



VU SERIES

The VU series check valves are used in any type of hydraulic circuit, with a safe, compact design suitable to any hydraulic application using non-corrosive liquids. The VU size range includes two different standard openings at 5 to 65 psi. The VU series can also be used as a pressure sequence valve by adjusting the internal spring loading to the required cracking point, according to the valve size.

Category: [Check Valves](#) Tags: [Industry: Agricultural](#), [Industry: Industrial](#), [Industry: Mobile](#), [Industry: Oil & Gas](#)

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DESCRIPTION

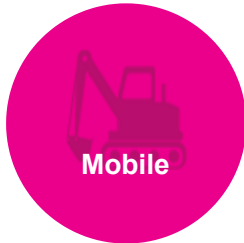
FEATURES

- Size range: 1/4" thru 2"
- Port options: NPT, SAE, BSP
- Standard SAE and NPT threads
- Standard crack 5 psi and 65 psi; various crack pressures optional
- Material: steel with black phosphate
- Closing spring: C72 material

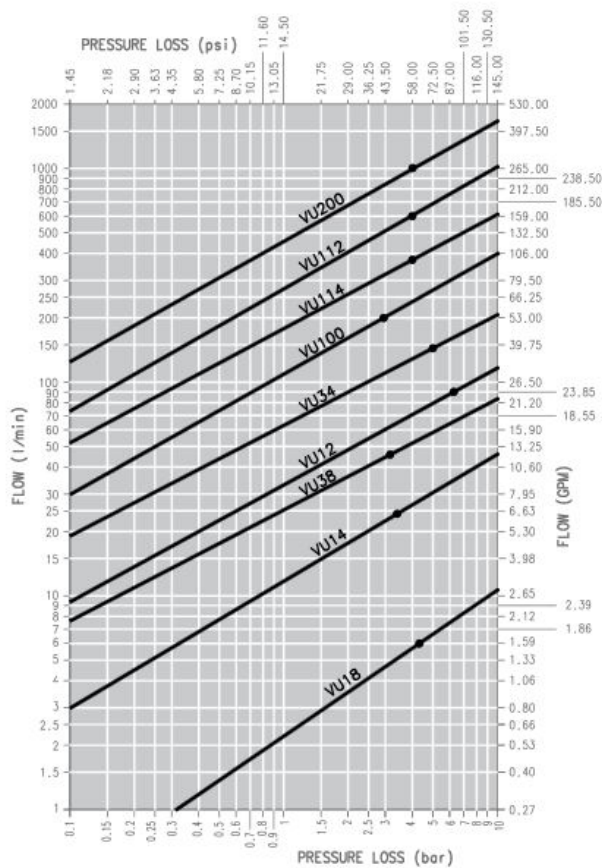
- Central exhausting hole option

APPLICATIONS

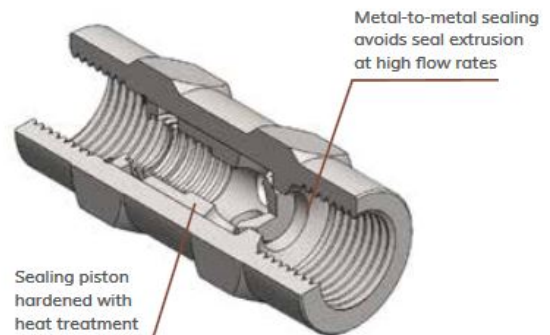
- Any type of hydraulic circuit
- Any hydraulic application using non-corrosive liquids
- As pressure sequence valve, by adjusting the internal spring loading to the required cracking point according to valve size



Pressure Drop



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S

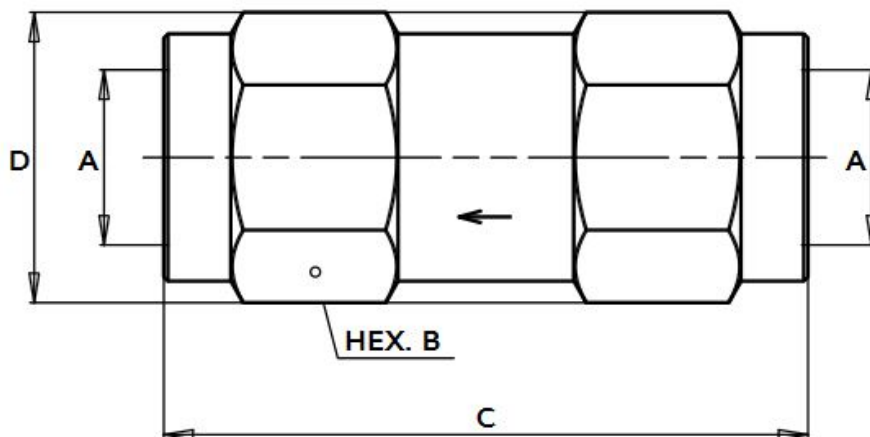


DESCRIPTION	MAX SUGGESTED FLOW		MAX OPERATING PRESSURE		BURST PRESSURE		
	inch	l/mm	GPM	MPa	psi	MPa	psi

VU 18	1/8	6	1.59	40	5800	160	23200
VU 14	1/4	24	6.36	35	5075	140	20300
VU 38	3/8	46	12.19	35	5075	140	20300
VU 12	1/2	90	23.85	30	4350	120	17400
VU 34	3/4	148	39.22	30	4350	120	17400
VU 100	1	200	53	30	4350	120	17400
VU 114	1 1/4	378	100.17	25	3625	100	14500
VU 112	1 1/2	600	159	25	3625	100	14500
VU 200	2	1000	265	15	2175	45	6525

Temperature range: from -20 C (-4 F) to 120 oC (248 F)

Size Diagram



DESCRIPTION	A	B		C		D		WEIGHT	
		mm	inch	mm	inch	mm	inch	kg	lb
VU 18	1/8	14.0	0.55	44.0	1.73	16.2	0.64	0.038	0.08
VU 14	1/4	19.0	0.75	60.0	2.36	21.9	0.86	0.090	0.20
VU 38	3/8	24.0	0.94	70.0	2.76	27.7	1.09	0.185	0.41
VU 12	1/2	30.0	1.18	77.0	3.03	34.6	1.36	0.303	0.67
VU 34	3/4	36.0	1.42	90.0	3.54	41.6	1.64	0.499	1.10

VU 100	1	45.0	1.77	106.0	4.17	52.0	2.05	0.901	1.99
VU 114	1 1/4	55.0	2.17	125.0	4.92	63.5	2.50	1.513	3.34
VU 112	1 1/2	65.0	2.56	140.0	5.51	75.1	2.96	2.430	5.36
VU 200	2	75.0	2.95	160.0	6.30	86.6	3.41	3.130	6.90

DESCRIPTION	A	B		C		D		WEIGHT	
		mm	inch	mm	inch	mm	inch	kg	lb
VU 14 SAE	7/16-20UNF	19.0	0.75	60.0	2.36	21.9	0.86	0.100	0.22
VU 38 SAE	9/16-18UNF	24.0	0.94	70.0	2.76	27.7	1.09	0.192	0.42
VU 12 SAE	3/4-16UNF	30.0	1.18	77.0	3.03	34.6	1.36	0.315	0.69
VU 34 SAE	1-1/16-12UN	36.0	1.42	94.0	3.70	41.6	1.64	0.490	1.08
VU 100 SAE	1-5/16-12UN	45.0	1.77	106.0	4.17	52.0	2.05	0.870	1.92
VU 114 SAE	1-5/8-12UN	55.0	2.17	125.0	4.92	63.5	2.50	1.486	3.28
VU 112 SAE	1-7/8-12UN	65.0	2.56	140.0	5.51	75.1	2.96	2.410	5.31
VU 200 SAE	2-1/2-12UN	75.0	2.95	160.0	6.30	86.6	3.41	2.995	6.60

VUS NPT Thread Soft Seal Check Valves

CRACK POINT	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	DESCRIPTION
VUS NPT THREAD					
5 psi	3/4	3/4	NPT	810701100	VUS 34 NPT 5 PSI SOFT SEAT
50 psi	3/4	1	NPT	810701400	VUS 100 NPT 50 PSI SOFT SEAT

VU NPT and SAE Thread

5 psi	1/8	1/8	NPT	810201100	81050
5 psi	1/4	1/4	NPT	810201101	81050
5 psi	3/8	3/8	NPT	810201102	81050
5 psi	1/2	1/2	NPT	810201103	81050
5 psi	3/4	3/4	NPT	810201104	81050
5 psi	1	1	NPT	810201105	81050
5 psi	1 1/4	1 1/4	NPT	810201106	81050
5 psi	1 1/2	1 1/2	NPT	810201107	81050
5 psi	2	2	NPT	810201108	81050
5 psi	3/4	3/4	NPT	810201109	81050
5 psi	1	1	NPT	810201110	81050
5 psi	1/2	1/2	NPT	810201112	81050
65 psi	1/8	1/8	NPT	810201400	81050
65 psi	1/4	1/4	NPT	810201401	81050
65 psi	3/8	3/8	NPT	810201402	81050
65 psi	1/2	1/2	NPT	810201403	81050
65 psi	3/4	3/4	NPT	810201404	81050

65 psi	1	1	NPT	810201405	81050
65 psi	1 1/4	1 1/4	NPT	810201406	81050
65 psi	1 1/2	1 1/2	NPT	810201407	81050
65 psi	2	2	NPT	810201408	81050
5 psi	1/4	1/4	SAE	810204100	81050
5 psi	3/8	3/8	SAE	810204101	81050
5 psi	1/2	1/2	SAE	810204102	81050
5 psi	3/4	3/4	SAE	810204103	81050
5 psi	1	1	SAE	810204104	81050
5 psi	1 1/4	1 1/4	SAE	810204105	81050
5 psi	1 1/2	1 1/2	SAE	810204106	81050
5 psi	2	2	SAE	810204107	81050
65 psi	1/4	1/4	SAE	810204400	81050
65 psi	3/8	3/8	SAE	810204401	81050
65 psi	1/2	1/2	SAE	810204402	81050
65 psi	3/4	3/4	SAE	810204403	81050
65 psi	1	1	SAE	810204404	81050
65 psi	1 1/4	1 1/4	SAE	810204405	81050

65 psi	1 1/2	1 1/2	SAE	810204406	81050
65 psi	2	2	SAE	810204407	81050
			*Available upon special request		

VU NPT Thread

CRACK POINT	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	DESCRIPTION
VU NPT THREAD					
14 psi	1/4	1/4	NPT	810201200	VU 14 NPT 14 PSI
14 psi	1/2	1/2	NPT	810201201	VU 12 NPT 14 PSI
14 psi	3/4	3/4	NPT	810201202	VU 34 NPT 14 PSI
14 psi	1	1	NPT	810201203	VU 100 NPT 14 PSI
14 psi	1 1/4	1 1/4	NPT	810201204	VU 114 NPT 14 PSI
14 psi	1 1/2	1 1/2	NPT	810201205	VU 112 NPT 14 PSI
21 psi	1	1	NPT	810201300	VU 100 NPT 21 PSI
57 psi	1/2	1/2	NPT	810201409	VU 12 NPT 57 PSI
115 psi	1/2	1/2	NPT	810201600	VU 12 NPT 115 PSI
115 psi	3/4	3/4	NPT	810201601	VU 34 NPT 115 PSI
145 psi	1	1	NPT	810201602	VU 100 NPT 145 PSI
215 psi	1/4	1/4	NPT	810201700	VU 14 NPT 215 PSI

290 psi

1/2

1/2

NPT

810201701

VU 12 NPT 290
PSI

ADDITIONAL INFORMATION

Body Size	<u>1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"</u>
Material	<u>Carbon</u>
Port Size	<u>1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"</u>
Port Options	<u>BSP, NPT, SAE</u>
Working Pressure	<u>Up to 5000</u>

Related products

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VEPHD SERIES

The VEPHD (Heavy Duty) Series offers the same features of the VEP series, with upgraded material, a yellow o-ring visual ID, and larger mating areas. Like the VEP, the VEPHD is a popular solution for hydraulic circuit applications subject to high pressure impulses and circuits which experience high residual or trapped pressure in a line, offered in a more durable, higher grade of steel and all QPQ plating for increased longevity.

[Read more](#)

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VOF SERIES

The VOF Series Threaded Poppet Couplers provide high resistance to pressure impulses, in a compact design. The VOF's internal parts are designed to reduce turbulence and pressure drop, and its poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected. A wrench flat on the bodies facilitates the fitting assembly, and the retainer is high resistance carbon steel.

[Read more](#)

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VEP SERIES

The VEP Series is a popular solution for hydraulic circuit applications subject to high pressure impulses and circuits which experience high residual or trapped pressure in a line. Thread-to-connect design eliminates premature wear or brinelling, a patented internal valve allows connection/disconnection with high residual pressures, and the flat face design avoids loss of hydraulic fluid and contamination into the circuit. A yellow o-ring indicator makes the VEP series even easier to work with.

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IRB | IRBO | IRBX SERIES

The **IRB Series Quick Couplings** are interchangeable to ISO B standard (ISO 7241-B). The IRB is offered in three different high quality materials to meet different application challenges—IRB carbon steel with Nitrile seals, IRBO brass with Viton seals, and IRBX 316 stainless steel with Viton seals. The entire series features compact design, AISI 302 stainless steel springs, and PTFE anti-extrusion rings.

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