










## TECHNICAL FEATURES AND OPTIONS

	<b>Available sizes</b> from 1/8" to 2"		<b>Material</b> High strength carbon steel		<b>Available threads</b> BSP - NPT - SAE
	<b>Standard cracking pressure</b> 0,35 - 4,5 bar		<b>Flow rate</b> Up to 1000 l/min		<b>Sealing description</b> Metal to metal seal
	<b>Operating pressure</b> Up to 400 bar				

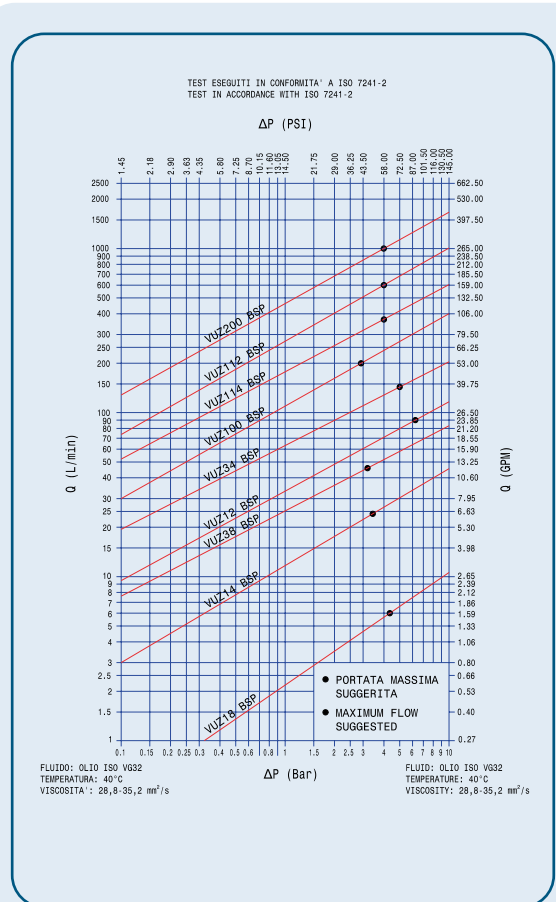
## BENEFITS

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

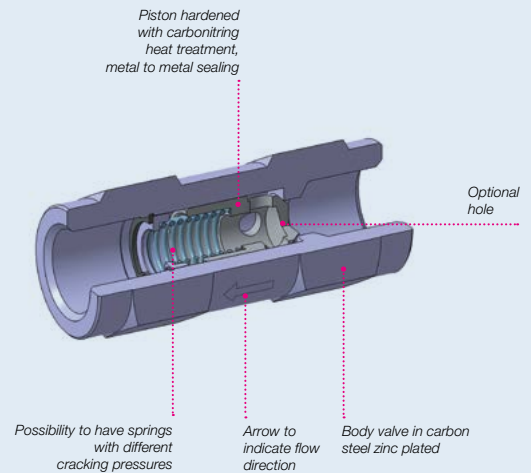
## HOW TO USE

- 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

## PERFORMANCES

Size	Series/Size		Max. suggested flow		Max. operating pressure		Burst pressure	
	in	VUZ	VU	l/min	gpm	MPa	psi	MPa
1/8	VUZ18	VU18	6	1,59	40	5800	160	23200
1/4	VUZ14	VU14	24	6,36	35	5075	140	20300
3/8	VUZ38	VU38	46	12,19	35	5075	140	20300
1/2	VUZ12	VU12	90	23,85	30	4350	120	17400
3/4	VUZ34	VU34	148	39,22	30	4350	120	17400
1	VUZ100	VU100	200	53,00	30	4350	120	17400
1-1/4	VUZ114	VU114	378	100,17	25	3625	100	14500
1-1/2	VUZ112	VU112	600	159,00	25	3625	100	14500
2	VUZ200	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 Instructions and warnings for proper selection of the products.

### Different possible configurations:

The VUZ series is also available (in addition to CR3 treatment) with phosphating surface treatment that help the adhesion of paint.

It can be recognized by the burnished black color.

For further information please contact Stucchi Technical support.

## VU Series

VUZ series is also available with phosphate conversion coating to help painting adhesion; this series is called VU.

VU products differs from the standard VUZ for their blue-black color.

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VUZ products differs from the standard VU for their blue-black color.



## ⚠ 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 carefully read and closely follow the instructions before selecting or using any Stucchi products.**

**Always refer to the version uploaded in the Instructions and warning section of [stucchigroup.com](http://stucchigroup.com) website for the latest release.**

**For specific, product-related, instructions, please contact Stucchi technical service.**

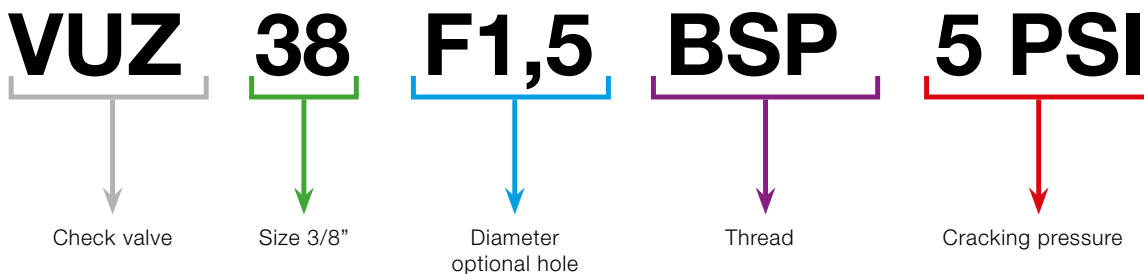


Reference table for different configuration

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	1 1/4"	14 PSI	VUZ114 SAE 14 PSI	810504200
1/4"	14 PSI	VUZ14 BSP 14 PSI	810500200	1/4"	65 PSI	VUZ14 NPT 65 PSI	810501401	3/4"	30 PSI	VUZ34 SAE 30 PSI	810504300
3/8"	14 PSI	VUZ38 BSP 14 PSI	810500201	3/8"	65 PSI	VUZ38 NPT 65 PSI	810501402	1"	65 PSI	VUZ100 SAE 65 PSI	810504400
1/2"	14 PSI	VUZ12 BSP 14 PSI	810500202	1/2"	65 PSI	VUZ12 NPT 65 PSI	810501403	3/8"	65 PSI	VUZ38 SAE 65 PSI	810504401
3/4"	14 PSI	VUZ34 BSP 14 PSI	810500203	3/4"	65 PSI	VUZ34 NPT 65 PSI	810501404	1/2"	65 PSI	VUZ12 SAE 65 PSI	810504402
1"	14 PSI	VUZ100 BSP 14 PSI	810500204	1"	65 PSI	VUZ100 NPT 65 PSI	810501405	3/4"	65 PSI	VUZ34 SAE 65 PSI	810504403
3/4"	30 PSI	VUZ34 BSP 30 PSI	810500300	1 1/4"	65 PSI	VUZ114 NPT 65 PSI	810501406	1"	65 PSI	VUZ14 SAE 65 PSI	810504404
1/8"	65 PSI	VUZ18 BSP 65 PSI	810500400	1 1/2"	65 PSI	VUZ112 NPT 65 PSI	810501407	1 1/4"	65 PSI	VUZ114 SAE 65 PSI	810504405
1/4"	65 PSI	VUZ14 BSP 65 PSI	810500401	2"	65 PSI	VUZ200 NPT 65 PSI	810501408	1 1/2"	65 PSI	VUZ112 SAE 65 PSI	810504406
3/8"	65 PSI	VUZ38 BSP 65 PSI	810500402					2	65 PSI	VUZ200 SAE 65 PSI	810504407 *
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								

\* Available upon request.

PRODUCT DEFINITION



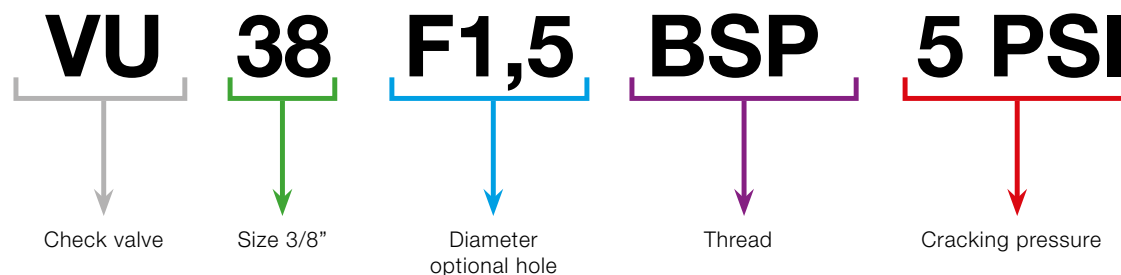
CHECK VALVE

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	VU18 BSP 5 PSI	810200100	1/8"	5 PSI	VU18 NPT 5 PSI	810201100	1/4"	5 PSI	VU14 SAE 5 PSI	810204100
1/4"	5 PSI	VU14 BSP 5 PSI	810200101	1/4"	5 PSI	VU14 NPT 5 PSI	810201101	3/8"	5 PSI	VU38 SAE 5 PSI	810204101
3/8"	5 PSI	VU38 BSP 5 PSI	810200102	3/8"	5 PSI	VU38 NPT 5 PSI	810201102	1/2"	5 PSI	VU12 SAE 5 PSI	810204102
1/2"	5 PSI	VU12 BSP 5 PSI	810200103	1/2"	5 PSI	VU12 NPT 5 PSI	810201103	1/2"	5 PSI	VU12EI SAE 5 PSI	810204111
3/4"	5 PSI	VU34 BSP 5 PSI	810200104	1/2"	5 PSI	VU12EI NPT 5 PSI	810201112	3/4"	5 PSI	VU34 SAE 5 PSI	810204103
1"	5 PSI	VU100 BSP 5 PSI	810200105	3/4"	5 PSI	VU34 NPT 5 PSI	810201104	1"	5 PSI	VU100 SAE 5 PSI	810204104
1 1/4"	5 PSI	VU114 BSP 5 PSI	810200106	1"	5 PSI	VU100 NPT 5 PSI	810201105	1 1/4"	5 PSI	VU114 SAE 5 PSI	810204105
1 1/2"	5 PSI	VU112 BSP 5 PSI	810200107	1 1/4"	5 PSI	VU114 NPT 5 PSI	810201106	1 1/2"	5 PSI	VU112 SAE 5 PSI	810204106
2"	5 PSI	VU200 BSP 5 PSI	810200108	1 1/2"	5 PSI	VU112 NPT 5 PSI	810201107	2"	5 PSI	VU200 SAE 5 PSI	810204107
1/4"	14 PSI	VU14 BSP 14 PSI	810200200	2"	5 PSI	VU200 NPT 5 PSI	810201108	3/8"	65 PSI	VU38 SAE 65 PSI	810204401
3/8"	14 PSI	VU38 BSP 14 PSI	810200206	1/4"	14 PSI	VU14 NPT 14 PSI	810201200	1/2"	65 PSI	VU12 SAE 65 PSI	810204402
1/2"	14 PSI	VU12 BSP 14 PSI	810200201	1/2"	14 PSI	VU12 NPT 14 PSI	810201201	3/4"	65 PSI	VU34 SAE 65 PSI	810204403
3/4"	14 PSI	VU34 BSP 14 PSI	810200202	3/4"	14 PSI	VU34 NPT 14 PSI	810201202	1"	65 PSI	VU100 SAE 65 PSI	810204404
1"	14 PSI	VU100 BSP 14 PSI	810200203	1"	14 PSI	VU100 NPT 14 PSI	810201203	1 1/4"	65 PSI	VU114 SAE 65 PSI	810204405
1 1/4"	14 PSI	VU114 BSP 14 PSI	810200204	1 1/4"	14 PSI	VU114 NPT 14 PSI	810201204	1 1/2"	65 PSI	VU112 SAE 65 PSI	810204406
1 1/2"	14 PSI	VU112 BSP 14 PSI	810200205	1 1/2"	14 PSI	VU112 NPT 14 PSI	810201205	2"	65 PSI	VU200 SAE 65 PSI	810204407
2"	14 PSI	VU200 BSP 14 PSI	810200207	1/8"	65 PSI	VU18 NPT 65 PSI	810201400	1"	145 PSI	VU100 SAE 145 PSI	810204600
1/8"	65 PSI	VU18 BSP 65 PSI	810200400	1/4"	65 PSI	VU14 NPT 65 PSI	810201401				
1/4"	65 PSI	VU14 BSP 65 PSI	810200401	3/8"	65 PSI	VU38 NPT 65 PSI	810201402				
3/8"	65 PSI	VU38 BSP 65 PSI	810200402	1/2"	65 PSI	VU12 NPT 65 PSI	810201403				
1/2"	65 PSI	VU12 BSP 65 PSI	810200403	3/4"	65 PSI	VU34 NPT 65 PSI	810201404				
3/4"	65 PSI	VU34 BSP 65 PSI	810200404	1"	65 PSI	VU100 NPT 65 PSI	810201405				
1"	65 PSI	VU100 BSP 65 PSI	810200405	1 1/4"	65 PSI	VU114 NPT 65 PSI	810201406				
1 1/4"	65 PSI	VU114 BSP 65 PSI	810200406	1 1/2"	65 PSI	VU112 NPT 65 PSI	810201407				
1 1/2"	65 PSI	VU112 BSP 65 PSI	810200407	2"	65 PSI	VU200 NPT 65 PSI	810201408				
2"	65 PSI	VU200 BSP 65 PSI	810200408	1/2"	115 PSI	VU12 NPT 115 PSI	810201600				
1/2"	115 PSI	VU12 BSP 115 PSI	810200600	3/4"	115 PSI	VU34 NPT 115 PSI	810201601				
3/4"	115 PSI	VU34 BSP 115 PSI	810200601	1"	145 PSI	VU100 NPT 145 PSI	810201602				
1/2"	145 PSI	VU12 BSP 145 PSI	810200605								
3/4"	145 PSI	VU34 BSP 145 PSI	810200603								
1"	145 PSI	VU100 BSP 145 PSI	810200602								
1 1/4"	145 PSI	VU114 BSP 145 PSI	810200608 *								
2"	145 PSI	VU200 BSP 145 PSI	810200607								

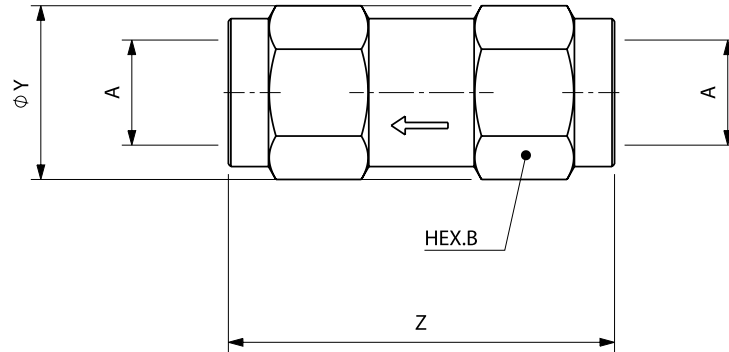
\* Available upon request.

**PRODUCT DEFINITION**



## OVERALL DIMENSIONS

### VALVE



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

Descriptive Code		Item Code	PORT (A)	Overall Length		Hex			Diameter		Weight			
VUZ	VU			mm	in	mm	in	mm	in	kg	lb			
VUZ18 BSP	VU18 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	VU14 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	VU38 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	VU12 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	VU34 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	VU100 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	VU114 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	VU112 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	VU200 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 THREAD NPT (ANSI B.1.20.1)

Descriptive Code		Item Code	PORT (A)	Overall Length		Wrench Flat			Diameter		Weight			
VUZ	VU			mm	in	mm	in	mm	in	kg	lb			
VUZ18 NPT	VU18 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	VU14 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	VU38 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	VU12 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	VU34 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	VU100 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	VU114 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	VU112 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	VU200 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 THREAD SAE (ISO 11926-1 & SAE J1926-1)

Descriptive Code		Item Code	PORT (A)	Overall Length		Wrench Flat			Diameter		Weight			
VUZ	VU			mm	in	mm	in	mm	in	kg	lb			
VUZ14 SAE	VU14 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	VU38 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	VU12 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	VU34 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	VU100 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	VU114 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	VU112 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	VU200 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