

AM 220 PUMP DRIVE

**MAXIMUM INPUT POWER 430 KW (580 HP)
1:1 RATIO @ 3200 RPM**

**QUALITY IS STANDARD:**

- CAST IRON HOUSINGS
- SHAVED GEARS
- BALL BEARINGS
- CASE HARDENED SHAFTS
- VITON SEALS ON INPUT SHAFT
- OUTPUT ROTATION OPPOSITE THE DIRECTION OF INPUT ROTATION
- GEAR RATIOS IDENTICAL ON ALL OUTPUTS
- MODULAR DESIGN

AM 220 TECHNICAL DATA

RATIO :1	MAX. INPUT TORQUE N-m (lbf-ft)	MAX. OUTPUT TORQUE PER PUMP PAD N-m (lbf-ft)	MAX. INPUT SPEED RPM	MAX. OUTPUT SPEED RPM	OIL QUANTITY L (gal)
0.49	1424 (1050)	407 (300)	2400	4898	2.5 (0.66)
0.58	1419 (1046)	465 (343)	2500	4310	2.0 (0.53)
0.67	1383 (1020)	515 (380)	2650	3955	1.8 (0.48)
0.77	1325 (977)	579 (427)	2850	3701	1.8 (0.48)
1.00	1289 (950)	692 (510)	3200	3200	1.4 (0.37)
1.30	990 (730)	753 (555)	3600	2769	1.4 (0.37)
1.50	882 (650)	766 (565)	3950	2633	1.2 (0.32)

LOAD CLASSIFICATIONS BASED UPON AGMA LOAD CHARACTERISTICS

PRIME MOVER	DURATION OF SERVICE	DRIVEN MACHINE LOAD CLASSIFICATIONS		
		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
Electric motor	Up to 3 hours per day	1.00	1.25	1.50
	3-10 hours per day	1.00	1.25	1.75
	Over 10 hours per day	1.25	1.50	2.00
Multi-cylinder internal combustion engine	Up to 3 hours per day	1.00	1.25	1.75
	3-10 hours per day	1.25	1.50	2.00
	Over 10 hours per day	1.50	1.75	2.25
Multi-cylinder internal combustion engine with high torque rise	Up to 3 hours per day	1.50	1.75	2.25
	3-10 hours per day	1.75	2.00	2.50
	Over 10 hours per day	2.00	2.25	2.75
Single cylinder internal combustion engine	Up to 3 hours per day	1.25	1.50	2.00
	3-10 hours per day	1.50	1.75	2.25
	Over 10 hours per day	1.75	2.00	2.50

All clutch engagements to be with prime mover below 1000 RPM. High inertia loads may require use of larger clutch. Contact Twin Disc application engineering department for assistance.

TO CALCULATE APPLICATION TORQUE:

$$\frac{5252 \times \text{HP}}{\text{Engine RPM}} = \text{Torque}$$

$$\text{Torque} \times \text{Load Factor} = \text{Application Torque}$$

Use load factor from chart at left

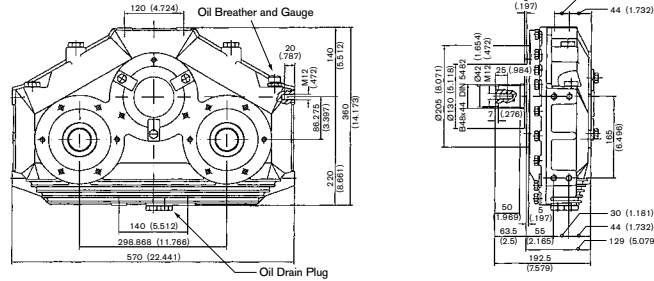
Maximum torque and maximum speed may be limited by clutch option.

Specifications subject to change without prior notice in the interest of continual product improvement.

Contact your local Twin Disc representative for engineering specifications.



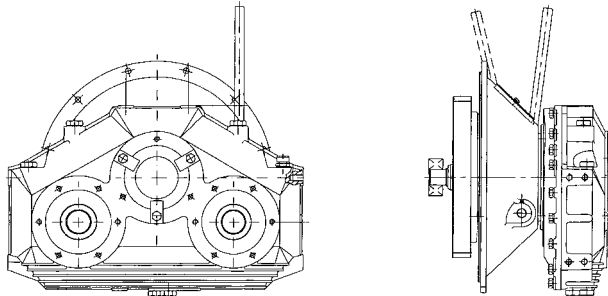
Basic Pump Drive
AM 220 B



With one plate 10" clutch
AM 220 BD 130

With one plate 11" clutch
AM 220 BD 145

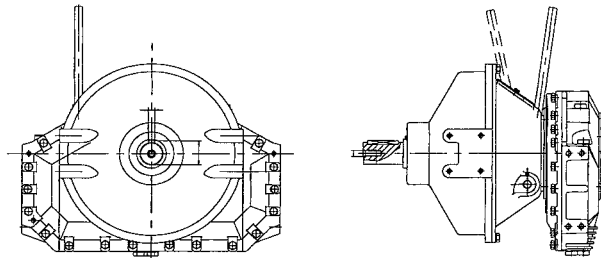
With two plate 11" clutch
AM 220 BD 290



Independent Mount
 with one plate 10" clutch
AM 220 BDS 130

Independent Mount
 with one plate 11" clutch
AM 220 BDS 145

Independent Mount
 with two plate 11" clutch
AM 220 BDS 290



AM 220 MOMENT OF INERTIA DATA

RATIO	B	BD 130	BD 145	BD 290	BDS 130	BDS 145	BDS 290
:1	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)	kg-m ² (lb-ft ²)
0.49							
0.58							
0.67	0.0952 (2.26)	0.2327 (5.52)	0.358 (8.49)	0.545 (12.94)	0.345 (8.19)	0.533 (12.64)	0.770 (18.28)
0.77	0.0839 (1.99)	0.2214 (5.25)	0.346 (8.22)	0.540 (12.67)	0.334 (7.92)	0.521 (12.37)	0.759 (18.01)
1.00	0.0561 (1.33)	0.1936 (4.59)	0.319 (7.56)	0.506 (12.01)	0.306 (7.26)	0.494 (11.71)	0.731 (17.35)
1.30	0.0503 (1.19)	0.1878 (4.46)	0.313 (7.42)	0.500 (11.87)	0.300 (7.13)	0.488 (11.58)	0.725 (17.21)
1.50	0.0476 (1.13)	0.1851 (4.39)	0.310 (7.36)	0.498 (11.81)	0.298 (7.06)	0.485 (11.51)	0.723 (17.15)

MODEL	WEIGHT kg (lb)
AM 220 B	70 (154)
AM 220 BD 130	110 (243)
AM 220 BD 145	114 (251)
AM 220 BD 290	136 (300)
AM 220 BDS 130	141 (311)
AM 220 BDS 145	145 (320)
AM 220 BDS 290	163 (359)

Twin Disc, Incorporated reminds users of these products that their safe operation depends on use in compliance with engineering information provided. Users are also reminded that safe operation depends on proper installation, operation and routine maintenance and inspection under prevailing conditions. It is the responsibility of users (and not Twin Disc, Incorporated) to provide and install guards or safety devices which may be required by recognized safety standards or by the Occupational Safety and Health Act of 1970 and its subsequent provisions.

United States of America • Australia • Belgium • France • Italy • Singapore • Switzerland

For nearly a century, we've been putting horsepower to work by designing, engineering and manufacturing rugged-duty industrial products. Our products and our reputation are bolted to the most renowned engine manufacturers and equipment OEMs in the world. Our mission is to make your machines and vehicles more productive, more durable, more operator-friendly, more cost-effective. From design and installation consultation through after-sale support, Twin Disc and its distributors are committed to your business. No one knows more about managing horsepower in more ways than Twin Disc.

TRANSMISSIONS • CLUTCHES • PTOS
 PUMP DRIVES • TORQUE CONVERTERS
 GEARBOXES • HYDRAULIC PTO PRODUCTS



Twin Disc, Incorporated
 Racine, Wisconsin 53403 USA
 Phone +1-262-638-4000
 Fax +1-262-638-4482
 www.twindisc.com

TD-Bulletin-AM220 Pump Drive
 © 2006, Twin Disc, Incorporated
 Printed in the USA