure on the line V. Assembly on 2 or more parallel cylinders with flow regulator valve to allow balanced and soft descent is highly recommended

Body: Aluminium, **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: Connect v1 and v2 to the pressure flow and c1 and c2 to the actuator as indicated in the diagram



CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0231	VBPSE 3/8" PS	1:12	35	350	3	£60.46

OVERCENTRE VALVES



USE AND OPERATION

These valves are used to control actuator's movement and block in one direction in order to enable the following functions: Under control descent of a load: load's weight doesn't carry it way as the valve prevent any cavitations of the actuator. Limited maximum pressure in case of shocks created by loads, over loads or sudden manoeuvring (load control with open centre distributor)

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** minor leakage

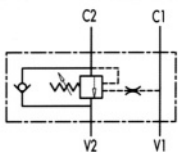
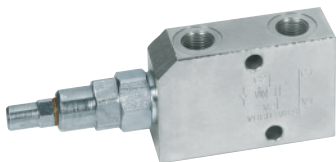
Standard settings: 320 bar

Valve setting must be at least 1,3 times more than load pressure in order to enable the valve to close even when undergone to the maximum load pressure

Applications: Connect v1 and v2 to the pressure flow, c1 to the free flow side of the actuator and c2 to the actuator's side you want the low to be blocked. In-line mounting

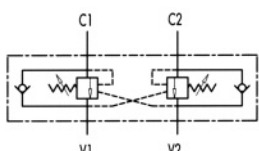
ON REQUEST: OTHER SETTINGS AVAILABLE, PILOT RATION 1:8 (SPECIFY CODE/RP18), SEALING CAP (CODE / P) AND ARRANGED SEALING CAP (CODE/PP)

SINGLE OVER CENTRE VALVES

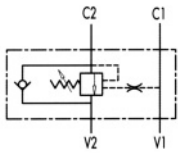


CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0390	VBCD 3/8" SE	1:3,1	35	350	£84.26
V0410	VBCD 1/2" SE	1:3,1	50	350	£85.34
V0411	VBCD 3/4" SE	1:5,5	105	350	£140.64
V0390/RP18	VBCD 3/8" SE RP 1 : 8	1:8	35	350	£100.38
V0410/RP18	VBCD 1/2" SE RP 1 : 8	1:8	50	350	£102.58
V0411/RP18	VBCD 3/4" SE RP 1 : 8	1:8	105	350	£167.34

DOUBLE OVERCENTRE VALVES



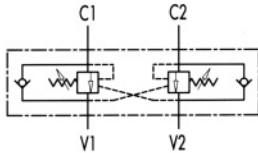
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0420	VBCD 3/8" DE	1:3,1	35	350	£137.04
V0430	VBCD 1/2" DE	1:3,1	50	350	£141.84
V0431	VBCD 3/4" DE	1:5,5	105	350	£216.37
V0420/RP18	VBCD 3/8" DE RP 1 : 8	1:8	35	350	£163.67
V0430/RP18	VBCD 1/2" DE RP 1 : 8	1:8	50	350	£171.15
V0431/RP18	VBCD 3/4" DE RP 1 : 8	1:8	105	350	£260.21



SINGLE OVERCENTRE VALVES TYPE A

The A type is different in the connections position and the pilot ratio

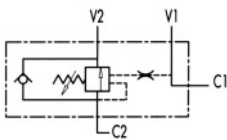
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0382	VBCD 1/4" SE/A	1:4,5	20	350	£81.22
V0392	VBCD 3/8" SE/A	1:4,5	40	350	£81.22
V0412	VBCD 1/2" SE/A	1:4,5	60	350	£85.73
V0419	VBCD 3/4" SE/A	1:5,5	95	350	£141.69
V0417	VBCD 1" SE/A	1:6,2	160	350	£255.65



DOUBLE OVERCENTRE VALVES TYPE A

The A type is different in the connections position and the pilot ratio

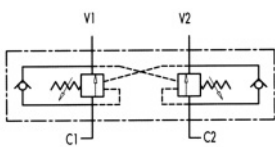
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0418	VBCD 1/4" DE/A	1:4,5	20	350	£133.55
V0422	VBCD 3/8" DE/A	1:4,5	40	350	£133.55
V0432	VBCD 1/2" DE/A	1:4,5	60	350	£140.76
V0435	VBCD 3/4" DE/A	1:5,5	95	350	£214.78
V0436	VBCD 1" DE/A	1:6,2	160	350	£373.75



SINGLE OVERCENTRE VALVES FLANGEABLE

Flange ports enable direct mounting of the valve on the actuator

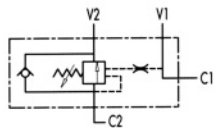
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0400	VBCD 3/8" SE/FL	1:4,5	40	350	£90.60
V0402	VBCD 1/2" SE/FL	1:4,5	60	350	£95.64
B8000	FLANGE FOR 3/8" & 1/2" SE				£11.81



DOUBLE OVERCENTRE VALVES FLANGEABLE

Flange ports enable direct mounting of the valve on the actuator

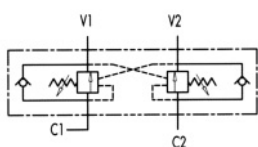
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0424	VBCD 3/8" DE/FL	1:4,5	40	350	£145.73
V0434	VBCD 1/2" DE/FL	1:4,5	60	350	£153.41
B8500	FLANGE FOR 3/8" & 1/2" DE				£17.26



SINGLE OVERCENTRE VALVES FLANEABLE BY SCREW

The special connection by screw, supplied with valve, enables direct mounting of the valve on the actuator

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0392/FLV	VBCD 3/8" SE/A FLV	1:4,5	40	350	£98.01
V0412/FLV	VBCD 1/2" SE/A FLV	1:4,5	60	350	£102.88



DOUBLE OVERCENTRE VALVES FLANGEABLE BY SCREW

The special connection by screw, supplied with valve, enables direct mounting of the valve on the actuator

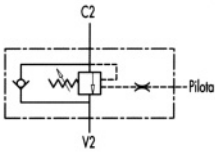
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0422/FLV	VBCD 3/8" DE/A FLV	1:4,5	40	350	£160.63
V0432/FLV	VBCD 1/2" DE/A FLV	1:4,5	60	350	£167.84

SEE KOMPASS VALVE SECTION FOR MORE OVERCENTRE VALVE OPTIONS.

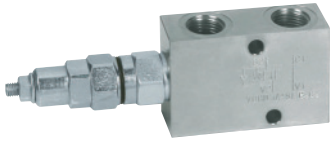


SINGLE OVER CENTRE VALVES, 3 WAYS

External pilot line

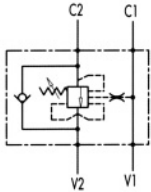


CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0394	VBCD 3/8" SE 3 VIE	1:4,5	40	350	£77.18
V0414	VBCD 1/2" SE 3 VIE	1:4,5	60	350	£80.41



SINGLE OVERCENTRE VALVES FOR CLOSED CENTRE

This valve is ideal when normal overcentre valves doesn't work properly as it's not sensitive to back pressure

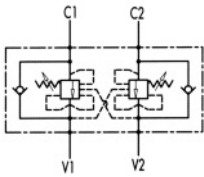


CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0391	VBCD 3/8" SE-A-CC	1:4,5	40	350	£98.83
V0393	VBCD 1/2" SE-A-CC	1:4,5	60	350	£102.40
V0407	VBCD 3/8" SE CC	1:3,1	35	350	£111.53
V0408	VBCD 1/2" SE CC	1:3,1	50	350	£114.61
V0409	VBCD 3/4" SE CC	1:5,5	105	350	£177.77
V0407/RP18	VBCD 3/8" SE CC	1:8	35	350	£122.75
V0408/RP18	VBCD 1/2" SE CC	1:8	50	350	£126.08
V0409/RP18	VBCD 3/4" SE CC	1:8	105	350	£195.39



DOUBLE OVERCENTRE VALVES FOR CENTRE CLOSED

This valve is ideal when normal overcentre valves doesn't work properly as it's not sensitive to back pressure

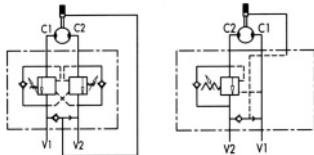


CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0441	VBCD 3/8" DE CC	1:3,1	35	350	£192.58
V0442	VBCD 1/2" DE CC	1:3,1	50	350	£199.07
V0443	VBCD 3/4" DE CC	1:5,5	105	350	£283.36
V0441/RP18	VBCD 3/8" DE CC	1:8	35	350	£211.87
V0442/RP18	VBCD 1/2" DE CC	1:8	50	350	£218.94
V0443/RP18	VBCD 3/4" DE CC	1:8	105	350	£311.38
V0421	VBCD 3/8" DE-A-CC	1:4,5	40	350	£167.40
V0423	VBCD 1/2" DE-A-CC	1:4,5	60	350	£174.52



OVERCENTRE VALVES FLANGEABLE ON DANFOSS MOTORS OMP/OMR

Direct flange is ideal for Danfoss motor type omp-omr and provides a maximum safety, very low pressure drops and solid installation



VBCDF DE OMP/OMR

VBCDF SE OMP/OMR

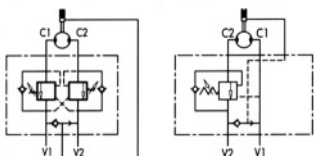
CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0415	VBCDF 1/2" SE OMP-OMR	1:4,5	50	350	£103.77
V0425	VBCDF 1/2" DE OMP-OMR	1:4,5	50	350	£173.89
V0415/SF	VBCDF 1/2" SE OMP-OMR SF/ BRAKE UNCLAPING	1:4,5	50	350	£114.85
V0425/SF	VBCDF 1/2" DE OMP-OMR SF/ BRAKE UNCLAPING	1:4,5	50	350	£185.16

NB. BRAKE UNCLAPING MEANS " A MECHANICAL FAIL SAFE BRAKE "



OVERCENTRE VALVES FLANGEABLE ON DANFOSS MOTORS OMS

Direct flange is ideal for danfoss engine type oms and provides a maximum safety, very low pressure drops and solid installation



VBCDF DE OMS

VBCDF SE OMS

CODE	TYPE	PILOT RATIO	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0416	VBCDF 1/2" SE OMS	1:4,5	50	350	£101.06
V0426	VBCDF 1/2" DE OMS	1:4,5	50	350	£171.47
V0416/SF	VBCDF 1/2" SE OMS /SF BRAKE UNCLAPING	1:8	50	350	£110.10
V0426/SF	VBCDF 1/2" DE OMS SF/ BRAKE UNCLAPING	1:8	50	350	£181.00

NB. BRAKE UNCLAPING MEANS " A MECHANICAL FAIL SAFE BRAKE "

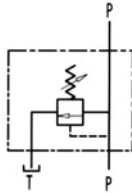
LIGHT RELIEF VALVES

USE AND OPERATION

The relief valve provides overload protection in a fast and accurate way: when it reaches pressure setting, the valve opens allowing pressure relief in order not to exceed this setting

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage **Applications:** Connect circuit port with pressure to P and tank port to T, Port p is reversible

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0689	VMP 1/4" L	30	300	£27.64
V0690	VMP 3/8" L	40	300	£36.06
V0689/T	VMP 1/4" L PRESSURE PRESET	30	300	£32.47
V0690/T	VMP 3/8" L PRESSURE PRESET	40	300	£35.05
V0689/V	VMP 1/4" L HANDKNOB	30	300	£33.73
V0690/V	VMP 3/8" L HANDKNOB	40	300	£36.32
V0689/P	VMP 1/4" L SEALING CAP	30	300	£35.36
V0690/P	VMP 3/8" L SEALING CAP	40	300	£38.02

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
10 - 180 (Standard)	40	100
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m

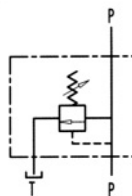
RELIEF VALVES

USE AND OPERATION

The relief valve provides overload protection in a fast and accurate way: when it reaches pressure setting, the valve opens allowing pressure relief in order not to exceed this setting

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage **Applications:** Connect circuit port with pressure to P and tank port to T, Port p is reversible

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0700	VMP 3/8"	45	300	£36.65
V0710	VMP 1/2"	70	300	£40.23
V0720	VMP 3/4"	120	300	£52.89
V0700/T	VMP 3/8" PRESSURE PRESET	45	300	£42.56
V0710/T	VMP 1/2" PRESSURE PRESET	70	300	£46.68
V0720/T	VMP 3/4" PRESSURE PRESET	120	300	£61.23
V0700/V	VMP 3/8" HANDKNOB	45	300	£43.65
V0710/V	VMP 1/2" HANDKNOB	70	300	£47.63
V0720/V	VMP 3/4" HANDKNOB	120	300	£61.98
V0700/P	VMP 3/8" SEALING CAP	45	300	£45.55
V0710/P	VMP 1/2" SEALING CAP	70	300	£49.60
V0720/P	VMP 3/4" SEALING CAP	120	300	£64.18

SPRINGS

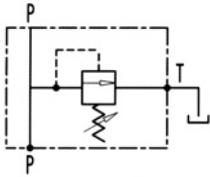
SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



KOMPASS®

SEE KOMPASS VALVE SECTION FOR MORE RELIEF VALVES AND RELIEF UNLOADING OPTIONS.



DIFFERENTIAL TYPE RELIEF VALVES

USE AND OPERATION

The relief valve provides overload protection in a fast and accurate way: when it reaches pressure setting, the valve opens allowing pressure relief in order not to exceed this setting. The differential valve opening is slower than the standard one, but the setting is more stable when the flow changes.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

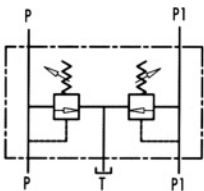
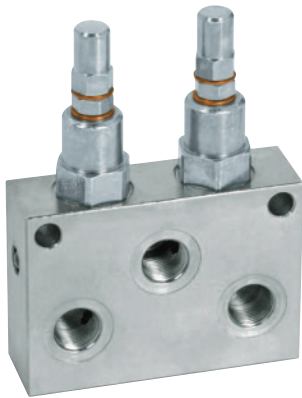
Applications: Connect circuit port with pressure to P and tank port to T. The 1" size is supplied with a double exit T (1 exit can be capped according with mounting needs)

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0725	VMPP 3/4"	120	400	£116.60
V0735	VMPP 1"	180	400	£135.19
V0725/T	VMPP 3/4" PRESSURE PRESET	120	400	£120.91
V0735/T	VMPP 1" PRESSURE PRESET	180	400	£139.74
V0725/V	VMPP 3/4" HANDKNOB	120	400	£120.52
V0735/V	VMPP 1" HANDKNOB	180	400	£139.01
V0725/P	VMPP 3/4" SEALING CAP	120	400	£120.28
V0735/P	VMPP 1" SEALING CAP	180	400	£142.71

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
20 - 200	40	160
50 - 400 (Standard)	80	180



DOUBLE RELIEF VALVES

USE AND OPERATION

Made up by 2 relief valves, the double relief valve provides overload protection in 2 lines-hydraulic circuits with 1 tank. It allows 2 different pressure setting

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Connect P and P1 to the pressure flow, the remaining P1 and P ports to the 2 lines to be controlled but in the reverse way; connect T to the tank.

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0732	VMPP 3/8"	45	300	£74.60
V0734	VMPP 1/2"	70	300	£76.32
V0732/T	VMPP 3/8" PRESSURE PRESET	45	300	£79.80
V0734/T	VMPP 1/2" PRESSURE PRESET	70	300	£82.02
V0732/V	VMPP 3/8" HANDKNOB	45	300	£82.43
V0734/V	VMPP 1/2" HANDKNOB	70	300	£84.64
V0732/P	VMPP 3/8" SEALING CAP	45	300	£86.10
V0734/P	VMPP 1/2" SEALING CAP	70	300	£88.32

SPRINGS

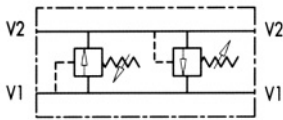
SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



KOMPASS®

SEE KOMPASS VALVE SECTION FOR MORE RELIEF VALVES AND RELIEF UNLOADING OPTIONS.



DUAL CROSS RELIEF VALVES

USE AND OPERATION

Made up by 2 relief valves with crossed tank, this valve is used to block pressure to a certain setting in the 2 ports of an actuator/hydraulic motor. It's ideal to provide protection against sudden shock pressures and to adjust different pressures in the 2 ports of an hydraulic circuit as well.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Connect V1 and V2 to the pressure flow or to the actuator/hydraulic motor. Vice versa for the remaining port V1 and V2. Mounting by the actuator is highly recommended in order to avoid pressure drops.

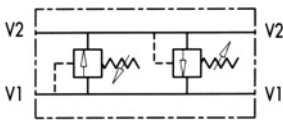
ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0438	VAU 1/4"	30	300	£57.76
V0440	VAU 3/8"	45	300	£63.17
V0450	VAU 1/2"	70	300	£66.78
V0460	VAU 3/4"	110	300	£88.44
V0438/T	VAU 1/4" PRESSURE PRESET	30	300	£62.15
V0440/T	VAU 3/8" PRESSURE PRESET	45	300	£69.23
V0450/T	VAU 1/2" PRESSURE PRESET	70	300	£72.39
V0460/T	VAU 3/4" PRESSURE PRESET	110	300	£94.31
V0438/V	VAU 1/4" HANDKNOB	30	300	£64.88
V0440/V	VAU 3/8" HANDKNOB	45	300	£70.07
V0450/V	VAU 1/2" HANDKNOB	70	300	£74.79
V0460/V	VAU 3/4" HANDKNOB	110	300	£96.33
V0438/P	VAU 1/4" SEALING CAP	30	300	£68.08
V0440/P	VAU 3/8" SEALING CAP	45	300	£73.39
V0450/P	VAU 1/2" SEALING CAP	70	300	£78.28
V0460/P	VAU 3/4" SEALING CAP	110	300	£100.17

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



DIFFERENTIAL DUAL CROSS RELIEF VALVES

USE AND OPERATION

Made up by 2 relief valves with crossed tank, this valve is used to block pressure to a certain setting in the 2 ports of an actuator/hydraulic motor. It's ideal to provide protection against sudden shock pressures and to adjust different pressures in the 2 ports of an hydraulic circuit as well. The differential valve makes the opening slower but more constant setting even with flow changes.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Connect V1 and V2 to the pressure flow or to the actuator/hydraulic motor. Vice versa for the remaining port V1 and V2. Mounting by the actuator is highly recommended in order to avoid pressure drops.

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0470	VAU 1"	160	400	£234.96
V0470/T	VAU 1" PRESSURE PRESET	160	400	£238.92
V0470/V	VAU 1" HANDKNOB	160	400	£242.55
V0470/P	VAU 1" SEALING CAP	160	400	£244.40

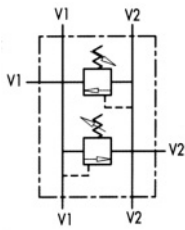
SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
20 - 200	40	160
50 - 400 (Standard)	80	180



KOMPASS®

SEE KOMPASS VALVE SECTION FOR PRESSURE REDUCING VALVES



DUAL CROSS RELIEF VALVES

USE AND OPERATION

Made up by 2 relief valves with crossed tank, this valve is used to block pressure to a certain setting in the 2 ports of an actuator/hydraulic motor. It's ideal to provide protection against sudden shock pressures and to adjust different pressures in the 2 ports of an hydraulic circuit as well. The 6 ports (2 ways in and 4 ways out reversible) enable to use just 1 valve for 2 cylinders.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Connect V1 and V2 to the pressure flow or to the actuator/hydraulic motor. Vice versa for the remaining port V1 and V2. Mounting by the actuator is highly recommended in order to avoid pressure drops.

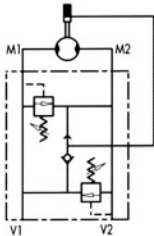
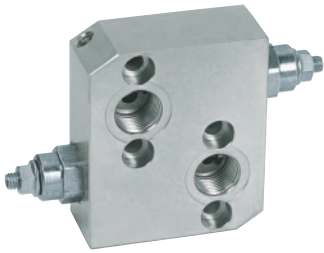
ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0737	VMPDI 3/8"	45	300	£74.36
V0738	VMPDI 1/2"	70	300	£79.42
V0737/T	VMPDI 3/8" PRESSURE PRESET	45	300	£79.42
V0738/T	VMPDI 1/2" PRESSURE PRESET	70	300	£84.14
V0737/V	VMPDI 3/8" HANDKNOB	45	300	£81.87
V0738/V	VMPDI 1/2" HANDKNOB	70	300	£86.41
V0737/P	VMPDI 3/8" SEALING CAP	45	300	£85.10
V0738/P	VMPDI 1/2" SEALING CAP	70	300	£89.82

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



DUAL CROSS RELIEF VALVE FLANGEABLE ON DANFOSS MOTORS OMS-OMP/OMR-OMT

USE AND OPERATION

Made up by 2 relief valves with crossed tank, this valve is used to block pressure to a certain setting in the 2 ports of an actuator/hydraulic motor. It's ideal to provide protection against sudden shock pressures and to adjust different pressures in the 2 ports of an hydraulic circuit as well. Direct flange is ideal for Danfoss motors type OMS, OMP/OMR and OMT and provides a maximum safety, very low pressure drops and solid installation.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Flange M1 and M2 directly to the motor and connect V1 and V2 to pressure flow.

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING). SINGLE ACTING WITH JUST 1 RELIEF AVAILABLE (CODE/ SE). BRAKE UNCLAPING (CODE/ SF)

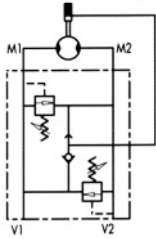
CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0490	VAU 1/2" OMS	50	300	£78.46
V0500	VAU 1/2" OMP/OMR	60	300	£79.95
V0505	VAU 3/4" OMT	100	300	£95.64
V0490/SE	VAU 1/2" OMS SE/ SINGLE ACTING	50	300	£75.55
V0500/SE	VAU 1/2" OMP/OMR SE/SINGLE ACTING	60	300	£78.02
V0505/SE	VAU 3/4" OMT SE/SINGLE ACTING	100	300	£93.48
V0490/T	VAU 1/2" OMS PRESSURE PRESET	50	300	£82.12
V0500/T	VAU 1/2" OMP/OMR PRESSURE PRESET	60	300	£83.95
V0505/T	VAU 3/4" OMT PRESSURE PRESET	100	300	£99.44
V0490/V	VAU 1/2" OMS HANDKNOB	50	300	£85.94
V0500/V	VAU 1/2" OMP/OMR HANDKNOB	60	300	£88.03
V0505/V	VAU 3/4" OMT HANDKNOB	100	300	£85.30
V0490/P	VAU 1/2" OMS SEALING CAP	50	300	£88.00
V0500/P	VAU 1/2" OMP/OMR SEALING CAP	60	300	£89.77
V0505/P	VAU 3/4" OMT SEALING CAP	100	300	£105.24
V0490/SF	VAU 1/2" OMS SF/ BRAKE UNCLAPING	50	300	£87.68
V0500/SF	VAU 1/2" OMP/OMR SF/ BRAKE UNCLAPING	60	300	£89.44
V0505/SF	VAU 3/4" OMT SF/ BRAKE UNCLAPING	100	300	£104.98

NB. BRAKE UNCLAPING MEANS " A MECHANICAL FAIL SAFE BRAKE "

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



DUAL CROSS RELIEF VALVE FLANGEABLE ON SAMHYDRAULIK MOTORS AG - AR

USE AND OPERATION

Made up by 2 relief valves with crossed tank, this valve is used to block pressure to a certain setting in the 2 ports of an actuator/hydraulic motor. It's ideal to provide protection against sudden shock pressures and to adjust different pressures in the 2 ports of a hydraulic circuit as well. Direct flange is ideal for Samhydraulic motors type AG - AR and provides a maximum safety, very low pressure drops and solid installation.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage **Applications:** Flange M1 and M2 directly to the motor and connect V1 and V2 to pressure flow.

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING). BRAKE UNCLAPING (CODE/ SF)

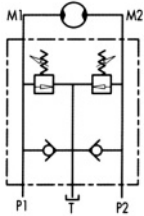
CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0455	VAU 1/2" AG - AR	60	300	£81.58
V0455/T	VAU 1/2" AG - AR PRESSURE PRESET	60	300	£85.28
V0455/V	VAU 1/2" AG - AR HANDKNOB	60	300	£89.06
V0455/P	VAU 1/2" AG - AR SEALING CAP	60	300	£90.97
V0455/SF	VAU 1/2" AG - AR SF/ BRAKE UNCLAPING	60	300	£90.97

BRAKE UNCLAPING MEANS " A MECHANICAL FAIL SAFE BRAKE "

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN)	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m



DUAL CROSS RELIEF VALVES WITH ANTI-CAVITATION

USE AND OPERATION

This valve is used to block pressure to a certain setting in the 2 ports of a hydraulic motor: when it reaches pressure setting, the valve opens allowing pressure relief in T. The relief valve provides overload protection in a fast and accurate way and Cavitation is avoided thanks to the check valve.

Body: Zinc-plated steel (VAUAC 1/2") and Aluminium VAUAC 3/4" **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

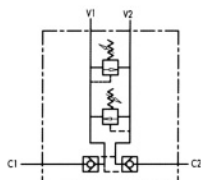
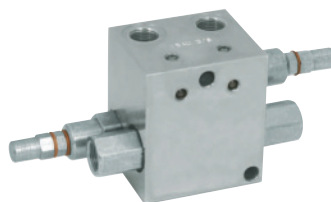
Applications: Flange M1 and M2 directly to the motor and connect P1 and P2 to pressure flow. Connect T to the tank. Mounting by the actuator is highly recommended in order to avoid pressure drops and get prompt duty.

ON REQUEST: DIFFERENT SETTING RANGE AVAILABLE (SEE TABLE BELOW) OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING).

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0508	VAUAC 1/2"	70	300	£191.31
V0510	VAUAC 3/4"	110	300	£297.80
V0508/T	VAUAC 1/2" PRESSURE PRESET	70	300	£195.07
V0510/T	VAUAC 3/4" PRESSURE PRESET	110	300	£300.51
V0508/V	VAUAC 1/2" HANDKNOB	70	300	£198.86
V0510/V	VAUAC 3/4" HANDKNOB	110	300	£189.82
V0508/P	VAUAC 1/2" SEALING CAP	70	300	£200.74
V0510/P	VAUAC 3/4" SEALING CAP	110	300	£306.20

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN) Q = 4 l/m	STANDARD SETTING BAR
10 - 180 Standard	30	90
80 - 300	50	150
For VAUAC 3/4"		
20 - 200	40	160
50 - 400 Standard	80	180



DUAL CROSS RELIEF VALVES WITH PILOT CHECK VALVE

USE AND OPERATION

Made up by 1 double pilot check valve together with one double cross relief valve, this valve enables to block the actuator in one position and to limit inlet pressure to the actuator.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** minor leakage

Applications: Connect V1 and V2 to the pressure flow and C1 and C2 to the actuator.

ON REQUEST: OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V444	VBAU 3/8"	35	180	£150.80
V444/T	VBAU 3/8" PRESSURE PRESET	35	180	£154.58
V444/V	VBAU 3/8" HANDKNOB	35	180	£158.61
V444/P	VBAU 3/8" SEALING CAP	35	180	£160.53



CHECK VALVES

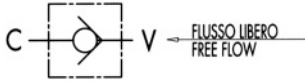
USE AND OPERATION

In the check valve flow is free in one direction and blocked in the reverse one.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** No leakage

Applications: Connect V to the pressure flow and C to the actuator. Flow is free from V to C and blocked in the reverse direction.

ON REQUEST: DIFFERENT CRACKING PRESSURES: 1-3-5-8 BAR (PLEASE SPECIFY THE DESIRED CRACKING PRESSURE IN THE PRODUCT DESCRIPTION). SET VALVE IS USED TO KEEP A HYDRAULIC SYSTEM UNDER PRESSURE.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0592	VU 1/8"	3	350	+ - 0.4 / 0.7	£17.53
V0590	VU 1/4"	20	350	+ - 0.4 / 0.7	£8.42
V0600	VU 3/8"	45	350	+ - 0.4 / 0.7	£9.01
V0610	VU 1/2"	70	350	+ - 0.4 / 0.7	£12.50
V0620	VU 3/4"	110	350	+ - 0.4 / 0.7	£18.39
V0630	VU 1"	160	350	+ - 0.4 / 0.7	£21.75
V0631	VU 1 1/4"	200	350	+ - 0.4 / 0.7	£54.86
V0632	VU 1 1/2"	300	350	+ - 0.4 / 0.7	£80.09



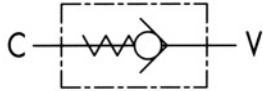
INTEGRATED CHECK VALVES

USE AND OPERATION

In the check valve flow is free in one direction and blocked in the reverse one. Small dimensions and their insert configuration makes these valves ideal for installation into custom designed hydraulic integrated circuit.

Body: Zinc-plated steel. **Exterior Tightness:** Through O-Ring seal.

Applications: Screw the valve keeping into consideration that flow is free from V to C.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0591	VUI 1/4"	20	350	0.5	£17.16
V0601	VUI 3/8"	30	350	0.5	£19.50
V0611	VUI 1/2"	50	350	0.5	£24.77
V0621	VUI 3/4"	80	350	0.5	£29.21



HOSE BURST VALVES CARTRIDGE

USE AND OPERATION

These valves are used to prevent uncontrolled decent of a load in case of hose failure.

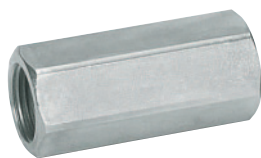
When it exceeds the setting (reaction flow), the valve blocks the flow.

Body: Steel, burnished.

Applications: Screw in the valve connecting V to the pressure flow and C to the actuator. Being used with a flow control valve is recommended. system). Hole on the flat (CODE/F, please specify the hole dimension) for a slow load decent with closed valve. Also available with male-female or female-female body for inline mounting.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0770	VUBA 1/4"	25	350	£7.13
V0780	VUBA 3/8"	50	350	£7.13
V0790	VUBA 1/2"	80	350	£7.13
V0800	VUBA 3/4"	140	350	£10.82
V0810	VUBA 1"	180	350	£20.22
V0770/F	VUBA 1/4" WITH HOLE	25	350	£14.43
V0780/F	VUBA 3/8" WITH HOLE	50	350	£14.82
V0790/F	VUBA 1/2" WITH HOLE	80	350	£17.12
V0800/F	VUBA 3/4" WITH HOLE	140	350	£21.65
V0810/F	VUBA 1" WITH HOLE	180	350	£32.62



HOSE BURST VALVES CARTRIDGE WITH FEMALE/FEMALE THREADED BODY



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0771	VUBA 1/4" MFF	25	350	£11.08
V0781	VUBA 3/8" MFF	50	350	£11.25
V0791	VUBA 1/2" MFF	80	350	£13.37
V0801	VUBA 3/4" MFF	140	350	£19.13
V0811	VUBA 1" MFF	180	350	£37.93
V0771/F	VUBA 1/4" MFF/ WITH HOLE	25	350	£18.57
V0781/F	VUBA 3/8" MFF/ WITH HOLE	50	350	£19.80
V0791/F	VUBA 1/2" MFF/ WITH HOLE	80	350	£24.52
V0801/F	VUBA 3/4" MFF/ WITH HOLE	140	350	£29.52
V0811/F	VUBA 1" MFF/ WITH HOLE	180	350	£44.02

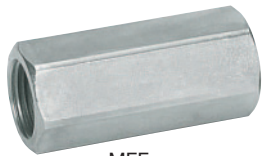


HOSE BURST VALVES CARTRIDGE WITH MALE/FEMALE THREADED BODY

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0772	VUBA 1/4" MMF	25	350	£10.46
V0782	VUBA 3/8" MMF	50	350	£10.62
V0792	VUBA 1/2" MMF	80	350	£12.62
V0802	VUBA 3/4" MMF	140	350	£17.90
V0812	VUBA 1" MMF	180	350	£35.82
V0772/F	VUBA 1/4" MMF/ WITH HOLE			£18.57
V0782/F	VUBA 3/8" MMF/ WITH HOLE			£19.80
V0792/F	VUBA 1/2" MMF/ WITH HOLE			£23.16
V0802/F	VUBA 3/4" MMF/ WITH HOLE			£27.87
V0812/F	VUBA 1" MMF/ WITH HOLE			£41.57



MMF



MFF

BODY ONLY - MALE/FEMALE OR FEMALE/FEMALE

CODE	TYPE	PRICE
MFF 1/4"	BODY FEMALE/FEMALE 1/4"	£3.90
MFF 3/8"	BODY FEMALE/FEMALE 3/8"	£4.71
MFF 1/2"	BODY FEMALE/FEMALE 1/2"	£7.06
MFF 3/4"	BODY FEMALE/FEMALE 3/4"	£7.43
MFF 1"	BODY FEMALE/FEMALE 1"	£10.77
MMF 1/4"	BODY MALE/FEMALE 1/4"	£3.90
MMF 3/8"	BODY MALE/FEMALE 3/8"	£4.71
MMF 1/2"	BODY MALE/FEMALE 1/2"	£7.06
MMF 3/4"	BODY MALE/FEMALE 3/4"	£7.43
MMF 1"	BODY MALE/FEMALE 1"	£10.77



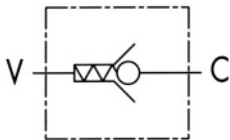
HOSE BURST VALVE WITH EXTERNAL ADJUSTMENT

USE AND OPERATION

These valves are used to prevent uncontrolled decent of a load in case of hose failure. When it exceeds the setting (reaction flow), the valve blocks the flow. Unlike the standard hose burst valve, it enables external flow adjustment through the knob.

Body: Zinc-plated steel. **Internal Components:** Hardened and ground steel. **Tightness:** Ball type.

Applications: Connect V to the pressure flow and C to the actuator. To adjust flow (1 turn = 15 litre), keep the nut on the valve to prevent oil leakage.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0785	VUB 3/8"	40	300	£25.02
V0795	VUB 1/2"	70	300	£26.01



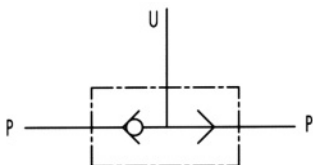
SHUTTLE VALVES

USE AND OPERATION

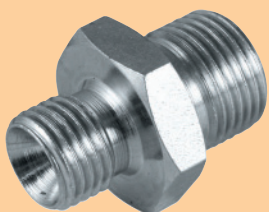
This valve is used to select higher pressure between two pressure lines.

Body: Zinc-plated steel. **Seal:** BUNA N. **Tightness:** Ball type.

Applications: Connect ports P to the 2 lines to select and U to the line to feed.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0666	VU2P 1/4"	30	450	£19.64
V0668	VU2P 3/8"	45	450	£21.87
V0670	VU2P 1/2"	70	450	£25.31
V0680	VU2P 3/4"	110	350	£51.06
V0685	VU2P 1"	150	300	£124.82



FLOWFIT

SEE OUR HYDRAULIC ADAPTOR SECTION FOR A FULL RANGE OF ADAPTOR SOLUTIONS.

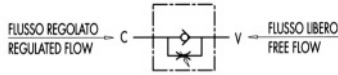


BARREL FLOW CONTROL VALVES WITH CHECK

USE AND OPERATION This valve is used to adjust flow speed of actuators in one direction; flow is free in reverse one. As pressure compensation is not provided, flow adjustment depends on pressure and oil viscosity.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** By diameter combination. Minor leakage with closed valve.

Applications: Connect V to the pressure flow and C to the actuator to set. The flow is adjusted from C to V and free in the reverse direction. When used on actuator with double pilot check valve, VRF has to be mounted between the actuator and the double pilot check valve. Flow adjustment is made by rotating the coupling: by clockwise rotation flow increases and vice versa. Once the flow has been set, lock the nut in order to keep the desired settings, even case of vibrations.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0540	VRF 1/4"	20	300	0.5	£24.53
V0550	VRF 3/8"	45	300	0.5	£27.72
V0560	VRF 1/2"	70	300	0.5	£35.47
V0570	VRF 3/4"	110	250	0.5	£51.69
V0580	VRF 1"	160	250	0.5	£78.13

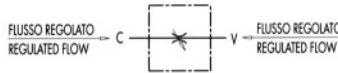


BARREL FLOW CONTROL VALVES NO CHECK

USE AND OPERATION This valve is used to adjust flow speed of actuators in both directions. As pressure compensation is not provided, flow adjustment depends on pressure and oil viscosity.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** By diameter combination. Minor leakage with closed valve.

Applications: Connect V to the pressure flow and C to the actuator to set; when used on an actuator with double pilot check, VRB has to be mounted between the actuator and the double pilot check valve. Flow adjustment is made by rotating the coupling: by clockwise rotation flow increases and vice versa. Once the flow has been set, lock the nut in order to keep the desired settings even in case of vibrations.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0545	VRB 1/4"	20	300	£21.48
V0555	VRB 3/8"	45	300	£22.38
V0565	VRB 1/2"	70	300	£26.70
V0575	VRB 3/4"	110	250	£53.22
V0585	VRB 1"	160	250	£94.75



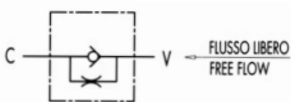
FIXED SETTING THROTTLE CHECK VALVES

USE AND OPERATION Flow is free in one direction and fixed in the reverse one. Flow is fixed as flow adjustment depends on the throttling hole diameter.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Poppet type:** Standard

Applications: Connect V to the pressure flow and C to the actuator. Flow is free from V to C and fixed in the reverse one. Throttling is obtained through one or two calibrated holes, the diameter of which has to be specified in the order.

On Request: Other settings available: 1-3-5-8 Bar (please specify in the description the desired setting).



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0590/1F	VUSF 1/4" WITH 1 HOLE	20	350	+ - 0.4 / 0.7	£10.21
V0600/1F	VUSF 3/8" WITH 1 HOLE	45	350	+ - 0.4 / 0.7	£11.06
V0610/1F	VUSF 1/2" WITH 1 HOLE	70	350	+ - 0.4 / 0.7	£14.90
V0620/1F	VUSF 3/4" WITH 1 HOLE	110	350	+ - 0.4 / 0.7	£21.52
V0630/1F	VUSF 1" WITH 1 HOLE	160	350	+ - 0.4 / 0.7	£25.18
V0631/1F	VUSF 1 1/4" WITH 1 HOLE	200	350	1	£87.27
V0632/1F	VUSF 1 1/2" WITH 1 HOLE	300	350	1	£117.51
V0590/2F	VUSF 1/4" WITH 2 HOLES	20	350	+ - 0.4 / 0.7	£10.48
V0600/2F	VUSF 3/8" WITH 2 HOLES	45	350	+ - 0.4 / 0.7	£11.44
V0610/2F	VUSF 1/2" WITH 2 HOLES	70	350	+ - 0.4 / 0.7	£15.21
V0620/2F	VUSF 3/4" WITH 2 HOLES	110	350	+ - 0.4 / 0.7	£22.12
V0630/2F	VUSF 1" WITH 2 HOLES	160	350	+ - 0.4 / 0.7	£25.99
V0631/2F	VUSF 1 1/4" WITH 2 HOLES	200	350	1	£89.82
V0632/2F	VUSF 1 1/2" WITH 2 HOLES	300	350	1	£120.96

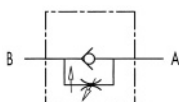


90° PRESSURE COMPENSATED 90° FLOW REGULATOR VALVES

USE AND OPERATION This valve is used to adjust flow speed of actuators in one direction; flow is free in the reverse one. The internal compensation system allows to keep a constant speed even when the load varies. High adjustment sensitivity.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Needle type

Applications: Connect A to the pressure flow and B to the actuator to set; flow is adjusted from B to A and is free in the reverse direction. Flow adjustment is made by rotating the plastic hand knob after loosening the side locking screw. This particular configuration allows an accurate and sensitive adjustment.



CODE	TYPE	BSP PORTS	MAX FLOW FROM A TO B L/MIN	MAX FLOW FROM B TO A L/MIN	MAX PRESSURE BAR	PRICE
V0581/C	VRFU 90° 1/4" PCFCV	1/4"	15	25	250	£78.13
V0582/C	VRFU 90° 3/8" PCFCV	3/8"	15	25	250	£79.33
V0583/C	VRFU 90° 1/2" PCFCV	1/2"	30	45	250	£120.20

FLOW REGULATOR VALVES WITH CHECK

USE AND OPERATION

This valve is used to adjust flow speed of actuators in one direction; flow is free in the reverse one. As pressure compensation is not provided, flow adjustment depends on pressure and fluid viscosity. High adjustment sensitivity.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Needle type, Minor leakage with closed valve.

Applications: Connect V to the pressure flow and C to the actuator to set; flow is adjusted from C to V and is free in the reverse direction. When used on actuator with double pilot check valve, VRFU has to be mounted between the actuator and the double pilot check valve. Flow adjustment is made by rotating the aluminium hand knob after loosening the side locking screw. This configuration allows an accurate and sensitive adjustment.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	CRACKING PRESSURE BAR	PRICE
V0581	VRFU 1/4"	15	350	0.5	£34.64
V0582	VRFU 3/8"	30	350	0.5	£38.80
V0583	VRFU 1/2"	50	350	0.5	£48.73
V0588	VRFU 3/4"	60	280	0.5	£88.44
V0576	VRFU 1"	80	250	0.5	£144.04

CODE	DESCRIPTION	PRICE
DAD090	Locking Nut to suit V0581/V0582/V0583	£3.59

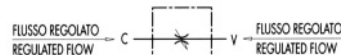
FLOW CONTROL VALVES WITHOUT CHECK

USE AND OPERATION

This valve is used to adjust flow speed of actuators in both directions. As pressure compensation is not provided, flow adjustment depends on pressure and fluid viscosity. High adjustment sensitivity.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Needle type, Minor leakage with closed valve.

Applications: Connect a port to the pressure. Flow will be adjusted in the other one. When used on actuator with double pilot check valve, VRFB has to be mounted between the actuator and the double pilot check valve. Flow adjustment is made by rotating the aluminium hand knob after loosening the side locking screw. This particular configuration allows an accurate and sensitive adjustment.



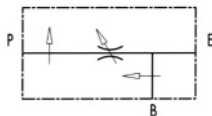
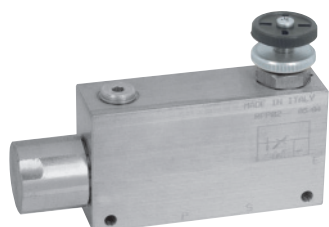
CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0584	VRFB 1/4"	15	350	£26.34
V0586	VRFB 3/8"	30	350	£35.36
V0587	VRFB 1/2"	50	350	£38.18
V0589	VRFB 3/4"	80	280	£72.20
V0577	VRFB 1"	80	250	£151.13

CODE	DESCRIPTION	PRICE
DAD090	Locking Nut to suit V0584/86/87/89	£3.59

3 PORT FLOW CONTROL VALVE WITH ONGOING PRESSURE LINE

USE AND OPERATION

This valve enables to keep "P" flow constant to a certain setting, independently of the required pressure or the inlet flow of the valve. Exceeded flow is drained in "B" and it is available for a second use. Also port "B" is insensitive to pressure changes, but not to flow changes. **Body:** Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** By diameter combination. Minor leakage (few drops per minute) is needed. Connect B to the tank or to a second actuator. To adjust inlet pressure in P screw in or out, hand wheel, after loosening the locknut.



CODE	TYPE	MAX FLOW L/MIN	MAX ADJUSTED FLOW	MAX PRESSURE BAR	PRICE
V1060	VRP3 3/8"	50	40	250	£151.45
V1070	VRP3 1/2"	85	60	250	£152.78
V1080	VPR 3/4"	150	90	210	£264.45
V1090	VPR 1"	250	150	210	£322.14

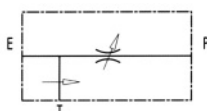
3 PORT FLOW CONTROL VALVE WITH EXCESS BACK TO TANK

USE AND OPERATION

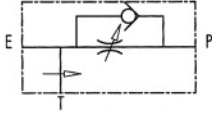
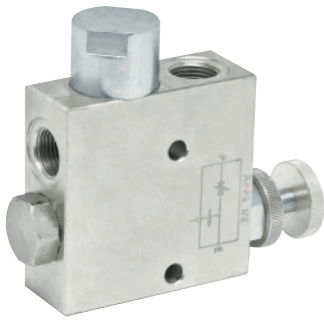
This valve enables to keep "P" flow constant to a certain setting, independently of the required pressure or the inlet flow of the valve. Exceeded flow is drained directly in T (tank).

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** By diameter combination. Minor leakage (few drops per minute)

Applications: Connect E to the pressure and P to the line where flow adjustment is needed.. Connect T to the tank. To adjust inlet pressure in P screw in or out, hand wheel, after loosening the locknut.



CODE	TYPE	MAX FLOW L/MIN	MAX ADJUSTED FLOW	MAX PRESSURE BAR	PRICE
V1110	RFP3 3/8"	50	30	250	£133.83
V1120	RFP 1/2"	85	50	250	£141.29
V9999	VCF.BC.3/2A06B	150	90	210	£301.41



3 PORT FLOW CONTROL VALVE WITH EXCESS TO TANK WITH CHECK VALVE

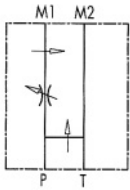
USE AND OPERATION

This valve enables to keep "P" flow constant to a certain setting, independently of the required pressure or the inlet flow of the valve. Exceeded flow is drained directly in T (tank). The check valve allows those applications where we require the return of the free flow.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** By diameter combination. Minor leakage (few drops per minute)

Applications: Connect E to the pressure and P to the line where flow adjustment is needed. Connect T to the tank. To adjust inlet pressure in P screw in or out, hand wheel, after loosening the locknut.

CODE	TYPE	BSP PORTS	MAX INLET FLOW L/MIN	MAX ADJUSTED FLOW L/MIN	MAX PRESSURE BAR	PRICE
V1110/VU	RFP3 3/8" c/VU	3/8"	50	30	350	£164.81
V1120/VU	RFP3 1/2" c/VU	1/2"	85	50	350	£166.11



3 PORT FLOW CONTROL VALVE EXCESS TO TANK FLANGEABLE ON DANFOSS MOTORS OMP/OMR

USE AND OPERATION

This valve enables to keep "P" flow constant to a certain setting, independently of the required pressure or the inlet flow of the valve. Exceeded flow is drained directly in T (tank).

Body: zinc-plated steel

Internal parts: Hardened and ground steel

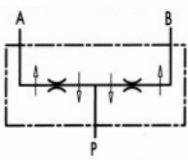
Seals: Buna N standard

Tightness: By diameter combination. Minor leakage (few drops per minute)

Applications: Connect M1 and M2 to the motor and P and T to the pressure.

PART NO.	TYPE	BSP PORTS	MAX INLET FLOW	MAX ADJUSTED FLOW	MAX PRESSURE (BAR)	PRICE
V1121	RFP3 1/2" OMP/OMR	1/2"	50 L/MIN	30 L/MIN	350	£149.74

2 WAY FLOW DIVIDERS



2 WAY FLOW DIVIDER

USE AND OPERATION

These valves allow the division of inlet flow into two equal parts (50/50) and they unify in the reverse direction, independently of any pressure changes and flow. These valves are used when two equal actuators, that are not mechanically coupled, supplied by the same pump and controlled by a single distributor, must move simultaneously both at input and output.

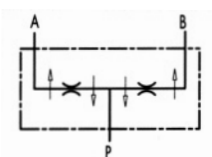
Body: cast iron / steel. **Internal Parts:** Hardened and ground steel. **Seals:** BUNA N standard and Teflon.

Tightness: By diameter combination. Cylinder stroke error tolerance of 2%. Any synchronisation differences are compensated by the terminal position of the stroke.

Applications: Connect P to the pressure flow and A and B to the actuators.

CODE	TYPE	PORTS	MIN. FLOW * L/MIN	MAX. FLOW * L/MIN	WORKING PRESS. BAR	PEAK PRESS. BAR	PRICE
V1001	V-EQ 8	3/8"	1	3	250	300	£249.27
V1000	V-EQ 10	3/8"	3	6	250	300	£231.20
V1002	V-EQ 15	3/8"	6	10	250	300	£231.20
V1003	V-EQ 20	3/8"	10	20	250	300	£231.20
V1004	V-EQ 22	3/8"	20	32	250	300	£231.20
V1005	V-EQ 25	1/2"	25	40	250	300	£234.25
V1006	V-EQ 30	1/2"	40	60	250	300	£234.25
V1007	V-EQ 50	1/2"	60	80	250	300	£249.27

* = Capacity values refers to input P



STEEL FLOW DIVIDERS

USE AND OPERATION

These valves allow the division of inlet flow into two equal parts (50/50) and they unify in the reverse direction, irrespective of any pressure differences and flow. These valves are used when two equal actuators, that are not mechanically coupled, supplied by the same pump and controlled by a single distributor, must move simultaneously both at input and output.

Body: Zinc plated steel. **Internal Parts:** Hardened and ground steel. **Seals:** BUNA N standard and Teflon.

Tightness: By diameter combination. Minor leakage

Applications: Connect P to the pressure flow and A and B to the actuators.

CODE	TYPE	BSP PORTS		MIN FLOW L/MIN	WORKING PRESSURE BAR	PEAK PRESSURE BAR	PRICE
		P	A+B				
V1022	DFL6-10	3/8"	3/8"	10	250	300	£176.70
V1023	DFL10-20	3/8"	3/8"	20	250	300	£176.70
V1025	DFL25-40	1/2"	3/8"	40	250	300	£176.70



DIRECT ACTING SEQUENCE VALVES

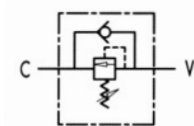
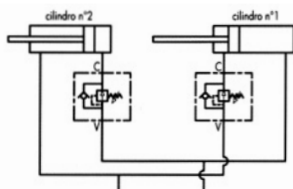
USE AND OPERATION

Sequence valve is used to feed 2 cylinders in sequence: it provides flow to the secondary circuit when a primary circuit function has been completed reaching the pressure setting. Return flow is free. It's ideal for circuit with low pressure on the secondary actuator as the pressure adds to it.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: For use with 2 actuators, follow the mounting instructions indicated in the scheme. For different uses, mount the valve keeping consideration that, when the valve reaches the setting pressure, the flow goes from **V** towards **C**, whilst flow is free from **C** to **V**.

ON REQUEST: DIFFERENT SETTING RANGE (SEE THE TABLE). OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0640	VS2C 3/8"	35	350	£60.45
V0660	VS2C 1/2"	70	350	£60.45
V0665	VS2C 3/4"	110	350	£142.14
V0640/T	VS2C 3/8" PRESSURE PRESET	35	350	£56.48
V0660/T	VS2C 1/2" PRESSURE PRESET	70	350	£67.66
V0665/T	VS2C 3/4" PRESSURE PRESET	110	350	£144.02
V0640/V	VS2C 3/8" HANDKNOB	35	350	£58.37
V0660/V	VS2C 1/2" HANDKNOB	70	350	£69.68
V0665/V	VS2C 3/4" HANDKNOB	110	350	£145.93
V0640/P	VS2C 3/8" SEALING CAP	35	350	£59.33
V0660/P	VS2C 1/2" SEALING CAP	70	350	£70.63
V0665/P	VS2C 3/4" SEALING CAP	110	350	£146.86

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN) Q = 4 l/m	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN) Q = 4 l/m	STANDARD SETTING BAR
20-200	40	160
50-400 (Standard)	80	180



KOMPASS®

SEE KOMPASS VALVE SECTION FOR MORE SEQUENCE VALVE OPTIONS.

SEQUENCE VALVES

USE AND OPERATION

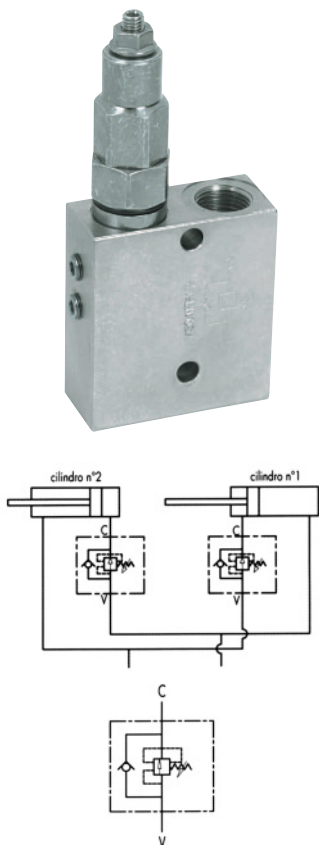
Sequence valve is used to feed 2 cylinders in sequence: it provides flow to the secondary circuit when a primary circuit function has been completed reaching the pressure setting. Return flow is free.

Being insensitive to back pressures, it allows to use the circuit pressure to control both the actuators.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: For use with 2 actuators, follow the mounting instructions indicated in the scheme. For different uses, mount the valve keeping consideration that, when the valve reaches the setting pressure, the flow goes from **V** towards **C**, whilst flow is free from **C** to **V**.

ON REQUEST: DIFFERENT SETTING RANGE (SEE THE TABLE). OTHER SETTINGS AVAILABLE (CODE/T: PLEASE SPECIFY THE DESIRED SETTING)



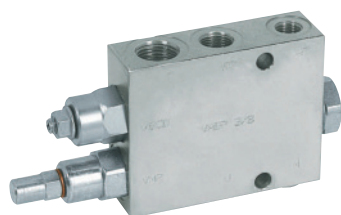
CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0642	VSQAPP 3/8"	35	250	£76.70
V0662	VSQAPP 1/2"	70	250	£89.34
V0642/T	VSQAPP 3/8" PRESSURE PRESET	35	250	£78.77
V0662/T	VSQAPP 1/2" PRESSURE PRESET	70	250	£91.47
V0642/V	VSQAPP 3/8" HANDKNOB	35	250	£80.73
V0662/V	VSQAPP 1/2" HANDKNOB	70	250	£93.43
V0642/P	VSQAPP 3/8" SEALING CAP	35	250	£81.74
V0662/P	VSQAPP 1/2" SEALING CAP	70	250	£94.36

SPRINGS

SETTING RANGE BAR	PRESSURE INCREASE (BAR/TURN) Q = 4 l/m	STANDARD SETTING BAR
10 - 50*	7	30
20 - 100	12	75
10 - 180 (Standard)	30	90
50 - 250	45	130
80 - 300	50	150

* = For setting less than 70 Bar Q = 12 l/m

TWO PUMP "HI-LOW" UNLOADING VALVES



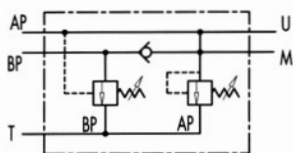
TWO PUMP "HI - LOW" UNLOADING VALVES

USE AND OPERATION

This valve is used in a 2 parallel-working pumps circuit in order to release the excess of the higher flow pump to the tank when this gets the required pressure setting. Since this moment and on, the actuator works with the lower flow pump at higher pressure, consuming less energy.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: Connect BP to the higher flow pump, AP to the lower flow pump, T to the tank, M to the eventual manometer and U as for necessity.



CODE	TYPE	MAX FLOW L/MIN			MAX PRESSURE BAR	PRICE
		AP	BP	T		
V0512	VABP 3/8"	15	30	40	350	£196.20
V0513	VABP 1/2"	25	45	65	350	£270.73
V0514	VABP 3/4"	30	80	100	350	£279.74

SPRINGS

STANDARD SPRINGS		
VALVE	BP (BAR)	AP (BAR)
VABP 3/8"	20-120	50-350
VABP 1/2"	20-120	50-350
VABP 3/4"	20-100	50-330



TWO PUMP "HI-LOW" UNLOADING VALVES FLANGEABLE (BASE NG6-NG10 AND NG16)

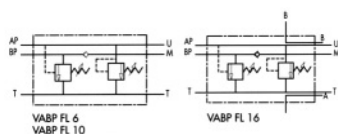
USE AND OPERATION

This valve is used in a 2 parallel-working pumps circuit in order to release the excess of the higher flow pumps to the tank when this gets the required pressure setting. Since this moment and on, the actuator works with the lower flow pumps at higher pressure, consuming less energy. It is ideal for direct flange-mounting on solenoid valves.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: Fix the valve to the pressure flow by connecting BP to the higher flow pumps, AP to the lower flow pumps, T to the tank and M to the eventual manometer. Flange the solenoid valve to the VABP and connect A and B to the actuator.

SEE POWERUNITS SECTION ON PAGE 23 - DOUBLE PUMP WITH HI-LOW VALVES BUILT UP



CODE	TYPE	MAX FLOW L/MIN			MAX PRESSURE BAR	PRICE
		AP	BP	T		
V0518	VABP FL 6 NG6	15	30	40	350	£293.75
V0515	VABP FL 10 NG10	20	45	60	350	£324.87
V0516	VABP FL 16 NG16	35	80	100	350	£631.72

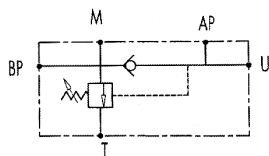


TWO PUMP "HI-LOW" UNLOADING VALVES FLANGEABLE ON LOW-PRESSURE PUMP

USE AND OPERATION This valve is used in a 2 parallel-working pumps circuit in order to release the excess of the higher flow pump to tank when this gets the required pressure setting. Since this moment and on the actuator works with the lower flow pumps at higher pressure, consuming less energy. This valve is designed for direct flanging on lower flow pump. To adjust the high pressure, you have to mount an inline relief valve.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: Connect BP to the higher flow pump, AP to the lower flow pump, T to the tank, M to the eventual manometer and U as for necessity.



CODE	TYPE	BSP PORTS	MAX FLOW L/MIN			MAX PRESSURE		MAX PRESSURE BAR	WEIGHT	PRICE
			AP	BP	T	AP	BP			
V0517	VEP FLP 1/2"	1/2"	15	45	55	350	80	350	2.5	£121.97

HIGH PRESSURE BALL VALVES

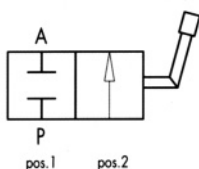


2 WAY BALL VALVES

USE AND OPERATION These valves are used to open or close oil flow in a circuit even with maximum pressure.

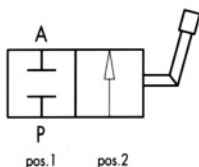
Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard and POM seals, **Tightness:** No leakage.

Applications: Connect either A or P to the ports where flow has to be blocked. Flow is blocked with lever at 90 deg (position 1) and free with lever in line (position 2). **ON REQUEST:** FIXING HOLES (CODE / FF).



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
DIN/ISO 228 BSP FEMALE CONNECTION				
V0830	RS 2 VIE 1/4"	25	500	£15.93
V0840	RS 2 VIE 3/8"	35	500	£18.40
V0850	RS 2 VIE 1/2"	60	500	£20.18
V0860	RS 2 VIE 3/4"	100	400	£51.49
V0870	RS 2 VIE 1"	180	350	£64.66
V0871	RS 2 VIE 1 1/4"	180	350	£64.60
V0874	RS 2 VIE 1 1/2"	180	350	£69.74

2 WAY BALL VALVES WITH FIXING HOLES



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0830/FF	RS 2 VIE 1/4" FF	25	500	£25.77
V0840/FF	RS 2 VIE 3/8" FF	35	500	£27.74
V0850/FF	RS 2 VIE 1/2" FF	60	500	£30.29
V0860/FF	RS 2 VIE 3/4" FF	100	400	£61.52
V0870/FF	RS 2 VIE 1" FF	180	350	£67.41
V0871/FF	RS 2 VIE 1 1/4" FF	180	350	£87.85
V0874/FF	RS 2 VIE 1 1/2" FF	180	350	£95.47

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
DIN 2353 LIGHT SERIES CONNECTION				
RS2-6L	RS 2 VIE M12X1.5	25	500	£9.56
RS2-8L	RS 2 VIE M14X1.5	25	500	£9.56
RS2-10L	RS 2 VIE M16X1.5	25	500	£9.56
RS2-12L	RS 2 VIE M18X1.5	35	500	£22.47
RS2-15L	RS 2 VIE M22X1.5	35	500	£25.13
RS2-18L	RS 2 VIE M26X1.5	60	500	£25.13
RS2-22L	RS 2 VIE M30X2	60	500	£51.49
RS2-28L	RS 2 VIE M36X2	100	350	£68.15
RS2-35L	RS 2 VIE M45X2	180	350	£151.34
RS2-42L	RS 2 VIE M52X2	180	350	£151.34

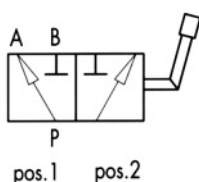
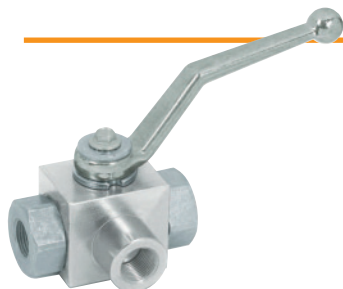
3 WAY BALL VALVES

USE AND OPERATION These valves are used to divert the inlet flow towards 2 alternate ports ("L" configuration)

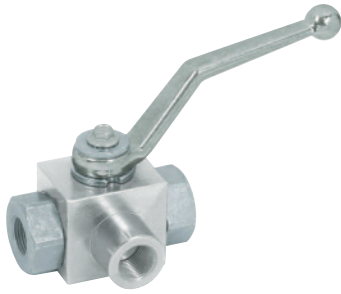
Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard and POM seals, **Tightness:** No leakage.

Applications: Connect P to the pressure flow, A and B to the circuit ports where the flow has to be diverted to. With the lever at 90 deg. Flow is connected to port A (position 1), with lever in line flow is connected to port B (position 2).

ON REQUEST: FIXING HOLES (CODE / FF).

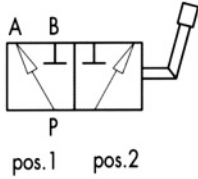


CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
DIN/ISO 228 BSP FEMALE CONNECTION				
V0832	RS 3 VIE 1/4"	25	500	£39.12
V0842	RS 3 VIE 3/8"	35	500	£39.12
V0852	RS 3 VIE 1/2"	60	500	£44.60
V0862	RS 3 VIE 3/4"	100	400	£72.57
V0872	RS 3 VIE 1"	180	350	£88.51
V0873	RS 3 VIE 1 1/4"	180	350	£115.18
V0875	RS 3 VIE 1 1/2"	180	350	£142.51



3 WAY BALL VALVES WITH FIXING HOLES

CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0832/FF	RS 3 VIE 1/4" FF	25	500	£53.53
V0842/FF	RS 3 VIE 3/8" FF	35	500	£54.71
V0852/FF	RS 3 VIE 1/2" FF	60	500	£56.60
V0862/FF	RS 3 VIE 3/4" FF	100	400	£90.81
V0872/FF	RS 3 VIE 1" FF	180	350	£94.35
V0873/FF	RS 3 VIE 1 1/4" FF	180	350	£120.38
V0875/FF	RS 3 VIE 1 1/2" FF	180	350	£147.21



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
DIN 2353 LIGHT SERIES CONNECTION				
RS3-6L	RS 3 VIE M12X1.5	25	500	£57.92
RS3-8L	RS 3 VIE M14X1.5	25	500	£57.92
RS3-10L	RS 3 VIE M16X1.5	25	500	£57.92
RS3-12L	RS 3 VIE M18X1.5	35	500	£60.83
RS3-15L	RS 3 VIE M22X1.5	60	500	£65.17
RS3-18L	RS 3 VIE M26X1.5	60	500	£65.17
RS3-22L	RS 3 VIE M30X2	60	500	£108.86
RS3-28L	RS 3 VIE M36X2	100	350	£122.15
RS3-35L	RS 3 VIE M45X2	180	350	£134.52
RS3-42L	RS 3 VIE M52X2	180	350	£537.03

DIVERTER VALVES



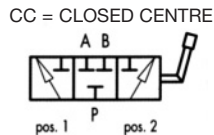
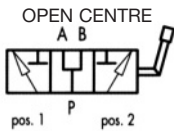
3 WAY DIVERTER VALVES

USE AND OPERATION

3 way diverter valves are used to divert the flow towards 2 different outlets.

Body: Cast iron **Colour:** Black **Internal parts:** Hardened and ground steel, **External Parts:** White Zinc plated **Seals:** Buna N standard, **Tightness:** Minor leakage. **Applications:** Connect P to the pressure flow, A and B to the circuit ports where the flow has to be diverted to. With the lever in position 1, the flow is connected towards port A; with the lever in position 2, the flow is connected towards port B. With the lever in the central position, ports P, A and B are all connected (open centre).

ON REQUEST: CLOSED CENTRE (CODE/CC). HIGH PRESSURE - UP TO 400 BAR (CODE/AP).



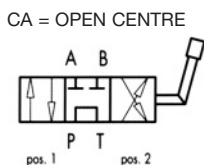
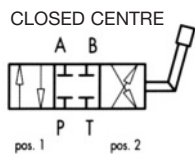
CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
3 WAY OPEN CENTRE				
7000.0104	1/4" 3 WAY DIVERTER VALVE OPEN CENTRE	60	350	£61.40
7000.0100	3/8" 3 WAY DIVERTER VALVE OPEN CENTRE	60	350	£61.40
7000.0101	1/2" 3 WAY DIVERTER VALVE OPEN CENTRE	90	350	£61.40
7000.0102	3/4" 3 WAY DIVERTER VALVE OPEN CENTRE	120	350	£64.48
7000.0103	1" 3 WAY DIVERTER VALVE OPEN CENTRE	200	300	£69.08
3 WAY CLOSED CENTRE				
7000.0111	1/4" 3 WAY DIVERTER VALVE CLOSED CENTRE	60	350	£69.08
7000.0107	3/8" 3 WAY DIVERTER VALVE CLOSED CENTRE	60	350	£115.39
7000.0108	1/2" 3 WAY DIVERTER VALVE CLOSED CENTRE	90	350	£129.48
7000.0109	3/4" 3 WAY DIVERTER VALVE CLOSED CENTRE	120	350	£142.59
7000.0110	1" 3 WAY DIVERTER VALVE CLOSED CENTRE	200	300	£569.25

4 WAY DIVERTER VALVES

USE AND OPERATION

This valve is used to reverse oil flow from 2 ways in towards two ways out. It could be used to control a double acting actuator or to reverse the rotation of an hydraulic motor.

Body: Cast iron **Colour:** Black **Internal parts:** Hardened and ground steel, **External Parts:** White Zinc plated **Seals:** Buna N standard, **Tightness:** Low leakage. **Applications:** Connect P to the pressure flow, T to the tank and ports A and B to the actuators or motor. With lever in position 1, P is connected to A and at the same time B drains into the tank T; with lever in position 2, P is connected to B and at the same time A drains into tank T. With lever in the central position all ports are closed (closed centre). **ON REQUEST:** OPEN CENTRE (CODE/CC). HIGH PRESSURE - UP TO 400 BAR (CODE/AP).



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
4 WAY OPEN CENTRE				
7000.0104	1/4" 4 WAY DIVERTER VALVE OPEN CENTRE	60	350	£65.08
7000.0100	3/8" 4 WAY DIVERTER VALVE OPEN CENTRE	60	350	£65.08
7000.0101	1/2" 4 WAY DIVERTER VALVE OPEN CENTRE	90	350	£65.08
7000.0102	3/4" 4 WAY DIVERTER VALVE OPEN CENTRE	120	350	£68.35
7000.0103	1" 4 WAY DIVERTER VALVE OPEN CENTRE	200	300	£73.22
4 WAY CLOSED CENTRE				
7000.0111	1/4" 4 WAY DIVERTER VALVE CLOSED CENTRE	60	350	£73.22
7000.0107	3/8" 4 WAY DIVERTER VALVE CLOSED CENTRE	60	350	£122.31
7000.0108	1/2" 4 WAY DIVERTER VALVE CLOSED CENTRE	90	350	£137.25
7000.0109	3/4" 4 WAY DIVERTER VALVE CLOSED CENTRE	120	350	£151.15
7000.0110	1" 4 WAY DIVERTER VALVE CLOSED CENTRE	200	300	£603.41

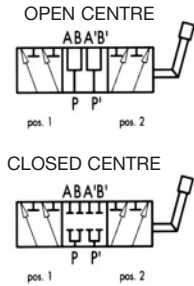


6 WAY DIVERTER VALVES

USE AND OPERATION

This valve is made up of two 3-way diverters coupled: each of the 2 parts are used to divert the inlet flow towards two ports. The single lever controls both the parts at the same time. It's ideal to control 2 actuators.

Body: Cast iron **Colour:** Black **Internal parts:** Hardened and ground steel, **External Parts:** White Zinc plated **Seals:** Buna N standard, **Tightness:** Minor leakage. **Applications:** Connect P and P' to the 2 pressure flows, Ports A and B to the first actuator and ports A' and B' to the second actuator. With lever in position 1, P is connected to A and P' to A'; with lever in position 2, P is connected to B and P' to B'. With lever in central position all ports are connected to each other (open centre)
ON REQUEST: CLOSED CENTRE (CODE/CC). HIGH PRESSURE - UP TO 400 BAR (CODE/AP).



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
6 WAY OPEN CENTRE				
7000.0104	1/4" 6 WAY DIVERTER VALVE OPEN CENTRE	60+60	350	£85.90
7000.0100	3/8" 6 WAY DIVERTER VALVE OPEN CENTRE	60+60	350	£85.90
7000.0101	1/2" 6 WAY DIVERTER VALVE OPEN CENTRE	90+90	350	£104.26
7000.0102	3/4" 6 WAY DIVERTER VALVE OPEN CENTRE	120+120	350	£124.55
7000.0103	1" 6 WAY DIVERTER VALVE OPEN CENTRE	200+200	300	£178.57
6 WAY CLOSED CENTRE				
7000.0111	1/4" 6 WAY DIVERTER VALVE CLOSED CENTRE	60+60	350	£85.90
7000.0107	3/8" 6 WAY DIVERTER VALVE CLOSED CENTRE	60+60	350	£85.90
7000.0108	1/2" 6 WAY DIVERTER VALVE CLOSED CENTRE	90+90	350	£104.26
7000.0109	3/4" 6 WAY DIVERTER VALVE CLOSED CENTRE	120+120	350	£124.63
7000.0110	1" 6 WAY DIVERTER VALVE CLOSED CENTRE	200+200	300	£178.57



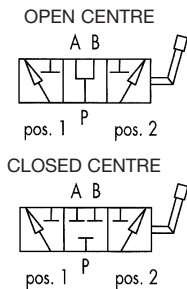
HIGH PRESSURE 3-WAY DIVERTER VALVES, STEEL BODY

USE AND OPERATION

Diverter flow is used to divert the flow towards 2 different outlets.

Body: Steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: Connect P to the pressure flow, A and P to the ports of the hydraulic circuit where flow has to be diverted. With lever in position 1 the flow is connected towards port A; with lever in position 2, the flow is connected towards port B. With lever in central position ports P, A and B are all connected (open centre).



CODE	TYPE	BSP PORTS	MAX FLOW L/MIN	MAX PRESSURE BAR	WEIGHT KG	PRICE
VO879/AP	DF 3 VIE 1/4" AP ACC.	1/4"	20	500	0.65	£57.09
VO881/AP	DF 3 VIE 3/8" AP ACC.	3/8"	35	500	0.72	£57.09
VO891/AP	DF 3 VIE 1/2" AP ACC.	1/2"	60	500	0.92	£68.78
VO901/AP	DF 3 VIE 3/4" AP ACC.	3/4"	100	500	1.57	£75.26
VO911/AP	DF 3 VIE 1" AP ACC.	1"	180	500	2.17	£115.50



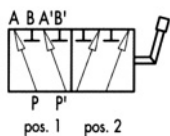
6 WAY DIVERTER VALVES, STEEL BODY

USE AND OPERATION

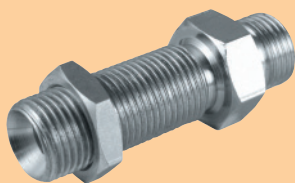
This valve is used to divert the flow from 2 ways in towards 4 ports (two at a time alternatively). It's ideal to control 2 actuators.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** Minor leakage.

Applications: Connect P and P' to the 2 pressure flows, ports A and B to the first actuator and ports A' and B' to the second actuator. With lever in position 1, P is connected to A and P' to A'; with lever in position 2, P is connected to B and P' to B'. Use with lever in central position is NOT recommended.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0930	DF 6 VIE 3/8" ACCIAIO	40	300	£109.10
V0932	DF 6 VIE 1/2" ACCIAIO	60	300	£128.44



FLOWFIT

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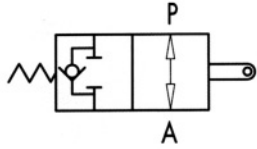
END STROKE VALVES, NORMALLY OPEN

USE AND OPERATION

This valve is used to stop oil inlet in a hydraulic circuit or to stop actuator's stroke (normally opened valve). The valve closing, obtained by pulling or pushing the slider, allows an immediate and total stop of the oil flow.

Body: Cast iron **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard and POM seals, **Tightness:** Minor leakage.

Applications: Connect P to the distributor and A to the circuit or to the actuator. When the slider is operating, flow is blocked from P towards A, whilst the check valve enables free flow oil flow in the reverse direction (from A towards P).



CODE	TYPE	PORT SIZE BSP	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0824	V-FCR 1T 60	3/8"	60	350	£98.48
V0826	V-FCR 1T 80	1/2"	80	350	£101.77
V0825	V-FCR 1T 120	3/4"	120	350	£213.13



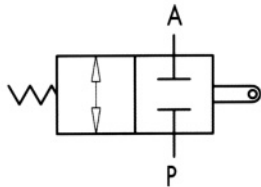
END STROKE VALVES, NORMALLY CLOSED

USE AND OPERATION

This valve is used to enable oil inlet in a hydraulic circuit (normally closed valve). The valve opens by pulling or pushing the slider.

Body: Cast iron **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard and POM seals, **Tightness:** Minor

Applications: Connect independently A and P to the distributor and to the circuit. When slider is operating, flow is free in both directions, vice versa it is blocked.



CODE	TYPE	PORT SIZE BSP	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0820	V-FCR 2T 60	3/8"	60	350	£93.48
V0822	V-FCR 2T 80	1/2"	80	350	£95.50
V0823	V-FCR 2T 120	3/4"	120	350	£201.08



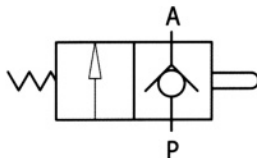
PUSHBUTTON END STROKE VALVES, NORMALLY CLOSED

USE AND OPERATION

This valve allows oil passage in a hydraulic circuit (normally closed valve). Once the slider is set into action, oil flow is free from P to A. It can be used: (a) to set the sequence of 2 actuators (b) as end

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

Applications: Connect A directly to the tank line P as for necessity. Mounting scheme can vary according to the use.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0827	V - 101 3/8" NC	40	350	£90.31
V0828	V - 101 1/2" NC	60	350	£100.76
V0829	V - 101 3/4" NC	100	350	£135.37



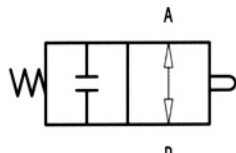
PUSHBUTTON END STROKE VALVES, NORMALLY OPENED

USE AND OPERATION

This valve is used to block oil passage in a hydraulic circuit (normally opened valve). The valve is closed by pushing mechanically the slider.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

Applications: Connect independently A or P to the distributor and to the circuit. When button is operating, flow is blocked in both directions, vice versa it is free.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0817	V - 101 3/8" NA	35	350	£104.98
V0818	V - 101 1/2" NA	50	350	£108.41



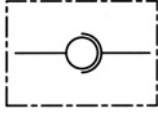
IN LINE ROTATING COUPLING

USE AND OPERATION

These valves are mounted between the end of a flexible hose and a fixed component to compensate hose's rotations and torsions and prevent its damaging. **They are not suitable for fast and continuous rotations.** They are used in every production field where systems have flexible moving hoses. In line mounting.

Body: Zinc-plated steel. **Tightness:** Low friction seals.

Applications: Connect port P to the uses.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE (BAR) WHEN ROTATING	MAX PRESSURE BAR	MAX ROTATION SPEED	PRICE
G1050	GGL 1/4"	25	200	400	212	£14.99
G1060	GGL 3/8"	35	200	400	173	£15.94
G1070	GGL 1/2"	60	150	300	160	£18.63
G1080	GGL 3/4"	100	150	300	120	£27.71
G1090	GGL 1"	180	100	300	100	£38.04
G1091	GGL 1 1/4"	200	100	300	86	£68.57
G1092	GGL 1 1/2"	250	80	300	73	£102.92
G1093	GGL 2"	300	50	250	50	£142.87



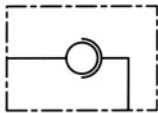
90 DEGREE ROTATING COUPLING

USE AND OPERATION

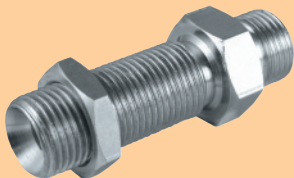
These valves are mounted between the end of a flexible hose and a fixed component to compensate hose's rotations and torsions and prevent its damaging. **They are not suitable for fast and continuous rotations.** They are used in every production field where systems have flexible moving hoses. 90 deg. mounting.

Body: Zinc-plated steel. **Tightness:** Low friction seals.

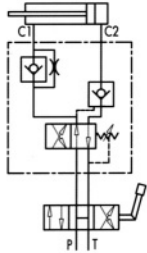
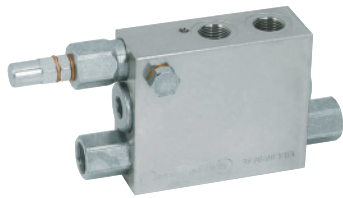
Applications: Connect port P to the uses.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE (BAR) WHEN ROTATING	MAX PRESSURE BAR	MAX ROTATION SPEED	PRICE
G0990	GG 90DEG 1/4"	25	200	400	212	£16.03
G1010	GG 90DEG 3/8"	35	200	400	173	£17.73
G1020	GG 90DEG 1/2"	60	150	300	160	£20.98
G1030	GG 90DEG 3/4"	100	150	300	120	£32.39
G1040	GG 90DEG 1"	180	100	300	100	£42.07
G1042	GG 90DEG 1 1/4"	200	100	300	86	£107.89
G1043	GG 90DEG 1 1/2"	250	80	300	73	£141.33
G1044	GG 90DEG 2"	300	50	250	50	£195.95



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SINGLE ACTING PLOUGH OVERTURNING VALVES

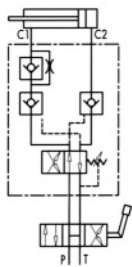
USE AND OPERATION

This valve has been realised for use on cylinders for reversible plough to obtain the automatic backflow and therefore the reversal of the motion of the hydraulic cylinder that makes the plough rotate. It is provided with a single pilot check valve which guarantees safety just on the block side, whilst the stem side it must be leaned on the plough mechanical locks. Assembly on balanced and light plough with internal diameters 40/50mm and 60/80mm is recommended.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage. **These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.**

Applications: Connect C1 to the cylinder's stem, C2 to the block, P and T to the machine inlet. Due to its shape, it can be in-line assembled on a hydraulic cylinder or directly fixed on the plough by means of the threaded hole on the body.

CODE	TYPE	PORTS	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0278	VRA 40/50 SE	3/8"	200	400	£173.98
V0280	VRA 60/80 SE	3/8"	200	400	£173.98



DOUBLE ACTING PLOUGH OVERTURNING VALVES

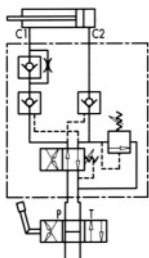
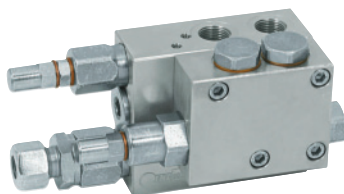
USE AND OPERATION

This valve has been realised for use on cylinders for reversible plough to obtain the automatic backflow and therefore the motion reversal of the hydraulic cylinder that makes the plough rotate. It is provided with a double pilot check valve which guarantees safety and enables to put and block the cylinder in any position. The motion reversal of the piston is made through a differential type relief valve exactly in the dead point of the plough, generating more power and speed. It can be assembled on heavy and unbalanced plough with the following internal diameters: 40/50, 60/80, 80.100, 100/110, 110/130 mm.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage. **These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.**

Applications: Connect C1 to the cylinder's stem, C2 to the block, P and T to the machine inlet. Due to its shape, it can be in-line assembled on a hydraulic cylinder or directly fixed on the plough by means of the threaded hole on the body.

CODE	TYPE	PORTS	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0282	VRAP 40/50 SE	3/8"	250	400	£200.08
V0290	VRAP 60/80 SE	3/8"	250	400	£200.08
V0300	VRAP 80/100 SE	3/8"	250	400	£200.08
V0302	VRAP 100/110 SE	3/8"	250	400	£200.08
V0320	VRAP 110/130 SE	3/8"	250	400	£203.91



DOUBLE ACTING PLOUGH OVERTURNING VALVES WITH RELIEF VALVE

USE AND OPERATION

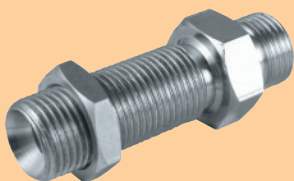
This valve has been realised for use on cylinders for reversible plough to obtain the automatic backflow and therefore the motion reversal of the hydraulic cylinder that makes the plough rotate. It is provided with a double pilot check valve and with a relief valve that enables to reduce the thrust (block side) in order not to damage the mechanical locks and the plough's head. The motion reversal of the piston is made through a differential type relief valve exactly in the dead point of the plough, generating more power and speed. It's ideal for assembly on heavy and unbalanced plough with the following internal diameters: 60/80, 80.100, 100/110, 110/130 mm.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.

Applications: Connect C1 to the cylinder's stem, C2 to the block, P and T to the machine inlet. Due to its shape, it can be in-line assembled on a hydraulic cylinder or directly fixed on the plough by means of the threaded hole on the body.

CODE	TYPE	PORTS	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0350	VRAP 60/80 SE + VMP	3/8"	250	400	£213.13
V0360	VRAP 80/100 SE + VMP	3/8"	250	400	£249.73
V0376	VRAP 100/110 SE + VMP	3/8"	250	400	£249.73
V0380	VRAP 110/130 SE + VMP	3/8"	250	400	£252.94



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DOUBLE ACTING PLOUGH OVERTURNING VALVE BY DOWN MOULDBOARD LOAD SHIFTING

USE AND OPERATION

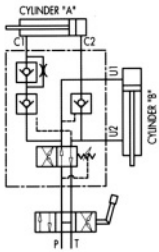
This valve has been realised for use on cylinders for reversible plough to obtain the automatic backflow and therefore the motion reversal of the hydraulic cylinder that makes the plough rotate. It has been designed to set in action 2 cylinders with disadvantageous rotation load (see diagram).

Operating Instructions: First cylinder B starts lining up the load. Before the manoeuvre ends, cylinder A starts overturning.

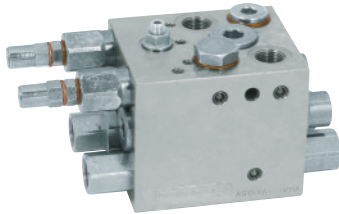
Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.

Applications: Connect C1 to the stem, C2 to the cylinder's block A, U1 to the block and U2 to B port of the cylinder; P and T to the machine inlet. Due to its shape, it can be in-line assembled on a hydraulic cylinder or directly fixed on the plough by means of the threaded hole on the body.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0330	VRAP 80/100 SS	250	400	£213.13



DOUBLE ACTING PLOUGH OVERTURNING VALVE BY UP MOULDBOARD LOAD SHIFTING

USE AND OPERATION

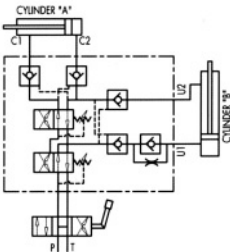
This valve has been realised for use on cylinders for reversible plough to obtain the automatic backflow and therefore the motion reversal of the hydraulic cylinder that makes the plough rotate. It has been designed to set in action 2 cylinders with disadvantageous rotation load (see diagram).

Operating Instructions: Sequence working: first cylinder B starts lining up the load; once it has got to the end of its stroke, cylinder A starts overturning. When this gets to the dead point, A and B start working at the same time, B with a delayed speed in relation to A.

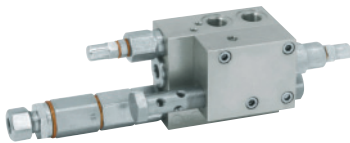
Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.

Applications: Connect C1 to the stem, C2 to the cylinder's block A, U1 to the block and U2 to B port of the cylinder; P and T to the machine inlet. Due to its shape, it can be in-line assembled on a hydraulic cylinder or directly fixed on the plough by means of the threaded hole on the body.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0340	VRAP 80/100 SV TN	230	400	£564.38



DOUBLE ACTING PLOUGH OUTSIDE DRILLS OVERTURNING VALVES FOR CYLINDER WITH MEMORY AND WITHOUT MEMORY

USE AND OPERATION

Valves for actuators with memory (V0325): Designed for use on cylinders with memory for outside drills reversible ploughs, it's provided with a duel cross relief valve which provides protection against tear's shocks when the plough exceeds the dead point.

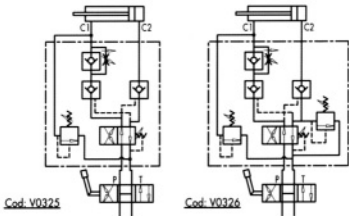
Valves for actuators without memory: Designed for use on cylinders without memory for outside drills reversible ploughs, it is provided with a duel cross relief valve: this enables to reduce the thrust pressure (block side) in order not to damage the mechanical locks on the plough's head.

Both systems are provided with a fixed compensated flow control valve which allows to keep a constant speed, whether the plough works inside the drills or outside.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

These valves are supplied with exchange pressure at 140 Bar: according to your requirements, pressure setting can be modified by acting on the pressure regulator.

Applications: Connect C1 and the duel cross relief valve to the cylinder from the rod side through the double banjo bolt (supplied with the valve) and double banjos, connect C2 to the cylinder from the block's side, P and T to the machine inlet.



CODE	TYPE	MAX FLOW L/MIN	MAX PRESSURE BAR	PRICE
V0325	VRAP 110/130 FSCM	250	400	£294.32
V0326	VRAP 110/130 FSSM	250	400	£322.17



1 WAY SPECIAL BLOCK FOR NO-STOP PLOUGH AND SUB-SOILERS TILLERS

USE AND OPERATION

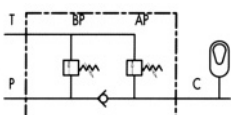
This valve is made up of 2 relief valves and 1 check valve. It is used to supply pressure to tanked systems on non-stop plough and sub-soilers tillers in order to provide protection against shocks.

Body: Zinc-plated steel **Internal parts:** Hardened and ground steel, **Seals:** Buna N standard, **Tightness:** No leakage.

Applications: Connect P to the machine inlet, T to the draining or to the tank for eventual reutilization and IC to the system.

* BP adjusts the charge pressure of system and is set at 80 Bar.

* AP adjusts the eventual security drainage opening and is set at 250 Bar.



CODE	TYPE	MAX PRESSURE BAR	PRICE
V0295	MASSELLO 1 VIA 3/8"	350	£202.78
V0296	MASSELLO 1 VIA 1/2"	350	£217.94