

# HYDRAULIC NUT FOR MOUNTING BEARINGS

**PNHL-PNHM** 

Plarad PNHL and PNHM Series Hydraulic Nuts make mounting bearings a quick and easy operation.

Mounting bearings onto tapered seatings and shafts can be difficult and time-consuming; the hydraulic nuts provide the high axial loads required to assemble the bearings, operated with a safe and easy to use hydraulic system.

The hydraulic nuts have a maximum 800 bar operation pressure. The high applied force and large piston stroke are suitable for the most difficult applications.

The PNHL and PNHM bearing mounting hydraulic nuts are interchangeable with HMV series hydraulic nuts. The hydraulic nuts are supplied with two side ports. One is fitted with a quick connect nipple. The other port is plugged as standard, but can be used to connect a pressure transducer or a pressure gauge.

#### **PNHL hydraulic nuts**

Our smooth bore PNHL nuts are used extensively in heavy industry and shipyards for mounting bearings, gears or propellers on tapered shafts. They can be used with threaded shafts installed with a reaction nut behind the nut. Alternatively they can be used with non-protruding shafts fitted with axial threaded holes and a reaction plate. By generating a higher force than standard threaded nuts, the applications for this design are much more versatile.

### **PNHM hydraulic nuts**

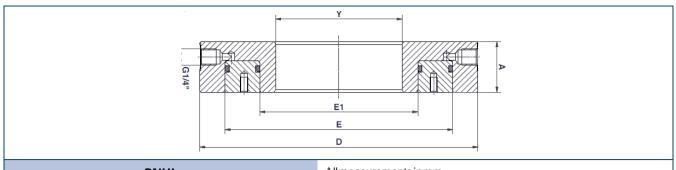
Our PNHM nuts can be used for mounting and dismounting bearings directly onto a tapered shaft or through a conical adapter or withdrawal sleeve. They are designed specifically to reduce the operational time spent on installing or dismantling a bearing.

## **Ancillary Equipment**

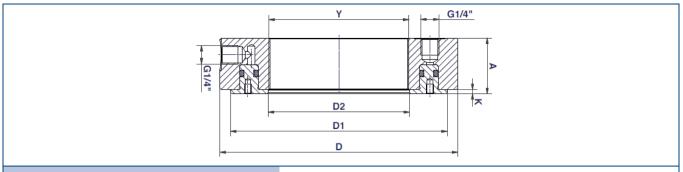
The PNHL and PNHM series hydraulic nuts are suitable for use with standard 1.000Bar hydraulic air pumps, hand pumps and hydraulic hoses. All ancillary equipment is kept in stock for guick delivery.

## **Specification**

- Wide size range
- 50mm to 500mm Shaft Diameter
- Quick connection can be fitted in the side or face of nut for clearance
- Ergonomictommy barholes for easy assembly
- Eyebolts included for nuts models over 30kg
- Quick delivery
- Complimentary pumps and hoses kept in stock
- Low maintenance seal design
- Special threads and sizes available
- Supplied with pressure test certification
- Comprehensive operating and safety manual



		PNHL			Allmeasurementsinmm							
Model Number	MaxLoadat 800 bar	Pressure Area	Stroke	Maximum Oil Volume	Height	Outside Diameter	Bearing Face Outside Diameter	Bearing Face Inside Diameter	Bore Diameter	Weight		
	kN	cm <sup>2</sup>	mm	cm <sup>3</sup>	А	D	Е	E1	Y	kg		
PNHL100	1054	132	10	132	40	220	180	125	100	9.5		
PNHL125	1100	137	10	137	40	245	200	150	125	9.8		
PNHL150	1173	147	10	147	40	270	226	180	150	12.5		
PNHL175	1286	161	11	177	45	305	250	205	175	17		
PNHL200	1602	200	12	240	50	330	280	230	200	21		
PNHL225	2070	259	12	310	50	365	313	255	225	23		
PNHL250	2553	319	12	383	50	390	345	280	250	28		
PNHL275	3228	403	12	484	50	430	380	305	275	34		
PNHL300	3511	439	13	570	55	470	410	335	300	44		
PNHL325	4021	503	13	653	55	500	440	360	325	49		
PNHL350	4863	608	13	790	55	540	475	385	350	57		
PNHL375	5781	723	13	939	55	575	510	410	375	65		
PNHL400	6498	812	15	1218	60	620	545	440	400	83		



PNHM						All measurements in mm								
Model Number	Max Load at 800 bar	Pressure Area	Stroke	Maximum Oil Volume	Height	Outside Diameter	Bearing Face Outside Diameter	Bearing Face Inside Diameter	Piston Flange Thickness	Thread Size	Weight			
	Kn	cm <sup>2</sup>	mm	cm <sup>3</sup>	А	D	D1	D2	K	Y	kg			
PNHM50	243	30	4	12	40	110	98	51	2	M 50x1.5	2.6			
PNHM55	250	31	4	13	40	118	105	56	2	M55x2	2.7			
PNHM60	253	32	4	13	40	125	112	61	2	M60x2	2.8			
PNHM65	283	35	4	14	40	132	118	66	3	M65x2	3.1			
PNHM70	327	41	4	16	40	140	123	71	3	M70x2	3.3			
PNHM75	366	46	4	18	40	145	128	76	3	M75x2	3.5			
PNHM80	399	50	4	20	40	150	133	81	3	M80x2	3.7			
PNHM85	401	50	4	20	40	155	138	86	3	M85x2	3.8			
PNHM90	402	50	5	25	40	160	143	91	3	M90x2	4.1			
PNHM95	419	52	5	26	40	165	148	96	3	M95x2	4.3			
PNHM100	436	54	5	27	40	170	155	101	3	M100x2	4.5			
PNHM105	453	57	5	28	42	175	160	106	6	M105x2	4.7			
PNHM110	470	59	5	29	42	180	165	111	6	M110x2	5			
PNHM115	487	61	5	30	43	185	170	116	6	M115x2	5.2			
PNHM120	504	63	5	31	43	190	175	121	6	M120x2	5.4			
PNHM125	521	65	5	33	44	195	180	126	7	M125x2	5.6			
PNHM130	519	65	5	32	44	200	185	131	7	M130x2	5.8			
PNHM135	533	67	5	33	45	205	190	136	7	M135x2	6			
PNHM140	549	69	5	34	45	210	196	141	7	M140x2	6.2			
PNHM145	565	71	5	35	46	215	202	146	7	M145x2	6.5			
PNHM150	582	73	5	36	46	220	207	151	7	M150x2	6.7			
PNHM155	647	81	5	40	46	225	214	156	7	M155x3	7			

PNHM					All measurements in mm								
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	kN	cm <sup>2</sup>	mm	cm <sup>3</sup>	А	D	D1	D2	K	Y	kg		
PNHM160	683	85	6	51	47	235	220	161	7	M160x3	7.7		
PNHM165	746	93	6	56	47	240	225	166	7	M165x3	8.2		
PNHM170	773	97	6	58	48	245	232	171	7	M170x3	8.6		
PNHM180	811	101	6	61	48	255	243	181	7	M180x3	9.1		
PNHM190	921	115	8	92	50	270	255	191	8	M190x3	10.5		
PNHM200	1013	127	8	101	50	280	267	201	8	M200x3	11.5		
PNHM205	1055	132	8	106	51	290	272	207	8	Tr 205x4	12.3		
PNHM210	1077	135	9	121	52	295	278	212	9	Tr 210x4	12.7		
PNHM215	1098	137	9	124	53	300	283	217	9	Tr 215x4	13.2		
PNHM220	1155	144	9	130	53	305	288	222	9	Tr 220x4	13.5		
PNHM225	1221	153	10	153	54	315	296	227	9	Tr 225x4	15		
PNHM230	1286	161	10	161	54	320	302	232	9	Tr 230x4	15.3		
PNHM235	1300	162	10	162	54	325	307	237	9	Tr 235x4	15.5		
PNHM240	1318	165	10	165	55	330	312	242	9	Tr 240x4	16.1		
PNHM250	1448	181	10	181	56	345	325	252	10	Tr 250x4	18		
PNHM260	1497	187	11	206	57	355	337	262	10	Tr 260x4	19		
PNHM270	1571	196	12	236	58	370	348	272	10	Tr 270x4	21.1		
PNHM275	1634	204	12	245	58	375	337	277	10	Tr 275x4	21.5		
PNHM280	1698	212	12	255	59	380	342	282	10	Tr 280x4	22.3		
PNHM290	1749	219	13	284	60	390	352	292	10	Tr 290x4	23.3		
PNHM295	1842	230	13	299	60	400	362	297	10	Tr 295x4	25		
PNHM300	1910	239	13	310	61	405	365	302	10	Tr 300x4	25.8		
PNHM310	2007	251	13	326	62	415	375	312	10	Tr 310x5	27		
PNHM315	2035	254	13	331	62	420	385	317	10	Tr 315x5	27.5		
PNHM320	2123	265	14	372	63	430	405	322	10	Tr 320x5	29.9		
PNHM330	2163	270	14	379	64	440	415	332	11	Tr 330x5	31		
PNHM335	2191	274	14	383	64	445	420	337	11	Tr 335x5	32		
PNHM340	2266	283	14	397	65	450	425	342	11	Tr 340x5	32.5		
PNHM345	2295	287	14	402	65	455	430	347	11	Tr 345x5	33.5		
PNHM350	2449	306	14	429	66	465	438	352	11	Tr 350x5	35		
PNHM355	2430	304	15	456	67	470	445	357	11	Tr 355x5	36.5		

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	kN	cm <sup>2</sup>	mm	cm <sup>3</sup>	А	D	D1	D2	K	Y	kg			
PNHM360	2509	314	15	470	67	475	450	362	11	Tr 360x5	37			
PNHM365	2533	317	15	475	67	482	455	367	11	Tr 365x5	38			
PNHM370	2570	321	16	514	68	490	460	372	11	Tr 370x5	40			
PNHM375	2651	331	16	530	68	495	465	377	11	Tr 375x5	41			
PNHM380	2682	335	16	536	69	500	472	382	11	Tr 380x5	41.5			
PNHM385	2765	346	16	553	69	505	478	387	11	Tr 385x5	42			
PNHM395	2868	358	16	574	69	512	488	397	11	Tr 395x5	43			
PNHM400	2945	368	17	626	71	525	495	402	11	Tr 400x5	47			
PNHM410	3065	383	17	651	71	535	505	412	11	Tr 410x5	48			
PNHM415	3097	387	17	658	71	540	510	417	11	Tr 415x5	49			
PNHM420	3130	391	17	665	72	545	517	422	12	Tr 420x5	50			
PNHM430	3195	399	17	679	74	555	527	432	12	Tr 430x5	52			
PNHM435	3228	404	17	686	74	560	533	437	12	Tr 435x5	53			
PNHM440	3438	430	17	731	74	565	538	442	12	Tr 440x5	54			
PNHM450	3508	438	17	745	76	580	548	452	12	Tr 450x5	58			
PNHM460	3577	447	18	805	76	590	560	462	12	Tr 460x5	59.5			
PNHM470	3646	456	18	820	76	600	570	472	12	Tr 470x5	61			
PNHM480	3715	464	18	836	76	612	582	482	12	Tr 480x5	63			
PNHM490	4147	518	19	985	80	625	593	492	13	Tr 490x5	69			
PNHM500	4222	528	20	1056	80	635	605	502	13	Tr 500x5	70			

