



TECHNICAL FEATURES AND OPTIONS



Available sizes
from 1/8" to 2"



Material
High strength carbon steel



Available threads
BSP - NPT - SAE



Standard cracking pressure
0,35 - 4,5 bar



Flow rate
Up to 1000 L/Min



Sealing description
Metal to metal seal



Operating pressure
Up to 400 bar

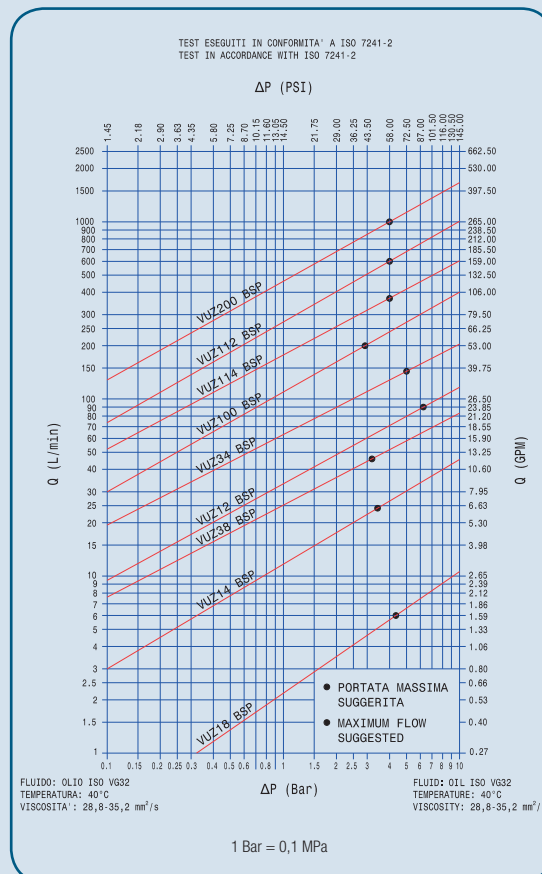
BENEFITS

- Optimal wearing resistance of the hardened sealing piston.
- Compact slim design.
- Different cracking pressure available upon request
- Simple to use.

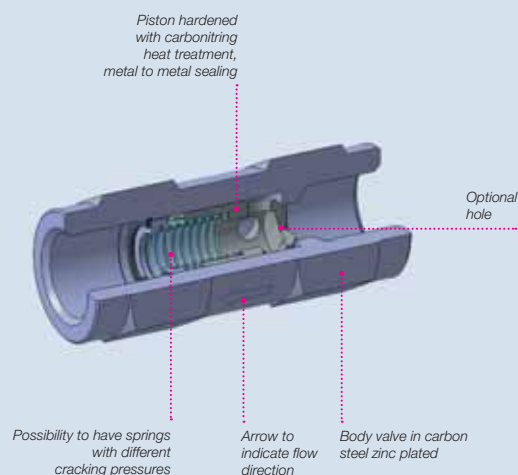
HOW TO USE

- Install the "VUZ" by matching the flow direction with the arrow stamped on the valve.
- To ensure a good efficiency of the system, it is important to select correctly the valve based on flow performances, pressure drop and application.

See the pressure drop graph.



The values of pressure drop are referred to check valve totally opened. If the pressure in the circuit is not sufficient to open totally the valve, the value of pressure drop change.



MAIN APPLICATIONS



Agriculture



Oil & Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

PERFORMANCES

Size	Series/Size	Max. suggested flow		Max. operating pressure		Burst pressure	
		l/min	GPM	MPa	psi	MPa	psi
1/8	VU18	6	1,59	40	5800	160	23200
1/4	VU14	24	6,36	35	5075	140	20300
3/8	VU38	46	12,19	35	5075	140	20300
1/2	VU12	90	23,85	30	4350	120	17400
3/4	VU34	148	39,22	30	4350	120	17400
1	VU100	200	53,00	30	4350	120	17400
1-1/4	VU114	378	100,17	25	3625	100	14500
1-1/2	VU112	600	159,00	25	3625	100	14500
2	VU200	1000	265,00	15	2175	45	6525

Temperature range:

from -20 °C to +120 °C (from -4 °F to +248 °F).

Please read carefully "instruction and warning" for proper selection of the products.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Make sure that the medium used is compatible with the material as indicate.

In case of doubt please contact Stucchi Technical Support.

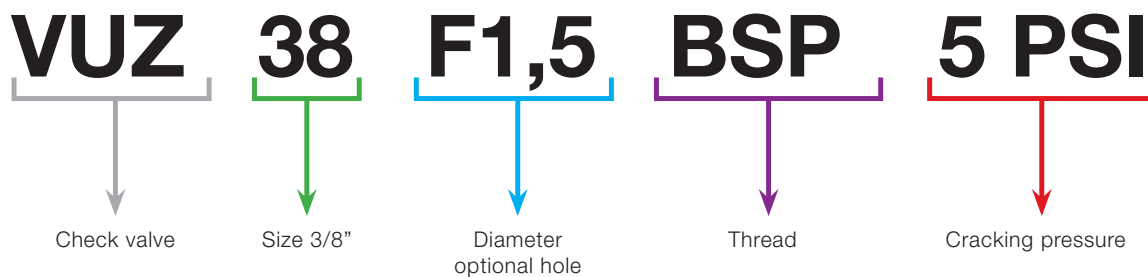
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (www.stucchi.it) before selecting or using Stucchi products.

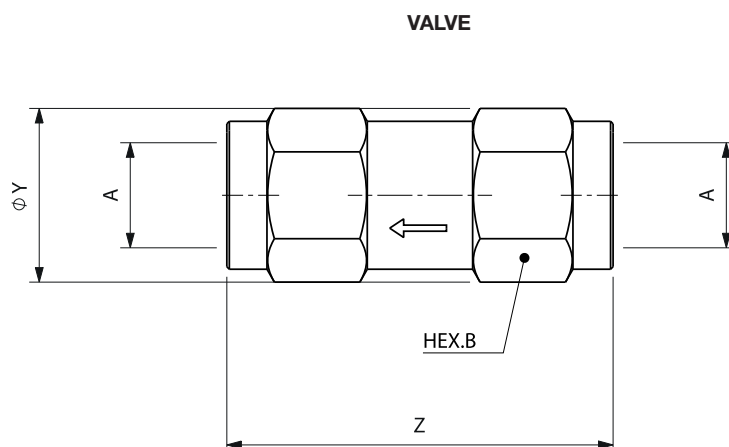
Reference table for different configuration

BSP THREAD				NPT THREAD				SAE THREAD			
BODY SIZE	CRACKING PRESSURES	DESCRIPTIVE CODE	ITEM CODE	BODY SIZE	CRACKING PRESSURES	DESCRIPTIVE CODE	ITEM CODE	BODY SIZE	CRACKING PRESSURES	DESCRIPTIVE CODE	ITEM CODE
1/8"	5 PSI	VUZ18 BSP 5 PSI	810500100	1/8"	5 PSI	VUZ18 NPT 5 PSI	810501100	1/4"	5 PSI	VUZ14 SAE 5 PSI	810504100
1/4"	5 PSI	VUZ14 BSP 5 PSI	810500101	1/4"	5 PSI	VUZ14 NPT 5 PSI	810501101	3/8"	5 PSI	VUZ38 SAE 5 PSI	810504101
3/8"	5 PSI	VUZ38 BSP 5 PSI	810500102	3/8"	5 PSI	VUZ38 NPT 5 PSI	810501102	1/2"	5 PSI	VUZ12 SAE 5 PSI	810504102
1/2"	5 PSI	VUZ12 BSP 5 PSI	810500103	1/2"	5 PSI	VUZ12 NPT 5 PSI	810501103	3/4"	5 PSI	VUZ34 SAE 5 PSI	810504103
3/4"	5 PSI	VUZ34 BSP 5 PSI	810500104	3/4"	5 PSI	VUZ34 NPT 5 PSI	810501104	1"	5 PSI	VUZ100 SAE 5 PSI	810504104
1"	5 PSI	VUZ100 BSP 5 PSI	810500105	1"	5 PSI	VUZ100 NPT 5 PSI	810501105	1 1/4"	5 PSI	VUZ114 SAE 5 PSI	810504105
1 1/4"	5 PSI	VUZ114 BSP 5 PSI	810500106	1 1/4"	5 PSI	VUZ114 NPT 5 PSI	810501106	1 1/2"	5 PSI	VUZ112 SAE 5 PSI	810504106
1 1/2"	5 PSI	VUZ112 BSP 5 PSI	810500107	1 1/2"	5 PSI	VUZ112 NPT 5 PSI	810501107	2"	5 PSI	VUZ200 SAE 5 PSI	810504107
2"	5 PSI	VUZ200 BSP 5 PSI	810500108	2"	5 PSI	VUZ200 NPT 5 PSI	810501108	3/4"	30 PSI	VUZ34 SAE 30 PSI	810504300
3/8"	5 PSI	VUZ38F1.5 BSP 5 PSI	810500109	1/4"	65 PSI	VUZ14 NPT 65 PSI	810501401	1"	65 PSI	VUZ100 SAE 65 PSI	810504400
3/8"	5 PSI	VUZ38F2 BSP 5 PSI	810500110	3/8"	65 PSI	VUZ38 NPT 65 PSI	810501402	3/8"	65 PSI	VUZ38 SAE 65 PSI	810504401
3/8"	5 PSI	VUZ38F1 BSP 5 PSI	810500111	1/2"	65 PSI	VUZ12 NPT 65 PSI	810501403	1/2"	65 PSI	VUZ12 SAE 65 PSI	810504402
1/4"	14 PSI	VUZ14 BSP 14 PSI	810500200	3/4"	65 PSI	VUZ34 NPT 65 PSI	810501404	3/4"	65 PSI	VUZ34 SAE 65 PSI	810504403
3/8"	14 PSI	VUZ38 BSP 14 PSI	810500201	1"	65 PSI	VUZ100 NPT 65 PSI	810501405	1"	65 PSI	VUZ14 SAE 65 PSI	810504404
1/2"	14 PSI	VUZ12 BSP 14 PSI	810500202	1 1/4"	65 PSI	VUZ114 NPT 65 PSI	810501406	1 1/4"	65 PSI	VUZ114 SAE 65 PSI	810504405
3/4"	14 PSI	VUZ34 BSP 14 PSI	810500203	1 1/2"	65 PSI	VUZ112 NPT 65 PSI	810501407	1 1/2"	65 PSI	VUZ112 SAE 65 PSI	810504406
1"	14 PSI	VUZ100 BSP 14 PSI	810500204	2"	65 PSI	VUZ200 NPT 65 PSI	810501408	2"	65 PSI	VUZ200 SAE 65 PSI	810504407
3/4"	30 PSI	VUZ34 BSP 30 PSI	810500300								
3/4"	35 PSI	VUZ34 BSP 35 PSI	810500301								
3/8"	21 PSI	VUZ38 BSP 21 PSI	810500302								
1/2"	21 PSI	VUZ12 BSP 21 PSI	810500303								
3/4"	21 PSI	VUZ34 BSP 21 PSI	810500304								
1/8"	65 PSI	VUZ18 BSP 65 PSI	810500400								
1/4"	65 PSI	VUZ14 BSP 65 PSI	810500401								
3/8"	65 PSI	VUZ38 BSP 65 PSI	810500402								
1/2"	65 PSI	VUZ12 BSP 65 PSI	810500403								
3/4"	65 PSI	VUZ34 BSP 65 PSI	810500404								
1"	65 PSI	VUZ100 BSP 65 PSI	810500405								
1 1/4"	65 PSI	VUZ114 BSP 65 PSI	810500406								
1 1/2"	65 PSI	VUZ112 BSP 65 PSI	810500407								
2"	65 PSI	VUZ200 BSP 65 PSI	810500408								
1 1/2"	73 PSI	VUZ112 BSP 73 PSI	810500500								
1/2"	115 PSI	VUZ12 BSP 115 PSI	810500602								
3/4"	115 PSI	VUZ34 BSP 115 PSI	810500603								
3/4"	145 PSI	VUZ34 BSP 145 PSI	810500600								
1"	145 PSI	VUZ100 BSP 145 PSI	810500601								

PRODUCT DEFINITION



OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

Descriptive Code	Item Code	PORT (A)	Overall Length			Hex			Diameter			Weight	
				mm	inch		mm	inch		mm	inch	Kg	Lbs
VUZ18 BSP	see reference table	1/8"	Z	44,0	1,73	B	14,0	0,55	Y	16,2	0,64	0,04	0,08
VUZ14 BSP	see reference table	1/4"	Z	60,0	2,36	B	19,0	0,75	Y	21,9	0,86	0,09	0,20
VUZ38 BSP	see reference table	3/8"	Z	70,0	2,76	B	24,0	0,94	Y	27,7	1,09	0,18	0,39
VUZ12 BSP	see reference table	1/2"	Z	77,0	3,03	B	30,0	1,18	Y	34,6	1,36	0,30	0,66
VUZ34 BSP	see reference table	3/4"	Z	90,0	3,54	B	36,0	1,42	Y	41,6	1,64	0,49	1,08
VUZ100 BSP	see reference table	1"	Z	106,0	4,17	B	45,0	1,77	Y	52,0	2,05	0,87	1,92
VUZ114 BSP	see reference table	1-1/4"	Z	125,0	4,92	B	55,0	2,17	Y	63,5	2,50	1,49	3,28
VUZ112 BSP	see reference table	1-1/2"	Z	140,0	5,51	B	65,0	2,56	Y	75,1	2,96	2,43	5,35
VUZ200 BSP	see reference table	2"	Z	160,0	6,30	B	75,0	2,95	Y	86,6	3,41	3,13	6,90

Port description: FEMALE NPT THREAD (ANSI B.1.20.1)

Descriptive Code	Item Code	PORT (A)	Overall Length			Wrench Flat			Diameter			Weight	
				mm	inch		mm	inch		mm	inch	Kg	Lbs
VUZ18 NPT	see reference table	1/8"	Z	44,0	1,73	B	14,0	0,55	Y	16,2	0,64	0,04	0,08
VUZ14 NPT	see reference table	1/4"	Z	60,0	2,36	B	19,0	0,75	Y	21,9	0,86	0,09	0,20
VUZ38 NPT	see reference table	3/8"	Z	70,0	2,76	B	24,0	0,94	Y	27,7	1,09	0,18	0,39
VUZ12 NPT	see reference table	1/2"	Z	77,0	3,03	B	30,0	1,18	Y	34,6	1,36	0,30	0,66
VUZ34 NPT	see reference table	3/4"	Z	90,0	3,54	B	36,0	1,42	Y	41,6	1,64	0,49	1,08
VUZ100 NPT	see reference table	1"	Z	106,0	4,17	B	45,0	1,77	Y	52,0	2,05	0,87	1,92
VUZ114 NPT	see reference table	1-1/4"	Z	125,0	4,92	B	55,0	2,17	Y	63,5	2,50	1,49	3,28
VUZ112 NPT	see reference table	1-1/2"	Z	140,0	5,51	B	65,0	2,56	Y	75,1	2,96	2,43	5,35
VUZ200 NPT	see reference table	2"	Z	160,0	6,30	B	75,0	2,95	Y	86,6	3,41	3,13	6,90

Port description: FEMALE SAE THREAD (ISO 11926-1 & SAE J1926-1)

Descriptive Code	Item Code	PORT (A)	Overall Length			Wrench Flat			Diameter			Weight	
			mm	inch		mm	inch		mm	inch		Kg	Lbs
VUZ14 SAE	see reference table	7/16-20UNF	Z	60,0	2,36	B	19,0	0,75	Y	21,9	0,86	0,10	0,22
VUZ38 SAE	see reference table	9/16-18UNF	Z	70,0	2,76	B	24,0	0,94	Y	27,7	1,09	0,19	0,42
VUZ12 SAE	see reference table	3/4-16UNF	Z	77,0	3,03	B	30,0	1,18	Y	34,6	1,36	0,32	0,69
VUZ34 SAE	see reference table	1-1/16-12UN	Z	94,0	3,70	B	36,0	1,42	Y	41,6	1,64	0,49	1,08
VUZ100 SAE	see reference table	1-5/16-12UN	Z	106,0	4,17	B	45,0	1,77	Y	52,0	2,05	0,87	1,92
VUZ114 SAE	see reference table	1-5/8-12UN	Z	125,0	4,92	B	55,0	2,17	Y	63,5	2,50	1,49	3,28
VUZ112 SAE	see reference table	1-7/8-12UN	Z	140,0	5,51	B	65,0	2,56	Y	75,1	2,96	2,41	5,31
VUZ200 SAE	see reference table	2-1/2-12UN	Z	160,0	6,30	B	75,0	2,95	Y	86,6	3,41	3,00	6,60