

# Maloney Series III Detector

## (Pig Signaler) for Pipeline Service & Meter Provers

The Maloney Series III™ Detector is manufactured for use in both conventional pipeline and meter prover services.

### Features

#### BI-DIRECTIONAL DETECTION

When centered on top of the pipe, a special probe allows detection from either direction with equal response.

#### WIDE PRESSURE RANGE

To provide pressure balancing, holes are drilled through the shaft to equalize pressure across the seals. The standard detector can be used in all operating pressures up to 1440 psi (ANSI 600#), higher ratings are available upon request.

#### EASY OPERATION

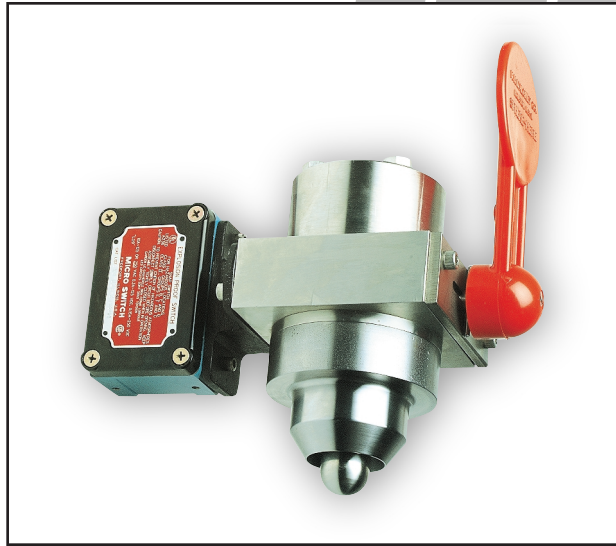
A U-type, Teflon® seal with stainless steel spring inserts maximizes shaft sealing and minimizes resistance to shaft-to-seal friction.

#### FACTORY PRE-SET DETECTOR SWITCH

For meter prover service. Sealed to ensure an accurate setting, the microswitch trips within .001 inch of a predetermined point. The sealed switch also eliminates the need for recalibration after replacement.

#### CORROSION-RESISTANT PARTS

Stainless steel is used for all metal parts (except the scarfed welding base), to retard wear and aging. Unless otherwise specified, a carbon-steel welding base is provided to maximize weld compatibility with most carbon-steel pipe. As an option the Series III



Detector can be manufactured of sulfide-stress-cracking resistant stainless steel to meet NACE MR-01-75.

#### MULTIPLE ACCESSORY FLEXIBILITY

Two accessories can be mounted on the standard two-port, square accessory plate, with special four-accessory models available on request. Accessories are activated by a cam on the probe shaft.

#### SIMPLE INSTALLATION

To prevent welding heat from damaging the seals, the top of the detector assembly disconnects from the base by removing the four hex-head bolts which secure the assembly to the base. Cut a 1-1/8" hole in the top of the pipe, center the base and weld into place.

**Note:** Where more than one detector is being installed for pipeline service, care should be taken to remount each detector assembly on the same base with which it was shipped.

**Caution:** The Series III Detector cannot be removed while under pressure.

### Detector Accessories

For multiple accessory flexibility, a variety of attachments is available to serve any or all of your pipeline or meter-prover needs.

- ◆ **Calibrated or Non-Calibrated Switch Assembly** - DPDT, UL and CSA listed "L59"; 10 amps @ 125 or 250 VAC; 0.3 amps @ 125 VDC; 0.15 amps @ 250 VDC.
- ◆ **Alternate Calibrated or Non-Calibrated Hermetically Sealed Electrical Switch Assembly** - SPDT, UL-listed "L2"; 1 amp @ 125 VAC. Both switches are UL-listed for use in hazardous locations Class I, Groups B, C, and D; Class II, Groups E, F, and G.
- ◆ **Visual Indicator** - Indicates passage of sphere or pig with a spring-mounted metal arm and a red plastic indicator. When manually reset, it is self-locking in the Down position.

(More information on reverse side)

Visit our web site [www.maloneytech.com](http://www.maloneytech.com)

### SALES & SERVICE WORLDWIDE

S&B TECHNICAL PRODUCTS  
1300 East Berry Street  
Fort Worth, Texas 76119 USA  
Telephone 817.923.3344  
Telefax 817.923.1339  
U.S. & Canada 800.432.8213  
[www.hultec.com](http://www.hultec.com)



HULTEC S.A.  
De Empaques Santa Ana  
Pozos de Santa Ana, Costa Rica  
Telephone 506.282.9900  
Telefax 506.282.2514

HULTEC EUROPE - PARIS  
Maurepas, France  
Telephone 33.1.30.507.252  
Telefax 33.1.30.501.652

HULTEC ASIA PACIFIC - AUSTRALIA  
St. Marys, NSW 2700  
Telephone 61.2.98.339988  
Telefax 61.2.98.339977

HULTEC - MEXICO  
Tlalnepanitla, Estado de Mexico CP  
Telephone 525.363.2483  
Telefax 525.362.2324

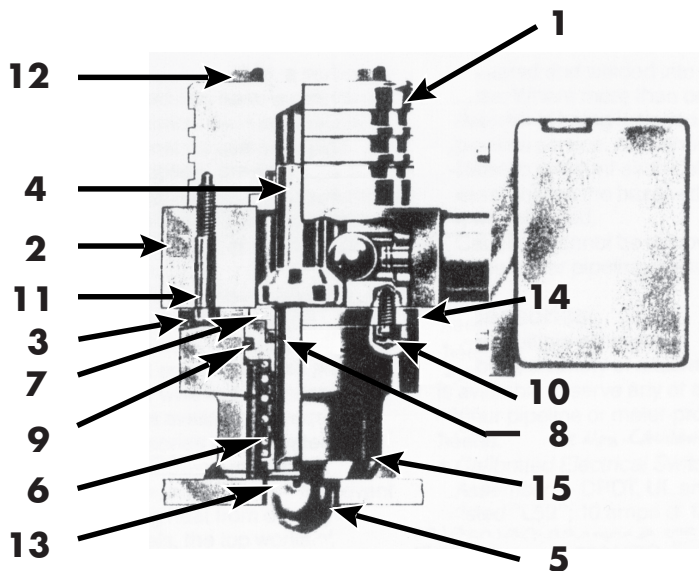
MALONEY TECHNICAL PRODUCTS  
1300 East Berry Street  
Fort Worth, Texas 76119 USA  
Telephone 817.923.3344  
Telefax 817.923.1339  
U.S. & CANADA 800.231.7236  
email: [sbtech@gte.net](mailto:sbtech@gte.net)



◆ **Counter** - Operates automatically to numerically register passage of spheres or pigs. Weatherproof plexiglass cover protects the digital counter for instant reference. Five-digit counter can be manually reset to zero.

◆ **Pneumatic Pilot Valve Assembly** - For installations where electrical power is not available, a pneumatic switch can be provided which accommodates pressures to 300 psi, clean air or gas.

◆ **Sphere Here® Extension** - Extends the detector above ground on buried pipelines. Available in 12" to 72" lengths.



## Special Purpose Detectors

### ◆ Special Detector to Meet NACE

**MR-01-75** - The Series III Detector is available in sulfide-stress-cracking resistant stainless steel suitable for NACE application requirements.

## To Order Please Specify:

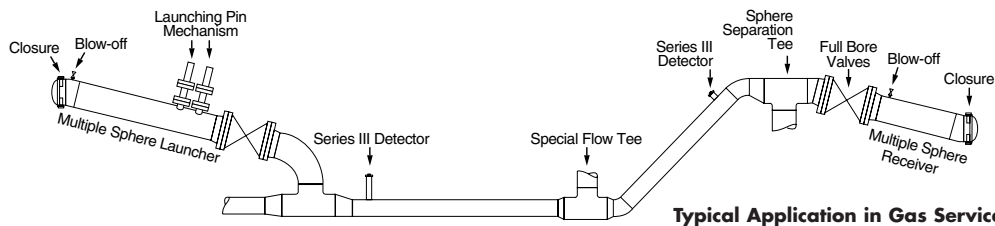
- ◆ Pipe O.D.
- ◆ Wall thickness
- ◆ Maximum operating pressure
- ◆ Temperature
- ◆ Type of line fluid or gas

For special applications please consult your sales representative. Mark X Series replacement parts are also available.

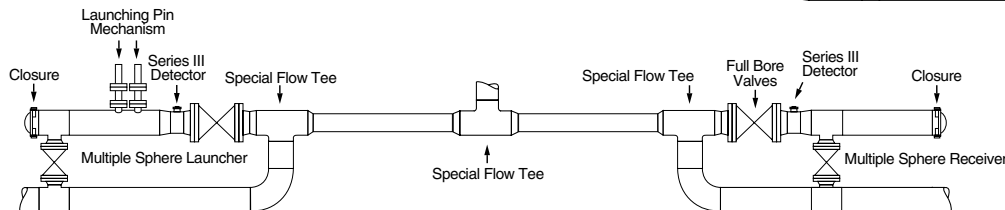
### PART NUMBERS BY PIPE O.D.

Item	Description	Material	3" - 4"	6"	8" - 60"
1	Cap	303 SS	+301-CAP	+301-CAP	+301-CAP
2	Accessory Plate	303 SS	+301-ACC	+301-ACC	+301-ACC
3	Flange	303 SS	+301-FLANGE	+301-FLANGE	+301-FLANGE
4	Shaft	440 SS	+301-SHAFT	+301-SHAFT	+301-SHAFT
5	Shaft End	303 SS	+301-PROBE	+301-PROBE	+301-PROBE
6	Shaft Spring	Inconel	+301-SPRING	+301-SPRING	+301-SPRING
7	Retainer Ring	303 SS	+301-R-RING	+301-R-RING	+301-R-RING
8	Shaft Seal	Omniseal	+301-SHAFTSEALS	+301-SHAFTSEALS	+301-SHAFTSEALS
9	O-Ring	Viton	+301-O-RING	+301-O-RING	+301-O-RING
10	# 10-24NC x 1/2" Lg. Socket Head Cap Screw	SS	+301-IIISCREW.50	+301-IIISCREW.50	+301-IIISCREW.50
11	# 10-24NC x 3/4" Lg. Socket Head Cap Screw	SS	+301-IIISCREW1.75	+301-IIISCREW1.75	+301-IIISCREW1.75
12	# 3/8" - 24NF x 4" Lg. Hex Head Cap Screw	SS	+301-IIISCREW4.0	+301-IIISCREW4.0	+301-IIISCREW4.0
13	# 1/8" Dia x 1" Lg. Spring Pin	SS	+301-S-PIN/1.0	+301-S-PIN/1.0	+301-S-PIN/1.0
14	Data Tag 1/4" x 1-1/2" Adh, Bk		+301-DATATAG	+301-DATATAG	+301-DATATAG
15	Base	HR C1018	+301-BASE/3-4	+301-BASE/6	+301-BASE/8-60
*16	1/2" NPT Hex Head Pipe Plug	Plastic	+301-PLUG	+301-PLUG	+301-PLUG
<b>Complete Assembled Series III Detector</b>			<b>+301-III/3-4</b>	<b>+301-III/6</b>	<b>+301-III/8-60</b>

\* Not visible in illustration  
 Details and features of the Maloney Series III Sphere and Pig Detector are covered by U.S. patent numbers 3,145,214 and 4,079,619



Typical Application in Gas Service



Typical Application in Liquid Service

Visit our web site [www.maloneytech.com](http://www.maloneytech.com)

Printed in USA

SALES & SERVICE WORLDWIDE

S&B TECHNICAL PRODUCTS  
 1300 East Berry Street  
 Fort Worth, Texas 76119 USA  
 Telephone 817.923.3344  
 Telefax 817.923.1339  
 U.S. & Canada 800.432.8213  
[www.hultec.com](http://www.hultec.com)



HULTEC S.A.  
 De Empaques Santa Ana  
 Pozos de Santa Ana, Costa Rica  
 Telephone 506.282.9900  
 Telefax 506.282.2514

HULTEC EUROPE - PARIS  
 Maurepas, France  
 Telephone 33.1.30.507.252  
 Telefax 33.1.30.501.652

HULTEC ASIA PACIFIC - AUSTRALIA  
 St. Marys, NSW 2700  
 Telephone 61.2.98.339988  
 Telefax 61.2.98.339977

HULTEC - MEXICO  
 Tlalnepanitla, Estado de Mexico CP  
 Telephone 525.363.2483  
 Telefax 525.362.2324



MALONEY TECHNICAL PRODUCTS  
 1300 East Berry Street  
 Fort Worth, Texas 76119 USA  
 Telephone 817.923.3344  
 Telefax 817.923.1339  
 U.S. & CANADA 800.231.7236  
 email: [sbtech@gte.net](mailto:sbtech@gte.net)