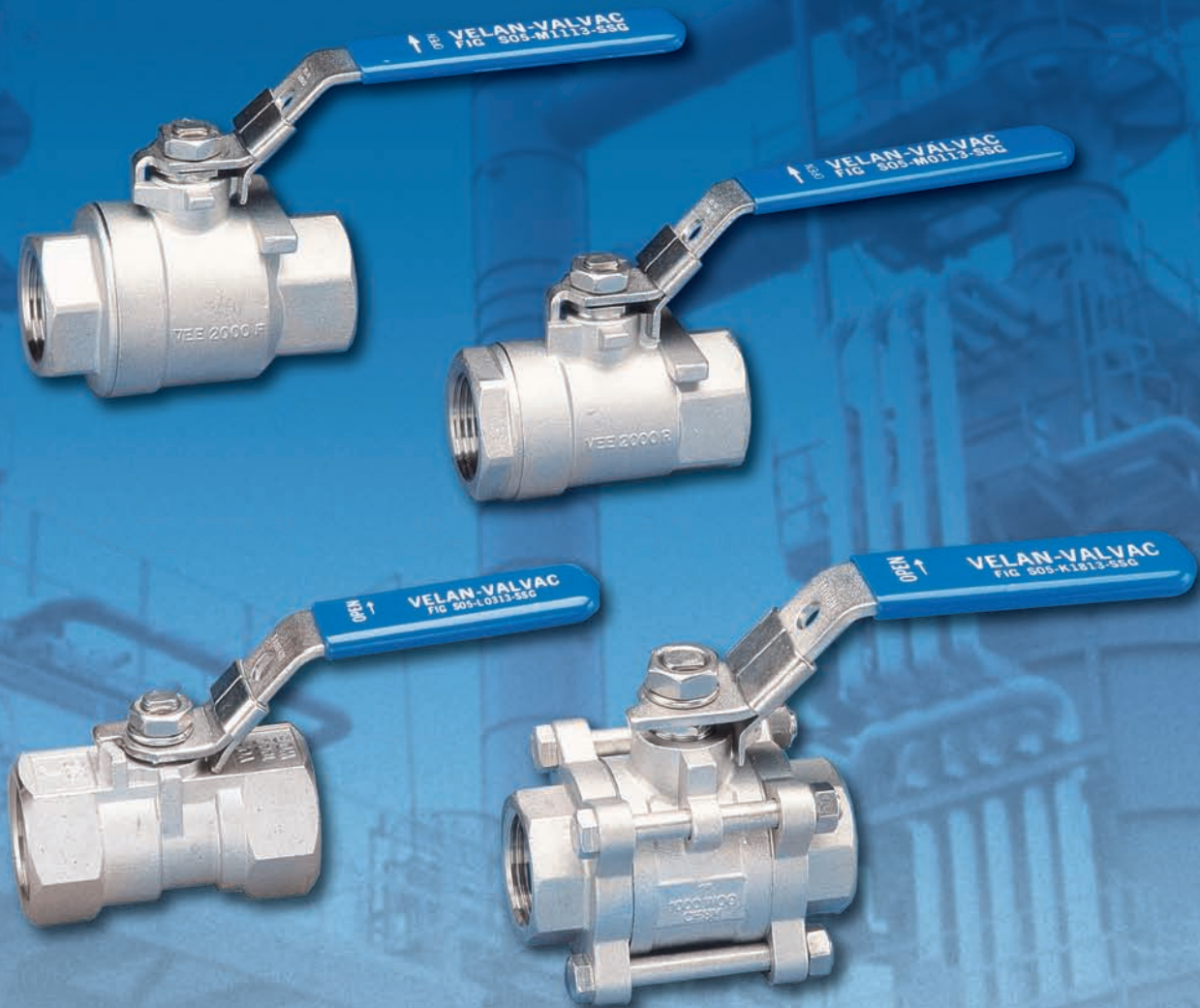


Valvac

General purpose ball valves



Pressure rating: up to 2000 psi
Sizes: 1/4–2" (8–50 mm)

VELAN

PROFILE

VELAN AT A GLANCE

History

- Founded in 1950

Sales

- Over \$400 million

People

- Over 1,800 employees

Global network

- 13 production facilities
- 5 plants in North America
- 4 plants in Europe
- 4 plants in Asia
- 4 stocking and distribution centers
- Hundreds of distributors worldwide
- Service shops worldwide

Product line

A world-leading range of cast and forged steel gate, globe, check, ball, triple-offset, knife gate, severe service valves and steam traps across all major industrial applications.

Quality

All major approvals

- ISO 9001 (since 1991)
- ASME N stamp for nuclear quality (since 1970)
- API 6D
- Total Process Improvement Program including Lean Manufacturing, Six Sigma

Engineering

Leader in valve design with many first-to-market innovations:

- Extensive engineering, R+D, cycle test facilities, and stress analysis
- Proven ability to satisfy special project requirements
- Field Engineering Services

Production capabilities

Leader in automated production:

- CNC and multi-station transfer machines

Velan value

- Strong management team, stable company
- Products proven to offer:
 - Low emissions
 - Easy maintenance
 - Long and reliable service
 - Low TOC
 - Quality that lasts

Velan is one of the world's leading manufacturers of industrial steel valves, recognized as a standard-bearer in quality and innovation. The company was founded by acclaimed inventor and entrepreneur A.K. Velan in 1950, and continues to leverage advanced engineering capabilities and innovation to create hard-working valves that meet critical industrial needs in the areas of power generation, chemical and petrochemical, oil and gas, pulp and paper, mining, cryogenic, and ship-building industries.

Velan's many product lines are grouped into the broad categories of: gate, globe, and check valves; quarter-turn valves; specialty valves; and steam traps. Within these product groups, Velan offers one of the most comprehensive product offerings available from any valve manufacturer, in sizes varying from ½" to 60", with pressure ratings from vacuum to over 10,000 psi, temperature ratings of up to 1,500 °F, and availability of many material and design options. All of Velan's valves are designed and manufactured with quality as a priority, and incorporate

CONTENTS

Company profile and manufacturing plants	2
Velan's global network	3
VOP-1000 one-piece	4
VEE-2000 regular and full port end-entry	5
V3P-1000 three-piece	6
How to order	7

many unique design features for environmentally friendly performance, simple maintenance, and reliable service.

Velan valves have an extremely broad installation base and are approved by major companies worldwide. Today, the company has a global network of 13 specialized manufacturing plants, including five in Canada and the US, four in Europe, and four in Asia. Velan employs over 1,800 people, 75% of whom are located in North America.

HEAD OFFICE AND PLANT 5



MONTREAL, CANADA 240,000 sq. ft. (22,300 m²)
2 – 60" (50 – 1500 mm) dual plate check valves, 3 – 48" (80 – 1200 mm) triple-offset valves, ¾ – 2" (10 – 50 mm) metal and resilient seated ball valves

Headquartered in Montreal, Canada, Velan has several international subsidiaries. For general inquiries:

Velan head office:

7007 Côte de Liesse,
Montreal, QC H4T 1G2 Canada

Tel: (514) 748-7743

Fax: (514) 748-8635

Check our website for more specific contact information.

www.velan.com

NOTE: The material in this catalog is for general information only and shall not be used for specific performance data and material selection without first consulting Velan. Velan reserves the right to change designs, materials or specifications without notice. Velan does not accept any liability or damages arising from the use of information in this catalog.

VELAN'S GLOBAL NETWORK

- 13 manufacturing facilities
- 4 stocking distribution centers
- Hundreds of distributors worldwide
- Service shops worldwide



MONTREAL, CANADA - *Velan Inc.*

109,000 sq. ft. (10,126 m²),
¼–4" (8–100 mm) forged gate, globe,
and check valves



LYON, FRANCE - *Velan S.A.S*

160,000 sq. ft. (14,900 m²)
¼–42" (8–1,050 mm) forged and cast steel
gate, globe, and butterfly valves



WILLICH, GERMANY - *Velan GmbH*

12,000 sq. ft. (1,115 m²)



MONTREAL, CANADA - *Velan Inc.*

170,000 sq. ft. (15,800 m²),
2–60" (50–1500 mm) forged and cast
steel gate, globe, check, ball, knife, and
3–36" (80–700 mm) butterfly valves



MENNECEY, FRANCE - *Segault*

21,530 sq. ft. (2,000 m²)
nuclear and severe service valves



ANSAN CITY, SOUTH KOREA - *Velan Ltd.*

30,000 sq. ft. (2,800 m²)
components and 2–4" (50–100 mm)
cast steel valves



WILLISTON, VT, U.S.A. - *Velan Valve Corp.*

155,000 sq. ft. (14,400 m²)
2–24" (50–600 mm) forged and cast steel
gate, globe, and check valves



LEICESTER, ENGLAND - *Velan Valves Ltd.*

14,000 sq. ft. (1,300 m²)
steam traps and ¾–2" (10–50 mm)
bonnetless globe valves



ANSAN CITY, SOUTH KOREA - *Velan Ltd.*

14,000 sq. ft. (1,300 m²) 65,000 sq. ft. (5,800 m²),
2–12" (50–300 mm) cast steel gate, globe,
check, ball, and knife gate valves



GRANBY, CANADA - *Velan Inc.*

186,500 sq. ft. (17,325 m²),
2–16" (50–400 mm) cast steel gate, globe,
and check valves,
¼–12" (8–300 mm) ball valves



LISBON, PORTUGAL - *Válvulas Industriais, Lda.*

60,000 sq. ft. (5,600 m²)
2–12" (50–300 mm) cast steel gate,
globe, and check valves



TAICHUNG, TAIWAN - *Velan-Valvac*

20,000 sq. ft. (1,840 m²)
¼–2" (8–50 mm) ball valves



MARIETTA, GA, U.S.A. - *VELEAST*

6,500 sq. ft. (600 m²)



BENICIA, CA, U.S.A. - *VELCAL*

15,000 sq. ft. (1,400 m²)



SUZHOU, CHINA - *Velan Valve (Suzhou) CO., LTD*

62,517 sq. ft. (5,808 m²)

VOP-1000

VELAN VALVAC ONE-PIECE REDUCED PORT GENERAL PURPOSE BALL VALVE 1/4 – 2" (8 – 50 mm)

CARBON OR STAINLESS STEEL BODY, RPTFE SEATS

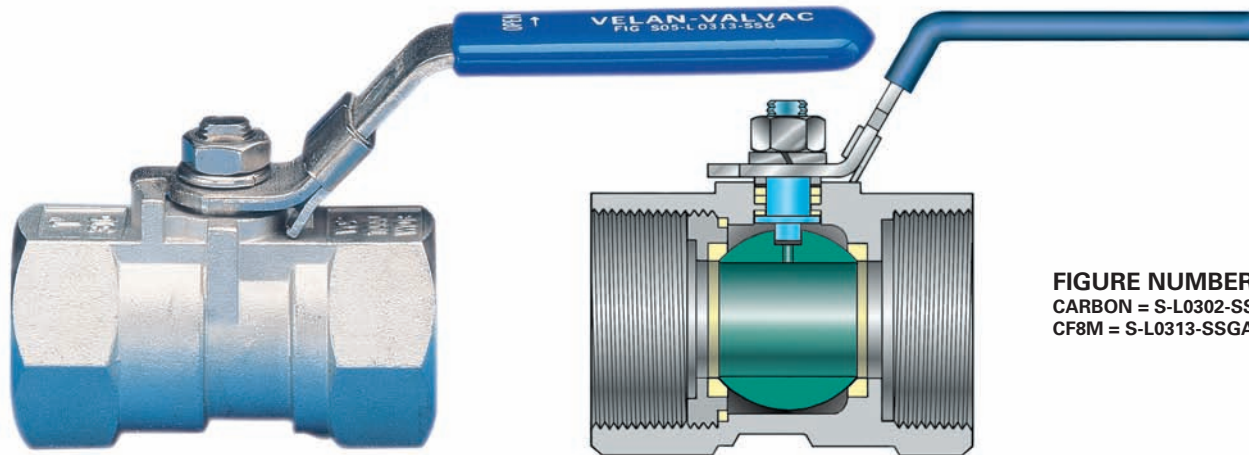


FIGURE NUMBER
CARBON = S-L0302-SSGA
CF8M = S-L0313-SSGA

STANDARD MATERIALS

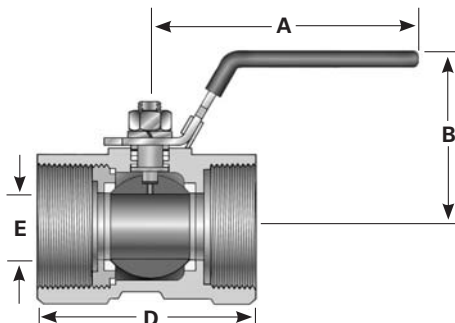
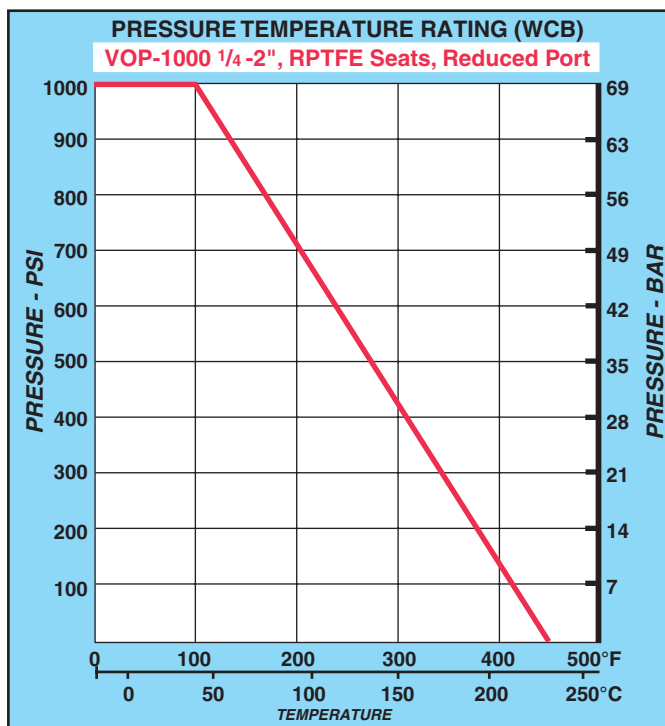
PART	STAINLESS STEEL	CARBON STEEL ⁽¹⁾
Body	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	SS 316	SS 316
Stem	SS 316	SS 316
Seat retainer	SS 316	Carbon steel
Thrust washer	RPTFE	RPTFE
Body seal	RPTFE	RPTFE
Stem packing	PTFE	PTFE
Stem washer	SS 304	SS 304
Stem nut	SS 304	SS 304
Gland follower	SS 304	SS 304
Handle / latch ⁽²⁾	SS 304	SS 304

(1) 1/4" and 3/8" sizes available only in SS body.

(2) Latch lock available only on 1/2" – 2" sizes.

DIMENSIONS AND WEIGHTS

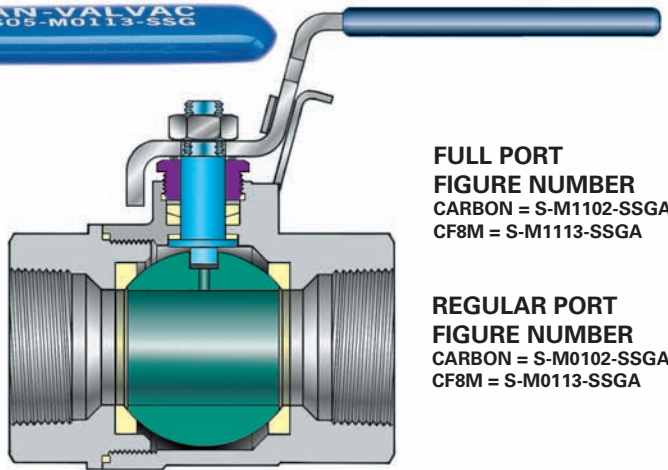
SIZE in mm	VOP-1000		MANUAL		Cv Value	WEIGHT lb/kg
	A	B	D	E		
1/4 8	2.64 67	2.28 58	1.73 44	0.23 6	2.5	0.18 0.08
3/8 10	3.19 81	2.28 58	1.91 49	0.33 8	3.5	0.24 0.11
1/2 15	3.80 97	2.50 64	2.36 60	0.35 9	4.8	0.44 0.20
3/4 20	3.80 97	2.67 68	2.40 61	0.49 12	9.5	0.57 0.26
1 25	4.73 120	3.33 85	2.91 74	0.63 16	14	0.93 0.42
1 1/4 32	4.73 120	3.55 90	3.07 78	0.79 20	33	1.48 0.67
1 1/2 40	5.97 152	3.88 99	3.37 86	0.98 25	45	2.00 0.91
2 50	5.97 152	4.29 109	4.02 102	1.26 32	58	3.31 1.50



VEE-2000

VELAN VALVAC FULL AND REGULAR PORT END-ENTRY GENERAL PURPOSE BALL VALVE 1/4 - 2" (8 - 50 mm)

CARBON OR STAINLESS STEEL BODY, RPTFE SEATS



FULL PORT
FIGURE NUMBER
CARBON = S-M1102-SSGA
CF8M = S-M1113-SSGA

REGULAR PORT
FIGURE NUMBER
CARBON = S-M0102-SSGA
CF8M = S-M0113-SSGA

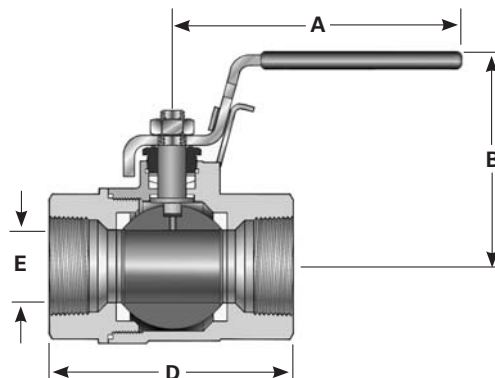
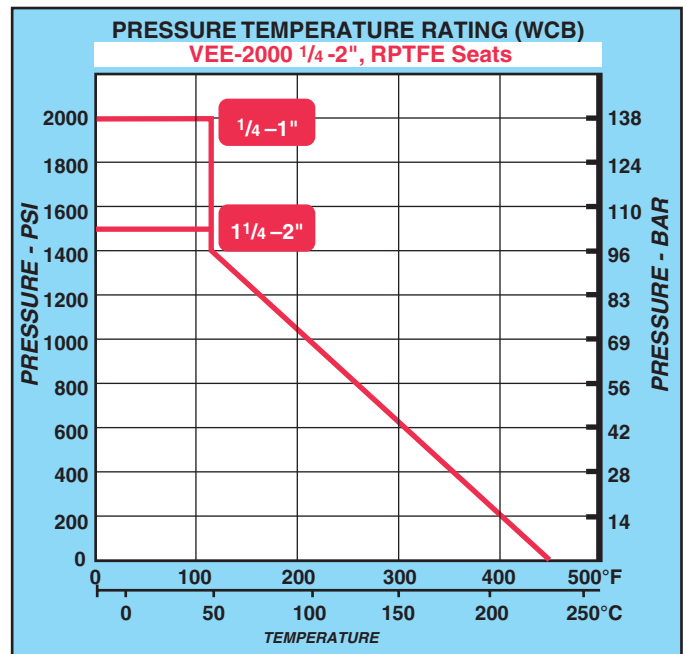
STANDARD MATERIALS

PART	STAINLESS STEEL	CARBON STEEL ⁽¹⁾
Body	CF8M	WCB
End cap	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	SS 316	SS 316
Stem	SS 316	SS 316
Thrust washer	RPTFE	RPTFE
Body seal	PTFE	PTFE
Packing ring	PTFE or RPTFE	PTFE or RPTFE
Packing nut	SS 304	SS 304
Handle	SS 304	SS 304
Handle / latch	SS 304	SS 304
Handle nut	SS 304	SS 304

(1) 1/4" and 3/8" sizes available only in SS body.

DIMENSIONS AND WEIGHTS

SIZE in mm	VEE-2000 MANUAL								Cv Value		WEIGHT lb/kg	
	A		B		D		E					
	Full port	Reg. port	Full port	Reg. port	Full port	Reg. port	Full port	Reg. port	Full port	Reg. port	Full port	Reg. port
¼ 8	4.57 116	4.57 116	2.10 53	2.10 53	2.20 56	2.20 56	0.44 11	0.44 11	8	8	0.66 0.30	0.66 0.30
⅜ 10	4.57 116	4.57 116	2.10 53	2.10 53	2.20 56	2.20 56	0.44 11	0.44 11	10	10	0.62 0.28	0.62 0.28
½ 15	4.57 116	4.57 116	2.09 53	2.10 53	2.39 61	2.35 60	0.50 13	0.44 11	13	12	0.62 0.28	0.62 0.28
¾ 20	5.10 130	5.10 130	2.43 62	2.29 58	3.00 76	2.83 72	0.81 21	0.62 16	50	15	1.41 0.64	1.10 0.50
1 25	5.10 130	5.10 130	2.83 72	2.99 76	3.56 90	3.31 84	1.00 25	0.81 21	93	35	2.27 1.03	1.70 0.77
1¼ 32	8.09 205	8.09 205	3.32 84	3.14 80	3.99 101	4.05 103	1.25 32	1.00 25	170	64	3.73 1.69	3.53 1.60
1½ 40	8.09 205	8.09 205	3.51 89	3.32 84	4.42 112	4.33 110	1.50 38	1.25 32	250	87	4.87 2.21	4.50 2.04
2 50	8.09 205	8.09 205	3.84 98	3.51 89	4.92 125	5.42 138	2.00 51	1.50 38	450	112	7.59 3.44	6.22 2.82



V3P-1000

VELAN VALVAC THREE-PIECE FULL PORT GENERAL PURPOSE BALL VALVE

$\frac{1}{4}$ – 2" (8 – 50 mm)

CARBON OR STAINLESS STEEL BODY, RPTFE SEATS, THREADED OR WELD ENDS

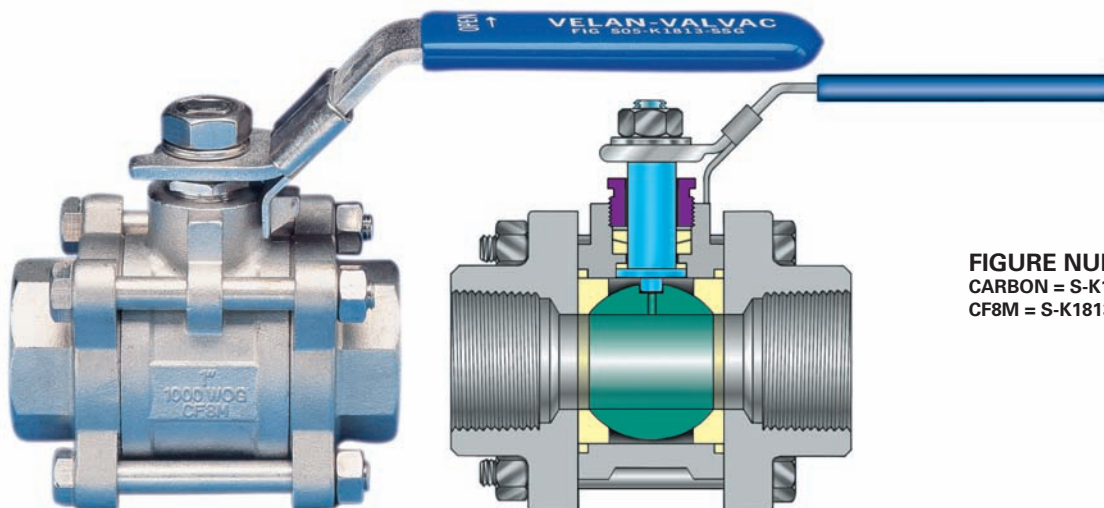


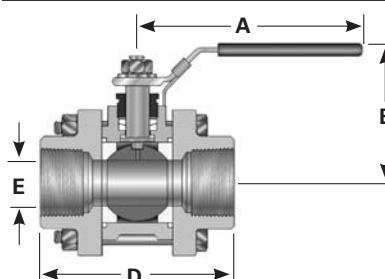
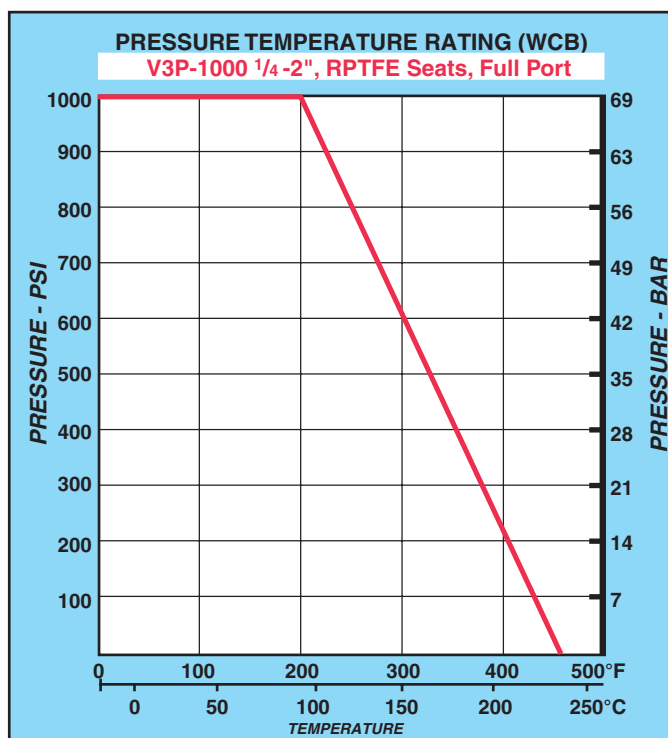
FIGURE NUMBER*
CARBON = S-K1802-SSGA
CF8M = S-K1813-SSGA

STANDARD MATERIALS

PART	STAINLESS STEEL	CARBON STEEL
Body	CF8M	WCB
End cap	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	SS 316	SS 316
Stem	SS 316	SS 316
Stem packing	RPTFE	RPTFE
Thrust washer	RPTFE	RPTFE
Body Seal	PTFE	PTFE
Body nuts & bolts	SS 304	B7
Packing nut	SS 304	SS 304
Handle nut	SS 304	SS 304
Handle/latch	SS 304	SS 304
Packing washer	SS 304	SS 304

DIMENSIONS AND WEIGHTS

SIZE in mm	V3P-1000				Cv Value	WEIGHT lb/kg
	A	B	D	E		
$\frac{1}{4}$ 8	4.22 107	2.28 58	2.50 64	0.42 11	8	0.99 0.45
$\frac{3}{8}$ 10	4.22 107	2.28 58	2.50 64	0.50 13	10	0.99 0.45
$\frac{1}{2}$ 15	5.03 128	2.50 64	2.90 74	0.55 14	13	1.46 0.66
$\frac{3}{4}$ 20	5.03 128	2.67 68	3.23 82	0.80 20	50	1.98 0.90
1 25	5.68 144	3.33 85	3.58 91	1.00 25	93	3.09 1.40
1 $\frac{1}{4}$ 32	5.68 144	3.55 90	4.37 111	1.25 32	170	4.85 2.20
1 $\frac{1}{2}$ 40	8.22 209	3.88 99	4.84 123	1.50 38	250	6.84 3.10
2 50	8.22 209	4.29 109	4.71 120	2.00 51	450	10.14 4.60



* Figure number shown is for threaded end valves, see "How to Order Chart" on page 11 for other end connections.

HOW TO ORDER

VELAN VALVAC GENERAL PURPOSE BALL VALVES

The figure numbers shown on this key cover essential features of Velan Valvac valves. Please use these figure numbers to ensure prompt and accurate processing of your order.

TYPE OF CONNECTION	SIZE OF CONNECTION	CLASS OR MODEL NUMBER	PORT	TYPE	BODY MATERIAL	TRIM	SEAT MATERIAL	SPECIAL SERVICE
A	B	C	D	E	F	G	H	I
	 				 	 		
S	0 3	L	0	3	0 2	S S	G	A

Example: 1", threaded, VOP-1000, reduced port valve in carbon steel with stainless steel trim and glass-filled Teflon seat for standard service.

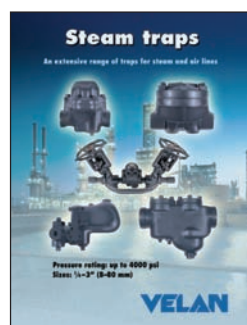
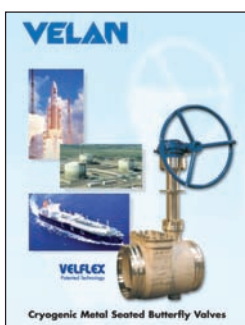
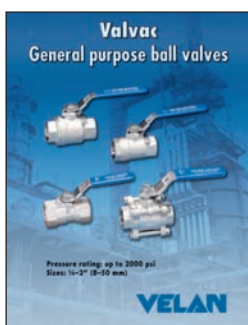
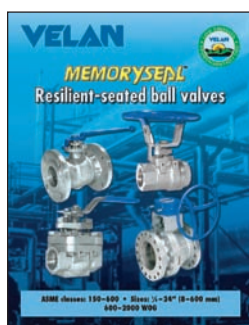
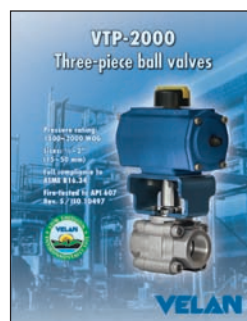
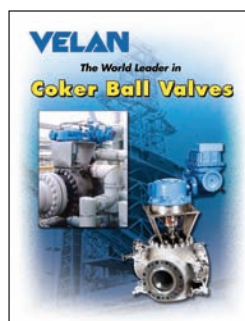
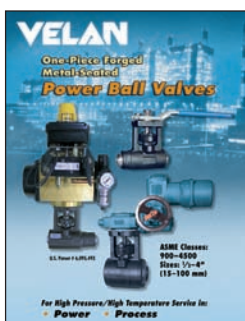
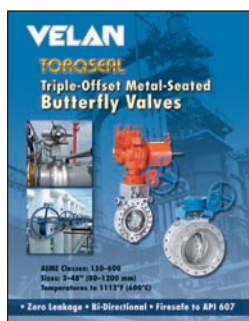
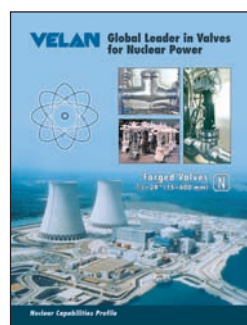
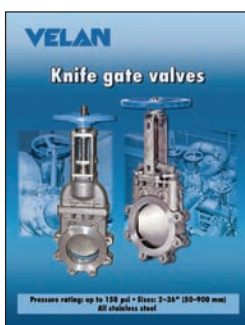
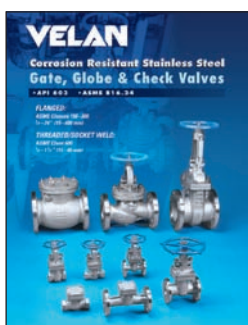
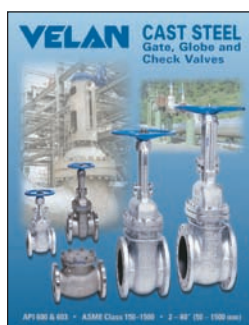
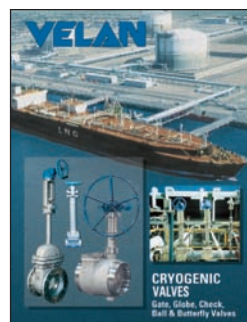
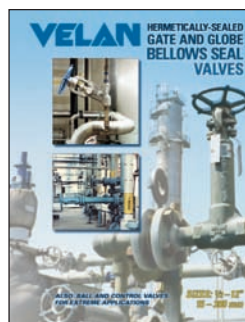
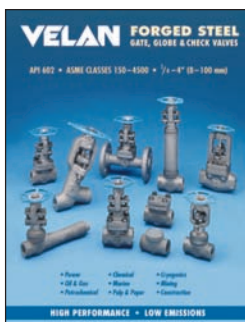
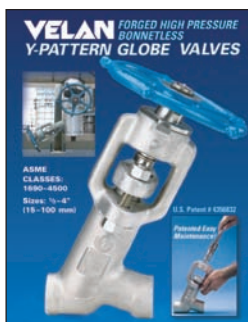
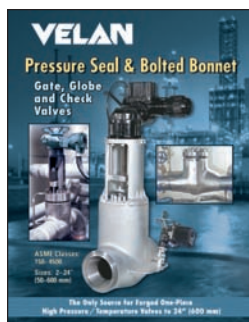
A TYPE OF CONNECTION			
B - Butt weld		W - Socket weld	
S - Threaded			
B SIZE OF CONNECTION			
Customers have the choice of specifying valve size as part of the valve figure number (B) using the numbers below, or indicating valve size separately.			
EXAMPLES:			
S03-L0302-SSGA (valve size is part of figure number)			
1/2"S-L0302-SSGA (valve size is shown separately)			
01 - 1/4" (8 mm)	03 - 1/2" (15 mm)	05 - 1" (25 mm)	07 - 1 1/2" (40 mm)
02 - 3/8" (10 mm)	04 - 3/4" (20 mm)	06 - 1 1/4" (32 mm)	08 - 2" (50 mm)
C MODEL NUMBER / CLASS			
K - V3P-1000		M - VEE-2000	
L - VOP-1000			
CLASS:			
0 - 150		1 - 300	

D PORT		
0 - Regular or reduced port		
1 - Full port		
E TYPE		
1 - End-entry (two-piece)		8 - Three-piece valve (bolted)
3 - One-piece/Unibody		
F BODY MATERIAL		
02 - A105, WCB		13 - CF8M
G TRIM		
CODE	BALL	STEM
SS	316	316
H SEAT MATERIAL		
G - Glass reinforced PTFE		
I SPECIAL SERVICE		
A - Standard		

The Velan Valvac line is a contractor grade ball valve intended for general services such as utilities and WOG rated requirements. Should you have requirements for process applications please refer to our Memoryseal® catalog.

Our Memoryseal® design is ideally suited for process applications due to superior features such as E20 packing chambers, fire test to API 607/ ISO 10497, pre-drilled mounting pads for actuation, and our patented Memoryseal® flexible seats.





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CAT-GPBV-08-09

CAT-GPBV-08-09

Printed in Canada

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