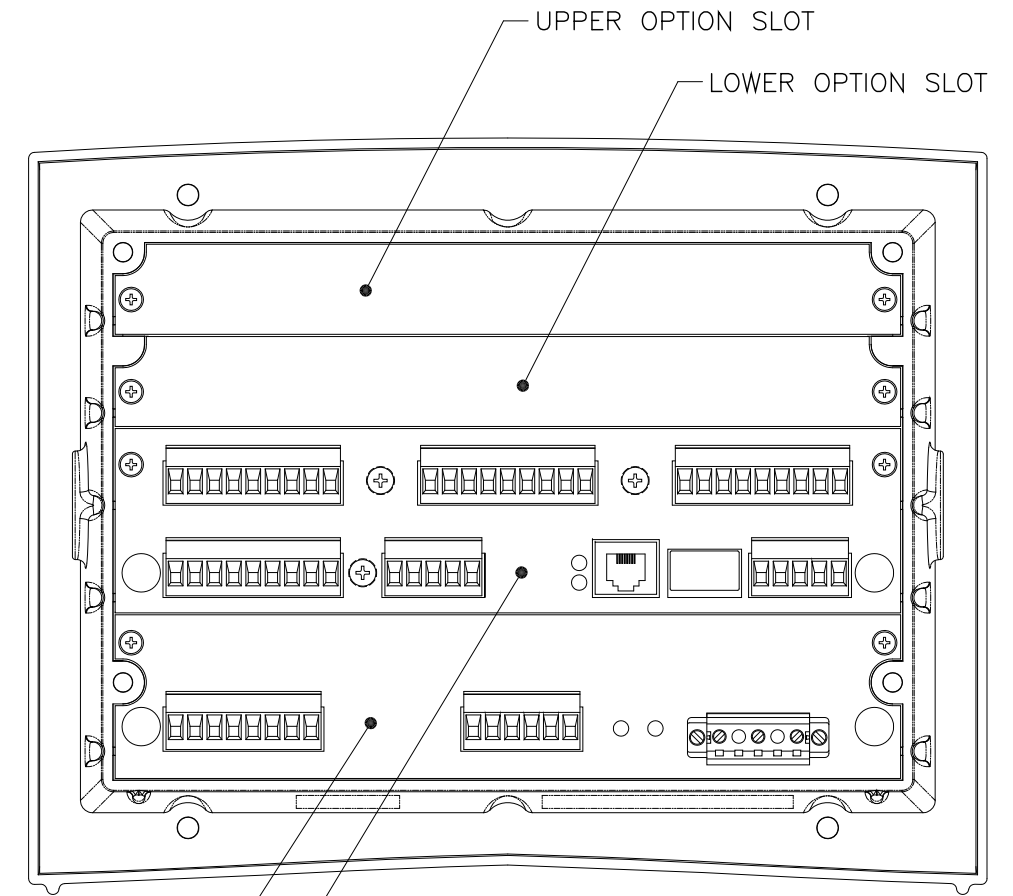
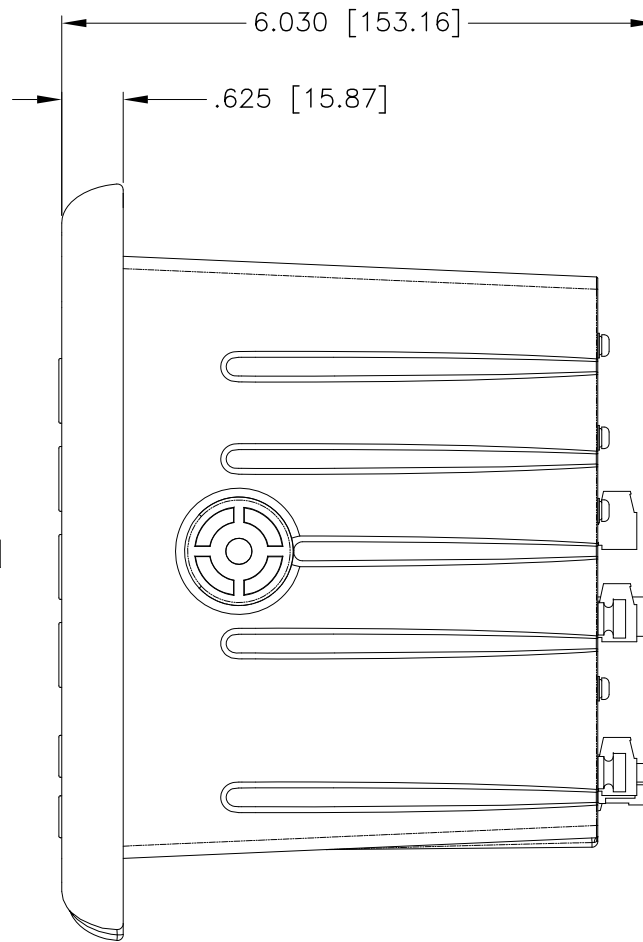
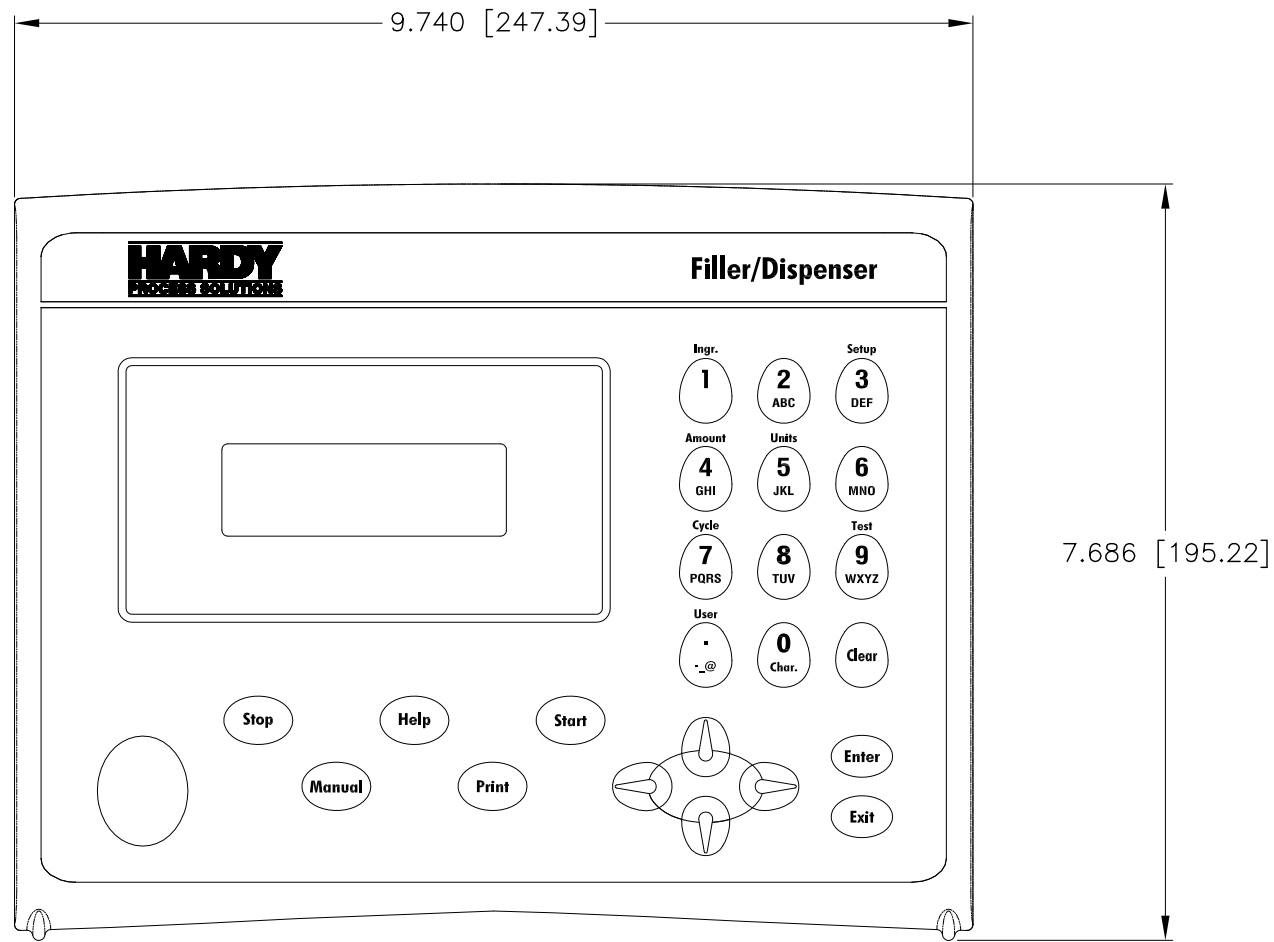


# MODEL HI 3010 FILLER/DISPENSER

REV.	ECO/DDC	DESCRIPTION	DATE	DRAFT	CHECK	APV'D
A	----	RELEASED.	12-21-01	V.J.C.	S.N.	T.L.M.
B	08596	REVISED PER ECN.	07-24-02	V.J.C.	S.N.	T.L.M.
C	08742	REVISED PER ECN.	11-21-02	S.N.	V.J.C.	T.L.M.
D	08891	REVISED PER ECN.	07-01-03	V.J.C.	S.N.	T.L.M.
E	09418	REVISED PER ECN.	11-22-04	V.J.C.	S.N.	T.K.
F	10826	REVISED PER ECN.	11-19-10	V.J.C.	C.B.	V.J.C.
G	11139	REVISED PER ECN.	08-23-13	V.J.C.	L.E.G.	V.J.C.




- INTERCONNECT WIRING FOR UNITS INSTALLED IN HAZARDOUS LOCATIONS TO BE PER NATIONAL ELECTRIC CODE (ANSI/NFPA-70).
- SEE SHEETS 5, 6, 7 AND 8 FOR CABLE TERMINATIONS.
- SEE SHEETS 2, 3 AND 4 FOR INSTRUMENT MOUNTING OPTIONS.
- SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.

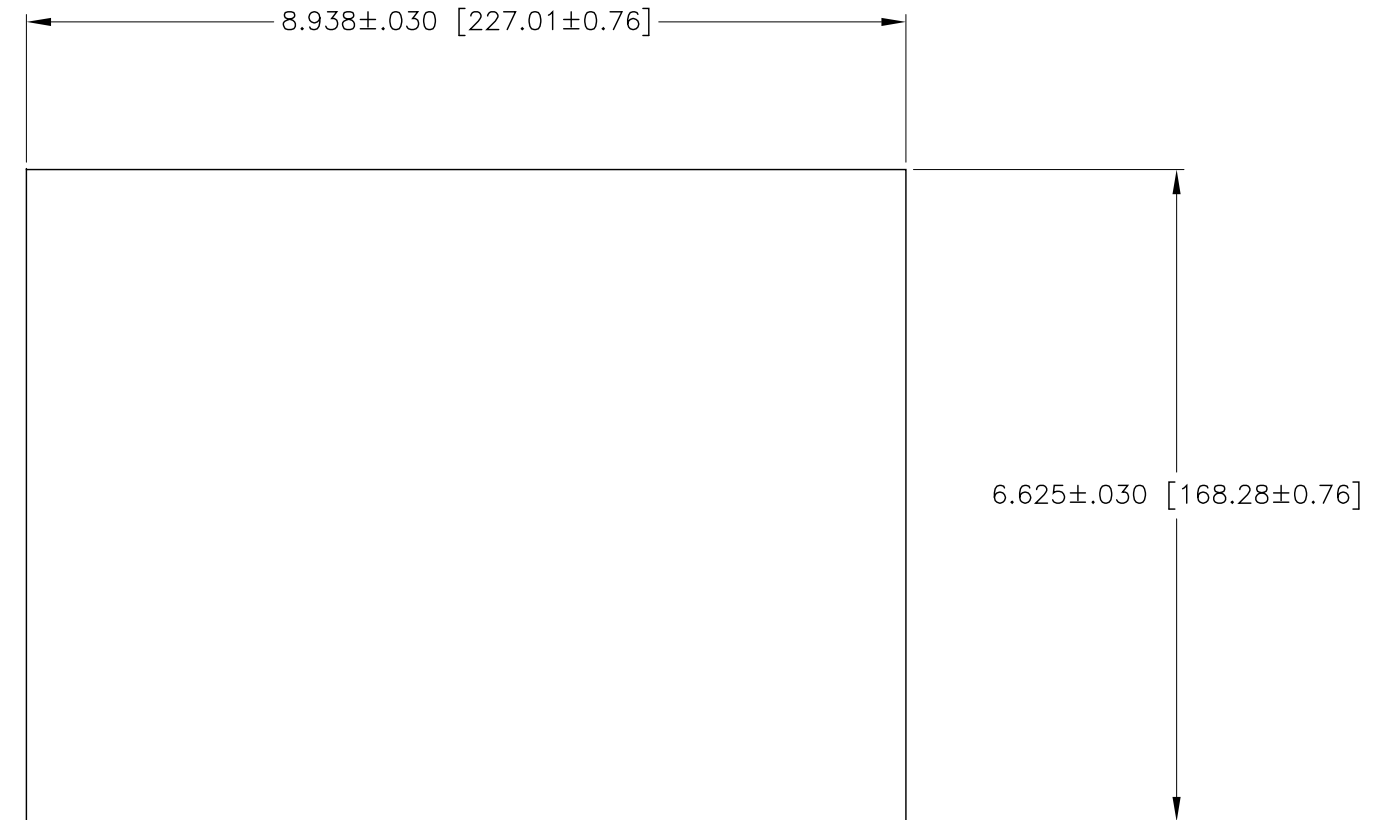
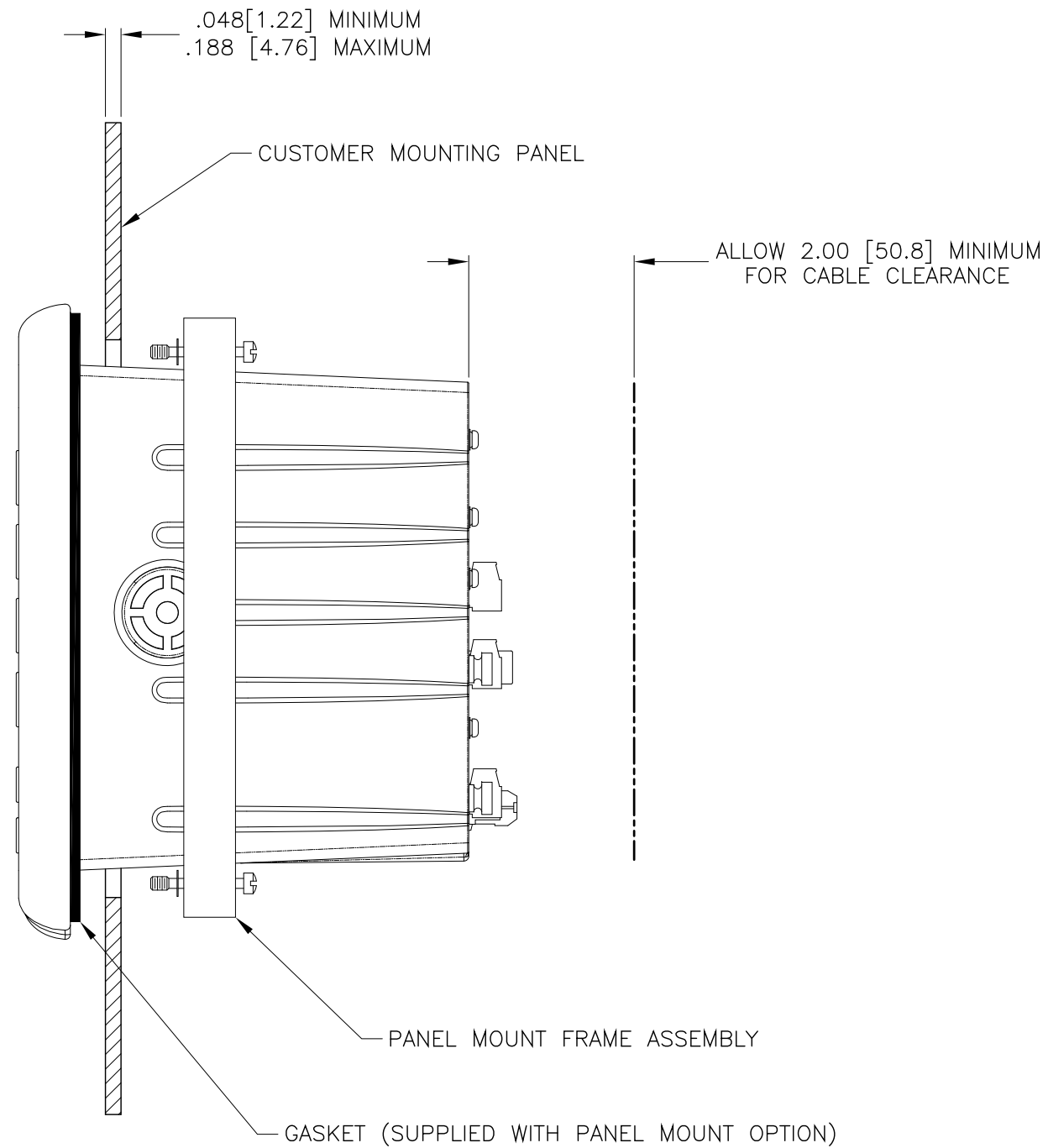
## NOTES: UNLESS OTHERWISE SPECIFIED

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DIMENSIONS = IN [MM]

ITEM	QTY	0584-0046	I/I DIAGRAM, HI 3010 FILLER/DISPENSER		COMMENTS
		PART NUMBER	DESCRIPTION		
<b>PARTS LIST</b>					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES [MM]		CONTRACT NO.		 <b>I/I DIAGRAM, HI 3010 FILLER/DISPENSER</b>	
TOLERANCES ARE: DECIMALS: .XX = N/A .XXX = N/A ANGLES: N/A		APPROVALS			
MATERIAL		DRAWN V. CHULA	DATE 12-12-01		
FINISH		CHECKED S. NAVARRO	DATE 12-21-01		
DO NOT SCALE DRAWING		APPROVED T. McDOUGALL	DATE 12-21-01	ISSUED S. NAVARRO	DATE 01-02-02
		PRODUCTION	DATE	SIZE <b>D</b>	FSCM <b>21316</b>
				DRAWING NO. <b>0584-0046</b>	REV. <b>G</b>
				FILE NAME: 584046G1.DWG	SCALE: NONE
				SHEET 1 OF 8	

MODEL HI 3010 FILLER/DISPENSER – PANEL MOUNT CONFIGURATION (OPTION PM)

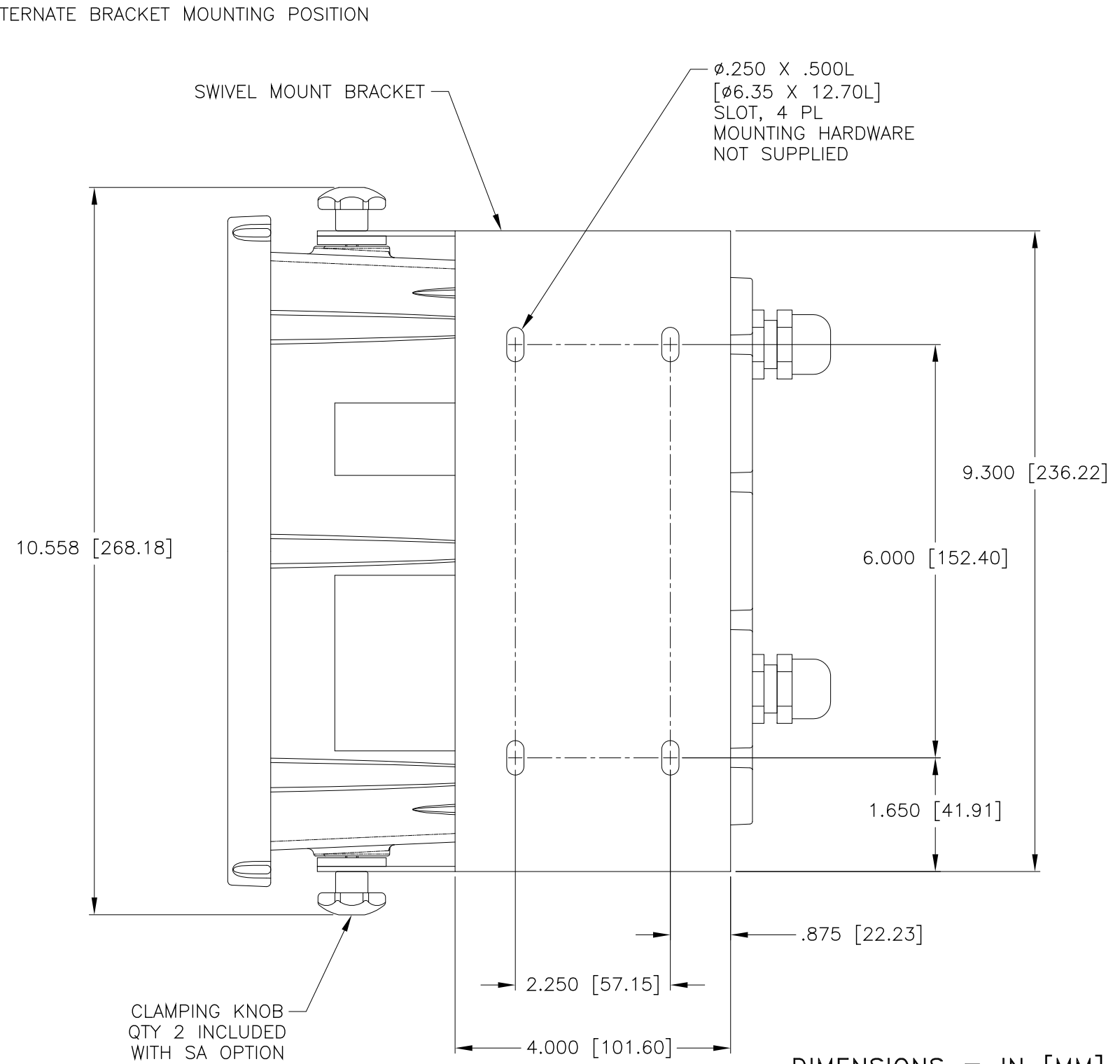
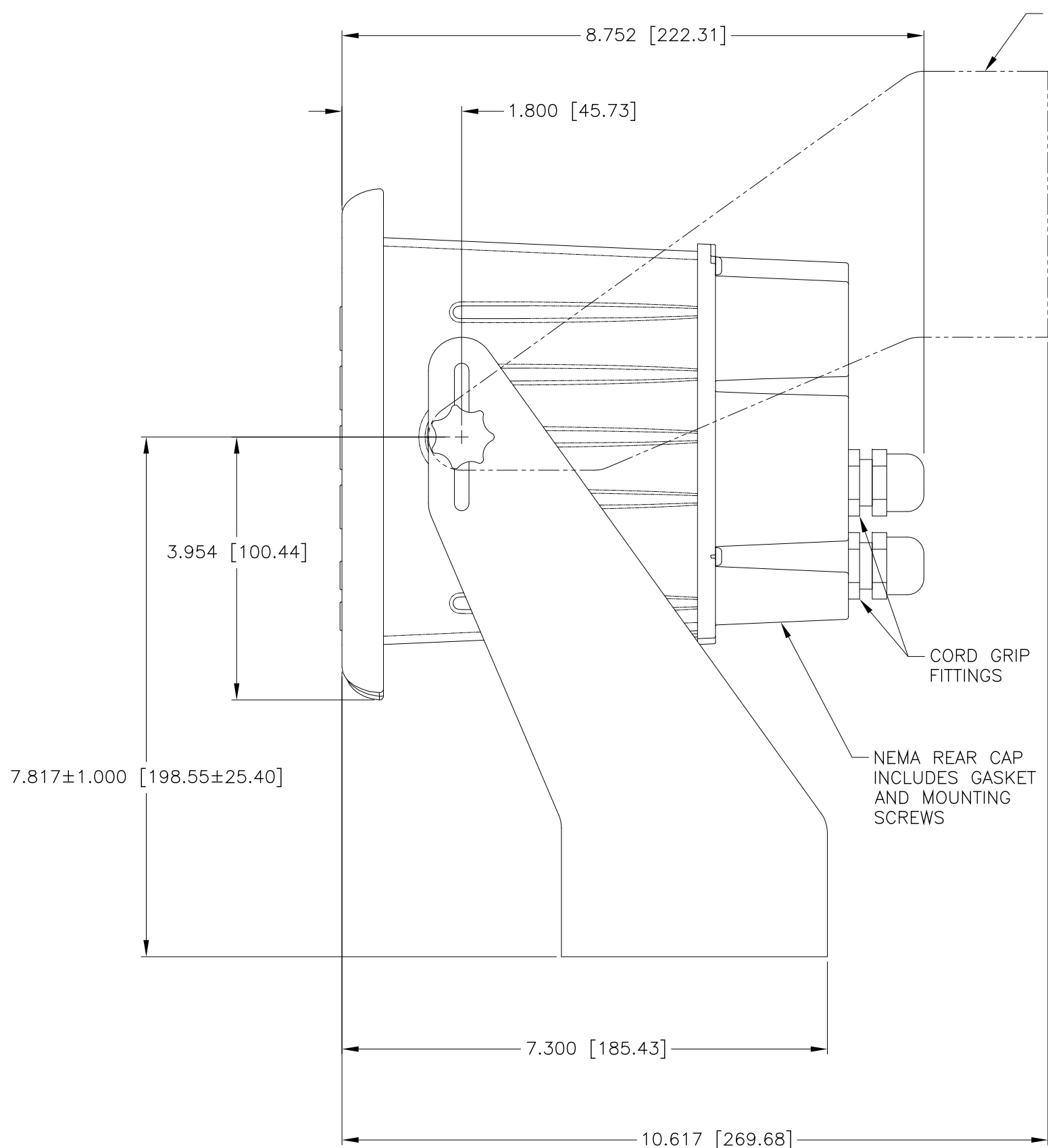


RECOMMENDED PANEL CUTOUT DIMENSIONS

DIMENSIONS = IN [MM]

<b>HARDY</b> PROCESS SOLUTIONS			
TITLE I/I DIAGRAM, HI 3010 FILLER/DISPENSER			
SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 2 OF 8

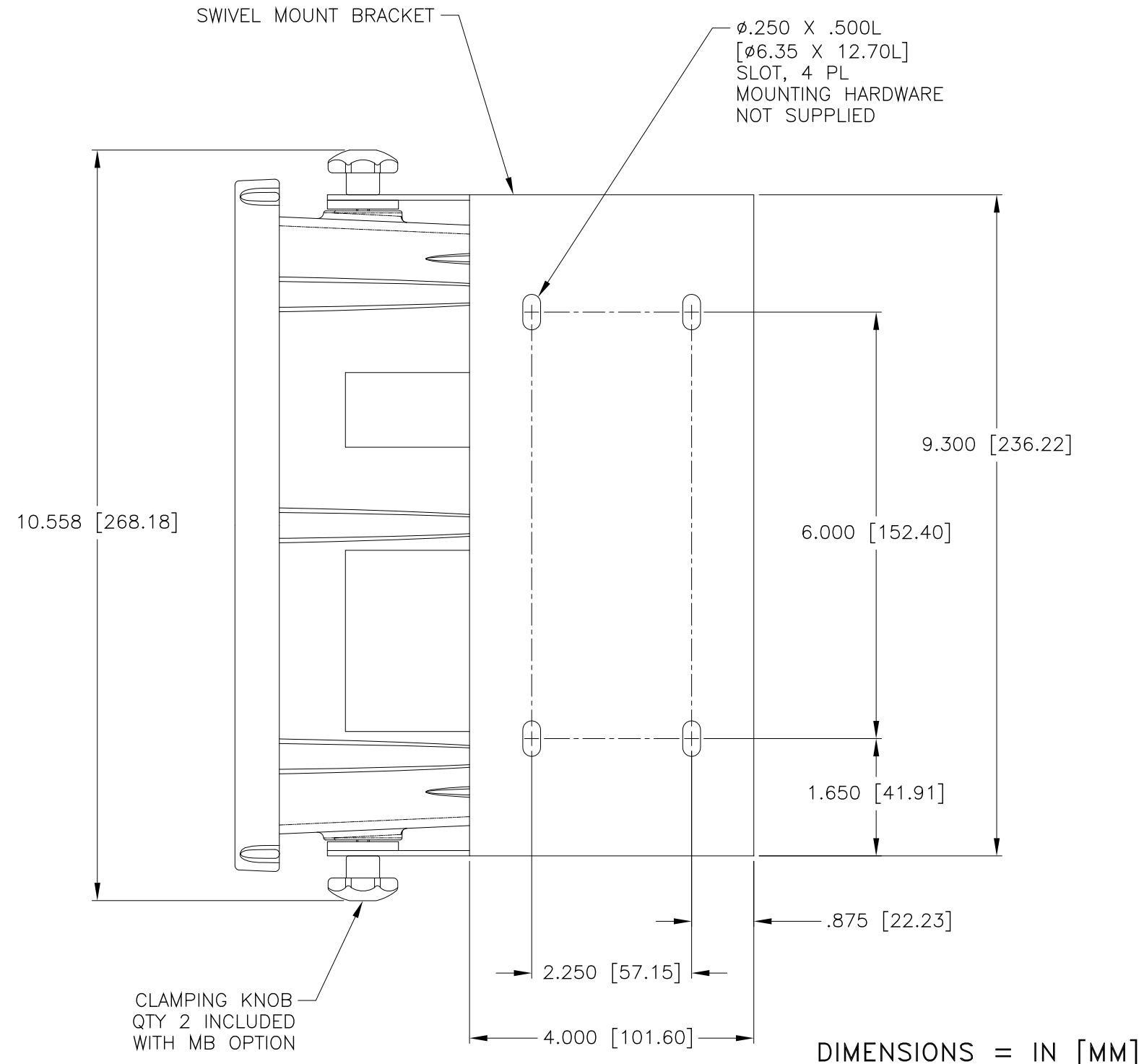
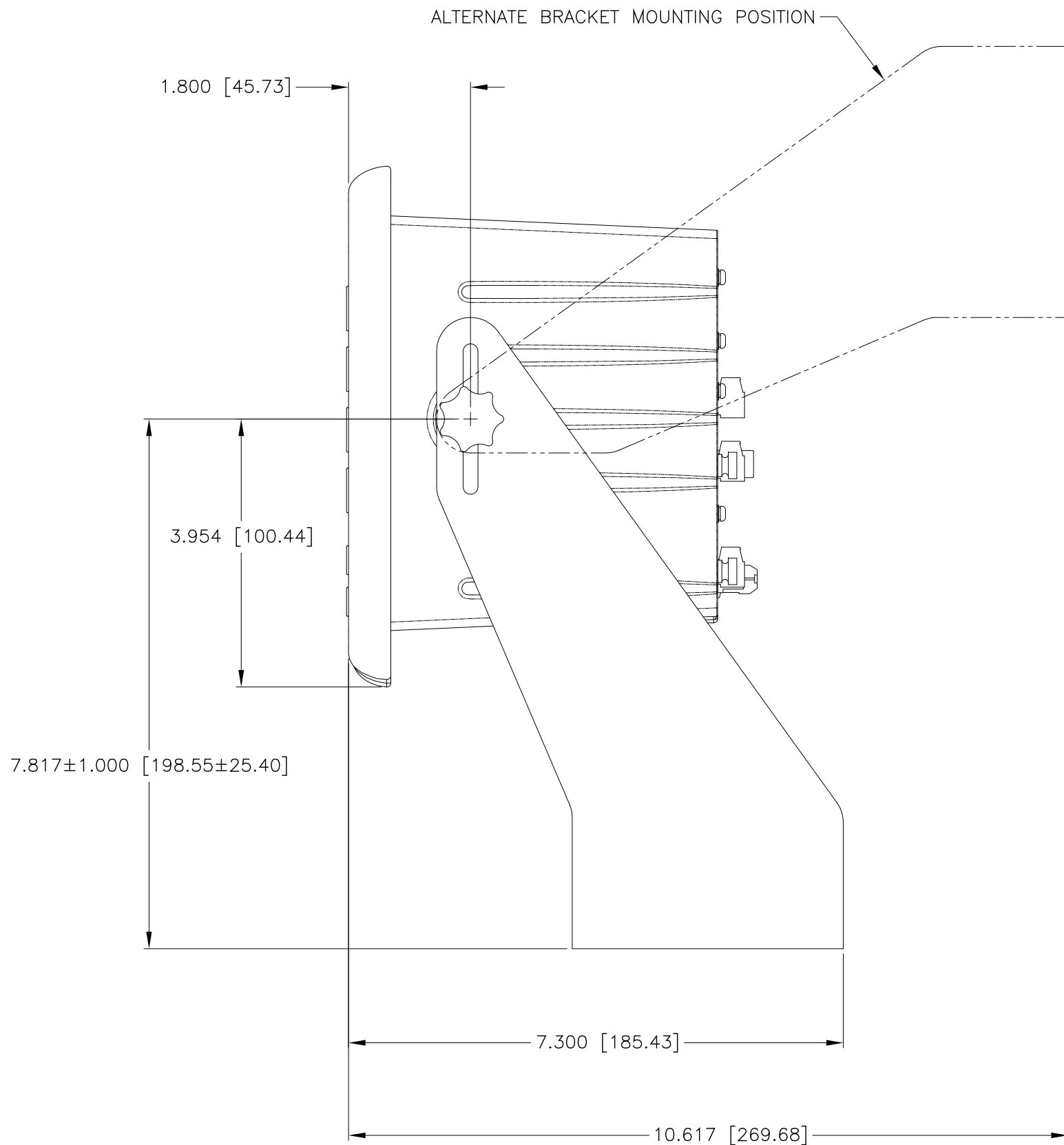
MODEL HI 3010 FILLER/DISPENSER STAND ALONE CONFIGURATION (OPTION SA) – WITH MOUNTING BRACKET, NEMA REAR CAP & 2 CORD GRIP FITTINGS



DIMENSIONS = IN [MM]

<b>HARDY</b> PROCESS SOLUTIONS			
TITLE I/I DIAGRAM, HI 3010 FILLER/DISPENSER			
SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 3 OF 8

MODEL HI 3010 FILLER/DISPENSER – SWIVEL MOUNT BRACKET (OPTION MB)



DIMENSIONS = IN [MM]

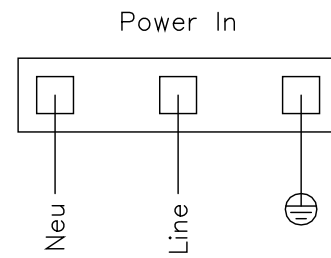
<b>HARDY</b> PROCESS SOLUTIONS			
TITLE I/I DIAGRAM, HI 3010 FILLER/DISPENSER			
SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 4 OF 8

## POWER INPUT TERMINATIONS

### OPTIONS AC, AA & AD

NOTES:

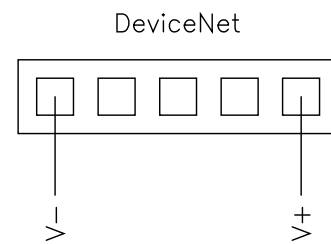
- INPUT VOLTAGE: 115/240 VAC, 50-60 Hz  
0.65/0.40 AMP, 25 WATT.
- WIRE SIZE: 14 AWG MAXIMUM / 18 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



### OPTIONS DC, DA & DD

NOTES:

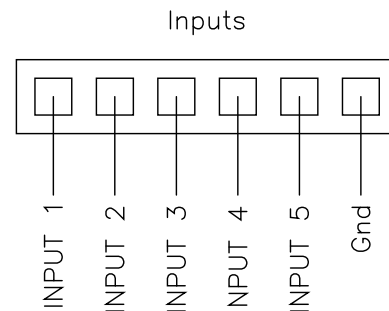
- INPUT VOLTAGE: 12/24 VDC  
0.84/0.42 AMP, 10 WATT.
- WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



## INPUT TERMINATIONS

NOTES:

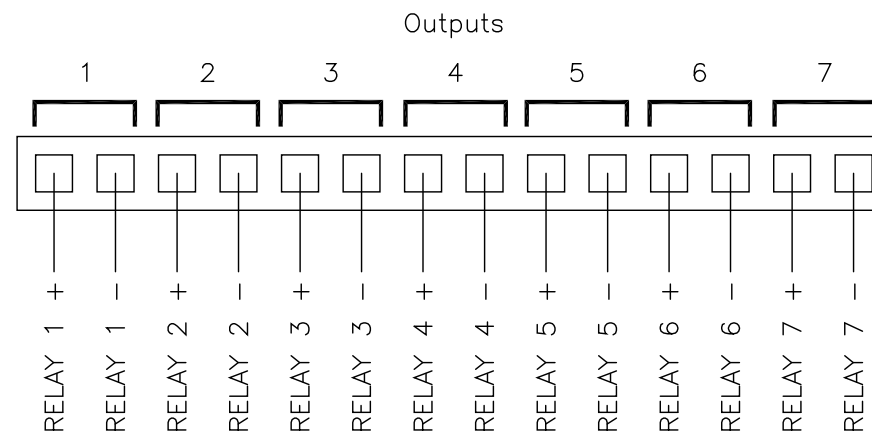
- ALL MAPPABLE
- DO NOT BUNDLE AC INPUT WIRING WITH POWER WIRING, RELAY CABLE OR ANY OTHER HIGH ENERGY CABLES.
- WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



## OUTPUT TERMINATIONS

NOTES:

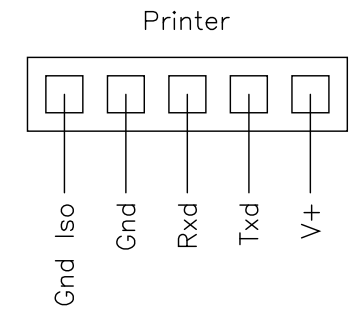
- AC RELAY CONTACT RATINGS: 24-280 VAC, .5 AMP NOMINAL  
SINGLE CYCLE SURGE: 85 AMP
- DC RELAY CONTACT RATINGS: 5-60 VDC, .5 AMP NOMINAL  
1 SECOND SURGE: 5 AMP
- RELAY TYPES: SOLID STATE, ALL MAPPABLE.
- WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



## PRINTER (RS-232) TERMINATIONS

NOTES:

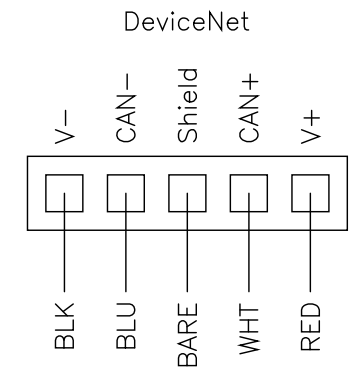
- WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



## DEVICENET COMMUNICATIONS

NOTES:

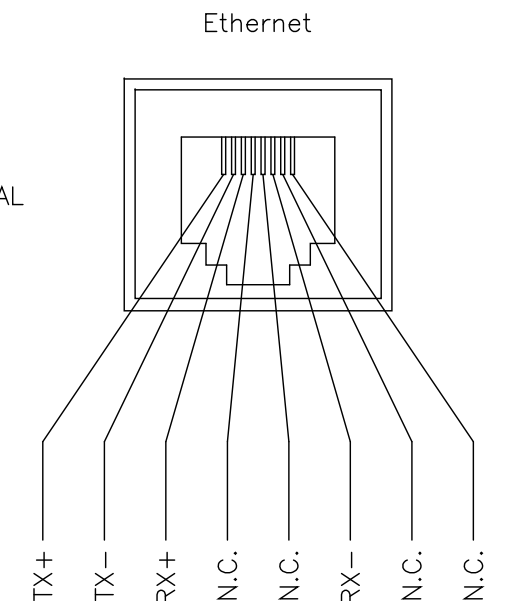
- SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON DEVICENET TERMINATIONS.
- WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.



## ETHERNET TERMINATION

NOTES:

- SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON ETHERNET TERMINATIONS.
- CONNECTOR TYPE: RJ-45, 8 PIN
- N.C. = NOT CONNECTED.



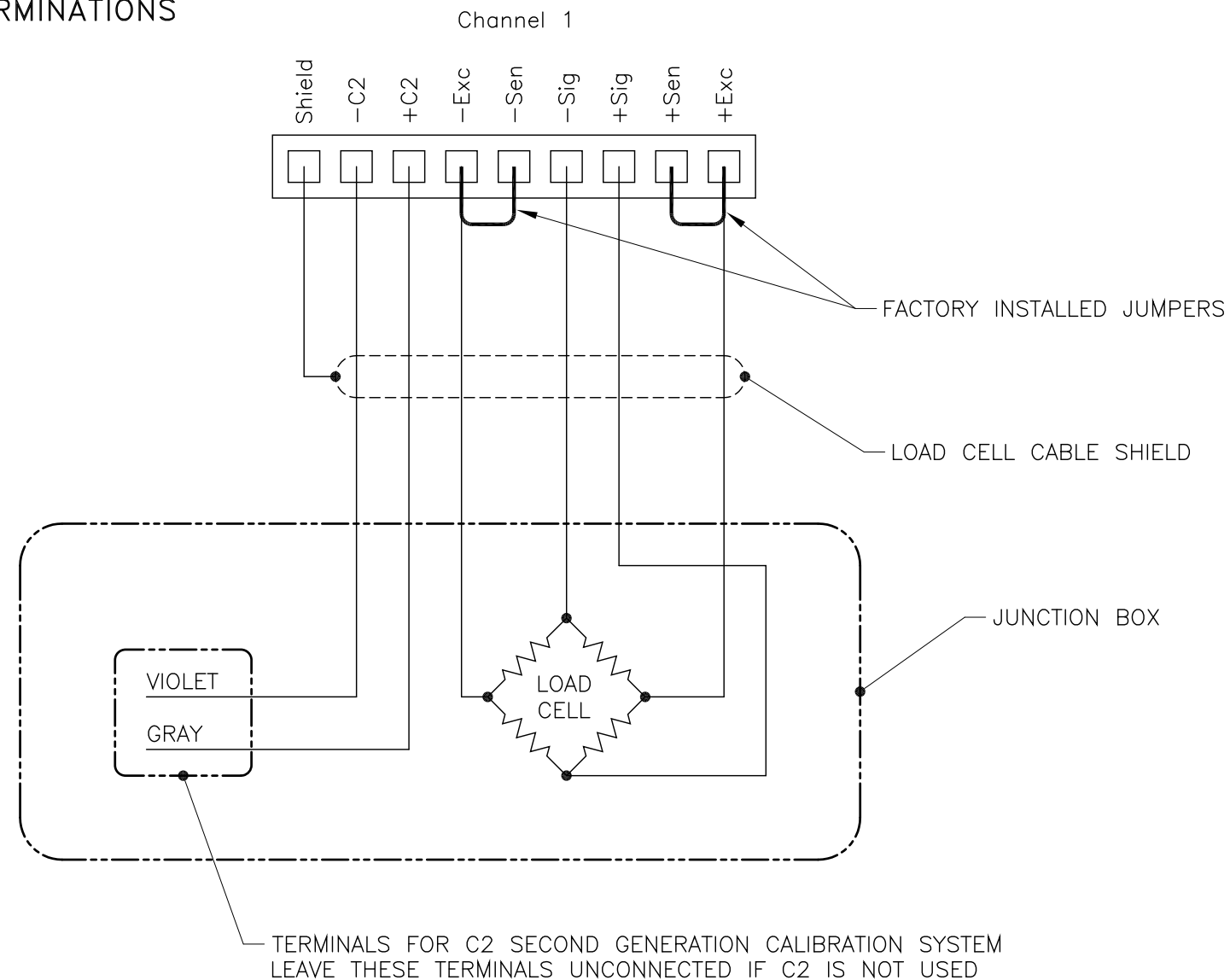
TITLE			
I/I DIAGRAM, HI 3010 FILLER/DISPENSER			
SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 5 OF 8

## SENSOR INPUT TERMINATIONS

### OPTION LC (SINGLE LOAD CELL OR SUMMED CONNECTION FROM JUNCTION BOX)

**NOTES:**

1. DO NOT RUN LOAD CELL CABLE PARALLEL TO, OR IN THE SAME CONDUIT WITH POWER WIRING, RELAY CABLE OR OTHER HIGH ENERGY CABLES.
2. FACTORY INSTALLED JUMPERS TO REMAIN IN PLACE FOR FOUR WIRE LOAD CELL CONNECTION. JUMPERS TO BE REMOVED FOR SIX WIRE OR EIGHT WIRE [C2] LOAD CELL CONNECTIONS. EXCITATION AND SENSE WIRES TO BE CONNECTED TOGETHER IN JUNCTION BOX.
3. REQUIRED LOAD CELL CABLE FOR C2 SECOND GENERATION CALIBRATION SYSTEM: HARDY INSTRUMENTS PART NUMBER 6020-0001.
4. SEE USER'S GUIDE FOR ADDITIONAL INFORMATION ON ANALOG WEIGH SCALE INPUT CONNECTIONS.
5. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

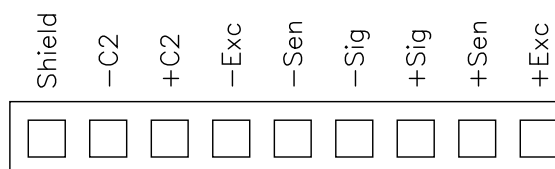


### OPTION JB (FOUR LOAD CELL INPUT) & OPTION SD (FOUR LOAD CELL INPUT WITH SMART DIAGNOSTICS)

**NOTES:**

1. DO NOT RUN LOAD CELL CABLES PARALLEL TO, OR IN THE SAME CONDUIT WITH POWER WIRING, RELAY CABLE OR OTHER HIGH ENERGY CABLES.
2. FACTORY INSTALLED JUMPERS TO REMAIN IN PLACE FOR FOUR WIRE LOAD CELL CONNECTION. JUMPERS TO BE REMOVED FOR SIX WIRE OR EIGHT WIRE (C2) LOAD CELL CONNECTIONS.
3. REQUIRED LOAD CELL CABLE FOR C2 SECOND GENERATION CALIBRATION SYSTEM: HARDY INSTRUMENTS PART NUMBER 6020-0001.
4. SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON LOAD CELL CONNECTIONS.
5. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

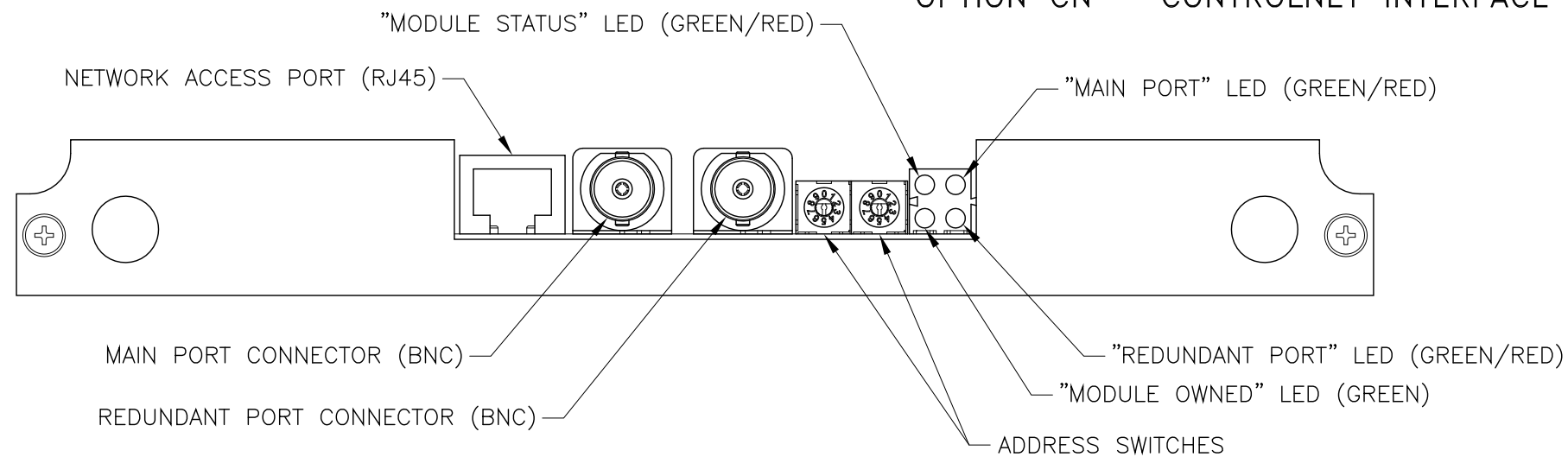
Channel 1, Channel 2, Channel 3 & Channel 4



TERMINATIONS ARE THE SAME AS OPTION LC, EXCEPT INDIVIDUAL LOAD CELLS ARE WIRED DIRECTLY TO CHANNELS 1 THROUGH 4

<b>HARDY</b> PROCESS SOLUTIONS			
TITLE <b>I/I DIAGRAM, HI 3010 FILLER/DISPENSER</b>			
SIZE <b>D</b>	FSCM <b>21316</b>	DRAWING NO. <b>0584-0046</b>	REV. <b>G</b>
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 6 OF 8

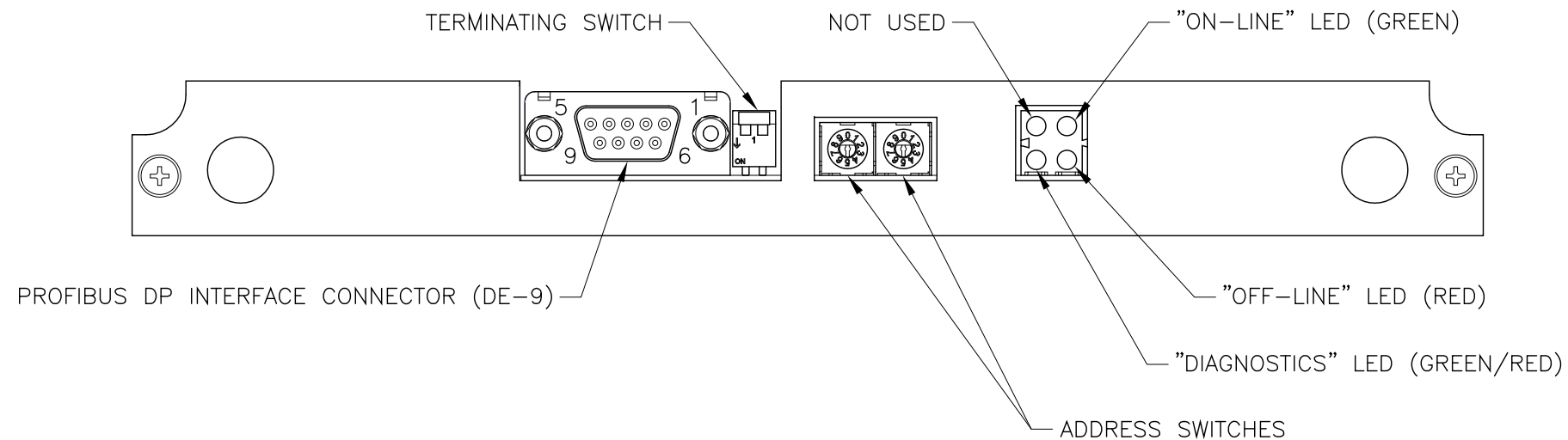
### OPTION CN – CONTROLNET INTERFACE



NOTES:

1. SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON CONTROLNET TERMINATIONS.
2. OPTION CN CAN ONLY BE LOCATED IN THE LOWER OPTION SLOT.

### OPTION PB – PROFIBUS DP I/O INTERFACE



NOTES:

1. SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON PROFIBUS DP I/O INTERFACE TERMINATIONS.
2. OPTION PB CAN ONLY BE LOCATED IN THE LOWER OPTION SLOT.

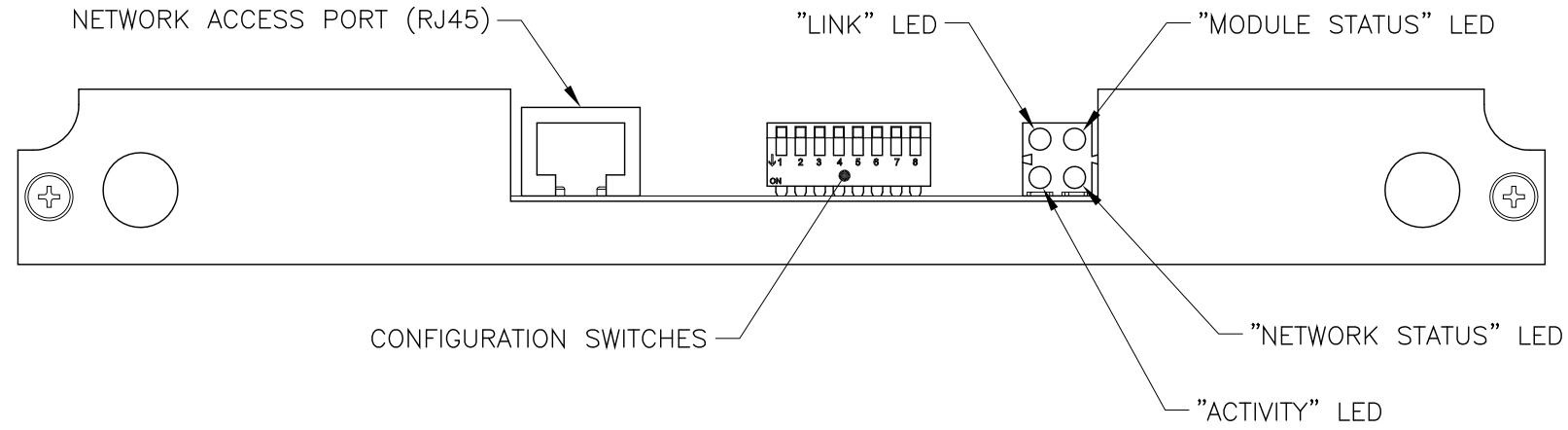
PROFIBUS INTERFACE CONNECTOR TERMINATIONS

PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1	NO CONNECT	4	RTS	7	NO CONNECT
2	NO CONNECT	5	GND BUS	8	RXD/TXD -
3	RXD/TXD +	6	+5V BUS	9	NO CONNECT



TITLE			
I/I DIAGRAM, HI 3010 FILLER/DISPENSER			
SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 7 OF 8

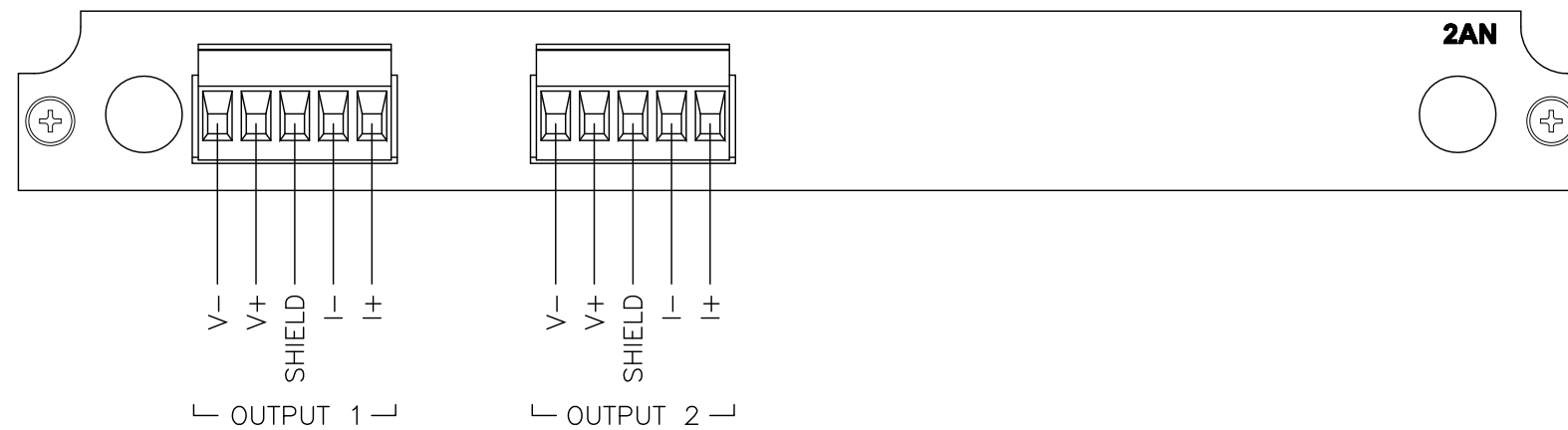
### OPTION EIP – ETHERNET/IP INTERFACE



NOTES:

1. SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON CONTROLNET TERMINATIONS.
2. OPTION EIP CAN BE LOCATED IN EITHER THE UPPER OPTION SLOT OR LOWER OPTION SLOT.

### OPTION 2AN – DUAL ANALOG OUTPUT



NOTES:

1. SEE OPERATION AND INSTALLATION MANUAL FOR ADDITIONAL INFORMATION ON ANALOG OUTPUT TERMINATIONS.
2. OPTION 2AN CAN BE LOCATED IN EITHER THE UPPER OPTION SLOT OR LOWER OPTION SLOT, OR IN BOTH OPTION SLOTS.
3. WIRE SIZE: 12 AWG MAXIMUM / 22 AWG MINIMUM.  
WIRE TIGHTENING TORQUE: 2 LB-IN MINIMUM / 4 LB-IN MAXIMUM.

**HARDY**  
PROCESS SOLUTIONS

TITLE  
I/I DIAGRAM, HI 3010  
FILLER/DISPENSER

SIZE	FSCM	DRAWING NO.	REV.
D	21316	0584-0046	G
FILE NAME: 584046G1.DWG		SCALE: NONE	SHEET 8 OF 8