



“BDR” “BDRN” Lock Mandrel

The “**BDR**” **Lock Mandrel** is a downhole device, run and retrieved on slickline in which it is placed and anchored to the BDR or BDRN 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 mean 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 (BDR or BDRN)
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)

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



BDR
Lock Mandrel





Black Diamond WELL SERVICES

Tubing								BDR Profile		BDRN Profile				Lock Mandrel ID		Part Number		
Size		Weight		ID		Drift		Packing Bore		Packing Bore		No-Go ID		Inch	mm	R Profile	RN Profile	
Inch	mm	lb/ft	kg/m	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm					
1.660	42.16	3.02	4.50	1.278	32.46	1.184	30.07	1.125	28.58	1.125	28.58	1.012	25.70	Available on Request				
1.900	48.26	3.64	5.42	1.500	38.10	1.406	35.71	1.375	34.93	1.375	34.93	1.250	31.75	0.62	15.75	LM137RO	LM137RN	
2.375	60.33	5.30	7.89	1.939	49.25	1.845	46.86	1.781	45.24	1.781	45.24	1.640	41.66	0.88	22.35	LM178RO	LM178RN	
		5.95	8.86	1.867	47.42	1.773	45.03	1.710	43.43	1.710	43.43	1.560	39.62	0.75	19.05	LM171RO	LM171RN	
		6.20	9.23	1.853	47.07	1.759	44.68											
		7.70	11.47	1.703	43.26	1.609	40.87	1.500	38.10	1.500	38.10	1.345	34.16	0.62	15.75	LM150RO	LM150RN	
2.875	73.03	7.90	11.77	2.323	59.00	2.229	56.62	2.188	55.58	2.188	55.58	2.010	51.05	1.12	28.45	LM218RO	LM218RN	
		8.70	12.96	2.259	57.38	2.165	54.99	2.125	53.98	2.125	53.98	1.937	49.20	0.88	22.35	LM212RO	LM212RN	
		8.90	13.26	2.243	56.97	2.149	54.58											
		9.50	14.15	2.195	55.75	2.101	53.37	2.000	50.80	2.000	50.80	1.881	47.78	0.88	22.35	LM200RO	LM200RN	
		10.40	15.49	2.151	54.64	2.057	52.25											
		11.00	16.38	2.065	52.45	1.971	50.06	1.875	47.63	1.875	47.63	1.716	43.59	0.88	22.35	LM187RO	LM187RN	
3.500	88.90	12.95	19.29	2.750	69.85	2.625	66.68	2.562	65.07	2.562	65.07	2.329	59.16	1.38	35.05	LM256RO	LM256RN	
		15.80	23.53	2.548	64.72	2.423	61.54	2.313	58.75	2.313	58.75	2.131	54.13	1.12	28.45	LM231RO	LM231RN	
		16.70	24.87	2.480	62.99	2.355	59.82											
		17.05	25.40	2.440	61.98	2.315	58.80	2.188	55.58	2.188	55.58	2.010	51.05	1.12	28.45	LM218RO	LM218RN	
4.000	101.60	11.60	17.28	3.428	87.07	3.303	83.90	3.250	82.55	3.250	82.55	3.088	78.44	1.94	49.28	LM325RO	LM325RN	
		13.40	19.96	3.340	84.84	3.215	81.66	3.125	79.38	3.125	79.38	2.907	73.84	1.94	49.28	LM312RO	LM312RN	
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	2.12	53.85	LM381RO	LM381RN	
		13.50	20.11	3.920	99.57	3.795	96.39	3.688	93.68	3.688	93.68	3.456	87.78	2.38	60.45	LM368RO	LM368RN	
		15.50	23.09	3.826	97.18	3.701	94.01											
		16.90	25.17	3.754	95.35	3.629	92.18	3.437	87.30	3.437	87.30	3.260	82.80	1.94	49.28	LM343RO	LM343RN	
5.000	127.00	15.00	22.34	4.408	111.96	4.283	108.79	4.125	104.78	4.125	104.78	3.912	99.39	2.75	69.85	LM412RO	LM412RN	
		18.00	26.81	4.276	108.61	4.151	105.44	4.000	101.60	4.000	101.60	3.748	95.20	2.38	60.45	LM400RO	LM400RN	
5.500	139.70	17.00	25.32	4.892	124.26	4.767	121.08	4.562	115.87	4.562	115.87	4.445	113.16	2.85	72.39	LM456RO	LM456RN	
		20.00	29.79	4.778	121.36	4.653	118.19											
		23.00	34.26	4.670	118.6	4.545	115.44	4.313	109.55	4.313	109.55	3.987	101.27	2.62	66.55	LM431RO	LM431RN	
6.000	152.40	15.00	22.34	5.524	140.31	5.399	137.13	5.250	133.35	5.250	133.35	5.018	127.51	3.50	88.90	LM525RO	LM525RN	
		18.00	26.81	5.424	137.77	5.299	134.59											
6.625	168.28	24.00	35.75	5.921	150.39	5.796	147.22	5.625	142.88	5.625	142.88	5.500	139.70	3.50	88.90	LM562RO	LM562RN	
		28.00	41.71	5.791	147.09	5.666	143.92											
7.000	177.80	17.00	25.32	6.538	166.0	6.431	163.35											
		20.00	29.79	6.456	163.98	6.331	160.81											
		23.00	34.26	6.366	161.70	6.241	158.52	5.963	151.46	5.963	151.46	5.770	146.05	3.75	95.25	LM596RO	LM596RN	
		26.00	38.73	6.276	159.41	6.151	156.24											
		29.00	43.20	6.184	157.07	6.059	153.90											
		32.00	47.66	6.094	154.79	5.969	151.61											
8.625	219.08	36.00	53.62	7.825	198.76	7.700	195.58	7.050	179.07	7.050	179.07	6.925	175.90	5.250	133.35	LM705RO	LM705RN	
								7.250	184.15	7.250	184.15	7.125	180.98	5.250	133.35	LM725RO	LM725RN	
								7.450	189.23	7.450	189.23	7.325	186.06	5.250	133.35	LM745RO	LM745RN	