Pilot Bearingless PTO

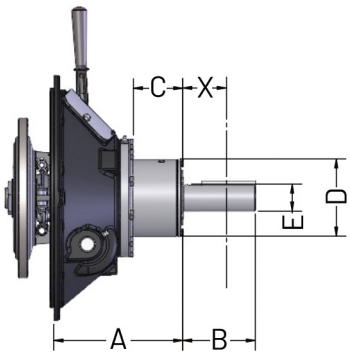
QUALITY IS STANDARD

- Available in sizes 6.5" through 11.5"
- Spherical main bearings
- Optional sintered iron plates
- Ball bearing throw-out collar
- Save time with ease of engine installation
- Suitable for side load & inline applications
- Removes loading of engine bearings

SPECIFICATIONS

	SAE Housing	Maximum Input Torque Nm (lb-ft)		Maximum Safe Speed rpm		Weight kg (lbs)
		Organic	Sintered	Solid Plates	Split Plates	
PBL106P	4, 5, 6	216 (159)	—	3500	3500	29.2 (64.3)
PBL107P	4, 5, 6	237 (175)	—	3200	3200	31.7 (69.8)
PBL108P	3, 4, 5	312 (230)	390 (288)	3100	3100	41.1 (90.6)
PBL110P	1, 2, 3, 4	445 (328)	556 (410)	3930	3500	54.9 (121.0)
PBL111P	1, 2, 3	617 (455)	771 (569)	3600	3200	71.1 (157.0)

	PBL106	PBL107	PBL108	PBL110	PBL111
SAE J620 Clutch Size	6.5"	7.5"	8.0"	10.0"	11.5"
SAE J617 Housing Size	#5	#5	#4	#4	#3
A	215.4 (8.48)	215.4 (8.48)	212.8 (8.38)	252.6 (9.94)	278.3 (10.96)
B	62.1 (2.44)	62.1 (2.44)	117.9 (4.64)	113.6 (4.47)	122.4 (4.81)
C	74.3 (2.92)	74.3 (2.92)	82.2 (3.24)	115.2 (4.54)	115.1 (4.53)
D	114.0 (4.48)	114.0 (4.48)	127.0 (5.00)	146.0 (5.74)	146.0 (5.74)
E	36.5 (1.44)	36.5 (1.44)	44.4 (1.75)	57.1 (2.25)	57.1 (2.25)

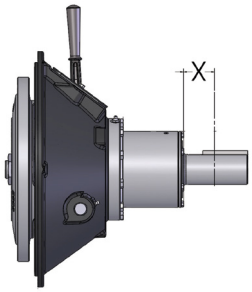


Dimensions are in mm (in).
All clutch engagements to be with prime mover below 1000 RPM. High inertia loads may require use of larger clutch.
Offset spacers sold separately to accommodate engine flywheels that deviate from the SAE J620 standard.
Contact Twin Disc application engineering department for assistance.

Click here to learn more about Pilot Bearingless PTOs

PBL PTO – ALLOWABLE SIDE LOAD, KG (LBS)

X Distance mm (in)



	RPM	-25.4 (-1)	0 (0)	25.4 (1)	50.8 (2)	76.2 (3)	101.6 (4)	127.0 (5)
PBL106P	1800	1667 (3674)	1188 (2618)	922 (2034)	754 (1662)	638 (1406)		
	2200	1569 (3459)	1118 (2465)	869 (1915)	720 (1565)	600 (1324)		
	2800	1460 (3218)	1040 (2293)	808 (1781)	675 (1456)	559 (1231)		
	3500	1365 (3010)	973 (2145)	756 (1666)	1399 (1362)	522 (1152)		
PBL107P	1800	1667 (3674)	1188 (2618)	922 (2034)	754 (1662)	638 (1406)		
	2200	1569 (3459)	1118 (2465)	869 (1915)	710 (1565)	600 (1324)		
	2600	1492 (3290)	1064 (2345)	826 (1821)	675 (1489)	571 (1259)		
	3200	1402 (3092)	999 (2203)	776 (1711)	635 (1399)	537 (1183)	101.6 (4)	127.0 (5)
PBL108P	1800	1927 (4247)	1418 (3126)	1122 (2473)	928 (2046)	791 (1745)	690 (1521)	611 (1348)
	2200	1814 (3999)	1335 (2944)	1056 (2329)	874 (1926)	745 (1643)	649 (1432)	576 (1269)
	2600	1725 (3804)	1270 (2800)	1005 (2215)	831 (1832)	709 (1562)	618 (1362)	547 (1207)
	3100	1637 (3608)	1205 (2656)	953 (2101)	788 (1738)	672 (1482)	586 (1292)	519 (1145)
PBL110P	1800	2565 (5654)	2051 (4522)	1709 (3767)	1465 (3229)	1281 (2825)	1139 (2511)	1025 (2260)
	2200	2415 (5324)	1931 (4258)	1609 (3547)	1379 (3040)	1206 (2660)	1072 (2364)	965 (2128)
	2800	2246 (4952)	1796 (3960)	1497 (3300)	1283 (2828)	1122 (2474)	998 (2199)	898 (1979)
	3900	2034 (4483)	1626 (3586)	1355 (2988)	1161 (2560)	1016 (2240)	903 (1991)	813 (1792)
PBL111P	1800	2565 (5654)	2051 (4522)	1709 (3767)	1465 (3229)	1281 (2825)	1139 (2511)	1025 (2260)
	2200	2415 (5324)	1931 (4258)	1609 (3547)	1379 (3040)	1206 (2660)	1072 (2364)	965 (2128)
	2800	2246 (4952)	1796 (3960)	1497 (3300)	1283 (2828)	1122 (2474)	998 (2199)	898 (1979)
	3600	2083 (4592)	1666 (3673)	1388 (3060)	1190 (2623)	1041 (2295)	925 (2039)	833 (1835)

ALLOWABLE SIDE LOAD – KG (LBS)

The following general formula should be used for determining the actual applied load: $L = \frac{126{,}000 \times HP}{N \times D} \times F \times LF$

WHERE
- L = Actual applied load (lbs)
- N = Shaft speed (rpm)
- D = Pitch diameter (in) of sheave, etc.
- F = Load factor
  1.0 for chain or gear drive, 1.5 for timing belts, 2.5 for all v belts, 3.5 for flat belts
- LF = 2.1 for reciprocating compressors and other severe shock drives and 1.8 for large inertia type drives (i.e. crushers, chippers, planers, etc.)

Compound drives and power engaged power take-off applications must have written factory review.

TWINDISC.COM
Twin Disc, Incorporated
Milwaukee, WI 53202 USA
Phone +1 (262) 638-4000

2504_Bulletin_PBL PTO