

Drive Up



PN Nut

The Pilgrim Nut (PN) is a hydraulic nut that has become the Marine Industry standard for Propeller installations where precision and accurate high loading is essential to produce a quick, safe and cost effective installation.

Hydraulic pressure is generated using Pilgrim's Morpress power pack linked to the Pilgrim Nut via flexible hose and self sealing quick release coupling. When Hydraulic pressure is applied, the piston of the Pilgrim Nut extends, thus pushing the propeller or rudder along the tapered shaft. The applied pressure and travel of the piston corresponds to the required push-up distance of the application.

Removal of the Propeller and Rudders can be simplified by reversing the Pilgrim Nut and using the Pilgrim Withdrawal equipment to pull the propeller or rudder off the taper.

The principle of the design of the Pilgrim Nut is universally accepted and approved by all major classification societies.

Typical Applications

- Popellers
- Tillers
- Pintles
- Rudderstocks

Benefits

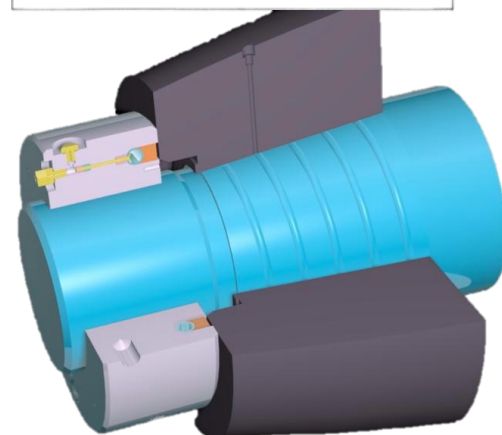
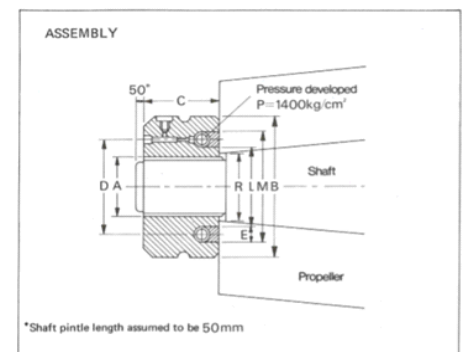
- Approved
- Accurate
- Cost Effective
- Reliable and Robust
- Installation & Removal



PROPORTIONS OF STANDARD MODEL PN NUT (1375 Bar)

TABLE 1

Nut Type	A	Plain Bore Ø	B	C	D	E	Load ring Ring		Max. Load Tons (P=1400kg/cm ²)	Weight Kg
							L	M		
PN1	225	200	360	135	292.5	22.5	270	315	285	71
PN2	250	225	400	150	325.0	25.0	300	350	350	86
PN3	275	250	440	165	357.5	27.5	330	385	430	114
PN4	300	275	480	180	390.0	30.0	360	420	510	148
PN5	325	300	520	195	422.5	32.5	390	455	600	188
PN6	350	325	560	210	455.0	35.0	420	490	690	236
PN7	375	350	600	225	487.5	37.5	450	525	795	290
PN8	400	375	640	240	520.0	40.0	480	560	905	356
PN9	425	400	680	255	552.5	42.5	510	595	1020	423
PN10	450	425	720	270	585.0	45.0	540	630	1145	502
PN11	475	450	760	285	617.5	47.5	570	665	1275	590
PN12	500	475	800	300	650.0	50.0	600	700	1415	688
PN13	525	500	840	315	682.5	52.5	630	735	1560	797
PN14	550	525	880	330	715.0	55.0	660	770	1710	916
PN15	575	550	920	345	747.5	57.5	690	805	1870	1046
PN16	600	575	960	360	780.0	60.0	720	840	2035	1189
PN17	625	600	1000	375	812.5	62.5	750	875	2210	1344
PN18	650	625	1040	390	845.0	65.0	780	910	2390	1512
PN19	675	650	1080	405	877.5	67.5	810	945	2575	1693
PN20	700	675	1120	420	910.0	70.0	840	980	2770	1888
PN21	725	700	1160	435	942.5	72.5	870	1015	2970	2098
PN22	750	725	1200	450	975.0	75.0	900	1050	3180	2322



Selection Procedure

Select L nearest in value equal to, or above R. Find corresponding value of A from Table 1 above and choose withdrawal equipment from Table 2

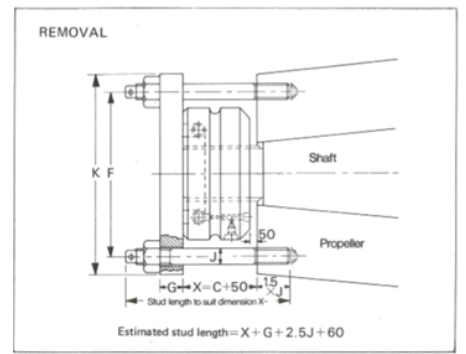
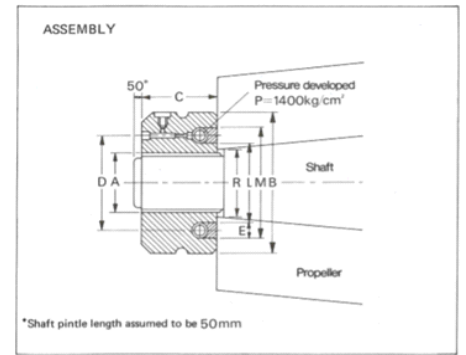
The Morpress Pump Range

Robust and designed with the operator in mind, The Mk 12 Morpress pump is perfect for use with a Pilgrim Nut .

PROPORTIONS OF HIGH LOAD MODEL PN NUT (1540 Bar)

TABLE 1

Nut Type	A	Plain Bore Ø	B	C	D	E	Load ring Ring		Max. Load Tons (P=1400kg/cm²)	Weight Kg
							L	M		
HPN01	225	200	360	113	292.5	24.75	267.75	317.25	357	59
HPN02	250	225	400	125	325.0	27.50	297.50	352.50	441	80
HPN03	275	250	440	138	357.5	30.25	327.25	387.75	533	105
HPN04	300	275	480	150	390.0	33.00	357.00	423.00	635	135
HPN05	325	300	520	163	422.5	35.75	386.75	458.25	745	171
HPN06	350	325	560	175	455.0	38.50	416.50	493.50	864	211
HPN07	375	350	600	188	487.5	41.25	446.25	528.75	992	259
HPN08	400	375	640	200	520.0	44.00	476.00	564.00	1129	312
HPN09	425	400	680	213	552.5	46.75	505.75	599.25	1274	373
HPN10	450	425	720	225	585.0	49.50	535.50	634.50	1428	440
HPN11	475	450	760	238	617.5	52.25	565.25	669.75	1591	517
HPN12	500	475	800	250	650.0	55.00	595.00	705.00	1763	600
HPN13	525	500	840	263	682.5	57.75	624.75	740.25	1944	694
HPN14	550	525	880	275	715.0	60.50	654.50	775.50	2133	794
HPN15	575	550	920	288	747.5	63.25	684.25	810.75	2332	907
HPN16	600	575	960	300	780.0	66.00	714.00	846.00	2539	1026
HPN17	625	600	1000	313	812.5	68.75	743.75	881.25	2755	1159
HPN18	650	625	1040	325	845.0	71.50	773.50	916.50	2980	1299
HPN19	675	650	1080	338	877.5	74.25	803.25	951.75	3213	1454
HPN20	700	675	1120	350	910.0	77.00	833.00	987.00	3456	1670
HPN21	725	700	1160	363	942.5	79.75	862.75	1022.25	3707	1796
HPN22	750	725	1200	375	975.0	82.50	892.50	1057.50	3967	1982
HPN23	775	750	1240	388	1007.5	85.25	922.25	1092.75	4236	2187
HPN24	800	775	1280	400	1040.0	88.00	952.00	1128.00	4514	2399
HPN25	825	800	1320	413	1072.5	90.75	981.75	1163.25	4800	2631



DETAILS OF WITHDRAWAL EQUIPMENT

TABLE 2

Nut Type	6 kg					8 kg					10 kg					12 kg					14 kg					16 kg					18 kg					20 kg									
	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt	J	F	K	G	Wt
PN1	48	430	525	80	170																																								
PN2	48	470	600	90	234																																								
PN3	48	510	625	90	253																																								
PN4	56	580	700	100	354	48	550	675	100	331																																			
PN5	56	600	750	110	434	48	590	700	110	385	48	590	700	110	398																														
PN6	64	650	800	120	550	56	640	775	120	518	48	630	750	120	483																														
PN7	64	690	850	120	614	56	680	825	120	579	56	680	825	120	600	48	680	800	120	557																									
PN8	72	740	900	130	739	64	730	900	130	765	56	720	850	130	677	48	710	825	130	632	48	710	825	130	646																				
PN9						64	770	925	140	857	56	760	900	140	800	56	760	900	140	822	48	750	875	140	765	48	750	875	140	780															
PN10						72	820	1000	150	1085	64	800	975	150	858	56	800	950	150	960	56	800	950	150	981	48	790	900	150	870															
PN11						72	850	1025	160	1200	64	850	1025	160	1242	56	840	975	160	1088	56	840	975	160	1110																				
PN12											72	900	1075	160	1350	64	890	1050	160	1280	56	880	1025	160	1190	56	880	1025	160	1213															
PN13																64	930	1100	170	1465	64	930	1100	170	1500	56	920	1050	170	1336															
PN14																72	980	1150	180	1730	64	970	1125	180	1640	64	970	1125	180	1675															
PN15																72	1010	1200	190	1955	64	1000	1175	190	1856	64	1000	1175	190	1890															
PN16																	72	1050	1225	200	2171	64	1050	1200	200	2056																			
PN17																	72	1090	1275	200	2330	72	1090	1275	200	2379	64	1090	1250	200	2260														
PN18																											72	1130	1325	210	2655	64	1130	1300	210	2540									
PN19																											72	1170	1350	220	2860	72	1170	1350	220	2940									
PN20																											72	1210	1430	230	2935	72	1210	1400	230	3270									
PN21																											72	1250	1425	230	3350	72	1250	1425	230	3400									
PN22																																													

NOTE: These tables relate to Pilgrim Nuts used for the assembly of keyed propellers only. They are not suitable for use with Pilgrim Keyless propellers and other dry fit propellers; please contact Pilgrim for information on those applications

Contact Us

Telephone: +44 161 785 7700
e-mail: sales@pilgrim-international.co.uk

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