Technical Specification Sheet

Permanent Gauge Solid Mandrel

The permanent gauge solid mandrel is designed to connect the gauge onto the production tubing and to provide a path for the gauge to measure the internal tubing pressure. The tubing pressure is measured via a port leading to the inside of the production tubing. During the installation of the gauge the mandrel provides full protection for the gauge and the cable head.

The mandrel design makes it suitable for both single and dual pressure permanent gauges. The I.D of the mandrel is the same as the production tubing; the OD can vary depending on the tubing and casing size. All designs are made to meet production-tubing specifications and manufactured in accordance to API 5CT, the tables below provide details for the 3 most common mandrel sizes.

Ratings & Dimensions

Mandrel size	4-1/2” Mandrel
Max pressure	15,000 psi
Outer diameter	5.91 in (15.0 cm)
Inner diameter	3.875 in (9.84 cm)
Length	70.0 in (1.77 m)
Weight	48.0 lbs (21.77 kg)
Materials	CS-4140 – 13Cr; other materials on request
Threaded Connections	EUE / VAM TOP – other threads on request
Applications	Piezo, Quartz KPerm gauges

Mandrel size	3-1/2” Mandrel
Max pressure	15,000 psi
Outer diameter	5.0 in (12.7 cm)
Inner diameter	2.92 in (7.41 cm)
Length	67.0 in (1.70 m)
Weight	38.0 lbs (17.20 kg)
Materials	CS-4140 – 13Cr; other materials on request
Threaded Connections	EUE / VAM TOP – other threads on request
Applications	Piezo, Quartz KPerm gauges

Mandrel size	2-7/8” Mandrel
Max pressure	15,000 psi
Outer diameter	4.50 in. (11.43 cm)
Inner diameter	2.40 in. (6.09 cm)
Length	66.0 in. (1.67m)
Weight	33.0 lbs (14.97 kg)
Materials	CS-4140 – 13Cr; other materials on request
Threaded Connections	EUE / VAM – other threads on request
Applications	Piezo, Quartz KPerm gauges

© Copyright 1994-2019 Probe Technologies Holdings, Incorporated. All Rights Reserved.