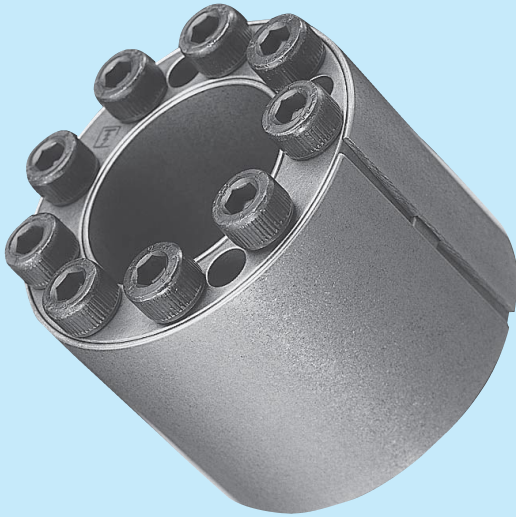


Power-Lock®

# AD-N Series

Sizes :  $\phi 19 \sim \phi 300$   
Shaft tolerance : h8  
Hub bore tolerance : H8  
Surface roughness : Below 12S

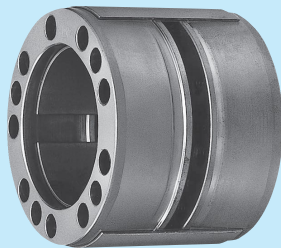
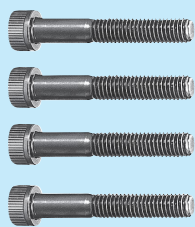


RoHS compliant.

## Features

- 1 High Capacity**  
Capable of transmitting 1.5 to 3 times the rated torque of the AS Series.
- 2 Same Inner and Outer Diameters as the AS Series**  
Designed with the same inner and outer diameters as an AS Series Power-Lock.
- 3 Self-Centering**  
These units provide accurate shaft-hub alignment and concentricity, allowing straight bore mounting.
- 4 New Electroless Nickel-Plated Models**  
Electroless nickel-plated models also available in  $\phi 50$  to  $\phi 100$  mm.  
Ideal for driving heavy transmission loads in clean rooms.

## Parts



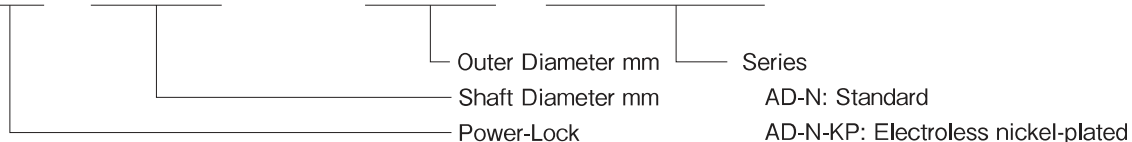
### < Caution >

The taper angles of "Power-Lock" AD-N Series shaft-hub locking devices are smaller than those of other similar devices. To install or remove a "Power-Lock" AD-N Series shaft-hub locking device, you must tighten the bolts gradually. Rapid tightening will damage the bolts and screw holes. Even tightening may be best accomplished by turning each bolt in increments of approximately 30°.

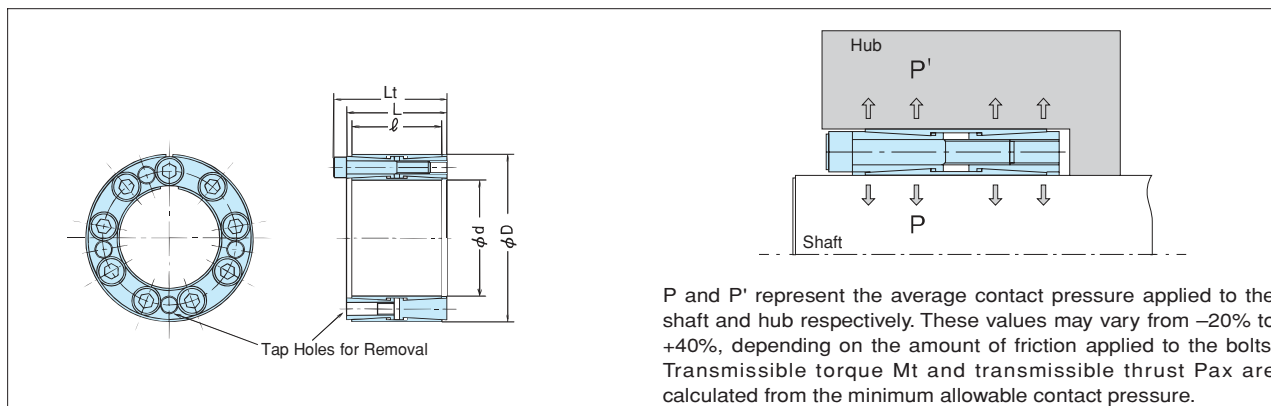
These products come in a complete one-piece unit, so the only removable parts are the locking bolts. The holes that do not contain bolts when delivered are the tap holes prepared for removal.

## Reference Number System

**PL 045 X 075 AD - N**



# Model Numbers and Specifications



\* Note) 3

Model No. d X D Shaft Diameter X Outer Diameter	Dimensions mm			Transmissible Torque		Transmissible Thrust		Contact Pressure				Locking Bolts			Mass kg	
	ℓ	L	Lt	Mt		Pax		Shaft P		Hub P'		Quantity	Size	Tightening Torque MA		
				N · m	{kgf · m}	kN	{kgf}	MPa	{kgf/mm <sup>2</sup> }	MPa	{kgf/mm <sup>2</sup> }			N · m		{kgf · m}
<b>PL 019 X 047 AD-N</b>	30	35	41	382	39	40.6	4140	237	24.1	96	9.8	6	M6 × 28	16.7	1.7	0.36
<b>PL 020 X 047 AD-N</b>	30	35	41	402	41	40.6	4140	225	22.9	96	9.8	6	M6 × 28	16.7	1.7	0.35
<b>PL 022 X 047 AD-N</b>	30	35	41	441	45	40.6	4140	204	20.8	96	9.8	6	M6 × 28	16.7	1.7	0.33
<b>PL 024 X 050 AD-N</b>	35	40	46	647	66	54.2	5530	214	21.8	103	10.5	8	M6 × 30	16.7	1.7	0.42
<b>PL 025 X 050 AD-N</b>	35	40	46	676	69	54.2	5530	205	21.0	103	10.5	8	M6 × 30	16.7	1.7	0.41
<b>PL 028 X 055 AD-N</b>	35	40	46	755	77	54.2	5530	183	18.7	93	9.5	8	M6 × 30	16.7	1.7	0.49
<b>PL 030 X 055 AD-N</b>	35	40	46	784	80	54.2	5530	171	17.5	93	9.5	8	M6 × 30	16.7	1.7	0.46
<b>PL 032 X 060 AD-N</b>	45	50	56	1270	130	81	8300	189	19.2	101	10.3	10	M6 × 35	16.7	1.7	0.72
<b>PL 035 X 060 AD-N</b>	45	50	56	1370	140	81	8300	172	17.6	101	10.3	10	M6 × 35	16.7	1.7	0.66
<b>PL 038 X 065 AD-N</b>	52	57	63	1670	170	89	9100	151	15.4	88	9.0	11	M6 × 40	16.7	1.7	0.88
<b>PL 040 X 065 AD-N</b>	52	57	63	1760	180	89	9100	144	14.7	88	9.0	11	M6 × 40	16.7	1.7	0.83
<b>PL 042 X 075 AD-N</b>	56	64	72	3530	360	170	17300	192	19.6	108	11.0	9	M8 × 50	40.2	4.1	1.36
<b>PL 045 X 075 AD-N</b>	56	64	72	3820	390	170	17300	179	18.3	108	11.0	9	M8 × 50	40.2	4.1	1.27
<b>PL 048 X 080 AD-N</b>	56	64	72	4070	415	170	17300	168	17.1	101	10.3	9	M8 × 50	40.2	4.1	1.43
<b>PL 050 X 080 AD-N</b>	56	64	72	4210	430	170	17300	162	16.5	101	10.3	9	M8 × 50	40.2	4.1	1.38
<b>PL 055 X 085 AD-N</b>	56	64	72	4610	470	170	17300	147	15.0	95	9.7	9	M8 × 50	40.2	4.1	1.49
<b>PL 060 X 090 AD-N</b>	56	64	72	6170	630	208	21200	165	16.8	110	11.2	11	M8 × 50	40.2	4.1	1.59
<b>PL 065 X 095 AD-N</b>	56	64	72	6760	690	208	21200	130	13.3	89	9.1	11	M8 × 50	40.2	4.1	1.71
<b>PL 070 X 110 AD-N</b>	70	78	88	11600	1180	330	33700	179	18.3	114	11.6	11	M10 × 70	81.3	8.3	3.18
<b>PL 075 X 115 AD-N</b>	70	78	88	12300	1260	330	33700	167	17.0	109	11.1	11	M10 × 70	81.3	8.3	3.36
<b>PL 080 X 120 AD-N</b>	70	78	88	14400	1470	360	36700	171	17.4	114	11.6	12	M10 × 70	81.3	8.3	3.52
<b>PL 085 X 125 AD-N</b>	70	78	88	15300	1560	360	36700	161	16.4	109	11.1	12	M10 × 70	81.3	8.3	3.70
<b>PL 090 X 130 AD-N</b>	70	78	88	17500	1790	390	39800	165	16.8	114	11.6	13	M10 × 70	81.3	8.3	3.88
<b>PL 095 X 135 AD-N</b>	70	78	88	18500	1890	390	39800	156	15.9	110	11.2	13	M10 × 70	81.3	8.3	4.06
<b>PL 100 X 145 AD-N</b>	90	100	112	26500	2700	531	54200	157	16.0	108	11.0	12	M12 × 90	142	14.5	6.13
<b>PL 110 X 155 AD-N</b>	90	100	112	31700	3230	576	58800	155	15.8	110	11.2	13	M12 × 90	142	14.5	6.65
<b>PL 120 X 165 AD-N</b>	90	100	112	39900	4070	664	67800	164	16.7	119	12.1	15	M12 × 90	142	14.5	7.13
<b>PL 130 X 180 AD-N</b>	104	116	130	50700	5170	779	79500	153	15.6	111	11.3	13	M14 × 90	225	23.0	8.32
<b>PL 140 X 190 AD-N</b>	104	116	130	62900	6420	900	91800	164	16.7	121	12.3	15	M14 × 90	225	23.0	8.67
<b>PL 150 X 200 AD-N</b>	104	116	130	71900	7340	959	97900	164	16.7	123	12.5	16	M14 × 90	225	23.0	9.15
<b>PL 160 X 210 AD-N</b>	104	116	130	81500	8320	1020	104000	163	16.6	123	12.6	17	M14 × 90	225	23.0	9.69
<b>PL 170 X 225 AD-N</b>	134	146	162	106000	10800	1240	127000	146	14.9	110	11.2	15	M16 × 120	348	35.5	17.7
<b>PL 180 X 235 AD-N</b>	134	146	162	120000	12200	1330	136000	147	15.0	113	11.5	16	M16 × 120	348	35.5	18.5
<b>PL 190 X 250 AD-N</b>	134	146	162	134000	13700	1410	144000	148	15.1	113	11.5	17	M16 × 120	348	35.5	21.4
<b>PL 200 X 260 AD-N</b>	134	146	162	141000	14400	1410	144000	140	14.3	108	11.0	17	M16 × 120	348	35.5	22.5
<b>PL 220 X 285 AD-N</b>	134	146	162	183000	18700	1670	170000	150	15.3	118	12.0	20	M16 × 120	348	35.5	26.6
<b>PL 240 X 305 AD-N</b>	134	146	162	220000	22400	1830	187000	151	15.4	120	12.2	22	M16 × 120	348	35.5	28.7
<b>PL 260 X 325 AD-N</b>	134	146	162	238000	24300	1830	187000	114	11.6	91	9.3	22	M16 × 120	348	35.5	30.9
<b>PL 280 X 355 AD-N</b>	165	177	197	364000	37100	2600	265000	150	15.3	118	12.0	20	M20 × 150	676	69.0	46.8
<b>PL 300 X 375 AD-N</b>	165	177	197	429000	43800	2860	292000	154	15.7	123	12.5	22	M20 × 150	676	69.0	49.7

Notes) 1. Stocked models are in bold.

2. Mt indicates torque at 0 transmissible thrust, while Pax indicates transmissible thrust at 0 torque. If transmissible torque and thrust apply simultaneously calculate and compare the combined value with the transmissible torque provided in the table.

3. Dimensions when this product is attached to the shaft and hub.