GWC Italia

Proven technology for individual valve solutions worldwide

FLANGED FLOATING BALL VALVES





TABLE OF CONTENTS

GWC Italia Worldwide Network	4
Company Overview, Certifications & Standards	5
Split Body Ball Valves	6
Unibody Ball Valves	7
Ordering Guide	9

Standard Features

Unibody Floating Ball Valve - Model A	10
Split Body Floating Ball Valve - Model B	11
Split Body Floating Ball Valve - Model C	12
Top Works Dimension Model A	14
Top Works Dimension Model B	16
Top Works Dimension Model C	18

20

Technical Characteristics

GWC ITALIA Worldwide Network

ITALY GROUP HEADQUARTERS, MANUFACTURING & SALES

GWC Italia S.p.A. Via A. Grandi, 5 20056 Trezzo Sull'Adda Milano, Italy Phone: 39-02-86882941 Fax: 39-02-86882942 Email: sales@gwcitalia.com





USA HEADQUARTERS MANUFACTURING & SALES GWC Italia

7600 District Blvd. Bakersfield, CA 93313 USA ph: +1-661.834.1775 fax: +1-661.834.2072 Email: sales@gwcitalia-usa.com



SALES DUBAI GWC Italia DMCC 1506, Platinum Tower I-Cluster, Jumeirah Lake Towers Dubai UAE ph: +971-44.539.358 Email: sales@gwcitalia.com



MANUFACTURING & SALES GWC Valve Manufacturing (Shanghai) Co., Ltd. No 3300 Tianchen Road, Qingpu, Shanghai 201708, China ph: +86-21.5979 8796 fax: +86-21.5979-8790 Email: sales@gwcitalia.com



SALES CHINA GWC Italia 5/F, China Life Tower, No.16 Chaowai Street Chaoyang District Beijing 100020, China ph: +86 10 5877 1065 fax: +86 10 5877 1120 Email: sales@gwcitalia.com **GWC Italia SpA** with its Headquarters in Milan, Italy fully designs, manufactures and markets valves with one of the most extensive Trunnion Mounted Ball Valve lines you will find in the Industry today. GWC Italia which was founded by an Italian Group & USA Entrepreneurial Management team has a history of building and managing successful valve Manufacturing companies over the past 40 years. GWC Italia Valves are used in major applications for Upstream, Downstream & Transportation Segments of the Oil & Gas Industry, E&P, Petrochemical, Chemical, Mining/Minerals, Power, Marine and Industrial markets.

GWC Italia's extensive line of valve and flow control products include:

- Trunnion Mounted Ball Valves (soft & metal seated)
 - Split Body
 - Top Entry
 - Welded Body
 - Subsea
 - Cryogenic & High Temperature
 - Compact Body (Twin Ball)
- Floating Ball Valves
- Pipeline Check Valves
- Gate, Globe and Check Valves including Cast & Forged
- Needle & Gauge Valves



Proven technology for individual valve solutions worldwide

CERTIFICATIONS & STANDARDS

American Standards

American Petroleum Institute								
API-6D	Specification for Pipeline Valves							
API-6D SS	Specification for Subsea Pipeline Valves							
API-6A	Specification for Wellhead and Christmas Tree Equipment							
API-6FA	Specification for Fire Test for Valves							
API-607	Fire Test for Soft-Seated Quarter-Turn Valves							
API-608	Metal Ball Valves - Flanged, Threaded, and Welding End							
API-Q1	Specification for Quality Programs for the Petroleum, Petrochemical & Natural Gas							
International	Standarda							

International Standards

ISO 9001:2008	Quality Management Systems
ISO 14001	Environmental Management
OHSAS 18001:2007	Occupational Health and Safety Management System
ISO/TS 29001	Petroleum, Petrochemical and Natural Gas Industries - Sector Specific Quality Management Systems
CE/PED	Pressure Equipment Directive
CU-TR	Technical Reglament Conformity Certificate TRCU
CRN	Canadian Registration Number
Z245.15.96	Pipeline Steel Valves
ATEX	European for explosive atmosphere
SIL3	Measurement of performance required for safety instrument function
ABS	American Bureau of Shipping



STANDARD FEATURES - Split Body Ball Valves



The GWC SPLIT BODY ball valves are designed, constructed and tested according to the most recent international standards, such as API, ASME, BS, DIN, etc.

- 1. Body
- 2. Closure / Cap
- 3. Ball
- 4. Cavity Relieving Seat
- 5. Stem
- 6. Anti-Static Spring and Ball
- 7. Gland Bushing
- 8. Gland Flange

- 9. Combination Lock Stop
- 10. Stem O-Ring
- 11. Gland O-Ring
- 12. Packing
- 13. Stem Thrust Washer
- 14. Spiral Wound Gasket
- 15. Body Stud
- 16. Body Nut

- 17. Gland Screw
- 18. Stem Washer
- 19. Stem Bolt
- 20. Stem Bearing
- 21. Gland Bearing
- 22. Snap Ring / Circlip
- 23. Handle

STANDARD FEATURES — Unibody Ball Valves



The GWC UNIBODY ball valves are designed, constructed and tested according to the most recent international standards, such as API, ASME, BS, DIN, etc.

- 1. Body
- 2. Closure / Cap
- 3. Ball
- 4. Cavity Relieving Seat
- 5. Stem
- 6. Anti-Static Spring and Ball
- 7. Gland Bushing
- 8. Gland Flange
- 9. Combination Lock Stop

- 10. Stem O-Ring
- 11. Gland O-Ring
- 12. Packing
- 13. Stem Thrust Washer
- 14. Graphite Gasket
- 15. PTFE Gasket
- 16. Gland Screw
- 17. Stem Washer
- 18. Stem Bolt

- 19. Stem Bearing
- 20. Gland Bearing
- 21. Snap Ring / Circlip
- 22. Handle

SPLIT BODY & UNIBODY BALL VALVES





Ball to stem anti-static spring and ball

O-Rings (Secondary Seal) Flexible Graphite Packing (Primary Seal)



Figure 1

Ball valves present a particular problem with the build up of static electricity around the ball. All GWC ball valves have anti-static devices which provides contact between stem and ball, and stem and body to eliminate static electricity.

Figure 2

In the event of a fire the valve is required to make a downstream seal. Even after the disintegration of the RTFE seats, GWC ball valves have an excellent metal to metal seal.



Figure 3

The combination of stem packing and o-rings guarantee zero emissions even at a low pressure. The primary seal is made out of flexible graphite, a material with extremely good resistance to fire conditions. The anti-blow out stem is inserted from inside the valve body.

Figure 4

Special attention has been paid to the mechanical strength and sealing efficiency of the central flanged joint in the valve body.

Figure 5 (unibody only)

The PTFE gasket packing acts as a primary seal for the Unibody ball valves. The secondary seal has been made out of flexible graphite, a material with extremely good resistance to fire conditions.



ORDERING GUIDE





4" CLASS 150 FLOATING BALL VALVE, FLG-RF, FULL BORE, A216 WCB BODY x 316SS TRIM, RTFE SEAT, VITON AED O-RINGS, NACE, FIRESAFE, LEVER OP.

1. MODEL

A - FLOATING BALL, UNIBODY, REDUCED BORE B - FLOATING BALL, SPLIT BODY, FULL BORE

C - FLOATING BALL, SPLIT BODY, REDUCED BORE

2. RATING

15 - CLASS 150 30 - CLASS 300

60 - CLASS 600

90 - CLASS 900 * 150 - CLASS 1500 * * 1/2" - 1" SIZES ONLY

3. END CONNECTION

0 - RF FLANGED 7 - BUTTWELD (SCHEDULE REQUIRED)

9 - RING JOINT X - SPECIAL

4. TYPE

1 - FIRE-SAFE

5. MATERIAL (BODY + TRIM)

AC - WCB + 304 BC - WCB + 316 CC - WCB + A105/ENP DC - WCB + F6A/13CR EC - LCC + LF2/ENP FC - LCC + F6A/13CR GC - LCC + 316

6. MATERIAL (SEAT)

G - RTFE **B** - NYLON E - DEVLON V - PEEK J - DELRIN M - METAL OC - CN7M + A/20 PC - A890-4A + F51 QC - A890-5A + F53 RC - A890-6A + F55 X - SPECIAL

NC - CF3M + 316L

HC - LCB + LF2/ENP

IC - LCB + F6A/13CR

JC - LCB + 316

KC - CF8 + 304

LC - CF8M + 316

MC - CF3 + 304L

X - SPECIAL

7. MATERIAL (O-RING SEAL) 4 – EPDM

1 - HNBR AED

2 - VITON AED 3 - VITON GLT AED

5 – AFLAS 6 – HNBR AED (Low Temp)

7 - PTFE + ELGILOY 8 – GRAPHITE X - SPECIAL

8. OPERATOR

L - HANDWHEEL OPERATOR

GO - WORM GEAR OPERATOR

B - BARE STEM

9. SPECIAL REQUIREMENTS

EB - EXTENDED BONNET

S - SUPPLY COMPLETE INFORMATION

UNIBODY FLOATING BALL VALVE — Model A150/A300



С

0

Construction

Unibody, reduced bore, free floating ball, fire-safe certified to API-607, blowout proof stem, cavity relieving seats, anti-static device, designed and tested according to ASME B16.34, BS5351 and API-6D.

Dimension

Face to Face	ASME B16.10 Short Pattern
End Flange	ASME B16.5
Rating	ASME Class 150-300

NACE MR-01-75 Certified



Standard Materials

Fig. No.	A150-1-BC-G1-L, A300-1-BC-G1-L	A150-1-LC-G1-L, A300-1-LC-G1-L
Body/Retainer	A216 WCB	A351 CF8M
Ball/Stem	316SS	316SS
Seats	RTFE	RTFE
O-Rings	HNBR	HNBR

Class 150

DIMENSIONS IN INCHES									
VALVE SIZE	2" 50mm	4" 100mm	6" 150mm	8" 200mm					
Bore Size (d)	1.50	2.50	3.00	4.00	6.00				
Face to Face (A)	7.00	8.00	9.00	10.50	11.50				
Length of Lever (C)	9.84	9.84	13.78	18.11	-				
Approx. Weight (lbs.)	16	28	54	84	160				

Class 300

DIMENSIONS IN INCHES									
VALVE SIZE	2" 50mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm				
Bore Size (d)	1.50	2.00	3.00	4.00	6.00				
Face to Face (A)	8.50	11.15	12.00	15.88	16.50				
Length of Lever (C)	9.84	9.84	13.78	18.11	-				
Approx. Weight (lbs.)	24	50	85	132	200				

SPLIT BODY FLOATING BALL VALVE - Model B150/B300

Construction

Split body, full bore, free floating ball, fire-safe certified to API-607, blow-out proof stem, cavity relieving seats, anti-static device, designed and tested according to ASME B16.34, BS5351 and API-6D.

Dimension

Face to Face	ASME B16.10 Long Pattern
End Flange	ASME B16.5
Rating	ASME Class 150-300

NACE MR-01-75 Certified





Standard Materials

Fig. No.	B150-1-BC-G1-L, B300-1-BC-G1-L	B150-1-LC-G1-L, B300-1-LC-G1-L
Body/Retainer	A216 WCB	A351 CF8M
Ball/Stem	316SS	316SS
Seats	RTFE	RTFE
O-Rings	HNBR	HNBR

Class 150

DIMENSIONS IN INCHES										
VALVE SIZE	1/2" 15mm	3/4" 20mm	1" 25mm	1-1/2" 40mm	2" 50mm	2-1/2" 65mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm
Bore Size (d)	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00	6.00	8.00
Face to Face (A)	4.25	4.625	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00
Length of Lever (C)	5.91	5.91	5.91	9.84	9.84	9.84	13.78	18.11	29.53	-
Wheel Diameter (F)	-	-	-	-	-	-	-	-	-	23.62
Approx. Weight (lbs.)	5	7	10	20	26	35	56	80	172	378

Class 300

DIMENSIONS IN INCHES										
VALVE SIZE	1/2" 15mm	3/4" 20mm	1" 25mm	1-1/2" 40mm	2" 50mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm	
Bore Size (d)	0.50	0.75	1.00	1.50	2.00	3.00	4.00	6.00	8.00	
Face to Face (A)	5.50	6.00	6.50	7.50	8.50	11.125	12.00	15.875	19.75	
Length of Lever (C)	5.91	5.91	5.91	9.84	9.84	13.78	18.11	29.53	-	
Wheel Diameter (F)	-	-	-	-	-	-	-	-	23.62	
Approx. Weight (lbs.)	9	11	15	28	38	75	110	230	481	

SPLIT BODY FLOATING BALL VALVE - C150/C300



С

g

Construction

Split body, reduced bore, free floating ball, fire-safe certified to API-607, blowout proof stem, cavity relieving seats, anti-static device, designed and tested according to ASME B16.34, BS5351 and API-6D.

Dimension

Face to Face	ASME B16.10 Short Pattern
End Flange	ASME B16.5
Rating	ASME Class 150-300

NACE MR-01-75 Certified



Standard Materials

Fig. No.	C150-1-BC-G1-L, C300-1-BC-G1-L	C150-1-LC-G1-L, C300-1-LC-G1-L
Body/Cap	A216 WCB	A351 CF8M
Ball/Stem	316SS	316SS
Seats	RTFE	RTFE
O-Rings	HNBR	HNBR

Class 150

DIMENSIONS IN INCHES												
VALVE SIZE	2" 50mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm	10" 250mm						
Bore Size (d)	1.50	2.00	3.00	4.00	6.00	8.00						
Face to Face (A)	7.00	8.00	9.00	10.50	11.50	13.00						
Length of Lever (C)	9.84	9.84	13.80	18.10	29.50	-						
Wheel Diameter (F)	-	-	-	-	-	23.62						
Approx. Weight (lbs.)	21	48	69	124	189	446						

Class 300

DIMENSIONS IN INCHES												
VALVE SIZE	2" 50mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm	10" 250mm						
Bore Size (d)	1.50	2.00	3.00	4.00	6.00	8.00						
Face to Face (A)	8.50	11.125	12.00	15.875	16.50	18.00						
Length of Lever (C)	9.84	9.84	13.80	18.10	29.50	-						
Wheel Diameter (F)	-	-	-	-	-	23.62						
Approx. Weight (lbs.)	30	58	97	208	370	581						

SPLIT BODY FLOATING BALL VALVE - Model B600/C600

Construction

Split body, full bore or reduced bore, free floating ball, fire-safe certified to API-607, blow-out proof stem, cavity relieving seats, anti-static device, designed and tested according to ASME B16.34, BS5351 and API-6D.

Dimension

Face to Face	ASME B16.10 Long Pattern
End Flange	ASME B16.5
Rating	ASME Class 600

NACE MR-01-75 Certified





- 1 Inch FB

H

Size 1.5 Inch FB - 4 Inch FB



Size 4 Inch FB - 6 Inch FB

Standard Materials

Fig. No.	B600-1-BC-J1-L, C600-1-BC-J1-L	B600-1-LC-J1-L, C600-1-LC-J1-L
Body/Cap	A216 WCB	A351 CF8M
Ball/Stem	316SS	316SS
Seats	DELRIN	DELRIN
O-Rings	HNBR	HNBR

Class 600 — Full Bore

	DIMENSIONS IN INCHES													
VALVE S	IZE	1/2" 15mm	3/4" 20mm	1" 25mm	1-1/2" 40mm	2" 50mm	3" 80mm	4" 100mm						
Bore Size (d)		0.50	0.75	1.00	1.50	2.00	3.00	4.00						
	RF	6.50	7.50	8.50	9.50	11.50	14.00	17.00						
Face to Face (A)	RTJ	6.50	7.50	8.50	9.50	11.62	14.12	17.12						
Length of Lever (C)		5.90	5.90	5.90	17.13	17.13	21.65	-						
Wheel Diameter (F)		-	-	-	-	-	-	18.11						
Approx. Weight (lbs.)		10	12	16	31	44	104	183						

Class 600 — Reduced Bore

DIMENSIONS IN INCHES												
VALVE SIZ	Έ	2" 50mm	3" 80mm	4" 100mm	6" 150mm							
Bore Size (d)		1.50	2.00	3.00	4.00							
	RF	11.50	14.00	17.00	22.00							
Face to Face (A)	RTJ	11.62	14.12	17.12	22.11							
Length of Lever (C)		17.13	17.13	21.65	-							
Wheel Diameter (F)		-	-	-	18.11							
Approx. Weight (lbs.)		42	81	131	271							



TOP WORKS DIMENSION - MODEL A



www.gwcitalia.com

	TOP WORKS DIMENSION FOR MODEL A - INCH																	
Size	CLASS	A	в	с	D	E	F	wм	GD	GW	P-UNC	ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
2" x 1.5"	150	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.4	2.8	0.8	0.7	2.8	FA07
[DN 50 X DN40]	300	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.4	2.8	0.8	0.7	2.8	FA07
3" x 2"	150	4.7	1.6	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.4	2.8	0.8	0.7	2.8	FA07
[DN 80 X DN40]	300	4.7	1.6	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.4	2.8	0.8	0.7	2.8	FA07
4" x 3"	150	6.6	2.1	0.6	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	4.0	3.7	1.2	0.7	4.0	FA10
[DN 100 X DN 80]	300	6.6	2.1	0.6	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	4.0	3.7	1.2	0.7	4.0	FA10
6" x 4"	150	7.2	2.1	0.6	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	4.0	3.7	1.2	0.7	4.0	FA10
[DN 150 X DN 100]	300	7.2	2.1	0.6	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	4.0	3.7	1.2	0.7	4.0	FA10
					тс	P WO	RKS D	IMENS	ION F	OR MC	DEL A	- MM						
Size	CLASS	Α	в		_													
			Б		D	E	F	WM	GD	GW	P-UNC	ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
2" x 1.5"	150	103.5	39.0	10.5	D 20.4	E 10.0	F 14.8	WM 86.0	GD 61.0	GW 44.0	P-UNC 4-5/16	KW 14.0	GL 86.0	LM 70.0	ØSD 19.8	ØGH 17.0	ØD1 70	MSS SP-101 TYPE FA07
2" x 1.5" [DN 50 X DN40]	150 300	103.5 103.5	39.0 39.0	10.5 10.5	D 20.4 20.4	E 10.0 10.0	F 14.8 14.8	WM 86.0 86.0	GD 61.0 61.0	GW 44.0 44.0	P-UNC 4-5/16 4-5/16	KW 14.0 14.0	GL 86.0 86.0	LM 70.0 70.0	ØSD 19.8 19.8	ØGH 17.0 17.0	ØD1 70 70	MSS SP-101 TYPE FA07 FA07
2" x 1.5" [DN 50 X DN40] 3" x 2"	150 300 150	103.5 103.5 120.5	39.0 39.0 41.0	10.5 10.5 10.5	D 20.4 20.4 22.4	E 10.0 10.0 10.0	F 14.8 14.8 16.5	WM 86.0 86.0 86.0	GD 61.0 61.0 61.0	GW 44.0 44.0 44.0	P-UNC 4-5/16 4-5/16 4-5/16	KW 14.0 14.0 14.0	GL 86.0 86.0 86.0	LM 70.0 70.0 70.0	ØSD 19.8 19.8 19.8	ØGH 17.0 17.0 17.0	ØD1 70 70 70	MSS SP-101 FA07 FA07 FA07
2" x 1.5" [DN 50 X DN40] 3" x 2" [DN 50 X DN40]	150 300 150 300	103.5 103.5 120.5 120.5	39.0 39.0 41.0 41.0	10.5 10.5 10.5 10.5	D 20.4 20.4 22.4 22.4	E 10.0 10.0 10.0 10.0	F 14.8 14.8 16.5 16.5	WM 86.0 86.0 86.0 86.0	GD 61.0 61.0 61.0 61.0	GW 44.0 44.0 44.0 44.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16	KW 14.0 14.0 14.0 14.0	GL 86.0 86.0 86.0	LM 70.0 70.0 70.0 70.0	ØSD 19.8 19.8 19.8 19.8	ØGH 17.0 17.0 17.0 17.0	ØD1 70 70 70 70	MSS SP-101 TYPE FA07 FA07 FA07 FA07
2" x 1.5" [DN 50 X DN40] 3" x 2" [DN 50 X DN40] 4" x 3"	150 300 150 300 150	103.5 103.5 120.5 120.5 168.0	39.0 39.0 41.0 41.0 53.0	10.5 10.5 10.5 10.5 12.0	D 20.4 20.4 22.4 22.4 27.1	E 10.0 10.0 10.0 10.0 14.0	F 14.8 14.8 16.5 16.5 18.5	WM 86.0 86.0 86.0 102.0	GD 61.0 61.0 61.0 61.0 74.0	GW 44.0 44.0 44.0 44.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-3/8	KW 14.0 14.0 14.0 14.0 20.0	GL 86.0 86.0 86.0 86.0 102.0	LM 70.0 70.0 70.0 70.0 95.0	ØSD 19.8 19.8 19.8 19.8 29.8	ØGH 17.0 17.0 17.0 17.0 19.0	ØD1 70 70 70 70 102	MSS SP-101 TYPE FA07 FA07 FA07 FA07 FA07 FA07
2" x 1.5" [DN 50 X DN40] 3" x 2" [DN 50 X DN40] 4" x 3" [DN 100 X DN 80]	150 300 150 300 150 300	103.5 103.5 120.5 120.5 168.0 168.0	39.0 39.0 41.0 41.0 53.0 53.0	10.5 10.5 10.5 10.5 12.0 12.0	D 20.4 20.4 22.4 22.4 27.1	E 10.0 10.0 10.0 10.0 14.0 14.0	F 14.8 14.8 16.5 16.5 18.5	WM 86.0 86.0 86.0 102.0	GD 61.0 61.0 61.0 74.0 74.0	GW 44.0 44.0 44.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8	KW 14.0 14.0 14.0 20.0	GL 86.0 86.0 86.0 102.0 102.0	LM 70.0 70.0 70.0 95.0 95.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8	ØGH 17.0 17.0 17.0 17.0 19.0 19.0	ØD1 70 70 70 70 102 102	MSS SP-101 TYPE FA07 FA07 FA07 FA07 FA07 FA07 FA07 FA07 FA07
2" x 1.5" [DN 50 X DN40] 3" x 2" [DN 50 X DN40] 4" x 3" [DN 100 X DN 80] 6" x 4"	150 300 150 300 150 300 150	103.5 103.5 120.5 120.5 168.0 168.0 183.0	39.0 39.0 41.0 53.0 53.0 53.0	10.5 10.5 10.5 10.5 10.5 12.0 12.0 12.0	D 20.4 20.4 22.4 22.4 27.1 27.1 27.9	E 10.0 10.0 10.0 10.0 14.0 14.0 14.0	F 14.8 14.8 16.5 16.5 18.5 18.5 18.5	WM 86.0 86.0 86.0 102.0 102.0 102.0	GD 61.0 61.0 61.0 74.0 74.0 74.0	GW 44.0 44.0 44.0 56.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8	KW 14.0 14.0 14.0 20.0 20.0 20.0	GL 86.0 86.0 86.0 102.0 102.0 102.0	LM 70.0 70.0 70.0 95.0 95.0 95.0	ØSD 19.8 19.8 19.8 29.8 29.8 29.8	ØGH 17.0 17.0 17.0 17.0 17.0 19.0 19.0 19.0	ØD1 70 70 70 102 102	MSS SP-101 TYPE FA07 FA10 FA10 FA10



					то	P WOF	RKS DI	MENSI	ION FC	R MO	DEL B -	INCH						
Size	CLASS	А	в	с	D	Е	F	wм	GD	GW	P-UNC	ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
1/2"	150	2.3	0.8	0.3	0.4	0.2	0.3	2.2	1.8	1.7	4-1/4	0.3	2.4	1.7	0.5	0.4	1.7	FA04
[DN 15]	300	2.3	0.8	0.3	0.4	0.2	0.3	2.3	1.8	1.7	4-1/4	0.3	2.4	1.4	0.5	0.4	1.7	FA04
	600	2.3	0.8	0.4	0.4	0.2	0.2	2.3	1.8	1.7	4-1/4	0.3	2.4	1.4	0.5	0.4	1.4	FA03
3/4"	150	2.4	0.9	0.3	0.5	0.2	0.2	2.3	1.8	1.7	4-1/4	0.3	2.4	1.4	0.5	0.4	1.4	FA03
[DN 20]	300	2.3	0.8	0.3	0.4	0.2	0.2	2.3	1.8	1.7	4-1/4	0.3	2.4	1.4	0.5	0.4	1.4	FA03
	600	2.3	0.8	0.4	0.4	0.2	0.2	2.3	1.8	1.7	4-1/4	0.3	2.4	1.4	0.5	0.4	1.4	FA03
1"	150	2.7	0.9	0.4	0.4	0.2	0.2	2.5	2.0	1.7	4-1/4	0.3	2.7	1.6	0.5	0.5	1.7	FA04
[DN 25]	300	2.7	0.9	0.4	0.4	0.2	0.2	2.5	2.0	1.7	4-1/4	0.3	2.7	1.6	0.5	0.5	1.7	FA04
	600	2.7	0.9	0.4	0.5	0.2	0.2	2.5	2.0	1.7	4-1/4	0.3	2.7	1.6	0.5	0.5	1.7	FA04
1-1/2"	150	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
[DN 40]	300	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
	600	4.1	1.5	0.5	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
2"	150	8.1	1.5	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
[DN 50]	300	5.0	1.5	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
	600	4.9	1.5	0.5	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
2-1/2"	150	5.6	1.6	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.5	3.3	2.8	0.8	0.6	2.8	FA07
[DN 65]	300	5.3	1.6	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.5	3.3	2.8	0.8	0.6	2.8	FA07
	600	6.1	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
3"	150	6.6	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
[DN 80]	300	6.6	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
	600	6.8	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
4"	150	7.4	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
[DN 100]	300	7.4	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
	600	9.0	3.0	0.6	1.6	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
6" [DN 150]	150	10.5	3.0	0.7	1.7	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
[511130]	300	10.5	3.0	0.6	1.9	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
8" [DN 200]	150	12.6	3.1	0.7	1./	0.9	1.2	5.9	4.4	3.3	4-5/8	1.4	5.7	5.3	2.0	0.9	5.5	FA14
											1 1	14						EA 14
_	300	12.0	3.1	0.7	T.9							- MM	0.1	5.5	2.0	0.5	0.0	17414
	300	12.0	3.1	0.7	TC	o.s P WOI	RKS D	IMENS	ION F	OR MC	DEL B	- MM	0.1	5.5	2.0	0.5	0.0	MSS SP-101
Size	CLASS	A	B	C	TC D	DP WO	RKS D	IMENS WM	GD	OR MC	DEL B	- MM ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
Size	CLASS 150	A 58.0	B 21.0	C 8.0	TC D 11.1	6.0	7.0	0.0 IMENS WM 55.0	4.4 GD 46.5	3.3 OR MC GW 42.0	P-UNC 4-1/4	- MM KW 8.0	GL 60.0	LM 42.0	ØSD 12	ØGH 10.0	ØD1 42	MSS SP-101 TYPE FA04
Size 1/2" [DN 15]	CLASS 150 300	A 58.0 59.5	B 21.0 21.5	C 8.0 8.0	D	6.0 6.0	7.0 7.0	0.0 IMENS 0 55.0 58.0	4.4 GD 46.5 46.5	3.3 OR MC GW 42.0 42.0	DEL B P-UNC 4-1/4 4-1/4	- MM KW 8.0 8.0	GL 60.0 60.0	LM 42.0 36.0	ØSD 12 12	ØGH 10.0 10.0	ØD1 42 42	MSS SP-101 TYPE FA04 FA04
Size 1/2" [DN 15]	CLASS 150 300 600	A 58.0 59.5 59.5	B 21.0 21.5 21.5	C 8.0 9.0	D 11.1 11.1 11.1	6.0 6.0 6.0	F 7.0 7.0 5.9	0.0 IMENS 0 55.0 58.0 58.0	4.4 GD 46.5 46.5 46.5	3.3 OR MC GW 42.0 42.0	P-UNC 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0	GL 60.0 60.0	LM 42.0 36.0 36.0	ØSD 12 12 12	ØGH 10.0 10.0	ØD1 42 42 36	MSS SP-101 TYPE FA04 FA03
Size 1/2" [DN 15] 3/4"	CLASS 150 300 600 150	A 58.0 59.5 59.5 60.0	B 21.0 21.5 21.5 22.0	C 8.0 9.0 8.0	D 11.1 11.1 11.1 11.1 11.9	0.3 P WO E 6.0 6.0 6.0 6.0	F 7.0 7.0 5.9 6.0	0.0 IMENS 955.0 58.0 58.0 58.0	4.4 GD 46.5 46.5 46.5 46.5	3.3 OR MC GW 42.0 42.0 42.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0	LM 42.0 36.0 36.0	ØSD 12 12 12 12	ØGH 10.0 10.0 10.0	ØD1 42 42 36 36	MSS SP-101 TYPE FA04 FA03 FA03
Size 1/2" [DN 15] 3/4" [DN 20]	CLASS 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.3	B 21.0 21.5 21.5 22.0 21.5	C 8.0 9.0 8.0 8.0 8.0	D 11.1 11.1 11.1 11.9 11.1	 0.3 P WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 	F 7.0 7.0 6.0 6.0	WM 55.0 58.0 58.0 58.0 58.0 58.0	4.4 GD F(46.5 46.5 46.5 46.5 46.5	3.3 GW 42.0 42.0 42.0 42.0 42.0 42.0	4-3/3 DEL B P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0	LM 42.0 36.0 36.0 36.0	ØSD 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0	ØD1 42 42 36 36 36	MSS SP-101 TYPE FA04 FA03 FA03
Size 1/2" [DN 15] 3/4" [DN 20]	CLASS 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5	B 21.0 21.5 21.5 22.0 21.5 21.5 21.5	0.7 C 8.0 9.0 8.0 9.0 8.0 9.0 9.0	I TC D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1	0.9 0.9 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	F 7.0 7.0 6.0 6.0 5.9	IMENS 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5	GR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0	LM 42.0 36.0 36.0 36.0 36.0 36.0	ØSD 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 9.5	ØD1 42 42 36 36 36 36	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03
Size 1/2" [DN 15] 3/4" [DN 20] 1"	CLASS 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5	B 21.0 21.5 21.5 22.0 21.5 21.5 21.5 23.5	0.7 C 8.0 9.0 8.0 9.0 9.0 9.0 9.0	I.3 TC D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1	0.9 0.9 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	F 7.0 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9	IMENS WM 55.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0	3.3 GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0	ØSD 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 9.5 12.0	ØD1 42 42 36 36 36 36 36 42	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 69.5	B 21.0 21.5 21.5 22.0 21.5 21.5 23.5 23.5 23.5	C 8.0 8.0 8.0 8.0 9.0 9.0 9.0 9.0 9.0	Image: 1.3 Image: 1.3 D Image: 1.3 Image: 1.3 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1	b.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	F 7.0 7.9 6.0 5.9 5.9 5.9 5.9 5.9 5.9	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0	42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0	ØSD 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.	ØD1 42 42 36 36 36 36 36 42 42 42	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA04 FA03 FA04
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 69.5 69.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 23.5	C 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	Image: Non-State Image: Non-State<	E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	F 7.0 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 64.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 43.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4	- MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0	00000000000000000000000000000000000000	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0	ØD1 42 42 36 36 36 36 36 42 42 42 42	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA03 FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA04 FA04
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2"	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 69.5 69.5 103.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 23.5 23.5 23.5	C 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5	Image: 1.3 D 11.1 12.0	E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0	F 7.0 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 5.9 14.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 64.0 64.0 64.0 66.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0	S.3 OR MC Gw 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16	- MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0	2.0 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 16.5 16.5	ØD1 42 42 36 36 36 36 42 42 42 42 70 70	FA04 FA04 FA03 FA04 FA05 FA04 FA04 FA04 FA04 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 69.5 103.5 103.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 39.0 39.0	C 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 10.5 12.0	I D 11.1 12.0	E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0	F 7.0 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 14.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0	GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0	2.0 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 16.5 16.5	ØD1 42 42 36 36 42 42 70 70	FA04 FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA04 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 39.0 39.0 37.0 28.0	c 8.0 8.0 9.0 <t< td=""><td>I D 11.1 12.1 20.4 19.9 21.8</td><td>B B</td><td>F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 14.3 14.3</td><td>WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0</td><td>4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 50.0 61.0 61.0 61.0 61.0</td><td>S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0</td><td>P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16</td><td>- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0</td><td>GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0 85.0 85.0</td><td>LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0</td><td>2.0 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12</td><td>ØGH 10.0 12.0 12.0 16.5 16.5 16.5 16.5</td><td>ØD1 42 42 36 36 36 42 42 70 70 70</td><td>FA04 FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA07 FA07</td></t<>	I D 11.1 12.1 20.4 19.9 21.8	B B	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 14.3 14.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 50.0 61.0 61.0 61.0 61.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0 85.0 85.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0	2.0 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 12.0 12.0 16.5 16.5 16.5 16.5	ØD1 42 42 36 36 36 42 42 70 70 70	FA04 FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2"	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 200	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 103.5 103.5 206.0	B 21.0 21.5 21.5 21.5 23.5 23.5 23.5 23.5 39.0 39.0 37.0 38.0 28.0	c 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 10.5 12.0 9.5	I D 11.1 12.1 20.4 19.9 21.8 20.2	0.3 P WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.2	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 70.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 12.0 16.5 16.5 16.5 16.5 16.5	ØD1 42 42 36 36 36 42 42 42 70 70 70 70 70	FA04 FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA05 FA06 FA07 FA07 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5 206.0 127.0 124.5	B 21.0 21.5 21.5 21.5 21.5 23.5 23.5 23.5 39.0 39.0 37.0 38.0 38.0 28.5	c 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 12.0 9.5 11.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 12.1 13.1 20.4 20.4 19.9 21.8 22.2 22.2	0.3 P WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 61.	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 44.0 44.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 <	ØD1 42 42 36 36 36 42 42 70 70 70 70 70 70 70	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA04 FA03 FA03 FA04 FA03 FA04 FA03 FA04 FA05 FA06 FA07 FA07 FA07 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 69.5 103.5 103.5 206.0 127.0 124.5	B 21.0 21.5 21.5 21.5 23.5 23.5 23.5 23.5 23.5 39.0 39.0 37.0 38.0 38.0 38.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 12.0 9.5 11.0 13.5	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 12.1 13.1 20.4 20.4 19.9 21.8 22.2 22.3 22.2	0.3 P WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 61.	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 14.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 112.0 112.0 116.5 116.5 116.5 116.5 116.5 116.5 116.5 116.5 116.5 116.5 116.5 116.5	ØD1 42 42 36 36 36 42 42 70 70 70 70 70 70 70 70 70 70 70	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA04 FA03 FA03 FA04 FA03 FA04 FA05 FA07 FA07 FA07 FA07 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2"	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5 206.0 127.0 124.5 143.5	B 21.0 21.5 21.5 21.5 21.5 23.5 23.5 23.5 23.5 39.0 39.0 37.0 38.0 38.0 38.0 38.5 41.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 11.0 13.5 10.5	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 12.1 13.1 20.4 20.4 19.9 21.8 22.2 22.3 23.2 22.4	0.3 P WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3	WINE WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5	ØD1 42 42 36 36 36 36 42 42 70 70 70 70 70 70 70 70 70 70 70 70 70 70	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA03 FA03 FA03 FA04 FA04 FA04 FA04 FA04 FA04 FA07 FA07 FA07 FA07 FA07 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5 206.0 127.0 124.5 143.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 23.5 39.0 39.0 39.0 39.0 38.0 38.0 38.0 38.5 41.0 41.0	C 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 11.0 13.5 10.5 10.5	I D 11.1 12.1 20.4 20.4 20.4 22.2 22.3 23.2 22.4 22.4	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 16.3	WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0	4.4 GD 6 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 14.0 13.9 13.9	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0 85.0 85.0 85.0 85.0 85.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 70.0 70.0 70.0 70	2.0 ØSD 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5	ØD1 42 42 36 36 36 36 42 42 42 42 42 42 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70	MSS SP-101 TYPE FA04 FA03 FA04 FA04 FA04 FA04 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5	B 21.0 21.5 21.5 22.0 21.5 23.5 23.5 23.5 23.5 23.5 23.5 39.0 39.0 37.0 38.0 38.0 38.5 41.0 41.0 53.0	C 8.0 8.0 9.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 11.0 13.5 10.5 12.0 12.0	I D 11.1 12.2 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1	0.3 E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 16.3 16.3 16.3 16.3 16.3 17.7 17.7	WENS WM 55.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0	S.3 GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0 85.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 70.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0	ØD1 42 42 36 36 36 42 42 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70	FA04 FA04 FA03 FA04 FA07 FA07
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3"	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 103.5 206.0 127.0 124.5 143.5 155.5 168.0 168.0	B 21.0 21.5 21.5 21.5 23.5 23.5 23.5 39.0 37.0 38.0 38.5 41.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 12.0 13.5 10.5 12.0 12.0 12.0	I D 11.1 120.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1	0.3 E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7	WHENS WM 55.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 64.0 86.0 <	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0	S.3 GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8	 MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 14.0 13.9 20.0 20.0 	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 40.0 70.0 70.0 70	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0	ØD1 42 42 36 36 36 36 42 42 42 42 42 70	FA04 FA04 FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA03 FA04 FA05 FA07 FA10 FA10
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80]	S00 CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 168.0 168.0 172.0	B 21.0 21.5 21.5 21.5 23.5 23.5 23.5 23.5 23.5 39.0 39.0 39.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 53.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 12.0 13.5 10.5 12.0 12.0 12.0 12.0 12.0	I D 11.1 20.4 22.2 22.4 27.1 27.1 27.1 27.1	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7	WINE WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8	- MM 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 10.0 19.0 19.0 19.0	ØD1 42 42 36 36 36 36 36 36 36 70	MAX MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA03 FA04 FA07 FA10 FA10 FA10 FA10
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 135.5 168.0 173.0 199.0	B 21.0 21.5 21.5 21.5 23.5 23.5 23.5 23.5 23.5 39.0 39.0 39.0 38.0 38.0 38.0 38.0 38.0 53.0 53.0 53.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 11.0 13.5 10.5 12.0 12.0 12.0 12.0 12.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 120.4 20.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1 27.1 27.1	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7	WINE WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0	ØD1 42 42 36 36 36 36 36 36 370 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102	MAX MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA07 FA10 FA10 FA10 FA10 FA10
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80] 4"	S00 CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.3 59.5 69.5 69.5 103.5 135.5 168.0 173.0 188.0	B 21.0 21.5 21.5 21.5 21.5 23.5 23.5 23.5 39.0 37.0 38.0 38.0 38.5 41.0 53.0 53.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 10.5 11.0 13.5 10.5 12.0 12.0 12.0 12.0 12.0 12.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 12.4 20.4 20.4 20.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1 27.1 29.1	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0 14.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7	WINENS WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0 102.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0	3.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8	- MM &W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 68	LM 42.0 36.0 37.0 37.0 35	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0	ØD1 42 42 36 36 36 36 42 42 42 42 42 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102 102 102	MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA07 FA10 FA10 FA10 FA10 FA10 FA10
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80] 4" [DN 100]	S00 CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 127.0 124.5 135.5 168.0 173.0 188.0 220.0	B 21.0 21.5 21.5 21.5 21.5 23.5 23.5 23.5 39.0 37.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 53.0 53.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 11.0 13.5 10.5 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 12.1 20.4 20.4 20.4 20.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1 27.1 29.1 41.1	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0 14.0 14.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.7	WINE WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0 102.0 102.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0	S.3 OR MC GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0 56.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2	- MM & W & 0.0 & 0.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 100.0 100.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 10.0 19.0 19.0 19.0 19.0 19.0 24.0	ØD1 42 42 36 36 36 36 42 42 42 42 42 42 70 70 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102 102 102	MAX MSS SP-101 TYPE FA04 FA03 FA03 FA03 FA03 FA04 FA03 FA03 FA03 FA04 FA04 FA04 FA04 FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA10 FA10
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80] 4" [DN 100]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 168.0 173.0 188.0 229.0 267.0	B 21.0 21.5 21.5 21.5 21.5 21.5 23.5 23.5 23.5 23.5 39.0 37.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 53.0 53.0 53.0 53.0 53.0 53.0 75.5	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 10.5 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 13.1 20.4 21.8 22.2 22.3 23.2 22.4 27.1 27.1 29.1 41.1 42.4	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0 14.0 14.0 18.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 17.7 17.7 29.5	WINENS WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0 102.0 102.0 102.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0	S.S GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 56.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2	- MM & W 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0 120.0 20.0 20.0 20.0 20.0 30.0 30.0	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 132.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 114.0 114.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 24.0	ØD1 42 42 36 36 36 36 36 42 42 42 42 42 70 70 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102 102 102 102 102 102 102 102	MAX FA04 FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA10 FA12
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 65] 3" [DN 80] 4" [DN 100] 6" [DN 150]	CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 103.5 103.5 103.5 103.5 103.5 168.0 173.0 188.0 229.0 267.0 266.5	B 21.0 21.5 22.0 21.5 23.5 23.5 23.5 23.5 39.0 37.0 38.0 38.0 38.5 41.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 10.5 11.0 13.5 10.5 12.0 16.0 17.0 18.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 120.4 20.4 20.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1 29.1 41.1 43.1 49.1	0.3 DP WO E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0 14.0 18.0 18.0	F 7.0 5.9 6.0 6.0 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 17.7 29.5 29.5 29.5	WINENS WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0 102.0 133.0 133.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 50.0 50.0 50.0 50.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0 70.0	S.3 GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 43.0 44.0 44.0 44.0 44.0 44.0 56.0 <td>P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2</td> <td> MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 13.9 20.0 20.0 20.0 20.0 20.0 20.0 20.0 30.0 30.0 </td> <td>GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 132.0 132.0</td> <td>LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0</td> <td>2.3 ØSD 12 12 12 12 12 12 12 12 12 12</td> <td>ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0 24.0 24.0</td> <td>ØD1 42 42 36 36 36 36 36 36 36 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102 102 102 102 102 102 102 102 102 125 125</td> <td>MAS FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA10 FA12 FA12</td>	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2	 MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0 14.0 14.0 14.0 13.9 20.0 20.0 20.0 20.0 20.0 20.0 20.0 30.0 30.0 	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 132.0 132.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 12.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0 24.0 24.0	ØD1 42 42 36 36 36 36 36 36 36 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 102 102 102 102 102 102 102 102 102 102 102 102 125 125	MAS FA04 FA03 FA04 FA04 FA04 FA04 FA04 FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA10 FA12 FA12
Size 1/2" [DN 15] 3/4" [DN 20] 1" [DN 25] 1-1/2" [DN 40] 2" [DN 50] 2-1/2" [DN 65] 3" [DN 80] 4" [DN 100] 6" [DN 150]	SOC CLASS 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300 600 150 300	A 58.0 59.5 59.5 60.0 59.5 69.5 69.5 69.5 103.5 168.0 188.0 229.0 266.5 310.2	B 21.0 21.5 22.0 21.5 23.5 23.5 23.5 23.5 39.0 37.0 38.0 38.0 38.5 41.0 53.0 53.0 53.0 53.0 75.5 75.0 75.5 70.0	C 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 10.5 10.5 11.0 13.5 10.5 12.0 14.0	I D 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 120.4 20.4 20.4 20.4 22.2 22.3 23.2 22.4 27.1 27.1 27.1 27.1 27.1 29.1 41.1 43.1 49.1	0.3 E 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0 18.0 18.0 22.0	F 7.0 5.9 6.0 5.9 5.9 5.9 5.9 14.3 14.3 16.3 16.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 29.5 29.5 29.5 29.5	WINENS WM 55.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 58.0 64.0 64.0 86.0 86.0 86.0 86.0 86.0 102.0 102.0 102.0 102.0 102.0 133.0 133.0	4.4 GD 46.5 46.5 46.5 46.5 46.5 46.5 46.5 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 100.0 100.0 100.0	S.S GW 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 43.0 44.0 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0 78.0 78.0 78.0	P-UNC 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-1/4 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2 4-1/2 4-1/2 4-1/2	 MM KW 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 14.0 14.0<!--</td--><td>GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 132.0 132.0 145.0</td><td>LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0 114.0</td><td>2.3 ØSD 12 12 12 12 12 12 12 12 12 12</td><td>ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0 24.0 24.0</td><td>ØD1 42 42 36 36 36 36 36 36 36 36 36 36 36 36 36 37 70 102 102 102 102 102 102 125 125 125</td><td>MSS SP-101 FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA07 FA10 FA10</td>	GL 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 68.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 132.0 132.0 145.0	LM 42.0 36.0 36.0 36.0 36.0 36.0 40.0 40.0 40.0 40.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0 114.0	2.3 ØSD 12 12 12 12 12 12 12 12 12 12	ØGH 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 9.5 12.0 12.0 12.0 12.0 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 19.0 19.0 19.0 19.0 24.0 24.0	ØD1 42 42 36 36 36 36 36 36 36 36 36 36 36 36 36 37 70 102 102 102 102 102 102 125 125 125	MSS SP-101 FA04 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA03 FA04 FA03 FA04 FA07 FA10 FA10



www.gwcitalia.com

					то	P WOF	RKS DI	MENSI	ION FC	R MO	DEL C -	INCH						
Size	CLASS	A	в	с	D	E	F	wм	GD	GW	P-UNC	ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
	150	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
2" x 1.5" [DN 50 x DN 40]	300	4.1	1.5	0.4	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
	600	4.1	1.5	0.5	0.8	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
	150	4.8	1.5	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
3" x 2" [DN 80 x DN 50]	300	5.0	1.5	0.4	0.9	0.4	0.6	3.4	2.4	1.7	4-5/16	0.6	3.3	2.8	0.8	0.6	2.8	FA07
	600	4.9	1.5	0.6	0.9	0.4	0.6	3.7	2.4	1.7	4-5/16	0.6	3.3	3.0	0.8	0.6	2.8	FA07
	150	6.6	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
4" x 3" [DN 100 x DN 80]	300	6.6	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
	600	6.8	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
	150	7.4	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
6" x 4" [DN 150 x DN 100]	300	7.4	2.1	0.5	1.1	0.6	0.7	4.0	2.9	2.2	4-3/8	0.8	3.9	3.7	1.2	0.7	4.0	FA10
	600	9.0	3.0	0.6	1.6	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
8" x 6"	150	10.3	3.0	0.6	1.6	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
[DN 200 x DN 150]	300	10.3	3.0	0.6	1.7	0.7	1.2	5.2	3.9	3.1	4-1/2	1.2	5.2	4.5	1.6	0.9	4.9	FA12
10" x 8"	150	12.6	3.1	0.7	1.7	0.9	1.2	5.9	4.4	3.3	4-5/8	1.4	5.7	5.3	2.0	0.9	5.5	FA14
[DN 250 x DN 200]	300	12.6	3.1	0.7	1.9	0.9	1.2	5.9	4.4	3.3	4-5/8	1.4	5.7	5.3	2.0	0.9	5.5	FA14
															a	·	^	
	·				тс	P WO	RKS D	IMENS	ION F	OR MC	DEL C	- MM						
Size	CLASS	A	В	с	TC D	P WO	RKS D	IMENS WM	GD	OR MC GW	DEL C	- MM ĸw	GL	LM	ØSD	ØGH	ØD1	MSS SP-101 TYPE
Size	CLASS 150	A 103.5	B 39.0	C 10.5	D 20.4	P WO E 10.0	RKS D F 14.3	MENS WM 86.0	GD 61.0	OR MC GW 44.0	DEL C P-UNC 4-5/16	- MM KW 14.0	GL 85.0	LM 70.0	ØSD 19.8	ØGH 16.5	ØD1 70	MSS SP-101 TYPE FA07
Size 2" x 1.5" [DN 50 x DN 40]	CLASS 150 300	A 103.5 103.5	B 39.0 39.0	c 10.5 10.5	D 20.4 20.4	E 10.0 10.0	F 14.3 14.3	WENS 86.0 86.0	GD 61.0 61.0	OR MC GW 44.0 44.0	DEL C P-UNC 4-5/16 4-5/16	- MM KW 14.0 14.0	GL 85.0 85.0	LM 70.0 70.0	ØSD 19.8 19.8	ØGH 16.5 16.5	ØD1 70 70	MSS SP-101 TYPE FA07 FA07
Size 2" x 1.5" [DN 50 x DN 40]	CLASS 150 300 600	A 103.5 103.5 103.5	B 39.0 39.0 37.0	C 10.5 10.5 12.0	TC D 20.4 20.4 19.9	P WO E 10.0 10.0	RKS D F 14.3 14.3 14.3	WM 86.0 86.0 86.0	GD 61.0 61.0 61.0	OR MO GW 44.0 44.0 44.0	DEL C P-UNC 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0	GL 85.0 85.0	LM 70.0 70.0 70.0	ØSD 19.8 19.8 19.8	ØGH 16.5 16.5 16.0	ØD1 70 70 70	MSS SP-101 TYPE FA07 FA07 FA07
Size 2" x 1.5" [DN 50 x DN 40]	CLASS 150 300 600 150	A 103.5 103.5 103.5 122.0	B 39.0 39.0 37.0 38.0	C 10.5 10.5 12.0 9.5	D 20.4 20.4 19.9 21.8	E 10.0 10.0 10.0 10.0	RKS D F 14.3 14.3 14.3 16.3	WM 86.0 86.0 86.0 86.0	GD 61.0 61.0 61.0 61.0 61.0	OR MC GW 44.0 44.0 44.0 44.0	DEL C P-UNC 4-5/16 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0 14.0	GL 85.0 85.0 85.0 85.0	LM 70.0 70.0 70.0 70.0	ØSD 19.8 19.8 19.8 19.8	ØGH 16.5 16.5 16.0 16.5	ØD1 70 70 70 70	MSS SP-101 TYPE FA07 FA07 FA07 FA07 FA07
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50]	CLASS 150 300 600 150 300	A 103.5 103.5 103.5 103.5 122.0 128.0	B 39.0 39.0 37.0 38.0 39.0	C 10.5 10.5 12.0 9.5 11.0	TC D 20.4 20.4 19.9 21.8 22.8	P WO E 10.0 10.0 10.0 10.0 10.0	RKS D F 14.3 14.3 14.3 16.3 16.3	WM 86.0 86.0 86.0 86.0 86.0 86.0 86.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0	OR MC GW 44.0 44.0 44.0 44.0 44.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0 14.0 14.0	GL 85.0 85.0 85.0 85.0 85.0	LM 70.0 70.0 70.0 70.0 70.0	ØSD 19.8 19.8 19.8 19.8 19.8	ØGH 16.5 16.5 16.0 16.5 16.5	ØD1 70 70 70 70 70 70	MSS SP-101 TYPE FA07 FA07 FA07 FA07 FA07 FA07
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50]	CLASS 150 300 600 150 300 600	A 103.5 103.5 103.5 122.0 128.0 124.5	B 39.0 39.0 37.0 38.0 39.0 38.5	C 10.5 10.5 12.0 9.5 11.0 16.0	D 20.4 20.4 19.9 21.8 22.8 22.3	P WO E 10.0 10.0 10.0 10.0 10.0 10.0	RKS D F 14.3 14.3 14.3 16.3 16.3	WM 86.0 86.0 86.0 86.0 86.0 94.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0	OR MC GW 44.0 44.0 44.0 44.0 44.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0 14.0 14.0 14.0	GL 85.0 85.0 85.0 85.0 85.0 85.0 85.0	LM 70.0 70.0 70.0 70.0 70.0 70.0	ØSD 19.8 19.8 19.8 19.8 19.8 19.8 19.8	ØGH 16.5 16.5 16.0 16.5 16.5 16.0	ØD1 70 70 70 70 70 70 70	MSS SP-101 TYPE FA07 FA07 FA07 FA07 FA07 FA07 FA07 FA07
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50]	CLASS 150 300 600 150 300 600 150	A 103.5 103.5 103.5 122.0 128.0 124.5 168.0	B 39.0 37.0 38.0 39.0 38.5 53.0	C 10.5 10.5 12.0 9.5 11.0 16.0 12.0	TC D 20.4 20.4 19.9 21.8 22.8 22.3 27.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0	RKS D F 14.3 14.3 14.3 16.3 16.3 16.3 16.3 17.7	WM 86.0 86.0 86.0 86.0 94.0 102.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0 71.0	GW 44.0 44.0 44.0 44.0 44.0 44.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0 14.0 14.0 14.0 20.0	GL 85.0 85.0 85.0 85.0 85.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 76.0 95.0	ØSD 19.8 19.8 19.8 19.8 19.8 19.8 29.8	ØGH 16.5 16.5 16.0 16.5 16.5 16.0 19.0	ØD1 70 70 70 70 70 70 70 102	MSS SP-101 TYPE FA07
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80]	CLASS 150 300 600 150 300 600 150 300	A 103.5 103.5 103.5 122.0 128.0 124.5 168.0 168.0	B 39.0 37.0 38.0 38.0 38.5 53.0 53.0	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0	TC D 20.4 20.4 19.9 21.8 22.8 22.3 27.1 27.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7	WM 86.0 86.0 86.0 86.0 94.0 102.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0	GW 44.0 44.0 44.0 44.0 44.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16	- MM KW 14.0 14.0 14.0 14.0 14.0 14.0 20.0 20.0	GL 85.0 85.0 85.0 85.0 85.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0	ØSD 19.8 19.8 19.8 19.8 19.8 19.8 29.8 29.8	ØGH 16.5 16.5 16.0 16.5 16.5 16.0 19.0 19.0	ØD1 70 70 70 70 70 70 102 102	MSS SP-101 TYPE FA07
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80]	CLASS 150 300 150 300 600 150 150 300 600	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0	B 39.0 39.0 37.0 38.0 39.0 38.5 53.0 53.0 53.0	C 10.5 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0	D 20.4 20.4 19.9 21.8 22.8 22.3 27.1 27.1 27.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7	WM 86.0 86.0 86.0 86.0 102.0 102.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0	OR MC Gw 44.0 44.0 44.0 44.0 56.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8	- MM KW 14.0 14.0 14.0 14.0 14.0 20.0 20.0 20.0	GL 85.0 85.0 85.0 85.0 100.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 18.0	ØD1 70 70 70 70 70 70 102 102	MSS SP-101 TYPE FA07 FA10 FA10 FA10
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80]	CLASS 150 300 600 150 600 150 300 600 600 150	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0	B 39.0 37.0 38.0 38.0 38.5 53.0 53.0 53.0 53.0	C 10.5 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0	D 20.4 20.4 21.8 22.8 22.3 27.1 27.1 27.1 27.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7	WM 86.0 86.0 86.0 86.0 102.0 102.0 102.0	GD 61.0 61.0 61.0 61.0 61.0 61.0 61.0 61.0	GW 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/3/8 4-3/8 4-3/8	 MM KW 14.0 14.0 14.0 14.0 20.0 20.0 20.0 20.0 	GL 85.0 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 29.8 29.8 29.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.5 16.5 18.0 18.0 19.0 19.0	ØD1 70 70 70 70 70 70 70 102 102 102 102	MSS SP-101 TYPE FA07 FA10 FA10 FA10 FA10 FA10
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80] 6" x 4" [DN 150 x DN 100]	CLASS 150 300 150 300 600 150 300 600 150 150 300	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0 188.0	B 39.0 37.0 38.0 38.5 53.0 53.0 53.0 53.0 53.0 53.0	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0 12.0 12.0	D 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4 22.8 22.3 27.1 27.1 27.1 27.9 27.9	E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7 17.7 17.7 17.7 17.7	WM 86.0 86.0 86.0 94.0 102.0 102.0 102.0 102.0	GD F0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0	GW 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/18 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8	 MM KW 14.0 14.0 14.0 14.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 	GL 85.0 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 29.8 29.8 29.8 29.8 29.8 29.8 29.8 29.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.5 16.5 18.0 19.0 18.0 19.0 19.0 19.0	ØD1 70 70 70 70 70 70 70 102 102 102 102 102	MSS SP-101 TYPE FA07 FA10 FA10 FA10 FA10 FA10
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80] 6" x 4" [DN 150 x DN 100]	CLASS 150 300 150 300 600 150 300 600 150 300 600	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0 188.0 229.0	B 39.0 37.0 38.0 39.0 38.5 53.0 53.0 53.0 53.0 53.0 53.0 75.5	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	D 20.4 20.4 19.9 21.8 22.8 27.1 27.1 27.1 27.9 41.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7 17.7 29.5	WM 86.0 86.0 86.0 94.0 102.0 102.0 102.0 102.0 102.0 102.0 102.0 102.0	GD F0 61.0 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 100.0	GW 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 56.0 56.0 56.0 56.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2	- MM KW 14.0 14.0 14.0 14.0 14.0 20.0 20.0 20.0 20.0 20.0 30.0	GL 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	LM 70.0 70.0 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 29.8 39.8 39.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.5 18.0 19.0 19.0 19.0 24.0	ØD1 70 70 70 70 70 70 102 102 102 102 102 102 102 102	MSS SP-101 TYPE FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA10
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80] 6" x 4" [DN 150 x DN 100] 8" x 6"	CLASS 150 300 150 300 600 150 300 600 150 300 600 150	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0 188.0 229.0 262.0	B 39.0 37.0 38.0 39.0 38.5 53.0 53.0 53.0 53.0 53.0 53.0 75.5 75.5	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	D 20.4 20.4 19.9 21.8 22.8 27.1 27.1 27.9 41.1 41.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7 29.5 29.5	WM 86.0 86.0 86.0 94.0 102.0 102.0 102.0 102.0 102.0 103.0	GD F GD 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 100.0	GW 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 78.0 78.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/3 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2	 MM KW 14.0 14.0 14.0 14.0 20.0 20.0 20.0 20.0 30.0 30.0 	GL 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	LM 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 29.8 39.8 39.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.0 19.0 19.0 19.0 24.0 24.0	ØD1 70 70 70 70 70 102 102 102 102 102 102 102 125	MSS SP-101 TYPE FA07 FA10 FA12
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80] 6" x 4" [DN 150 x DN 100] 8" x 6" [DN 200 x DN 150]	CLASS 150 300 150 300 600 150 300 600 150 300 150 300 150 300	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0 188.0 229.0 262.0 262.0	B 39.0 37.0 38.0 39.0 38.5 53.0 53.0 53.0 53.0 53.0 53.0 75.5 75.5 75.5	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 16.0 16.0 16.0	D 20.4 20.4 19.9 21.8 22.8 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.9 41.1 43.1	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7 29.5 29.5	WM 86.0 86.0 86.0 94.0 102.0 102.0 102.0 102.0 103.0 133.0	GDN F GD 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 100.0 100.0	GW 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 78.0 78.0 78.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2 4-1/2	 MM KW 14.0 14.0 14.0 20.0 20.0 20.0 20.0 20.0 30.0 30.0 30.0 	GL 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 132.0 132.0	LM 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 39.8 39.8 39.8	ØGH 16.5 16.5 16.5 16.5 16.5 16.0 19.0 19.0 19.0 24.0 24.0 24.0	ØD1 70 70 70 70 70 102 102 102 102 102 102 102 125 125	MSS SP-101 TYPE FA07 FA10 FA10 FA10 FA10 FA10 FA10 FA12 FA12 FA12
Size 2" x 1.5" [DN 50 x DN 40] 3" x 2" [DN 80 x DN 50] 4" x 3" [DN 100 x DN 80] 6" x 4" [DN 150 x DN 100] 8" x 6" [DN 200 x DN 150] 10" x 8"	CLASS 150 300 150 300 600 150 300 600 150 300 150 300 150 300	A 103.5 103.5 122.0 128.0 124.5 168.0 168.0 173.0 188.0 229.0 262.0 262.0 319.0	B 39.0 37.0 38.0 39.0 35.0 53.0 53.0 53.0 53.0 53.0 53.0 53.0 75.5 75.5 79.0	C 10.5 12.0 9.5 11.0 16.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 16.0 16.0 16.0 18.0	D 20.4 20.4 19.9 21.8 22.8 27.1 27.1 27.1 27.9 41.1 43.1 42.6	P WO E 10.0 10.0 10.0 10.0 10.0 10.0 14.0 14.0	F 14.3 14.3 14.3 14.3 16.3 16.3 17.7 17.7 17.7 29.5 29.5 30.3	WM 86.0 86.0 86.0 94.0 102.0 102.0 102.0 102.0 103.0 133.0 133.0 150.0	GDN F GD 61.0 61.0 61.0 61.0 61.0 61.0 74.0 74.0 74.0 74.0 74.0 74.0 100.0 100.0 113.0	GW 44.0 44.0 44.0 44.0 44.0 56.0 56.0 56.0 56.0 78.0 78.0 85.0	P-UNC 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/16 4-5/3 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-3/8 4-1/2 4-1/2 4-1/2 4-5/8	 MM KW 14.0 14.0 14.0 20.0 20.0 20.0 20.0 30.0 30.0 36.0 	GL 85.0 85.0 85.0 85.0 100.0 100.0 100.0 100.0 132.0 132.0 145.0	LM 70.0 70.0 70.0 70.0 95.0 95.0 95.0 95.0 95.0 114.0 114.0 114.0 134.0	ØSD 19.8 19.8 19.8 19.8 29.8 29.8 29.8 39.8 39.8 39.8 39.8 39.8 49.8	ØGH 16.5 16.5 16.5 16.5 16.0 19.0 19.0 19.0 24.0 24.0 24.0 24.0 24.0	ØD1 70 70 70 70 70 102 102 102 102 102 102 102 102 125 125 125 125	MSS SP-101 TYPE FA07 FA10 FA10 FA10 FA10 FA12 FA12 FA12 FA12 FA12 FA12 FA12 FA12 FA14

TECHNICAL CHARACTERISTICS

PRESSURE / TEMPERATURE CHART

The following chart indicates the pressure and temperature ratings for commonly used seat material used in ASME 150# – 600# GWC floating ball valves. Other materials are available upon request.



TORQUE VALUES [INCH-LBS]

		ANSI Class#	
Bore	150	300	600
Size (In.)	Р	RESSURE (P	SI)
	285 PSI	740 PSI	1480 PSI
1/2" FP	48	60	145
3/4" FP	60	84	324
1" FP	99	140	450
1-1/2" FP 2" RP	180	264	850
2" FP 3" RP	240	492	919
2-1/2" FP	372	530	-
3" FP 4" RP	624	1500	2260
4" FP 6" RP	1332	2257	6441
6" FP 8" RP	4944	7231	-
8" FP 10" RP	9996	15466	-

FLANGED FLOATING VALVE Cv VALUES

Cv is a number measured in gallons/minute, which is calculated from the flow of water through the valve with a 1 psi pressure drop across the valve length.

SIZE (In.)	ANSI Class#		
	150	300	600
1/2" FP	20	20	20
3/4" FP	50	50	50
1" FP	95	95	95
1-1/2" FP	240	240	240
2" RP	133	133	133
2" FP	460	460	460
3" RP	245	245	245
2-1/2" FP	720	720	-
3" FP	1150	1150	1150
4" RP	590	590	590
4" FP	2125	2125	2125
6" RP	850	850	850
6" FP	5450	5450	-
8" RP	2200	2200	
8" FP	10225	10225	-
10" RP	3900	3900	

* No Safety factor added in the above torque.

GWC recommends Min. 25% (or) more to be considered based on application.

NOTES	

NOTES

NOTES	



WORLDWIDE HEADQUARTERS

GWC Italia S.p.A. Via A. Grandi, 5 20056 Trezzo Sull'Adda ph: 39-02-86882941 fax: 39-02-86882942

USA HEADQUARTERS

GWC Italia 7600 District Blvd. Bakersfield, CA 93313 USA ph: 661-834-1775 fax: 661-834-2072

www.gwcitalia.com