

TABLE 1: DIMENSIONAL & FLANGE RATINGS
(SEE NOTES 9 & 10)

FLANGE SIZE ANSI/DN	Ø B	FLANGE RATING								
		150# ANSI	300# ANSI	600# ANSI	DIN PN16	DIN PN40	DIN PN100	JIS 10K	JIS 20K	JIS 40K
		THREAD SIZE / (QTY) / STUD LENGTH (NOTE: DIN & JIS LENGTHS GIVEN IN mm)								
1/2" DN15	1.38 [35]	1/2-13 (4) 4.50	1/2-13 (4) 4.75	1/2-13 (4) 5.25	M12 (4) 118	M12 (4) 130	M12 (4) 145	M12 (4) 120	M12 (4) 120	M16 (4) 140
1" DN25	2.00 [51]	1/2-13 (4) 4.50	5/8-11 (4) 5.25	5/8-11 (4) 5.75	M12 (4) 120	M12 (4) 135	M16 (4) 165	M16 (4) 130	M16 (4) 140	M16 (4) 140
1-1/2" DN40	2.88 [73]	1/2-13 (4) 5.00	3/4-10 (4) 5.75	3/4-10 (4) 6.50	M16 (4) 120	M16 (4) 135	M20 (4) 175	M16 (4) 130	M16 (4) 150	M20 (4) 150
2" DN50	3.62 [92]	5/8-11 (4) 5.50	5/8-11 (8) 5.75	5/8-11 (6) 6.50	M16 (4) 140	M16 (4) 145	M24 (4) 180	M16 (4) 130	M16 (8) 150	M16 (8) 150
3" DN80	5.00 [127]	5/8-11 (4) 5.75	3/4-10 (8) 6.50	3/4-10 (8) 7.25	M16 (8) 150	M16 (8) 165	M24 (8) 185	M16 (8) 140	M20 (8) 170	M20 (8) 170
4" DN100	6.19 [157]	5/8-11 (8) 5.75	3/4-10 (8) 6.75	7/8-9 (8) 8.00	M16 (8) 150	M20 (8) 165	M27 (8) 200	M16 (8) 150	M20 (8) 170	M22 (8) 180
5" DN125	7.31 [186]	3/4-10 (8) 6.50	3/4-10 (8) 7.50	1-8 (12) 9.5	M20 (8) 155	M24 (8) 185	M30 (12) 240	M20 (8) 170	M22 (8) 180	M24 (8) 190
6" DN150	8.50 [216]	3/4-10 (8) 6.50	3/4-10 (8) 7.50	1-8 (12) 9.50	M20 (8) 155	M24 (8) 185	M30 (12) 240	M20 (8) 170	M22 (12) 180	M30 (12) 210
8" DN200	10.62 [270]	3/4-10 (8) 6.75	7/8-9 (12) 8.25	1-1/8-7 (12) 10.25	M12 (12) 160	M27 (12) 305	M33 (12) 265	M20 (12) 170	M22 (12) 180	M30 (12) 230
10" DN250	12.75 [324]	7/8-9 (12) 7.00	1-8 (16) 8.25	1-1/4-8 (16) 10.5	M24 (12) 170	M30 (12) 210	M36 (12) 270	M22 (12) 180	M24 (12) 200	M30 (12) 240
12" DN300	15.00 [381]	7/8-9 (12) 7.00	1-1/8-8 (16) 9.00	1-1/4/8 (20) 11.00	M24 (12) 180	M30 (16) 240	M39 (16) 280	M22 (16) 180	M24 (16) 200	M36 (16) 260

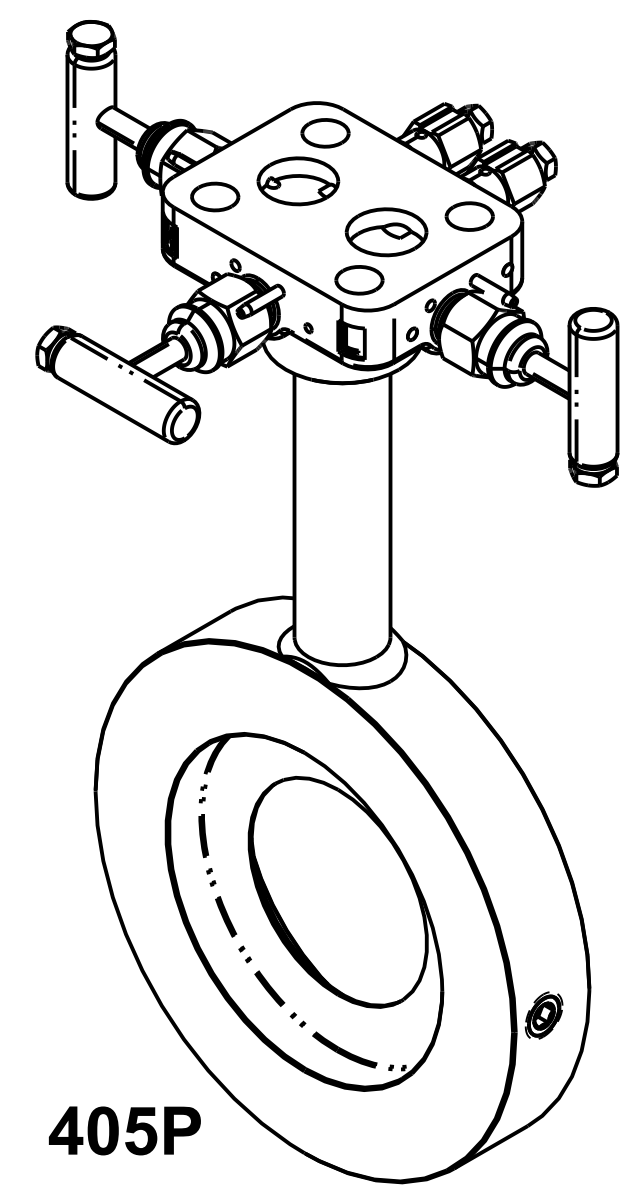
REVISION TABLE			
REVISION	ECO NO.	APP'D	DATE
AO	DSI1050713	EV	3/9/12
DESCRIPTION			
REVISED NOTE 4 TO INCLUDE MINIMUM TEMPERATURE			

NOTES:

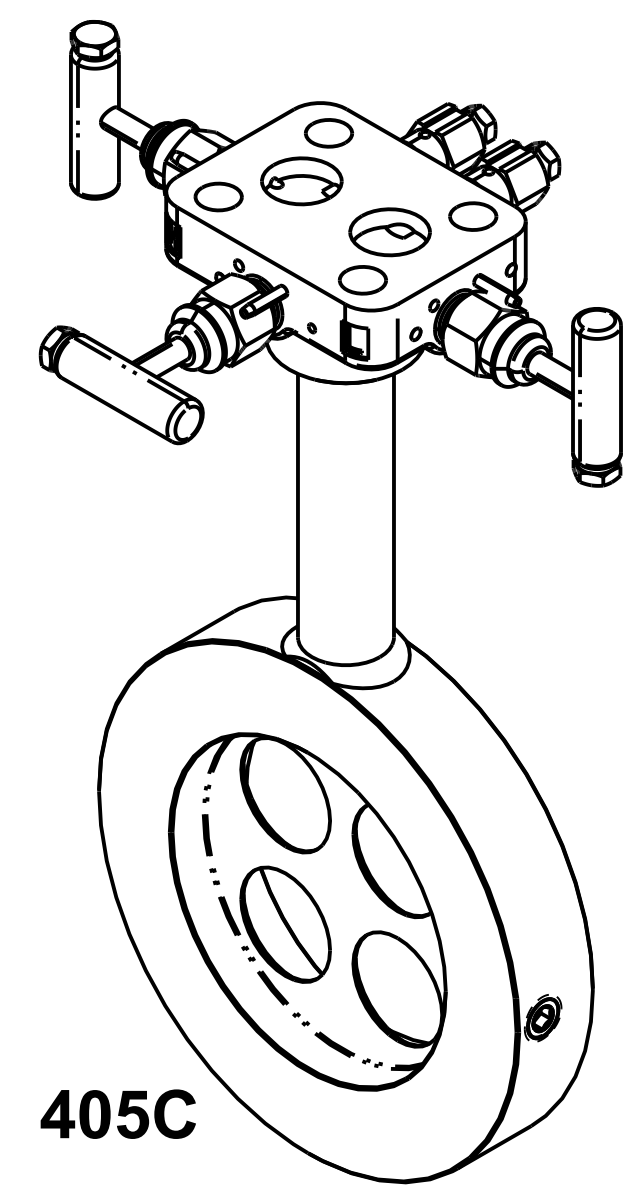
- ROSEMOUNT INC. CERTIFIES THIS DRAWING IS IN ACCORDANCE WITH ENGINEERING SPECIFICATIONS AND ACCURATELY REPRESENTS THE EQUIPMENT FURNISHED.
- SENSOR ORIENTATION SHOWN FOR DETAIL ONLY. FOR ACTUAL RECOMMENDED LOCATION AND ORIENTATION REFER TO INSTALLATION MANUAL 00809-0100-4810.
- FOR MODEL SELECTIONS, REFER TO ROSEMOUNT PRODUCT DATA SHEET 00813-0100-4810.
- 405 TEMPERATURE LIMITS ARE -40°F TO 450°F FOR DIRECT MOUNT 3 VALVE MANIFOLD, -148°F TO 850°F FOR REMOTE MOUNT WITH GRAPHOIL VALVE PACKING.
- MATERIALS: 316/316L STAINLESS STEEL.
- ORIFICE BORE IS SQUARE EDGE CONCENTRIC WITH .40 OR .65 BETA. 405C/P ONLY.
- 405 RATED TO 600# ANSI/PN100 316SST.
- REMOTE MOUNT 3-VALVE MANIFOLD WITH ADAPTER PLATE AND 1/2" NPT FLANGE ADAPTERS: ADAPTERS CAN BE ROTATED TO GIVE CONNECTIONS CENTERS OF 2.00 (51), 2.13 (54) OR 2.25 (57).
- ASSEMBLY OF 405 TO FLANGE PIPE SECTION: ALIGNMENT RING WILL HAVE ETCHED FLANGE SIZE TO BE INDEXED WITH STUDS TO INSURE PROPER ALIGNMENT OF 405 TO PIPE ID.
- STUDS, NUTS AND GASKETS NOT INCLUDED WITH 405. CORRECT STUD SIZE PER TABLE 1 IS CRITICAL FOR PROPER ALIGNMENT. RECOMMENDED GASKET: 1/8" MAX THICKNESS WITH APPROPRIATE MATERAIL FOR APPLICATION CONDITIONS.
- FOR OPTIMUM PERFORMANCE, ORIENTATION AND FLOW DIRECTION IS AS FOLLOWS:
GAS: DIRECT MOUNT OR REMOTE MOUNT OPTIONS ARE ACCEPTABLE IN HORIZONTAL OR DOWNWARD FLOW IN A VERTICAL LINE.

LIQUID: DIRECT MOUNT OR REMOTE MOUNT OPTIONS ARE ACCEPTABLE IN A HORIZONTAL OR UPWARD FLOWING VERTICAL LINE. IT IS NOT RECOMMENDED FOR USE IN A DOWNWARD FLOWING VERTICAL LINE.

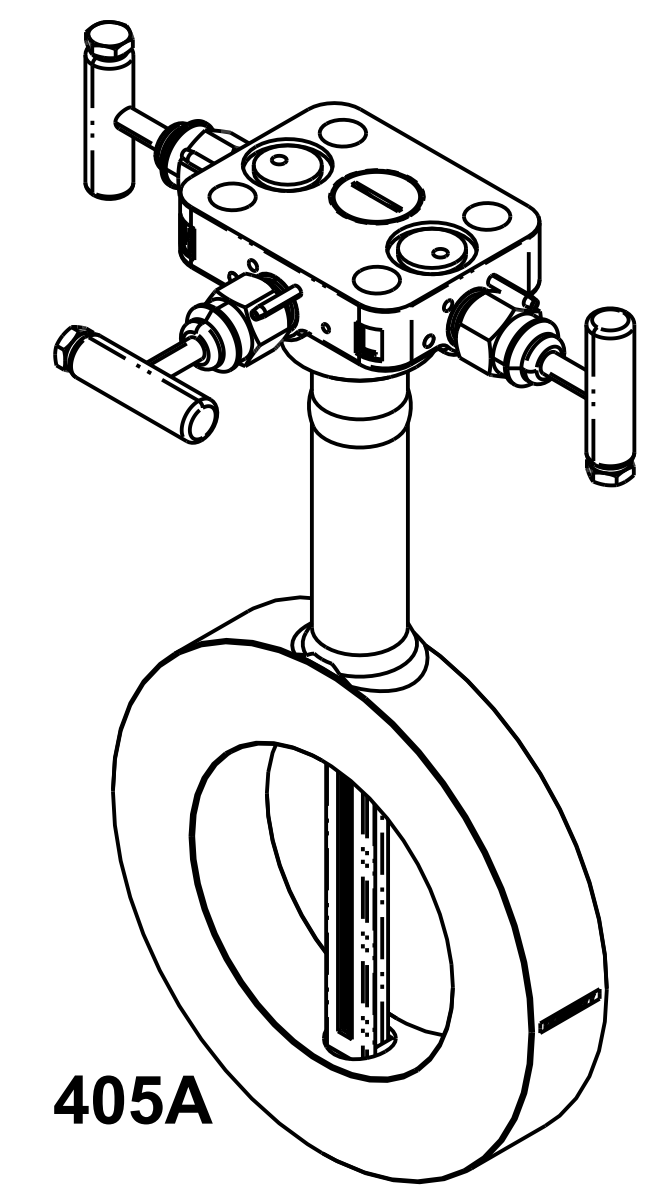
STEAM: REMOTE MOUNTING OPTION IS ACCEPTABLE IN A HORIZONTAL OR UPWARD FLOWING VERTICAL LINE. DIRECT MOUNTING OPTION IS RECOMMENDED ONLY IN A HORIZONTAL LINE. IT IS NOT RECOMMENDED FOR USE IN A DOWNWARD FLOWING LINE.
- SPECIAL CLEANING IS NOT AVAILABLE WITH HIGH TEMPERATURE OPTION ON 405C/P OR ANY 405A.




405P



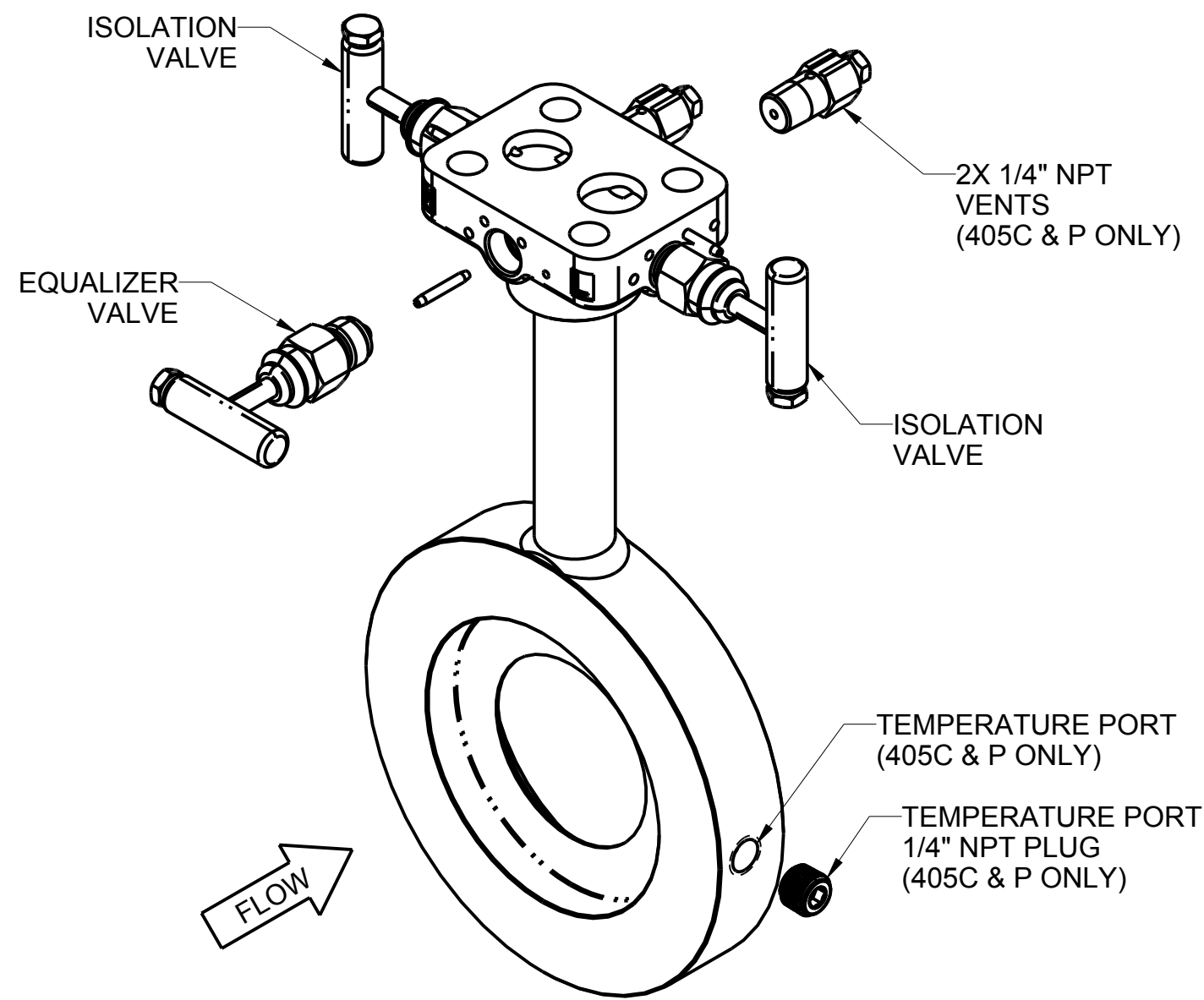
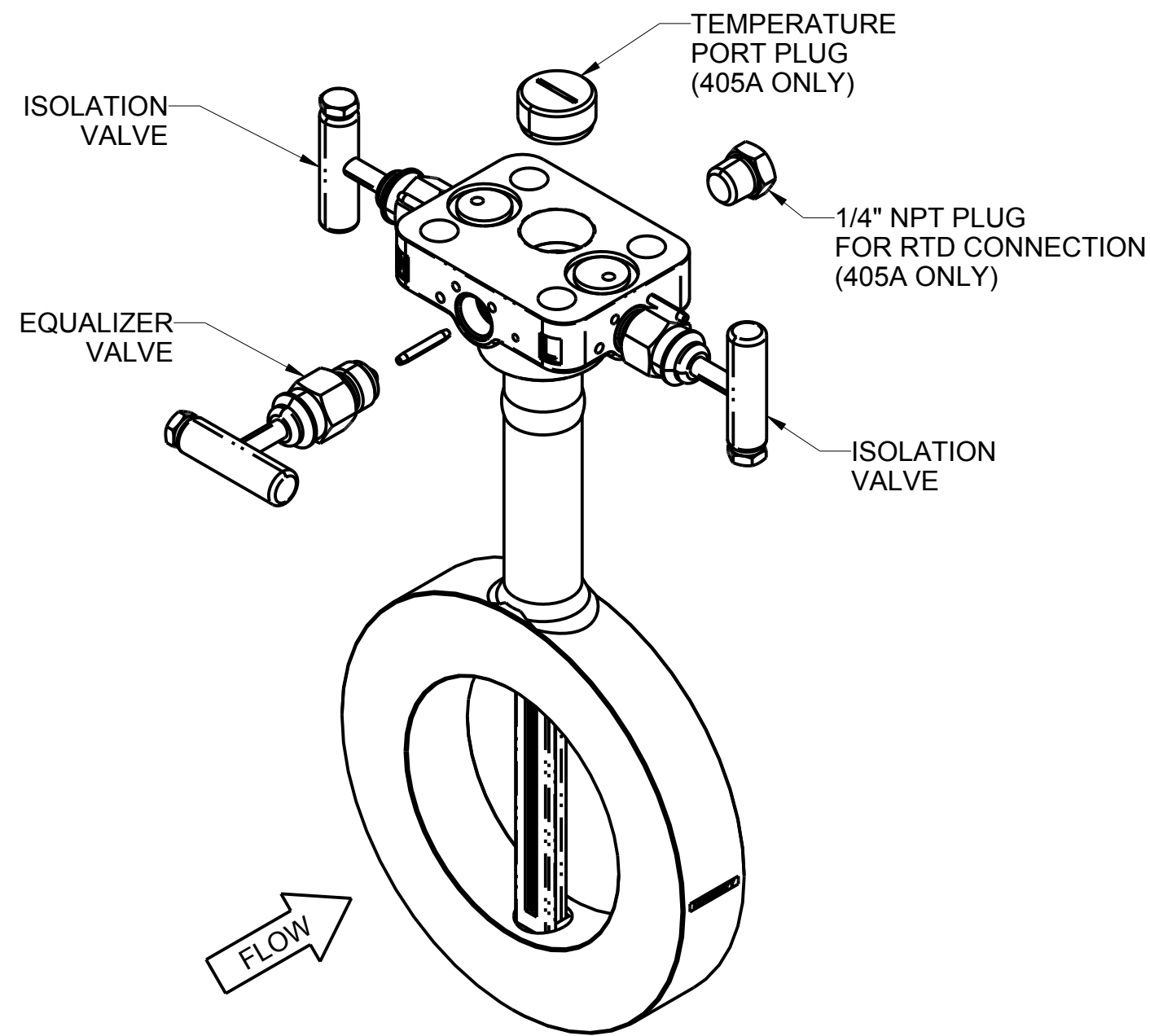
405C



405A

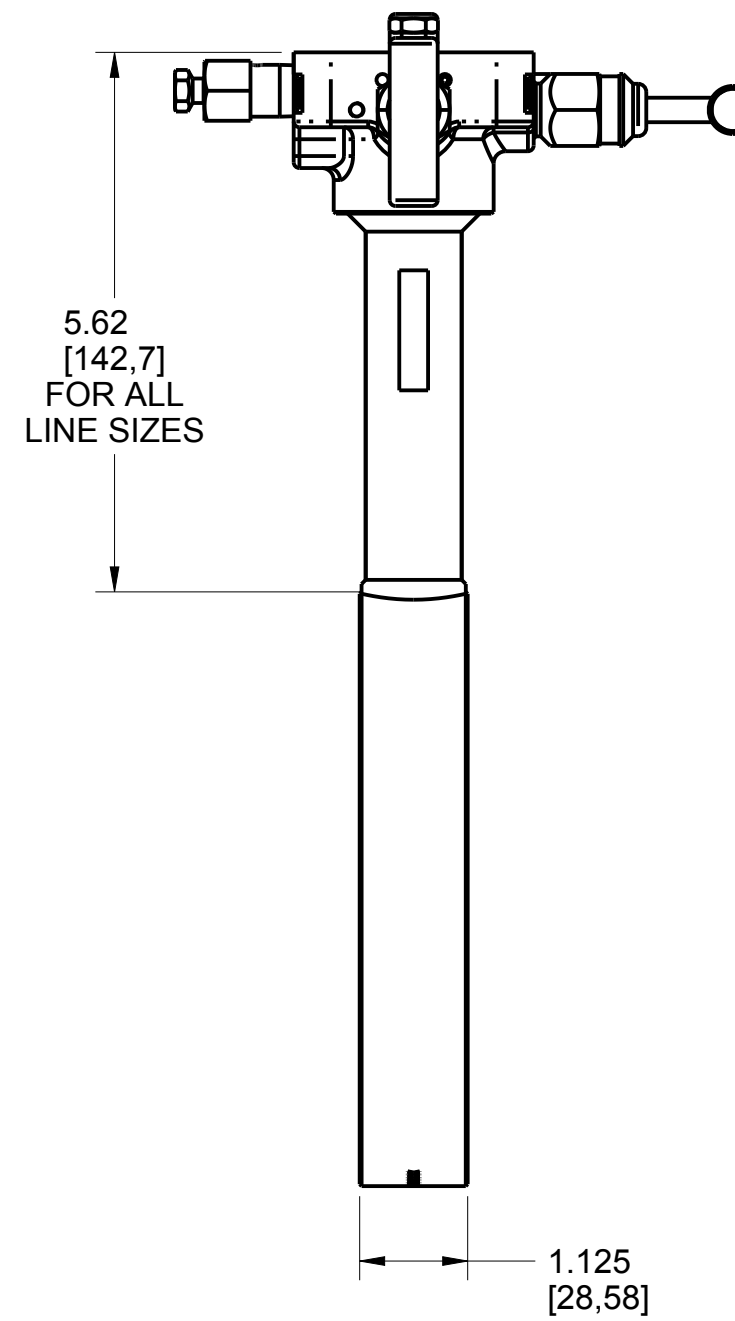
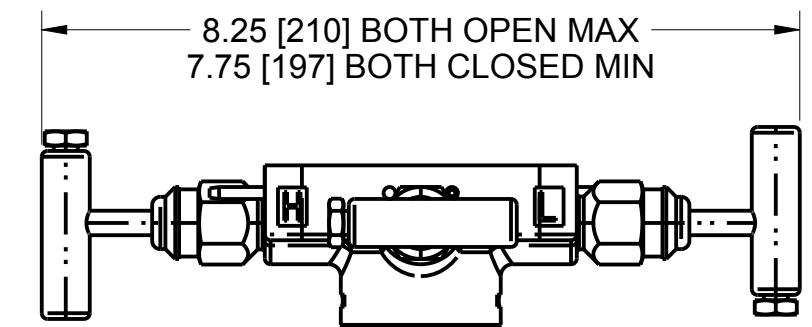
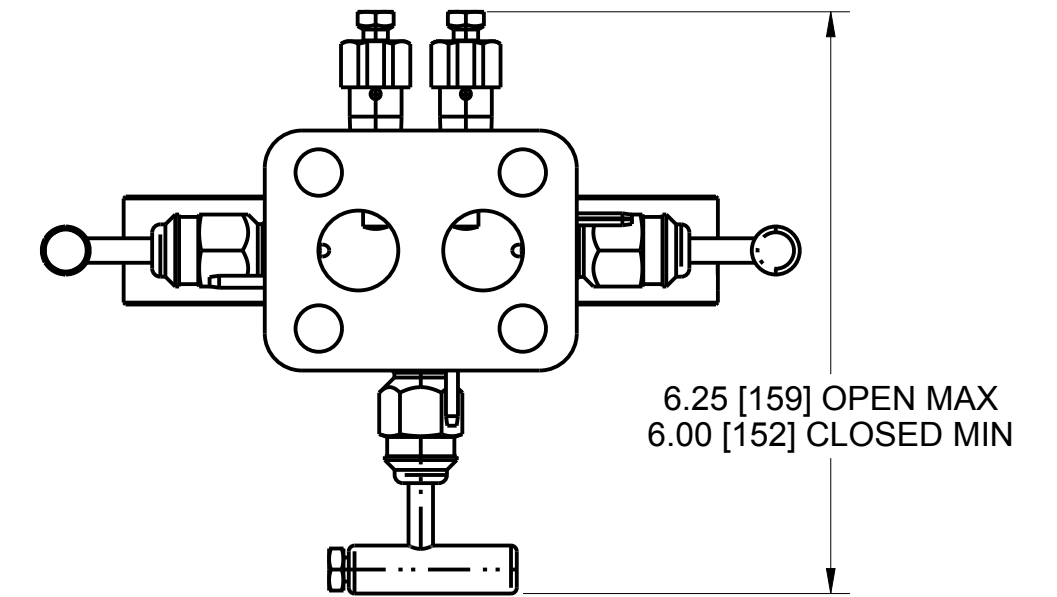
*UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (MM)		TYPE I		ROSEMOUNT [®] BOULDER, COLORADO		
*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY		DR. P DEEGAN	12/13/11	TITLE		
		APPROVAL		DIMENSIONAL DRAWING MODEL 405		
		DRAWING S IFFT	12/27/11	COMPACT FLOWMETER		
		TAGGING		SIZE C	DRAWING NO. 00405-1001	
		SPECIALS		SCALE : NONE	SHEET: 1 of 7	

DP PRIMARY COMPONENTS



NOTE: ALL INFORMATION TYPICAL TO ALL TYPES OF 405 MODELS UNLESS OTHERWISE NOTED

REVISION TABLE			
REVISION	ECO NO.	APP'D	DATE
AO	DSI1050713	EV	3/9/12
DESCRIPTION			
REVISED NOTE 4 TO INCLUDE MINIMUM TEMPERATURE			

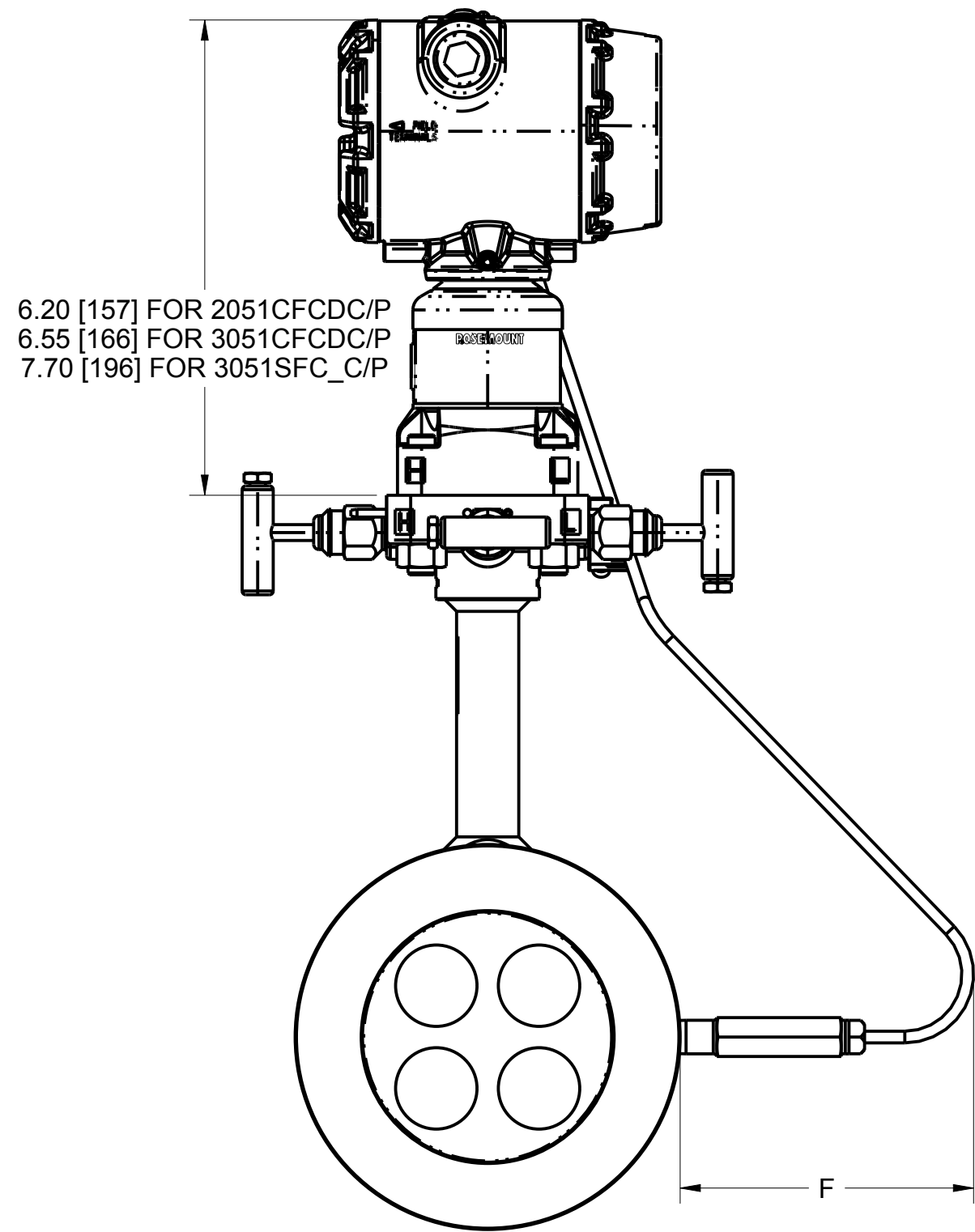


ØB
SEE TABLE 1

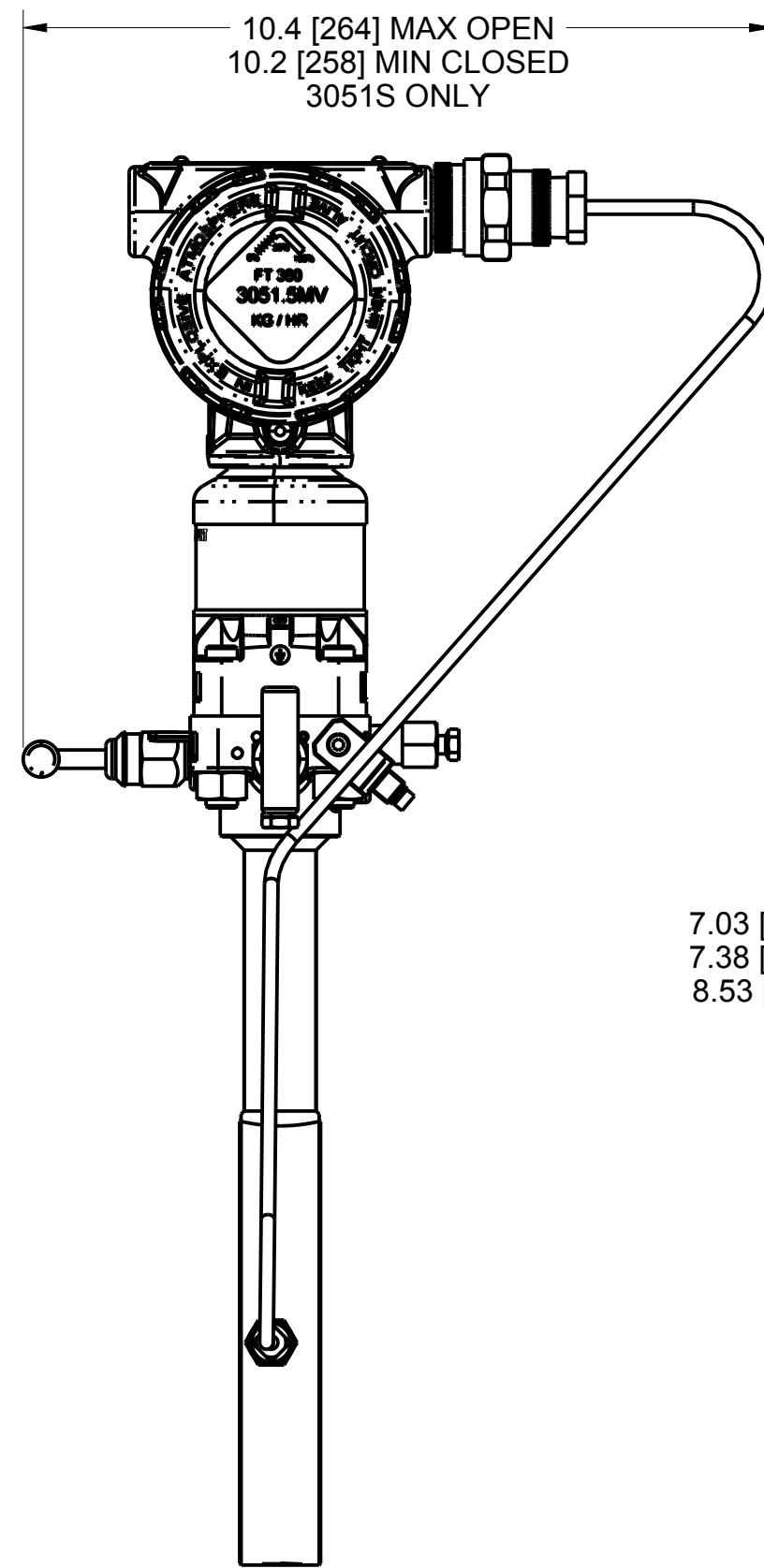
NOTE: DIMENSIONS ARE TYPICAL TO ALL TYPES OF 405 MODELS WITH STANDARD VALVES

*UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (MM)		TYPE I		ROSEMOUNT [®]		
*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY		DR.	P DEEGAN	12/13/11	TITLE	
		APPROVAL		DIMENSIONAL DRAWING MODEL 405		
		DRAWING	S IFFT	12/27/11	COMPACT FLOWMETER	
		TAGGING			SIZE	DRAWING NO.
		SPECIALS			C	00405-1001
				SCALE : NONE	SHEET: 2 of 7	

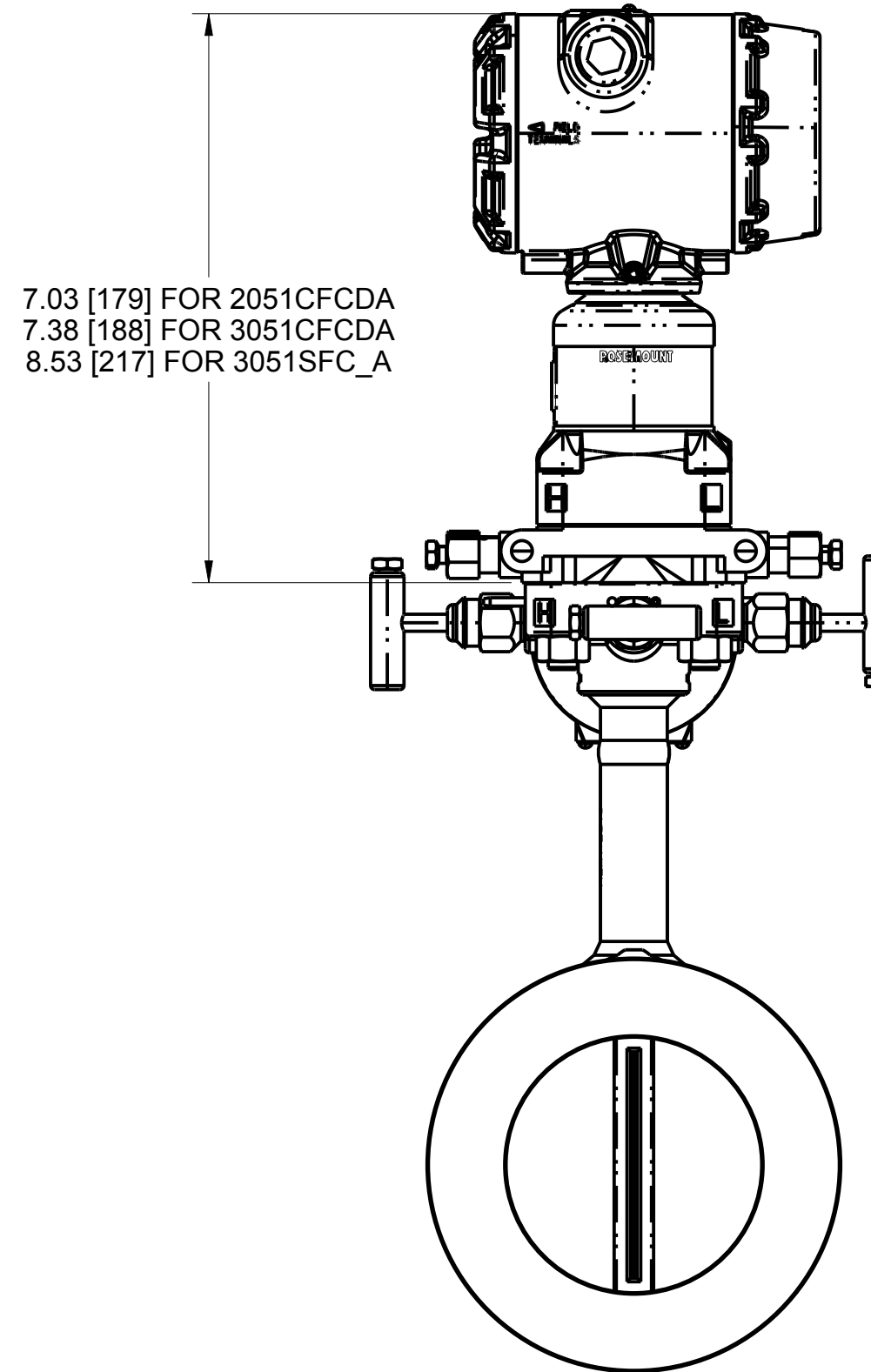
DIRECT MOUNT TYPE CONNECTION OPTIONS



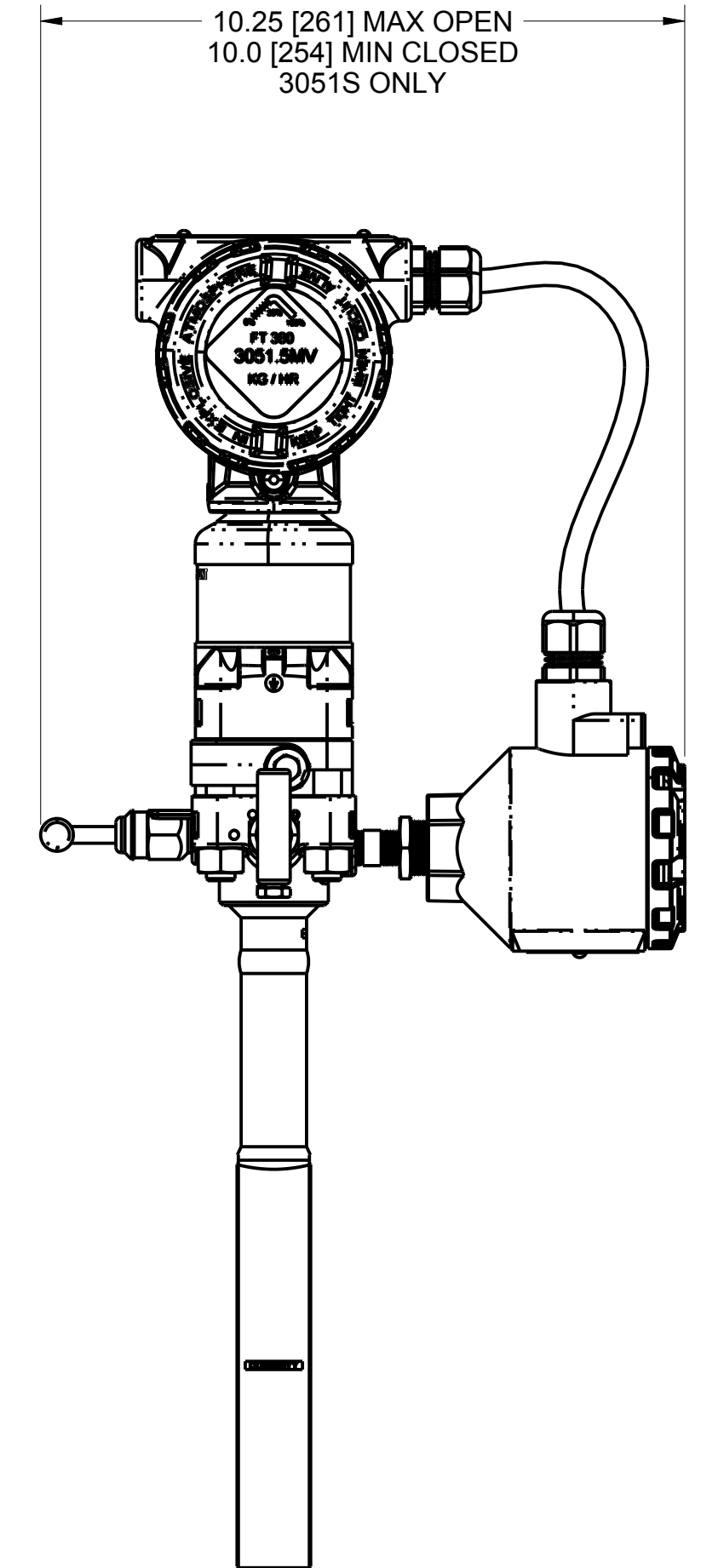
6.20 [157] FOR 2051CFDC/P
6.55 [166] FOR 3051CFDC/P
7.70 [196] FOR 3051SFC_C/P



10.4 [264] MAX OPEN
10.2 [258] MIN CLOSED
3051S ONLY



7.03 [179] FOR 2051CFDA
7.38 [188] FOR 3051CFDA
8.53 [217] FOR 3051SFC_A



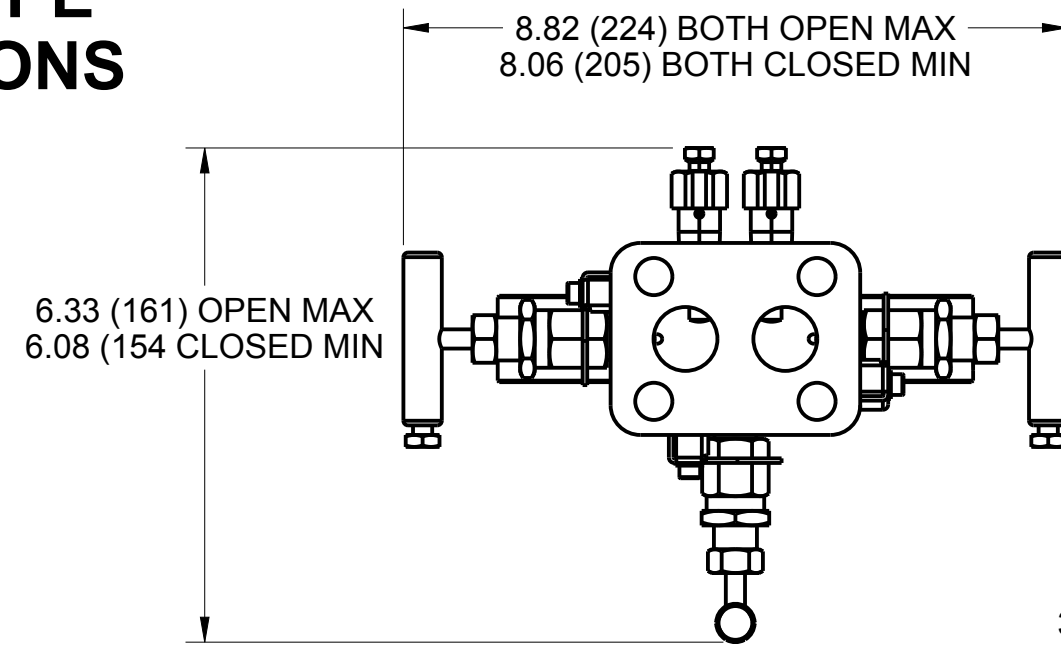
10.25 [261] MAX OPEN
10.0 [254] MIN CLOSED
3051S ONLY

3051SFC	
LINE SIZE	F IN(mm)
1/2"	5.3 (134)
1"	5.0 (127)
1-1/2"	4.5 (115)
2"	5.9 (150)
3"	5.2 (132)
4"	4.6 (116)
5"	7.2 (184)
6"	6.7 (171)
8"	5.8 (148)
10"	6.7 (170)
12"	5.7 (144)

REVISION TABLE			
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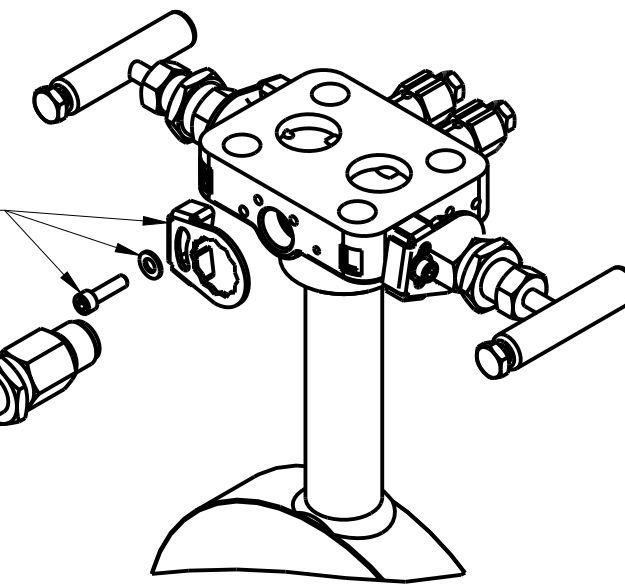
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*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY		DR. P DEEGAN	12/13/11	TITLE	
		APPROVAL		DIMENSIONAL DRAWING MODEL 405	
		DRAWING S IFFT	12/27/11	COMPACT FLOWMETER	
		TAGGING		SIZE C	DRAWING NO. 00405-1001
		SPECIALS		SCALE : NONE	SHEET: 3 of 7

DIRECT MOUNT TYPE CONNECTION OPTIONS CONT'D



3X B31.X VALVE
LOCK MECHANISM

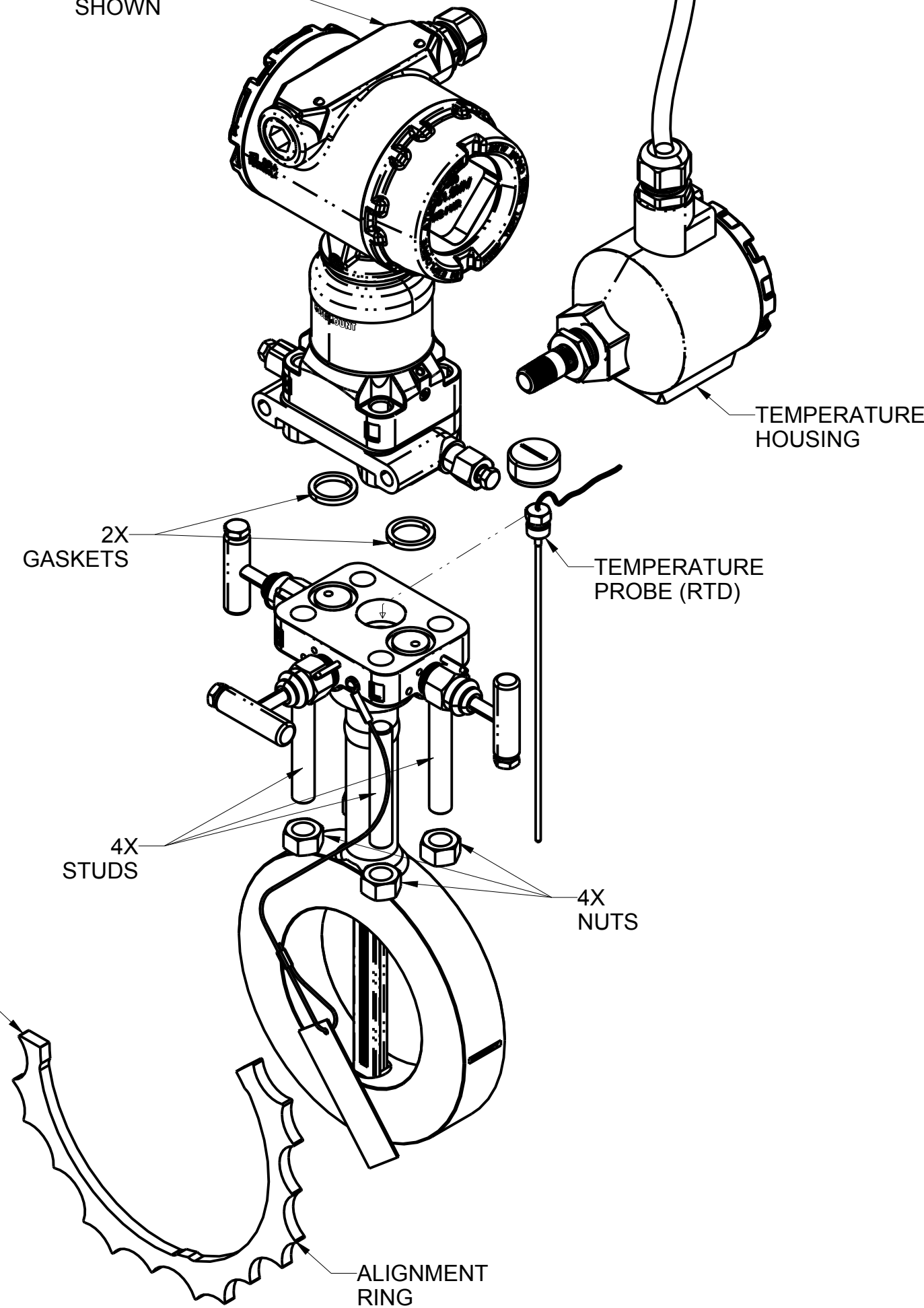
3X B31.X GRAFOIL
PACKING VALVE



REVISION TABLE

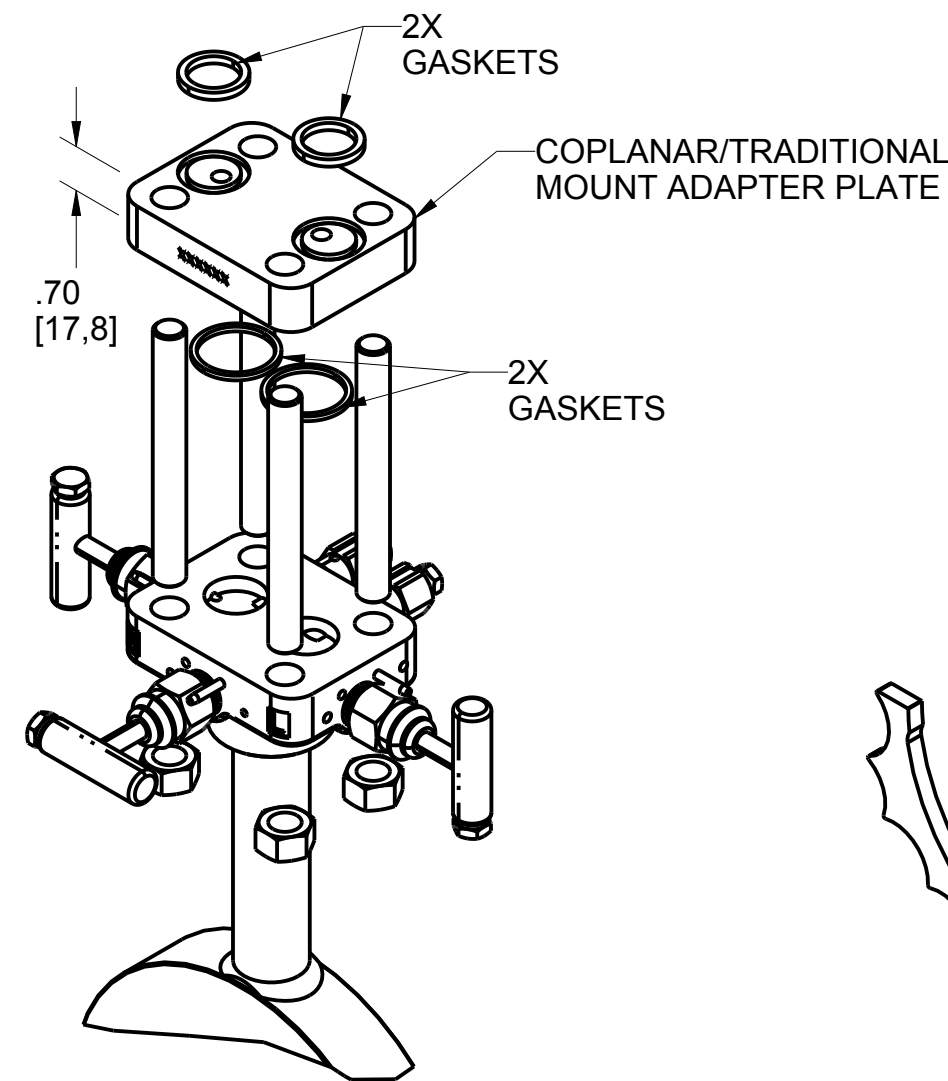
REVISION	ECO NO.	APP'D	DATE
AO	DS11050713	EV	3/9/12
DESCRIPTION			
REVISED NOTE 4 TO INCLUDE MINIMUM TEMPERATURE			

3051SMV
TRANSMITTER
SHOWN

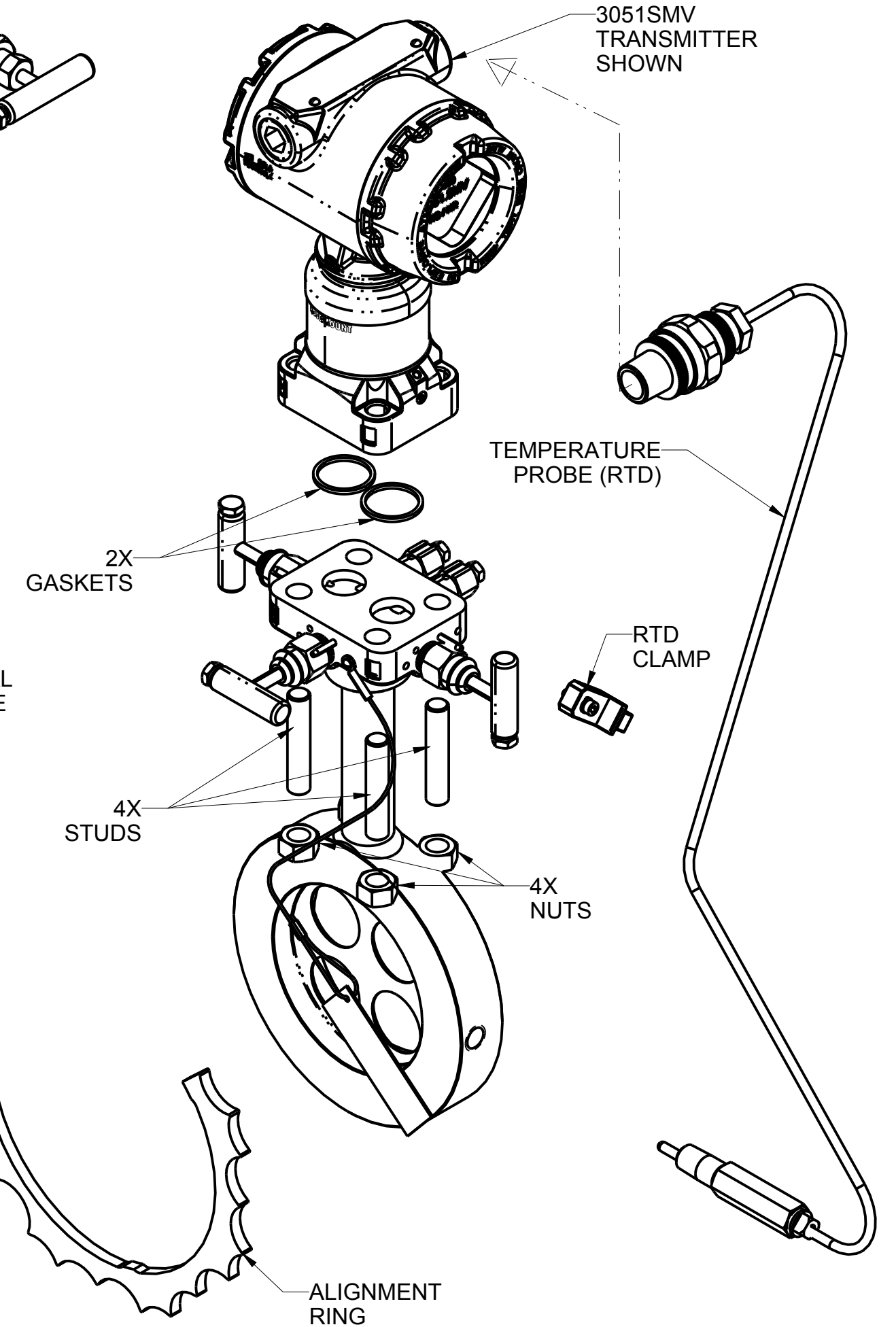


**D3 DIRECT MOUNT OPTION
W/ TEMP (405A)**

CODE CONFORMANCE VALVE OPTION (ALL)



**A3 OPTION COPLANAR/TRADITIONAL
MOUNT ADAPTER (405C/P)**

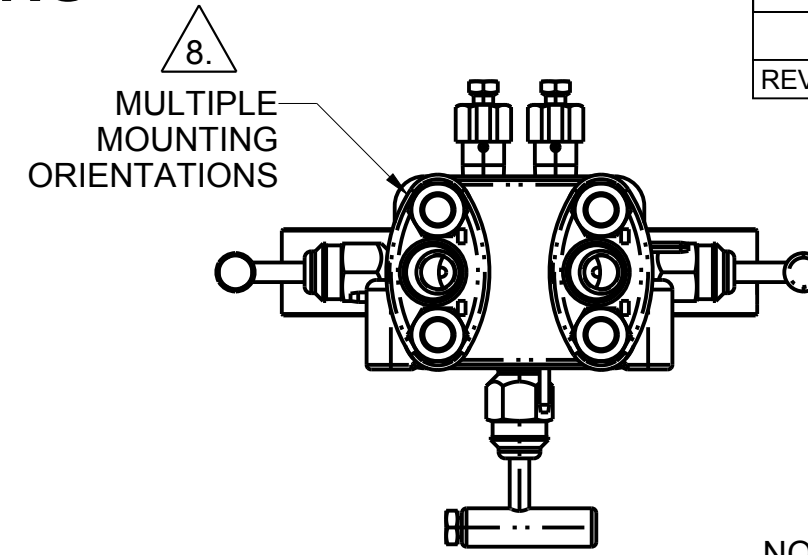
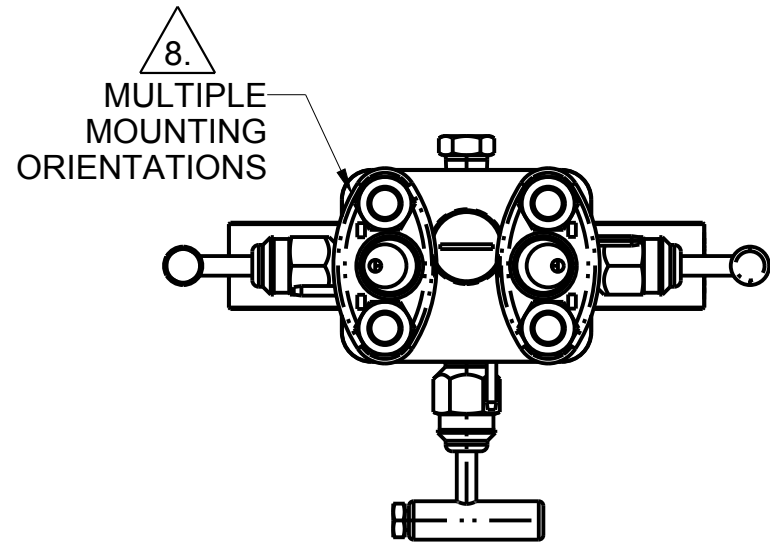


**D3 DIRECT MOUNT OPTION
W/ TEMP (405C/P)**

<p>*UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (MM)</p> <p>*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY</p>	TYPE I		ROSEMOUNT® BOULDER, COLORADO		
	DR.	P DEEGAN	12/13/11	TITLE	
	APPROVAL			DIMENSIONAL DRAWING MODEL 405	
	DRAWING	S IFFT	12/27/11	COMPACT FLOWMETER	
	TAGGING			SIZE	DRAWING NO.
			C	00405-1001	
SPECIALS			SCALE : NONE	SHEET: 4 of 7	

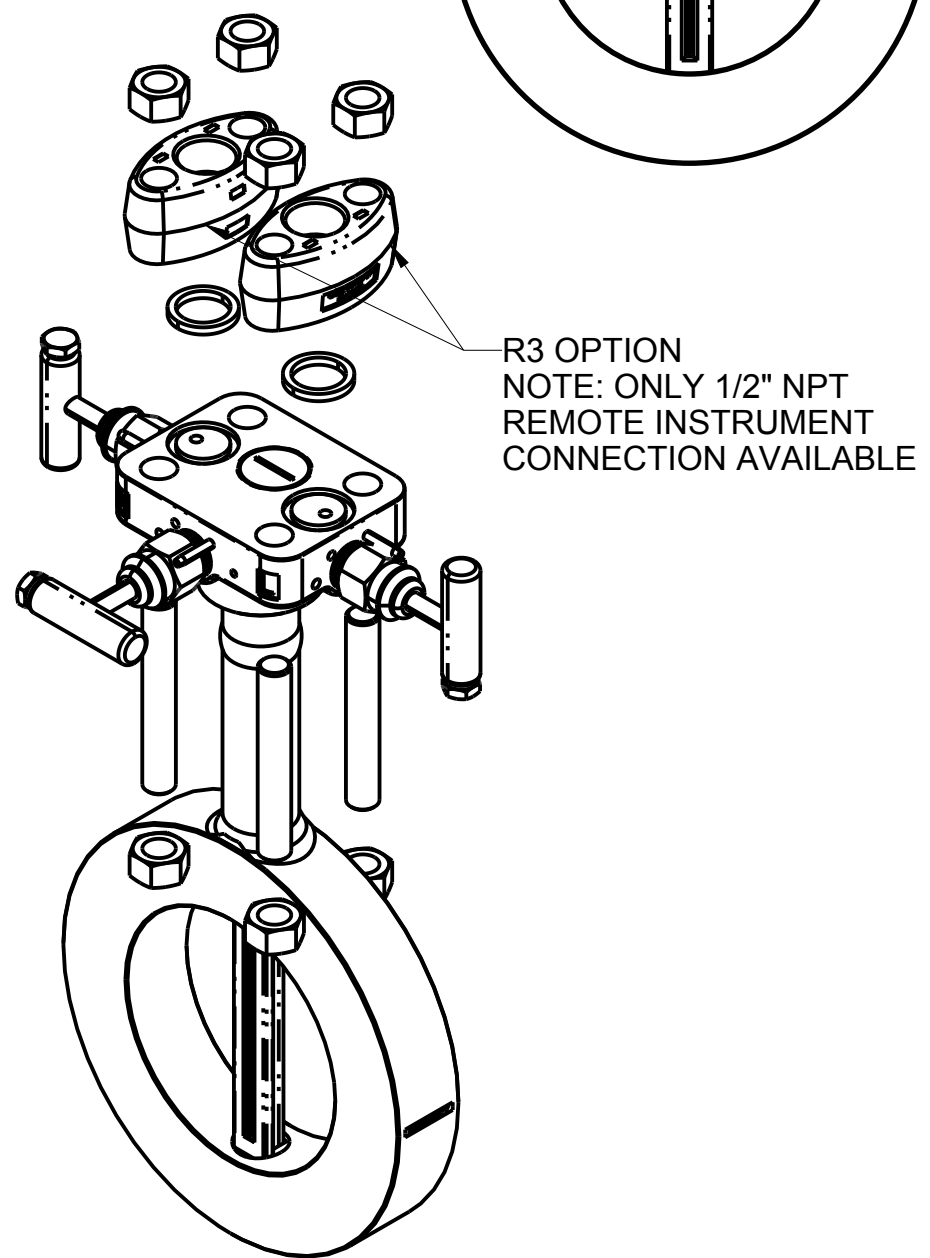
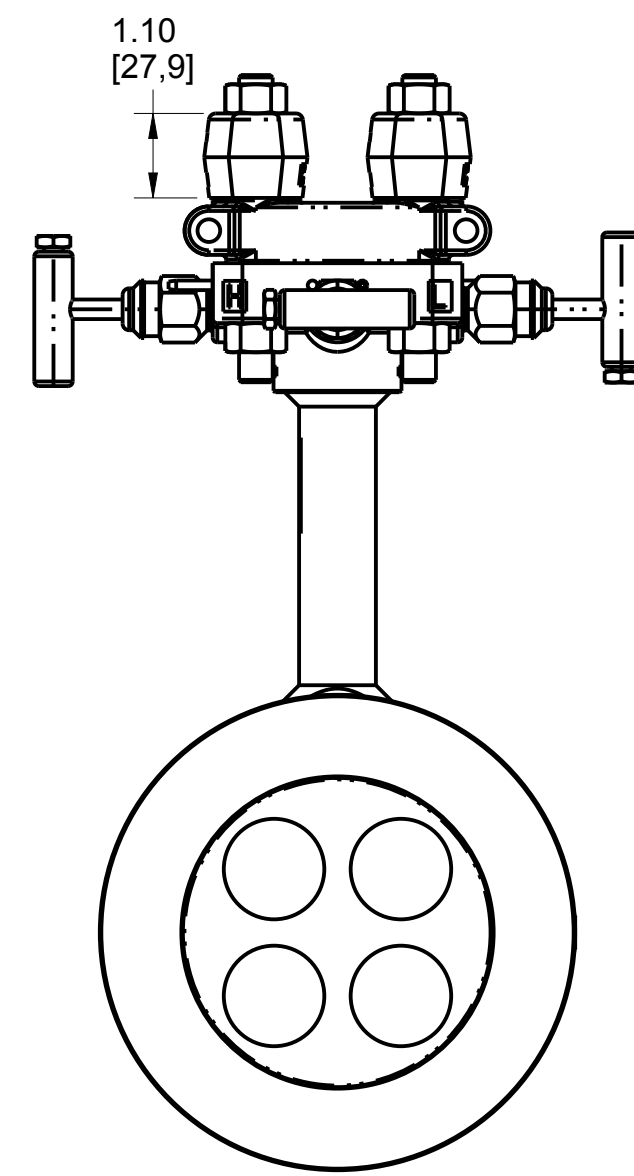
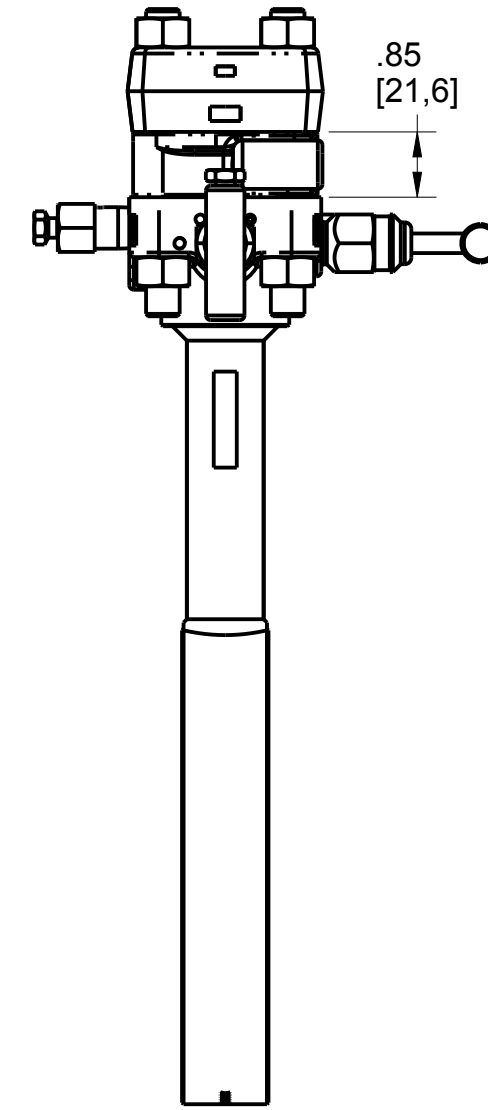
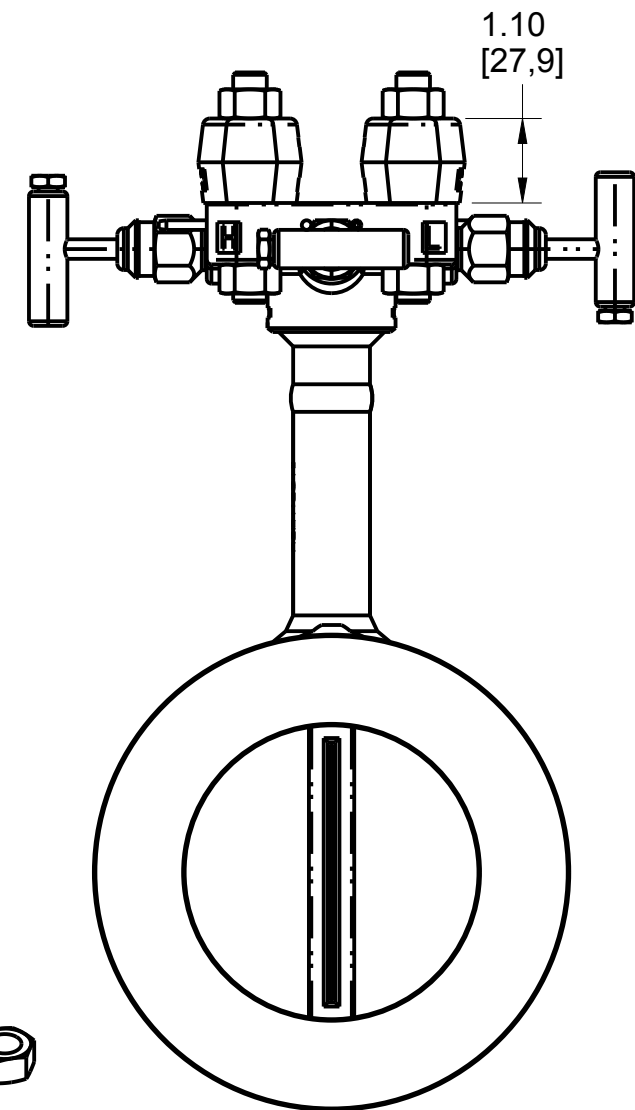
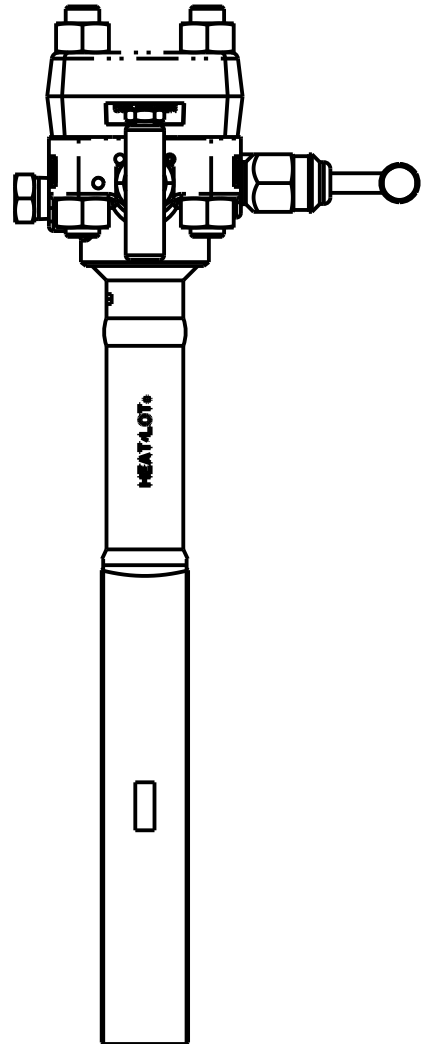
REMOTE MOUNT TYPE CONNECTION OPTIONS

REVISION TABLE			
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DESCRIPTION			
REVISED NOTE 4 TO INCLUDE MINIMUM TEMPERATURE			

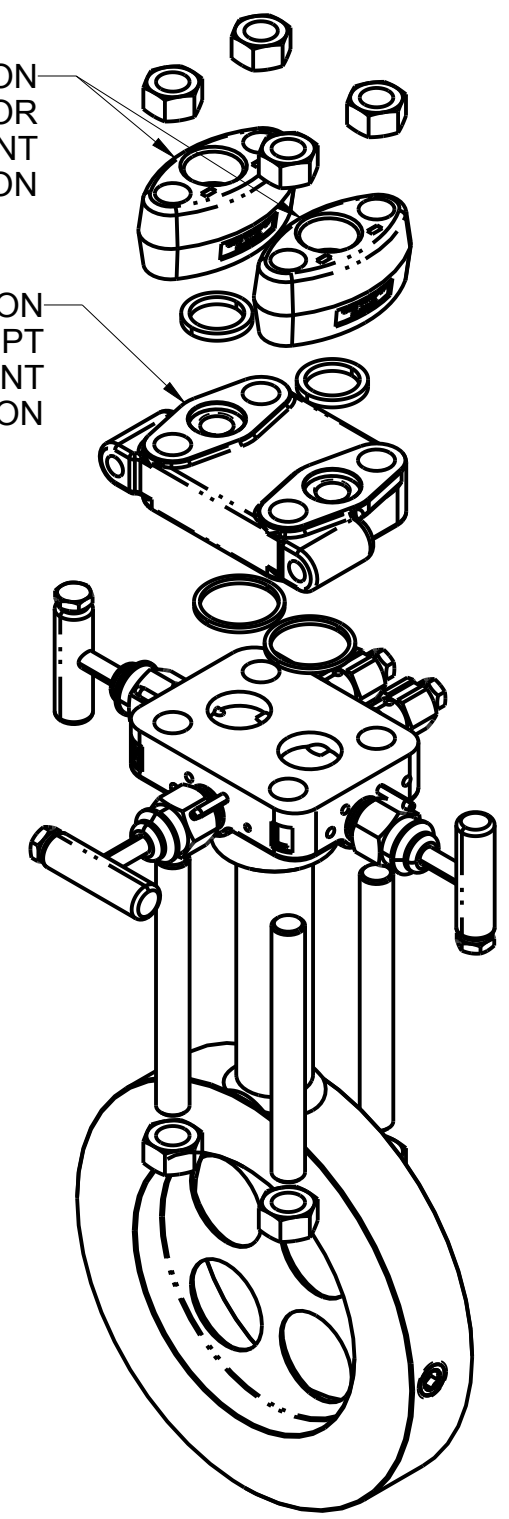


R3 WITH E OPTION
NOTE: USED ONLY FOR
1/2" NPT REMOTE INSTRUMENT
CONNECTION

R3 OPTION
NOTE: USED FOR BOTH 1/4" NPT
& 1/2" NPT REMOTE INSTRUMENT
CONNECTION




R3 OPTION
NOTE: ONLY 1/2" NPT
REMOTE INSTRUMENT
CONNECTION AVAILABLE



REMOTE MOUNT CONNECTION TYPE (405A)

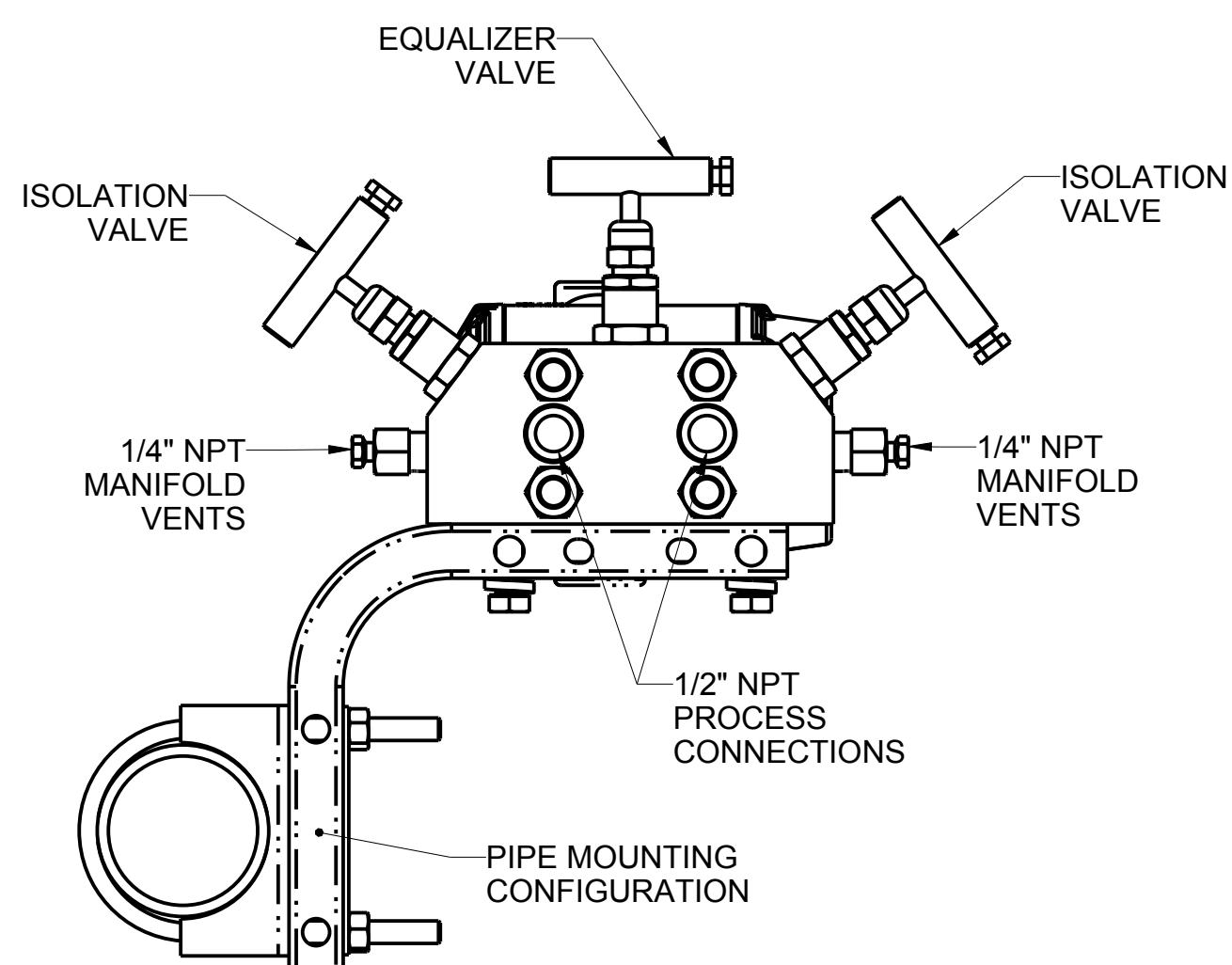
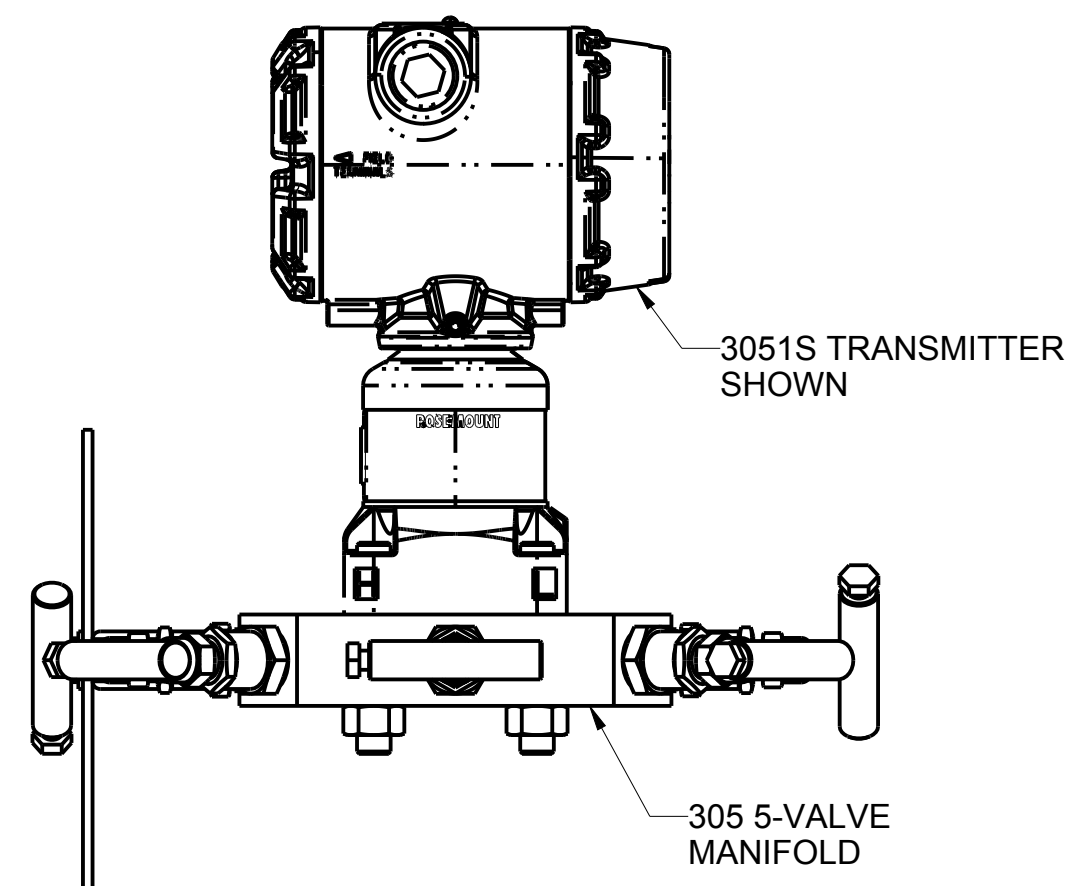
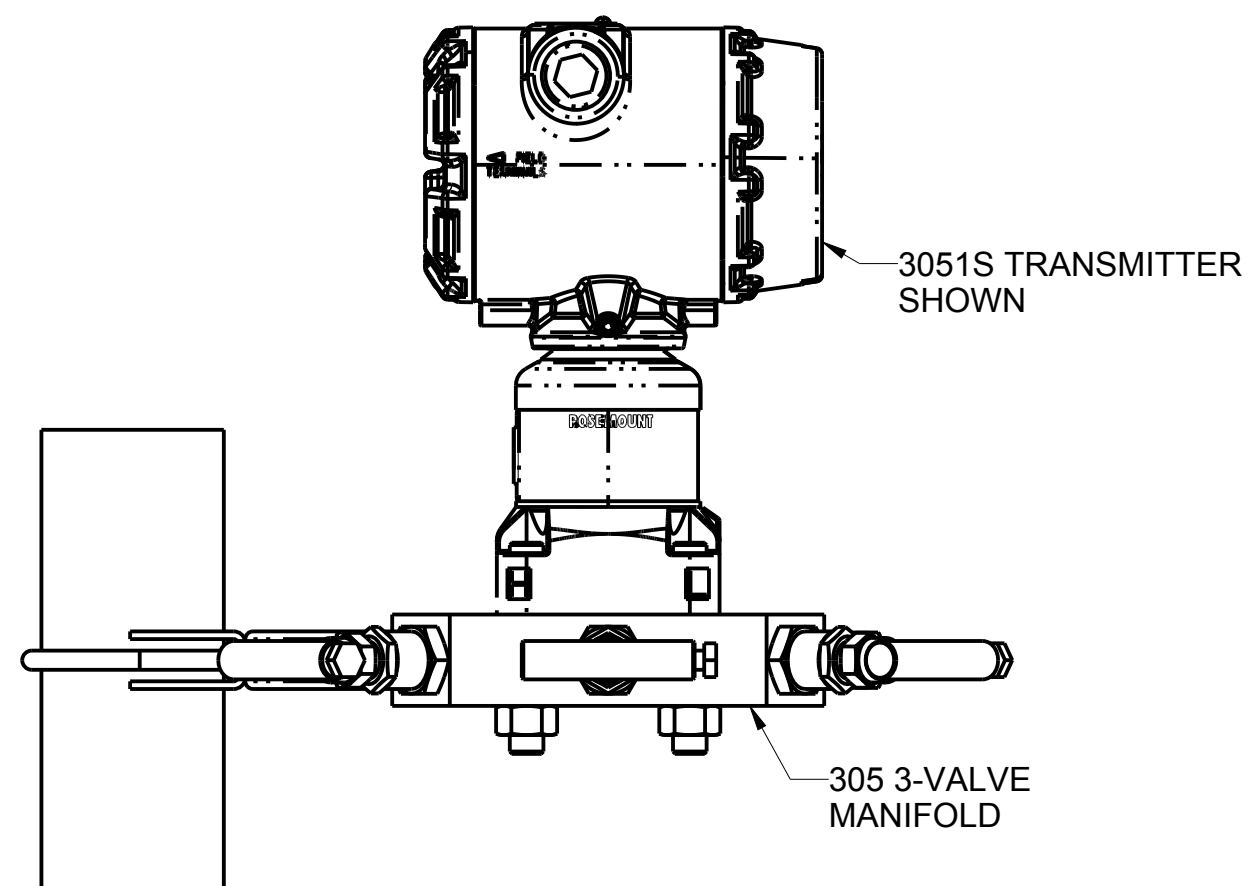
REMOTE MOUNT CONNECTION TYPE (405C/P)

<p>*UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES (MM)</p> <p>*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY</p> 	TYPE I		ROSEMOUNT®		BOULDER, COLORADO	
	DR.	P DEEGAN	12/13/11	TITLE		
	APPROVAL			DIMENSIONAL DRAWING MODEL 405		
	DRAWING	S IFFT	12/27/11	COMPACT FLOWMETER		
	TAGGING			SIZE	DRAWING NO.	
SPECIALS			C	00405-1001		
			SCALE : NONE	SHEET: 5 of 7		

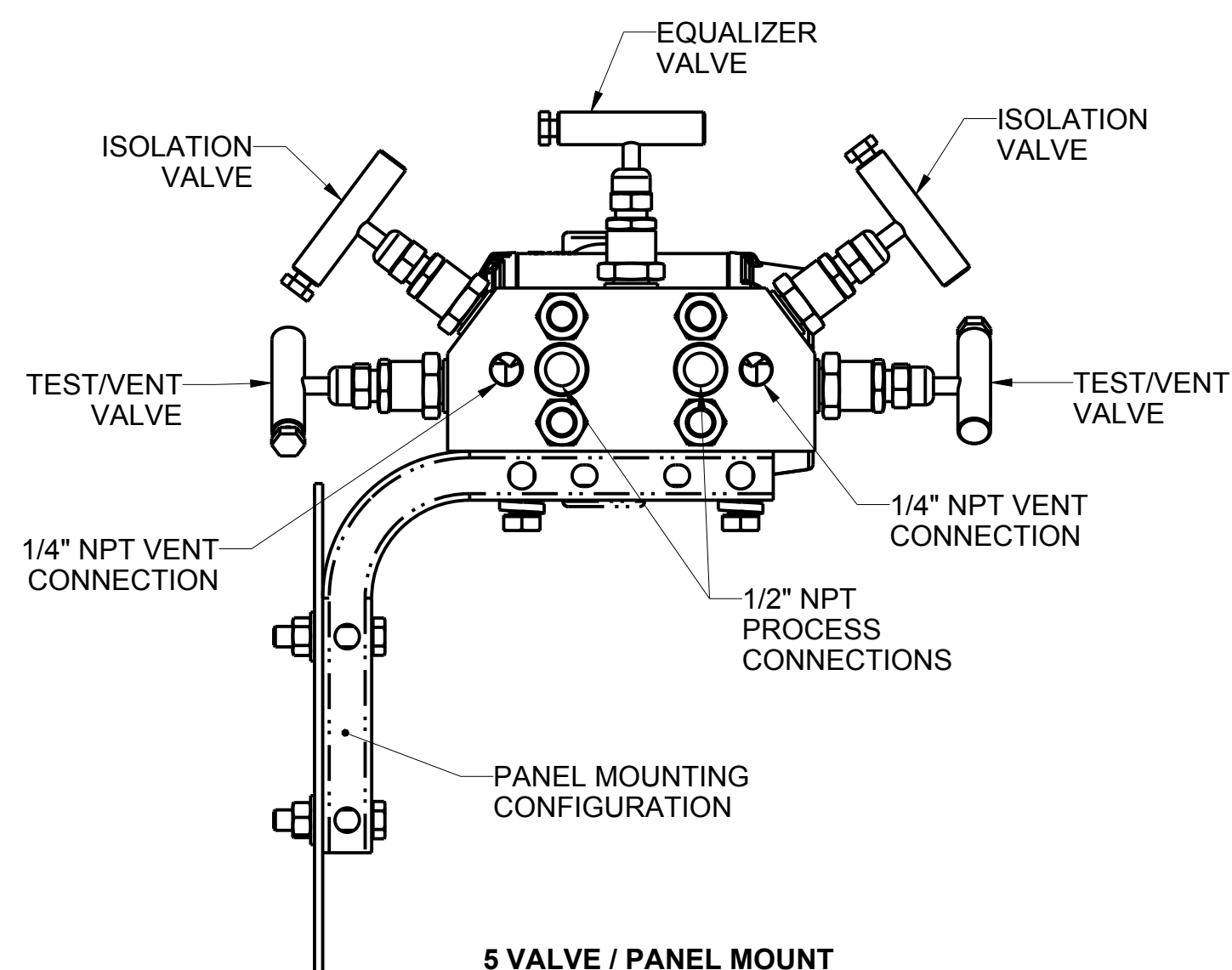
REMOTE MOUNT MANIFOLD TYPE CONNECTION OPTIONS

REVISION TABLE

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AO	DS11050713	EV	3/9/12
DESCRIPTION			
REVISED NOTE 4 TO INCLUDE MINIMUM TEMPERATURE			



3 VALVE / PIPE MOUNT



5 VALVE / PANEL MOUNT

*UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES (MM)

*ALL DIMENSIONS ARE NOMINAL
AND ARE FOR REFERENCE ONLY



TYPE I

ROSEMOUNT[®]

BOULDER, COLORADO

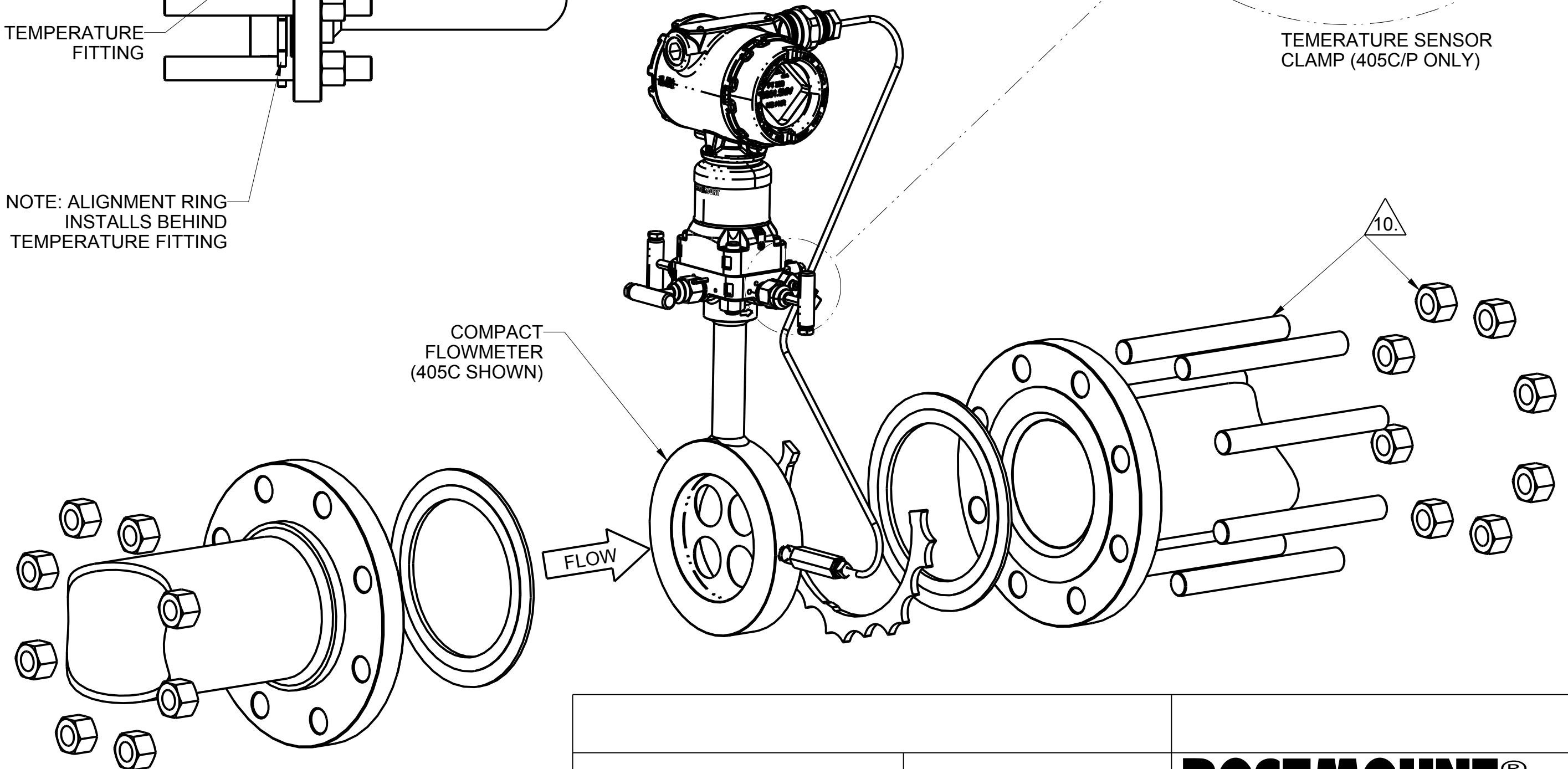
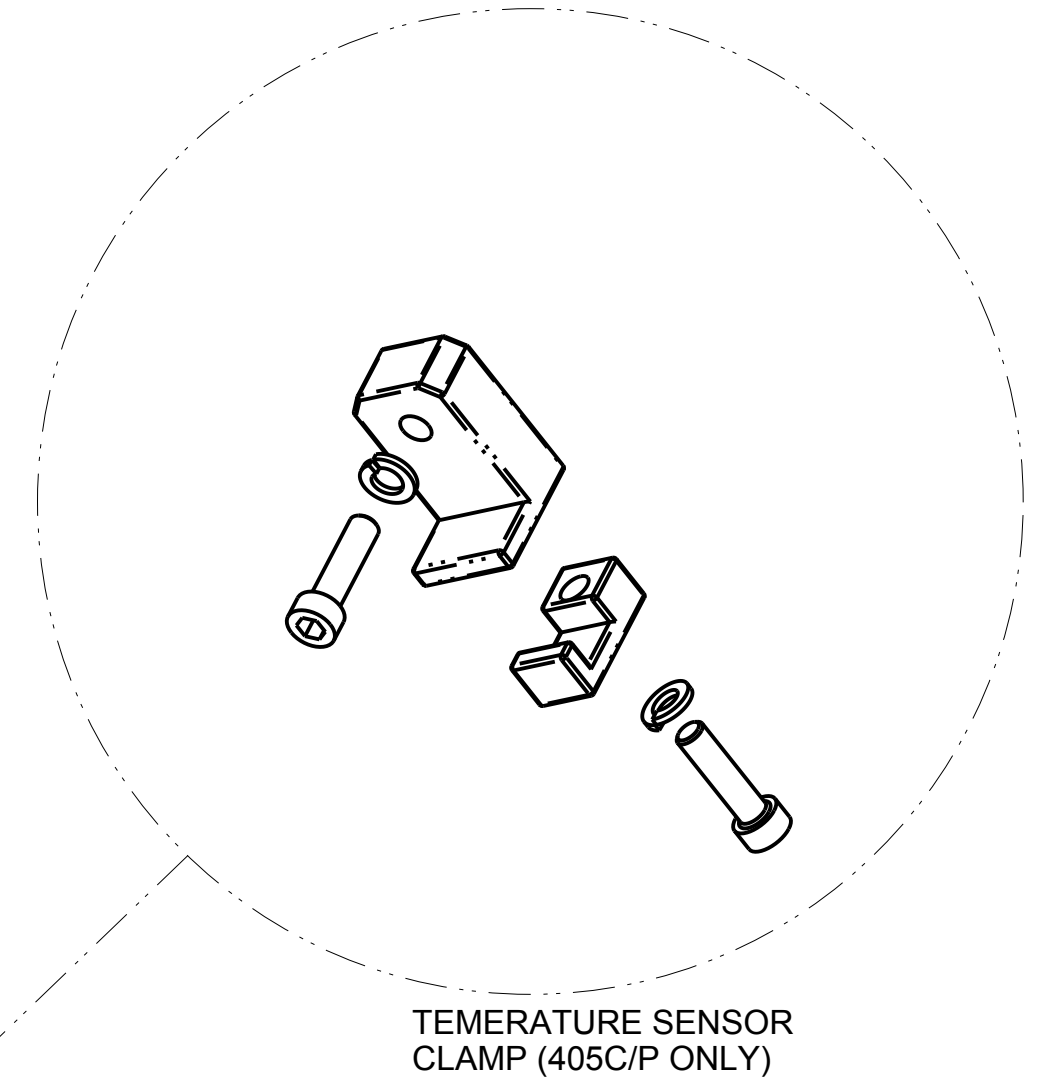
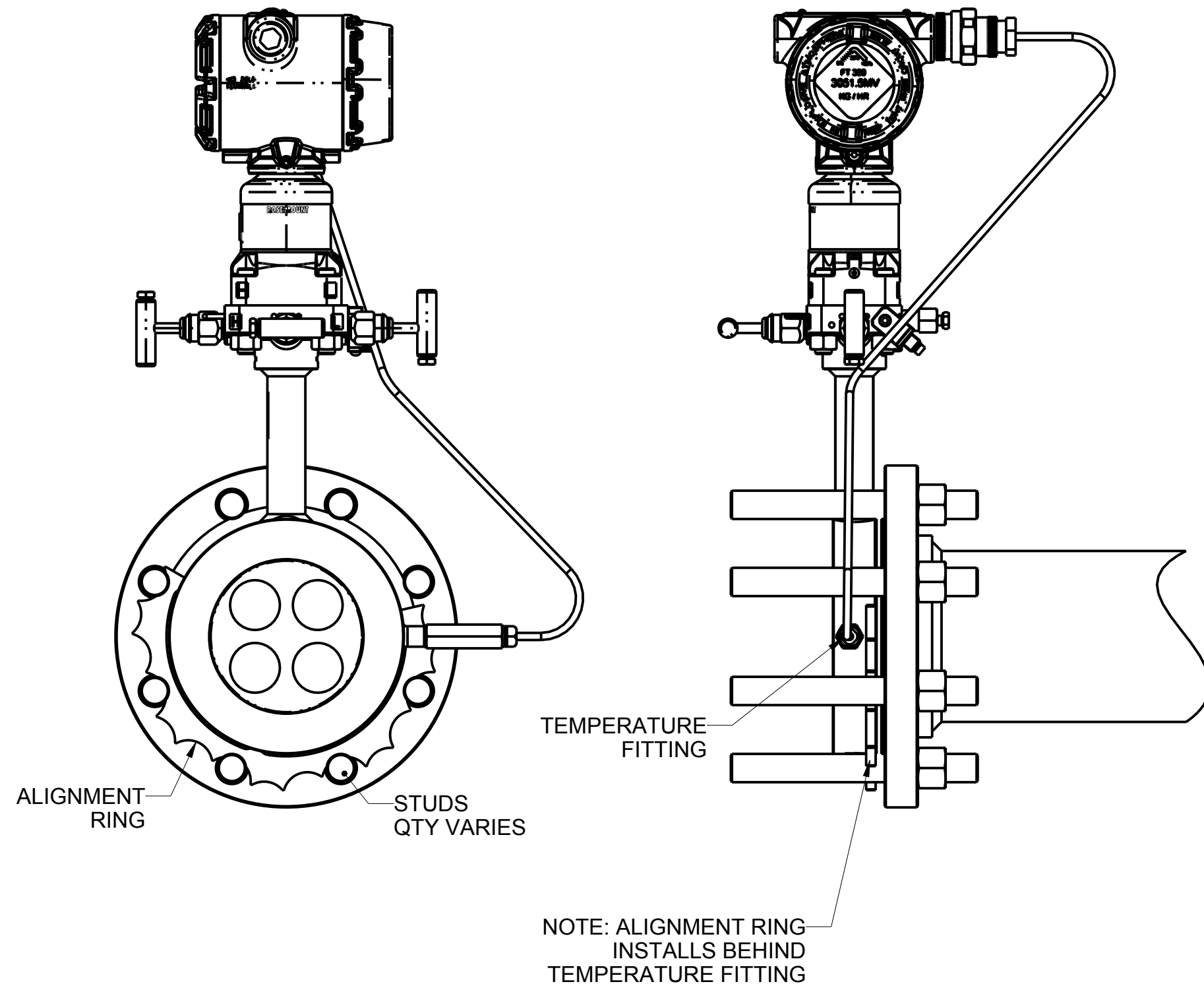
DR.	P DEEGAN	12/13/11
APPROVAL		
DRAWING	S IFFT	12/27/11
TAGGING		
SPECIALS		

TITLE		DIMENSIONAL DRAWING MODEL 405	
COMPACT FLOWMETER		DRAWING NO. 00405-1001	
SIZE	C	SCALE : NONE	
SHEET: 6		of 7	

FLOW METER INSTALLATION EXAMPLE

REVISION TABLE

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	DR.	P DEEGAN	12/13/11	TITLE	
*ALL DIMENSIONS ARE NOMINAL AND ARE FOR REFERENCE ONLY	APPROVAL		DIMENSIONAL DRAWING MODEL 405		
	DRAWING	S IFFT	12/27/11	COMPACT FLOWMETER	
	TAGGING			SIZE	DRAWING NO.
	SPECIALS			C	00405-1001
					SCALE : NONE