

# FIRE PROTECTION MATERIAL SUBMITTALS

FOR:

## Dollar General Lake City Water Storage Tank

**4357 COUNTY RD 242** LAKE CITY, FL 32024

Date: September 7, 2021

Our Project Number: FP-275291
Project Manager: Richard Bloom

Project Manager: Richard Bloom

Prepared By: AHB

The materials submitted represent the quality of materials specified. All materials may be substituted at this contractor's discretion for like equivalent materials.

W. W. Gay Fire & Integrated Systems, Inc. 2500 N.E. 18<sup>th</sup> Terrace Gainesville, Florida 32609 (352) 380-0317

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## PIPE & FITTINGS

### **GENERAL INFORMATION**



### **Product Specifications**

System: PVC Schedule 40 Pressure Pipe and Fitting System

**Scope:** This specification covers PVC Schedule 40 pipe and fittings for pressure applications. This system is

intended for pressure applications where the operating temperature will not exceed 140°F.

**Specification:** Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with

a Cell Class of 12454 as identified in ASTM D 1784.

PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. PVC Schedule 40 fittings shall conform to ASTM D 2466. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to NSF International Standard 61 or the health effects portion of NSF Standard 14

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, building, and fire code requirements. Buried pipe shall be installed in accordance with ASTM F 1668 and ASTM D 2774. Solvent cement joints shall be made in a two step process with primer conforming to ASTM F 656 and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents not compatible with PVC compounds. Systems shall be hydrostatically tested after installation. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings.

#### Referenced Standards\*:

ASTM D 1784	Rigid Vinyl Compounds
ASTM D 1785	PVC Plastic Pipe, Schedule 40
ASTM D 2466	PVC Plastic Fittings, Schedule 40
ASTM D 2564	Solvent Cements for PVC Pipe and Fittings
ASTM D 2774	Underground Installation of Thermoplastic Pressure Piping
ASTM F 656	Primers for PVC Pipe and Fittings
ASTM F 1668	Procedures for Buried Plastic Pipe
NSF Standard 14	Plastic Piping Components and Related Materials
NSF Standard 61	Drinking Water System Components - Health Effects

<sup>\*</sup>Note: Latest revision of each standard applies.

#### **Short Specification:**

Pipe and fittings shall be manufactured from PVC compound with a cell class of 12454 per ASTM D 1784 and conform with NSF International Standards 14 and 61. Pipe shall be iron pipe size (IPS) conforming to ASTM D 1785. Fittings shall conform to ASTM D 2466.

All pipe and fittings shall be produced by a single manufacturer and shall be installed in accordance with manufacturer's recommendations and applicable code requirements. Buried pipe shall be installed in accordance with ASTM F 1668 and ASTM D 2774. Solvent cements shall conform to ASTM D 2564, primer shall conform to ASTM F 656. The system is to be manufactured by Charlotte Pipe and Foundry Company and is intended for pressure applications where the temperature will not exceed 140°F.

#### **Product Certification**



This is to certify that all Plastic Pipe and Fittings manufactured by Charlotte Pipe and Foundry Company are manufactured in the United States and conform to the following standards:

#### **PVC SCH. 40 SOLID WALL PIPE**

ASTM D 1784, ASTM D 1785, ASTM D 2665 FHA UM 79a FEDERAL SPECIFICATION L-P-320a NSF STANDARD 14 AND 61

#### **PVC SCH. 40 DWV CELLULAR CORE PIPE**

ASTM D 4396, ASTM F 891 NSF STANDARD NO. 14

#### RePVC® SCH. 40 DWV PIPE WITH RECYLED CONTENT

ASTM D 4396, ASTM F 1760 NSF STANDARD NO. 14

#### **PVC SCH. 40 DWV FITTINGS**

ASTM D 1784, ASTM D 2665, ASTM D 3311, ASTM F1866 FHA UM 79a FEDERAL SPECIFICATION L-P-320a NSF STANDARD NO. 14

#### **PVC SDR-21 AND SDR-26 PRESSURE PIPE**

ASTM D 1784, ASTM D 2241 NSF STANDARD NO. 14 AND 61

#### **PVC SCH. 40 PRESSURE FITTINGS**

ASTM D 1784, ASTM D 2466 NSF STANDARD 14 AND 61

#### **PVC SCH. 40 WELL CASING PIPE**

ASTM D 1784, ASTM F 480 NSF STANDARD NO. 14 AND 61

#### **PVC SCH. 80 PIPE**

ASTM D 1784, ASTM D 1785 NSF STANDARD NO. 14 AND 61

#### **PVC SCH. 80 FITTINGS**

ASTM D 1784, ASTM D 2467 ASTM D 2464 ASTM F 1970 NSF STANDARD NO. 14 AND 61

#### **PVC SDR 35 SEWER MAIN PIPE**

ASTM D 1784, ASTM D 3034, SDR 35 ASTM D 3212, ASTM F 477

#### **PVC SEWER AND DRAIN PIPE**

ASTM D 1784, ASTM D 2729

#### **PVC THIN WALL PIPE & FITTINGS**

ASTM D 1784, ASTM D 2949 NSF STANDARD NO. 14

#### CPVC FLOWGUARD GOLD® CTS PIPE & FITTINGS

ASTM D 1784, ASTM D 2846 FHA UM-61a NSF STANDARD NO. 14 AND 61 CSA LISTED ON SPECIFIED ITEMS

#### **CPVC REUZE® CTS PIPE & FITTINGS**

ASTM D 1784, ASTM D 2846 NSF STANDARD NO. 14

#### <u>CPVC CHEMDRAIN® SCH. 40 PIPE & FITTINGS</u>

ASTM D 1784, ASTM F 2618 NSF STANDARD 14

#### **ABS SCH. 40 DWV CELLULAR CORE PIPE**

ASTM D 3965, ASTM F 628 NSF STANDARD NO. 14 cNSF® us-dwv

#### ABS PLUS®SCH. 40 DWV CELLULAR CORE PIPE

ASTM D 3965, ASTM D 4396, ASTM F 1488

#### **ABS SCH. 40 DWV FITTINGS**

ASTM D 3965, ASTM D 2661, ASTM D 3311 FHA UM 79a FEDERAL SPECIFICATION L-P-322b NSF STANDARD NO. 14

CHARLOTTE PIPE AND FOUNDRY COMPANY





### Pipe Reference Guide



						Si	zes	Ava	ilab	le									
Product	1/4	3/8	1/2	3/4	1	11/4	11/2	2	21/2	3	4	5	6	8	10	12	14	15	16
ChemDrain® CPVC Schedule 40 ★							•	•		•	•		•	•					
FlowGuard Gold® CPVC CTS SDR 11			•	•	•	•	•	•											
ReUze® CPVC CTS SDR 11			•	•	•		•	•											
PVC Schedule 80	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•		•
PVC Schedule 40			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
PVC Schedule 40 DWV ★						•	•	•		•	•	•	•	•	•	•	•		•
RePVC® Schedule 40 DWV with Recycled Content ★							•	•		•	•		•	•					
PVC Schedule 30 ★										•									
PVC DWV Foam Core ★							•	•		•	•		•	•	•	•			
PVC Well Casing								•	•	•	•		•	•					
PVC SDR 13.5 (PR315)			•																
PVC SDR 21 (PR200)				•	•	•	•	•											
PVC SDR 26 (PR160)						•	•	•		•									
PVC SDR 35 Sewer Main Belled-End ★†											•		•						
PVC SDR 35 Sewer Main Gasketed ★†											•		•	•					
PVC D 2729 Sewer and Drain ★†										•	•								
ABS DWV Foam Core ★							•	•		•	•		•						
ABS Plus® Foam Core DWV★							•	•		•	•								

★ Non-Pressure

† Not NSF Listed

#### You can't beat the system.®

#### Notes:

- 1. End treatments are Plain and Belled. Consult factory for availability.
- 2. Lengths are 10 and 20 feet (14 and 20 feet for Gasketed Sewer Main). Consult factory for availability and non-standard lengths.
- 3. PVC Schedule 40 Bell End and PVC Well Casing pipe lengths for sizes 4", 6", and 8" are 20 feet plus the bell (20 foot laying length).
- 4. PVC SDR 35 Sewer Main Pipe in 14 foot lengths are 14 feet plus the bell (14 foot laying length).



# **PVC Pipe: Schedule 40**



#### >> PVC Schedule 40 Pipe - Plain End

PVC SCHEDULE	40 (WHITE)	PLAIN	END	PVC 1120	AST	M D 1785
PART NO.	NOM. SIZE	UPC # 611942-	AVG. OD (IN.)	MIN. WALL (IN.)	MAX WORK Pressure at 23° c or 73° f	WT. PER 100 FT. (LBS.)
PVC 4005	½" x 10'	06658	.840	.109	600 PSI	15.9
PVC 4005	½" x 20'	03922	.840	.109	600 PSI	15.9
PVC 4007	3/4" x 10'	06661	1.050	.113	480 PSI	21.1
PVC 4007	3/4" x 20'	03925	1.050	.113	480 PSI	21.1
PVC 4010	1" x 10'	06664	1.315	.133	450 PSI	31.3
PVC 4010	1" x 20'	03928	1.315	.133	450 PSI	31.3
PVC 7100*	11/4" x 10'	03945	1.660	.140	370 PSI	42.4
PVC 7100*	11/4" x 20'	03946	1.660	.140	370 PSI	42.4
PVC 7112*	1½" x 10'	03947	1.900	.145	330 PSI	50.7
PVC 7112*	1½" x 20'	03948	1.900	.145	330 PSI	50.7
PVC 7200*	2" x 10'	03949	2.375	.154	280 PSI	68.1
PVC 7200*	2" x 20'	03950	2.375	.154	280 PSI	68.1
PVC 4025‡	2½" x 20'	04205	2.875	.203	300 PSI	108.0
PVC 7300*	3" x 10'	03951	3.500	.216	260 PSI	141.2
PVC 7300*	3" x 20'	03952	3.500	.216	260 PSI	141.2
PVC 7400†	4" x 10'	03953	4.500	.237	220 PSI	201.2
PVC 7400†	4" x 20'	03954	4.500	.237	220 PSI	201.2
PVC 7500†	5" x 20'	04837	5.563	.258	190 PSI	272.5
PVC 7600†	6" x 10"	03955	6.625	.280	180 PSI	353.7
PVC 7600†	6" x 20'	03956	6.625	.280	180 PSI	353.7
PVC 7800†	8" x 10'	13087	8.625	.322	160 PSI	532.3
PVC 7800†	8" x 20'	03958	8.625	.322	160 PSI	532.3
PVC 7910†	10" x 20'	03959	10.750	.365	140 PSI	754.7
PVC 7912†	12" x 20'	03961	12.750	.406	130 PSI	997.9
PVC 7914†	14" x 20'	04862	14.000	.437	130 PSI	1180.1
PVC 7916†	16" x 20'	04918	16.000	.500	130 PSI	1543.1

<sup>\*</sup> Dual Marked ASTM D 1785 and ASTM D 2665.

NOTE: When ordering, please specify plain end or bell end.

NSF Listed. Meets All Requirements of ASTM D 1784 and ASTM D 1785.

### **A WARNING**

Testing with or use of compressed air or gas in PVC / ABS / CPVC pipe or fittings can result in explosive failures and cause severe injury or death.





- NEVER test with or transport/store compressed air or gas in PVC / ABS / CPVC pipe or fittings.
- NEVER test PVC / ABS / CPVC pipe or fittings with compressed air or gas, or air over water boosters.
- ONLY use PVC / ABS / CPVC pipe for water or approved chemicals.
- Refer to warnings in PPFA User Bulletin 4-80 and ASTM D 1785.

<sup>†</sup> Triple Marked ASTM D 1785 & ASTM D 2665 & ASTM F 480.

<sup>‡</sup> Dual Marked ASTM D 1785 & ASTM F 480.



## SUBMITTAL FOR CHARLOTTE PIPE® PVC SCHEDULE 40 PRESSURE PIPE AND FITTING SYSTEM

Date:	
Job Name:	Location:
Engineer:	Contractor:
Cooper	

#### Scope:

This specification covers PVC Schedule 40 pipe and fittings for pressure applications. This system is intended for pressure applications where the operating temperature will not exceed 140° F.

#### Specification:

Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784.

PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. Injection molded PVC Schedule 40 fittings shall conform to ASTM D 2466. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to NSF International Standard 61 and the health-effects portion of NSF Standard 14.

#### Installation:

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, fire, and building code requirements. Buried pipe shall be installed in accordance with ASTM F 1668. Solvent cement joints shall be made in a two-step process with primer conforming to ASTM F 656 and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

#### Referenced Standards:

ASTM D 1784: Rigid Vinyl Compounds ASTM D 1785: PVC Plastic Pipe, Schedule 40 ASTM D 2466: PVC Plastic Fittings, Schedule 40

ASTM D 2564: Solvent Cements for PVC

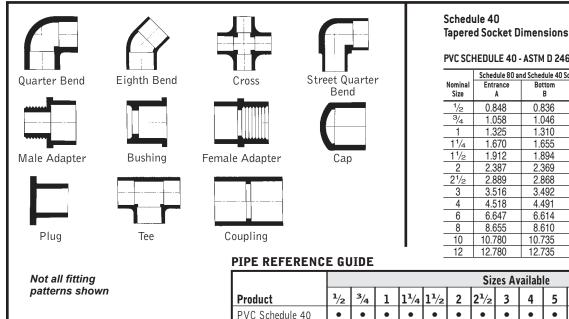
Pipe and Fittings

ASTM F 1668: Procedures for Buried Plastic Pipe

NSF Standard 14: Plastic Piping Components & Related Materials

NSF Standard 61: Drinking Water System Components -

Health Effects



PVC SCHEDULE 40 - ASTM D 2466 Schedule 40 Schedule 80 and Schedule 40 Socket Diameter Schedule 80 Tolerance Socket Length Socket Length C (Minimum) C (Minimum) 0.836 ±0.004 0.875 0.688 1.046 ±0.004 1.000 0.719 1.310 ±0.005 1.125 0.875 1.655 ±0.005 1.250 0.938 1.894 ±0.006 1.375 1.094 2.369 ±0.006 1.500 1.156 2.868 ±0.007 1.750 1.750 3.492 1.875 1.875 ±0.008 4.491 ±0.009 2.250 2.000 ±0.011 3.000 6.614 3.000 4.000 8.610 ±0.015 4.000 10.735 ±0.015 5.000 5.000 6.000 12.735 ±0.015 6.000

6 | 8 | 10 | 12 | 14 | 16

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Charlotte Pipe and Foundry Company • P.O. Box 35430 Charlotte, NC 28235 • (800) 438-6091 • www.charlottepipe.com





List Price Schedule PVC-112 Effective January 16, 2012 Supersedes Price Schedule PVC-1011

Possession of this price list shall not be construed as an offer to sell the products listed.

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# NSF.

### >> PVC Drain-Waste-Vent Fittings

For Non-Pressure Applications

ASTM D 2665 & ASTM F 1866

Size UPC# No. Per No. Per List Price Size UPC# No. Per No. Per List Price 611942- Carton Pallet Each 611942- Carton Pallet Each
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#### Part No. PVC 100 Coupling (HxH)

11/4	03188	100	8000	\$8.32
1½	03189	100	5600	1.88
2	03190	100	4900	2.45
3	03191	60	1080	8.43
4	03192	25	700	14.94
6	03193	15	180	48.67
8	03194	6	72	107.19
10	03195	24/half crate	36/crate	*
12	03196	12/half crate	24/crate	*
14 <sup>(F)</sup>	12190	6/half crate	12/crate	*
16 <sup>(F)</sup>	12191	4/half crate	8/crate	*



#### Part No. PVC 101 Female Adapter (FPT x H)

11/4	03197	100	8000	\$17.81
1½	03198	100	5600	3.50
2	03199	100	4900	5.96
3	03200	30	1470	16.03
4	03201	10	560	20.55
6	03202	10	180	69.02
8	11342	6	72	194.46
10 <sup>(F)</sup>	12192	30/half crate	60/crate	*
12 <sup>(F)</sup>	12193	12/half crate	24/crate	*



## Part No. PVC 101X Female Adapter with Cleanout Plug (H)

8**	12269	5	80	\$299.26	
10 <sup>(F)</sup>	12267	30/half crate	60/crate	*	N
12 <sup>(F)</sup>	12268	12/half crate	24/crate	*	N

Note: Shading indicates new part.



## Part No. PVC 102 Pipe Increaser-Reducer (HxH)

1½x2	03203	25	3600	\$5.45	
1½x3	03204	25	1400	16.57	
2x3	03205	20	1600	12.73	
2x4	03206	10	800	25.26	
3x4	03207	20	1120	26.86	
3x6	11073	5	140	117.36	
4x6	11074	5	140	108.59	
4x8	11343	2	70	192.91	
4x10**	11344	36/half crate	72/crate	*	
4x12**	12184	27/half crate	45/crate	*	
4x14 <sup>(F)</sup>	12199	6/half crate	12/crate	*	N
4x16 <sup>(F)</sup>	12178	4/half crate	8/crate	*	N
6x8	11123	2	70	158.74	
6x12**	11345	27/half crate	45/crate	*	
6x14 <sup>(F)</sup>	12195	5/half crate	10/crate	*	N
6x16 <sup>(F)</sup>	12198	4/half crate	8/crate	*	N
8x10	10012	36/half crate	72/crate	*	
8x12	10014	27/half crate	45/crate	*	
8x14 <sup>(F)</sup>	12175	5/half crate	10/crate	*	
8x16 <sup>(F)</sup>	12179	4/half crate	8/crate	*	
10x12	10015	27/half crate	45/crate	*	
10x14 <sup>(F)</sup>	12176	3/half crate	5/crate	*	N
10x16 <sup>(F)</sup>	12177	4/half crate	8/crate	*	N
12x14 <sup>(F)</sup>	12194	4/half crate	8/crate	*	
12x16 <sup>(F)</sup>	12196	2/half crate	4/crate	*	
14x16 <sup>(F)</sup>	12197	2/half crate	4/crate	*	

#### (F) Fabricated

- For pricing of this item, please see current PVC Large-Diameter DWV fitting list price schedule.
- \*\* Assembled from two molded components

Note: N = non-stock item – contact customer service for availability.

### You can't beat the system.®



Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each	Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each
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#### Part No. PVC 103 Trap Adapter - Male (SPG x SLIP)

1½x1¼	03208	100	8000	\$6.37
1½	03209	50	7200	6.77
2	03210	25	3600	20.60



#### Part No. PVC 103P Trap Adapter - Male (SPG x SLIP with Plastic Nut)

1½x1¼	03211	75	6000	\$7.64
1½	03212	50	5600	6.93
2	03213	25	3600	27.31



Part No. PVC 103R Trap Adapter - Male with  $1^1/2^{\prime\prime}$  Plastic Nut and Washers to Fit  $1^1/2^{\prime\prime}$  and  $1^1/4^{\prime\prime}$  Traps

(SPG x SLIP with Plastic Nut)

1½ 04139 50 5600	\$7.37
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Part No. PVC 103X
Trap Adapter - Male
(SPG x SLIP with Chrome Nut)

1½x1¼	03214	100	8000	\$9.77
1½	03215	50	5600	9.73
2	03216	25	3600	34.98



Part No. PVC 104 Trap Adapter - Female (HxSLIP)

1½x1¼	03220	50	5600	\$7.23
1½	03221	50	7200	5.77

Note: Shading indicates new part.

(F) Fabricated



#### Part No. PVC 104P Trap Adapter - Female

(H x SLIP with Plastic Nut)

1½x1¼	03223	50	5600	\$6.93
1½	03224	50	5600	6.64



Part No. PVC 104R Trap Adapter - Female with  $1^1/2^{\prime\prime}$  Plastic Nut and Washers to Fit  $1^1/2^{\prime\prime}$  and  $1^1/4^{\prime\prime}$  Traps

(H x SLIP with Plastic Nut)

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#### Part No. PVC 104X Trap Adapter - Female (H x SLIP with Chrome Nut)

11/4	03226	50	5600	\$12.04
1½x1¼	03227	50	5600	9.50
1½	03228	50	5600	9.73



## Part No. PVC 105 Fitting Cleanout Adapter [SPG x FPT]

1½	03233	50	7200	\$4.43
2	03234	50	4000	5.72
3	03235	25	1225	16.12
4	03236	10	560	26.47
6	03237	10	280	77.10
8 <sup>(F)</sup>	12180	5	80	197.86
10 <sup>(F)</sup>	10175	18/half crate	36/crate	*
12 <sup>(F)</sup>	10176	9/half crate	18/crate	*

 $H = \mathsf{Hub}$ 

SPG = Spigot

SLIP = Slip

MPT = Male Pipe Thread

FPT = Female Pipe Thread

<sup>\*</sup> For pricing of this item, please see current PVC Large-Diameter DWV fitting list price schedule.



	PC# No. Per 1942- Carton	No. Per Pallet	List Price Each	Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each
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# Part No. PVC 105X Fitting Cleanout Adapter with Cleanout Plug (SPIGOT)

1½	03239	50	5600	\$7.74	
2	03240	50	2800	9.40	
3	03241	25	875	22.72	
4	03242	10	560	36.18	
6	03243	10	180	109.50	
8 <sup>(F)</sup>	12181	5	80	321.63	
10 <sup>(F)</sup>	10178	18/half crate	36/crate	*	N
12 <sup>(F)</sup>	10179	9/half crate	18/crate	*	N



#### Part No. PVC 106 Cleanout Plug (MPT)

1½	03251	50	7200	\$3.32
2	03252	50	7200	3.69
3	03253	25	3600	6.61
4	03254	30	2400	9.73
6	03255	10	800	32.41
8	10162	5	280	164.34
10	12185	150/half crate	300/crate	*
12	12186	76/half crate	152/crate	*

Note: Shading indicates new part.

- (F) Fabricated
- \* For pricing of this item, please see current PVC Large-Diameter DWV fitting list price schedule.
- \*\* Assmbled from two molded components

Note: N = non-stock item – contact customer service for availability.



#### Part No. PVC 107 Flush Bushing (SPG x H)

1½x1¼	03261	100	14400	\$7.33
2x11/4	03262	50	7200	7.50
2x1½	03263	50	7200	3.23
3x1½	03264	30	2400	15.51
3x2	03265	30	2400	8.10
4x2	03266	30	1470	26.97
4x3	03267	30	1470	13.76
6x4	03268	10	490	71.60
8x4	10618	1	112	170.67
8x6	03269	1	144	155.93
10x4**	12187	30/half crate	60/crate	*
10x6**	11346	30/half crate	60/crate	*
10x8	10180	48/half crate	84/crate	*
12x4**	11347	38/half crate	76/crate	*
12x6**	10634	48/half crate	84/crate	*
12x8	10181	36/half crate	54/crate	*
12x10	10182	36/half crate	54/crate	*



#### Part No. PVC 107 Concentric Reducer Bushing (SPG x H)

14x4 <sup>(F)</sup>	12208	5/half crate	10/crate	*	N
14x6 <sup>(F)</sup>	12209	5/half crate	10/crate	*	N
14x8 <sup>(F)</sup>	12210	5/half crate	10/crate	*	N
14x10 <sup>(F)</sup>	12204	6/half crate	12/crate	*	
14x12 <sup>(F)</sup>	12205	6/half crate	12/crate	*	
16x4 <sup>(F)</sup>	12212	4/half crate	8/crate	*	N
16x6 <sup>(F)</sup>	12206	4/half crate	8/crate	*	
16x8 <sup>(F)</sup>	12207	4/half crate	8/crate	*	
16x10 <sup>(F)</sup>	12182	4/half crate	8/crate	*	
16x12 <sup>(F)</sup>	12183	4/half crate	8/crate	*	
16x14 <sup>(F)</sup>	12211	4/half crate	8/crate	*	N



Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each	Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each	
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## Part No. PVC 108 Flush Bushing (Cleanout Adapter) (SPG x FPT)

2x1½	03274	50	7200	\$16.74
10x8	10232	48/half crate	84/crate	*
12x8	10233	36/half crate	54/crate	*



# Part No. PVC 108X Flush Bushing (Cleanout Adapter) with Plug (SPG x FPT)

10x8	10234	48/half crate	84/crate	*
12x8	10235	36/half crate	54/crate	*



## Part No. PVC 109 Male Adapter [Will not accept a tail piece]

Octagon shoulders for tightening purposes.  $(H \times MPT)$ 

11/4	03285	50	7200	\$8.90
1½x1½	03287	25	3600	4.79
11/2	03286	50	5600	3.65
2	03288	50	5600	4.73
3	03289	25	1400	13.56
4	03290	25	875	30.05



#### Part No. PVC 110 Flush Cleanout Plug (MPT)

2	03291	25	7200	\$12.11
3	03292	50	7200	14.06
4	03293	25	3600	14.21



#### Part No. PVC 111 Male Fitting Adapter (SPG x MPT)

1½	03298	50	7200	\$14.27
2	03299	25	3600	15.94

Note: Shading indicates new part.



#### Part No. PVC 115 Adapter Coupling (SDR 35 H x DWV H)

8 <sup>(F)</sup>	12270	5	80	\$121.82
10 <sup>(F)</sup>	12271	10/half crate	20/crate	*
10x8 <sup>(F)</sup>	12272	10/half crate	20/crate	*
12 <sup>(F)</sup>	12273	10/half crate	20/crate	*



#### Part No. PVC 116 Cap (SOCKET)

1½	03301	10	2880	\$7.48
2	03302	5	1800	12.49
3	03303	10	1440	21.60
4	03304	5	560	30.85
6	03305	5	175	77.90
8	10252	3	63	267.24
10	11121	42/half crate	63/crate	*
12	11122	2/box	24/pallet	*
14 <sup>(F)</sup>	12214	24/half crate	48/crate	*
16 <sup>(F)</sup>	12213	14/half crate	28/crate	*



# Part No. PVC 117 Adapter Coupling (Adapts S&D Spigot to DWV Spigot) (HxH)

4x3	03307	20	1120	\$25.54
4x4	03308	10	560	28.97



# Part No. PVC 118 Adapter Bushing [Adapts DWV Hub to S&D Spigot] [DWV SPIGOT x HUB]

3	03309	25	2800	\$23.89
4	03310	10	1440	11.53

- (F) Fabricated
- \* For pricing of this item, please see current PVC Large-Diameter DWV fitting list price schedule.



Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each	Size	UPC# 611942-	No. Per Carton	No. Per Pallet	List Price Each

9		t No. PVC 300 Bend H)		
11/4	03354	100	3500	\$13.76
1½	03355	100	2800	3.77
2	03356	50	1400	5.96
3	03357	25	450	17.55
4	03358	10	180	34.59
6	03359	5	80	121.40
8	03360	1	28	221.30
10**	10167	8/half crate	14/crate	*
12**	10168	6/half crate	9/crate	*
14 <sup>(F)</sup>	12218	2/half crate	4/crate	*
16 <sup>(F)</sup>	12219	1/half crate	3/crate	*



#### Part No. PVC 300A Vent 1/4 Bend (HxH)

8†	12188	2	32	\$175.73
10†	10019	15/half crate	21/crate	*
12†	10025	6/half-crate	12/crate	*



#### Part No. PVC 300R 1/4 Bend, Reducing

(HxH)

2x1½	04196	10	1440	\$22.73



#### Part No. PVC 300S 1/4 Bend with Side Inlet

(HxH)

3x3x1½	03361	10	490	\$48.44
3x3x2	03362	10	350	35.80



#### Part No. PVC 301 Vent 1/4 Bend, Street (HxSPG)

8 <sup>(F)</sup>	12279	2	24	\$184.52
10 <sup>(F)</sup>	12277	4/half crate	8/crate	* N
12 <sup>(F)</sup>	12278	2/half crate	5/crate	* N

Note: Shading indicates new part.



#### Part No. PVC 302 1/4 Bend, Street (SPG x H)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
2     03371     50     1750     7.69       3     03372     20     560     19.45       4     03373     10     180     36.56       6     03374     5     80     169.12       8     11348     1     28     413.83       10 <sup>(F)</sup> 12220     3/half crate     6/crate     *       12 <sup>(F)</sup> 12221     2/half crate     4/crate     *       14 <sup>(F)</sup> 12222     -     1/crate     *	11/4	03369	35	3920	\$19.49	
3     03372     20     560     19.45       4     03373     10     180     36.56       6     03374     5     80     169.12       8     11348     1     28     413.83       10 <sup>(F)</sup> 12220     3/half crate     6/crate     *       12 <sup>(F)</sup> 12221     2/half crate     4/crate     *       14 <sup>(F)</sup> 12222     -     1/crate     *	1½	03370	100	3500	5.05	
4     03373     10     180     36.56       6     03374     5     80     169.12       8     11348     1     28     413.83       10 <sup>(F)</sup> 12220     3/half crate     6/crate     *       12 <sup>(F)</sup> 12221     2/half crate     4/crate     *       14 <sup>(F)</sup> 12222     -     1/crate	2	03371	50	1750	7.69	
6       03374       5       80       169.12         8       11348       1       28       413.83         10 <sup>(F)</sup> 12220       3/half crate       6/crate       *         12 <sup>(F)</sup> 12221       2/half crate       4/crate       *         14 <sup>(F)</sup> 12222       -       1/crate       *	3	03372	2 20 560 <b>]</b>		19.45	
8       11348       1       28       413.83         10 <sup>(F)</sup> 12220       3/half crate       6/crate       *         12 <sup>(F)</sup> 12221       2/half crate       4/crate       *       N         14 <sup>(F)</sup> 12222       -       1/crate       *	4	03373	10	180	36.56	
10 <sup>(F)</sup> 12220       3/half crate       6/crate       *         12 <sup>(F)</sup> 12221       2/half crate       4/crate       *       N         14 <sup>(F)</sup> 12222       -       1/crate       *	6	03374	5	80	169.12	
12 <sup>(F)</sup> 12221 2/half crate 4/crate * N 14 <sup>(F)</sup> 12222 - 1/crate *	8	11348	1	28	413.83	
14 <sup>(F)</sup> 12222 - 1/crate *	10 <sup>(F)</sup>	12220	3/half crate	6/crate	*	
	12 <sup>(F)</sup>	12221	2/half crate	4/crate	*	N
16 <sup>(F)</sup> 12223 - 1/crate *	14 <sup>(F)</sup>	12222	-	1/crate	*	
	16 <sup>(F)</sup>	12223	-	1/crate	*	



#### Part No. PVC 303 1/4 Bend with Low Heel Inlet (HxHxH)

3x3x1½	03375	25	400	\$36.66
3x3x2	03376	25	400	31.57
4x4x2	03377	15	180	62.35



#### Part No. PVC 304 Long Sweep 1/4 Bend (HxH)

1½	03378	50	1750	\$9.06
2	03379	25	1225	9.80
3	03380	10	350	23.09
4	03381	5	175	44.10
6	11349	5	60	179.33



#### Part No. PVC 305 Long Sweep 1/4 Bend with High Heel Inlet (HxHxH)

3x3x2	03383	25	300	\$136.28	
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- (F) Fabricated
- Not a sanitary pattern
- \* For pricing of this item, please see current PVC Large-Diameter DWV fitting list price schedule.
- \*\* Assembled from two molded components

Note: N = non-stock item – contact customer service for availability.

#### **Limited Warranty**

Charlotte Pipe and Foundry Company® (Charlotte Pipe®) Products are warranted to be free from manufacturing defects and to conform to currently applicable ASTM standards for a period of five (5) years from date of delivery. Buyer's remedy for breach of this warranty is limited to replacement of, or credit for, the defective product. This warranty excludes any expense for removal or reinstallation of any defective product and any other incidental, consequential, or punitive damages. This limited warranty is the only warranty made by seller and is expressly in lieu of all other warranties, express and implied, including any warranties of merchantability and fitness for a particular purpose. No statement, conduct or description by Charlotte Pipe or its representative, in addition to or beyond this Limited Warranty, shall constitute a warranty. This Limited Warranty may only be modified in writing signed by an officer of Charlotte Pipe.

This Limited Warranty will not apply if:

- 1) The Products are used for purposes other than their intended purpose as defined by local plumbing and building codes, and the applicable ASTM standard.
- 2) The Products are not installed in good and workmanlike manner consistent with normal industry standards; installed in compliance with the latest instructions published by Charlotte Pipe and good plumbing practices; and installed in conformance with all applicable plumbing, fire and building code requirements.
- 3) This limited warranty does not apply when the products of Charlotte Pipe are used with the products of other manufacturers that do not meet the applicable ASTM or CISPI standards or that are not marked in a manner to indicate the entity that manufactured them.
- 4) The Products fail due to defects or deficiencies in design, engineering, or installation of the piping system of which they are a part.
- 5) The Products have been the subject of modification; misuse; misapplication; improper maintenance or repair; damage caused by the fault or negligence of anyone other than Charlotte Pipe; or any other act or event beyond the control of Charlotte Pipe.

### All Charlotte Pipe and Foundry Company Products are made in U.S.A.



Charlotte, Charlotte Pipe and "You can't beat the system" are registered trademarks of Charlotte Pipe and Foundry Company.

- 6) The Products fail due to the freezing of water in the Products.
- 7) The Products fail due to contact with chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents that are not compatible.
- 8) Pipe outlets, sound attenuation systems or other devices are permanently attached to the surface of Charlotte® PVC, ABS or CPVC products with solvent cement or adhesive glue.

Charlotte Pipe products are manufactured to the applicable ASTM or CISPI standard. Charlotte Pipe and Foundry **cannot** accept responsibility for the performance, dimensional accuracy, or compatibility of pipe, fittings, gaskets, or couplings not manufactured or sold by Charlotte Pipe and Foundry.

Any Charlotte Pipe products alleged to be defective **must** be made available to Charlotte Pipe at the following address for verification, inspection and determination of cause:

Charlotte Pipe and Foundry Company Attention: Technical Services 2109 Randolph Road Charlotte, North Carolina 28207

#### Purchaser must obtain a return materials authorization

and instructions for return shipment to Charlotte Pipe of any product claimed defective or shipped in error. Any Charlotte Pipe product **proved** to be defective in manufacture will be replaced F.O.B. point of original delivery, or credit will be issued, at the discretion of Charlotte Pipe.

4/15/10

### **A WARNING**

Testing with or use of compressed air or gas in PVC / ABS / CPVC pipe or fittings can result in explosive failures and cause severe injury or death.



- NEVER test with or transport/store compressed air or gas in PVC / ABS / CPVC pipe or fittings.
- NEVER test PVC / ABS / CPVC pipe or fittings with compressed air or gas, or air over water boosters.
- ONLY use PVC / ABS / CPVC pipe for water or approved chemicals.
- Refer to warnings in PPFA User Bulletin 4-80 and ASTM D 1785.

You can't beat the system.®



## Flanged Fittings and Flanges

### Flanged Fittings Class 125 & 250 Specifications

- Flanged fittings UL Listed through 12"
- Grey iron castings conform to ASTM A126 and ASTM A48
- Flanged fitting dimensions conform to ASME B16.1 and ANSI/AWWA C110/A21.10
- Manufacturing facility is ISO 9001:2008
- Flanged fittings made of 150# ductile iron for sizes 6" and below
- Galvanizing available upon request

### Class 125 & 250 Cast Flanges Specifications

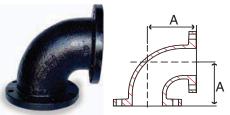
- Grey iron castings conform to ASTM A126 and ASTM A48
- Companion flange dimensions conform to ASME B16.1
- Hot-dipped galvanized flanges conform to ASTM A153
- Companion flanges threads conform to ASME B1.20.1
- Manufacturing facility is ISO 9001:2008











Size	Part Number	Materials	Α	Weight
IN	I all Nullinei	Materials	IN	LB
1-1/4	38E 1012D	150 lb. Ductile Iron	3.75	9
1-1/2	38E 1014D	150 lb. Ductile Iron	4.00	9
2	38E 1020D	150 lb. Ductile Iron	4.50	14
2-1/2	38E 1024D	150 lb. Ductile Iron	5.00	19
3	38E 1030D	150 lb. Ductile Iron	5.50	25
3-1/2	38E 1034D	150 lb. Ductile Iron	6.00	25
4	38E 1040D	150 lb. Ductile Iron	6.50	45
5	38E 1050D	150 lb. Ductile Iron	7.50	52
6	38E 1060D	150 lb. Ductile Iron	8.00	65
8	38E 1080	125 lb. Cast Iron	9.00	105
10	38E 1100	125 lb. Cast Iron	11.00	165
12	38E 1120	125 lb. Cast Iron	12.00	255
14	38E 1140	125 lb. Cast Iron	14.00	353
16	38E 1160	125 lb. Cast Iron	15.00	430
18 38E 1180		125 lb. Cast Iron	16.50	450
20	38E 1200	125 lb. Cast Iron	18.00	580
24	38E 1240	125 lb. Cast Iron	22.00	900

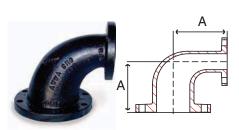


Fig. 38RE1 – 90° Reducing Elbow

Size IN	Part Number	Materials	A IN	Weight LB
2 x 1-1/2	38RE1020014D	150 lb. Ductile Iron	4.50	22
3 x 1-1/2	38RE1030014D	150 lb. Ductile Iron	5.50	22
3 x 2	38RE1030020D	150 lb. Ductile Iron	5.50	22
3 x 2-1/2	38RE1030024D	150 lb. Ductile Iron	5.50	22
4 x 2	38RE1040020D	150 lb. Ductile Iron	6.50	29
4 x 2-1/2	38RE1040024D	150 lb. Ductile Iron	6.50	31
4 x 3	38RE1040030D	150 lb. Ductile Iron	6.50	29
5 x 2	38RE1050020D	150 lb. Ductile Iron	7.50	50
5 x 2-1/2	38RE1050024D	150 lb. Ductile Iron	7.50	50
5 x 4	38RE1050040D	150 lb. Ductile Iron	7.50	50
6 x 2	38RE1060020D	150 lb. Ductile Iron	8.00	42
6 x 2-1/2	38RE1060024D	150 lb. Ductile Iron	8.00	45
6 x 3	38RE1060030D	150 lb. Ductile Iron	8.00	50
6 x 4	38RE1060040D	150 lb. Ductile Iron	8.00	55
6 x 5	38RE1060050D	150 lb. Ductile Iron	8.00	65
8 x 4	38RE1080040	125 lb. Cast Iron	9.00	80
8 x 5	38RE1080050	125 lb. Cast Iron	9.00	85
8 x 6	38RE1080060	125 lb. Cast Iron	9.00	85
10 x 4	38RE1100040	125 lb. Cast Iron	11.00	110
10 x 6	38RE1100060	125 lb. Cast Iron	11.00	130
10 x 8	38RE1100080	125 lb. Cast Iron	11.00	150
12 x 6 38RE1120060		125 lb. Cast Iron	12.00	188
12 x 8 38RE1120080		125 lb. Cast Iron	12.00	185
12 x 10	38RE1120100	125 lb. Cast Iron	12.00	210
14 x 12	38RE1140120	125 lb. Cast Iron	125 lb. Cast Iron 14.00	
16 x 12	38RE1160120	125 lb. Cast Iron	15.00	310



### Flanged Fittings - 125# Cast Iron & 150# Ductile Iron



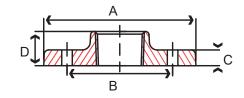


Fig. 17HF1 - 125 lb. Threaded Hydrant Flange

Size	Part Number	Α	В	С	D	Bolt Hole	Number of	Weight
IN	Black	IN	IN	IN	IN	Size	<b>Bolt Holes</b>	LB
6	17HF1060	11.00	9.50	1.00	1.56	7/8	6	16



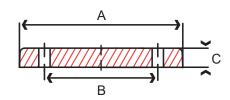


Fig. 17HB1 - 125 lb. Blind Hydrant Flange

Size	Part Number	A	В	C	Bolt Hole	Number of	Weight
IN	Black	IN	IN	IN	Size	Bolt Holes	LB
6	17HB1060	11.00	9.50	1.00	7/8	6	26



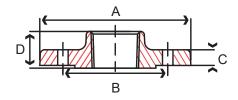


Fig. 17TH2 & 18TH2 - 250 lb. Threaded Companion Flange

Size	Part N	Α	В	C	D	Bolt Hole	Number of	Weight	
IN	Black	Galvanized	IN	IN	IN	IN	Size	Bolt Holes	LB
2	17TH2020	18TH2020	6.50	5.00	0.88	1.25	3/4	8	7
2-1/2	17TH2024	18TH2024	7.50	5.88	1.00	1.43	5/8	8	10
3	17TH2030	18TH2030	8.25	6.62	1.12	1.56	5/8	8	14
4	17TH2040	18TH2040	10.00	7.88	1.25	1.75	5/8	8	24
6	17TH2060	-	12.50	10.60	1.44	1.94	5/8	12	39
8	17TH2080	-	15.00	13.00	1.62	2.19	1	12	58



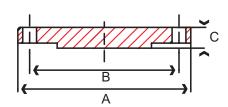


Fig. 17BL2 - 250 lb. Blind Flange

Size	Part Number	Α	В	C	Bolt Hole Size	Number of Bolt	Weight
IN	Black	IN	IN	IN	DUIT HUIG SIZE	Holes	LB
2	17BL2020	6.50	5.00	0.88	3/4	8	8
2-1/2	17BL2024	7.50	5.88	1.00	7/8	8	12
3	17BL2030	8.25	6.62	1.12	7/8	8	16
4	17BL2040	10.00	7.88	1.25	7/8	8	27
5	17BL2050	11.00	9.25	1.38	7/8	8	35
6	17BL2060	12.50	10.60	1.44	7/8	12	50
8	17BL2080	15.00	13.00	1.62	1	12	81
10	17BL2100	17.50	15.25	1.88	1-1/8	16	115

All 250 lb. Flanges have 1/16 raised face



#### Kuriyama of America, Inc.

360 E. State Parkway

Schaumburg, IL 60173-5335 USA

**Phone:** (847) 755-0360

**Toll-Free FAX:** (800) 800-0320

International FAX: (847) 885-0996 Email: <a href="mailto:sales@kuriyama.com">sales@kuriyama.com</a>

#### Tiger™ Green TG™ Series EPDM Suction Hose



1

<u>Series</u>	<u>ID</u>	<u>OD</u>	Working Pressure at 68°F	Working Pressure at 104°F	Vacuum Rating at 68°F	Vacuum Rating at 104°F	Approx. Bending Radius at 68°F	Standard Length	<u>Weight</u>
<u>TG100X100</u>	1 in 25.4 mm	1.40 in 35.5 mm	65 psi	45 psi	Full	28 inHg	2 in	100 ft	0.28 lbs/ft
<u>TG125X100</u>	1 1/4 in 31.8 mm	1.63 in 41.4 mm	60 psi	40 psi	Full	28 inHg	3 in	100 ft	0.33 lbs/ft
<u>TG150X100</u>	1 1/2 in 38.1 mm	1.93 in 49.0 mm	50 psi	35 psi	Full	28 inHg	3 in	100 ft	0.44 lbs/ft
TG200X100	2 in 50.8 mm	2.51 in 63.8 mm	50 psi	35 psi	Full	28 inHg	5 in	100 ft	0.67 lbs/ft

<u>Series</u>	<u>ID</u>	<u>OD</u>	Working Pressure at 68°F	Working Pressure at 104°F	Vacuum Rating at 68°F	Vacuum Rating at 104°F	Approx. Bending Radius at 68°F	Standard Length	<u>Weight</u>
<u>TG250X100</u>	2 1/2 in 63.5 mm	3.07 in 78.0 mm	45 psi	30 psi	Full	28 inHg	5.5 in	100 ft	0.95 lbs/ft
<u>TG300X100</u>	3 in 76.2 mm	3.60 in 91.5 mm	45 psi	30 psi	Full	26 inHg	7 in	100 ft	1.14 lbs/ft
TG400X100	4 in 101.6 mm	4.70 in 119.5 mm	40 psi	25 psi	Full	26 inHg	11.5 in	100 ft	1.84 lbs/ft
<u>TG600X100</u>	6 in 152.4 mm	6.85 in 174.0 mm	30 psi	20 psi	28 inHg	24 inHg	20.00 in	100 ft	3.07 lbs/ft
<u>TG600X20</u>	6 in 152.4 mm	6.85 in 174.0 mm	30 psi	20 psi	28 inHg	24 inHg	20.00 in	20 ft	3.07 lbs/ft

1

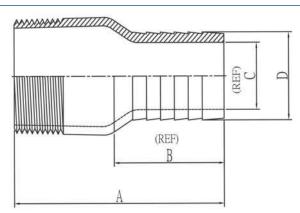
#### **King Nipple**

Connection: MNPT x Hose

Bevel x Hose Material:

Stainless Steel - FNWKNSB, FNWKNST
Unplated Carbon Steel - FNWKNUT, FNWKNUB
Zinc Plated Carbon Steel - FNWKNPT

 $\underline{B}$  designates beveled,  $\underline{T}$  designates threaded. Combination nipples are not recommended for steam.



#### **Dimensions (inches)**

Product Code	Size	А	В	С	D
FNWKNSTD	1/2"	2.76	1.42	0.30	0.54
FNWKNSTF	3/4"	3.03	1.46	0.55	0.78
FNWKNSTG	1"	3.19	1.46	0.77	1.02
FNWKNSTH *	1-1/4"	3.46	1.57	1.01	1.27
FNWKNSBJ * / FNWKNSTJ *	1-1/2"	4.13	2.09	1.14	1.54
FNWKNSBK * / FNWKNSTK *	2"	4.69	2.36	1.74	2.03
FNWKNSTL *	2-1/2"	5.55	2.80	2.11	2.52
FNWKNSBM * / FNWKNSTM *	3"	5.98	3.15	2.67	3.03
FNWKNSBP * / FNWKNSTP *	4"	7.17	3.70	3.64	4.04
FNWKNSTU *	6"	10.08	5.94	5.63	6.04

Product Code	Size	А	В	С	D
FNWKNUTD	1/2"	2.76	1.42	0.30	0.54
FNWKNUTF	3/4"	3.03	1.46	0.55	0.78
FNWKNUTG	1"	3.19	1.46	0.77	1.02
FNWKNUTH *	1-1/4"	3.46	1.57	1.01	1.27
FNWKNUTJ *	1-1/2"	4.13	2.09	1.14	1.54
FNWKNUTK * / FNWKNUBK *	2"	4.69	2.36	1.74	2.03
FNWKNUTL *	2-1/2"	5.55	2.80	2.11	2.52
FNWKNUTM * / FNWKNUBM *	3"	5.98	3.15	2.67	3.03
FNWKNUTP * / FNWKNUBP *	4"	7.17	3.70	3.64	4.04
FNWKNUTU *	6"	10.08	5.94	5.63	6.04

Product Code	Size	А	В	С	D
FNWKNPTD	1/2"	2.76	1.42	0.30	0.54
FNWKNPTF	3/4"	3.03	1.46	0.55	0.78
FNWKNPTG	1"	3.19	1.46	0.77	1.02
FNWKNPTH *	1-1/4"	3.46	1.57	1.01	1.27
FNWKNPTJ *	1-1/2"	4.13	2.09	1.14	1.54
FNWKNPTK *	2"	4.69	2.36	1.74	2.03
FNWKNPTL *	2-1/2"	5.55	2.80	2.11	2.52
FNWKNPTM *	3"	5.98	3.15	2.67	3.03
FNWKNPTP *	4"	7.17	3.70	3.64	4.04
→ FNWKNPTU *	6"	10.08	5.94	5.63	6.04

Recommended for use in low pressure discharge and suction service for compatible liquids. \* Size 1-1/4" and above are not recommended for compressible products such as air or nitrogen.

### **VALVES**

#### For Non-Health Hazard Applications

Job Name	Contractor
Job Location	Approval
	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

## **Series 007**Double Check Valve Assemblies

Sizes: 1/2" - 3" (15 - 80mm)

Series 007 Double Check Valve Assemblies shall be installed at referenced cross-connections to prevent the backflow of polluted water into the potable water supply. Only those cross-connections identified by local inspection authorities as non-health hazard shall be allowed the use of an approved double check valve assembly.

Check with local authority having jurisdiction regarding vertical orientation, frequency of testing or other installation requirements.

The valve shall meet the requirements of ASSE Std. 1015 and AWWA Std. C510. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

#### **Features**

- Ease of maintenance only one cover
- Top entry
- Replaceable seats and seat discs
- Modular construction
- Compact design
- Cast bronze body construction ½" 2" (15 50mm)
- Fused epoxy coated cast iron body 2½" 3" (65 80mm)
- Top mounted ball valve test cocks
- Low pressure drop
- No special tools required for servicing
- 1/2" 1" (15 25mm) have tee handles

#### **Specifications**

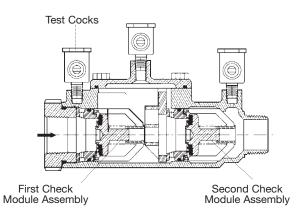
A Double Check Valve Assembly shall be installed at each noted location. The assembly shall consist of two positive seating check modules with captured springs and rubber seat discs. The check module seats and seat discs shall be replaceable. Service of all internal components shall be through a single bronze or stainless steel access cover secured with stainless steel bolts. The assembly shall also include two resilient seated isolation valves; four top mounted, resilient seated test cocks. The assembly shall meet the requirements of ASSE Std. 1015 and AWWA Std. C510. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Assembly shall be a Watts Series 007.



3/4" (20mm) 007M3QT



2" (50mm) 007M1QT HC



The 007 Series features a modular design concept which facilitates complete maintenance and assembly by retaining the spring load.

### Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS



#### Pressure - Temperature

½" - 2" (15 - 50mm)

Temperature Range: 33°F – 180°F (0.5°C – 82°C). Maximum Working Pressure: 175psi (12.1 bar).

2½" - 3" (65 - 80mm)

Temperature Range: 33°F - 110°F (0.5°C - 43°C) continuous,

140°F (60°C) intermittent.

Maximum Working Pressure: 175psi (12.1 bar).

#### **Standards**

ASSE Std. 1015, AWWA Std. C510 IAPMO PS31, CSA B64.5

#### **Approvals**



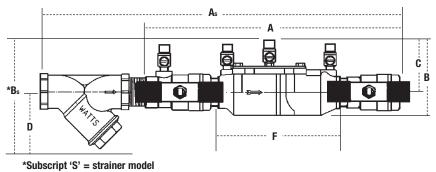
† ASSE, AWWA, IAPMO, CSA, UPC

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.
- Models LF and S are not listed.
- UL Classified (LF models only) <sup>3</sup>/<sub>4</sub>" 2" (20 50mm) (except 007M3LF)
- UL Classified with OSY gate valves (2½" and 3" horizontal only.)
- \* Horizontal and vertical "flow up" approval on all sizes

#### **Dimensions – Weights**

#### Models

Sizes: 1/2" - 2" (15 - 50mm)



#### Suffix HC — Fire Hydrant Fittings dimension "A" = 231/2" (594mm)

MODEL	SIZE	(DN)							DI	IMENSIO	VS								WEIG	HT
			F	١	1	3		С		D	F		G		R	ł	Т			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
†▲ 007QT	1/2	15	10	254	45/8	117	27/16	62	_	_	5	127	3%	85	<b>2</b> 5⁄16	59	21/16	52	4.5	2
†▲ 007M3QT	3/4	20	1111//8	282	4	102	31//8	79	_	_	63/16	157	37/16	87	21/8	54	<b>1</b> 5⁄16	33	5	2.3
†▲ 007M1QT	1	25	131/4	337	51//8	130	4	102	_	_	71/2	191	3%	85	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	12	5.4
†▲ 007M2QT	11/4	32	16%	416	5	127	<b>3</b> 5⁄16	84	_	_	91/2	241	5	127	3	76	2	50	15	6.8
†▲ 007M2QT	11/2	40	16¾	425	47/8	124	3½	89	_	_	93/4	248	5 <sup>13</sup> / <sub>16</sub>	148	31//8	79	211/16	68	15.9	7.2
†▲ 007M1QT	2	50	19½	495	61/4	159	4	102	_	_	13%	340	61//8	156	37/16	87	211/16	68	25.7	11.7
• 007QT-S	1/2	15	13	330	6	152	<b>2</b> <sup>7</sup> / <sub>16</sub>	62	3	76	5	127	33/8	85	<b>2</b> 5/16	59	21/16	52	5.5	2.5
<ul> <li>007M3QT-S</li> </ul>	3/4	20	141/2	368	61//8	156	31//8	79	3	76	<b>6</b> <sup>3</sup> ⁄16	157	37/16	87	21/8	54	<b>1</b> 5⁄16	33	6.7	3.1
• 007M1QT-S	1	25	<b>17</b> <sup>15</sup> ⁄ <sub>16</sub>	157	73/4	197	4	102	31/4	83	71/2	191	3%	85	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	14	6.4
<ul> <li>007M2QT-S</li> </ul>	11/4	32	21½	546	71/16	179	<b>3</b> 5⁄16	84	31/2	83	91/2	241	5	127	3	76	2	50	19	8.6
• 007M2QT-S	11/2	40	25 <sup>1</sup> / <sub>16</sub>	637	71/16	179	3½	89	33/4	95	93/4	248	5 <sup>13</sup> / <sub>16</sub>	148	31//8	79	211/16	68	19.6	8.9
• 007M1QT-S	2	50	271/4	692	83/4	222	4	102	4	102	13%	340	61//8	156	37/16	87	211/16	68	33.5	15.2

#### Suffix:

S - bronze strainer

LF - without shutoff valves

LH - locking handle ball valves (open position)

SH - stainless steel ball valve handles

HC - 21/2" inlet/outlet fire hydrant fittings (2" valve)

#### Prefix:

U - Union connections

2½" - 3" (65 - 80mm)

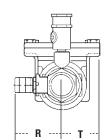
#### Suffix:

NRS - non-rising stem resilient seated gate valves

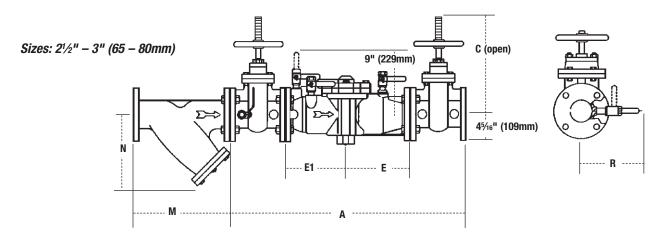
OSY - UL/FM outside stem and yoke resilient seated gate valves

LF - without shutoff valves

QT-FDA - FDA epoxy coated quarter-turn ball valves



#### Dimensions - Weights



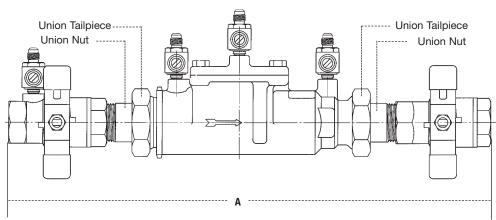
	MODEL	SIZE	(DN)		DIMENSIONS							WEIGHT		
				ļ ,	Ą	(	0	E,	E1		R			
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	
	007QT-FDA	21/2	65	331//8	841	6%	162	91/16	230	83/4	222	155	70	
•	007-NRS	21/2	65	331/8	841	9%	238	91/16	230	83/4	222	155	70	
<b>*</b>	007-0SY	21/2	65	331//8	841	16%	416	91/16	230	83/4	222	158	72	
	007-QT-FDA	3	80	341/8	867	6%	162	91/16	230	83/4	222	155	70	
<b>*</b> *	007-NRS	3	80	341//8	867	101/4	260	91/16	230	83/4	222	185	84	
•	007-0SY	3	80	341//8	867	18%	479	91/16	230	83/4	222	185	84	

#### **Strainer Dimensions**

SI	ZE					WEI	GHT	
					N			
in.	mm	in.	mm	in.	mm	lbs.	kgs.	
21/2								_
3*	80	101//8	267	7	178	34	15	
	in. <b>2</b> ½	21/2 65	in. mm in.  2½ 65 10	in. mm in. mm 2½ 65 10 254	in. mm in. mm in. 2½ 65 10 254 6½	in. mm in. mm in. mm 2½ 65 10 254 6½ 165	in. mm in. mm in. mm lbs. 2½ 65 10 254 6½ 165 28	in. mm in. mm in. mm lbs. kgs. 2½ 65 10 254 6½ 165 28 13

#### \*S Models only

#### 1" U007M1QT



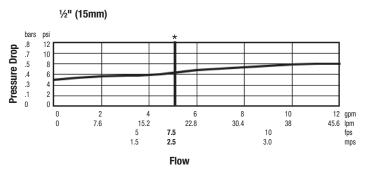
Sizes: ½" – 2" (15 – 50mm)

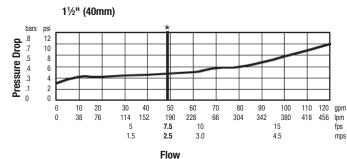
MODEL	SIZE	(DN)	DIMENSIONS				
			A				
	in.	mm	in.	mm			
U007QT	1/2	15	1213/16	326			
U007M2QT	3/4	20	13 <sup>13</sup> / <sub>16</sub>	350			
U007M2QT	1	25	16%	422			
U007M2QT	11/4	32	203/4	527			
U007M2QT	11/2	40	21½	546			
U007M1QT	2	50	241/2	622			

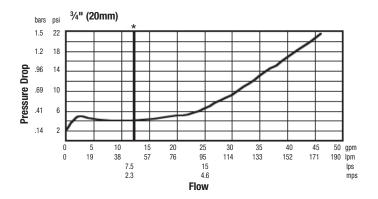
#### Capacity

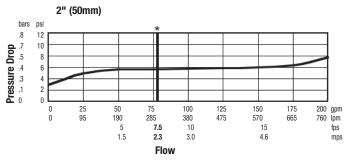
As complied from documented Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California lab tests.

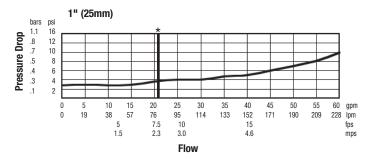
 $^{\star}$  Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)  $^{\star\star}$  UL rated flow

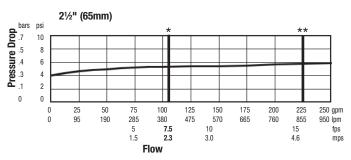


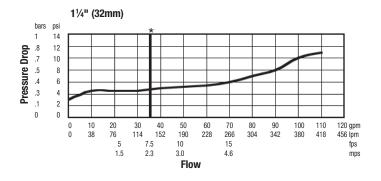


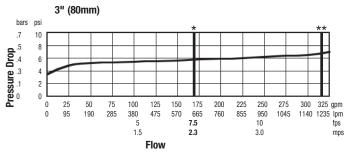


















ES-007 1103

## **CONNECTIONS**

# Female Dry Hydrant









Straight PVC

45 Degree PVC

90 Degree PVC

Adapter (No PVC)

Side 1	Side 2	Straight PVC	45 Degree PVC	90 Degree PVC	Adapter (No PVC)
4 1/2"	6" PVC	DHF45600	DHF45645	DHF45690	
5"	6" PVC	DHF5600	DHF5645	DHF5690	
6"	6" PVC	DHF6600	DHF6645	DHF6690	
4 1/2"	6' NPSH				DHF456P
5"	6" NPSH				DHF56P
6"	6" NPSH				DHF66P

#### Includes

- Plug
- Screen
- Chain
- Swivel Female

#### **Features**

- · Color Red
- 6" Schedule 40 PVC pipe
- Light-weight 6061-T6 Aluminum Alloy
- · Meet or Exceed NFPA

#### **Available**

- 4 1/2", 5", 6"
- NH/NST

Dry hydrant sizes are determined by your local fire department. Please contact your local fire department before purchasing.

Straight PVC models DO NOT incorporate slip-socket adapter. 45° and 90° PVC models incorporate slip-socket adapter for glue-on connection to a 6"schedule 40 PVC pipe. Adapter (No PVC) models will screw onto any male 6" NPT pipe fitting.



Call: 888.975.0858 Email: sales@firehosedirect.com