# Valvac General purpose ball valves

T & YELAN WALVAG

VELAN-VALVAC

Pressure rating: up to 2000 psi Sizes: NPS ¼-2 (DN 8-50)



VELAN-VALVAC

t & Viel-and Walty as

19

# **VELAN'S PROFILE**

## **VELAN AT A GLANCE**

#### History

• Founded in 1950

#### Sales

• Over \$500 million

#### People

• Over 2,000 employees

## **Product line**

A world-leading range of valves across all major industrial applications:

- Cast steel gate, globe, check, and ball valves
- Forged steel gate, globe, check, and ball valves
- Triple-offset butterfly valves
- Knife gate valves
- Severe service valves
- Bellows seal valves
- Steam traps

## Quality

All major certifications and approvals

- $\bullet$  ASME N stamp and NPT for nuclear
- valves (since 1970) • ISO 9001 (since 1991) Currently certified to ISO 9001:2008
- PED
- GOST (TR and RTN)
- API 6A and API 6D
- TA-Luft
- Quality programs fully compliant with ISO-9001, NCA 4000, ASME NQA-1 and 10 CFR 50 Appendix B, surveyed by ASME and audited by NUPIC, Northrop Grumman Newport News, DCMA, utilities, architect/ engineers, and other organizations from around the world

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

Velan head office: 7007 Côte de Liesse, Montreal, QC H4T 1G2 Canada

Tel: +1 514 748 7743 Fax: +1 514 748 8635

Check our website for more specific contact information.

## www.velan.com



Velan is one of the world's leading manufacturers of cast and forged steel gate, globe, check, ball, triple-offset, knife gate, highly engineered severe service valves, and steam traps offering superior performance across all major industrial applications including: fossil, nuclear, and cogeneration power; oil and gas; refining and petrochemicals; chemicals and pharmaceutical; LNG and cryogenics; marine; HVAC; mining; water and wastewater; pulp and paper; and subsea. The company also supplies actuators and integrated control packages.

Founded in 1950, Velan has earned a reputation for product excellence and innovation by bringing to the market superior products with special emphasis on quality, safety, ease of operation, and long service life. Velan valves have an extremely broad installation base and are approved by major companies worldwide.

© 2014 Velan Inc., Montreal, QC, Canada. All rights reserved. The contents hereof are confidential and proprietary to Velan. Any unauthorized reproduction or disclosure, in whole or in part, is strictly prohibited. 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 this information without notice. Velan does not accept any liability or damages arising from the use of information in this catalog. Velan Valves, Velan, Memoryseal, Torqseal, Velflex, Adaxie, and RAMA are trademarks or registered trademarks of Velan Inc. and/or another Velan company. Stellite® is a registered trademark of Kennametal Stellite<sup>M</sup>, a wholly owned subsidiary of Kennametal Inc. All other trademarks and registered trademarks are owned by their respective companies.

# **TABLE OF CONTENTS**

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

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.



# **VELAN'S GLOBAL NETWORK**

# **Head office**



Montreal, Canada Velan Inc.

# **Manufacturing plants**

## **North America**



Montreal, Canada Velan Inc., Plant 1



Montreal, Canada Velan Inc., Plant 2 and 7



Granby, Canada Velan Inc., Plant 4 and 6



Montreal, Canada Velan Inc., Plant 5



Williston, VT, U.S.A. Velan Valve Corp., Plant 3



- 5 plants in North America
- 6 plants in Europe
- 6 plants in Asia
- 5 stocking and distribution centers
- Hundreds of distributors worldwide
- Over 60 service shops worldwide



Lyon, France Velan S.A.S.

N



Mennecy, France Segault S.A.



Leicester, UK Velan Valves Ltd.



Lisbon, Portugal Velan Válvulas Industriais, Lda.



Lucca, Italy Velan ABV S.p.A., Plant 1



Lucca, Italy Velan ABV S.p.A., Plant 2

# Asia



Ansan City, South Korea Velan Ltd., Plant 1



Ansan City, South Korea Velan Ltd., Plant 2



Ansan City, South Korea Velan Ltd., Plant 3



Taichung, Taiwan Velan Valvac Mfg. Co., Ltd.



Suzhou, China Velan Valve (Suzhou) Co., Ltd.



Coimbatore, India Velan Valves India Pvt. Ltd.





Granby, Canada Vel*CAN* 



Benicia, CA, U.S.A. Vel*CAL* 



Marietta, GA, U.S.A. Vel*EAST* 



Houston, TX, U.S.A. Vel*TEX* 



Willich, Germany Velan GmbH

# **VELAN VALVAC VOP-1000**

# ONE-PIECE REDUCED PORT GENERAL PURPOSE BALL VALVE NPS ¼-2 (DN 8-50)

CARBON OR STAINLESS STEEL BODY, RPTFE SEATS



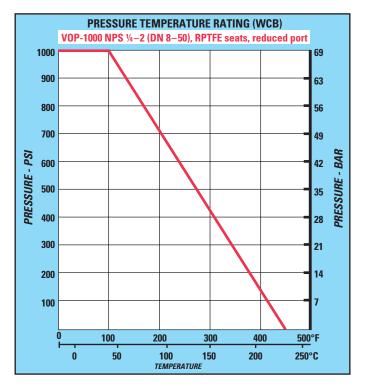
#### STANDARD MATERIALS

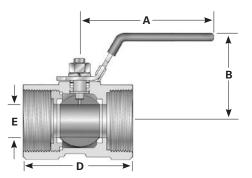
PART	STAINLESS STEEL	CARBON STEEL <sup>(1)</sup>
Body	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	SS 316	SS 316
Stem	SS 316	SS 316
Seat retainer	SS 316	Carbon steel
Thrust washer	RPTFE	RPTFE
Body seal	RPTFE	RPTFE
Stem packing	PTFE	PTFE
Stem washer	SS 304	SS 304
Stem nut	SS 304	SS 304
Gland follower	SS 304	SS 304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

(1) NPS  $\frac{1}{4}$  and  $\frac{3}{8}$  (DN 8 and 10) sizes available only in SS body. (2) Latch lock available only on NPS  $\frac{1}{2} - 2$  (DN 15 - 50) sizes.

## **DIMENSIONS AND WEIGHTS**

SIZE	VOP	1000	MAN	IUAL	Cv	WEIGHT
NPS DN	Α	В	D	E	CV	lb/kg
1⁄4	2.64	2.28	1.73	0.23	2.5	0.18
8	67	58	44	6		0.08
³∕₄	3.19	2.28	1.91	0.33	3.5	0.24
10	81	58	49	8		0.11
½	3.80	2.50	2.36	0.35	4.8	0.44
15	97	64	60	9		0.20
<sup>3</sup> ⁄ <sub>4</sub>	3.80	2.67	2.40	0.49	9.5	0.57
20	97	68	61	12		0.26
1	4.73	3.33	2.91	0.63	14	0.93
25	120	85	74	16		0.42
1¼	4.73	3.55	3.07	0.79	33	1.48
32	120	90	78	20		0.67
1½	5.97	3.88	3.37	0.98	45	2.00
40	152	99	86	25		0.91
2	5.97	4.29	4.02	1.26	58	3.31
50	152	109	102	32		1.50

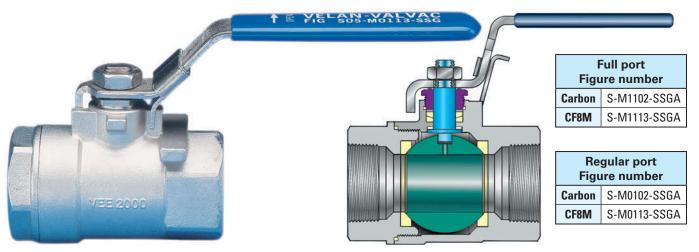




# **VELAN VALVAC VEE-2000**

# FULL AND REGULAR PORT END-ENTRY GENERAL PURPOSE BALL VALVE NPS $\frac{1}{4}$ -2 (DN 8-50)

CARBON OR STAINLESS STEEL BODY, RPTFE SEATS



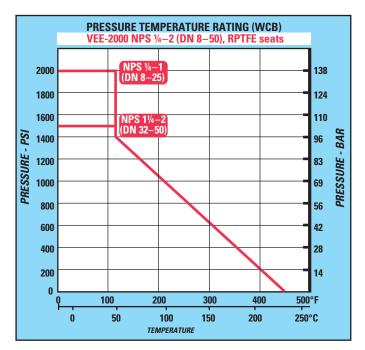
#### STANDARD MATERIALS

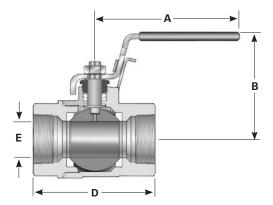
PART	STAINLESS STEEL	CARBON STEEL <sup>(1)</sup>
Body	CF8M	WCB
End cap	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	SS 316	SS 316
Stem	SS 316	SS 316
Thrust washer	RPTFE	RPTFE
Body seal	PTFE	PTFE
Packing ring	PTFE or RPTFE	PTFE or RPTFE
Packing nut	SS 304	SS 304
Handle	SS 304	SS 304
Handle / latch	SS 304	SS 304
Handle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

(1) NPS  $\frac{1}{4}$  and  $\frac{3}{8}$  (DN 8 and 10) sizes available only in SS body.

#### DIMENSIONS AND WEIGHTS

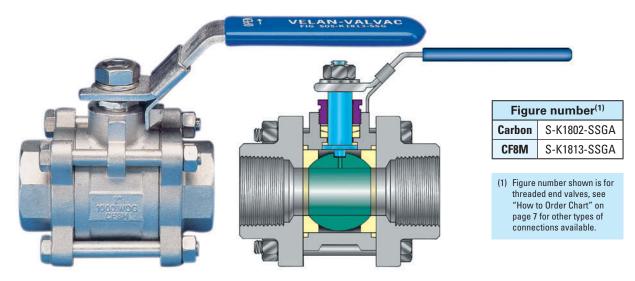
SIZE		VE	E-20	000		MA	NUA	L	Cv WEI		IGHT	
NPS		4	I	3	D E		UV		lb/kg			
DN	Full port	Reg. port	Full port	Reg port								
1⁄4 8	4.57 116	4.57 116	2.10 53	2.10 53	2.20 56	2.20 56	0.44 11	0.44 11	8	8	0.66 0.30	0.66 0.30
⅔ 10	4.57 116	4.57 116	2.10 53	2.10 53	2.20 56	2.20 56	0.44 11	0.44 11	10	10	0.62 0.28	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
<sup>3</sup> ⁄ <sub>4</sub> 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





# VELAN VALVAC V3P-1000

# THREE-PIECE FULL PORT GENERAL PURPOSE BALL VALVE NPS $\frac{1}{4}$ – 2 (DN 8–50) CARBON OR STAINLESS STEEL BODY, RPTFE SEATS, THREADED OR WELD ENDS

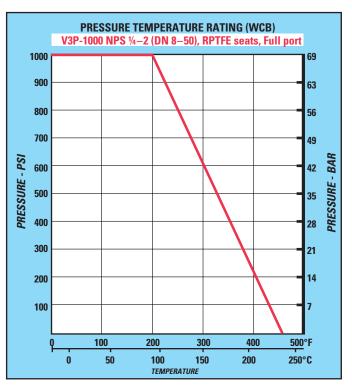


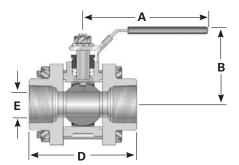
## STANDARD MATERIALS

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**

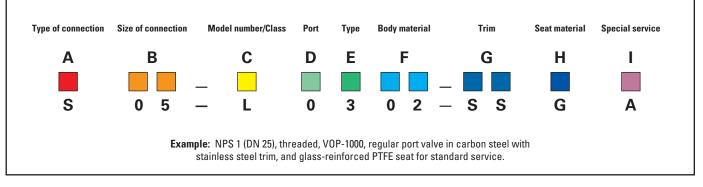
SIZE	V3P-	·1000	MAN	IUAL	Cv	WEIGHT
NPS DN	Α	В	D	E	CV	lb/kg
1⁄4	4.22	2.28	2.50	0.42	8	0.99
8	107	58	64	11		0.45
¾	4.22	2.28	2.50	0.50	10	0.99
10	107	58	64	13		0.45
½	5.03	2.50	2.90	0.55	13	1.46
15	128	64	74	14		0.66
<sup>3</sup> ⁄ <sub>4</sub>	5.03	2.67	3.23	0.80	50	1.98
20	128	68	82	20		0.90
1	5.68	3.33	3.58	1.00	93	3.09
25	144	85	91	25		1.40
1¼	5.68	3.55	4.37	1.25	170	4.85
32	144	90	111	32		2.20
1½	8.22	3.88	4.84	1.50	250	6.84
40	209	99	123	38		3.10
2	8.22	4.29	4.71	2.00	450	10.14
50	209	109	120	51		4.60





# **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.



Α	TYPE OF CONNECTION
в	Butt weld
s	Thread NPT
w	Socket weld

В	SIZE OF CONNECTION	SIZE OF CONNECTION								
Customers have the choice of specifying valve size as part of the valve figure number ( <b>B</b> ) using the numbers below, or indicating valve size separately. Sizes shown in NPS (DN) <b>EXAMPLES:</b> B <b>16</b> -3054P-02TS (valve size is part of figure number) NPS <b>10</b> B-3054P-02TS (valve size is shown separately)										
01	1/4 (8)	05	1 (25)							
02	<b>02</b> <sup>3</sup> / <sub>8</sub> (10) <b>06</b> 1- <sup>1</sup> / <sub>4</sub> (32)									
03	<sup>1</sup> /2 (15)	07	1- <sup>1</sup> /2 (40)							
04	<sup>3</sup> /4 (20)	08	2 (50)							

D	PORT		
0	Regular port	1	Full port

Е	ТҮРЕ		
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

С	MODEL NUMBER / CLASS				
Model number		Class			
к	V3P-1000	0	150		
L	V0P-1000	1	300		
м	VEE-2000				

Н	SEAT MATERIAL
G	Glass-reinforced PTFE

	SPECIAL SERVICE
Α	Standard

The most comprehensive line of industrial forged and cast steel gate, globe, check, ball, butterfly, and knife gate valves and steam traps.

ASME pressure classes 150–4500 in carbon, alloy, and stainless steel



**WARNING:** The use of chainwheels may present a risk of serious injury to personnel or damage to property if the chainwheel becomes detached and falls. The end user and purchaser shall be responsible to ensure the correct installation, operation, maintenance and safety provisions related to chainwheels. Velan does not assume any liability whatsoever for the safe application and operation of chainwheels supplied by parties other than Velan or for chainwheels that are used without a suitably designed safety device.

© 2019 Velan Inc., Montreal, QC, Canada. All rights reserved. The contents hereof are confidential and proprietary to Velan. Any unauthorized reproduction or disclosure, in whole or in part, is strictly prohibited. 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 this information without notice. Velan does not accept any liability or damages arising from the use of information in this catalog. Velan, Velan Ultraflex, Steamless, Moss, Torqseal, Memoryseal, Securaseal, Velflex, Rama, Clama, Adareg, and Rama Clama II are trademarks or registered trademarks of Velan Inc. and/or another Velan company. One or more of these trademarks are registered trademarks are owned by their respective companies.



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:** +1 514 748 7743 **Fax:** +1 514 748 8635

Check our website for more specific contact information.

## www.velan.com

CAT-GPBV-07-14a

Printed in Canada