Technical Specification Sheet

Permanent Gauge Welded Mandrel

The permanent gauge welded 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 welded mandrel sizes.

Ratings & Dimensions

Mandrel size	2-3/8” Mandrel
Max pressure	5,000 psi
Max outer diameter	3.816 in (9.69 cm)
Inner diameter	1.995 in (5.07 cm)
Length	51.19 in (130.02 cm) – hand-tight engagement
Weight	4.7 lb / ft
Threaded connection	2.375 in 8 Rd Reg EUE
Materials	P-110; N-80; L-80; J-55
Applications	Piezo gauge

Mandrel size	2-7/8” Mandrel
Max pressure	5,000 psi
Max outer diameter	4.334 in (11.0 cm)
Inner diameter	2.441 in (6.2 cm)
Length	51.37 in (130.48 cm) – hand-tight engagement
Weight	6.5 lb / ft
Threaded connection	2.875 in 8 Rd Reg EUE
Materials	P-110; N-80; L-80; J-55
Applications	Piezo gauge

Mandrel size	3-1/2” Mandrel
Max pressure	5,000 psi
Outer diameter	5.084 in (12.7 cm)
Inner diameter	2.92 in (7.41 cm)
Length	51.75 in (131.45 cm) – hand-tight engagement
Weight	9.30 lb / ft
Materials	P-110; N-80; L-80; J-55
Applications	Piezo gauge

*Mandrel is third-party sourced.

© Copyright 1994-2020 Probe Technologies Holdings, Incorporated. All Rights Reserved.