

**AM 450 PUMP DRIVE**

**MAXIMUM INPUT POWER 965 KW (1295 HP)  
1:1 RATIO @ 2400 RPM**

**QUALITY IS STANDARD:**

- CAST IRON HOUSINGS
- CASE HARDENED AND GROUND SPUR 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 450 TECHNICAL DATA**

RATIO :1	MAX. INPUT TORQUE	MAX. OUTPUT TORQUE PER PUMP PAD	MAX. INPUT SPEED	MAX. OUTPUT SPEED	OIL QUANTITY
	N-m (lbf-ft)	N-m (lbf-ft)	RPM	RPM	L (gal)
0.67	3839 (2830)	963 (710)	2000	2985	2.5 (0.66)
0.77	3839 (2830)	1072 (790)	2100	2727	2.5 (0.66)
0.89	3839 (2830)	1173 (865)	2250	2528	2.3 (0.61)
1.00	3839 (2830)	1318 (972)	2400	2400	2.3 (0.61)

**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.

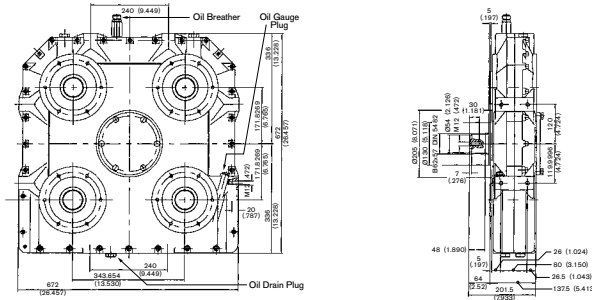
Specifications subject to change without prior notice in the interest of continual product improvement.

Contact your local Twin Disc representative for engineering specifications.



**Basic Pump Drive  
AM 450 B**

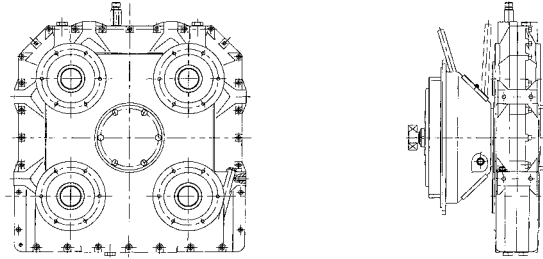
Four additional pump pads available on input side of drive.



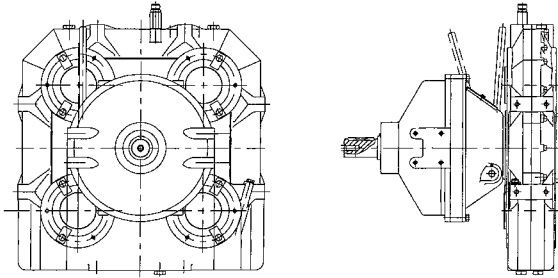
**With two plate 11" clutch  
AM 450 BD 290**

**With two plate 14" clutch  
AM 450 BD 2200**

**With three plate 14" clutch  
AM 450 BD 3300**

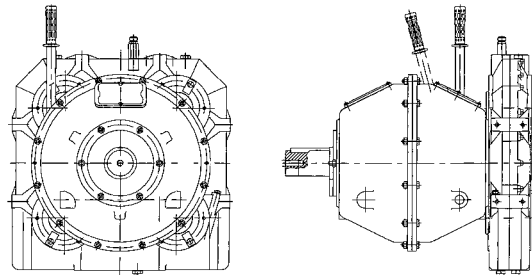


**Independent Mount  
with two plate 11" clutch  
AM 450 BDS 290**



**Independent Mount  
with two plate 14" clutch  
AM 450 BDS 2200**

**Independent Mount  
With three plate 14" clutch  
AM 450 BDS 3300**



**AM 450 MOMENT OF INERTIA DATA**

RATIO	B	BD 290	BD 2200	BD 3300	BDS 290	BDS 2200
:1	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )	kg-m <sup>2</sup> (lb-ft <sup>2</sup> )
0.67	0.6413 (15.22)	1.109 (26.32)	2.466 (58.53)	3.191 (75.73)	1.316 (31.24)	3.641 (86.41)
0.77	0.5777 (13.71)	1.045 (24.80)	2.403 (57.02)	3.128 (74.22)	1.253 (29.73)	3.578 (84.90)
0.89	0.4527 (10.74)	0.920 (21.84)	2.278 (54.05)	3.003 (71.26)	1.128 (26.76)	3.453 (81.93)
1.00	0.4445 (10.55)	0.895 (21.23)	2.270 (53.86)	2.995 (71.06)	1.120 (26.57)	3.445 (81.74)

MODEL	WEIGHT kg (lb)
AM 450 B	205 (452)
AM 450 BD 290	271 (597)
AM 450 BD 2200	338 (745)
AM 450 BD 3300	381 (840)
AM 450 BDS 290	298 (657)
AM 450 BDS 2200	448 (988)

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.

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