

# LOCK MANDREL

## DESCRIPTION

The Lock Mandrel is a downhole anchoring and sealing device designed to be installed inside a Landing Nipple to secure and seal various subsurface flow-control tools, such as plugs, safety valves, and other flow-control devices. It provides a mechanical lock and pressure-tight seal, ensuring precise positioning and dependable operation of the attached equipment.

Lock mandrels are retrievable tools that can be installed or removed using wireline or coiled tubing, allowing for fast and efficient well intervention without the need to pull the tubing. Their robust design and high-pressure capability make them ideal for use in HPHT wells and critical flow-control applications, supporting a wide range of production, testing, and zonal isolation operations.

## FEATURES

- Provides a secure locking and sealing mechanism within the landing nipple
- Enables installation of retrievable plugs, safety valves, and flow-control devices
- Suitable for high-pressure, high-temperature, and sour service applications
- Simple installation and retrieval via wireline or coiled tubing
- Enhances operational flexibility for well testing, production control, and zonal isolation



Tubing Size  
in - [mm]Tubing Weight  
Min-Max [lbs/ft]Wall thickness  
Min-Max [mm]

1,66 - [42,2]

2,3 - 2,4

3,6

1,9 - [48,3]

2,4

3,2

1,9 - [48,3]

2,76 - 2,9

3,7

2,063 - [52,4]

3,25

4

2,375 - [60,3]

4,6 - 4,7

4,8

2,875 - [73]

6,4 - 6,5

5,5

3,5 - [88,9]

9,3 - 10,2

6,5 - 7,3

4 - [101,6]

11

6,7

4,5 - [114,3]

12,6 - 15,2

6,9 - 8,55

5 - [127]

13

6,4

5,5 - [139,7]

17 - 23

7,7 - 10,54

Tubing ID  
in - [mm]Lock Mandrel ID  
in - [mm]

1,38 - [35,1]

0,62 - [15,7]

1,66 - [42,2]

0,75 - [19,1]

1,61 - [40,9]

0,75 - [19,1]

1,751 - [44,5]

0,75 - [19,1]

1,995 - [50,7]

1 - [25,4]

2,441 - [62]

1,38 - [35,1]

2,992 - [76]

1,75 - [44,5]

3,476 - [88,3]

2,12 - [53,8]

3,958 - [100,5]  
3,826 - [97,2]

2,62 - [66,5]

4,494 - [114,1]

2,62 - [66,5]

4,892 - [124,3]

3,12 - [79,2]