

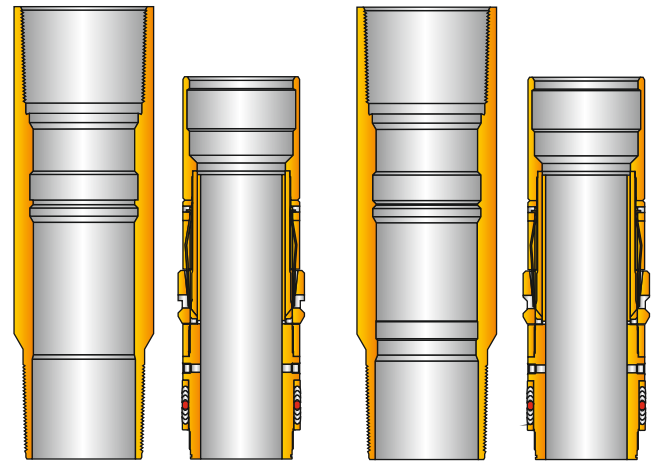
## LANDING NIPPLES AND LOCK MANDRELS

### PARVEEN X and R Landing Nipples and Lock Mandrels

PARVEEN X and R 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. PARVEEN X landing nipple is used in standard weight tubing. PARVEEN R landing nipple is typically used with heavyweight tubing.

The completion can have as many selective nipples with the same ID in any sequence as desired on the tubing string. This versatility results in an unlimited number of positions for setting and locking subsurface flow controls. The flow control, which is attached to the required PARVEEN X or R lock mandrel, is run in the well via the selective running tool on slickline.

The slickline operator using the selective running tool can set the flow control in any one of the landing nipples at the desired depth. If this location is unsatisfactory or if well conditions change, the flow control may be moved up or down the tubing string to another nipple location. These operations can be done by slickline under pressure without killing the well.



**"X"  
LANDING NIPPLE  
AND LOCK MANDREL**

**"XN" NO-GO  
LANDING NIPPLE  
AND LOCK MANDREL**

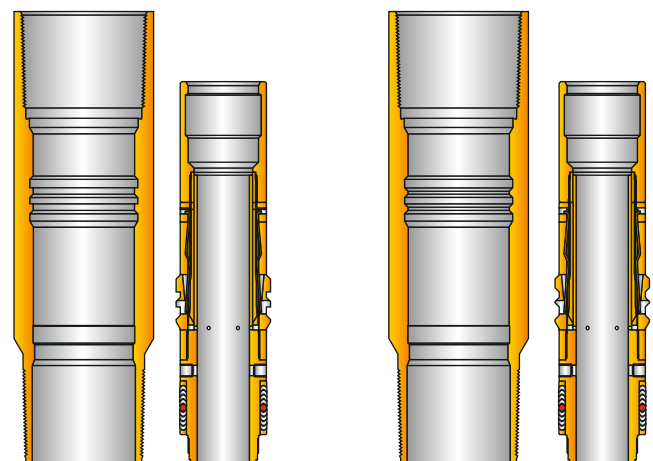
### PARVEEN XN and RN No-Go Landing Nipples and Lock Mandrels

This equipment is designed for use in single nipple installations or as the bottom nipple in a series of PARVEEN X or R landing nipples. These landing nipples have the same packing bore ID for a particular tubing size and weight. PARVEEN X and XN landing nipples are designed for use with standard weight tubing. PARVEEN R and RN landing nipples are designed for use with heavy weight tubing.

(The N designates no-go nipples.)

#### Features

- Landing nipples
  - Large bore for minimum restriction
  - Universal nipple with one internal profile
- Lock Mandrels
  - 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



**"R"  
LANDING NIPPLE  
AND LOCK MANDREL**

**"RN" NO-GO  
LANDING NIPPLE  
AND LOCK MANDREL**



## ‘X’ AND ‘XN’ LANDING NIPPLES AND LOCK MANDRELS

TUBING								FOR STANDARD TUBING WEIGHTS							
								X PROFILE		XN PROFILE				LOCK	
								PACKING BORE		PACKING BORE		NO-GO ID		MANDREL ID	
SIZE		WEIGHT		ID		DRIFT		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)
(in.)	(mm)	lb/ft	(kg/m)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)
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							
1.900	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
		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
		2.76	4.11	1.610	40.89	1.516	38.51	1.500	38.10	1.500	38.10	1.448	36.78	0.75	19.05
		2.90	4.32	1.610	40.89	1.516	38.51	1.500	38.10	1.500	38.10	1.448	36.78	0.75	19.05
		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
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
		4.70	7.00	1.995	50.67	1.901	48.29	1.875	47.63	1.875	47.63	1.791	45.49	1.00	25.40
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
		6.50	9.68	2.441	62.00	2.347	59.61	2.313	58.75	2.313	58.75	2.205	56.01	1.38	35.05
3.500	88.90	9.30	13.85	2.992	76.00	2.867	72.82	2.813	71.45	2.813	71.45	2.666	67.72	1.75	44.45
		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
4.000	101.60	11.00	16.38	3.476	89.29	3.351	85.12	3.313	84.15	3.313	84.15	3.135	79.63	2.12	53.85
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
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
5.500	139.70	17.00	25.32	4.892	124.26	4.767	121.08	4.562	115.87	4.562	115.87	4.455	113.16	3.12	79.25

## ‘R’ AND ‘RN’ LANDING NIPPLES AND LOCK MANDRELS

TUBING								FOR HEAVY TUBING WEIGHTS							
								R PROFILE		RN PROFILE				LOCK	
								PACKING BORE		PACKING BORE		NO-GO ID		MANDREL ID	
SIZE		WEIGHT		ID		DRIFT		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)
(in.)	(mm)	lb/ft	(kg/m)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(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
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
		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
		6.20	9.23	1.853	47.07	1.759	44.68	1.710	43.43	1.710	43.43	1.560	39.62	0.75	19.05
2.857	73.03	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
		7.90	11.77	2.323	59.00	2.229	56.62	2.199	55.58	2.188	55.58	2.010	51.05	1.12	28.45
		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
		8.90	13.26	2.243	56.97	2.149	54.58	2.125	53.98	2.125	53.98	1.937	49.20	0.88	22.35
		9.50	14.15	2.196	55.75	2.101	53.37	2.000	50.80	2.000	50.80	1.881	47.78	0.88	22.35
		10.40	15.49	2.151	54.64	2.057	52.25	2.000	50.80	2.000	50.80	1.881	47.78	0.88	22.35
		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
3.500	89.90	11.65	17.35	1.995	50.67	1.901	48.29	1.875	47.63	1.875	47.63	1.716	43.59	0.88	22.35
		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
		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
4.000	101.60	16.70	24.87	2.480	62.99	2.355	59.82	2.313	58.75	2.313	58.75	2.131	54.13	1.12	28.45
		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
		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
4.500	114.30	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
		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
		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
		15.50	23.09	3.826	97.18	3.701	94.01	3.688	93.68	3.688	93.68	3.456	87.78	2.38	60.45
		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
5.000	127.00	19.20	28.60	3.640	92.46	3.515	89.28	3.437	87.30	3.437	87.30	3.260	82.80	1.94	49.28
		15.00	22.34	4.408	111.96	4.283	108.79	4.125	104.78	4.125	104.78	3.913	99.39	2.75	69.85
		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
5.500	139.70	17.00	25.32	4.892	124.26	4.767	121.08	4.562	115.87	4.562	115.87	4.455	113.16	2.85	72.39
		20.00	29.79	4.778	121.36	4.653	118.19	4.562	115.87	4.562	115.87	4.455	113.16	2.85	72.39
		23.00	34.26	4.670	118.62	4.545	115.44	4.313	109.55	4.313	109.55	3.987	101.27	2.62	66.55
6.000	152.40	15.00	22.34	5.524	140.31	5.399	137.13	5.250	133.35	5.250	133.35	5.020	127.51	3.50	88.90
		18.00	26.81	5.424	137.77	5.299	134.59	5.250	133.35	5.250	133.35	5.020	127.51	3.50	88.90
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
		28.00	41.71	5.791	147.09	5.666	143.92	5.625	142.88	5.625	142.88	5.500	139.70	3.50	88.90
7.000	177.80	17.00	25.32	6.538	166.07	6.431	163.35	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
		20.00	29.79	6.456	163.98	6.331	160.81	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
		23.00	34.26	6.366	161.70	6.241	158.52	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
		26.00	38.73	6.276	159.41	6.151	156.24	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
		29.00	43.20	6.184	157.07	6.059	153.90	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
		32.00	47.66	6.094	154.79	6.969	177.01	5.962	151.43	5.962	151.43	5.750	146.05	3.75	95.25
8.625	219.08	35.00	52.13	6.004	152.50	5.879	149.33	5.875	149.23	5.875	149.23	5.750	146.05	3.75	95.25
		36.00	53.62	7.825	198.76	7.700	195.58	7.450	189.23	7.450	189.23	7.325	186.06	5.250	133.35
		36.00	53.62	7.825	198.76	7.700	195.58	7.250	184.15	7.250	184.15	7.125	180.98	5.250	133.35
		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