Access & Power Integration

T1HCK3

Up to 8 Door Kit

Fully assembled kit includes:
- Trove1 enclosure with THC1 Altronix/Hartmann Controls backplane
- One (1) AL600ULXB - Power Supply/Charger

T1HCK34

Up to 8 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove1 enclosure with THC1 Altronix/Hartmann Controls backplane
- One (1) AL600ULXB - Power Supply/Charger
- One (1) ACM4 - Fused Access Power Controller

All components of these Trove kits are UL Listed sub-assemblies.
Please refer to the included corresponding Sub-Assembly Installation Guides for further information.

Installation Guide

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Rev. T1HCL011122

Installing Company: _____ Service Rep. Name: _____
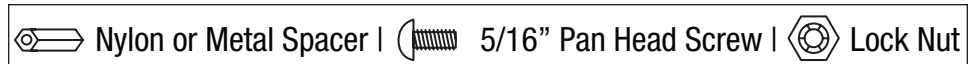
Address: _____ Phone #: _____

Overview:

Altronix/Hartmann Controls Trove kits are pre-assembled and consist of Trove enclosure with factory installed Altronix power supply/chargers and sub-assemblies. Each kit also accommodates one (1) Hartmann Controls PRS_Master boards and up to four (4) PRS_TDM or PRS_IO8 boards.

Configuration Chart:

Altronix Model Number	115VAC 60Hz Input Current (A)	Power Supply Board Input Fuse Rating	Nominal DC Output Voltage Options		Maximum Supply Current for Output on Power Supply board and ACM4 Access Power Controller's outputs (A)	Fail-Safe/ Fail-Secure or Dry Form "C" Outputs	Current Per ACM4 Output (A)	ACM4 Board Input Fuse Rating	ACM4 Board Output Fuse Rating
			12VDC Output Range (V)	24VDC Output Range (V)					
T1HCK3	3.5	5A/ 250V	AL600ULXB		12 or 24VDC @ 6A	–	–	–	–
			10.0-13.2	20.19-26.4					
T1HCK34	3.5	5A/ 250V	AL600ULXB		12VDC @ 5.4A or 24VDC @ 5.7A	4	2.5	10A/ 32V	3A/ 32V
			10.0-13.2	20.19-26.4					

Hardware and Accessories:

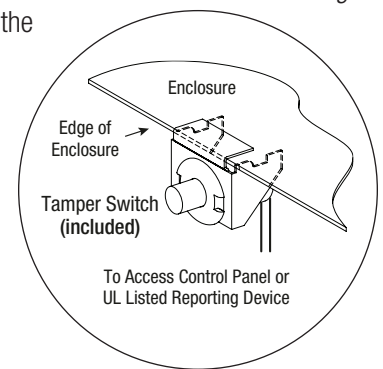⊙▭ Nylon or Metal Spacer | ▥▥▥ 5/16" Pan Head Screw | ⬡ Lock Nut

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

1. Remove backplane from enclosure. Do not discard hardware.
2. Mark and predrill holes in the wall to line up with the top three keyholes in the enclosure. Install three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the three upper screws; level and secure. Mark the position of the lower three holes. Remove the enclosure. Drill the lower holes and install the three fasteners. Place the enclosure's upper keyholes over the three upper screws. Install the three lower screws and make sure to tighten all screws.
3. Mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) in desired location, opposite hinge. Slide the tamper switch bracket onto the edge of the enclosure approximately 2" from the right side *(Fig. 1, pg. 2)*. Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device. To activate alarm signal open the door of the enclosure.
4. Mount Hartmann Controls boards to backplane, *refer to pages 3-4.*
5. Refer to the *ULXB Power Supply/Charger Installation Guide* for AL600ULXB and *Sub-Assembly Installation Guide* for ACM4 for further installation instructions.

Fig. 1

Enclosure
Edge of Enclosure
Tamper Switch **(included)**
To Access Control Panel or UL Listed Reporting Device

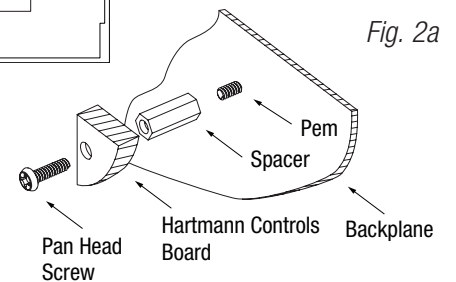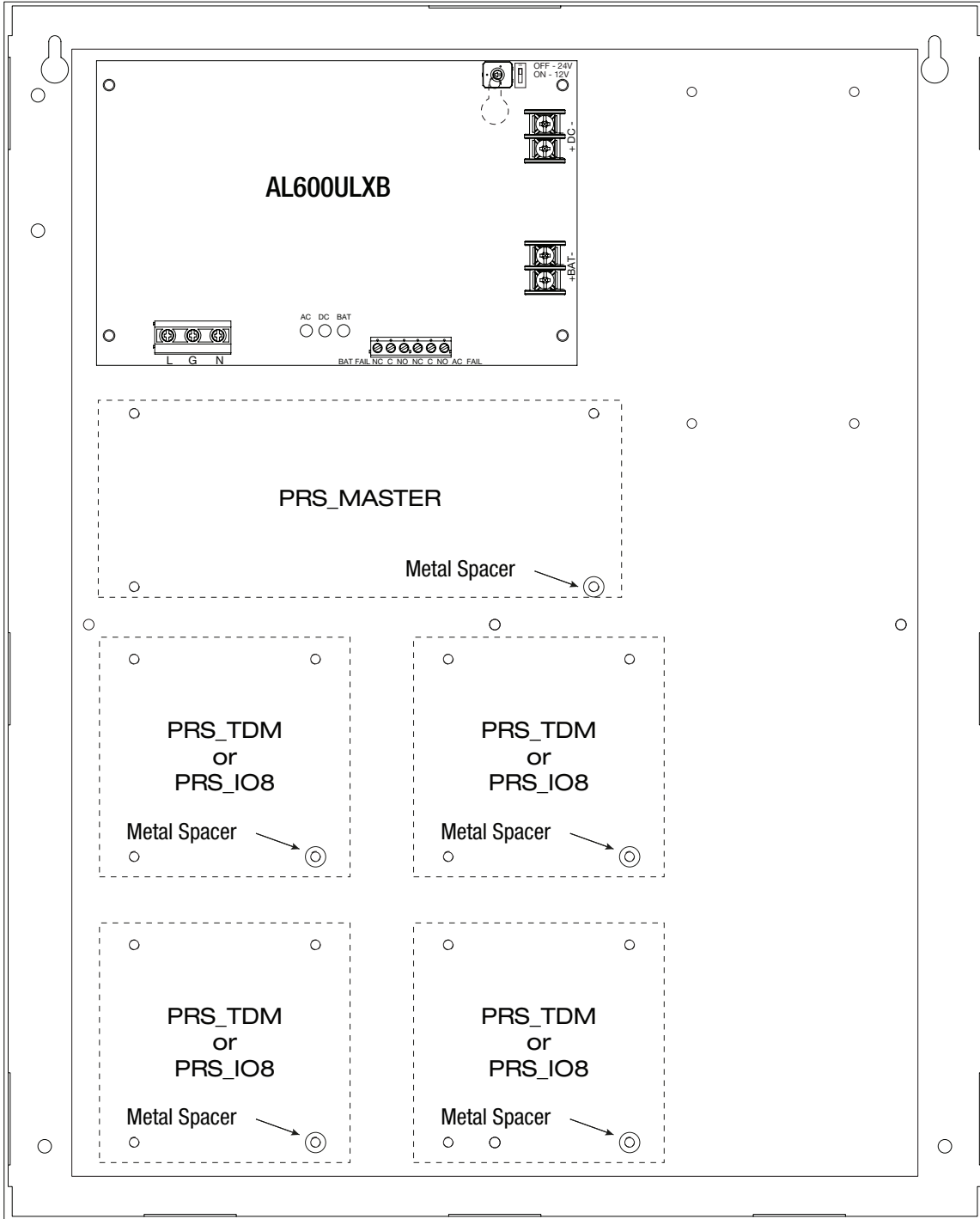# T1HCK3: Configuration of Hartmann Controls Boards:

1. Align the Hartmann Controls boards on the backplane to match the boards' mounting holes with corresponding pems.
2. Fasten spacers (provided) to pems that match the hole pattern for Hartmann Control boards *(Fig. 2, 2a, pg. 3)*.
   Note: Hartmann Controls boards must be properly grounded.
   Please use provided metal spacers for the lower right mounting holes *(Fig. 2, pg. 3)*.
3. Mount Hartmann Controls boards to spacers utilizing provided 5/16" pan head screws *(Fig. 2a, pg. 3)*.
4. Fasten backplane to Trove1 enclosure utilizing lock nuts (provided).

Fig. 2 - **T1HCK3 Configuration**

OFF - 24V
ON - 12V

+ DC -

+BAT-

AL600ULXB

AC   DC   BAT

L   G   N

BAT FAIL NC NO C NC C NO AC FAIL

PRS_MASTER

Metal Spacer

PRS_TDM
or
PRS_IO8

Metal Spacer

PRS_TDM
or
PRS_IO8

Metal Spacer

PRS_TDM
or
PRS_IO8

Metal Spacer

PRS_TDM
or
PRS_IO8

Metal Spacer

Fig. 2a

Pem

Spacer

Pan Head
Screw

Hartmann Controls
Board

Backplane
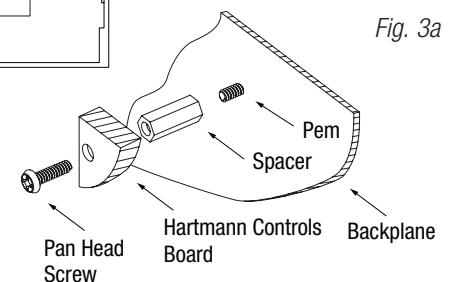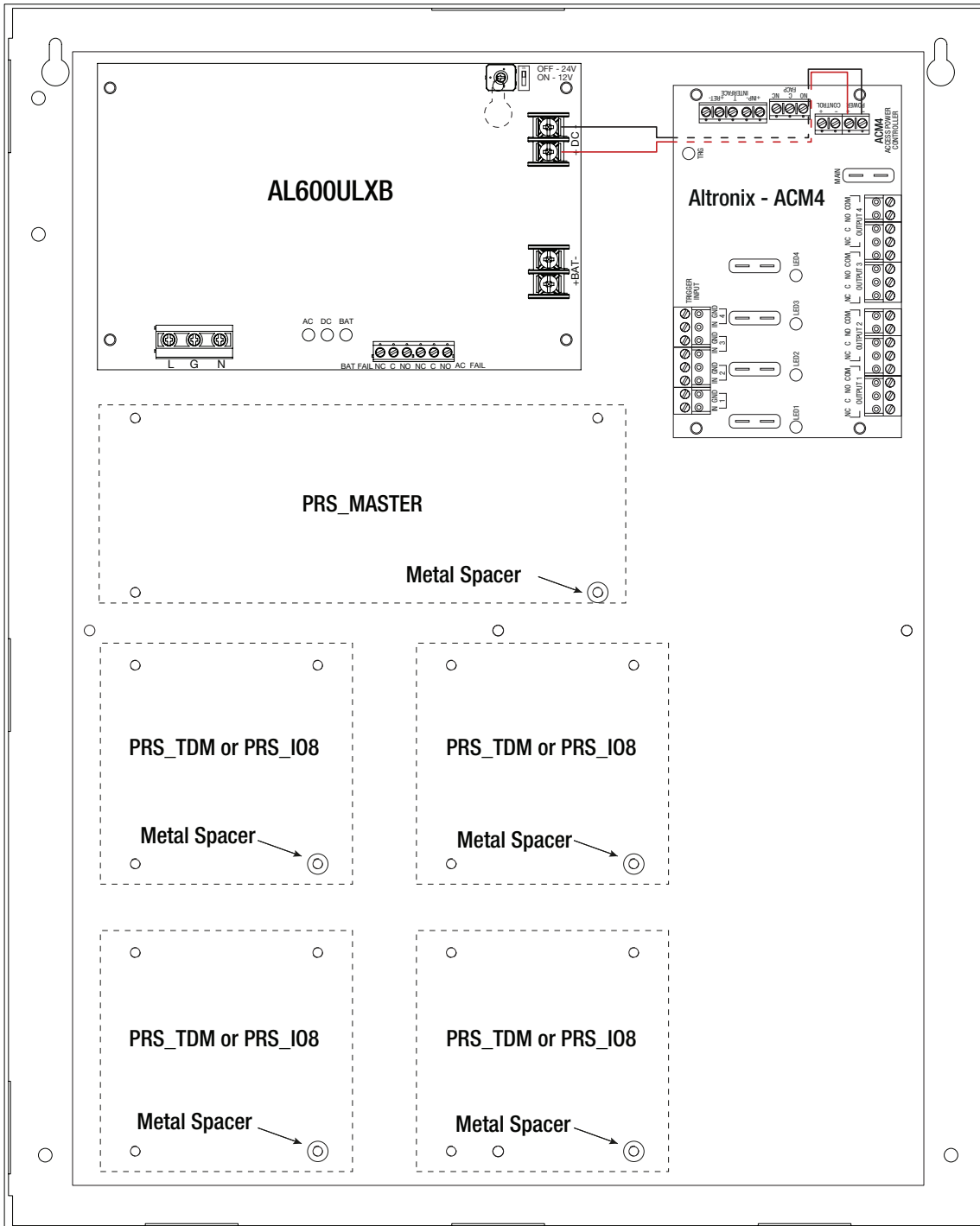
T1HCK34: Configuration of Hartmann Controls Boards:

1. Align the Hartmann Controls boards on the backplane to match the boards' mounting holes with corresponding pems.
2. Fasten spacers (provided) to pems that match the hole pattern for Hartmann Control boards *(Fig. 3, 3a, pg. 4)*.
   Note: Hartmann Controls boards must be properly grounded.
   Please use provided metal spacers for the lower right mounting holes *(Fig. 3, pg. 4)*.
3. Mount Hartmann Controls boards to spacers utilizing provided 5/16" pan head screws *(Fig. 3a, pg. 4)*.
4. Fasten backplane to Trove1 enclosure utilizing lock nuts (provided).
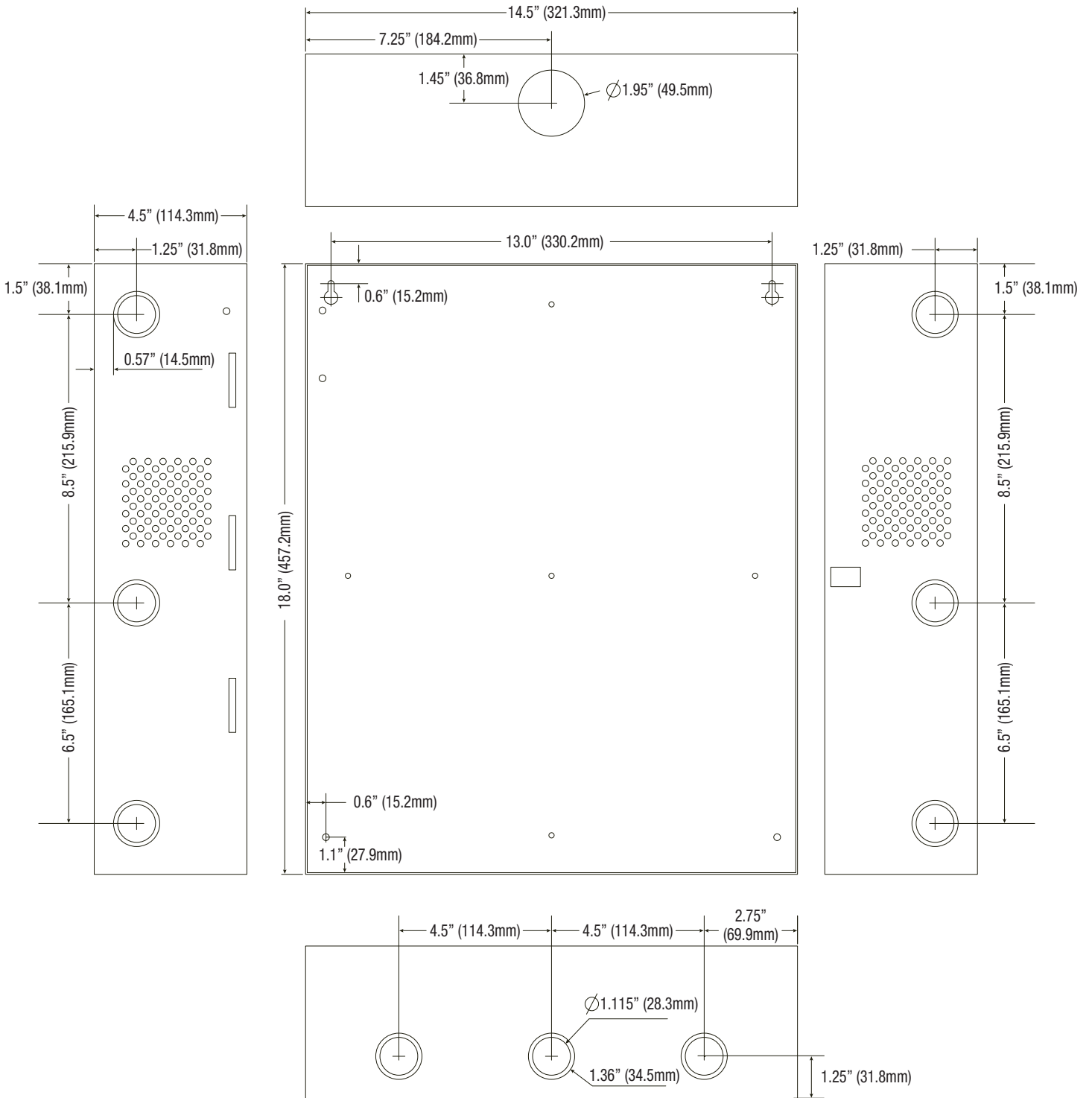
Fig. 3 - **T1HCK34 Configuration**

Fig. 3a

THC1 ULXB Kits Installation Guide

Notes:

Notes:

Notes:

Enclosure Dimensions (H x W x D approximate):
18" x 14.5" x 4.625" (457mm x 368mm x 118mm)

14.5" (321.3mm)

7.25" (184.2mm)

1.45" (36.8mm)

⌀1.95" (49.5mm)

4.5" (114.3mm)

1.25" (31.8mm)

1.5" (38.1mm)

0.57" (14.5mm)

8.5" (215.9mm)

6.5" (165.1mm)

13.0" (330.2mm)

0.6" (15.2mm)

18.0" (457.2mm)

0.6" (15.2mm)

1.1" (27.9mm)

1.25" (31.8mm)

1.5" (38.1mm)

8.5" (215.9mm)

6.5" (165.1mm)

4.5" (114.3mm)

4.5" (114.3mm)

2.75" (69.9mm)

⌀1.115" (28.3mm)

1.36" (34.5mm)

1.25" (31.8mm)