PIG PASSAGE INDICATORS

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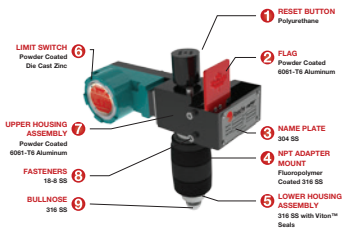

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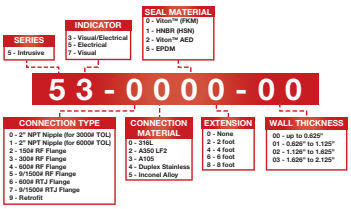

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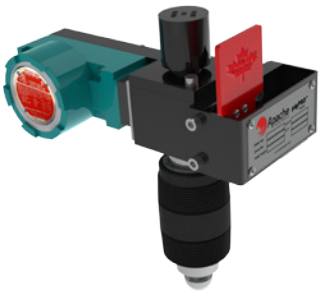

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world class world wide

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pigPRO™

PIG PASSAGE INDICATORS
pigPRO™ Series

The Intrusive Pig Signaler

The Apache pigPRO™ are manufactured in our Edmonton, Alberta, Canada facility. From Canadian workmanship to the patented fluid seal design, our pigPRO™ are depended upon by pipeline operators the world over.

When you see the pigPRO™ name,
we guarantee it will indicate more than just quality.

Detecting cleaning pigs, accurately and reliably.

At Apache, we know that knowledge is power. That's why we want to make certain that when a customer is pigging a pipeline, they will always know when the pig has passed a critical point in the pipeline.

To achieve that, we designed the pigPRO™ Series, a patented line of intrusive pig passage indicators that reliably detect the precise location of a cleaning pig as it travels within the pipeline network.

How does it work?

The pigPRO™ indicator is permanently installed on pig launchers and receivers, or very close to a pump station. By doing so, operators are notified the instant that the pig has left the launcher or arrived in the receiver.

The system is fitted with a plunger that is then inserted into the pipe, physically penetrating the pipe bore. When a pipeline cleaning pig passes, it actuates the plunger, which activates either a visual or electrical indicator, or both. The instant that the indicator is displayed, the pipeline cleaner's precise location is revealed.

The Apache pigPRO™ are an INTRUSIVE model as the plunger actually penetrates the pipe bore. The protruding PLUNGER is actuated by the passage of a pipeline cleaner thereby activating an indicator.

- Bi-directional activation is a standard feature of all our indicator types
- All indicators are manufactured for a specific operating pressure and wall thickness
- Can be flange mounted or mounted using a 2" NPT thread-o-let
- All pigPRO™ can be modified to mount into most competitor's T.O.L.

Components:

Apache's unique patented FLUID SEAL DESIGN does not allow paraffin or other objects to obstruct the operational mechanisms thus ensuring positive indication of the pig's passage. There are no gears in the trigger mechanism and all materials conform to NACE standard MR0175 / ISO 15156.

pigPRO™

PIG PASSAGE INDICATORS
pigPRO™ Series

The Intrusive Pig Signaler

EASILY INSTALLED WITHOUT DISRUPTING PRODUCTION

Every model in the pigPRO™ series is easily installed, even while the pipeline is on-stream. So preparing for critical pipeline cleaning doesn't disrupt critical production.

FEWER MOVING PARTS EASE INSTALLATION & REDUCE RISK

Most pig indicators feature trigger mechanisms with many moving parts that make it more difficult to align during installation. As a result they are frequently damaged. With the pigPRO™'s hemispherical design, these issues are completely eliminated, saving time and money. To ensure that the indicator is properly adjusted for the individual pipeline, hemispherical plunger sensitivity adjustment and hemispherical plunger penetration adjustment are standard features.

BI-DIRECTIONAL ACTIVATION

Every pigPRO™ indicator is bi-directional, so it is triggered by a pig traveling in either direction. Although a pig is rarely required to travel in the opposite direction of the flow in a pipeline while it is on-stream, this capability can be useful when servicing offline pipelines.

DEBRIS OR NO DEBRIS, PIGPRO™ PERFORMS

When it comes to indicating pig passage, wax or debris in the line, most pig indicators simply can't operate. That's not the case with the pigPRO™, which operates reliably, regardless of wax. It's specially designed to prevent debris from obstructing its operational mechanisms, so a passing pig is always indicated.

UNIVERSAL, ADAPTABLE

Our ability to retrofit to most mounts makes the Apache pigPRO™ completely versatile.

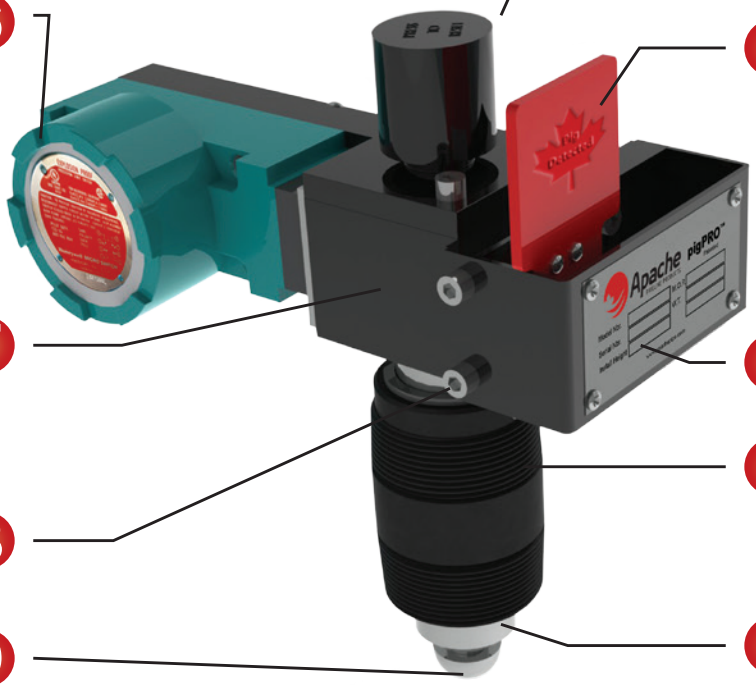
PRIMARY SYSTEM COMPONENTS

Every Apache pigPRO™ pig passage indicator includes a thread-mounting nipple, standard lower housing with fluorocarbon O-rings, and a hemispherical plunger with a flag assembly.

Designed for easy adjustment onsite, even while on-stream.

pigPRO™

MATERIAL LIST



1 RESET BUTTON
Polyurethane

2 FLAG
Powder Coated
6061-T6 Aluminum

3 NAME PLATE
304 SS

4 NPT ADAPTER MOUNT
Fluoropolymer
Coated 316 SS

5 LOWER HOUSING ASSEMBLY
316 SS with Viton™
Seals

6 LIMIT SWITCH
Powder Coated
Die Cast Zinc

7 UPPER HOUSING ASSEMBLY
Powder Coated
6061-T6 Aluminum

8 FASTENERS
18-8 SS

9 BULLNOSE
316 SS

Optional Materials Available

pigPRO™

PART NUMBER SELECTION

SERIES
5 - Intrusive

INDICATOR
3 - Visual/Electrical
5 - Electrical
7 - Visual

SEAL MATERIAL
0 - Viton™ (FKM)
1 - HNBR (HSN)
2 - Viton™ AED
5 - EPDM

5 3 - 0 0 0 0 - 0 0

CONNECTION TYPE
0 - 2” NPT Nipple (for 3000# TOL)
1 - 2” NPT Nipple (for 6000# TOL)
2 - 150# RF Flange
3 - 300# RF Flange
4 - 600# RF Flange
5 - 9/1500# RF Flange
6 - 600# RTJ Flange
7 - 9/1500# RTJ Flange
9 - Retrofit

CONNECTION MATERIAL
0 - 316L
2 - A350 LF2
3 - A105
4 - Duplex Stainless
5 - Inconel Alloy

EXTENSION
0 - None
2 - 2 foot
4 - 4 foot
6 - 6 foot
8 - 8 foot

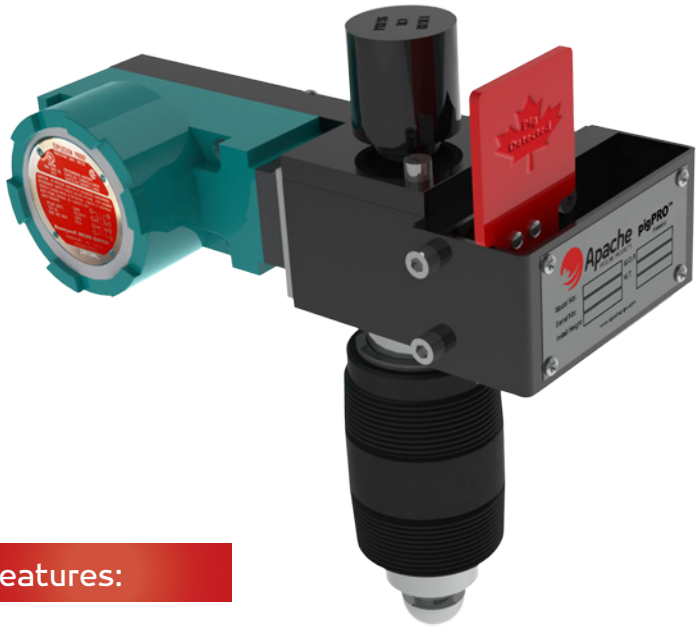
WALL THICKNESS
00 - up to 0.625”
01 - 0.626” to 1.125”
02 - 1.126” to 1.625”
03 - 1.626” to 2.125”

pigPRO™

Series 53

Visual/Electrical Indication

Manual/Auto Reset



THE MODEL 53 IS A COMBINATION VISUAL AND ELECTRICAL INDICATOR WITH MANUAL AND AUTOMATIC RESET.

Offering both visual and electrical indicator capabilities and manual and automatic reset features, the Model 53 is the most versatile member of Apache's pigPRO™ Series, a patented line of intrusive pig passage indicators that reliably detect the precise location of a cleaning pig as it travels within the pipeline network. When a cleaning pig passes the system's intruding plunger, it activates the plunger and triggers a visual flag indicator, signaling the pig's location.

Features:

Base Model 53 includes a thread mounting nipple, standard lower housing with fluorocarbon O-Rings, hemispherical plunger with a flag assembly and weather sealed & explosion proof limit switch. The switch employed on this model is NEMA rated, UL listed and CSA certified to suit most applications.

Options:

Flange Mount models are designed to connect to existing flanged connections and are available in ANSI Class 150, 300, 600 or 900/1500 flanges.

Extension Pole:

Aluminum extensions can be attached to enable detection of the pigs passage on buried pipelines. All pressure sealing components remain below the extension module. Available in lengths 2' to 8'.

Check out apachepipe.com/animations.html for videos on pigPRO™

pigPRO™

Series 55

Electrical Indication

Auto Reset

THE MODEL 55 IS AN ELECTRICAL INDICATOR WITH MANUAL AND AUTOMATIC RESET.

With its optional manual and automatic reset capabilities, the Model 55 is a highly sought after member of Apache's pigPRO™ Series, a patented line of intrusive pig passage indicators that reliably detect the precise location of a cleaning pig as it travels within the pipeline network. When a cleaning pig passes the system's intruding plunger, it activates the plunger and triggers a visual flag indicator, signaling the pig's location.

Features:

Base Model 55 includes a thread mounting nipple, standard lower housing with fluorocarbon O-Rings, hemispherical plunger and weather sealed & explosion proof limit switch. The switch employed on this model is NEMA rated, UL listed and CSA certified to suit most applications.

Options:

Flange Mount models are designed to connect to existing flanged connections and are available in ANSI Class 150, 300, 600 or 900/1500 flanges.

Extension Pole:

Aluminum extensions can be attached to enable detection of the pigs passage on buried pipelines. All pressure sealing components remain below the extension module. Available in lengths 2' to 8'.

Check out apachepipe.com/animations.html for videos on pigPRO™

pigPRO™

Series 57

Visual Indication
Manual Reset

THE BASE MODEL 57 IS A VISUAL FLAG INDICATOR WITH MANUAL RESET.

It is a popular member of Apache's pigPRO™ Series, a patented line of intrusive pig passage indicators that reliably detect the precise location of a cleaning pig as it travels within the pipeline network. When a cleaning pig passes the system's intruding plunger, it activates the plunger and triggers a visual flag indicator, signaling the pig's location.

Features:

Our most popular pigPRO™, the base Model 57 includes a thread mounting nipple, standard lower housing with fluorocarbon O-Rings, hemispherical plunger with a flag assembly.

Options:

Flange Mount models are designed to connect to existing flanged connections and are available in ANSI Class 150, 300, 600 or 900/1500 flanges.

Extension Pole:

Aluminum extensions can be attached to enable detection of the pigs passage on buried pipelines. All pressure sealing components remain below the extension module. Available in lengths 2' to 8'.

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pigPRO™

FLANGE MOUNT

Flange Mount models are designed to connect to existing flanged connections.

Available in ANSI Class 150, 300, 600 or 900/1500 flanges.

pigPRO™

EXTENSION POLE

Aluminum extensions can be attached to enable detection of the pig's passage on buried pipelines.

All pressure sealing components remain below the extension module.

Available in lengths 2 to 8'.

Extension poles can be used with any Apache pigPRO™

NON-INTRUSIVE

CD52 BANDIT

Features & Benefits:

The CD52 Bandit provides quick and easy non-intrusive pig passage detection of any pig and transmitter moving between 0.1 and 20 meters per second. Non-intrusive means less maintenance and corrosion, and no possibilites of pipeline leaks.

Quick and Easy Installation: No hot-tapping required. The CD52 Bandit can be installed in minutes by any field technician.

Sensing means of the CD52 Bandit consist of a set of patented, non-intrusive proprietary noise-canceling antennas invented by CDI specifically for pig passage detection. This antenna system gives the Bandit its ability to reject nearby magnetic noise and halt costly false-positive triggering. A small, safe, permanent magnet or active transmitter installed on a pig is all it takes to put the Bandit to work!

Remote Signaling of a passage is easy with built-in flashing LCD visal display and dry-contact relays. These normally-open or normally-closed relays may be used in conjuction with existing SCADA systems to integrate the CD52 Bandit into a pipeline control and signalling network. An optional array of four high-luminosity LEDs can be seen over distances as great as 100 meters (328 feet).

Options Available:

- Sunshade helps protect the Bandit from intense sunlight by reducing overall temperature inside, thus prolonging the life of the electriconic components. 316 stainless steel construction guarantees long life in a harsh pipeline environment.
- Heater system recommended for operation below -22°F (-30°C).
- LineStat satellite radio for transmitting passage time, date, and GPS location via email or SMS message.
- Remote Indicator System provides passage indication up to 328 ft (100 meters).

NON-INTRUSIVE

CD52 BANDIT - PORTABLE

Features & Benefits:

The CD52 Portable Bandit offers the added flexibility of quick takedown and relocation wherever/whenever a temporary signaler is needed.

Suspend Mode - A simple pushbutton temporarily suspends Portable Bandit opertion for removal and repositioning.

Compact & Light - At only 13 in. [330 mm] tall, 21 lb. [9.5 kg], and a lower CG than the Bandit, the Portable Bandit is easily picked up and secured in its own low-prfile carrying case for transport to the next job site.

Non-intrusive pig passage detection of any pig and transmitter moving between 0.01 and 20 meters per second means less maintenance and corrosion, and no possibilties of pipeline leaks.

Sensing Means of the CD52 Portable Bandit consist of a set of patented, non-intrusive proprietary noise-canceling antennas invented by CDI specfically for pig passage detection. This antenna system gives the Bandit its ability to reject nearby magnetic noise and halt costly false-positive triggering. A small, safe, permanent magnet or active transmitter installed on a pig is all it takes to put the Bandit to work!

Options Available:

- Sunshade helps protect the Portable Bandit from intense sunlight by reducing overall temperature inside, thus prolonging the life of the electriconic components. The 316 stainless steel construction guarantees long life in a harsh pipeline environment.
- Stainless steel antenna & mounting plate.
- Pelican™ case.