



“BDX” “BDXN” LOCK MANDREL

The “BDX” Lock Mandrel is a downhole device, run and retrieved on slickline in which it is placed and anchored to the BDX or BDXN Landing Nipple within the tubing string to provide a setting point for flow-control equipment such as valves, chokes and plugs.

The two main types of Lock Mandrel uses different means of locating and anchoring; a Selective Lock locates and anchors any matching landing nipple profile within the tubing; and a No-Go non-selective nipple lock, usually installed at the bottom of the tubing string. The No-Go nipple lock can also be used in taper string application.

APPLICATION

- Plugging under pressure
- Provide pre-determined locations for setting and locking subsurface flow controls

FEATURES

- Locks designed to hold pressure from above or below or from sudden reversals
- Landing Nipples have the same packing bore ID for a particular tubing size and weight
- Retractable Locking Key
- Extra large ID for higher flow volumes

BENEFITS

- Faster slickline service because of the retractable keys
- Operator control of locating, landing and locking in the selected nipple
- Inside fishing neck large ID to maximise production
- Optional holddown feature for high flow rates and safety valve installation
- Holddown reduce the risk of Lock Mandrel self-release

When ordering to specify:

1. Profile (BDX or BDXN)
2. Packing Bore
3. Tubing Size, Weight & Grade
4. Thread Connection
5. Service (Standard, H₂S or CO₂)
6. Special Holddown
7. Special Material Requirements (if applicable)



BDX Lock Mandrel



The Lock Mandrels are supplied with industry standard pin connections complete with fishing necks. Please contact our BDWS Sales representative.



Black Diamond WELL SERVICES

TUBING								BDX Profile		BDXN Profile				Lock Mandrel ID		Part Number	
Size		Weight		ID		Drift		Packing Bore		Packing Bore		No-Go ID		Lock Mandrel ID		Part Number	
Inch	mm	lb/ft	kg/m	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	X Profile	XN Profile
1.050	26.67	1.20	1.79	0.824	20.93	0.730	18.54	Available On Request									
1.315	33.40	1.80	2.68	1.049	26.64	0.955	24.26	Available On Request									
1.660	42.16	2.30	3.43	1.380	35.05	1.286	32.66	1.250	31.75	1.250	31.75	1.135	28.83	0.62	15.75	LM125XO	LM125XN
		2.40	3.57														
1.900	48.26	2.40	3.57	1.660	42.16	1.516	38.51	1.500	38.10	1.500	38.10	1.448	36.78	0.75	19.05	LM150XO	LM150XN
		2.76	4.11	1.610	40.89												
		2.90	4.32														
2.063	52.40	3.25	4.84	1.751	44.48	1.657	42.09	1.625	41.28	1.625	41.28	1.536	39.01	0.75	19.05	LM162XO	LM162XN
2.375	60.33	4.60	6.85	1.995	50.67	1.901	48.29	1.875	47.63	1.875	47.63	1.791	45.49	1.00	25.40	LM187XO	LM187XN
		4.70	7.00														
2.875	73.03	6.40	9.53	2.441	62.00	2.347	59.61	2.313	58.75	2.313	58.75	2.205	56.01	1.38	35.05	LM231XO	LM231XN
		6.50	9.68														
3.500	88.90	9.30	13.85	2.992	76.00	2.813	72.82	2.813	71.45	2.813	71.45	2.666	67.72	1.75	44.45	LM281XO	LM281XN
		10.30	15.34	2.992	74.22	2.797	71.04	2.750	69.85	2.750	69.85	2.635	66.93	1.75	44.45	LM275XO	LM275XN
4.000	101.60	11.00	16.38	3.476	88.29	3.351	85.12	3.313	84.15	3.313	84.15	3.135	79.63	2.12	53.85	LM331XO	LM331XN
4.500	114.30	12.75	18.99	3.958	100.53	3.833	97.36	3.813	96.85	3.813	96.85	3.725	94.62	2.62	66.55	LM381XO	LM381XN
5.000	127.00	13.00	19.36	4.494	114.15	4.369	110.97	4.313	109.55	4.313	109.55	3.987	101.27	2.62	66.55	LM431XO	LM431XN
5.500	139.70	17.00	25.32	4.892	124.26	4.767	115.87	4.562	115.87	4.562	115.87	4.455	113.16	3.12	79.25	LM456XO	LM456XN