

REVISION TABLE			
REVISION	ECO NO.	APP'D	DATE
AR	1213280	E.S	2/10/23
DESCRIPTION			
CHANGE THE UNIT TO "LBS" FROM "KGS" IN THE SHEET 12			

"1/2" THRU 2.5"
STYLE A
SLIP-ON FLANGES

6. STYLE A REFERS TO ANY FLOWTUBE WITH W0, W1, OR W3 COIL HOUSING (EXAMPLE MODEL CODE: 8705XXXXXXXXXW0XX)
STYLE B REFERS TO ANY FLOWTUBE WITH M0, M1, M2, OR M4 COIL HOUSING (EXAMPLE MODEL CODE: 8705XXXXXXXXXM0XX)

5. FOR BREVITY, THE MODEL NUMBER LIST ONLY CONTAINS THE CODES FOR CARBON STEEL FLANGES. 304 AND 316 STAINLESS STEEL FLANGES ARE DIMENSIONALLY IDENTICAL TO CARBON STEEL. USE THE TABLE BELOW TO FIND THE CARBON STEEL CODE THAT CORRESPONDS TO EACH STAINLESS STEEL CODE.

STAINLESS STEEL CODES	ARE THE SAME DIMENSIONS AS CARBON STEEL CODE
S,P	C
T,R	D
G,H	F
K,L	J

4. SEE DRAWING 08705-0025 FOR HIGH PRESSURE FLANGES.

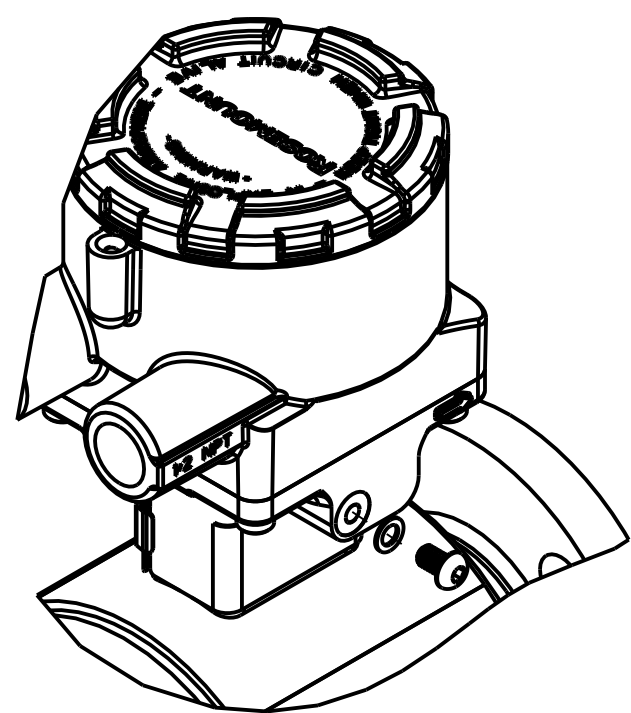
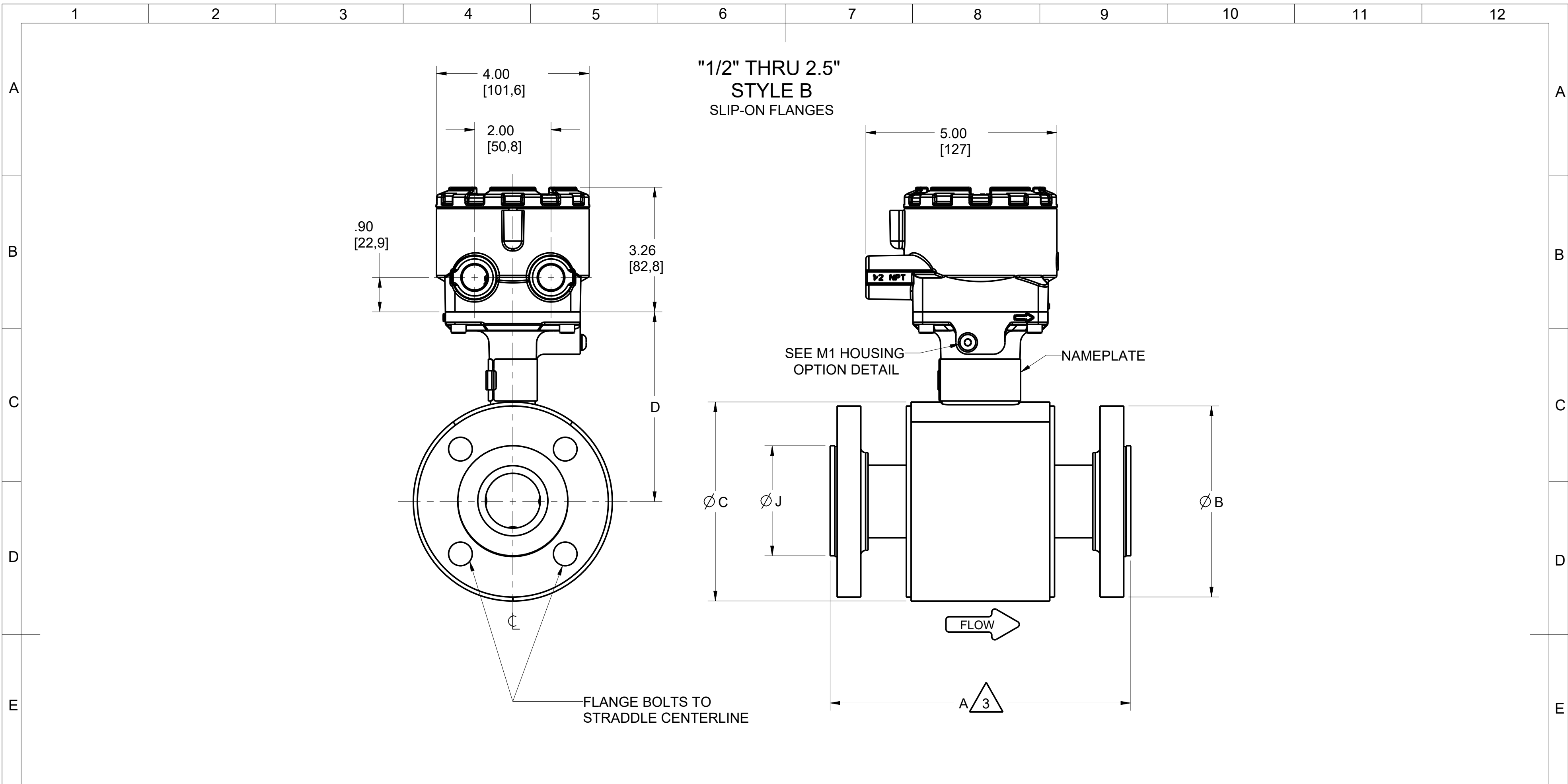
3. DIM "A" FOR FLOWMETERS WITH SLIP-ON FLAT FACE (SO/FF) FLANGES IS EQUAL TO THAT OF A RAISED FACE FLANGE (SO/RF). IF USING LINING PROTECTORS, SEE "LINING PROTECTOR" SHEET. IF USING GROUND RINGS, SEE "GROUND RING" SHEET.

2. PRESSURE RELIEF VALVE AVAILABLE WITH SEALED WELDED HOUSING (W1 OPTION) ONLY.

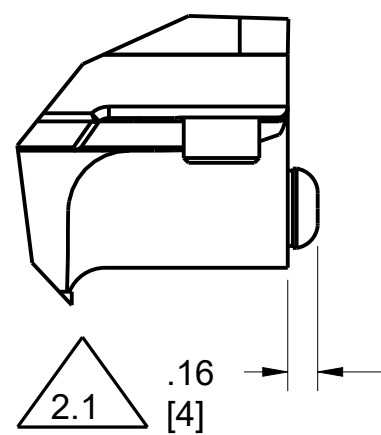
1. ROSEMOUNT CERTIFIES THAT THIS DRAWING IS IN ACCORDANCE WITH ROSEMOUNT ENGINEERING SPECIFICATIONS AND ACCURATELY REPRESENTS THE EQUIPMENT FURNISHED.

DRAWING NO. 08705-0024

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.	SURFACE FINISH UNLESS OTHERWISE SPECIFIED <input checked="" type="checkbox"/>	3RD ANGLE <input checked="" type="checkbox"/>	SIZE C	SCALE -	REV AR
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.		EMERSON			
-DEC TOLERANCES-		ROSEMOUNT			
.X ± - [-]	.XX ± - [-]	TITLE DIMENSIONAL DRAWING			
.XXX ± - [-]	FRACTIONS ± -	MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE			
ANGLES ± -	DO NOT SCALE PRINT	DR. D. BROKKE	9/22/08	DRAWING NO. 08705-0024	
	CAD MAINTAINED, (PRO/E)	APP'D S. ROGERS	12/12/08		
	PRODUCT CODE	DOC TYPE	SHEET 1 OF 15		



**M1 HOUSING
OPTION
DETAIL**



2.1 OPTIONAL RELIEF VALVE ASSEMBLY IS 1.75" [44,5].

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.		SURFACE FINISH UNLESS OTHERWISE SPECIFIED		✓	3RD ANGLE		SIZE	SCALE	REV				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.		EMERSON		ROSEMOUNT									
-DEC TOLERANCES-		TITLE		DIMENSIONAL DRAWING									
.X ± - [-]		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE											
.XX ± - [-]		DR. D. BROKKE		9/22/08		DRAWING NO.							
.XXX ± - [-]		APP'D S. ROGERS		12/12/08		08705-0024							
FRACTIONS ± -		ANGLES ± -		DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)		PRODUCT CODE		DOC TYPE		SHEET 2 OF 15	

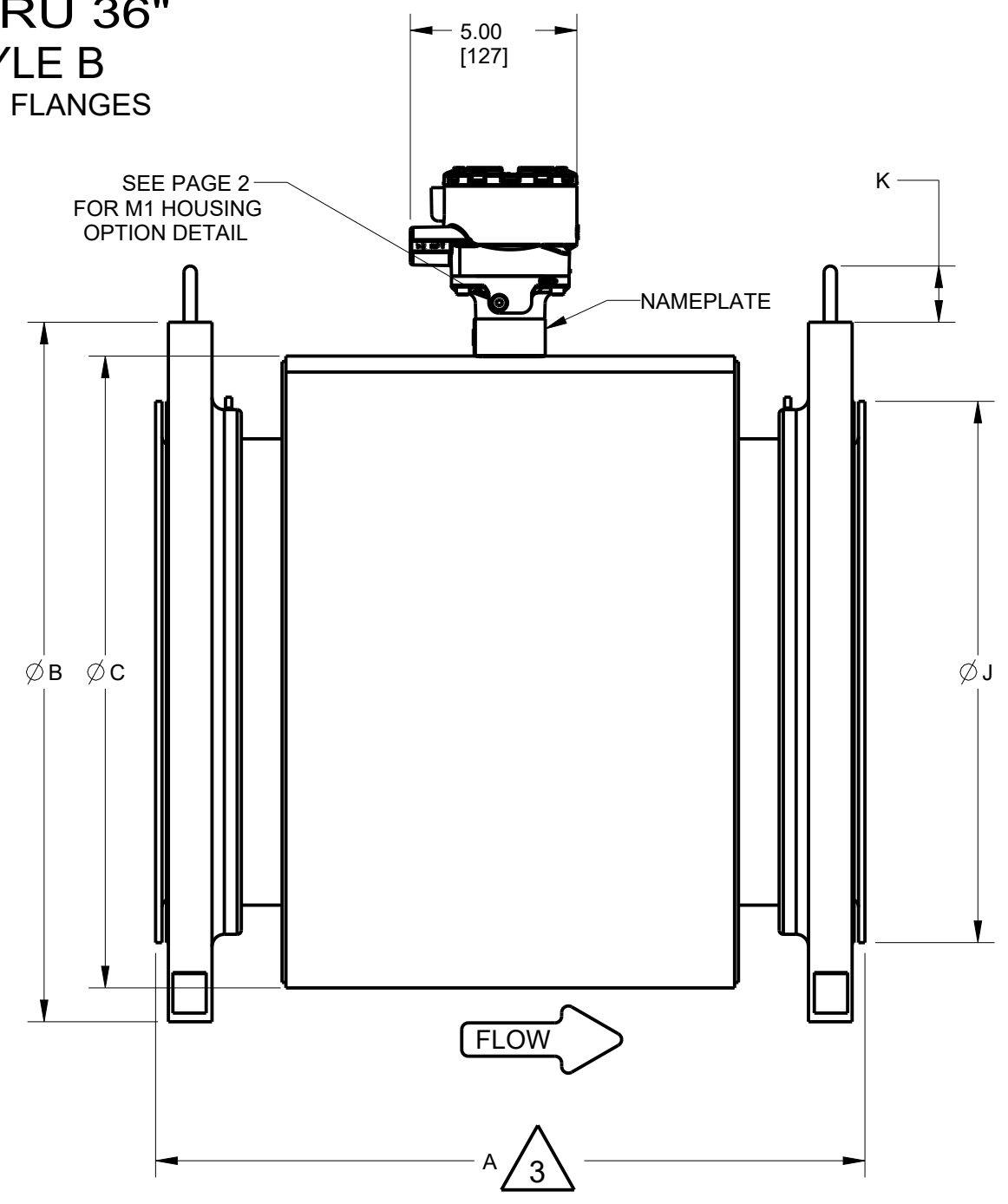
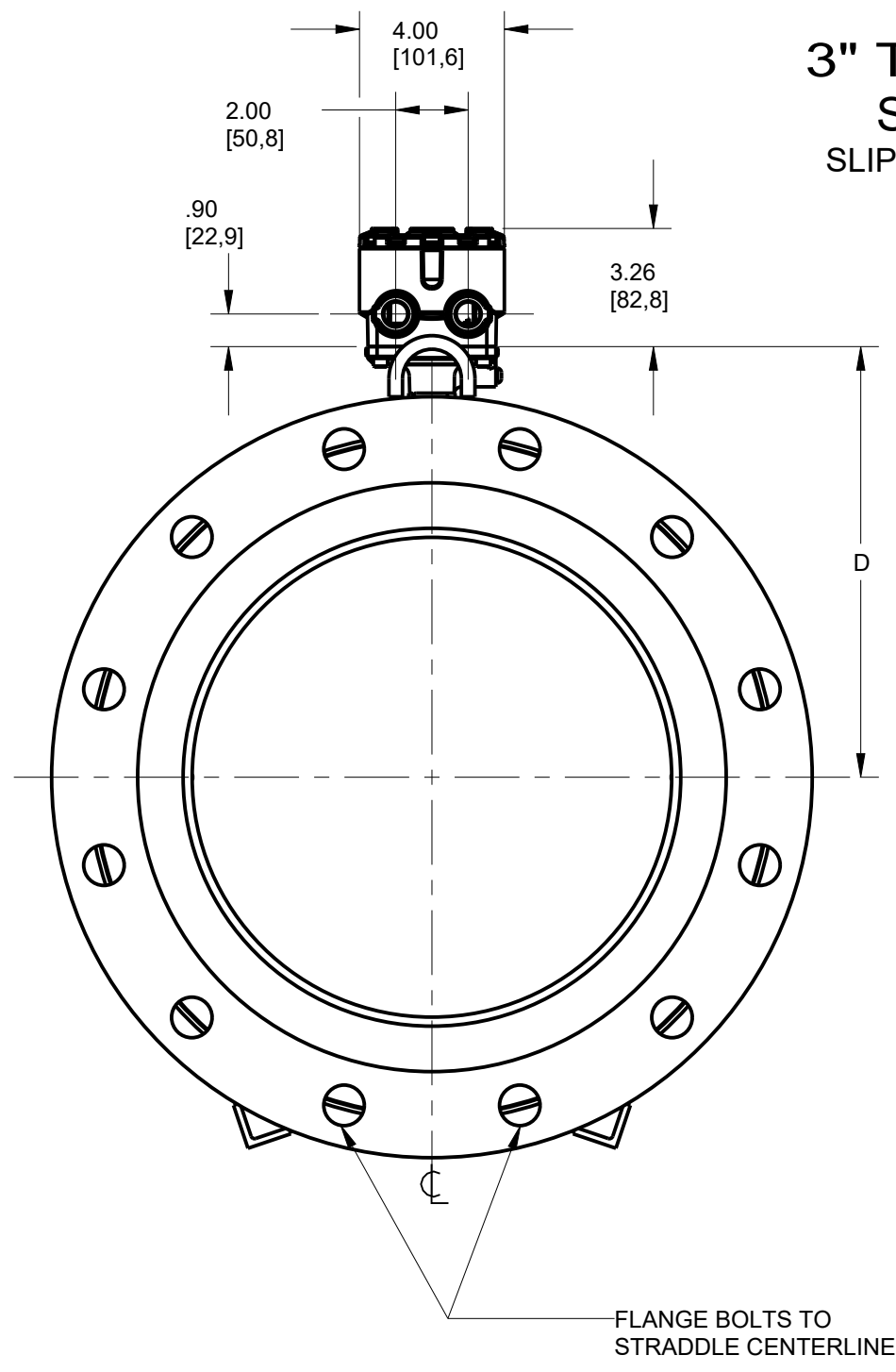
DRAWING NO. 08705-0024

1 2 3 4 5 6 7 8 9 10 11 12

A
B
C
D
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H

A
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H

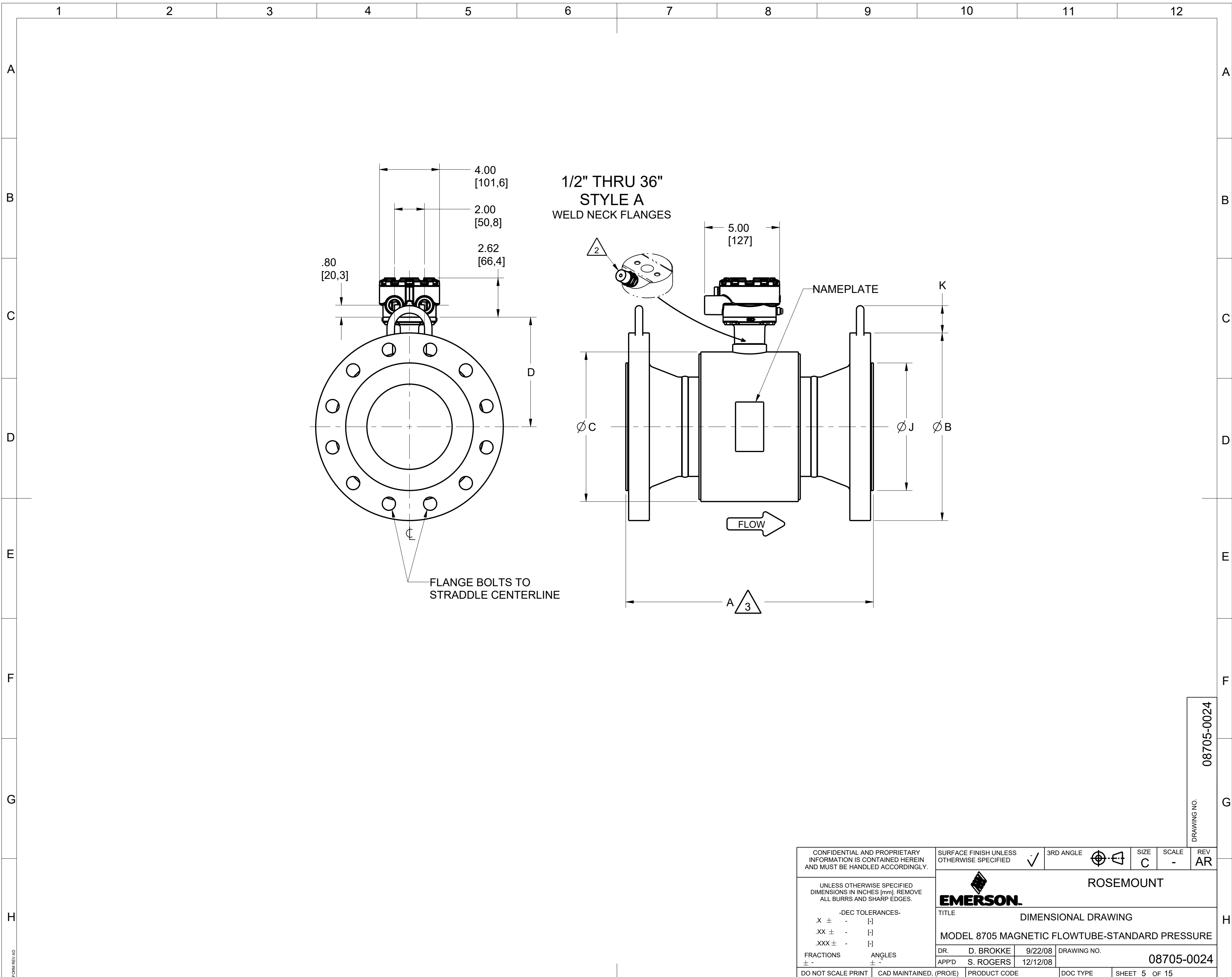
**3" THRU 36"
STYLE B
SLIP-ON FLANGES**



CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.		SURFACE FINISH UNLESS OTHERWISE SPECIFIED ✓		3RD ANGLE	SIZE C	SCALE -	REV AR
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.		EMERSON ROSEMOUNT					
-DEC TOLERANCES-		TITLE DIMENSIONAL DRAWING					
.X ± - [-]		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE					
.XX ± - [-]		DR. D. BROKKE 9/22/08		DRAWING NO. 08705-0024			
.XXX ± - [-]		APP'D S. ROGERS 12/12/08					
FRACTIONS ± -	ANGLES ± -	DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)	PRODUCT CODE	DOC TYPE	SHEET 4 OF 15

DRAWING NO. 08705-0024

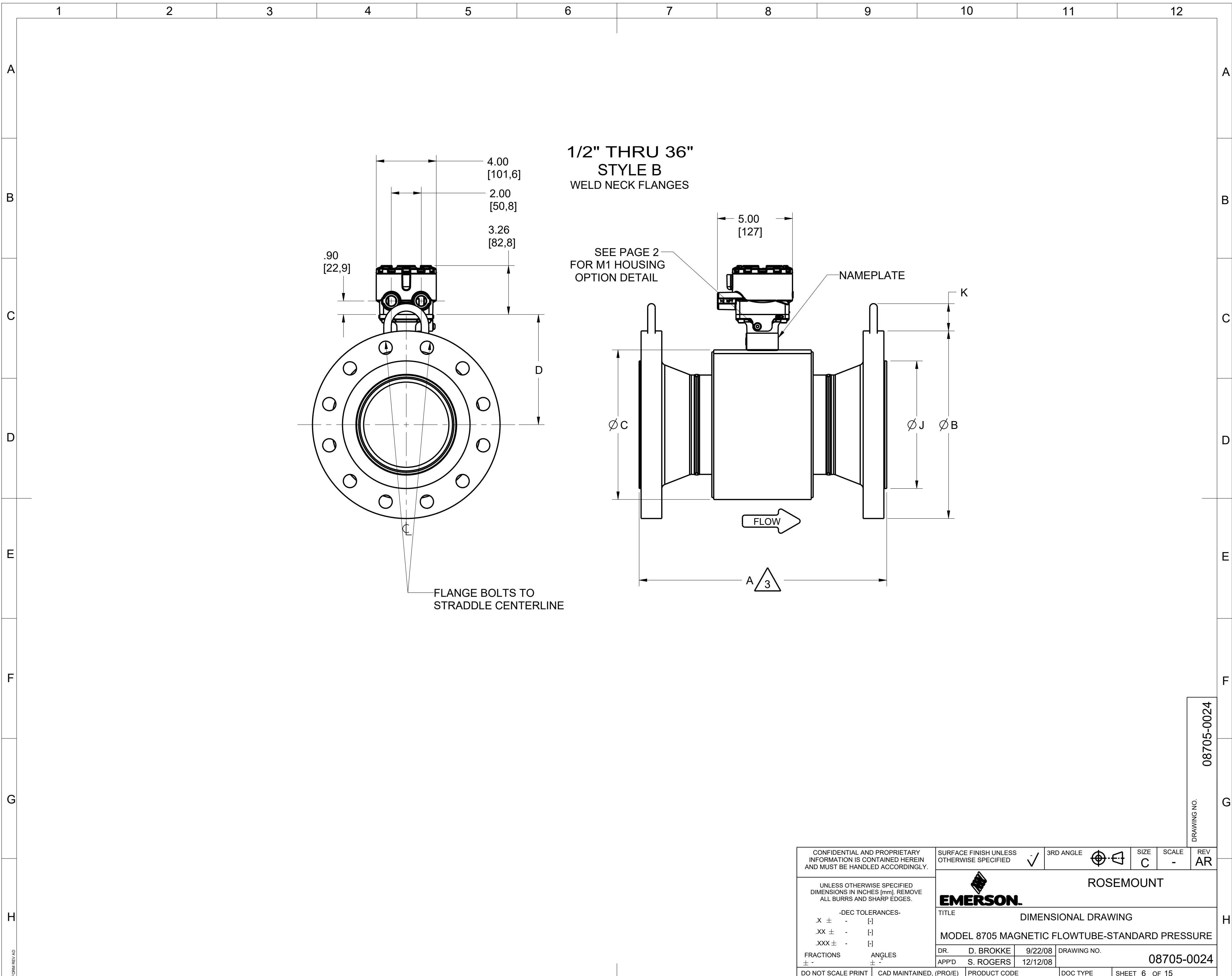
FORM REV/AD



DRAWING NO. 08705-0024

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.		SURFACE FINISH UNLESS OTHERWISE SPECIFIED <input checked="" type="checkbox"/>		3RD ANGLE	SIZE C	SCALE -	REV AR
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.		EMERSON ROSEMOUNT					
-DEC TOLERANCES-		TITLE DIMENSIONAL DRAWING					
.X ± - [-]		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE					
.XX ± - [-]		DR. D. BROKKE		9/22/08		DRAWING NO.	
.XXX ± - [-]		APP'D S. ROGERS		12/12/08		08705-0024	
FRACTIONS ± -	ANGLES ± -	DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)		PRODUCT CODE	
		DOC TYPE		SHEET 5 OF 15			

FORM REV/AD



**1/2" THRU 36"
STYLE B
WELD NECK FLANGES**

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.		SURFACE FINISH UNLESS OTHERWISE SPECIFIED ✓		3RD ANGLE	SIZE C	SCALE -	REV AR
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES.		EMERSON ROSEMOUNT					
-DEC TOLERANCES-		TITLE DIMENSIONAL DRAWING					
.X ± - [-]		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE					
.XX ± - [-]		DR. D. BROKKE 9/22/08		DRAWING NO. 08705-0024			
.XXX ± - [-]		APP'D S. ROGERS 12/12/08					
FRACTIONS ± -	ANGLES ± -	DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)	PRODUCT CODE	DOC TYPE	SHEET 6 OF 15

DRAWING NO. 08705-0024

FORM REV/AD

1 2 3 4 5 6 7 8 9 10 11 12

A

B

C

D

E

F

G

H

A

B

C

D

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G

H

1/2" THRU 36"
STYLE A
WITH W3 OPTION

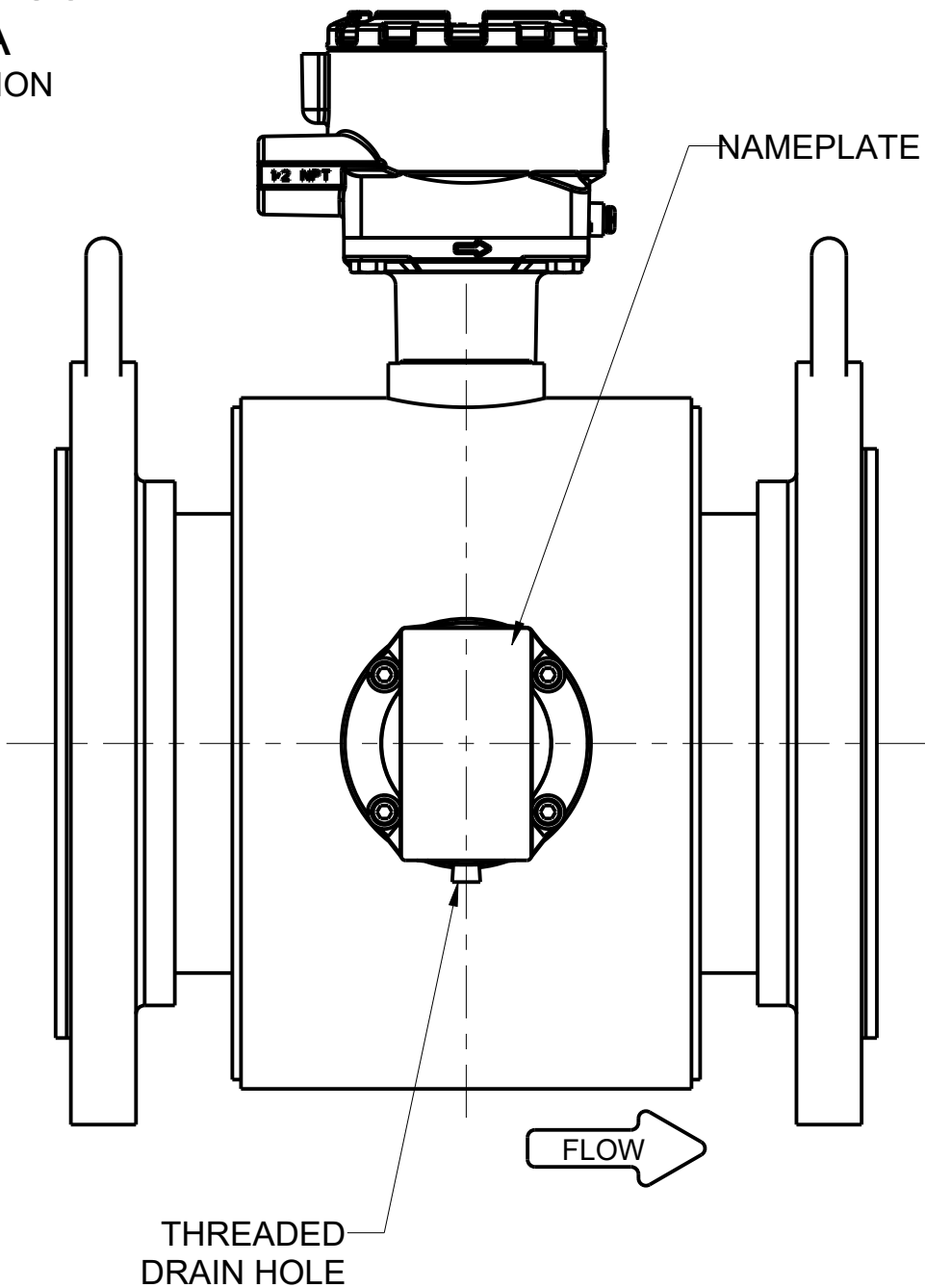
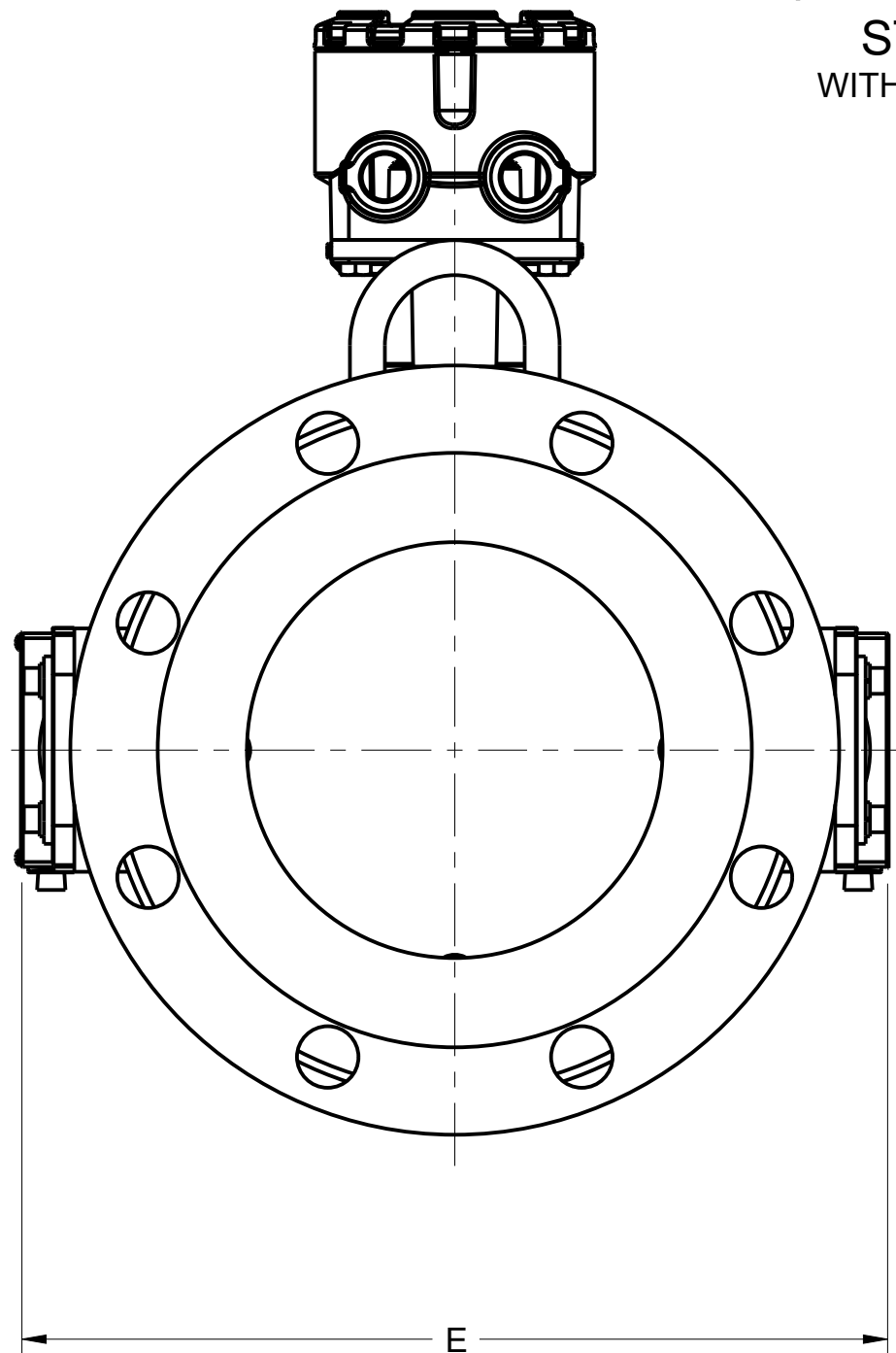


TABLE 4 - BODY WIDTH WITH ELECTRODE ACCESS (W3)

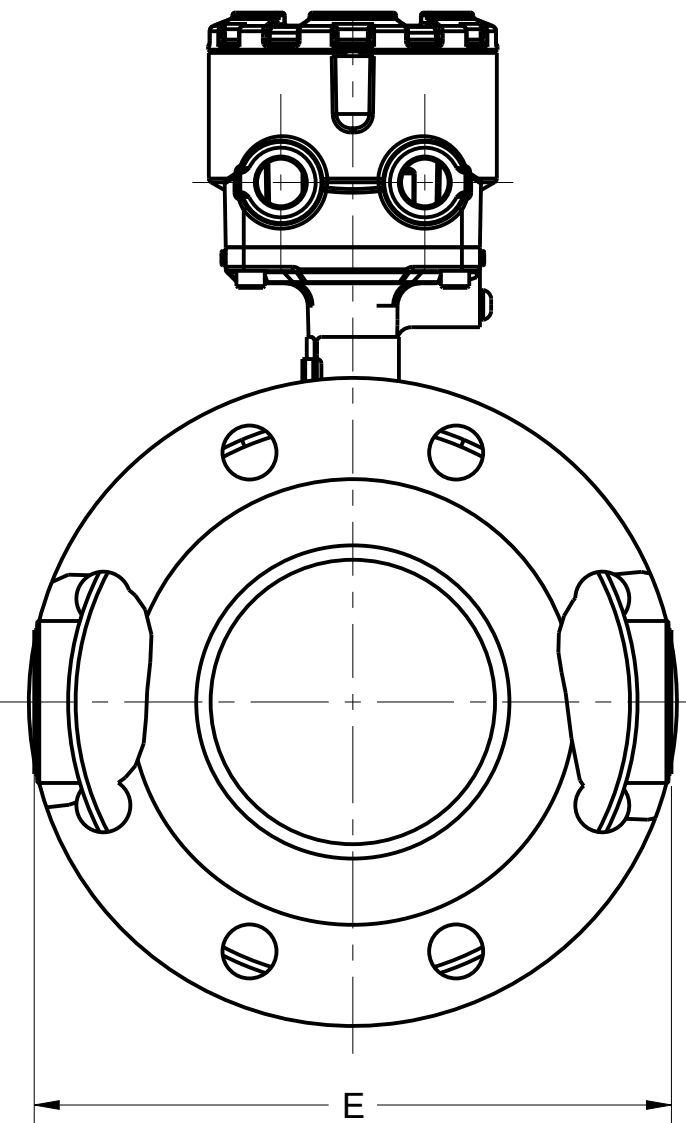
Size -- in (mm) All Flanges	Body Width w/ W3 DIM "E" (inch)	Body Width w/ W3 DIM "E" (mm)
0.5 (15)	4.41	112
1 (25)	4.41	112
1.5 (40)	4.82	122
2 (50)	4.82	122
2.5 (60)		
3 (80)	5.82	148
4 (100)	6.17	157
5 (125)		
6 (150)	7.30	185
8 (200)	8.27	210
10 (250)	9.69	246
12 (300)	10.77	274
14 (350)	11.83	300
16 (400)	12.84	326
18 (450)	14.10	358
20 (500)	15.11	384
24 (600)	17.39	442
30 (750)	20.13	511
36 (900)	24.00	610

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY.		SURFACE FINISH UNLESS OTHERWISE SPECIFIED <input checked="" type="checkbox"/>		3RD ANGLE <input checked="" type="checkbox"/>	SIZE C	SCALE -	REV AR
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (mm). REMOVE ALL BURRS AND SHARP EDGES.		EMERSON ROSEMOUNT					
-DEC TOLERANCES-		TITLE DIMENSIONAL DRAWING					
.X ± - [-]		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE					
.XX ± - [-]		DR. D. BROKKE		9/22/08		DRAWING NO.	
.XXX ± - [-]		APP'D S. ROGERS		12/12/08		08705-0024	
FRACTIONS ± -	ANGLES ± -	DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)		PRODUCT CODE	
		DOC TYPE		SHEET 7 OF 15			

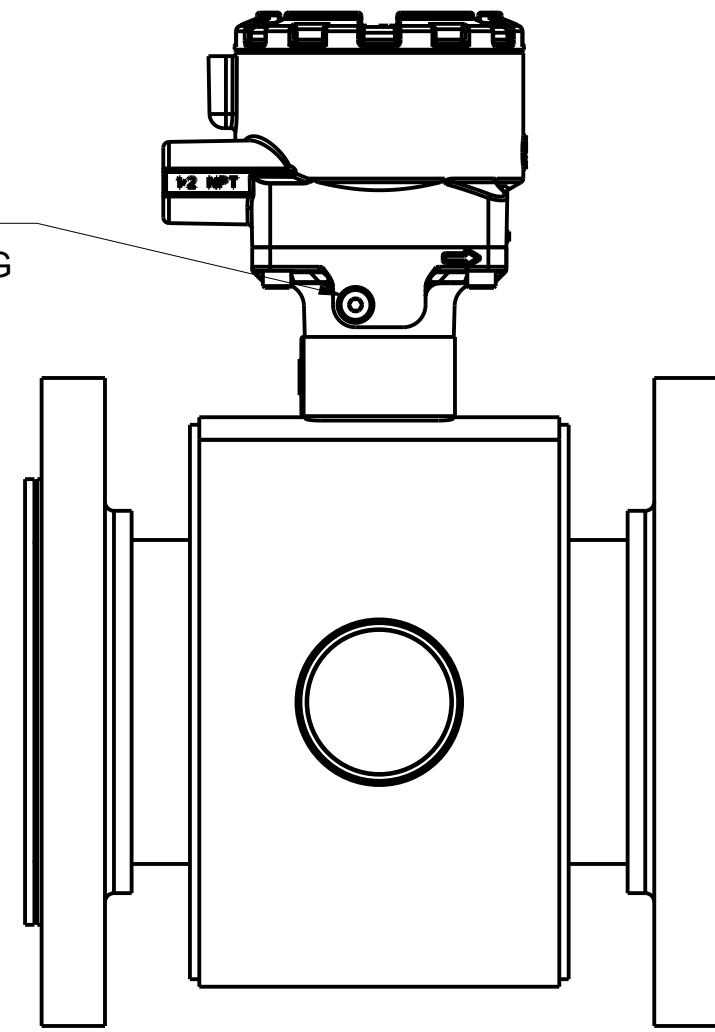
DRAWING NO. 08705-0024

FORM REV/AD

1/2" THRU 36"
STYLE B
WITH M2 OPTION

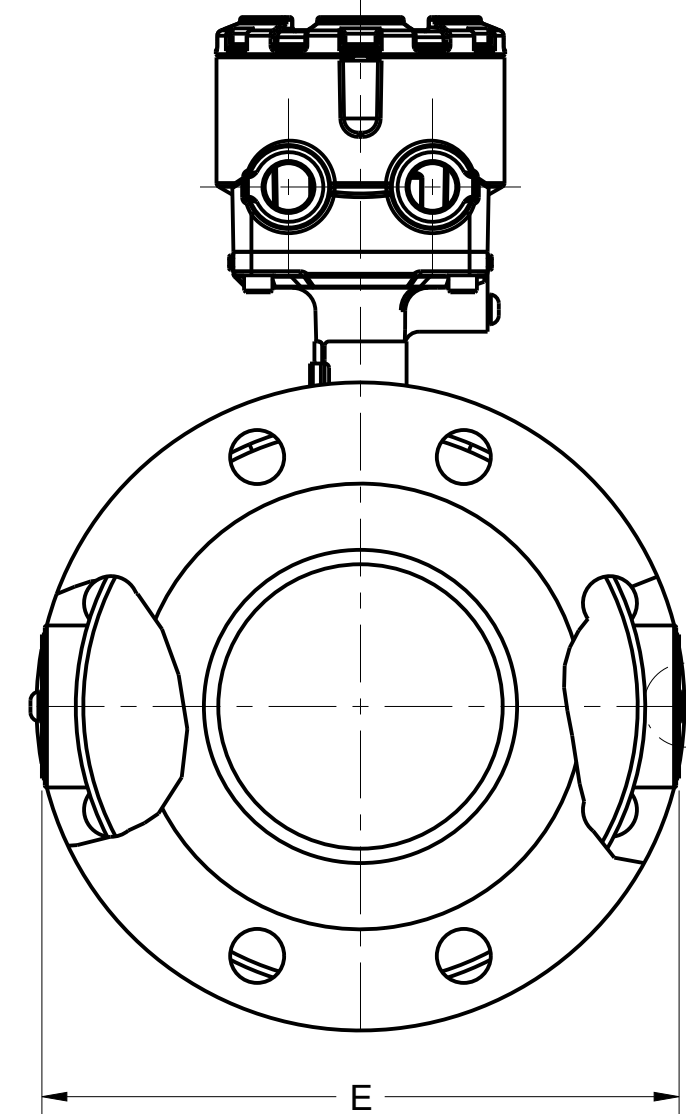


SEE PAGE 2
FOR M1 HOUSING
OPTION DETAIL



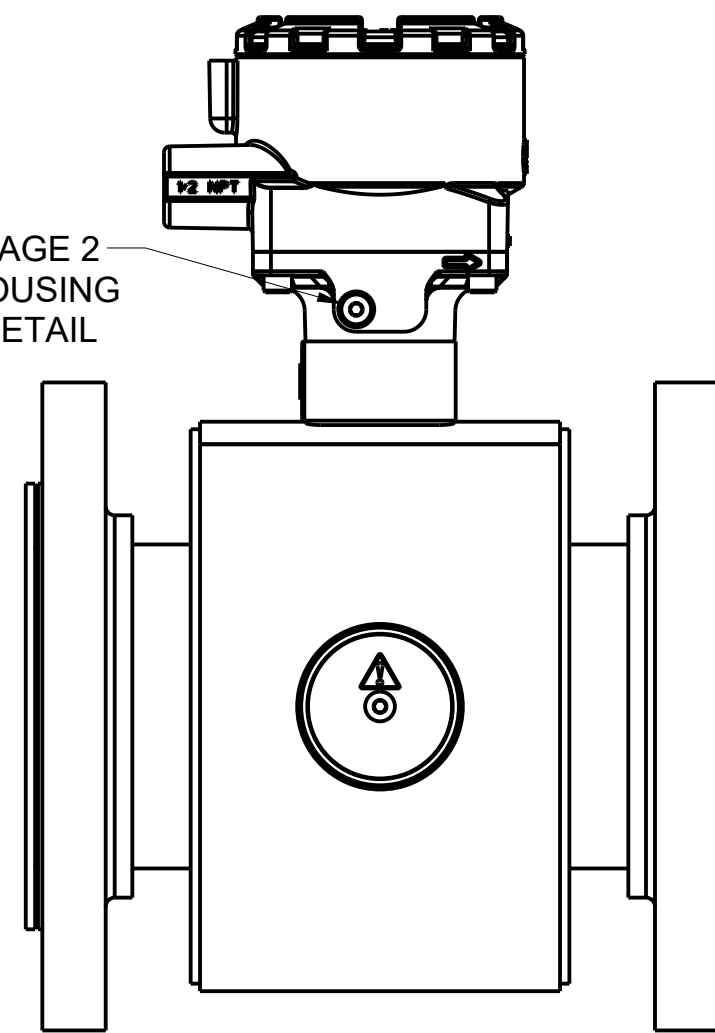
1/2" THRU 36"
STYLE B
WITH M4 OPTION

8.2



SEE DETAIL A

SEE PAGE 2
FOR M1 HOUSING
OPTION DETAIL



.16
[4]

DETAIL A
2X
M4 OPTION ONLY

THREADED
DRAIN
HOLE

TABLE 5 - BODY WIDTH WITH ELECTRODE ACCESS (M2)

Size -- in (mm) All Flanges	Body Width w/ M2 DIM "E" (inch)	Body Width w/ M2 DIM "E" (mm)
	8.1	8.1
0.5 (15)	5.22	133
1 (25)	5.70	145
1.5 (40)	5.88	149
2 (50)	6.36	161
2.5 (60)	6.86	174
3 (80)	7.88	200
4 (100)	8.88	226
5 (125)	9.71	247
6 (150)	10.62	270
8 (200)	12.62	321
10 (250)	15.53	394
12 (300)	17.53	445
14 (350)	20.68	525
16 (400)	22.68	576
18 (450)	24.68	627
20 (500)	26.68	678
24 (600)	30.68	779
30 (750)	36.68	932
36 (900)	44.18	1122

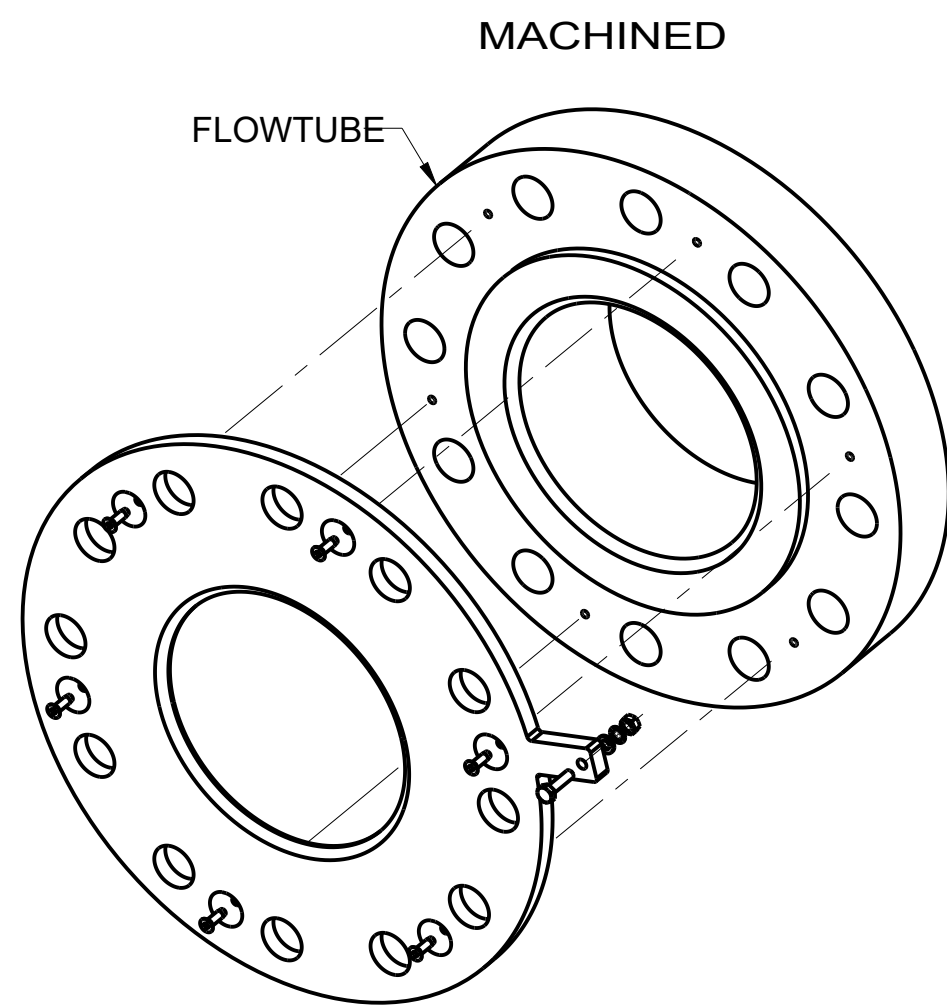
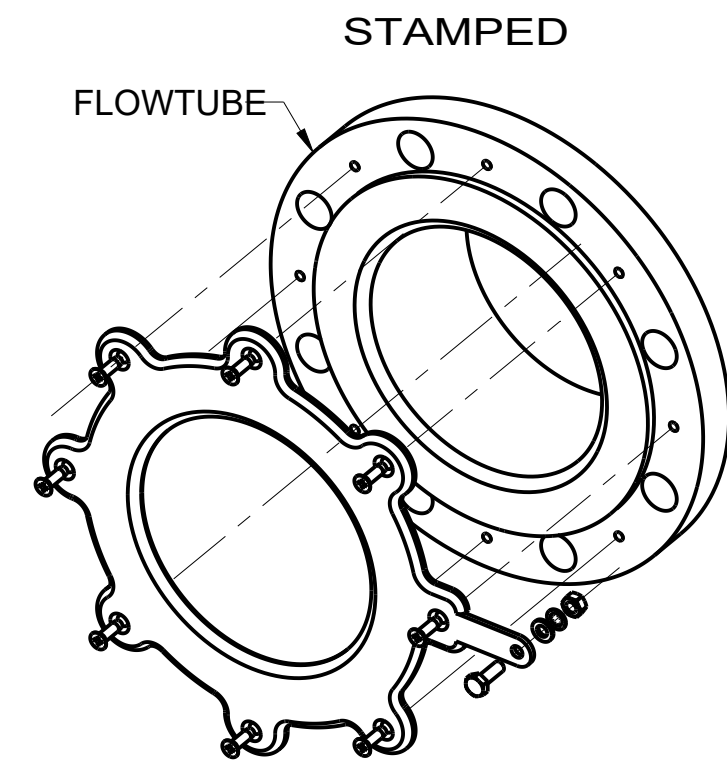
8.2 WHEN VENTING THE ELECTRODE COMPARTMENT, THE VENT AND RECOVERY PIPING DIAMETER MUST NOT BE SMALLER THAN THE M6 COVER THREADING TO AVOID BUILDING PRESSURE INSIDE THE ELECTRODE COMPARTMENT.

8.1 WHEN M4 OPTION IS SELECTED ADD .320" (8mm) TO M2 DIM 'E' (BODY WIDTH DIMENSION)

08705-0024

DRAWING NO.

CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY. UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (mm). REMOVE ALL BURRS AND SHARP EDGES. -DEC TOLERANCES- .X ± - [-] .XX ± - [-] .XXX ± - [-] FRACTIONS ± - ANGLES ± -	SURFACE FINISH UNLESS OTHERWISE SPECIFIED ✓ 3RD ANGLE	SIZE C SCALE - REV AR
	ROSEMOUNT EMERSON TITLE DIMENSIONAL DRAWING MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE DR. D. BROKKE 9/22/08 DRAWING NO. 08705-0024 APP'D S. ROGERS 12/12/08	
DO NOT SCALE PRINT	CAD MAINTAINED, (PRO/E)	PRODUCT CODE
DOC TYPE	SHEET 8 OF 15	



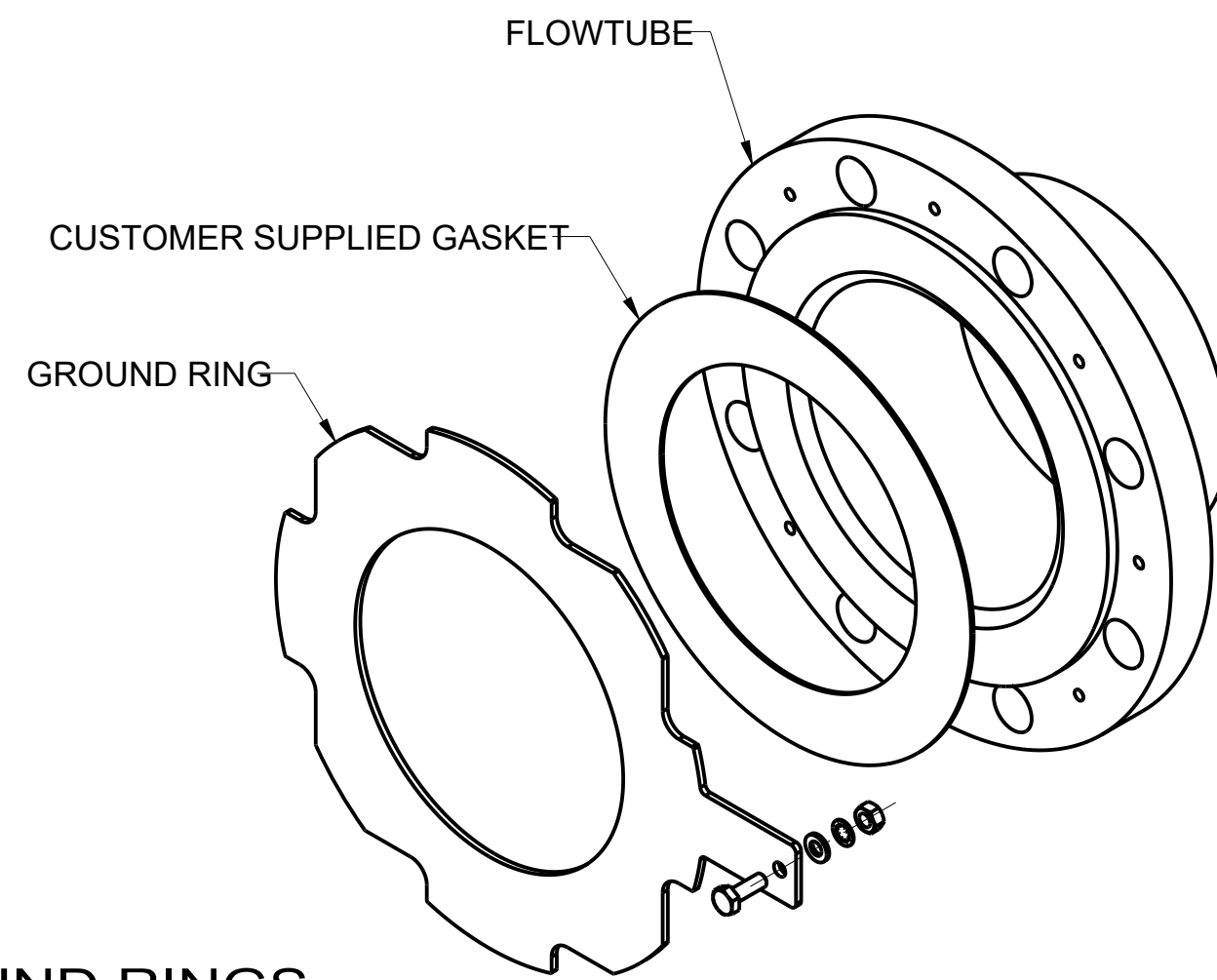
LINING PROTECTORS
QUANTITY 2

Table 5 - LINING PROTECTOR THICKNESS 9.1

Line Size in (mm)	THICKNESS (QTY 1) ADD VALUE TO "DIM A" (OVERALL LENGTH)		THICKNESS (QTY 2) ADD VALUE TO "DIM A" (OVERALL LENGTH)	
	MIN	MAX	MIN	MAX
0.5 (15)	0.087	0.134	0.174	0.268
1 (25)	0.084	0.130	0.168	0.260
1.5 (40)	0.105	0.190	0.210	0.380
2 (50)	0.105	0.190	0.210	0.380
2.5 (60)	0.105	0.190	0.210	0.380
3 (80)	0.105	0.190	0.210	0.380
4 (100)	0.105	0.190	0.210	0.380
5 (125)	0.128	0.190	0.256	0.380
6 (150)	0.100	0.190	0.200	0.380
8 (200)	0.090	0.190	0.180	0.380
10 (250)	0.110	0.185	0.220	0.370
12 (300)	0.110	0.185	0.220	0.370
14 (350)	0.150	0.185	0.300	0.370
16 (400)	0.150	0.185	0.300	0.370
18 (450)	0.150	0.162	0.300	0.324
20 (500)	0.150	0.162	0.300	0.324
24 (600)	0.150	0.162	0.300	0.324
30 (750)	0.285	0.285	0.570	0.570
36 (900)	0.410	0.410	0.820	0.820

9.2 ADDITIONAL LENGTH DOES NOT INCLUDE CUSTOMER SUPPLIED GASKET.

9.1 ACTUAL VALUE DEPENDENT UPON FLANGE RATING AND MATERIAL OF CONSTRUCTION; CONSULT FACTORY FOR EXACT DIMENSIONS.



GROUND RINGS
QUANTITY 2

Table 6 -GROUND RING THICKNESS 9.1 9.2

Line Size in (mm)	THICKNESS (QTY 1) ADD VALUE TO "DIM A" (OVERALL LENGTH)		THICKNESS (QTY 2) ADD VALUE TO "DIM A" (OVERALL LENGTH)	
	MIN	MAX	MIN	MAX
0.5 (15)	0.045	0.120	0.090	0.240
1 (25)	0.045	0.120	0.090	0.240
1.5 (40)	0.045	0.120	0.090	0.240
2 (50)	0.045	0.120	0.090	0.240
2.5 (60)	0.059	0.120	0.118	0.240
3 (80)	0.045	0.120	0.090	0.240
4 (100)	0.045	0.120	0.090	0.240
5 (125)	0.059	0.120	0.118	0.240
6 (150)	0.045	0.120	0.090	0.240
8 (200)	0.045	0.120	0.090	0.240
10 (250)	0.045	0.120	0.090	0.240
12 (300)	0.045	0.120	0.090	0.240
14 (350)	0.045	0.250	0.090	0.500
16 (400)	0.045	0.250	0.090	0.500
18 (450)	0.120	0.250	0.240	0.500
20 (500)	0.120	0.250	0.240	0.500
24 (600)	0.187	0.250	0.374	0.500
30 (750)	0.187	0.250	0.374	0.500
36 (900)	0.187	0.250	0.374	0.500

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UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (mm). REMOVE ALL BURRS AND SHARP EDGES.		EMERSON ROSEMOUNT			
-DEC TOLERANCES- .X ± [] .XX ± [] .XXX ± []		TITLE DIMENSIONAL DRAWING			
FRACTIONS ± [] ANGLES ± []		MODEL 8705 MAGNETIC FLOWTUBE-STANDARD PRESSURE			
DO NOT SCALE PRINT		CAD MAINTAINED, (PRO/E)	PRODUCT CODE	DOC TYPE	SHEET 9 OF 15
DR. D. BROKKE 9/22/08		DRAWING NO. 08705-0024			
APP'D S. ROGERS 12/12/08		REV AR			

DRAWING NO. 08705-0024

