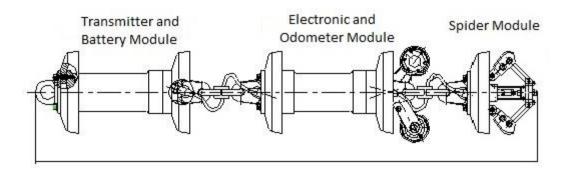
ENGINEERING SERVICE

12" PS ENGINEERING CALIPER TOOL

SPECIFICATION SHEET



DATA SETS

Sensing Fingers wiht Double Wheels 16

Gyros 1

Odometer Channels 2

OPERATIONAL

Products All Liquids and Gases

Max. Pressure 120 bar (1740.45 psig)

Temp. Range -10° to 80° C

Recommended Tool Speed* 0.1 to 3 m/s

Allowable Tool Speed 0.1 to 10 m/s

Minumum Back Pressure 5 bar (72 psig)

DIMENSIONS

Length** approx. 1500 mm (59.05 in)

Weight approx. 35 kg (77.16 lbs)

The below mentioned Featurens/Indications will be loceted (longitudinally) and identified the PS Engineering Caliper Tool.

- T-Pieces
- Valves
- Bends
- Girth Welds
- Dents
- Ovality
- Internal Diameter Changes

| | Tool Attributes | |
|--------------------------------|-----------------------------------|------------------------------|
| | Battery Capacity | 700 hrs |
| | Active Range (Max. Distance) | 600 km |
| | Odometer Resolution | 47 mm |
| | Modules | 3 |
| PIPELINE GEOMETRY REQUIREMENTS | | <u>ITS</u> |
| | Minimum Local Bore | 25% of pipe O.D. |
| | Min. Bend Radius | 1.5D for 90° Bend |
| | Min. ID in Straight Pipe | 243 mm |
| | Accuracy of Measurement | |
| | Accuracy of Distance information | ≤ 0.2mm from ref. Girth Weld |
| | | or 0.1% of total distance |
| | Accuracy of Internal Dia. Changes | +/- 0.2% |
| | Accuracy of Defect Measurement | +/- 0.2% |
| | Axial Sampling | 47 mm |
| | | |

Rev. Date: 05.01.2015

All given percentage values are related to the outer diameter (OD). The above mentioned accuracies depend on acceptable run conditions:

- Constant speed during inspection
- Clean pipe
- Pipebook given to PS Engineering evaluation department

When driving the tool with compressed air, the pipeline must have a back pressure of at least 5 bars / 0,5 MPA (depending on condition of the pipeline) * At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results we recommend tool speeds between 0.1 and 1.5 m/s.

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 $PS\ Engineering\ reserves\ the\ right\ to\ introduce\ technical\ changes\ and\ modifications\ without\ prior\ notice.$

^{**} For shorter lengths contact PS Engineering