# **AM 320 PUMP DRIVE**

MAXIMUM INPUT POWER 205 KW (275 HP) FOR RATIO 1.00:1 @ 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



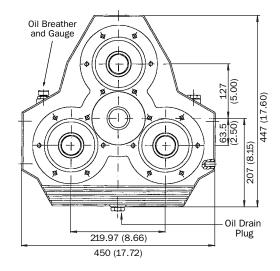
#### **AM 320 TECHNICAL DATA**

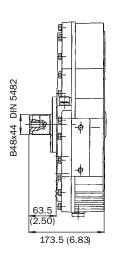
MAXIMUM INPUT TORQUE N-m (lbf-ft)	MAX. OUTPUT TORQUE PER PUMP PAD N-m (lbf-ft)	MAXIMUM INPUT SPEED RPM	MAXIMUM OUTPUT SPEED RPM	OIL QUANTITY L (gal)
735 (542)	250 (184)	2650	3897	3.1 (0.82)
700 (516)	275 (203)	2850	3608	2.4 (0.63)
670 (494)	300 (221)	3200	3596	1.7 (0.45)
630 (465)	315 (232)	3200	3200	2.2 (0.58)
560 (413)	320 (236)	3300	2920	1.7 (0.45)
550 (406)	350 (258)	3600	2835	2.0 (0.53)
500 (369)	365 (269)	3950	2687	1.8 (0.48)
	INPUT TORQUE N-m (lbf-ft) 735 (542) 700 (516) 670 (494) 630 (465) 560 (413) 550 (406)	INPUT TORQUE N-m (lbf-ft)         PER PUMP PAD N-m (lbf-ft)           735 (542)         250 (184)           700 (516)         275 (203)           670 (494)         300 (221)           630 (465)         315 (232)           560 (413)         320 (236)           550 (406)         350 (258)	INPUT TORQUE N-m (lbf-ft)         PER PUMP PAD N-m (lbf-ft)         INPUT SPEED RPM           735 (542)         250 (184)         2650           700 (516)         275 (203)         2850           670 (494)         300 (221)         3200           630 (465)         315 (232)         3200           560 (413)         320 (236)         3300           550 (406)         350 (258)         3600	INPUT TORQUE N-m (lbf-ft)         PER PUMP PAD N-m (lbf-ft)         INPUT SPEED RPM         OUTPUT SPEED RPM           735 (542)         250 (184)         2650         3897           700 (516)         275 (203)         2850         3608           670 (494)         300 (221)         3200         3596           630 (465)         315 (232)         3200         3200           560 (413)         320 (236)         3300         2920           550 (406)         350 (258)         3600         2835

See reverse for selection procedures.

#### **AM 320 DIMENSIONS**

Basic Pump Drive Weight: 42 kg (93 lb)





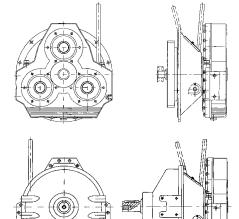


With one plate 10" clutch AM 320 BD 130

With one plate 11" clutch AM 320 BD 145

Independent Mount with one plate 10" clutch AM 320 BDS 130

Independent Mount with one plate 11" clutch AM 320 BDS 145



## TECHNICAL DATA FOR AVAILABLE CLUTCHES See below for selection procedures

CLUTCH TYPE	SAE SIZE	MAXIMUM INPUT TORQUE N-m (lbf-ft)	MAXIMUM SPEED RPM	POWER kW (hp)
BD 130	3 or 4	330 (243)	3100	70 (94)
BD 145	3 or 4	450 (332)	3100	80 (107)
BDS 130	_	330 (243)	3100	70 (94)
BDS 145	_	450 (332)	3100	80 (107)

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.

# MODEL kg (lb) AM 320 BD 130 82 (181) AM 320 BD 145 86 (190) AM 320 BDS 130 113 (249) AM 320 BDS 145 117 (258)

### **PUMP DRIVE SELECTION PROCEDURE**

- 1. Identify the number and type of hydraulic pumps to be applied.
- 2. Check the maximum torque absorbed by the pump or pumps on each output of the pump drive.
- 3. Check the maximum power/torque entering the pump drive from the prime mover.
- 4. Compare the size of the hydraulic pumps to the selected pump drive installation dimensions to determine if the proper clearance exists to mount the pumps on the pump drive.
- 5. Select the desired input configuration:
  - B Basic mount, either with drive plate or rubber block drive
  - BD Engine mounted clutch input
  - BDS Independently mounted clutch input

If a BD or BDS option is selected, verify that the input speed does not exceed the maximum allowable speed for the clutch and that the applied torque does not exceed 80% of the maximum torque rating of the clutch.

- 6. Verify that the torque value of each output is below the maximum value shown for the chosen pump drive.
- 7. Verify that the input speed does not exceed the maximum input speed shown for the pump drive.
- 8. Select the proper output option for pump adaptation. SAE adapters are available for all pump drives. Other adaptations may be available, contact Twin Disc for non SAE adaptations.
- 9. Identify cooling requirements:
  - Oil operating temperature must not exceed 105°C (221°F) with synthetic oil or 80°C (176°F) with mineral oil.
  - Depending on the input power, application and duty, a cooling system may be necessary.
  - It is advisable to check the oil temperature during the first few hours of work to make sure
    it does not exceed the maximum temperatures listed.
  - All pump drives (except AM 216 and AM 320) can be equipped with a cooling system consisting of an oil circulating pump mounted on the input shaft on the pump side, and oil/water cooler and required piping and fittings.

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.

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 aftersale 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



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<sup>\*</sup> Applied torque equals 80% or less of maximum input torque.