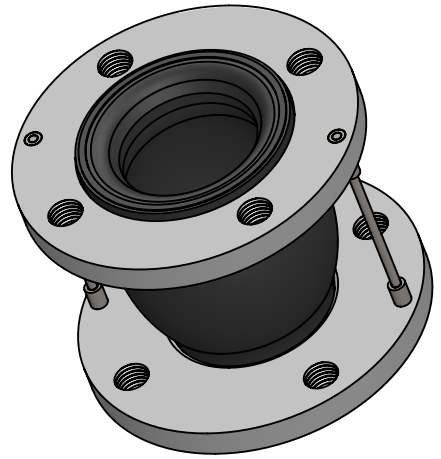


**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	EPDM
2	TUBE	EPDM
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, TAPPED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications. Contact factory for other sizes.

\*EPDM is the standard elastomer for the interior and exterior covering. Contact factory for other elastomers.

**MOVEMENT CAPABILITY AND FORCES**


Qty	Part Number	Size I.D. (in)	F/F (in)	MOVEMENT CAPABILITY AND FORCES							Weight (Lbs)	No. Cables	Thread Size UNC
				Comp. (in)	Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)	Angular (Deg)			
	MSRC EE0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.625
	MSRC EE0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.625
	MSRC EE0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.625
	MSRC EE0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.625
	MSRC EE0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.75
	MSRC EE0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.75
	MSRC EE0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.75
	MSRC EE1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	0.875
	MSRC EE1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	0.875

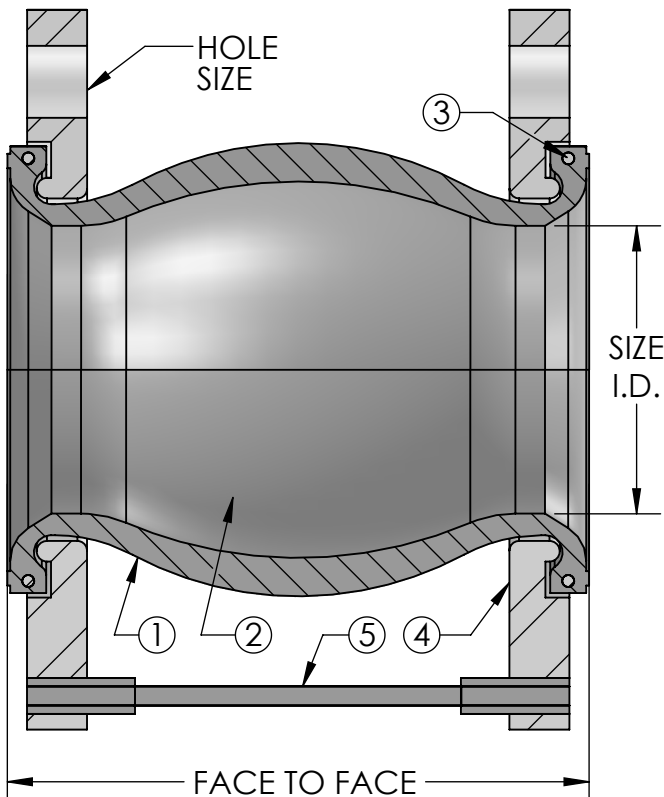
**PROJECT INFO**


CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

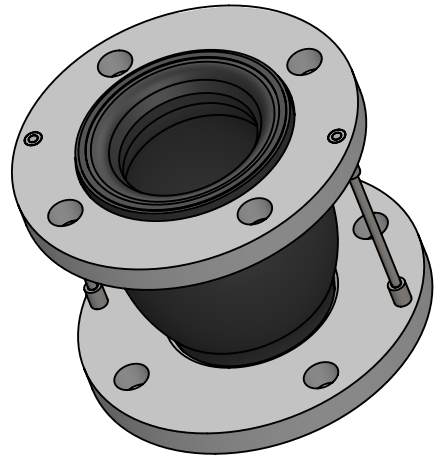
REV.	DATE
	
2323 W. HUBBARD ST. CHICAGO, IL 60612 TEL: 312-738-3800 FAX: 312-738-0415 WWW.METRAFLEX.COM	
<h2>CABLESPHERE</h2> <h3>EPDM TAPPED SPHERICAL CONNECTOR</h3>	
DRAWN BY: <b>DKISH</b>	DATE: <b>11/5/2014</b>
APPROVED: <b>JC</b>	DATE: <b>11/5/2014</b>
SCALE: <b>NONE</b>	DRAWING NUMBER: <b>MSRC-EE-T</b>



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	EPDM
2	TUBE	EPDM
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, DRILLED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications. Contact factory for other sizes.

\*EPDM is the standard elastomer for the interior and exterior covering. Contact factory for other elastomers.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	MOVEMENT CAPABILITY AND FORCES							Weight (Lbs)	No. Cables	Hole Size
				Comp. (in)	AXIAL			DEFLECTION					
					Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)	Angular (Deg)			
	MSRCDEE0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.75
	MSRCDEE0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.75
	MSRCDEE0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.75
	MSRCDEE0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.75
	MSRCDEE0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.875
	MSRCDEE0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.875
	MSRCDEE0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.875
	MSRCDEE1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	1
	MSRCDEE1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	1

**PROJECT INFO**

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

REV.

DATE



2323 W. HUBBARD ST.  
CHICAGO, IL 60612  
TEL: 312-738-3800  
FAX: 312-738-0415  
WWW.METRAFLEX.COM

**CABLESPHERE**

EPDM DRILLED SPHERICAL CONNECTOR

DRAWN BY: **DKISH**

DATE: **11/5/2014**

APPROVED: **JC**

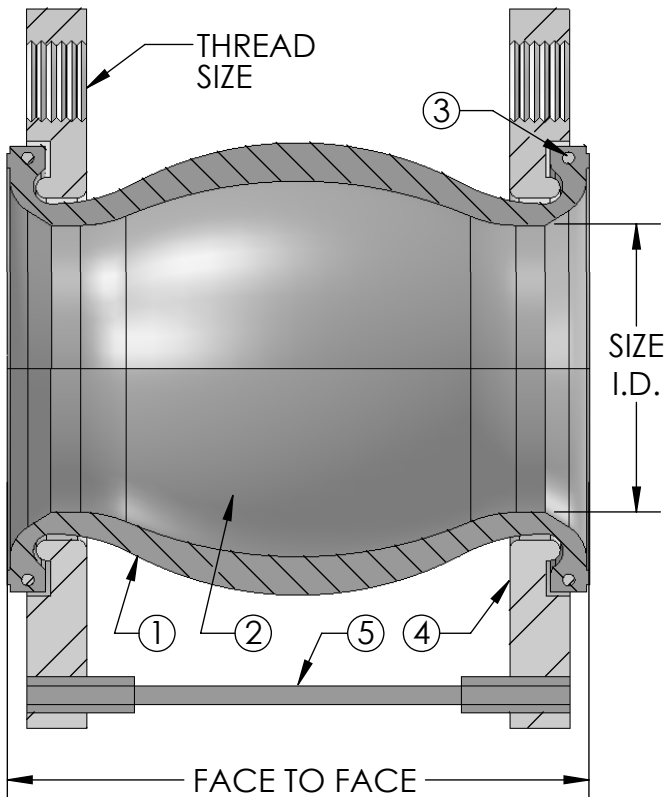
DATE: **11/5/2014**

SCALE:

DRAWING NUMBER:

**NONE**

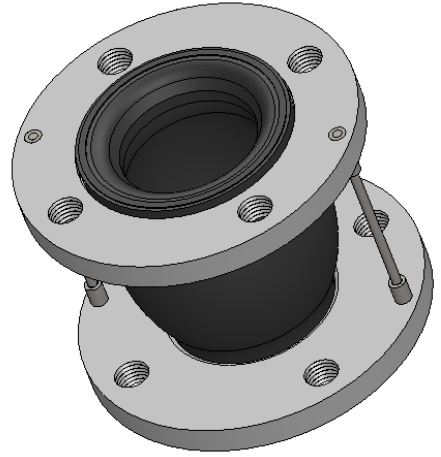
**MSRC-EE-D**



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	NEOPRENE
2	TUBE	NEOPRENE
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, TAPPED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	MOVEMENT CAPABILITY AND FORCES							Weight (Lbs)	No. Cables	Thread Size UNC
				Comp. (in)	AXIAL			DEFLECTION					
					Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)	Angular (Deg)			
	MSRCNN0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.625
	MSRCNN0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.625
	MSRCNN0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.625
	MSRCNN0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.625
	MSRCNN0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.75
	MSRCNN0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.75
	MSRCNN0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.75
	MSRCNN1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	0.875
	MSRCNN1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	0.875

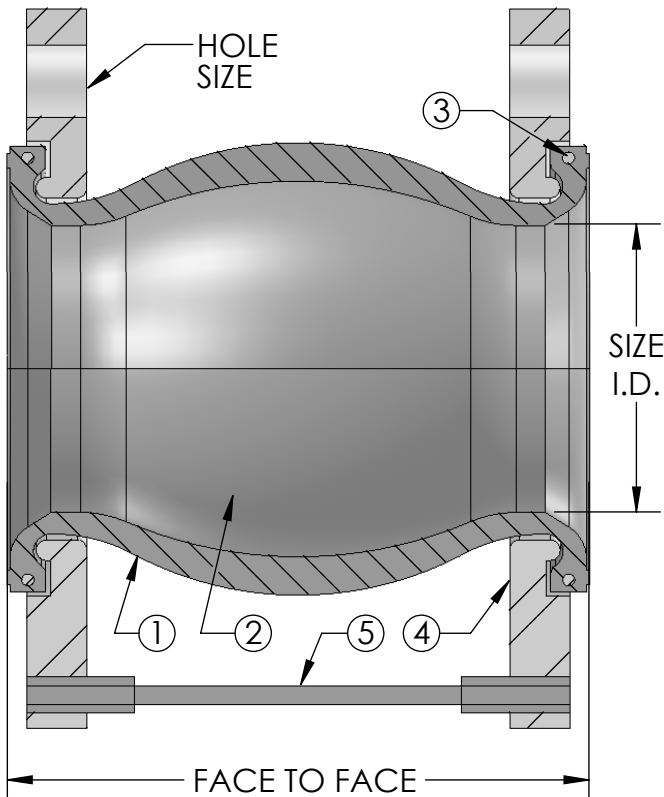
**PROJECT INFO**


CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

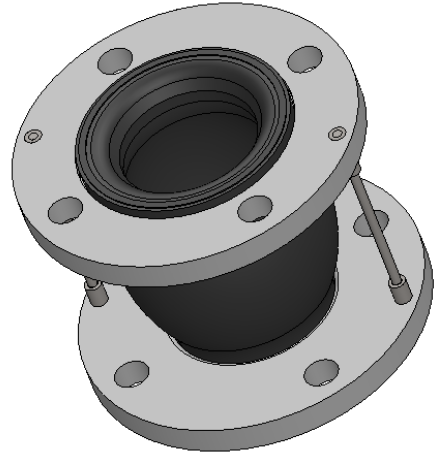
REV.	DATE
2323 W. HUBBARD ST. CHICAGO, IL 60612 TEL: 312-738-3800 FAX: 312-738-0415 WWW.METRAFLEX.COM	
<h2>CABLESPHERE</h2> <p>NEOPRENE TAPPED SPHERICAL CONNECTOR</p>	
DRAWN BY: DKISH	DATE: 1/20/2014
APPROVED: JC	DATE: 1/20/2014
SCALE: NONE	DRAWING NUMBER: MSRC-NN-T



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	NEOPRENE
2	TUBE	NEOPRENE
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, DRILLED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	AXIAL			DEFLECTION			Weight (Lbs)	No. Cables	Hole Size	
				Comp. (in)	Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)				Angular (Deg)
	MSRCDNN0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.75
	MSRCDNN0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.75
	MSRCDNN0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.75
	MSRCDNN0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.75
	MSRCDNN0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.875
	MSRCDNN0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.875
	MSRCDNN0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.875
	MSRCDNN1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	1
	MSRCDNN1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	1

**PROJECT INFO**

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

REV.

DATE



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CHICAGO, IL 60612  
TEL: 312-738-3800  
FAX: 312-738-0415  
WWW.METRAFLEX.COM

**CABLESPHERE**

NEOPRENE DRILLED SPHERICAL CONNECTOR

DRAWN BY: DKISH

DATE: 1/20/2014

APPROVED: JC

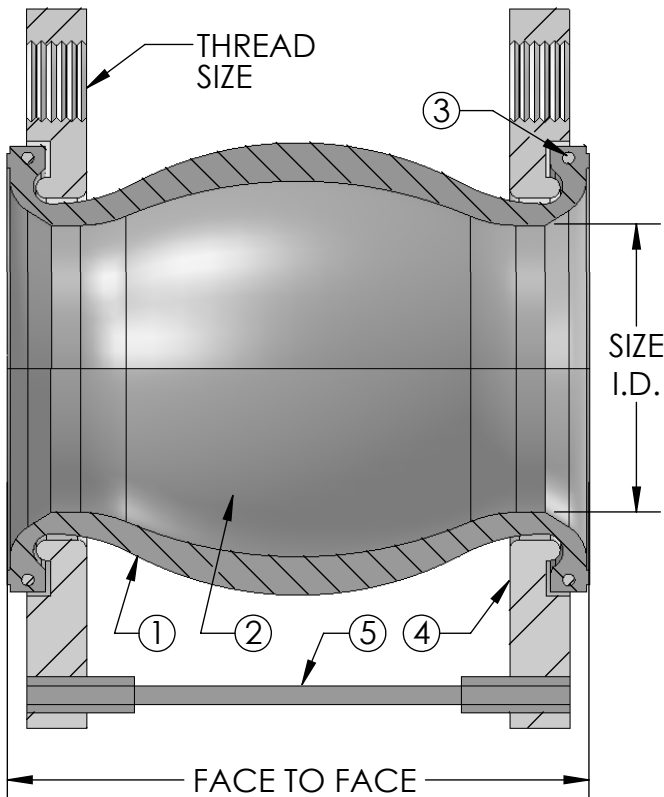
DATE: 1/20/2014

SCALE:

DRAWING NUMBER:

NONE

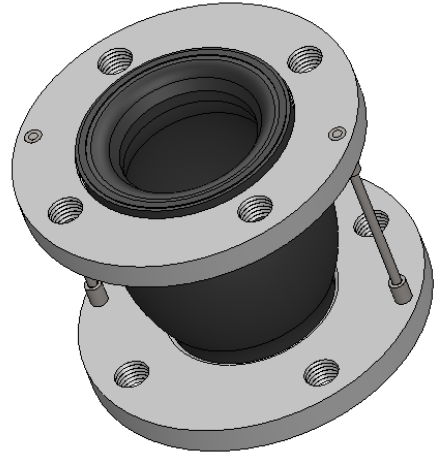
MSRC-NN-D



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	BUTYL
2	TUBE	BUTYL
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, TAPPED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	MOVEMENT CAPABILITY AND FORCES							Weight (Lbs)	No. Cables	Thread Size UNC
				Comp. (in)	AXIAL			DEFLECTION					
					Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)	Angular (Deg)			
	MSRCBB0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.625
	MSRCBB0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.625
	MSRCBB0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.625
	MSRCBB0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.625
	MSRCBB0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.75
	MSRCBB0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.75
	MSRCBB0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.75
	MSRCBB1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	0.875
	MSRCBB1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	0.875

**PROJECT INFO**

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

REV.

DATE



2323 W. HUBBARD ST.  
CHICAGO, IL 60612  
TEL: 312-738-3800  
FAX: 312-738-0415  
WWW.METRAFLEX.COM

**CABLESPHERE**

**BUTYL TAPPED SPHERICAL CONNECTOR**

DRAWN BY: DKISH

DATE: 1/20/2014

APPROVED: JC

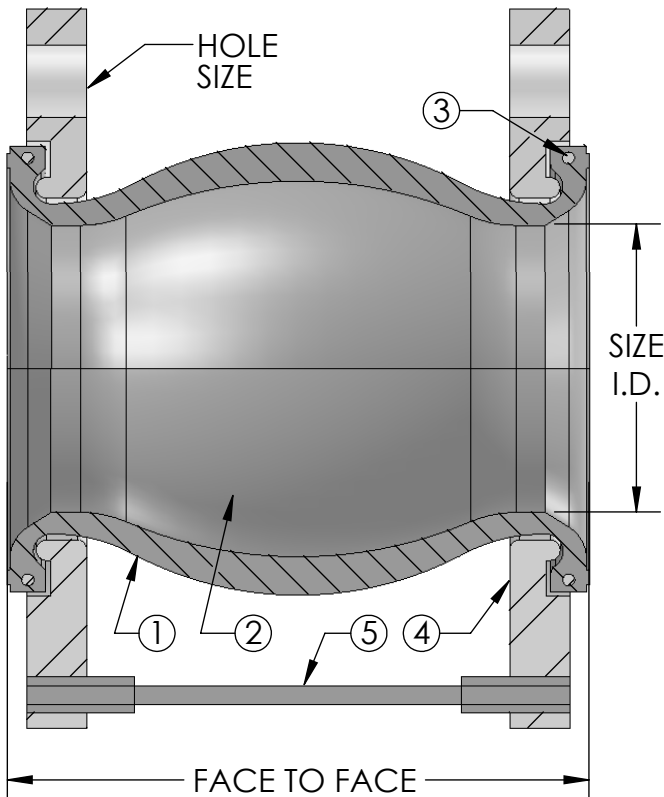
DATE: 1/20/2014

SCALE:

NONE

DRAWING NUMBER:

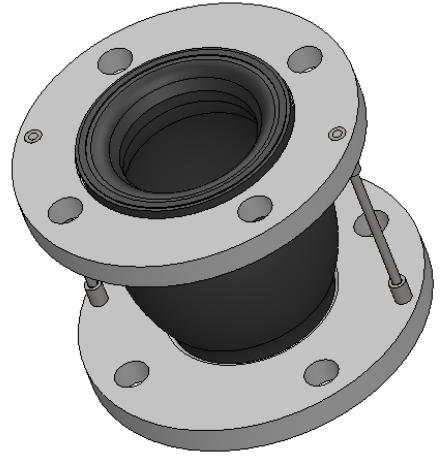
MSRC-BB-T



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	BUTYL
2	TUBE	BUTYL
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, DRILLED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**


Qty	Part Number	Size I.D. (in)	F/F (in)	AXIAL			DEFLECTION			Weight (Lbs)	No. Cables	Hole Size	
				Comp. (in)	Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)				Angular (Deg)
	MSRCDBB0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.75
	MSRCDBB0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.75
	MSRCDBB0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.75
	MSRCDBB0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.75
	MSRCDBB0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.875
	MSRCDBB0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.875
	MSRCDBB0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.875
	MSRCDBB1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	1
	MSRCDBB1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	1

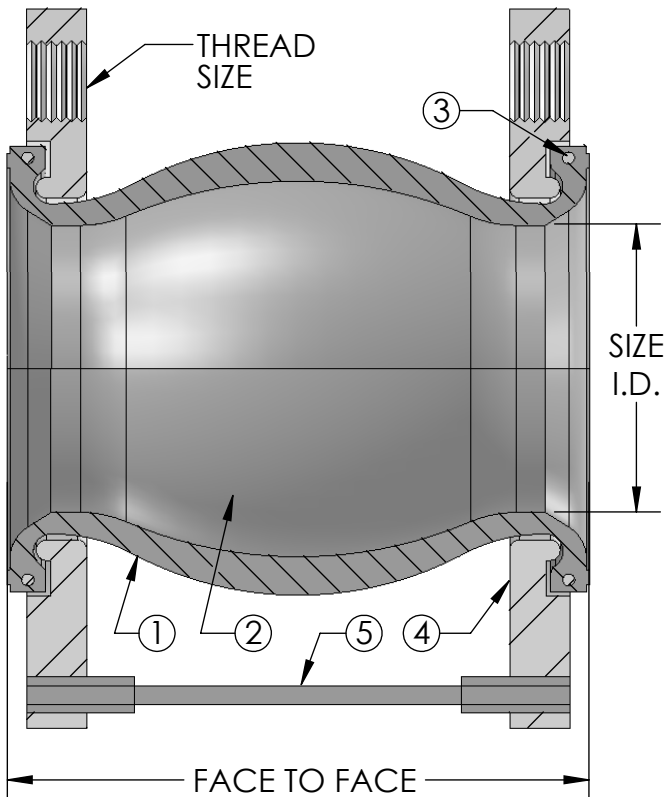
**PROJECT INFO**


CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

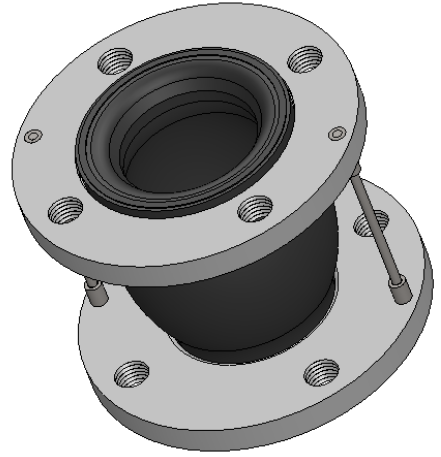
REV.	DATE
	
2323 W. HUBBARD ST. CHICAGO, IL 60612 TEL: 312-738-3800 FAX: 312-738-0415 WWW.METRAFLEX.COM	
<h2>CABLESPHERE</h2> <h3>BUTYL DRILLED SPHERICAL CONNECTOR</h3>	
DRAWN BY: DKISH	DATE: 1/20/2014
APPROVED: JC	DATE: 1/20/2014
SCALE: NONE	DRAWING NUMBER: MSRC-BB-D



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	NEOPRENE
2	TUBE	NITRILE
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, TAPPED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	AXIAL			DEFLECTION			Weight (Lbs)	No. Cables	Thread Size UNC	
				Comp. (in)	Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)				Angular (Deg)
	MSRCPN0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.625
	MSRCPN0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.625
	MSRCPN0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.625
	MSRCPN0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.625
	MSRCPN0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.75
	MSRCPN0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.75
	MSRCPN0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.75
	MSRCPN1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	0.875
	MSRCPN1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	0.875

**PROJECT INFO**

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

REV.

DATE



2323 W. HUBBARD ST.  
CHICAGO, IL 60612  
TEL: 312-738-3800  
FAX: 312-738-0415  
WWW.METRAFLEX.COM

**CABLESPHERE**

NITRILE TAPPED SPHERICAL CONNECTOR

DRAWN BY: DKISH

DATE: 1/20/2014

APPROVED: JC

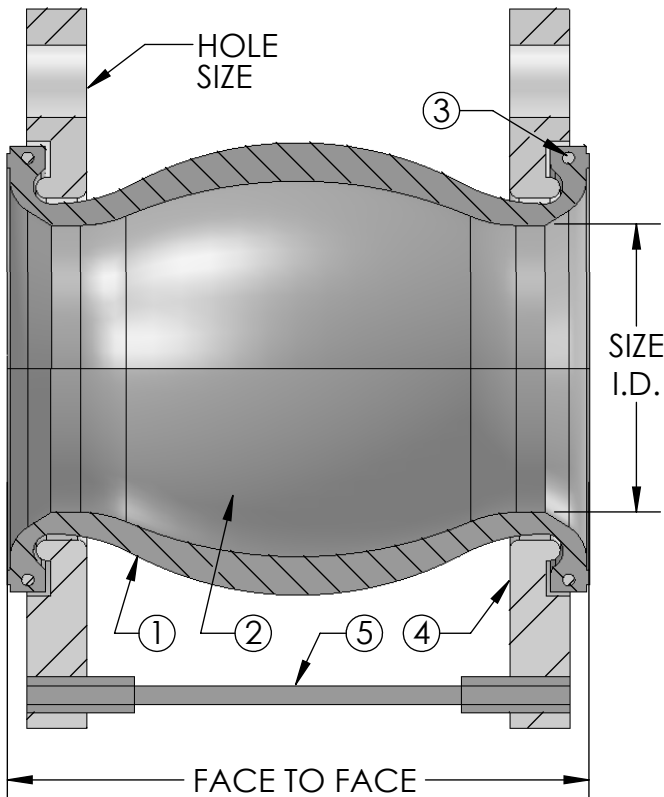
DATE: 1/20/2014

SCALE:

DRAWING NUMBER:

NONE

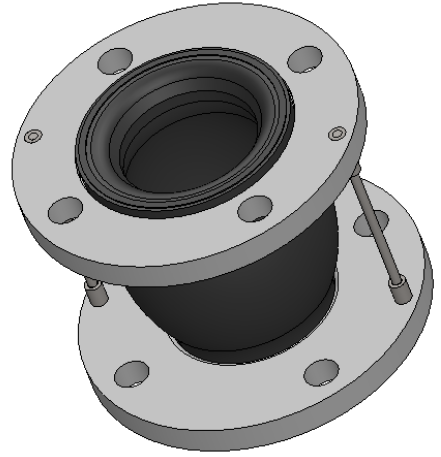
MSRC-PN-T



**\*Max Operating Conditions**

Temp. (°F)	Pressure (PSI)
170°	225
180°	200
190°	175
200°	150
210°	125
220°	100
230°	75

MAXIMUM WORKING TEMPERATURE 230°F



**LEAD FREE**

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

ITEM	PART NAME	MATERIAL
1	COVER	NEOPRENE
2	TUBE	NITRILE
3	ANCHOR WIRE	GALV. STEEL
4	FLANGE	GALV. STEEL, 150#, DRILLED
5	CABLE	GALV. STEEL AIRCRAFT CABLE

OTHER MATERIALS AND SIZES AVAILABLE

**Notes:**

For installation instructions go to [www.metroflex.com](http://www.metroflex.com). Joint must be installed at its neutral length, and the bolts properly torqued. Not suitable for steam or vacuum applications.

**MOVEMENT CAPABILITY AND FORCES**

Qty	Part Number	Size I.D. (in)	F/F (in)	AXIAL			DEFLECTION			Weight (Lbs)	No. Cables	Hole Size	
				Comp. (in)	Approx Force (Lbs)	Elong. (in)	Approx Force (Lbs)	Lateral (in)	Approx Force (Lbs)				Angular (Deg)
	MSRCDPN0200	2	6	0.5	55	0.125	73	0.5	55	15	8	2	0.75
	MSRCDPN0250	2.5	6	0.5	102	0.125	68	0.5	97	15	13	2	0.75
	MSRCDPN0300	3	6	0.5	136	0.125	115	0.5	108	15	14	2	0.75
	MSRCDPN0400	4	6	0.625	145	0.125	242	0.5	275	15	18	2	0.75
	MSRCDPN0500	5	6	0.625	172	0.125	196	0.5	308	15	23	2	0.875
	MSRCDPN0600	6	6	0.625	293	0.125	563	0.5	484	15	28	4	0.875
	MSRCDPN0800	8	6	0.625	372	0.125	587	0.5	688	15	40	4	0.875
	MSRCDPN1000	10	8	0.75	398	0.25	455	0.75	781	15	68	4	1
	MSRCDPN1200	12	8	0.75	390	0.25	356	0.75	842	15	96	4	1

**PROJECT INFO**


CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

REV.	DATE
2323 W. HUBBARD ST. CHICAGO, IL 60612 TEL: 312-738-3800 FAX: 312-738-0415 WWW.METRAFLEX.COM	
<h2>CABLESPHERE</h2> <h3>NITRILE DRILLED SPHERICAL CONNECTOR</h3>	
DRAWN BY: DKISH	DATE: 1/20/2014
APPROVED: JC	DATE: 1/20/2014
SCALE: NONE	DRAWING NUMBER: MSRC-PN-D