

# Signet 9900 Rear Enclosure Kit



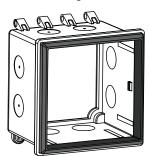
3-9900-399.090 Rev. A1 2/16

## Instruction Sheet

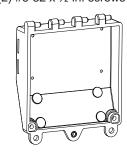
## **Included Parts**

## 3-9900.399-1 Rear Enclosure Kit, Hinged Cover

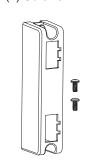
(1) Rear Enclosure with silicone gaskets



- (1) Hinged Cover
- (2) #6-32 x 1/2 in. screws



- (1) Module Plug
- (2) Screws



(1) Hinge Clip

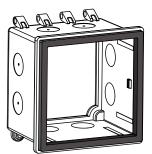


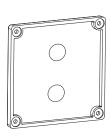
#### Wall mount hardware

- (4) #8 x 11/4 in. screws
- (4) Sealing washers, SS & Neoprene
- (4) Wall anchor, white PP

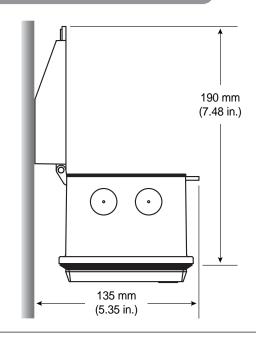
## 3-9900.399-2 Rear Enclosure Kit, Flat Cover

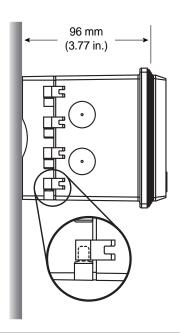
- (1) Rear Enclosure with polyurethane gasket and silicone gasket
- (1) Flat Cover
  - (4) #6-32 x 1/2 in. screws

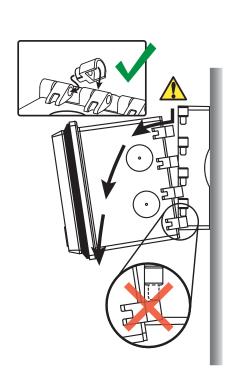




## **Enclosure Orientation**







## **Drilling Procedure**



#### Important!

NEMA TYPE 4X/IP66 rated conduit fittings must be used to maintain Enclosure NEMA TYPE 4X/IP66 rating.

#### Required Equipment (customer supplied):

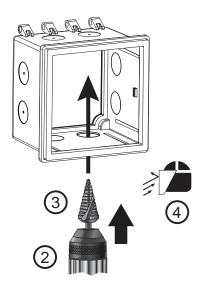
- 1. NEMA TYPE 4X/IP66 rated conduit fittings
- 2. Power Drill
- 3. Step Drill Bit or Variable Diameter Drill Bit
- 4. Eye protection and gloves



Use eye protection and gloves when drilling. Drill Enclosure conduit ports at a workbench, not when installed on a pipe, wall or panel.

#### Prior to drilling, account for:

- Enclosure orientation
- 9900 module(s)
- Current application wiring
- Other factors which may impact wiring access



**NOTE:** Multiple conduit ports may be required. Do not route the sensor, DC power, or 4 to 20 mA cables in conduit containing AC power wiring. Electrical noise may interfere with sensor signal.

#### Recommended:

When using the 9900 Relay Module (3-9900.393), use ports above, below or across from Relay Module terminals to ensure wiring clearance.

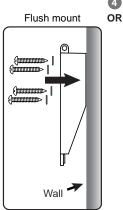
## **Wall Mount Installation**

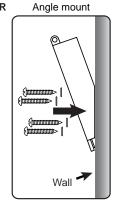
Hinged Cover (3-9900.399-1) ONLY

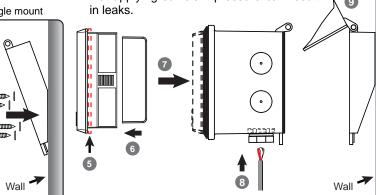


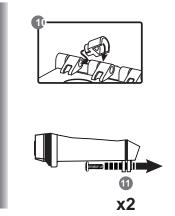
Apply sufficient pressure when installing the 9900 into the enclosure.

Make sure there are no gaps between the 9900 and the front gasket of the enclosure. Not applying sufficient pressure can result









- Determine the **Enclosure Orientation** (hinge on top, bottom, left or right side) and mark the desired conduit ports.
- On a workbench, while wearing PPE, drill out the marked 2. conduit ports. See Drilling Procedure for details.
- Install conduit fittings into drilled out conduit ports. 3.
- Determine the wall mounting position of the Hinged Cover and drill pilot holes. Install wall anchors if required. Mount cover using (4) #8 x 11/4 in. screws.
- Remove 9900 gasket before installation into Rear Enclosure!

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#### Required drill sizes

Hinged Cover = 0.45 mm ( $^{11}/_{64}$  in.)

Pilot holes: Dry-wall or plaster = 6.40 mm (1/4 in.)

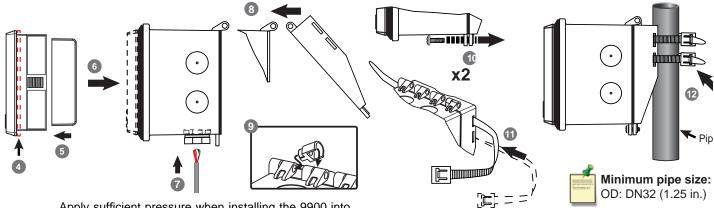
Steel panel or wood = 3.50 mm (#29: 0.136 in.)

- If Relay Module (3-9900.393) is not used, install Module Plug into Relay Slot and secure using two screws.
- While gripping the 9900 face, install the Enclosure onto the rear of the 9900, (there will be a series of clicks).
- Install application wiring through conduit fittings. Recommended: Do not route the sensor, DC power, or 4 to 20 mA cables in conduit containing AC power wiring. Electrical noise may interfere with sensor signal.
- 9. Slide Enclosure barrels onto Hinged Cover pins.
- 10. Install Hinge Clip to lock the cover to the enclosure.
- 11. Secure cover with (2) #6-32 x ½ in. screws. Tighten screws until tabs touch, do not over tighten.

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## **Pipe Mount Installation**

#### Hinged Cover (3-9900.399-1) ONLY





Apply sufficient pressure when installing the 9900 into the enclosure.

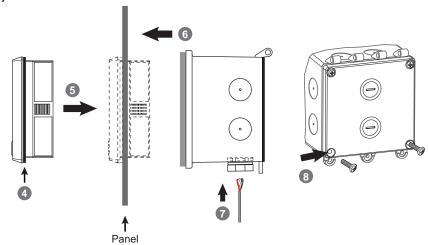
Make sure there are no gaps between the 9900 and the front gasket of the enclosure. Not applying sufficient pressure can result in leaks.

- Determine the Enclosure Orientation (hinge on top, bottom, left or right side) and mark the desired conduit ports.
- On a workbench, while wearing PPE, drill out the marked conduit ports. See **Drilling Procedure** for details.
- 3. Install conduit fittings into drilled out conduit ports.
- 4. Remove 9900 gasket before installation into Rear Enclosure!
- 5. If Relay Module (3-9900.393) is not used, install Module Plug into Relay slot and secure using two screws.
- 6. While gripping the 9900 face, install the Enclosure onto the rear of the 9900 (there will be a series of clicks).

- Install application wiring through conduit fittings.
   Recommended: Do not route the sensor, DC power, or 4 to 20 mA cables in conduit containing AC power wiring. Electrical noise may interfere with sensor signal.
- 8. Slide Hinged Cover pins into Enclosure barrels.
- 9. Install Hinge Clip to lock the cover to the enclosure.
- 10. Secure cover with (2) #6-32 x ½ in. screws. Tighten screws until tabs touch, do not over tighten.
- 11. Install plastic tie-wraps or metal hose clamps through slots in Hinged Cover. **Customer supplied:** ½ in. max. width, material and length based on application.
- 12. Secure Enclosure to pipe, do not overstress slots. **Recommended**: Use metal hose clamps for pipe diameters DN32 (1.25 in.) to DN50 (2.00 in.). Do not over tighten, 11.5 kg-cm (10 in-lb) max.

#### **Panel Mount Installation**

#### Flat Cover (3-9900.399-2) ONLY



- Determine the Enclosure Orientation and mark the desired conduit ports.
- 2. On a workbench, while wearing PPE, drill out the marked conduit ports. See **Drilling Procedure** for details.
- 3. Install conduit fittings into drilled out conduit ports.
- 4. 9900 gasket required for panel installation.
- Insert 9900 into panel cut-out. Temporarily secure the 9900 to the panel with tape or grip the 9900 face until the Enclosure is installed.
- Install the Enclosure onto the rear of the 9900, compressing the gasket against the panel (there will be a series of clicks).
- 7. Install application wiring through conduit fittings.

  Recommended: Do not route the sensor, DC power, or
  4 to 20 mA cables in conduit containing AC power wiring.

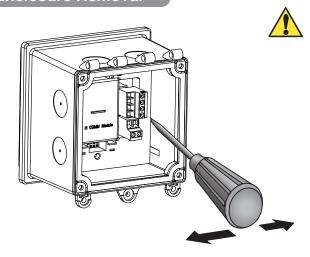
  Electrical noise may interfere with sensor signal.

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8. Secure Flat Cover with (4) #6-32 x ½ in. screws.

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### **Enclosure Removal**



#### Remove all wiring from the 9900 before removing Enclosure.

#### For Panel Mount Installations:

Temporarily secure the 9900 with tape to the panel or grip 9900 face. Do Not release the 9900 until removed from Enclosure.

#### For Wall and Pipe Mount Installations:

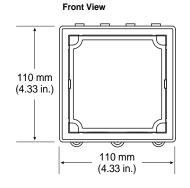
Remove Enclosure from Hinged Cover.

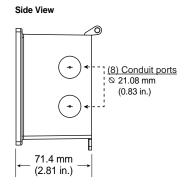
Grip 9900 face. Do Not release 9900 until removed from Enclosure.

- 1. Insert Flathead screwdriver between the 9900 and Enclosure on either the right or left side of the Enclosure hinges.
- Gently move the screwdriver back and forth, while steadily applying forward pressure.
- 3. Alternate placement of the screwdriver to incrementally release the 9900 from the Enclosure.

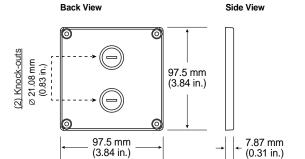
## **Dimensions**

#### Rear Enclosure

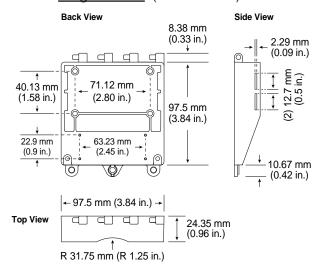




#### **Flat Cover** (3-9900.399-2)



### Hinged Cover (3-9900.399-1)



## **Ordering Information**

Part Number	Code	Description
3-9900.399-1	159 001 834	9900 Rear Enclosure Kit, Hinged Cover
3-9900.399-2	159 001 835	9900 Rear Enclosure Kit, Flat Cover

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