

PIG-SIGNALLER

Scraper Passage Indicator



PVL ENGINEERS

■ Flag Indicator



Description

PVL's PIG-SIGNALLER Scraper Passage Indicator is a device installed at prescribed intervals on pipelines to detect the passage of a pig or sphere. The most common indicators have a trigger extending into pipelines through a welded fitting, or nipple that has been tapped. When a pig passes, the trigger is tripped which immediately activates a signaling mechanism.

Signaling systems available from PVL include a flag indicator, an electrical indicator or a flag/electrical indicator. All indicators are compatible with all standard THREADED-O-RING nipples now in the field and are interchangeable. This makes it possible to order these units as an upgrade conversion kit without nipple, or as a complete PIG-SIGNALLER indicator system with nipple.

Features

Built to withstand the most brutal offshore/onshore environments, the PIG SIGNALLER indicator is weatherproof and corrosion-resistant. All components exposed to pipeline products are completely sealed to prevent leakage and are NACE compatible. Components exposed to the atmosphere are 316 stainless steel. The flag indicator offers high visibility. Because the triggering toggle that extends into a pipe is omni directional, it does not require adjustments after it is set. The flag can be oriented to face any desired direction. The carbon steel nipple is manufactured from easily weldable material. PIG-SIGNALLER indicators can be installed on or removed from a pressured pipeline by using a PVL Tapping Machine and accessories.

Options

The following options are available:

- Flag Indicator with Manual Reset;
- Electrical Indicator with Auto Reset;
- Flag/Electrical Indicator combined.
- Extended models, for installation on buried pipelines, are available in all configurations.
- Omni directional trigger is standard.
- Special materials and O-Ring seals are available.
- Standard model is suitable for environmentally harsh conditions.
- Nipple can be furnished with flanged or threaded mounting.
- "Build your own" PIG-SIGNALLER Assembly from the following charts.

PVL ENGINEERS is committed to providing you with the exact product to assist you in planning, budgeting and meeting the specifications for your individual application needs.

Patent Pending in the INDIA and in foreign countries.

INDIA: +91-9727739210
+91-9773195219

Order Information

PIG-SIGNALLER

XXXX - Suffix *

O-Ring Material

Material Option

- 0=Explosive Decompression & Extrusion Resistant Viton
- 1=Buna-N (Low Temp)
- 2=Neoprene
- 3=EPDM
- 4=Kalrez
- 5=Buna

Final Assembly
With Flag Indicator

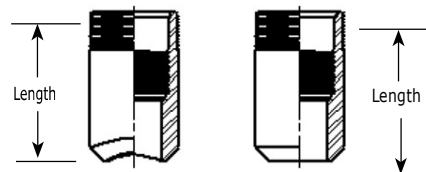
"SUFFIX" Pipe Size

Pipe Size	Pipe Wall Thickness	Length	Suffix
6" & Up	.250 to .500	4.000	-51
6" & Up	.501 to .750	3.750	-52
6" & Up	.751 to 1.000	3.500	-53
6" & Up	1.001 to 1.250	3.250	-54
6" & Up	1.251 to 1.500	3.000	-55
6" & Up	1.501 to 1.750	2.750	-56
6" & Up	.125 to .249	4.250	-64
4"	.189 to .375	4.125	-01
4"	.125 to .188	4.250	-03
5"	.189 to .375	4.125	-12
5"	.125 to .188	4.250	-13
5"	.563 to .750	3.750	-20
Less Nipple			-99

* Please indicate if protection for environmentally harsh conditions is required.

5" & Smaller Pipe

6" & Larger Pipe



THREADED-O-RING Nipple part number: 00-1023-0333-SUFFIX

Example: 04-3800-0100-51

is a PIG-SIGNALLER with a flag indicator, 12" extended shaft for 6" and larger pipe with .250" to .500" wall.

Specifications

PIG-SIGNALLER Scraper Passage Indicators

THREAD-O-RING™ Nipple Material

Size & Grade:	2 NPS XXS ASTM A 333 Grade 6 seamless steel pipe
Tensile Requirements:	35,000 psi SMYS - 60,000 psi SMTS
Impact Requirements:	13 ft-lbf min Avg 3 Specimens 10 ft-lbf min One Specimen Only
	Impact Temperature -50° F
Chemical Requirements:	Composition, % - Carbon 0.30 max, Manganese 0.29-1.06, Phosphorus 0.025 max, Sulfur 0.025 max, Silicon 0.10 min
Test Report:	Certified Test Reports furnished per ASTM A 530

Pressure Temperature Ratings

Pressures are in pounds per square inch, gage (psig). Temperatures are in Fahrenheit.

Piping Code	B31.3	B31.4	F=.72	B31.8	F=.60	F=.50	F=.40
Temp. °F		F=.72	F=.72	F=.60	F=.50	F=.40	
-50	3159						
-20 to 250	3159	3743	3743	3120	2600	2080	
300	3159		3620	3017	2514	2011	
350	3159		3493	2911	2425	1940	
400	3159		3369	2808	2340	1872	
450	3072		3246	2246	1872	1497	
500	2985						

Pressure Temperature Ratings

Pressures are in bar. Temperatures are in Celsius.

Piping Code	B31.3	B31.4	F=.72	B31.8	F=.60	F=.50	F=.40
Temp. °C		F=.72	F=.72	F=.60	F=.50	F=.40	
-46	218						
-29 to 116	218	258	258	215	179	143	
149	218		250	208	173	139	
177	218		241	201	167	134	
204	218		232	194	161	129	
262	212		224	155	129	103	
260	206						

Pressures do not include allowance for corrosion. O-Ring material selection must be suitable for service fluids and temperature requirements.

Recommended Spare Parts List

Component	Quantity/Assembly	Quantity/Spares*	Part Number
Oring, Plug	1	1	
Backup Ring	1	1	
Oring, Cap	1	1	
Set Screw	3	3	
1-inch Hex Plug Holder*	1	1	

*If PIG-SIGNALLER is to be installed or removed under pressure with a PVL Drilling Machine a new Plug Holder is required. If PIG-SIGNALLER is to be installed or removed with no pressure in the pipeline a 1-inch hex allen wrench is required.

PIG-SIGNALLER

Flag Indicator with Manual Reset

The basic indicator includes
2" (50 mm) THREADED-O-
RING
nipple, plug assembly and

indicator assembly

The extended indicator

includes the same items as well
as an extended length indicator
assembly.

Length		Weight		Part Number
In.	mm	Lbs.	Kg.	
Basic		9	4	
Extended				
36	900	20	9.0	
48	1200	25	11.5	
60	1500	29	13.0	
72	1800	34	15.5	
84	2000	39	18.0	
96	2500	44	20.5	

Consult the factory for larger sizes.