

Engineering Specification

Job Name _____
Job Location _____
Engineer _____
Approval _____

Contractor _____
Approval _____
Contractor's P.O. No. _____
Representative _____

LEAD FREE*

Series Watts Spools and Watts Flanges

Make Up Spools and Flanges For Backflow Preventers

Sizes: 2½"-10"

Watts "Make Up" Spools are used when retrofitting a backflow preventer into an installation where an existing backflow preventer is being replaced. Watts "Make Up" Flanges are used in piping applications where there is a need for additional fitting lay length. The Watts Spools and Watts Flanges feature Lead Free* construction to comply with Lead Free* installation requirements.

Models

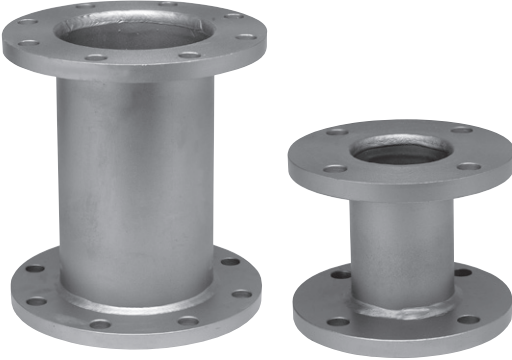
Spool - Make Up Spools

Available in Lightweight 300 series Stainless Steel or Epoxy coated Carbon Steel. AWWA 150# class "D" Carbon Steel Flanges offered as standard. 150# class "D" Stainless Steel Flanges upon special request.

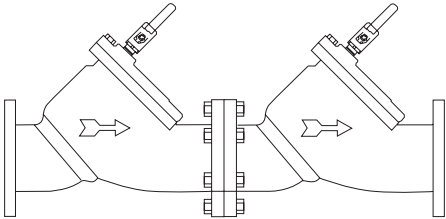
Flanges - Make Up Flanges

AWWA 150# modified class "D" Zinc plated Carbon Steel Flanges with standard bolt pattern. 150# modified class "D" Zinc Plated Carbon Steel Flanges with standard pattern slotted. 150# modified class "D" Stainless Steel Flanges with standard bolt pattern.

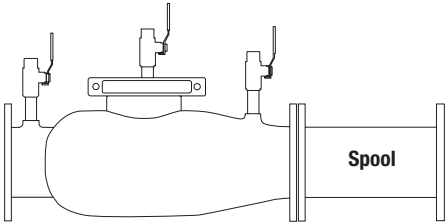
Contact factory for specific applications.



Spools



Watts 709/LF709



Watts 774 with Spool

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

NOTICE

Inquire with governing authorities for local installation requirements

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



How to order

Locate the manufacturer and model number under the valve size column in the matrix on these two pages. It is assumed that the valve you will be installing is a Watts 774 Sentry Series. On the first line across from the model number is the lay length of the valve less gates. On the lines listed below is the valve being replaced. On that line is the lay length of that valve. The column to the right is the length of the spool needed to "make up" the difference between the valve being replaced and the lay length of the "Sentry Series." Below the spool length is the ordering code for that spool.

Retrofit Spool Pieces for Various Lengths • Cast Iron Watts Products vs Watts Sentry Series

WATTS MODEL	2½"*	ACTUAL SPOOL LENGTH NEEDED	3"*	ACTUAL SPOOL LENGTH NEEDED	4"*	ACTUAL SPOOL LENGTH NEEDED	6"*	ACTUAL SPOOL LENGTH NEEDED	8"*	ACTUAL SPOOL LENGTH NEEDED	10"*	ACTUAL SPOOL LENGTH NEEDED
774	22"	-	22"	-	22"	-	27½"	-	29½"	-	29½"	-
709/LF709	24"	17⁄8"	24"	17⁄8"	34"	117⁄8"	42½"	147⁄8"	52"	223⁄8"	64"	343⁄8"
774DCDA	22"	-	22"	-	22"	-	27½"	-	29½"	-	29½"	-
709DCDA	-	-	24"	17⁄8"	34"	117⁄8"	41½"	137⁄8"	52"	223⁄8"	64"	343⁄8"
994	22"	-	22"	-	22"	-	27½"	-	29½"	-	29½"	-
909/LF909	26½"	4"	26½"	4"	37"	147⁄8"	44½"	167⁄8"	55¼"	255⁄8"	673⁄8"	37¾"
994RPDA	22"	-	22"	-	22"	-	27½"	-	-	-	-	-
909RPDA	26½"	4"	26½"	4"	37"	147⁄8"	44½"	167⁄8"	55¼"	-	673⁄8"	-

*Size and length of valve being replaced.

For Example: when replacing a Watts 4" 709 with a Watts 4" 774 you would need a spool that is 117⁄8" long. The slight decrease in the spools length is to accommodate the flange gasket, approximately 1⁄8".

Example:

WATTS MODEL: 709		WATTS MODEL: 774	
Line Size	Lay Length	Line Size	Lay Length
4"	34"	4"	22"

Spool Length from chart: 117⁄8" Subtract Lengths: 12"
Ordering code: 0107020

Spool Sizes and Lengths

VALVE SIZE	ORDERING CODE	LENGTH	SPOOL SIZE	MODEL
2½"	0107000	1⅞"	2½" x 1⅞"	SPOOL
	0107001	3⅜"	2½" x 3⅜"	SPOOL
	0107002	2 ¹⁵ / ₁₆ "	2½" x 3 ¹⁵ / ₁₆ "	SPOOL
	0107003	4"	2½" x 4"	SPOOL
	0107004	4 ¹⁵ / ₁₆ "	2½" x 4 ¹⁵ / ₁₆ "	SPOOL
3"	0107005	1⅞"	3" x 1⅞"	SPOOL
	0107006	2½"	3" x 2½"	SPOOL
	0107007	3½"	3" x 3½"	SPOOL
	0107008	3 ¹⁵ / ₁₆ "	3" x 3 ¹⁵ / ₁₆ "	SPOOL
	0107009	4"	3" x 4"	SPOOL
4"	0107010	5⅝"	4" x 5⅝"	SPOOL
	0107011	5⅞"	4" x 5⅞"	SPOOL
	0107012	6⅝"	4" x 6⅝"	SPOOL
	0107013	6 ¹³ / ₁₆ "	4" x 6 ¹³ / ₁₆ "	SPOOL
	0107014	7⅞"	4" x 7⅞"	SPOOL
	0107015	7 ¹⁵ / ₁₆ "	4" x 7 ¹⁵ / ₁₆ "	SPOOL
	0107016	8"	4" x 8"	SPOOL
	0107017	9⅞"	4" x 9⅞"	SPOOL
	0107018	10¼"	4" x 10¼"	SPOOL
	0107019	10⅞"	4" x 10⅞"	SPOOL
	0107020	11⅞"	4" x 11⅞"	SPOOL
	0107021	12"	4" x 12"	SPOOL
	0107022	14⅞"	4" x 14⅞"	SPOOL
6"	0107023	5⅝"	6" x 5⅝"	SPOOL
	0107024	8⅝"	6" x 8⅝"	SPOOL
	0107025	9 ¹¹ / ₁₆ "	6" x 9 ¹¹ / ₁₆ "	SPOOL
	0107026	10¼"	6" x 10¼"	SPOOL
	0107027	11"	6" x 11"	SPOOL
	0107028	12 ⁷ / ₁₆ "	6" x 12 ⁷ / ₁₆ "	SPOOL
	0107029	12½"	6" x 12½"	SPOOL
	0107030	13⅝"	6" x 13⅝"	SPOOL
	0107031	13⅞"	6" x 13⅞"	SPOOL
	0107032	14"	6" x 14"	SPOOL
	0107033	14⅝"	6" x 14⅝"	SPOOL
	0107034	14⅞"	6" x 14⅞"	SPOOL
	0107035	16⅞"	6" x 16⅞"	SPOOL
	0107036	17⅝"	6" x 17⅝"	SPOOL

VALVE SIZE	ORDERING CODE	LENGTH	SPOOL SIZE	MODEL
8"	7017224	1⅞"	2½" x 1⅞"	SPOOL
	7017225	3⅜"	2½" x 3⅜"	SPOOL
	7017226	2 ¹⁵ / ₁₆ "	2½" x 3 ¹⁵ / ₁₆ "	SPOOL
	7017227	4"	2½" x 4"	SPOOL
	7017228	4 ¹⁵ / ₁₆ "	2½" x 4 ¹⁵ / ₁₆ "	SPOOL
	7017229	1⅞"	3" x 1⅞"	SPOOL
	7017230	2½"	3" x 2½"	SPOOL
	7017231	3½"	3" x 3½"	SPOOL
	7017232	3 ¹⁵ / ₁₆ "	3" x 3 ¹⁵ / ₁₆ "	SPOOL
	7017233	4"	3" x 4"	SPOOL
10"	7017234	5⅝"	4" x 5⅝"	SPOOL
	7017235	5⅞"	4" x 5⅞"	SPOOL
	7017236	6⅝"	4" x 6⅝"	SPOOL
	7017237	6 ¹³ / ₁₆ "	4" x 6 ¹³ / ₁₆ "	SPOOL
	7017238	7⅞"	4" x 7⅞"	SPOOL
	7017239	7 ¹⁵ / ₁₆ "	4" x 7 ¹⁵ / ₁₆ "	SPOOL
	7017240	8"	4" x 8"	SPOOL
	7017241	9⅞"	4" x 9⅞"	SPOOL
	7017242	10¼"	4" x 10¼"	SPOOL
	7017243	10⅞"	4" x 10⅞"	SPOOL
12"	7017244	11⅞"	4" x 11⅞"	SPOOL
	7017245	12"	4" x 12"	SPOOL

Size = Valve Size x Spool Length

Use with series 757 and 957 when replacing:

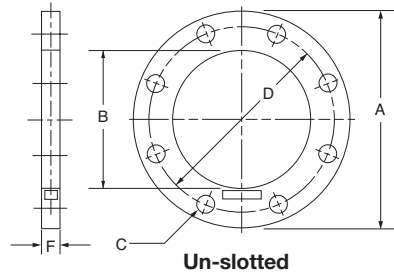
VALVE SIZE	ORDERING CODE	LENGTH	SPOOL SIZE	MODEL	VALVE SIZE	ORDERING CODE	LENGTH	SPOOL SIZE	MODEL
HERSEY 6CM					IRON				
BRONZE					IRON				
2½"	0107105	3¾"	2½" x 3¾"	W-SPL	2½"	0107106	5¼"	2½" x 5¼"	W-SPL
3"	0107107	8 ¹ / ₁₆ "	3" x 8 ¹ / ₁₆ "	W-SPL	3"	0107107	8 ¹ / ₁₆ "	3" x 8 ¹ / ₁₆ "	W-SPL
4"	0107109	12 ⁹ / ₁₆ "	4" x 12 ⁹ / ₁₆ "	W-SPL	4"	0107110	13 ⁹ / ₁₆ "	4" x 13 ⁹ / ₁₆ "	W-SPL
6"	0107111	10¼"	6" x 18¼"	W-SPL	6"	0107111	18¼"	6" x 18¼"	W-SPL
-	-	-	-	-	8"	0107112	25¼"	8" x 25¼"	W-SPL
-	-	-	-	-	10"	0107113	30¼"	10" x 30¼"	W-SPL
Hersey Model 2									
3"	0107108	8 ¹¹ / ₁₆ "	3" x 8 ¹¹ / ₁₆ "	W-SPL					
4"	0107110	13 ⁹ / ₁₆ "	4" x 13 ⁹ / ₁₆ "	W-SPL					
6"	0107111	18¼"	6" x 18¼"	W-SPL					
8"	0107112	25¼"	8" x 25¼"	W-SPL					
10"	0107113	30¼"	10" x 30¼"	W-SPL					

Please be advised that due to variations in manufacturing tolerances, the measurements listed can vary from what is installed. Please verify the measurements of the valve being replaced. Custom lay lengths available upon request.

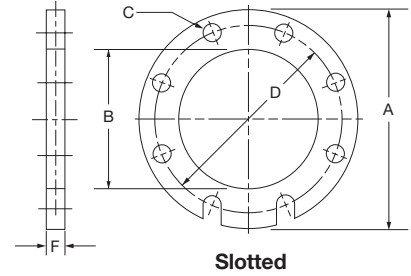
"Make Up" Flanges

Available Thickness

- 1/4" & 1/2" Stainless Steel
- 1/2" & 1" Zinc Plated Carbon Steel



Un-slotted



Slotted

AWWA C207 Modified Class D Spacer Flanges

SIZE	STD.	MODEL	ORDERING CODE	A FLG. OD +/-1/8	B FLG. ID +1/16 -0	C BOLT HOLE SIZE	D BOLT CIRCLE +/-1/16	E NO. HOLES	F THICKNESS +/-1/8	COMMENTS
2"	AWWA D	W-FLG SS-U	0107060	6"	2.44"	3/4"	4 3/4"	4	1/4"	UN-SLOTTED
2"	AWWA D	W-FLG SS-U	0107061	6"	2.44"	3/4"	4 3/4"	4	1/2"	UN-SLOTTED
2"	AWWA D	W-FLG SS-S	0107062	6"	2.44"	3/4"	4 3/4"	4	1/4"	SLOTTED
2"	AWWA D	W-FLG SS-S	0107063	6"	2.44"	3/4"	4 3/4"	4	1/2"	SLOTTED
2 1/2"	AWWA D	W-FLG SS-U	0107064	7"	2.94"	3/4"	5 1/2"	4	1/4"	UN-SLOTTED
2 1/2"	AWWA D	W-FLG SS-U	0107065	7"	2.94"	3/4"	5 1/2"	4	1/2"	UN-SLOTTED
2 1/2"	AWWA D	W-FLG SS-S	0107066	7"	2.94"	3/4"	5 1/2"	4	1/4"	SLOTTED
2 1/2"	AWWA D	W-FLG SS-S	0107067	7"	2.94"	3/4"	5 1/2"	4	1/2"	SLOTTED
3"	AWWA D	W-FLG Z-U	0107068	7 1/2"	3.57"	3/4"	6"	4	1/2"	UN-SLOTTED
3"	AWWA D	W-FLG Z-U	0107069	7 1/2"	3.57"	3/4"	6"	4	1"	UN-SLOTTED
3"	AWWA D	W-FLG Z-S	0107070	7 1/2"	3.57"	3/4"	6"	4	1/2"	SLOTTED
3"	AWWA D	W-FLG Z-S	0107071	7 1/2"	3.57"	3/4"	6"	4	1"	SLOTTED
3"	AWWA D	W-FLG SS-U	0107072	7 1/2"	3.57"	3/4"	6"	4	1/4"	UN-SLOTTED
3"	AWWA D	W-FLG SS-U	0107073	7 1/2"	3.57"	3/4"	6"	4	1/2"	UN-SLOTTED
3"	AWWA D	W-FLG SS-S	0107074	7 1/2"	3.57"	3/4"	6"	4	1/4"	SLOTTED
3"	AWWA D	W-FLG SS-S	0107075	7 1/2"	3.57"	3/4"	6"	4	1/2"	SLOTTED
4"	AWWA D	W-FLG Z-U	0107076	9"	4.57"	3/4"	7 1/2"	8	1/2"	UN-SLOTTED
4"	AWWA D	W-FLG Z-U	0107077	9"	4.57"	3/4"	7 1/2"	8	1"	UN-SLOTTED
4"	AWWA D	W-FLG Z-S	0107078	9"	4.57"	3/4"	7 1/2"	8	1/2"	SLOTTED
4"	AWWA D	W-FLG Z-S	0107079	9"	4.57"	3/4"	7 1/2"	8	1"	SLOTTED
4"	AWWA D	W-FLG SS-U	0107080	9"	4.57"	3/4"	7 1/2"	8	1/4"	UN-SLOTTED
4"	AWWA D	W-FLG SS-U	0107081	9"	4.57"	3/4"	7 1/2"	8	1/2"	UN-SLOTTED
4"	AWWA D	W-FLG SS-S	0107082	9"	4.57"	3/4"	7 1/2"	8	1/4"	SLOTTED
4"	AWWA D	W-FLG SS-S	0107083	9"	4.57"	3/4"	7 1/2"	8	1/2"	SLOTTED
6"	AWWA D	W-FLG Z-U	0107084	11"	6.72"	7/8"	9 1/2"	8	1/2"	UN-SLOTTED
6"	AWWA D	W-FLG Z-U	0107085	11"	6.72"	7/8"	9 1/2"	8	1"	UN-SLOTTED
6"	AWWA D	W-FLG Z-S	0107086	11"	6.72"	7/8"	9 1/2"	8	1/2"	SLOTTED
6"	AWWA D	W-FLG Z-S	0107087	11"	6.72"	7/8"	9 1/2"	8	1"	SLOTTED
6"	AWWA D	W-FLG SS-U	0107088	11"	6.72"	7/8"	9 1/2"	8	1/4"	UN-SLOTTED
6"	AWWA D	W-FLG SS-U	0107089	11"	6.72"	7/8"	9 1/2"	8	1/2"	UN-SLOTTED
6"	AWWA D	W-FLG SS-S	0107090	11"	6.72"	7/8"	9 1/2"	8	1/4"	SLOTTED
6"	AWWA D	W-FLG SS-S	0107091	11"	6.72"	7/8"	9 1/2"	8	1/2"	SLOTTED
8"	AWWA D	W-FLG Z-U	0107092	13 1/2"	8.72"	7/8"	11 3/4"	8	1/2"	UN-SLOTTED
8"	AWWA D	W-FLG Z-U	0107093	13 1/2"	8.72"	7/8"	11 3/4"	8	1"	UN-SLOTTED
8"	AWWA D	W-FLG Z-S	0107094	13 1/2"	8.72"	7/8"	11 3/4"	8	1/2"	SLOTTED
8"	AWWA D	W-FLG Z-S	0107095	13 1/2"	8.72"	7/8"	11 3/4"	8	1"	SLOTTED
8"	AWWA D	W-FLG SS-U	0107096	13 1/2"	8.72"	7/8"	11 3/4"	8	1/4"	UN-SLOTTED
8"	AWWA D	W-FLG SS-U	0107097	13 1/2"	8.72"	7/8"	11 3/4"	8	1/2"	UN-SLOTTED
8"	AWWA D	W-FLG SS-S	0107098	13 1/2"	8.72"	7/8"	11 3/4"	8	1/4"	SLOTTED
8"	AWWA D	W-FLG SS-S	0107099	13 1/2"	8.72"	7/8"	11 3/4"	8	1/2"	SLOTTED
10"	AWWA D	W-FLG SS-U	0107100	16"	10.81"	1"	14 1/4"	12	1/4"	UN-SLOTTED
10"	AWWA D	W-FLG SS-U	0107101	16"	10.81"	1"	14 1/4"	12	1/2"	UN-SLOTTED
10"	AWWA D	W-FLG SS-S	0107102	16"	10.81"	1"	14 1/4"	12	1/4"	SLOTTED
10"	AWWA D	W-FLG SS-S	0107103	16"	10.81"	1"	14 1/4"	12	1/2"	SLOTTED

Matrix: Z = Zinc S = Slotted SS = 304 Stainless Steel U = Un-slotted Size = Valve Size x Thickness



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