

# ■ THREAD-O-RING™ Fittings

■ For Sizes: 2- and 3-inches



T.D. Williamson

Bulletin No: 2100.001.03

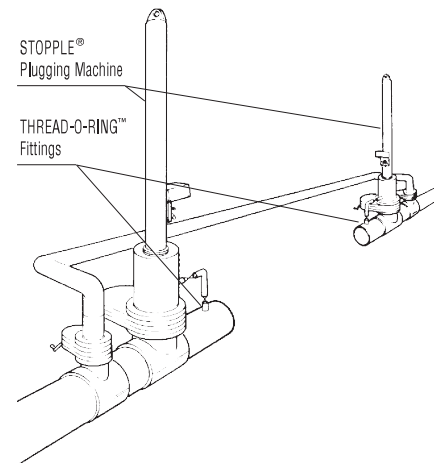
Version: 12.2015

Cross Indexing No: n/a

Supersedes: 2100.001.02 (08.2006)



## ■ Typical Setup Using THREAD-O-RING™ Fittings



TDW THREAD-O-RING™ Fittings are used for blowdown of the isolated pipe section following a double STOPPLE® operation.

### Description

THREAD-O-RING™ Fittings (T-O-R) are used with TDW STOPPLE® Plugging Machines as purge and equalization fittings. They can also be installed during new construction and used for blowdown connections on either side of a block valve. T-O-R Fittings are available in two sizes: 2 in. and 3 in. (DN 50 and DN 80).

The 2 in. T-O-R Fitting will accept the corrosion test coupons, thermometer wells, gauge adapters and other instrument probes.

The 2 in. T-O-R Fitting has a maximum operating pressure of 3600 psi (248 bar). The 3 in. fitting has a maximum operating pressure of 1500 psi (103 bar). Both sizes have a maximum operating temperature of 180° F (82° C).

### Features

The complete THREAD-O-RING Fitting consists of: cap, plug, O-ring, and nipple.

THREAD-O-RING Fitting taps can be made without shutdown using the TDW T-101 Drilling Machine or the 360 Tapping Machine.

When properly equipped, 2- and 3-inch T-O-R Plugs are set using the T-101 Drilling Machine. Additionally, the 360 Tapping Machine can set 3-inch plugs.

One of the many uses of the THREAD-O-RING Fitting is as a purge and equalization fitting during plugging operations on pipelines and plant piping.

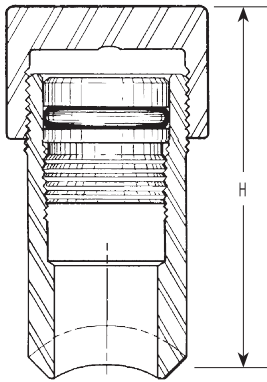
Patented in the United States and in other countries.  
ISO 9001 Certified

North & South America: +1 918 447 5000 ■ Europe / Africa / Middle East: +32 67 28 3611 ■ Asia Pacific: +65 6364 8520 ■ [www.tdwilliamson.com](http://www.tdwilliamson.com)

Data subject to change without notice. / Dimensions not for construction unless certified. / © Registered trademark of T.D. Williamson, Inc. in the United States and other countries. / TM Trademark of T.D. Williamson, Inc. in the United States and other countries. / © Copyright 2015 All rights reserved. T.D. Williamson, Inc.



# THREAD-O-RING™ Fittings



## Dimensions

Size		'H' for pipe smaller than 6"		'H' for 6" and larger pipe		Min. Valve I.D.		Weight		Part Number
inch	mm	inch	mm	inch	mm	inch	mm	lb.	kg.	
2	50	5-5/16	135	5-3/16	132	2-1/16	52.4	6-1/2	2.9	See Chart
3	80	4-3/4	121	4-3/4	121	3-1/16	77.8	12-3/8	5.6	06-1387-0000*

\* This part number is for use with a 360 Tapping Machine only. If a T-101 compatible plug is required, contact a TDW representative for the correct part number.

## TR - NNBB - PMRR - CC

2 in. (DN 50) TDW THREAD-O-RING™ Fitting

### Nipple Material

"NN"	Nipple Material	Part Number
00	Steel, Carbon ASTM A-333 GR 6	00-1023-0333-XX
01	Steel, Stainless 304L ASTM A-312	00-1023-0359-XX
02	Steel, Stainless 316L ASTM A-312	00-1023-0358-XX
03	Aluminum, 6061-T6	00-1023-0360-XX

### Weld Bevel

Nipple			
"BB"	Part Number	Pipe Size	Detail
00	00-1023-XXXX -51	6.000 and larger	B
01	00-1023-XXXX -12	5.000 Nom. or 5.562 OD	A
02	00-1023-XXXX -03	4.000 Nom. or 4.500 OD	A
03	00-1023-XXXX -04	3.500 Nom. or 4.000 OD	A
04	00-1023-XXXX -05	3.000 Nom. or 3.500 OD	A
05	00-1023-XXXX -06	2.500 Nom. or 2.875 OD	A
06	00-1023-XXXX -07	2.000 Nom. or 2.375 OD	A



Detail A



Detail B



# THREAD-O-RING™ Fittings

## Threaded Cap

"CC"	Cap Material	Part Number
00	ASTM A105 (Std. Mat.)	00-0200-0001
02	ASTM A312 304L SST	00-0200-0015
03	ASTM A312 316L SST	00-0200-0021
04	Aluminum 6061-T6	00-0200-0022
06	ASME A350 LF2 CL1	00-0200-0019

## Plug Material

"PM"	Plug Material	Part Number
00	ASTM B16 C36000 H02 Brass (Std. Mat.)	00-4172-0100
01	ASTM C1213/1215 CF Stl.	00-4172-0200
02	ASTM 304 CF SST	00-4172-0600
03	ASTM 316 CF SST	00-4172-0400
04	Aluminum, 6061-T6	00-4172-1200
05	ASME SA350 LF2 CL1	00-4172-0500
06	ASTM 303 CF SST	00-4172-0300
08	4140 CF Steel	00-4172-0800
12	ASTM A105 Normalized	00-4172-1300
13	ASTM B148 C95400 AI Bronze	00-4172-1400
14	ASTM B21 C46400 Naval Brass	00-4172-1500
15	ASTM 304L SST	00-4172-1600
16	ASTM A350 LF2 CL1 Per NACE MR0175	00-4172-1700

## O-Ring Material

"RR"	O-Ring Material	Part Number
00	No O-Ring	N/A
01	Buna-N N674-70 (Std. Mat.)	00-0118-0006
02	Fluorocarbon V747-75	00-1248-0002
03	Neoprene C1276-70 (Std. Mat.)	00-1947-0006
04	Ethylene Propylene E540-80 (EPDM)	00-2977-0001
05	Buna-N (Low-Temp.) N103-70	00-3079-0001
06	PTFE	00-1327-0001
07	Neoprene 882-K	00-1808-0003
08	Silicone Rubber	00-3781-0006
09	Neoprene 882-P	00-4677-0006
10	Kalrez	00-4353-0001
11	Fluorocarbon GF	00-6732-0002
12	PTFE Encapsulated Fluorocarbon	00-6762-0002
13	Special Nitrile N-497	00-6932-0001
14	Fluorocarbon V1238-95	00-8509-0002



**T.D. Williamson**

2100,001.03- p4



# THREAD-O-RING™ Flanged Fitting

Size: 2-inch



T.D. Williamson

Bulletin No: 2100.019.01

Version: 11.2012

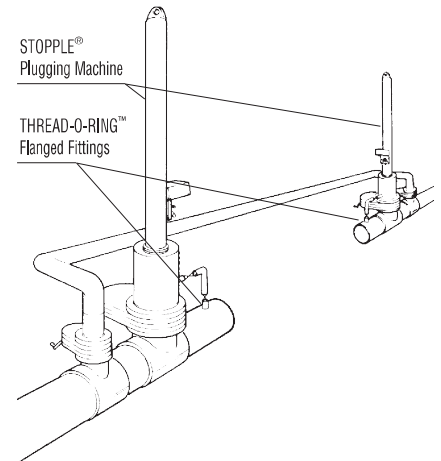
Cross Indexing No: n/a

Supersedes: 2100,019,00 (09.2008)



■ THREAD-O-RING™ Flanged Fittings

## ■ Typical Setup Using THREAD-O-RING™ Flanged Fittings



TDW THREAD-O-RING™ Flanged Fittings are used for blowdown of the isolated pipe section following a double STOPPLE® operation.

### Description

THREAD-O-RING™ Flanged Fittings are used with TDW Tapping Machines as purge and equalization fittings. They can also be installed during new construction and used for blowdown connections on either side of a block valve.

In addition, the THREAD-O-RING Flanged Fitting will accept the corrosion test coupons, thermometer wells, gauge adapters and other instrument probes.

The THREAD-O-RING Flanged Fitting has a maximum operating pressure per the ANSI Class and Schedule and has a maximum operating temperature of 180°F (82°C).

### Features

The complete THREAD-O-RING Flanged Fitting consists of: flange, plug, O-ring, and blind flange kit.

THREAD-O-RING Flanged Fitting taps can be made without shutdown using the TDW T-101 Drilling Machine or the 360 Tapping Machine.

The 2-inch THREAD-O-RING™ Plugs are set using either the T-101 Drilling Machine or the 360 Tapping Machine.

One of the many uses of the THREAD-O-RING Flanged Fitting is as a purge and equalization fitting during tapping operations on pipelines and plant piping.

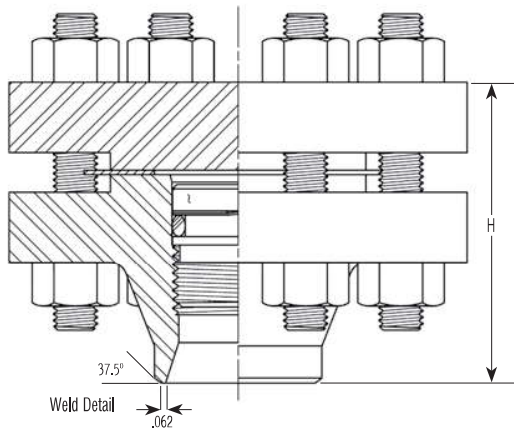
ISO 9001 Certified

Toll Free

**1-888-TDWmSon (839-6766)**



# THREAD-O-RING™ Flanged Fitting



## Dimensions

Size		'H' for 6" and larger pipe		Min. Valve I.D.		Weight		Part Number
Inches	mm	Inches	mm	Inches	mm	Lb.	Kg.	
2	50	5-3/16	132	2-1/16	52.4	6-1/2	2.9	See Chart

**F R - N N B B - P M R R - C C**

2" (DN 50) TDW THREAD-O-RING™ Flanged Fitting

## Flange Material

"NN"	Flange Material & Class	Part Number
00	ASTM A105N, 150 LB	00-0465-0001-XX
01	ASTM A105N, 300 LB	00-0465-0002-XX
02	ASTM A105N, 400 & 600 LB	00-0465-0004-XX
03	ASTM A105N, 900 & 1500 LB	00-0465-0005-XX
04	ASTM A350 LF2 CL1, 150 LB	00-8833-0001-XX
05	ASTM A350 LF2 CL1, 300 LB	00-8833-0002-XX
06	ASTM A350 LF2 CL1, 400 & 600 LB	00-8833-0004-XX
07	ASTM A350 LF2 CL1, 900 & 1500 LB	00-8833-0005-XX
08	ASTM A182 F304L STAINLESS, 150 LB	00-8835-0001-XX
09	ASTM A182 F304L STAINLESS, 300 LB	00-8835-0002-XX
10	ASTM A182 F304L STAINLESS, 400 & 600 LB	00-8835-0004-XX
11	ASTM A182 F304L STAINLESS, 900 & 1500 LB	00-8835-0005-XX

## Schedule

"BB"	Flange Part Number	Schedule
00	00-XXXX-XXXX -04	10
01	00-XXXX-XXXX -03	40
02	00-XXXX-XXXX -02	80
03	00-XXXX-XXXX -01	160

## Maximum Allowable Operating Pressure

Based on Hoop Stress at Weld Hub  
Using .72 Design Factor -in psi

Class	Material	Schedule			
		10	40	80	160
150		285	285	285	285
300	ASTM A 105N	740	740	740	740
400	AND	990	990	990	990
600	A350 LF2 CL1	1480	1480	1480	1480
900		2220	2220	2220	2220
1500		2375	3405	3705	3705
150		285	285	285	285
300		740	740	740	740
400	ASTM A182 F304L	990	990	990	990
600		1480	1480	1480	1480
900		1650	2220	2220	2220
1500		1650	2365	3300	3705



# THREAD-O-RING™ Flanged Fitting

## Blind Flange Kit

"CC"	ANSI Class	Material	Part Number
00	150	ASTM A105N	06-8041-0215-00
01	300	ASTM A105N	06-8041-0230-00
02	400 & 600	ASTM A105N	06-8041-0260-00
03	900 & 1500	ASTM A105N	06-8041-0290-00
04	150	ASTM A-350 LF 2 CL	26-1078-0215
05	300	ASTM A-350 LF 2 CL	26-1078-0230
06	400 & 600	ASTM A-350 LF 2 CL	26-1078-0260
07	900 & 1500	ASTM A-350 LF 2 CL	26-1078-0290
08	150	ASTM 182 F304L ST	26-2223-0215
09	300	ASTM 182 F304L ST	26-2223-0230
10	400 & 600	ASTM 182 F304L ST	26-2223-0260
11	900 & 1500	ASTM 182 F304L ST	26-2223-0290
99	No Blind Flange Kit		

## Plug Material

"PM"	Plug Material	Part Number
00	ASTM B-16 Yellow Brass (Std. Mat'l)	00-4172-0100
01	ASTM C1213/1215 CF Stl.	00-4172-0200
02	ASTM 304 CF SST	00-4172-0600
03	ASTM 316 CF SST	00-4172-0400
04	Aluminum, 6061-T6	00-4172-1200
05	ASME SA350 LF2	00-4172-0500
06	ASTM 303 CF SST	00-4172-0300
08	4140 CF Steel	00-4172-0800
12	ASTM A105 Normalized	00-4172-1300
13	ASTM B148 C95400 Al Bronze	00-4172-1400
14	ASTM B21 C46400 Naval Brass	00-4172-1500
15	ASTM 304L SST	00-4172-1600

## O-Ring Material

"RR"	O-Ring Material	Part Number
00	No O-Ring	N/A
01	Buna-N (Standard) N674-70	00-0118-0006
02	Viton® V747-75	00-1248-0002
03	Neoprene C1276-70 (Std)	00-1947-0006
04	Ethylene Propylene E540-80 (EPDM)	00-2977-0001
05	Buna-N (Low-Temp) N103-70	00-3079-0001
06	Teflon®	00-1327-0001
07	Neoprene 882-K	00-1808-0003
08	Silicone Rubber	00-3781-0006
09	Neoprene 882-P	00-4677-0006
10	Kalrez®	00-4353-0001
11	Viton® GF	00-6732-0002
12	Teflon® Encapsulated Viton®	00-6762-0002
13	Special Nitrile N-497	00-6932-0001
14	Viton® V1238-95	00-8509-0002

Kalrez® and Viton® are registered trademarks of DuPont Performance Elastomers LLC Ltd.  
Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.