

LANDING NIPPLE S

MODEL: WC-LNP-X [X Type] & WC-LNP-XN [Bottom No-Go]

PRODUCT No.: WC-41405 & WC-41406

MODEL: WC-LNP-R [R Type] & WC-LNP-RN [Bottom No-Go]

PRODUCT No.: WC-41407 & WC-41408

LOCK MANDRELS

MODEL: WC-LM-X & WC-LM-XN

PRODUCT No.: WC-41412 & WC-41414

MODEL: WC-LM-R & WC-LM-RN

PRODUCT No.: WC-41413 & WC-41415

Landing nipples are run into the well on the completion tubing to provide a specific landing location for subsurface flow control equipment. The common internal profiles of these Landing Nipples make them universal. WC-LNP-X Landing Nipple is used in standard weight tubing while WC-LNP-R Landing Nipple is typically used with heavy weight tubing.

The completion can have as many selective nipples with IDs in desired sequence on the tubing string. This requires number of positions of Landing Nipples for setting and locking subsurface flow controls. The flow controls required to be placed inside the well is attached to the required lock mandrel and run into the well via the selective running tool on slick line/wireline.

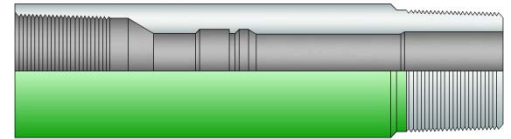
The slick-line operator using the selective running tool can set the flow control in the selective landing nipple at the desired depth. Once location is found to be unsatisfactory or well conditions gets changed, the flow control equipment could be moved up or down the tubing string to another landing nipple location. These operations can be done by wireline/slick-line under pressure without killing the well.

Bottom No-Go equipments are designed for use in single nipple installations or as the bottom nipple in a series of selective or Top No-Go landing nipples. These landing nipples have the same packing bore ID for a particular tubing size and weight.

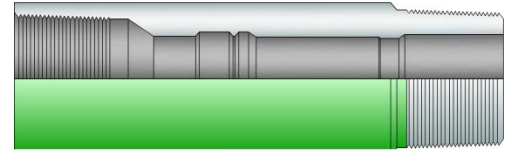
Here N designates Bottom No-Go.

Features / Benefits:

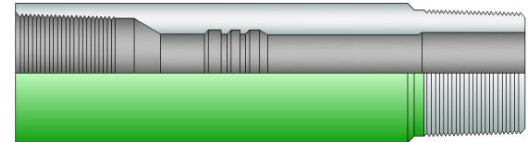
- Large Bore for minimum restriction
- Universal nipple with one internal profile
- Retractable locking Keys
- Locks designed to hold pressure from above or below from sudden reversals
- Optional hold down
- Interference hold-down for smaller locks
- Shear pin hold-down for larger locks



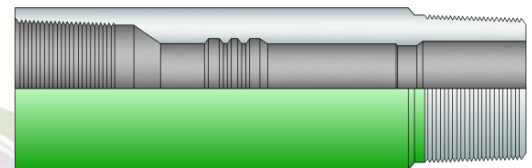
WC-LNP-X



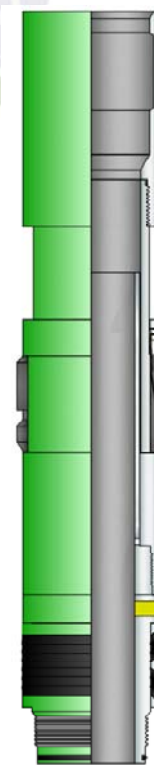
WC-LNP-XN



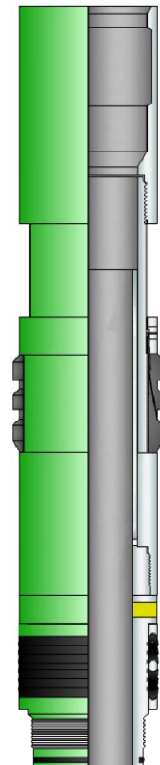
WC-LNP-R



WC-LNP-RN



WC-LM-X



WC-LM-R

■ Specification Guide:

'X' and 'XN' LANDING NIPPLES AND LOCK MANDRELS											
TUBING				FOR STANDARD TUBING WEIGHTS							
				X PROFILE		XN PROFILE				LOCK MANDREL	
SIZE in	WEIGHT lb/ft	ID in	DRIFT in	SEALING BORE		SEALING BORE		NO-GO ID		ID	
				in	mm	in	mm	in	mm	in	mm
2 1/16	3.25	1.751	1.657	1.625	41.275	1.625	41.275	1.536	39.014	0.75	19.05
2 3/8	4.60	1.995	1.901	1.875	47.625	1.875	47.625	1.791	45.491	1.00	25.40
	4.70	1.995	1.901	1.875	47.625	1.875	47.625	1.791	45.491	1.00	25.40
2 7/8	6.40	2.441	2.347	2.313	58.750	2.313	58.750	2.205	56.007	1.38	35.052
	6.50	2.441	2.347	2.313	58.750	2.313	58.750	2.205	56.007	1.38	35.052
3 1/2	9.30	2.992	2.867	2.813	71.450	2.813	71.450	2.666	67.716	1.75	44.450
	10.30	2.992	2.797	2.750	69.850	2.750	69.850	2.635	66.929	1.75	44.450
4	11.00	3.476	3.351	3.313	84.150	3.313	84.150	3.135	79.629	2.12	53.848
4 1/2	12.75	3.958	3.833	3.813	96.850	3.813	96.850	3.725	94.615	2.62	66.548
5	13.00	4.494	4.369	4.313	109.55	4.313	109.550	3.987	101.269	2.62	66.548
5 1/2	17.00	4.892	4.767	4.562	115.87	4.562	115.874	4.455	113.157	3.12	79.248

'R' and 'RN' LANDING NIPPLES AND LOCK MANDRELS											
TUBING				FOR HEAVY TUBING WEIGHTS							
				R PROFILE		RN PROFILE				LOCK MANDREL	
SIZE in	WEIGHT lb/ft	ID in	DRIFT in	SEALING BORE		SEALING BORE		NO-GO ID		ID	
				in	mm	in	mm	in	mm	in	mm
2 3/8	5.30	1.939	1.845	1.781	45.237	1.781	45.237	1.640	41.656	0.88	22.352
	5.95	1.867	1.773	1.710	43.434	1.710	43.434	1.560	39.624	0.75	19.05
	6.20	1.853	1.759	1.710	43.434	1.710	43.434	1.560	39.624	0.75	19.05
	7.70	1.703	1.609	1.500	38.100	1.500	38.100	1.345	34.163	0.62	15.748
2 7/8	7.90	2.323	2.229	2.188	55.575	2.188	55.575	2.010	51.054	1.12	28.448
	8.70	2.259	2.165	2.125	53.975	2.125	53.975	1.937	49.1998	0.88	22.352
	8.90	2.243	2.149	2.125	53.975	2.125	53.975	1.937	49.1998	0.88	22.352
	9.50	2.196	2.101	2.000	50.800	2.000	50.800	1.881	47.7774	0.88	22.352
	10.40	2.151	2.057	2.000	50.800	2.000	50.800	1.881	47.7774	0.88	22.352
	11.00	2.065	1.971	1.875	47.625	1.875	47.625	1.716	43.5864	0.88	22.352
3 1/2	11.65	1.995	1.901	1.875	47.625	1.875	47.625	1.716	43.5864	0.88	22.352
	12.95	2.750	2.625	2.562	65.074	2.562	65.074	2.329	59.1566	1.38	35.052
	15.80	2.548	2.423	2.313	58.750	2.313	58.750	2.131	54.1274	1.12	28.448
	16.70	2.480	2.355	2.313	58.750	2.313	58.750	2.131	54.1274	1.12	28.448
4	17.05	2.440	2.315	2.188	55.575	2.188	55.575	2.010	51.054	1.12	28.448
	11.60	3.428	3.303	3.250	82.55	3.250	82.55	3.088	78.4352	1.94	49.276
	13.40	3.340	3.215	3.125	79.375	3.125	79.375	2.907	73.8378	1.94	49.276
4 1/2	12.75	3.958	3.833	3.813	96.850	3.813	96.850	3.725	94.615	2.12	53.848
	13.50	3.920	3.795	3.688	93.675	3.688	93.675	3.456	87.7824	2.38	60.452
	15.50	3.826	3.701	3.688	93.675	3.688	93.675	3.456	87.7824	2.38	60.452
	16.90	3.754	3.629	3.437	87.299	3.437	87.299	3.260	82.804	1.94	49.276
	19.20	3.640	3.515	3.437	87.299	3.437	87.299	3.260	82.804	1.94	49.276
5	15.00	4.408	4.283	4.125	104.77	4.125	104.77	3.913	99.3902	2.75	69.85
	18.00	4.276	4.151	4.000	101.60	4.000	101.60	3.748	95.1992	2.38	60.452
5 1/2	17.00	4.892	4.767	4.562	115.874	4.562	115.874	4.455	113.157	2.85	72.39
	20.00	4.778	4.653	4.562	115.874	4.562	115.874	4.455	113.157	2.85	72.39
	23.00	4.670	4.545	4.313	109.550	4.313	109.550	3.987	101.2698	2.62	66.548
6	15.00	5.524	5.399	5.250	133.35	5.250	133.35	5.020	127.508	3.50	88.9
	18.00	5.424	5.299	5.250	133.35	5.250	133.35	5.020	127.508	3.50	88.9
6.625	24.00	5.921	5.796	5.625	142.875	5.625	142.875	5.500	139.7	3.50	88.9
	28.00	5.791	5.666	5.625	168.275	5.625	168.275	5.500	139.7	3.50	88.9
7.000	17.00	6.538	6.431	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	20.00	6.456	6.331	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	23.00	6.366	6.241	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	26.00	6.276	6.151	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	29.00	6.184	6.059	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	32.00	6.094	5.969	5.962	151.434	5.962	151.434	5.750	146.05	3.75	95.25
	35.00	6.004	5.879	5.875	149.225	5.875	149.225	5.750	146.05	3.75	95.25
8.625	36.00	7.825	7.700	7.450	189.23	7.450	189.23	7.325	186.055	5.250	133.35
	36.00	7.825	7.700	7.250	184.15	7.250	184.15	7.125	180.975	5.250	133.35
	36.00	7.825	7.700	7.050	179.07	7.050	179.07	6.925	175.895	5.250	133.35