



Mustang Sampling[®]

Pony[®] Heated Probe Enclosure Installation, Operation & Maintenance

PONY[®]



TABLE OF CONTENTS

Safety Warnings	3
Product Features	4
Technical Specifications	5
Product Dimensions & Parts	6
Electrical Wiring Diagrams	8
Installation Instructions	9
Operation Instructions	11
Maintenance Instructions	11

SAFETY WARNINGS



Failure to abide by any of the safety warnings could result in serious injury or death.

- Standard for Safety Electrical Equipment for Measurement, Control, and Laboratory Use; Part 1: General Requirements (ANSI/UL 61010-1, 07/12/2004, Ed. 2).
- Standard for Safety Electrical Equipment for Measurement, Control, and Laboratory Use; Part 1: General Requirements (CAN/CSA C22.2 No. 61010-1, 07/01/2004, Ed. 2).
- Standard for Safety Explosion-Proof and Dust-Ignition Proof Electrical Equipment for Use in Hazardous (Classified) Locations (ANSI/UL 1203, 1028/09, Ed. 4).
- Explosion-Proof Enclosures for Use in Class 1 Hazardous Locations Industrial: Industrial Products (CSA C22.2 No. 30-M1986, (G.I. No. 2, 11/1988)).
- Electrical power must be "OFF" before and during installation and maintenance or personal injury may result. Follow site requirements for Safety Precaution Rules.
- Do not exceed any equipment pressure, or electrical ratings.
- To reduce the risk of fire or explosion, do not install where the marked operating temperature exceeds the ignition temperature of the hazardous atmosphere(s).
- Heated regulator surface temperature will approach temperature limit specified in technical specifications.
- Select a mounting location so that the system will not be subjected to impact or other damaging effects.
- The hazard location information specifying class and group listing of each system is marked on the nameplate.
- Properly ground all equipment to prevent static electric generation.

PRODUCT DESCRIPTION

The Pony[®] Heated Probe Enclosure is an integral patented component of the Mustang[®] Sample Conditioning System (MSCS[®]) designed to provide and maintain heat for the sample probe directly at the sample point.

APPLICATION

The Pony enclosure installs between 6" center-to-center threadolets as an integral component in an Analytically Accurate[®] sample conditioning system.

Pony enclosure models can be utilized with a remote Mustang[®] P53[®] Sample Conditioning System as well as a stand-alone sampling system.

FEATURES

- Patented technology utilizing existing power supplied by heat trace tube bundle
- Molded narrow clam shell design
- Steel latching closures
- Compatible with Mustang CertiSeries™ line of products

BENEFITS

- Protects probes from temperature and weather fluctuations
- Helps preserve sample integrity
- Requires no gas consumption or external power
- Direct-mount on pipeline fitting between 6" center-to-center threadolets (TOLs)
- Fits over existing brand of probes
- Provides easy maintenance

TECHNICAL SPECIFICATIONS

Heating Components	80 watt self-limiting block heater (optional 50 watt self-limiting block heater for warmer climates)
Maintains Sample Gas	98°F (37°C)
Cabinet Construction	Hotpressed Glass Fiber Reinforced Polyester
Input Supply Voltage Options	120 VAC, 80 Watts
	240 VAC, 80 Watts
	24 VDC, 25 Watts

PRODUCT DIMENSIONS & PARTS

Intertec Enclosure



Item Number	Description
1	Insulated Clamshell Enclosure
2	Heat Trace Tube Bundle Connection Location
3	Self-Limiting Block Heater
4	Probe Location

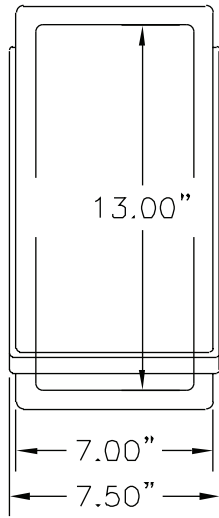
O'Brien Enclosure



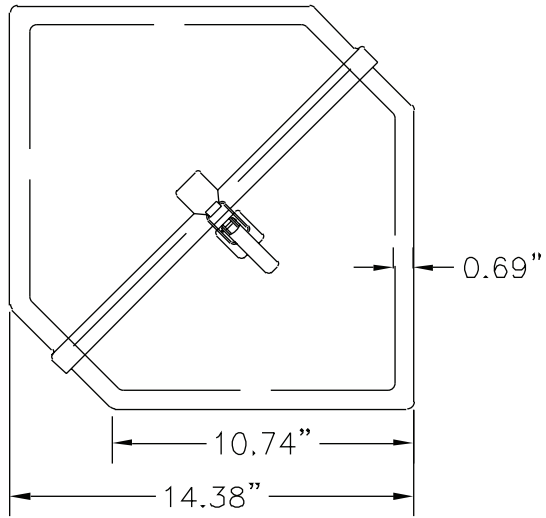
Stainless Steel Enclosure



Intertec Enclosure

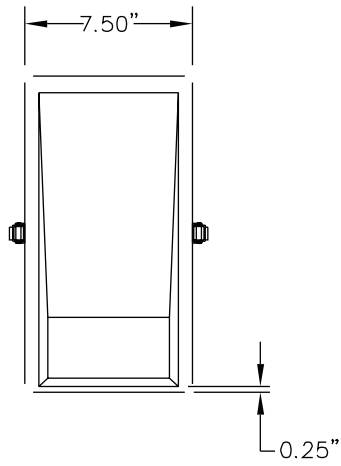


Front View

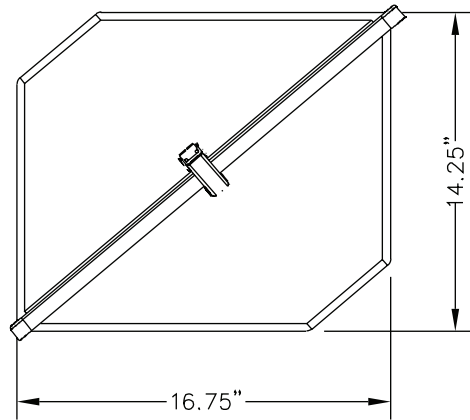


Side View

O'Brien Enclosure

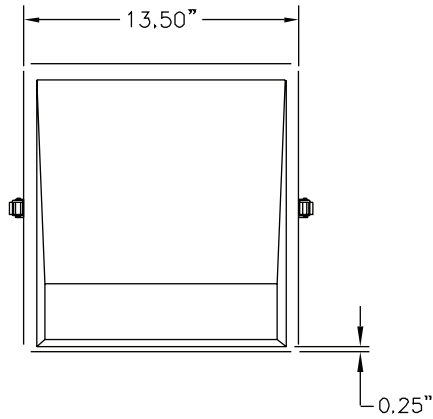


Front View

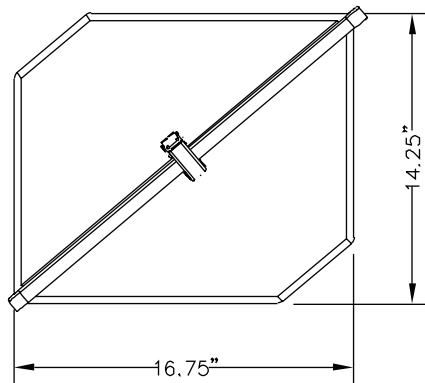


Side View

Stainless Steel Enclosure

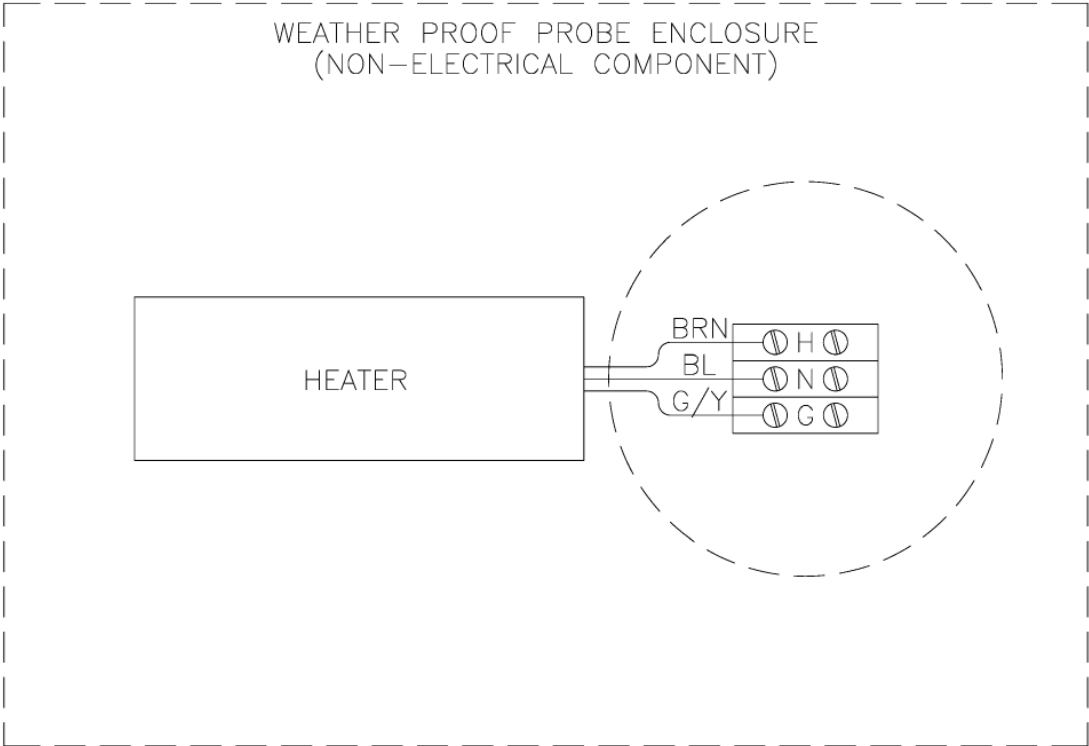


Front View



Side View

ELECTRICAL & WIRING DIAGRAMS



INSTALLATION INSTRUCTIONS

NOMENCLATURE

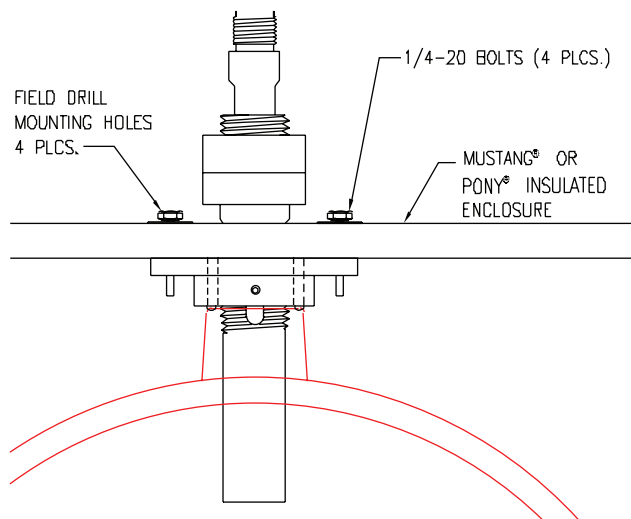
- **MAOP**—Maximum Allowable Operating Pressure
- **LNG**—Liquid Natural Gas
- **BTU**—British Thermal Unit

TOOLS REQUIRED

- Standard Hand Tools
- Utility Knife

INSTALLATION

1. Mount the Pony® Heated Probe Enclosure assembly in accordance with previous cautions and warnings.
2. Perform the electrical hook up with de-energized conductors.
3. Verify the unit that you are hooking up to matches voltage wise with the power supply that you are connecting. Damage to the unit can occur if the wrong source power is applied.
4. A seal fitting is required for the power input connection to the Pony conduit fitting to maintain its electrical hazard classification rating.
5. For 120 volt single phase input power: Connect the “hot” wire to wiring terminal #H. Connect the “Neutral” wire to wiring terminal #N. Connect the earthing (ground) wire to the green screw (G) in the bottom of the enclosure.
6. For 208 or 230 volt single phase input power: Connect one “hot” wire to wiring terminal #H1. Connect the “Neutral” to wiring terminal #N. Connect the second “hot” wire to wiring terminal #H2. Connect the earthing (ground) wire to the green screw in the bottom of the enclosure.
7. For 24 VDC input power: Connect the positive wire to wiring terminal #1. Connect the negative wire to wiring terminal #2. Connect the earthing (ground) wire to the green screw in the bottom of the enclosure.
8. Externally connect earthing (grounding) conductors from assembly to equipment ground connections.
9. After installing the probe housing, tighten the KT-Nut™ down onto the housing.
10. Back the KT-Nut off until the set screw is lined up with the set screw.



11. Set the Pony® Heated Probe Enclosure onto the probe housing, lining the enclosure up with the pipe line.
12. Mark the set screw and 4 bolt holes on the bottom of the enclosure.
13. Remove the enclosure from the probe house.
14. Place the yellow cover (provided) over the probe to keep dirt out of the housing.
15. Drill 4 holes into the bottom of the enclosure using a 3/8" drill bit.
16. Place the enclosure onto the housing, and using split washers, bolt the enclosure to the KT-Nut® Mounting Bracket with 1/4-20 bolts.
17. Once the enclosure is secured, determine the best place for the Heat Trace Bundle Tube to come into the Pony® Probe Enclosure. With a 1-1/2" conduit hole saw, drill a hole into the side of the enclosure making sure the lid will be able to shut.
18. Screw in the Mustang® Heat Trace Tube Bundle seal 1.60 leaving about 5 feet. Mark the tubing bundle and strip back the black coating and insulation. DO NOT CUT INTO HEAT TRACE. Carefully cut foil coating exposing tubing and Heat Trace.
19. Slide the 2 legged Raychem TS1-SB2 boot over the tubing and Heat Trace. Heat shrink the boot to the bundle.
20. Pull the bundle through the 1.60 boot leaving 3/4"-1" exposed inside the Pony Probe Enclosure. Heat shrink the 1.60 boot.
21. With a 1/2" drive ratchet, take the plug out of the seal. Loop the Heat Trace over to the seal and mark the Heat Trace where it is in the center of the seal.
22. Tape the end of the wires on the Heat Trace and slide the gland with the screws over the Heat Trace followed by the red grommet.
23. Carefully pull the wires through the seal into the enclosure leaving 1/2"-1" of white core inside the enclosure. Remove the tape and insert the bus wires into the guide tubes of the CS-100 core sealer. MAKE SURE THE WIRES ARE NOT CROSSED.
24. Using pin terminals, dead end the circuit into the terminal block provided.
25. NOTE: In the Pony enclosure with Heater Block, you must NOT terminate until you check for polarity and land bus wires accordingly

HEAT TRACE TERMINATION

See Mustang Heat Trace Termination Installation Guide.

ADJUST THE TEMPERATURE SET POINT

The heater block is a self limiting heater.

STARTUP PROCEDURE

1. Close the cover on the Pony Heated Probe Enclosure.
2. Allow a few minutes for the system temperature to stabilize.
3. Seal the seal fittings if the Pony Heated Probe Enclosure block heater is functioning as desired.

OPERATION INSTRUCTIONS

1. Verify that sample stream supply is shut off.
2. Verify that power to the heat tracing is off.
3. Connect the heat trace tube bundle to the Pony® Probe Enclosure block heater.
4. Turn power on to the heat tracing.

MAINTENANCE INSTRUCTIONS

1. Once system is operational, no routine maintenance is required.
2. Monitoring of flow and temperature values is recommended at least annually.
3. Tape the end of the wires on the Heat Trace and slide the gland with the screws over the Heat Trace followed by the red grommet.
4. Carefully pull the wires through the seal into the Adalet enclosure leaving 1/2"-1" of white core inside the Adalet enclosure. Remove the tape and insert the bus wires into the guide tubes of the CS-100 core sealer. **MAKE SURE THE WIRES ARE NOT CROSSED.**
5. Using pin terminals, dead end the circuit into the terminal block provided.
6. **NOTE:** In the Pony® Probe Enclosure with Heater Block, you must NOT terminate until you check for polarity and land bus wires accordingly.

Analytically Accurate® **TECHNOLOGY**

About Mustang Sampling

Mustang Sampling, LLC is the innovator of Analytically Accurate® solutions within sample conditioning systems. We provide custom solutions of products and services globally to the Natural Gas, Natural Gas Liquids (NGL), and Liquefied Natural Gas (LNG) industries. Mustang Sampling continues to pioneer integrated control systems, allowing our customers to maintain phase stability from sample extraction at the source through sample analysis. Our products are continuously improved and subjected to the highest quality standards which provides our customers with the best sample conditioning solutions.

Mustang Sampling, LLC
43 Ritmore Glen
Ravenswood, WV 26164
P: +1 304 273 5357
F: +1 304 273 2531

info@MustangSampling.com
www.MustangSampling.com

Copyright © 2019 Mustang Sampling. All rights reserved. Mustang Sampling®, Mustang®, MSCS®, Pony®, KT-Nut® and Analytically Accurate® are registered trademarks of Mustang Sampling, LLC. Watlow® is a registered trademarks of Watlow.

U.S. Patents 7,162,933; D674,052 S

No part of this publication may be reproduced in any material form without the written permission of Mustang Sampling, LLC.

MS-IOMPONYCS.v5-EN-P September 2019
Supersedes: MS-IOMPONYCS.v4-EN-P