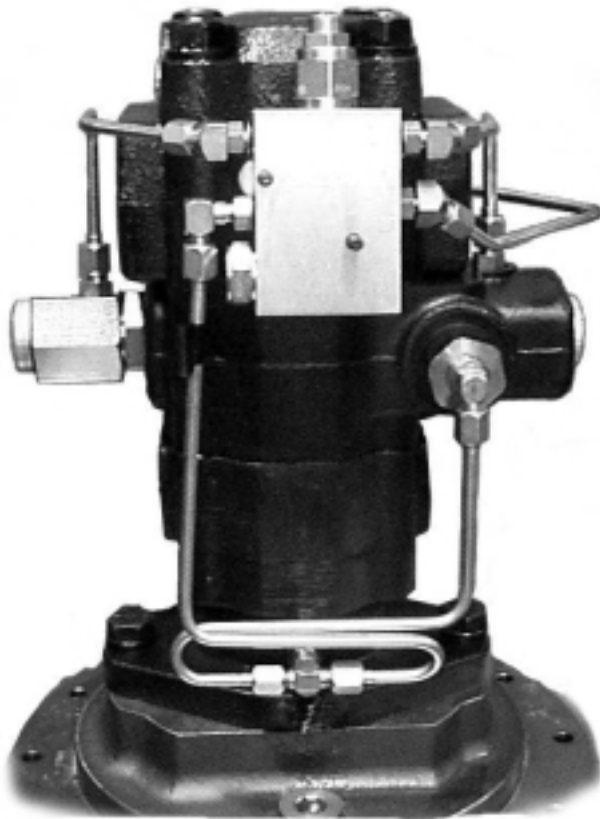


ESKRIDGE

NEW!

KICKDOWN VALVE SYSTEM FOR



HYDRASYNC™ MODELS

75 OR 78

MODELS 75 OR 78 HYDRASYNC™ WITH “KICKDOWN”

Features

--2-Speed Shift-on-the Fly Hydrasync™

- For use in utility and construction applications.**
- At 2300 psi, shifts to low speed high torque.**
- No shift line, shift valve or motor case drain line.**
- Digger stays in low, unless digger control valve is centered.**
Gives more control for driving anchors in changing soil conditions.

HOW “KICKDOWN” SYSTEMS WORK

CRITERIA

HYDRAULIC SYSTEM

2400 PSI / 2750 PSI

40 GPM MINIMUM

MOTORS: TWO SPEED WITH HIGH PRESSURE SHAFT SEAL

MOTOR MOUNT: SAE “C” 2-BOLT AND 4-BOLT

HEAVY DUTY, HIGH EFFICIENCY, DOUBLE PLANETARY DRIVE

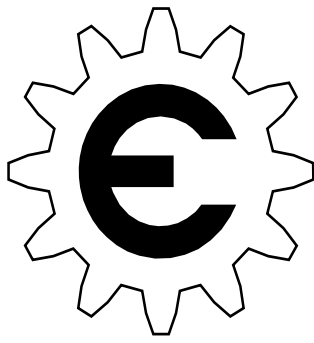
SHAFT SIDE LOADING NOT RECOMMENDED

BI-DIRECTIONAL KICKDOWN SYSTEM

For 75 or 78 Hydrasync™ Diggers (output torques from 3,000 to 20,000 ft-lb).

Kickdown valve for operation in both clockwise and counter clockwise rotation.

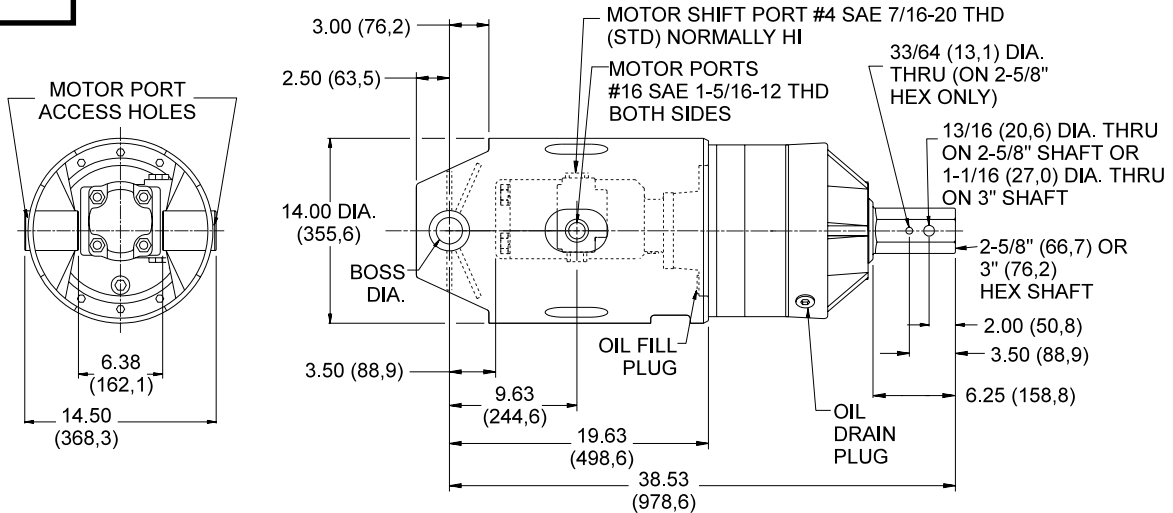
- 1.** This Kickdown system operates in both clockwise and counterclockwise direction.
- 2.** The digger will always start rotation in the High Speed-Low Torque mode.
- 3.** As the hydraulic system pressure builds, while augering, the valve senses the pressure increase and at approximately 2300 psi the valve opens, shifts the spool in the motor and “kicks down” to the Low Speed-High Torque mode.
- 4.** The digger remains in this mode, High Torque-Low Speed, until the digger control valve is centered or neutralized.
- 5.** This Kickdown valve configuration allows operators to continue augering in High Torque-Low Speed mode, once it has kicked down, as long as they do not center the digger control valve. This should be beneficial particularly when driving anchors, as it will provide more control if soil conditions change as the anchor is being driven.
- 6.** This system only requires the main pressure and return lines to the digger motor. Shift line, shift valves and drain lines are not required. All necessary valves, hoses and brackets are provided with this system.
- 7.** When using in the reverse direction, if an auger is stuck down-hole or you are backing out an anchor, this version will immediately kickdown to Low Speed-High Torque mode if the system pressure reaches 2300 psi. It will remain in this mode until the control valve is centered or neutralized.



ESKRIDGE

Eskridge auger drives are being used throughout North America on tough construction jobs, in any weather. Some are being used to drill large diameter deep holes for foundation work, some are installing high torque anchors, and some are boring horizontally. These are just a few of the applications for Eskridge auger drives. Consult your Eskridge technical sales representative for assistance in selecting an auger drive for your construction application.

MODEL 75



Values = inches (mm)

NOTE: Specifications and descriptive data shown are nominal and subject to change without notice.

75 SERIES TECHNICAL SPECIFICATIONS

RATED OUTPUT TORQUES: To 20,000 ft-lb (27,112 N-m)
MAXIMUM SYSTEM PRESSURE: 2,750 psi (189,7 bar) (Motor Code 61 Only)
SHIFTING PRESSURE: 300 psi (20,7 bar) MINIMUM, 2750 psi (189,7 bar) MAXIMUM
OUTPUT SHAFT: 2-5/8" (66,7 mm) or 3" (76,2 mm) HEX
SHAFT PULL-OUT LOAD: 30,000 lb (13,636 kg)
SHAFT PRESSURE LOAD: 30,000 lb (13,638 kg)
OIL CAPACITY: 10 pt (4,76 l)
BAIL BOSS DIAMETER: 2.01" (51,05 mm)
WEIGHT: 510 lb (231,8 kg)

NOTES:

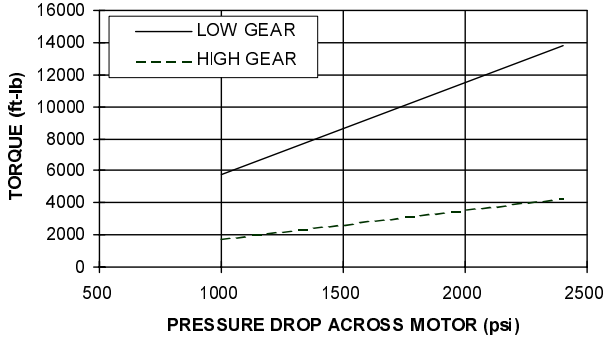
- STARTING TORQUES ARE APPROXIMATELY 25% LESS THAN RUNNING TORQUES.
- SYSTEM BACK PRESSURE WILL REDUCE THE RUNNING TORQUES PROPORTIONALLY.
- BACK PRESSURE SHOULD BE LIMITED TO 100 psi (6,9 bar).
- MAXIMUM FLOW RATE IS DEPENDENT UPON MOTOR DISPLACEMENTS.
- HIGH ALLOY HEAT TREATED BAIL BOSS PINS REQUIRED (CUSTOMER PROVIDED).
- 3" (76,2mm) HEX SHAFT REQUIRED ON UNITS DEVELOPING TORQUES ABOVE 15,000 ft-lb. (20334 N-m)

MODEL	GEAR RATIO	MOTOR			MOTOR PRESSURE psi (bar)	FLOW gpm (l/min)	RATED TORQUE*		SPEED	
		GEAR WIDTH	DISPL. in ³ (cm ³)	ORDER OPTION NUMBER WIDTH			FT-LB. (N-m) LOW HIGH	rpm LOW HIGH		
75-51	51:1	1-1/2" X 2-1/2" (38, 1X63,5)	10.20 (167,1)	60	2,400 (166)	40 (152)	13,800 (18,713)	4,300 (5,830)	16	42
		2-1/2" X 2-1/2" (63, 5X63,5)	12.75 (208,9)	61	2,750 (190)	40 (152)	20,000 (27,120)	8,200 (11,119)	13	25
		2" X 2-1/2"	11.45	62	2,400 (166)	40 (152)	15,500	5,700	14.5	33

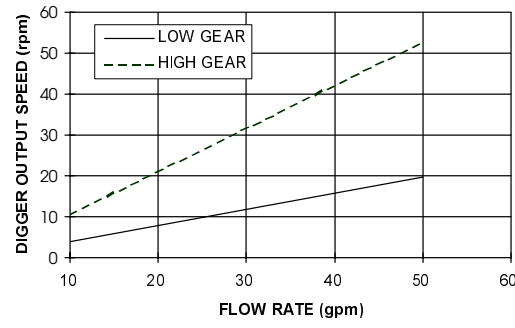
*Maximum intermittent value.

MODEL 75-51
 MOTOR CODE: 60
 MAX INLET PRESSURE: 2,500 psi

DIGGER TORQUE

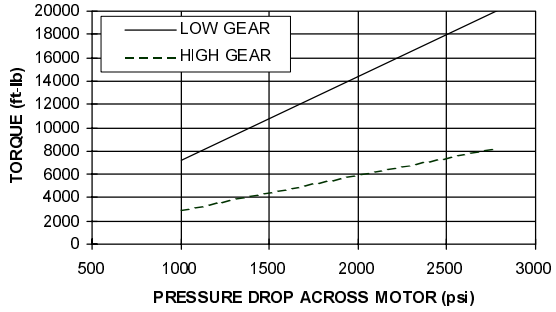


DIGGER SPEED

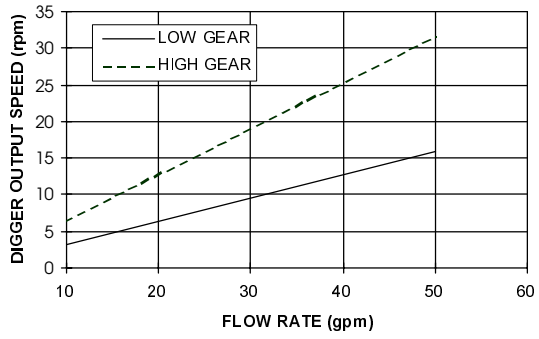


MODEL 75-51
 MOTOR CODE: 61
 MAX INLET PRESSURE: 2,750 psi

DIGGER TORQUE

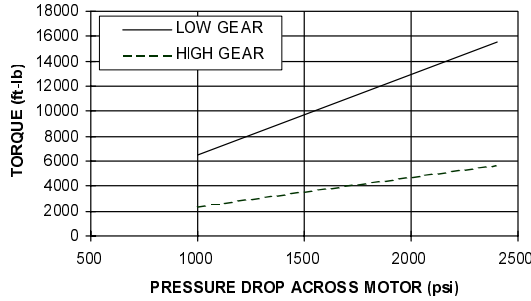


DIGGER SPEED

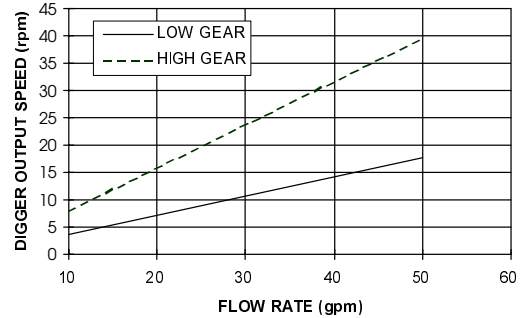


MODEL 75-51
 MOTOR CODE: 62
 MAX INLET PRESSURE: 2,500 psi

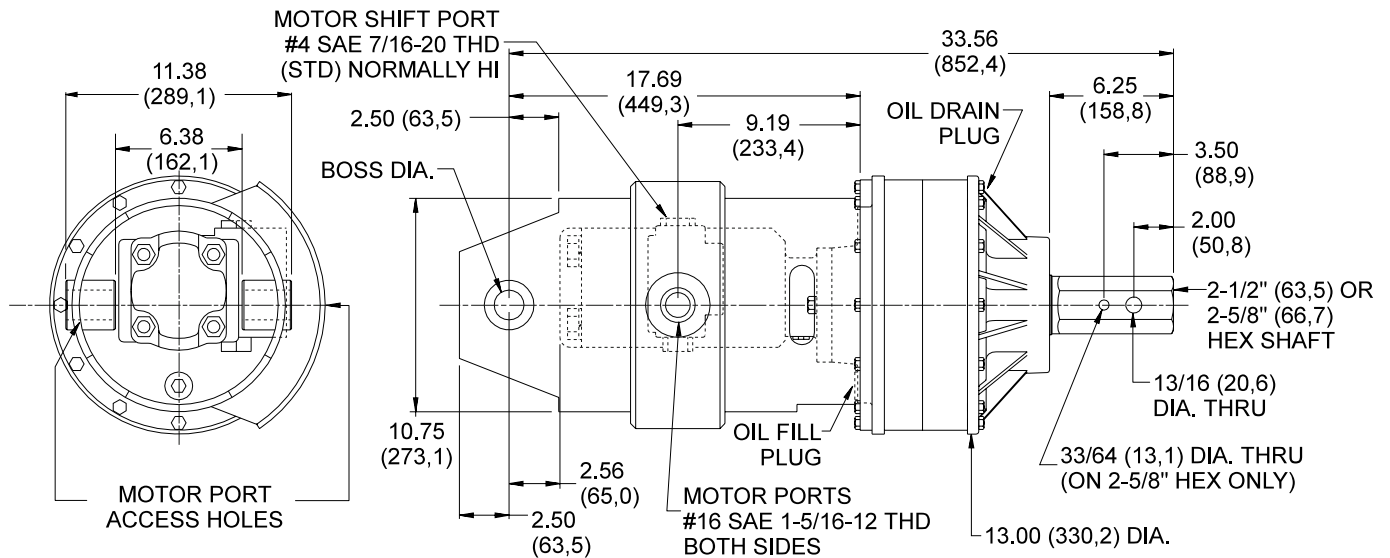
DIGGER TORQUE



DIGGER SPEED



MODEL 78



Values = inches (mm)

NOTE: Specifications and descriptive data shown are nominal and subject to change without notice.

78 SERIES

TECHNICAL SPECIFICATIONS

RATED OUTPUT TORQUES: To 12,000 ft-lb (16,272 N-m)

MAXIMUM SYSTEM PRESSURE: 2,500 psi (172,4 bar)

SHIFTING PRESSURE: 300 psi (20,7 bar) MINIMUM, 2500 psi (172,4 bar)

MAXIMUM

OUTPUT SHAFT: 2-1/2" (63,5 mm) or 2 5/8" (66,7 mm) HEX

SHAFT PULL-OUT LOAD: 15,000 lb (6804 kg)

SHAFT PRESSURE LOAD: 15,000 lb (6804 kg)

OIL CAPACITY: 6.5 pts (3,1 L)

BAIL BOSS DIAMETER: 1.26" (32,00 mm) OR 1.51" (38,35 mm)

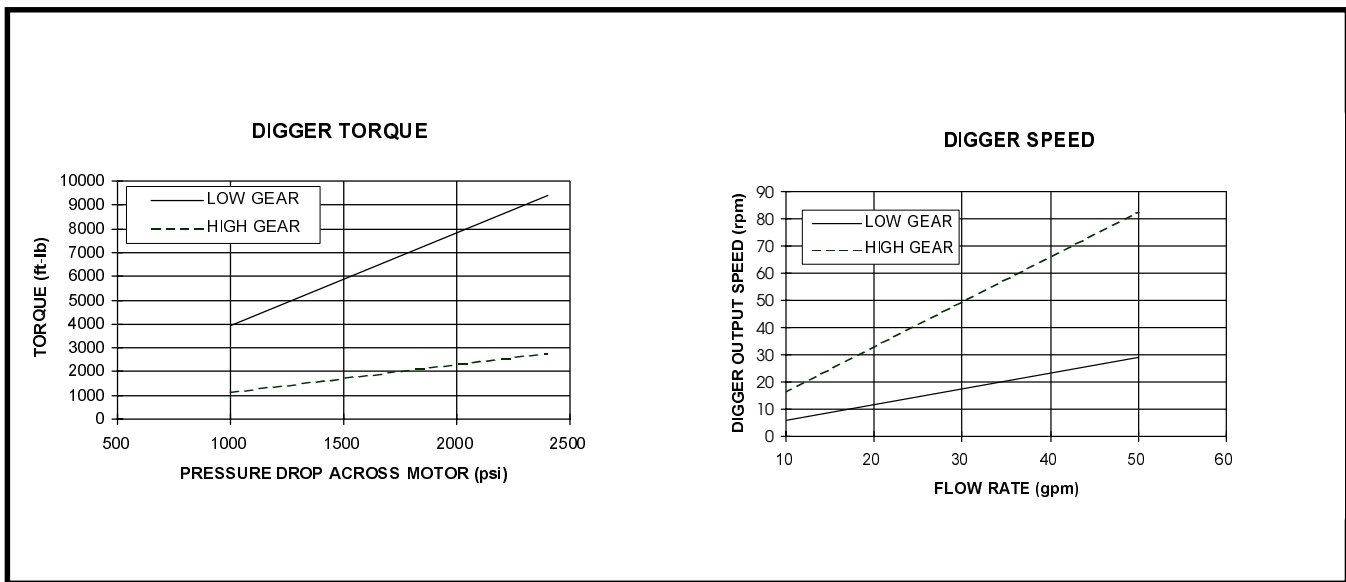
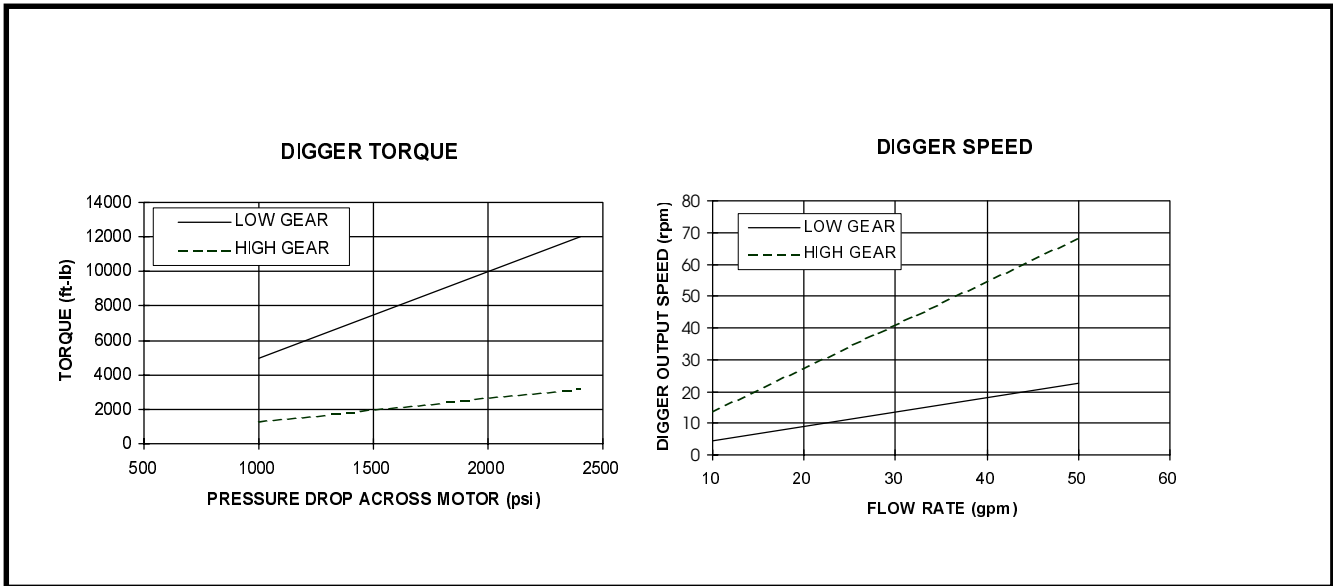
WEIGHT: 370 lb (168.2 kg)

NOTES:

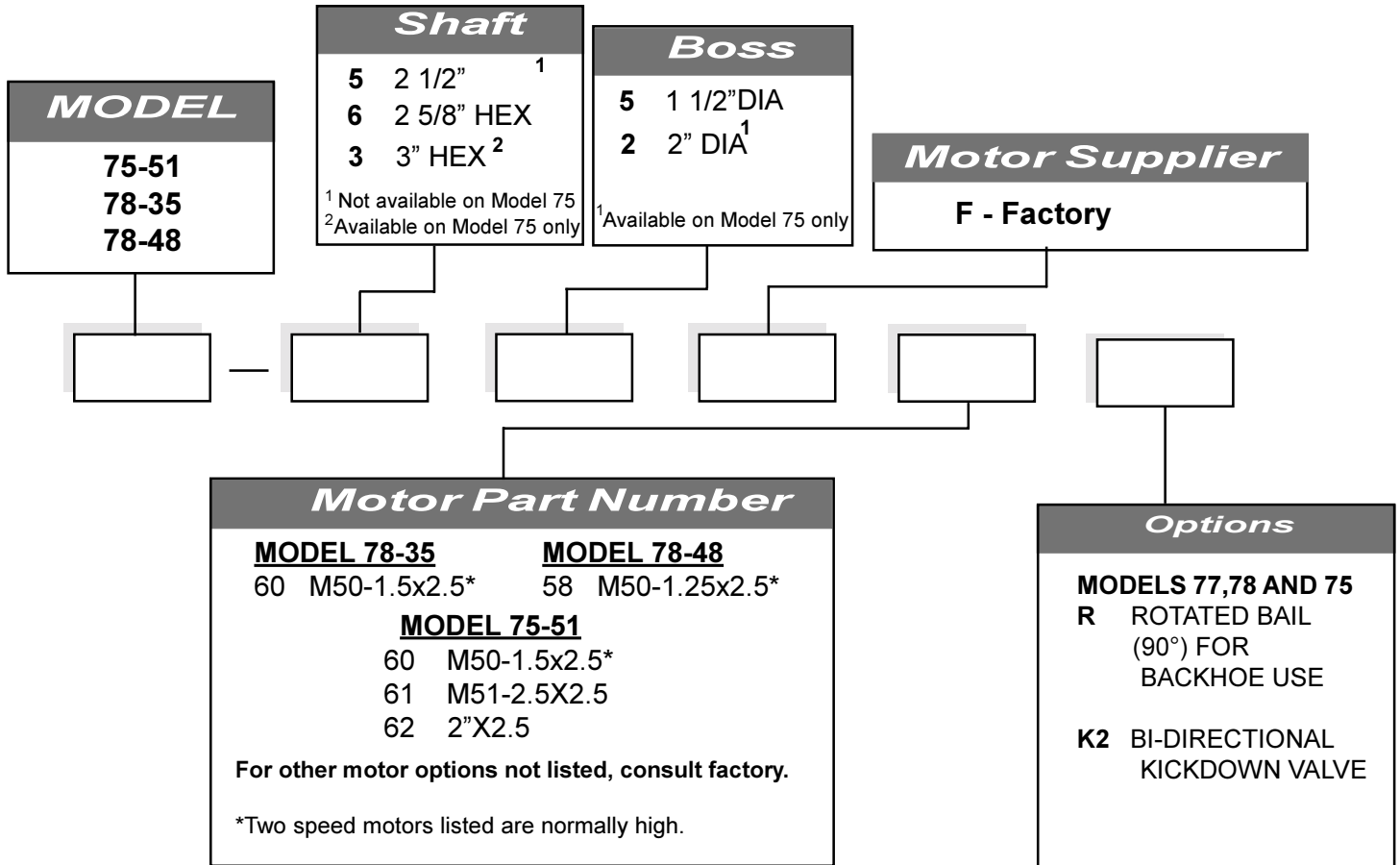
- STARTING TORQUES ARE APPROXIMATELY 25% LESS THAN RUNNING TORQUES.
- SYSTEM BACK PRESSURE WILL REDUCE THE RUNNING TORQUES PROPORTIONALLY.
- BACK PRESSURE SHOULD BE LIMITED TO 100 psi (6,9 bar).
- MAXIMUM FLOW RATE IS DEPENDENT UPON MOTOR DISPLACEMENTS.
- HIGH ALLOY HEAT TREATED BAIL BOSS PINS REQUIRED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

MODEL	GEAR RATIO	MOTOR			MOTOR PRESSURE psi (bar)	FLOW gpm (l/min)	RATED TORQUE* FT-LB. (N-m)			
		GEAR WIDTH	DISPL. in ³ (cm ³)	ORDER OPTION NUMBER			LOW	HIGH		
78-35	35:1	1.5" x 2.5" (50, 8x50,8)	10.20 (167,1)	60	2,400 (166)	40 (152)	9,500 (12,811)	2,800 (5,085)	23	58
78-48	48:1	1-1/4" X 2-1/2" (31, 8X63,5)	9.56 (156,7)	58	2,400 (166)	40 (152)	12,000 (16,272)	3,200 (4,339)	18	55

*Maximum intermittent value.



Ordering



• Order number example: 75-51 - 5 2 F 18 R- K2

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