



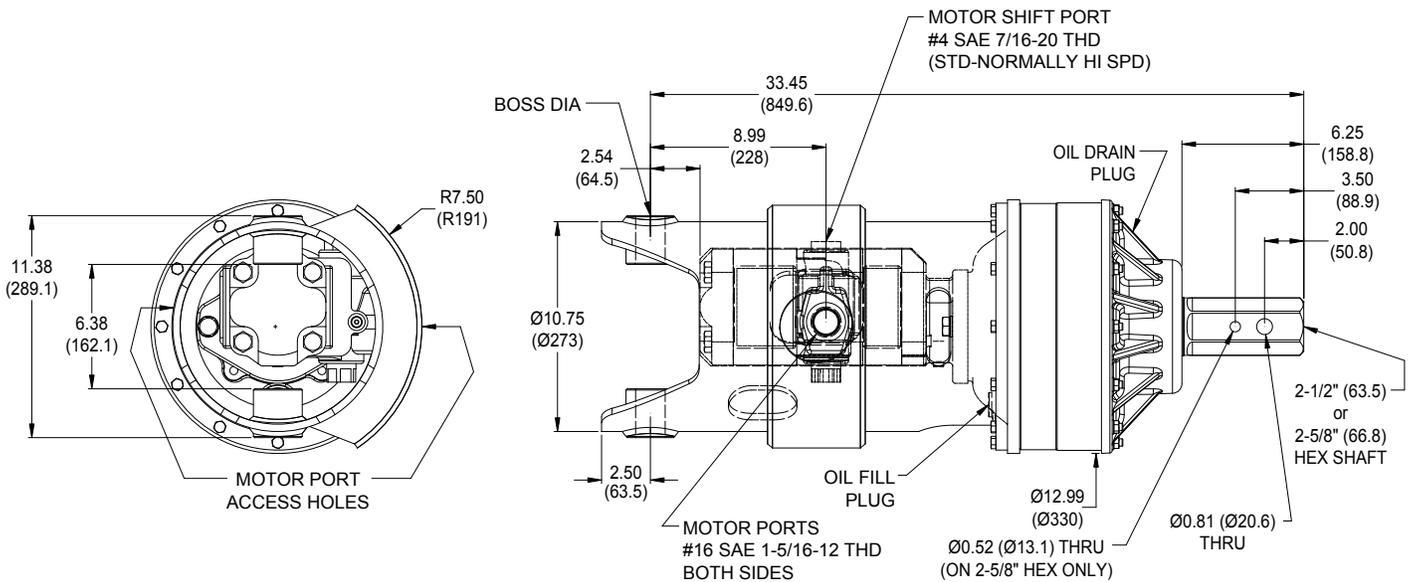
# 78 Series DiggerDrive™

## TO 12,000 FT-LB TORQUE

Hydrasync "Shift On The Fly" Data Sheet PS78\_6\_2009

The series 78, "Hydrasync" uses a high-efficiency double planetary for high torque requirements, like foundation anchor installation and drilling larger holes for piers.

The 78 is now available with automatic "Kickdown" option (when operations require it). The digger will shift to low-speed, high-torque position while you keep digging. There is no need for an additional hydraulic line to shift the motor. This option requires a motor with a high-pressure shaft seal.



TWO-SPEED, SHIFT-ON-THE-FLY HEAVY DUTY, HIGH EFFICIENCY, DOUBLE PLANETARY DRIVE  
SHAFT SIDE LOADING NOT RECOMMENDED.

### TECHNICAL SPECIFICATIONS

MOTOR MOUNT: SAE "C" 2-BOLT AND 4-BOLT  
MOTORS: 2-SPEED GEAR TYPE  
RATED OUTPUT TORQUES: TO 12,000 ft-lb (16 272 N-m)  
MAXIMUM SYSTEM PRESSURE: 2,500 psi (172.4 bar)  
MINIMUM SHIFTING PRESSURE: 300 psi (20.7 bar), MAX: 2,500 psi (172.4 bar)  
MOTOR CASE DRAIN: REQUIRED  
OUTPUT SHAFT OPTIONS: 2-1/2" (50.8 mm) OR 2-5/8" (66.8 mm) HEX  
SHAFT PULL-OUT LOAD: 15,000 lb (6 818 kgf)  
SHAFT PRESSURE LOAD: 15,000 lb (6 818 kgf)  
OIL CAPACITY: 6.5 pts (3.1 l)  
BAIL BOSS DIAMETER: 1.26" (32.0 mm) OR 1.51" (38.4mm)  
WEIGHT: 370 lb (168.2 kg) WITH MOTOR

For more information regarding Planetary Diggerdrives and other innovative products, feel free to contact us at:



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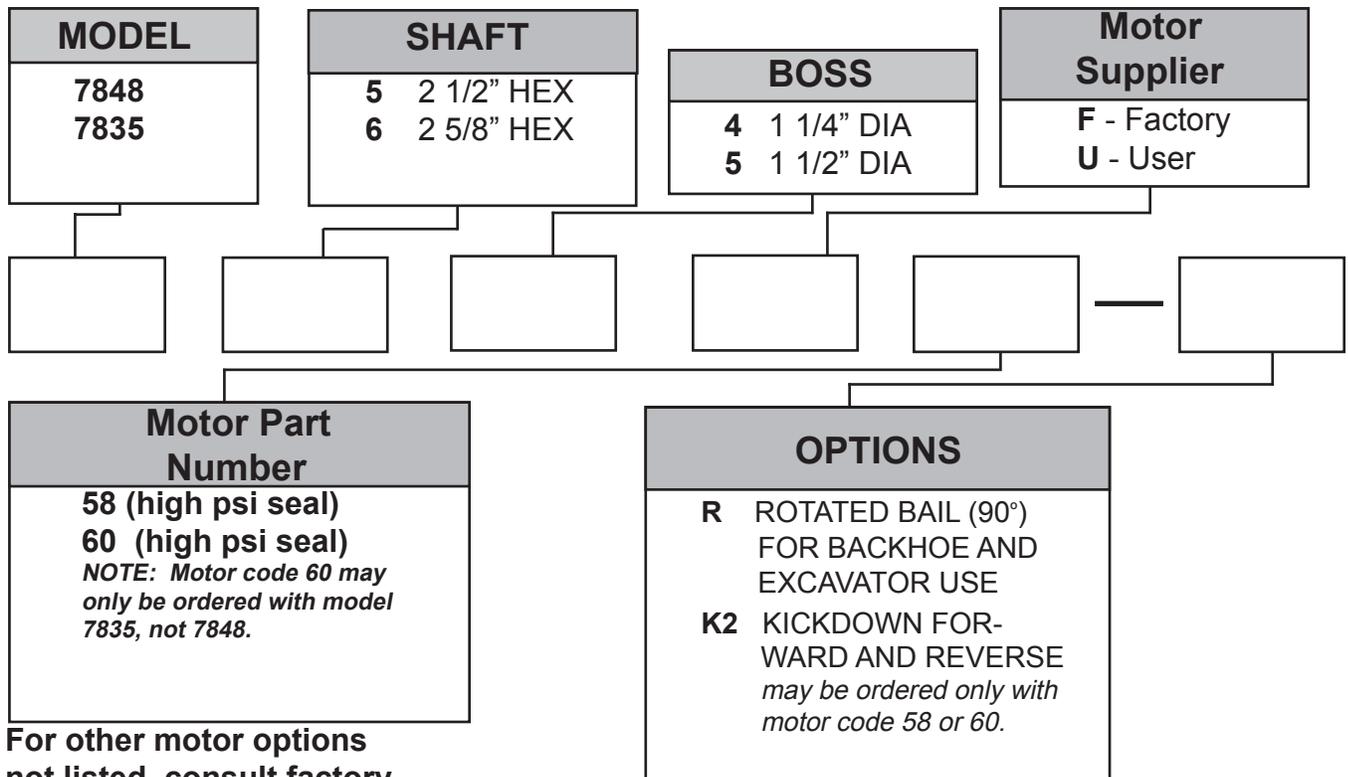
WEBSITE: [www.eskridgeinc.com](http://www.eskridgeinc.com) • E-MAIL: [sales@eskridgeinc.com](mailto:sales@eskridgeinc.com)

# Performance Data

MODEL	GEAR RATIO	MOTOR	MOTOR PRESSURE $\Delta$ psi ( $\Delta$ bar)	FLOW gpm (l/min)	RATED TORQUE*/SPEED	
					ft-lb. (N-m) HIGH SPEED	rpm LOW SPEED
78-35	35.1:1	58	2,400 (166)	40 (152)	2,471(3 350)/73 rpm	9,000(12 200)/26rpm
		60	2,400 (166)	40 (152)	2,967(4 023)/61 rpm	9,633(13 060)/24 rpm
78-48	47.8:1	58	2,400 (166)	40 (152)	3,363(4 560)/54 rpm	12,000(16 270)/19rpm

\* Maximum intermittent value.

- STARTING TORQUES ARE APPROXIMATELY 25% LESS THAN RUNNING TORQUE.
- SYSTEM BACK PRESSURE WILL REDUCE THE RUNNING TORQUES PROPORTIONALLY.
- BACK PRESSURE SHOULD BE LIMITED TO 100 psi (6,9 bar). *Kickdown version can tolerate 500 psi backpressure, max.*
- MAXIMUM FLOW RATE IS DEPENDENT UPON MOTOR DISPLACEMENTS.
- HIGH ALLOY HEAT TREATED BAIL BOSS PINS REQUIRED (CUSTOMER PROVIDED).



For other motor options not listed, consult factory.

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