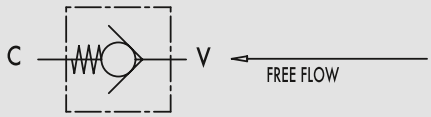
Rückschlagventile

CHECK VALVES

Rückschlagventil - Innengewinde

TYPE
VU

HYDRAULIC DIAGRAM



CHECK VALVES

USE AND OPERATION:
In the check valves flow is free in one direction and blocked in the reverse one.

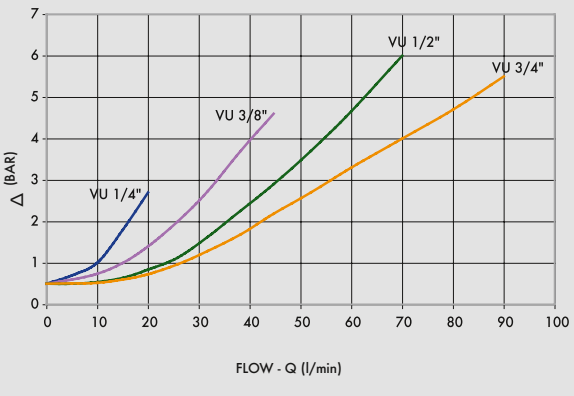
MATERIALS AND FEATURES:
Body: zinc-plated steel
Internal parts: hardened and ground steel
Poppet type: any leakage.

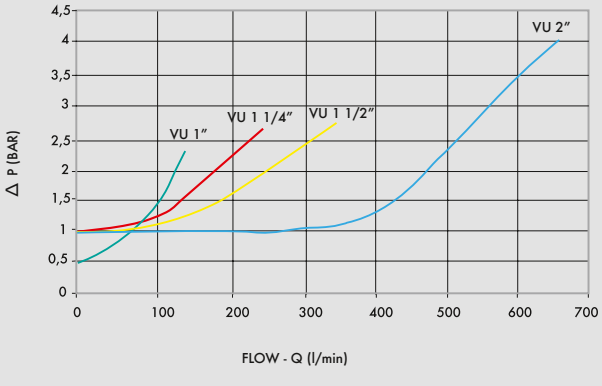
APPLICATIONS:
Connect V to the pressure flow and C to the actuator. Flow is free from V to C and blocked in the reverse direction.

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.
- NPT thread (code VN... instead of V0... example: VU 1/4" NPT code = VN590)
- **Body in stainless steel (VX instead of V0 example: VU 1/4" INOX code = VX590)**

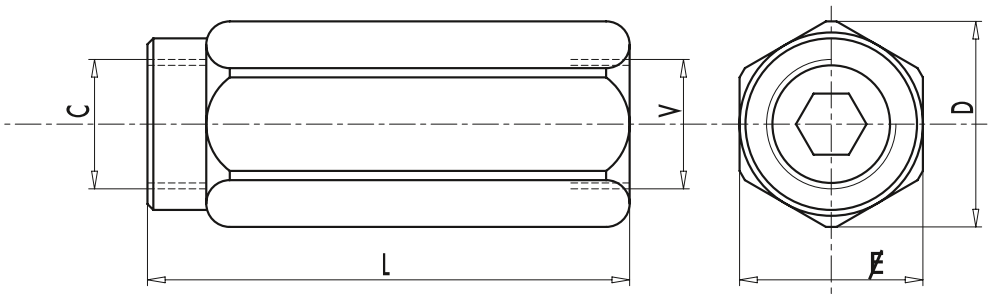
PRESSURE DROPS CURVE

Oil temperature: 50° C - Oil viscosity: 30 cSt





CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar	CRACKING PRESSURE Bar
V0592	VU 1/8"	3	350	±0,4/0,7
V0590	VU 1/4"	20	350	±0,4/0,7
V0600	VU 3/8"	45	350	±0,4/0,7
V0610	VU 1/2"	70	350	±0,4/0,7
V0620	VU 3/4"	110	350	±0,4/0,7
V0630	VU 1"	160	350	±0,4/0,7
V0631	VU 1 1/4"	250	300	±0,7/1
V0632	VU 1 1/2"	350	300	±0,7/1
V0633	VU 2"	650	300	±1



SPRINGS

code	0,4/0,7 Bar	1 Bar	3 Bar	5 Bar	8 Bar
VU 1/4"	V0590	V0590/1	V0590/3	V0590/5	V0590/8
VU 3/8"	V0600	V0600/1	V0600/3	V0590/5	V0600/8
VU 1/2"	V0610	V0610/1	V0610/3	V0610/5	V0610/8
VU 3/4"	V0620	V0620/1	V0620/3	V0620/5	V0620/8
VU 1"	V0630	V0630/1	V0630/3	V0630/5	V0630/8
VU 1" 1/4"		V0631	V0631/3	V0631/5	V0631/8
VU 1" 1/2"		V0632	V0632/3	V0632/5	V0632/8
VU 2"		V0633			

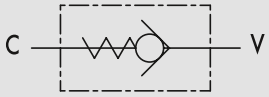
CODE	TYPE	V - C GAS - MET	L mm	E mm	D mm	WEIGHT kg
V0592	VU 1/8"	G 1/8"	44	14	16	0,038
V0590	VU 1/4"	G 1/4"	62	19	21	0,104
V0600	VU 3/8"	G 3/8"	68	24	26,5	0,184
V0610	VU 1/2"	G 1/2"	77	30	34	0,322
V0620	VU 1/4"	G 3/4"	88	36	40	0,492
V0630	VU 1"	G 1"	105	41	46	0,676
V0631	VU 1"1/4	G 1" 1/4	135	55	63	1,646
V0632	VU 1"1/2	G 1" 1/2	145	60	69	1,950
V0633	VU 2"	G 2"	150	70	80	2,726

Rückschlagventil - Aussengewinde

TYPE

VU MM

HYDRAULIC DIAGRAM



MALE/MALE CHECK VALVES

USE AND OPERATION:
In the check valves flow is free in one direction and blocked in the reverse one.

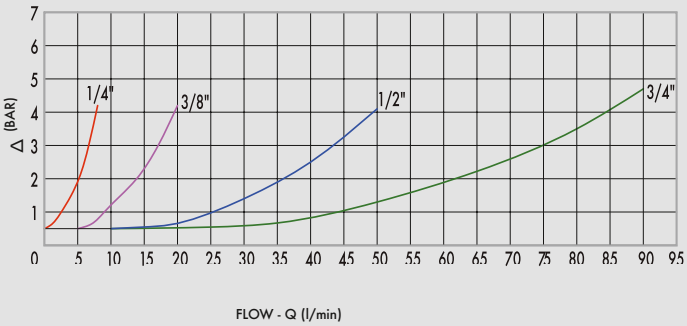
MATERIALS AND FEATURES:
Body: zinc-plated steel
Internal parts: hardened and ground steel
Poppet type: any leakage.

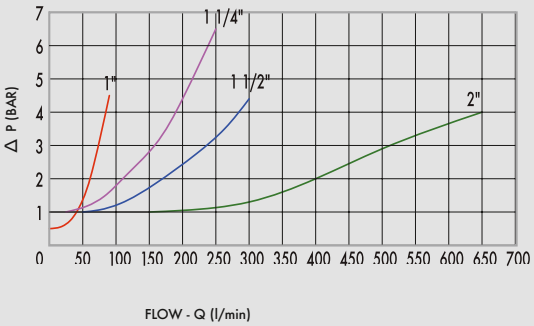
APPLICATIONS:
Connect V to the pressure flow and C to the actuator. Flow is free from V to C and blocked in the reverse direction.

ON REQUEST
• Different cracking pressures: 1-3-6-9 bar (please specify the desired cracking pressure in the product description). Set valve is used to keep a hydraulic system under pressure.

PRESSURE DROPS CURVE

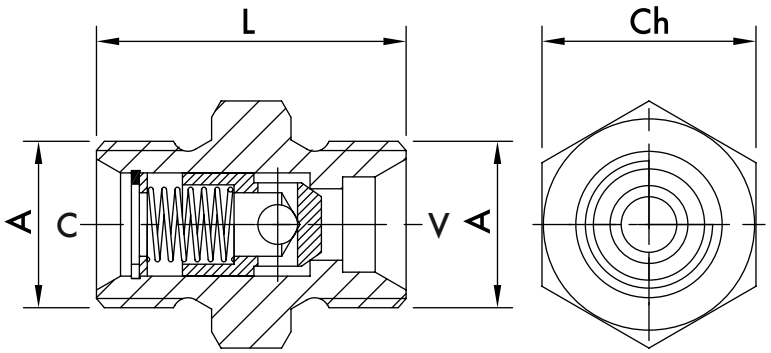
Oil temperature: 50° C - Oil viscosity: 30 cSt





CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar
V0594/*	VU MM 1/4"	8	350
V0604/*	VU MM 3/8"	20	350
V0614/*	VU MM 1/2"	50	350
V0624/*	VU MM 3/4"	90	350
V0634/*	VU MM 1"	90	320
V0637/*	VU MM 1" 1/4	250	320
V0638/*	VU MM 1" 1/2	300	320
V0639/*	VU MM 2	650	320

*Please specify the desired spring: cracking pressure 1 (standard) -3 -6 Bar up to 1" size and 1 (standard) - 6 - 9 Bar from 1" 1/4 size.



SPRINGS

code	1 Bar	3 Bar	6 Bar	9 Bar
VU MM1/4"	V0594/1	V0594/3	V0594/6	/
VU MM 3/8"	V0604/1	V0604/3	V0594/6	/
VU MM 1/2"	V0614/1	V0614/3	V0614/6	/
VU MM 3/4"	V0624/1	V0624/3	V0624/6	/
VU MM 1"	V0634/1	/	V0634/6	V0634/9
VU MM 1" 1/4	V0637/1	/	V0637/6	V0637/9
VU MM 1" 1/2	V0638/1	/	V0638/6	V0638/9
VU MM 2"	V0639/1	/	V0639/6	V0639/9

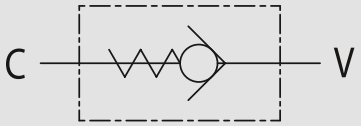
CODE	TYPE	A mm	L mm	Ch mm	WEIGHT kg
V0594/*	VU MM 1/4"	1/4"	32	19	0,033
V0604/*	VU MM 3/8"	3/8"	34	22	0,053
V0614/*	VU MM 1/2"	1/2"	39	27	0,092
V0624/*	VU MM 3/4"	3/4"	45	32	0,142
V0634/*	VU MM 1"	1"	55	40	0,288
V0637/*	VU MM 1" 1/4	1" 1/4	70	50	0,594
V0638/*	VU MM 1" 1/2	1" 1/2	86	55	0,910
V0639/*	VU MM 2	2"	102	70	1,800

ABITEK
Hydraulik • Antriebstechnik

Rückschlagventil - einschraubbar

TYPE
VUI

HYDRAULIC DIAGRAM



INTEGRATED CHECK VALVES

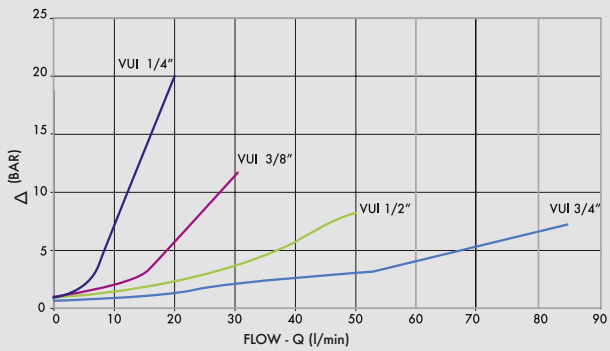
USE AND OPERATION:
In the check valves flow is free in one direction and blocked in the reverse one. Small dimensions and their insert configuration make these valves ideal for installation into custom designed hydraulic integrated circuit.

MATERIALS AND FEATURES:
Body: zinc-plated steel
Exterior tightness: through O-Ring seal

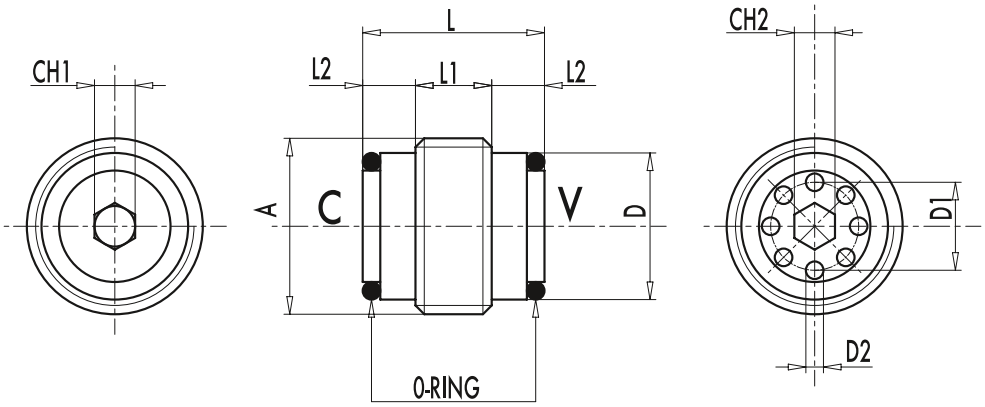
APPLICATIONS:
Screw the valve keeping into consideration that flow is free from V to C.

PRESSURE DROPS CURVE

Oil temperature: 50° C - Oil viscosity: 30 cSt



CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar	CRACKING PRESSURE Bar
V0591	VUI 1/4"	20	350	0,5
V0601	VUI 3/8"	30	350	0,5
V0611	VUI 1/2"	50	350	0,5
V0621	VUI 3/4"	80	350	0,5



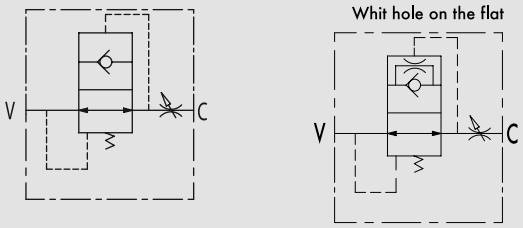
CODE	TYPE	A GAS	ØD mm	ØD1 mm	ØD2 mm	CH1 mm	CH2 mm	L mm	L1 mm	L2 mm	O-ring mm	WEIGHT kg
V0591	VUI 1/4"	G1/4"	11,3	6,5	1,25	3	3	17	6	5,5	9X1	0,104
V0601	VUI 3/8"	G3/8"	14,8	8	2	4	3	18,5	7,5	5,5	10,8X1,78	0,184
V0611	VUI 1/2"	G1/2"	18,5	10,5	2,25	6	5	22,5	8,5	7	14X1,78	0,322
V0621	VUI 3/4"	G3/4"	24	14	3	8	8	28,5	13,5	7,5	8,7X2,62	0,492

Schlauchbruchsicherung

TYPE

VUBA

HYDRAULIC DIAGRAM



HOSE BURST VALVES CARTRIDGE

USE AND OPERATION:

These valves are used to prevent uncontrolled descent of a load in case of hose failure. When it exceeds the valve setting (reaction flow), the valve block the flow.

MATERIALS AND FEATURES:

Body: steel, burnished

APPLICATIONS:

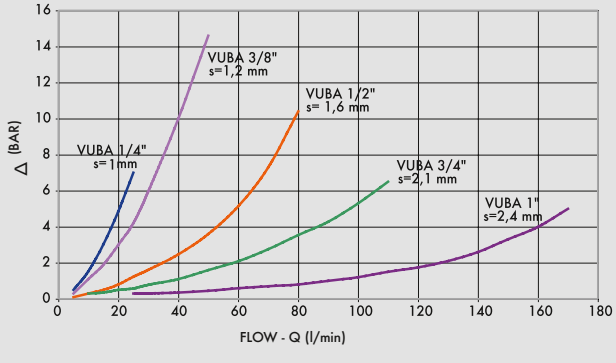
Screw in the valve connecting V to the pressure flow and C to the actuator. The use together with a flow control valve is recommended.

ON REQUEST:

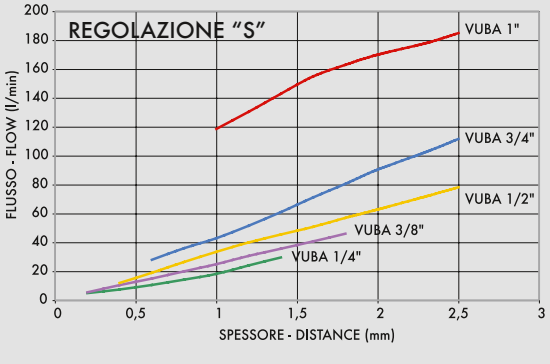
- Preset hose bursts available (the reaction flow should be set 1,5 times more than the rate flow of the system). Please specify flow (lt/min) or distance S (mm) from the flat to the valve
- Hole on the flat (CODE/F, please specify hole dimension) for a slow load descent with closed valve
- Valve completes with male-female or female-female thread body for in line mounting by the actuator.

PRESSURE DROPS CURVE

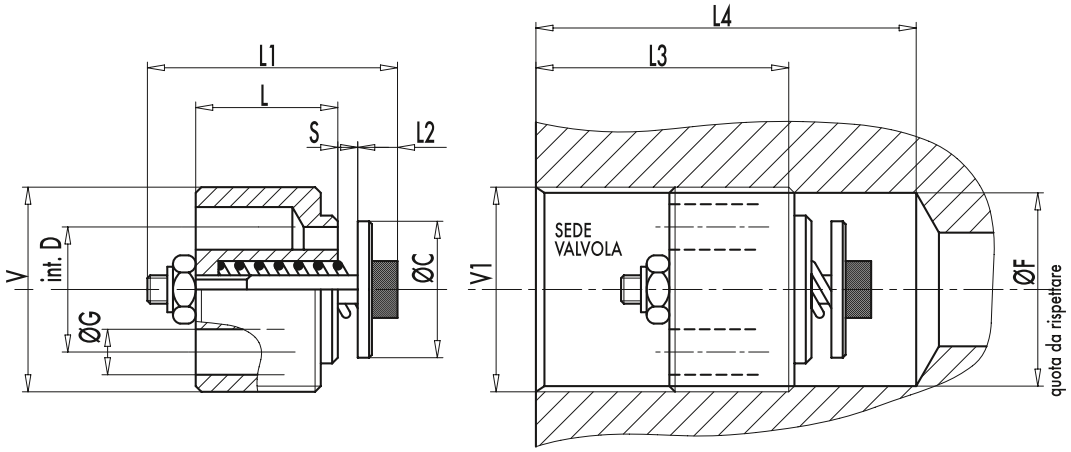
Oil temperature: 50° C - Oil viscosity: 30 cSt



FLOW/DISTANCE

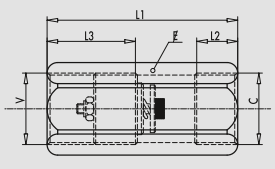


CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar
V0770	VUBA 1/4"	20	350
V0780	VUBA 3/8"	50	350
V0790	VUBA 1/2"	80	350
V0800	VUBA 3/4"	140	350
V0810	VUBA 1"	180	350

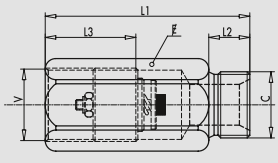


CODE	TYPE	V-V1 GAS	L mm	L1 mm	L2 mm	L3 mm	L4 mm	ØC mm	ØG mm	ØF mm	ØD(i) mm	S mm	WEIGHT kg
V0770	VUBA 1/4"	G1/4"	8	18	5	28	35	9,5	2,5	11,75	8	1,0	0,006
V0780	VUBA 3/8"	G3/8"	10,5	23	5	31	40	12,5	3,5	15,2	10,5	1,2	0,012
V0790	VUBA 1/2"	G1/2"	13	29	5	33	43	15	4,5	19	12,5	1,6	0,024
V0800	VUBA 3/4"	G3/4"	18	34	7	40	53	18,5	6	24,5	16	2,1	0,048
V0810	VUBA 1"	G1"	20	40	8	43	66	25	7	30,5	19	2,8	0,098

CODE	TYPE	V-C GAS	L1 mm	L2 mm	L3 mm	F mm	WEIGHT kg
V0771	VUBA 1/4"+MFF	G1/4"	50	16	28	19	0,072
V0781	VUBA 3/8"+MFF	G3/8"	58	17	31	24	0,132
V0791	VUBA 1/2"+MFF	G1/2"	62	18	33	27	0,146
V0801	VUBA 3/4"+MFF	G3/4"	75	21	40	32	0,220
V0811	VUBA 1"+MFF	G1"	85	26	43	41	0,452
V0772	VUBA 1/4"+MMF	G1/4"	50	12	28	19	0,064
V0782	VUBA 3/8"+MMF	G3/8"	58	13	31	24	0,120
V0792	VUBA 1/2"+MMF	G1/2"	62	14	33	27	0,140
V0802	VUBA 3/4"+MMF	G3/4"	75	16	40	32	0,228
V0812	VUBA 1"+MMF	G1"	85	19	43	41	0,456



TYPE
MFF



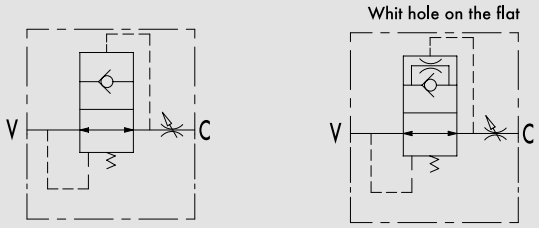
TYPE
MMF

Schlauchbruchsicherung mit Aussengewinde

TYPE

VUBA DIN

HYDRAULIC DIAGRAM



ADJUSTABLE HOSE BURST VALVES DIN 2353

USE AND OPERATION:

These valves are used to prevent uncontrolled descent of a load in case of hose failure. When it exceeds the valve setting (reaction flow), the valve block the flow.

MATERIALS AND FEATURES:

Body: zinc-plated steel
Flat: burnished steel

APPLICATIONS:

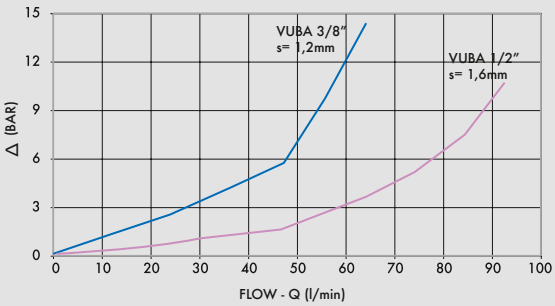
Screw in the valve connecting V to the pressure flow and C to the actuator. The use together with a flow control valve is recommended.

ON REQUEST:

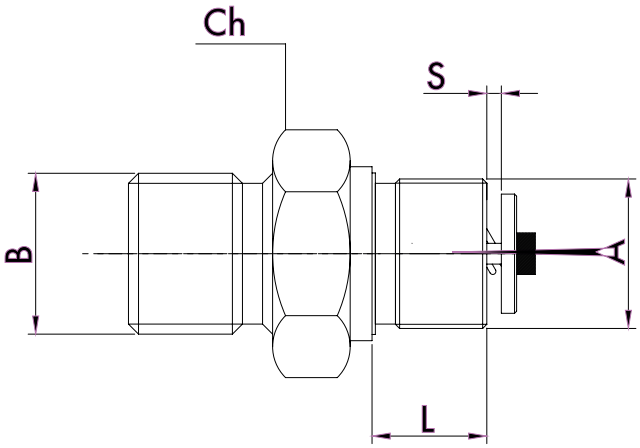
- Preset hose bursts available (the reaction flow should be set 1,5 times the rate flow of the system). Please specify flow (lt/min) or distance S (mm) from the flat to the valve
- Hole on the flat (CODE/F, please specify hole dimension) for a slow load descent with closed valve

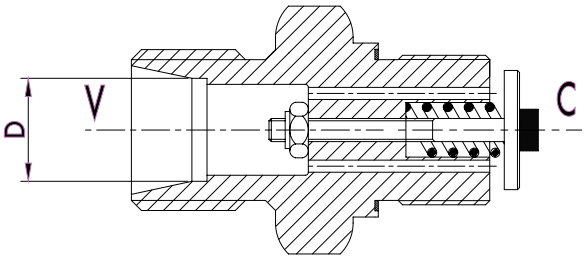
PRESSURE DROPS CURVE

Oil temperature: 50° C - Oil viscosity: 30 cSt



CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar
V0784	VUBA 3/8" DIN T10L	50	350
V0786	VUBA 3/8" DIN T12L	50	350
V0787	VUBA 3/8" DIN T15L	50	350
V0794	VUBA 1/2" DIN T15L	80	350





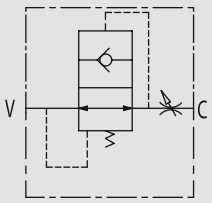
CODE	TYPE	A BSPP	B mm	L mm	D mm	S mm	Ch mm
V0784	VUBA 3/8" DIN T10L	3/8"	M16x1,5	11	10	1,2	22
V0786	VUBA 3/8" DIN T12L	3/8"	M18x1,5	11	12	1,2	22
V0787	VUBA 3/8" DIN T15L	3/8"	M22x1,5	11	15	1,2	24
V0794	VUBA 1/2" DIN T15L	1/2"	M22x1,5	13	15	1,6	27

Schlauchbruchsicherung mit Aussengewinde

TYPE

VUBR

HYDRAULIC DIAGRAM



HOSE BURST VALVES WITH EXTERNAL ADJUSTMENT

USE AND OPERATION:

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

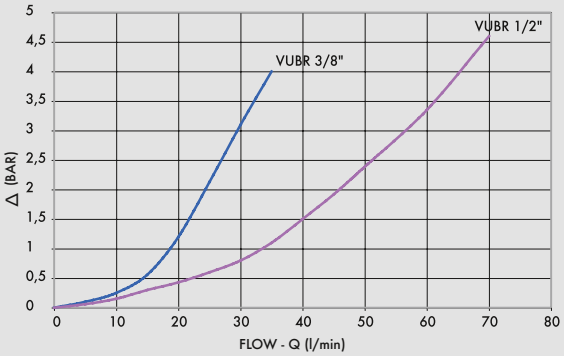
MATERIALS AND FEATURES:

Body: zinc-plated steel
Internal components: hardened and ground steel
Tightness: ball type

APPLICATIONS:

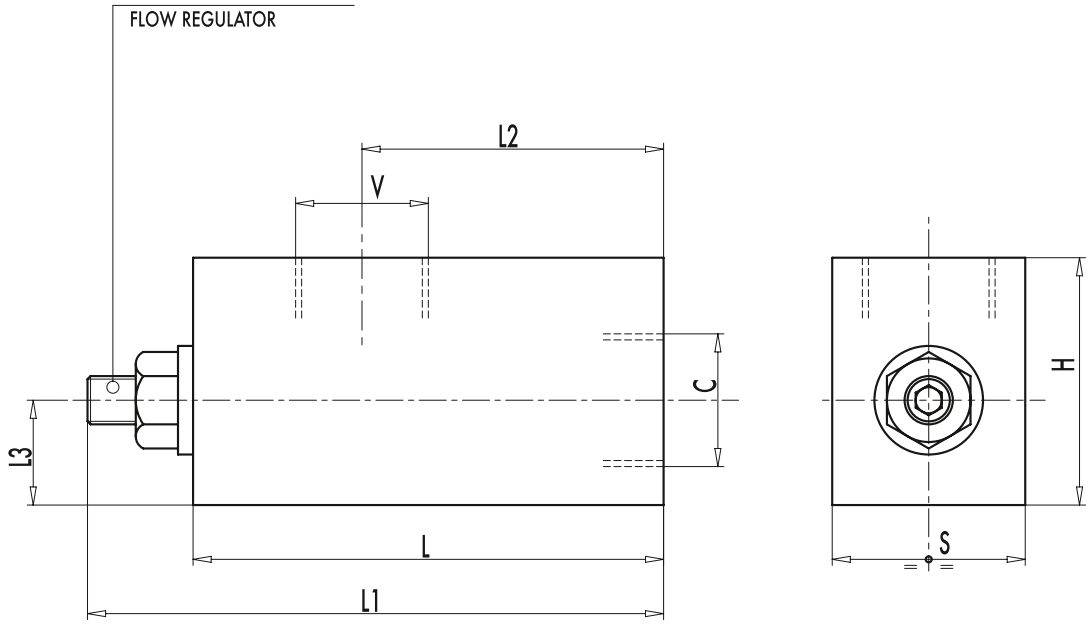
Connect V to the pressure flow and C to the actuator. To adjust flow (1 turn ≈ 15 l), keep the nut on the valve in order to prevent oil leakage.

PRESSURE DROPS CURVE



Oil temperature: 50° C - Oil viscosity: 30 cSt

CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar
V0785	VUBR 3/8"	40	300
V0795	VUBR 1/2"	70	300

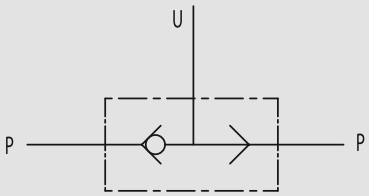


CODE	TYPE	V - C GAS	L mm	L1 mm	L2 mm	L3 mm	H mm	S mm	WEIGHT kg
V0785	VUBR 3/8"	G3/8"	76	93	47	16	40	30	0,634
V0795	VUBR 1/2"	G1/2"	76	93	47	16	40	30	0,586

Wechselventil

TYPE
VU2P

HYDRAULIC DIAGRAM



SHUTTLE VALVES

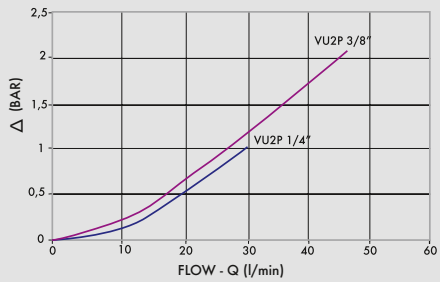
USE AND OPERATION:
This valve is used to select higher pressure between two pressure lines.

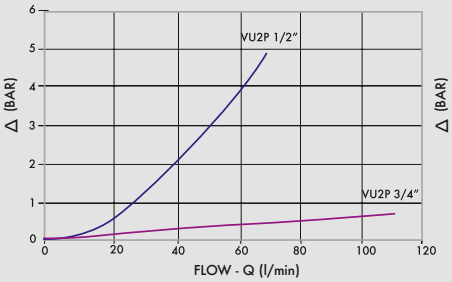
MATERIALS AND FEATURES:
Body: zinc-plated steel
Seal: BUNA N standard
Tightness: ball type

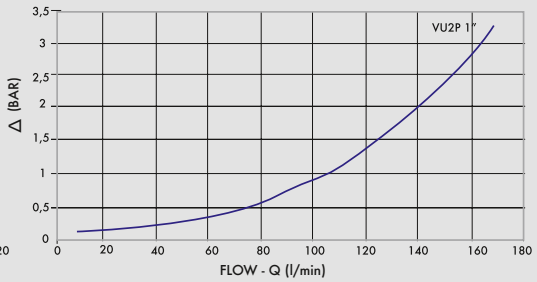
APPLICATIONS:
Connect ports P to the 2 lines to select and U to the line to feed .

PRESSURE DROPS CURVE

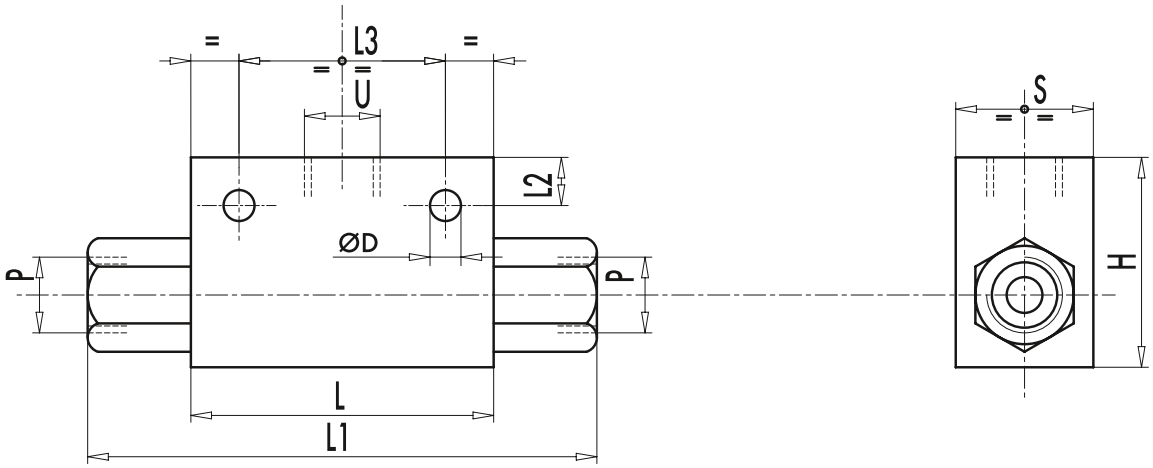
Oil temperature: 50° C - Oil viscosity: 30 cSt







CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar
V0666	VU2P 1/4"	30	450
V0668	VU2P 3/8"	45	450
V0670	VU2P 1/2"	70	450
V0680	VU2P 3/4"	110	350
V0685	VU2P 1"	150	300



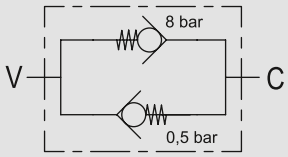
CODE	TYPE	U - P GAS	L mm	L1 mm	L2 mm	L3 mm	H mm	S mm	ØD mm	WEIGHT kg
V0666	VU2P 1/4"	G1/4"	60	104	9	44	40	30	8,5	0,560
V0668	VU2P 3/8"	G3/8"	60	104	9	44	40	30	8,5	0,530
V0670	VU2P 1/2"	G1/2"	60	104	12	44	50	30	8,5	0,652
V0680	VU2P 3/4"	G3/4"	80	127	12	44	58	35	8,5	1,086
V0685	VU2P 1"	G1"	80	126	11	60	80	50	10,5	1,870

Rückschlagventil - Bidirektional

TYPE

VRC

HYDRAULIC DIAGRAM



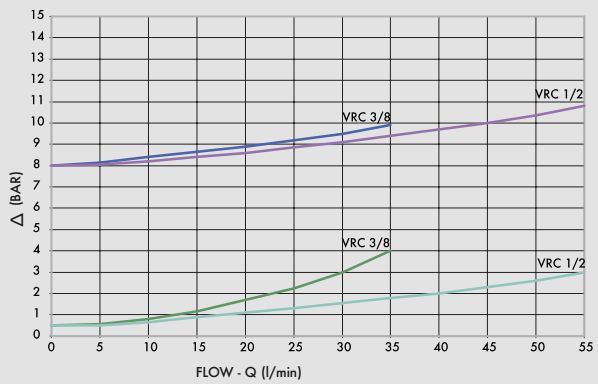
BIDIRECTIONAL CHECK VALVES

USE AND OPERATION:
In the bidirectional check valves flow is controlled in both directions at different pressure setting.

MATERIALS AND FEATURES:
Body: zinc plated steel
Internal parts: hardened and ground steel

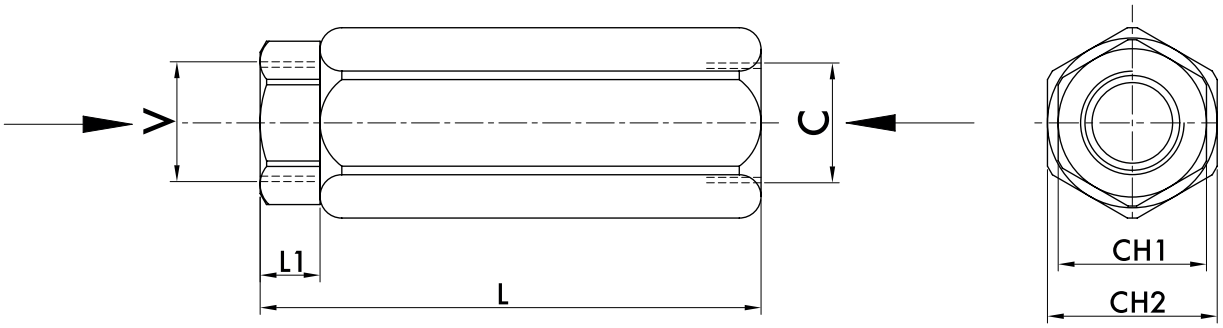
APPLICATIONS:
Connect V or C to the pressure flow according to the adjustment to be obtain.

PRESSURE DROPS CURVE



Oil temperature: 50° C - Oil viscosity: 30 cSt

CODE	TYPE	MAX FLOW Lt. / min	MAX PRESSURE Bar	CRACKING PRESSURE V - C Bar	CRACKING PRESSURE C - V Bar
V0606	VRC 3/8"	35	350	0,5	8
V0616	VRC 1/2"	55	350	0,5	8



CODE	TYPE	V - C GAS	L mm	L1 mm	CH1 mm	CH2 mm	WEIGHT kg
V0606	VRC 3/8"	G3/8"	100	11	27	30	0,448
V0616	VRC 1/2"	G1/2"	118	26	27	30	0,448