



HYDROSTATIC TRANSMISSIONS

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The product information and specifications within this catalogue should be viewed as a guide only and are subject to change without notice. Please refer to inside front cover for further details.



MEDIUM DUTY PUMPS **MANUALLY-OPERATED PUMPS**



Eaton Model 70142

FEATURES:

- Reduced noise and vibration
- New trunnion bearing arrangement
- Stronger mounting flange
- Improved swashplate
- Customised valve plate design

SPECIFICATIONS:

- | | |
|--------------------------------|---|
| ● Pump element | Piston |
| ● Mounting flange | 2 Bolt SAE "A" Mount |
| ● Max. displ./rev | 0-20.3 cm ³ /r (0-1.24 in ³ /r) |
| | 0-23.6 cm ³ /r (0-1.44 in ³ /r) |
| ● Flow @ rated speed & PSI | 64.3 l/min (17 GPM) |
| | 75.7 l/min (20 GPM) |
| ● Max. rated speed | 3600 RPM |
| ● Cont. operating pressure | 207 bar (3000 PSI) |
| ● Intermit. operating pressure | 345 bar (5000 PSI) |
| ● Power input @ 3200 RPM | 26 kW (35 HP) |
| ● Operating temperature | 107°C (225°F) |

EATON

Eaton is a world wide leader in the design, manufacture and marketing of a comprehensive line of reliable, high-efficiency fluid power system and components. Eaton's full line of powerful hydraulic component brand names include Char-Lynn, Eaton and Vickers, each of which has a well-established worldwide reputation.

Eaton products are known for their excellence in engineering and production and include hydrostatic transmissions, valves, piston pumps, gear pumps and motors.

Eaton heavy duty hydrostatic transmissions are self-lubricating, sealed systems that transfer power to remote locations without a mechanical power train. This feature allows greater design flexibility.

Applications include agricultural combines, transit mixer drum drives, timber harvesters, construction equipment, farm tractors, saw mills, mining equipment and many other applications.



Eaton Model 70142/70145 - Single Pumps

FEATURES:

- Reduced noise and vibration
- New trunnion bearing arrangement
- Stronger mounting flange
- Improved swashplate
- Customised valve plate design



BASIC SPECIFICATION:

Model Number	Model Title	Disp. cc/rev	Cont. bar	Int. bar	Max. rpm	Mtg SAE	Aux. Mt. SAE	St'd Charge Pump bar	Base Model	
70142	AAS1	20.3	210	345	3600	A-2	A-2	6.9 ccr	7-10	70142-RER-02
70145	AAS2	23.6	210	345	3600	A-2	A-2	6.9 ccr	7-10	70145-REK-02

ORDERING CODES:

These base models full codes are:

70142 - AAS1SRAAA0TT1AAAB11AA0A0F

70145 - AAS21RAAAA0TT1AAAB11AA0A0F2 and have the following basic configurations.

Consult Berendsen Fluid Power for other models and options.

- Input shaft 13T splined
- Thru-drive shaft 9T splined
- Control shaft Right side, through hole option
- By-pass valve Not fitted
- Relief set 345 bar
- Main ports Opposite side ports, 1-1/16"-12 UN
- Intermit. operating pressure 345 bar (5000 PSI)
- Power input @ 3200 RPM 26 kW (35 HP)
- Operating temperature 107°C (225°F) Max.



Eaton Model 70360

FEATURES:

- Reduced noise and vibration
- New trunnion bearing arrangement
- Stronger mounting flange
- Improved swashplate
- Customised valve plate design
- Square input control shaft
- Facilitates assembly of customer installed linkage
- Reduces wear on control shaft linkage

SPECIFICATIONS:

- Pump element Piston
- Mounting flange 2 Bolt SAE "A" Mount
- Max. displ./rev 0-40.6 cm³/r (0-2.48 in³/r)
0-49.2 cm³/r (0-3.00 in³/r)
- Flow @ rated speed & PSI 140 l/min (37 GPM)
169 l/min (45 GPM)
- Max. rated speed 3600 RPM
- Cont. operating pressure 207 bar (3000 PSI)
- Intermit. operating pressure 345 bar (5000 PSI)
- Power input @ 3600 RPM 55 kW (74 HP)
- Operating temperature 107°C (225°F)

BASIC SPECIFICATION:

Model Number	Model Title	Disp. cc/rev	Cont. bar	Int. bar	Max. rpm	Mtg SAE	Aux. Mt. SAE	Charge Pump Disp.	Charge Pump bar	Typical Model
70360	ACV	40.6	210	345	3600	B-2	A-2	13.8 ccr	7-10	70360-RCJ-02

* Standard charge pump is 6.9 cc/rev, but the model above has 13.8 cc/rev pump.

ORDERING CODES:

The full code for this model is: ACV20RAJ1TTA1Y21110000A0B and has the following basic configurations. Consult Berendsen Fluid Power for other models and options.

- Input shaft 15T splined
- Thru-drive shaft 9T splined
- Control shaft Right side, square shaft with bolt groove
- By-pass valve Not fitted
- Relief set 345 bar
- Main ports Opposite side ports, 1-1/16"-12 UN
- Others Low cam effort valving fitted



SERVO CONTROLLED PUMPS

Eaton Model 72400

FEATURES:

- Time proven components
- Valve plate design for higher speed capability
- Cast iron housing
- Cradle swash design for reduced noise
- Lubricated swash plate bushing
- SAE "A" mount std., SAE "B" opt.
- Three auxiliary output shafts
- Two charge pump displacements
- Five input shafts
- Two case drains
- One case drain for tandem
- Linear control spool

SPECIFICATIONS:

- | | |
|--------------------------------|---|
| • Pump element | Piston |
| • Mounting flange | 2 Bolt SAE "B" Mount |
| • Max. displ./rev | 0-40.6 cm ³ /r (0-2.48 in ³ /r) |
| | 0-49.2 cm ³ /r (0-3.00 in ³ /r) |
| • Flow @ rated speed & PSI | 140 l/min (37 GPM) |
| | 170 l/min (49.2 GPM) |
| • Max. rated speed | 3600 RPM |
| • Cont. operating pressure | 210 bar (3000 PSI) |
| | 172 bar (2500 PSI) |
| • Intermit. operating pressure | 345 bar (5000 PSI) |
| | 286 bar (4150 PSI) |
| • Power input @ 2500 RPM | 52 kW (70 HP) |
| • Operating temperature | 107°C (225°F) |





Eaton Model 72400 (Cont.)

ORDERING INFORMATION:

AAD L A A A 1 3 E E 1 T T A M0 0 A 0 00A000D
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18)

(1) BASE MODEL TYPE

AAD = 40.6 ccr Single
 AAE = 40.6 ccr Tandem front
 AAF = 40.6 ccr Tandem rear
 ACG = 49.2 ccr Single
 ACH = 49.2 ccr Tandem front
 ACJ = 49.2 ccr Tandem rear

(2) SHAFT ROTATION

R = Right hand
 L = Left hand

(3) INPUT SHAFT OPTIONS

A = 15T Spline
 B = 41T Spline
 C = 13T Spline
 D = Taper
 G = 1" Dia. Keyed

(4) OUTPUT SHAFT OPTIONS

A = 9T Spline (SAE-A only)
 B = 41T Spline (SAE-B only)
 F = 11T Spline (SAE-A only)

(5) AUXILIARY MOUNTING (THRU-DRIVE)

A = SAE-A-2
 B = SAE-B-2
 E = SAE-A-2 c/w mtg support holes
 F = SAE-B-2 c/w mtg support holes

(6) CHARGE PUMP OPTION

0 = w/o Charge pump
 1 = 6.9 cc/rev
 2 = 13.8 cc/rev

(7) CHARGE RELIEF SETTING CODE

3 = Standard 17-21 bar

(8) AUX. PORT SIZE & LOCATION

D = One plugged
 E = Both plugged

(9) DRAIN PORT SIZE & LOCATION

D = Both side 1-1/16" (Right plugged)
 E = Both side 1-1/16" (Left plugged)

(10) MAIN PORT LOCATION

1 = Right side
 2 = Left side

(11) PORT A RELIEF SETTING CODE

0 = Check only
 B = 140 bar
 E = 175 bar
 H = 210 bar
 L = 240 bar
 N = 275 bar
 Q = 310 bar
 T = 345 bar

(12) PORT B RELIEF SETTING CODE

0 = Check only
 B = 140 bar
 E = 175 bar
 H = 210 bar
 L = 240 bar
 N = 275 bar
 Q = 310 bar
 T = 345 bar

(13) BY-PASS VALVE

0 = w/o Valve
 A = c/w Valve

(14) CONTROL OPTIONS

M0 = Manual servo
 MA = Manual servo c/w lockout switch (wide band)
 MB = Manual servo c/w neutral detent (wide band)
 MC = Manual servo c/w wide band neutral
 EE = Electric proportional (12VDC, 1-5 vdc command)
 EL = Electric proportional (12VDC, +/- 100mA command)
 HA = Hydraulic remote (5-15 bar pilot)

(15) DE-STROKE VALVE

0 = Not fitted
 1 = Valve c/w 12VDC coil & weather pack connector
 2 = Valve c/w 24VDC coil & weather pack connector
 3 = Valve c/w 12VDC coil & DIN connector
 4 = Valve c/w 24VDC coil & DIN connector

(16) PILOT SUPPLY PORT (P) ORIFICE

0 = No orifice
 A = 0.71 mm
 B = 0.81 mm
 C = 0.91 mm
 D = 1.02 mm
 E = 1.12 mm
 F = 1.32 mm
 G = 1.45 mm
 H = 1.65 mm
 J = 1.85 mm

(17) CONTROL PORT (S1 & S2) ORIFICE

0 = No orifice
 A = 0.71 mm
 B = 0.81 mm
 C = 0.91 mm
 D = 1.02 mm
 E = 1.12 mm
 F = 1.32 mm
 G = 1.45 mm
 H = 1.65 mm
 J = 1.85 mm

(18) OTHER OPTIONS

00A000D = Standard 17-21 bar



HEAVY DUTY PUMPS

Eaton Model 33, 39, 46, 54, 64, 76

FEATURES:

- 415 bar (5800 PSI) pressure rating
- Speeds to 4510 RPM
- Variety of drive shafts
- High strength swashplates
- High strength cast iron housing
- High flow check valves in pumps
- A charge pump displacement option
- Full line of controls
- Large case drain ports
- Valve plate hardened steel for long life
- A, B, C Auxiliary mount options

SPECIFICATIONS:

- | | |
|-----------------------------|---|
| ● Continuous pressure | 241 bar (3500 PSI) max. |
| ● Intermittent pressure | 415 bar (6000 PSI) max. |
| ● Pump element | Piston |
| ● Mounting flange | 2 Bolt SAE "B" Mount |
| ● Model displacement | 0-54, 4 cm ³ /r (3.32 in ³ /r) |
| | 0-63, 7 cm ³ /r (3.89 in ³ /r) |
| | 0-75, 3 cm ³ /r (4.60 in ³ /r) |
| | 0-89, 1 cm ³ /r (5.44 in ³ /r) |
| | 0-105, 5 cm ³ /r (6.44 in ³ /r) |
| | 0-124, 8 cm ³ /r (7.62 in ³ /r) |
| ● Flow @ 240 bar (3500 PSI) | 233 l/min (61.5 GPM) to 333 l/min (99.1 GPM) |
| ● Speed, Input | 2775 RPM (max.) to 4510 RPM (max.) |
| ● Torque @ 240 bar | 232 Nm (2049 lb-in) to 514 Nm (4552 lb-in) |





Eaton Model 33, 39, 46, 54, 64, 76 (Cont.)

ORDERING INFORMATION: Typical option codes only. Consult Berendsen Fluid Power for other options & stock models.

ACA 46 2 3 14 R 0 A 0 0 MD D 0 0 0 0 0 0 0 1 0 D 0000 B
 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24)

(1) HEAVY DUTY PUMPS

ACA = Heavy Duty Pumps Series 0, 1, 3

(2) BASIC MODELS - DISPLACEMENT

cu.in/rev x 10 (eg. 46 = 4.6 cu.in./rev = 75.3 cc/rev)

(3) UNIT FUNCTIONS

2 = Variable pumps
 3 = Fixed motors
 4 = Variable motors

(4) SERIES NUMBER

0 = Model 76
 3 = Other models replacing 1

(5) SHAFT OPTIONS

01 = 1.5" Dia. Straight keyed
 02 = 1.75" Dia. Straight keyed
 03 = 1.375" Dia. Tapered
 07 = 1.5" Dia. Tapered
 13 = 13T 8/16-P Splined (Model 76)
 14 = 14T 12/24-P Splined
 21 = 21T 16/32-P Splined

(6) SHAFT ROTATION

R = Right hand
 L = Left hand

(7) VALVE PLATE

0 = Standard
 V = Grooved
 1 = Propel

(8) MAIN PORTS

A = Code 61 SAE 1" flange
 B = Code 62 SAE 1" flange

(9) POWER LIMITER PRESSURE SETTING - PORT A

0 = Not fitted
 C = 105 bar (1500 PSI)
 D = 140 bar (2000 PSI)
 E = 175 bar (2500 PSI)
 F = 210 bar (3000 PSI)
 G = 245 bar (3500 PSI)
 H = 280 bar (4000 PSI)
 J = 310 bar (4500 PSI)
 K = 345 bar (5000 PSI)

(10) POWER LIMITER PRESSURE SETTING - PORT B

0 = Not fitted
 C = 105 bar (1500 PSI)
 D = 140 bar (2000 PSI)
 E = 175 bar (2500 PSI)
 F = 210 bar (3000 PSI)
 G = 245 bar (3500 PSI)
 H = 280 bar (4000 PSI)
 J = 310 bar (4500 PSI)
 K = 345 bar (5000 PSI)

(11) CONTROL OPTION

MA = Manual
 MD = Manual c/w neutral lockout switch (N/C)
 ME = Manual c/w neutral detent
 HA = Hydraulic remote (1.4-14 bar)
 EN = Electronic proportional control
 RE = Remote electric c/w destroke

(12) CONTROL SUPPLY PORT ORIFICE CODE

0 = No orifice fitted
 A = 0.71 mm (0.028") Dia.
 D = 1.12 mm (0.052") Dia.
 F = 1.65 mm (0.065") Dia.
 H = 2.39 mm (0.094") Dia.

(13) S1 & (14) S2 PORT ORIFICE CODE

0 = No orifice fitted
 A = 0.71 mm (0.028") Dia.
 D = 1.12 mm (0.052") Dia.
 F = 1.65 mm (0.065") Dia.
 H = 2.39 mm (0.094") Dia.

(15) PRESSURE OVERRIDE

0 = None
 2 = Internal
 3 = Remote

(16) PRESSURE OVERRIDE PRESSURE SETTING CODE

0 = Not fitted
 C = 105 bar (1500 PSI)
 D = 140 bar (2000 PSI)
 E = 175 bar (2500 PSI)
 F = 210 bar (3000 PSI)
 G = 245 bar (3500 PSI)
 H = 280 bar (4000 PSI)
 J = 310 bar (4500 PSI)
 K = 345 bar (5000 PSI)

(17) SPECIAL CONTROL FEATURE

0 = for no special features

(18) CHARGE PUMP FEATURES

0 = c/w Standard charge pump
 D = Charge pump w/external discharge port (7/8"-14UNF)
 E = No charge pump
 H = Charge pump w/remote pressure filter port on A port side

(19) AUXILIARY MOUNT (THRU-DRIVE)

0 = No thru-drive
 A = SAE-A with shaft seal
 B = SAE-B with shaft seal
 E = SAE-C (typical tandem pump front)

(20) CHARGE PUMP DISPLACEMENT

0 = No charge pump fitted
 1 = 13.9 cc/rev (0.85 cu.in./rev)
 2 = 17.4 cc/rev (1.06 cu.in./rev)
 3 = 21.0 cc/rev (1.28 cu.in./rev)
 4 = 27.9 cc/rev (1.70 cu.in./rev)
 5 = 34.7 cc/rev (2.12 cu.in./rev)

(21) 2ND CHARGE PUMP DISPLACEMENT

0 = No pump

(22) CHARGE PUMP RELIEF PRESSURE SETTING

A = 11 bar
 D = 15 bar (Standard)
 G = 19 bar
 L = 24 bar

(23) SPECIAL FEATURES FOR CHARGE PUMP, BASE PUMP, PAINTING ETC

00000 = Standard

(24) DESIGN VERSION



MEDIUM DUTY PISTON MOTORS

Eaton Model 74111

FEATURES:

- Compact, light weight axial piston motors in durable aluminium housings
- Bi-directional
- Numerous options for shaft types and porting
- SAE mounting flanges and SAE O-ring ports
- Fixed and variable motors
- Displacements from 12.3 cc/rev to 82.6 cc/rev with 3 frame sizes
- Unique construction 82.6 cc/rev motor with two opposite rotating groups in a housing



SPECIFICATIONS:

- | | |
|---|---|
| • Motor element | Piston |
| • Displacement | 12.3 cm ³ /r (0.75 in ³ /r) |
| • Rated flow @ rated speed and pressure | 64 l/min (16.9 GPM) |
| • Speed, rated | 4500 RPM (max.) |
| • Continuous pressure | 207 bar (3000 PSI) |
| • Intermittent pressure | 372.4 bar (5400 PSI) (max.) |
| • Torque @ rated speed and pressure | 29 Nm (260 lb-in) |

Eaton Model 74118

FEATURES:

- Compact, light weight axial piston motors in durable aluminium housings
- Bi-directional
- Numerous options for shaft types and porting
- SAE mounting flanges and SAE O-ring ports
- Fixed and variable motors
- Displacements from 12.3 cc/rev to 82.6 cc/rev with 3 frame sizes
- Unique construction 82.6 cc/rev motor with two opposite rotating groups in a housing



SPECIFICATIONS:

- | | |
|---|---|
| • Motor element | Piston |
| • Displacement | 20.3 cm ³ /r (1.24 in ³ /r) |
| • Rated flow @ rated speed and pressure | 78.7 l/min (20.8 GPM) |
| • Speed, rated | 3600 RPM (max.) |
| • Continuous pressure | 207 bar (3000 PSI) |
| • Intermittent pressure | 372.4 bar (5400 PSI) (max.) |
| • Torque @ rated speed and pressure | 62 Nm (550 lb-in) |



Eaton Model 74318

FEATURES:

- Compact, light weight axial piston motors in durable aluminium housings
- Bi-directional
- Numerous options for shaft types and porting
- SAE mounting flanges and SAE O-ring ports
- Fixed and variable motors
- Displacements from 12.3 cc/rev to 82.6 cc/rev with 3 frame sizes
- Unique construction 82.6 cc/rev motor with two opposite rotating groups in a housing

SPECIFICATIONS:

- | | |
|---|---|
| • Motor element | Piston |
| • Displacement | 40.6 cm ³ /r (2.48 in ³ /r) |
| • Rated flow @ rated speed and pressure | 153.7 l/min (40.6 GPM) |
| • Speed, rated | 3600 RPM (max.) |
| • Continuous pressure | 207 bar (3000 PSI) |
| • Intermittent pressure | 345 bar (5000 PSI) (max.) |
| • Torque @ rated speed and pressure | 135.6 Nm (1200 lb-in) |

OPTIONS AVAILABLE:

- Thru-shaft (Order model 74348)
- Speed pickup
- Hot oil shuttle



Eaton Model 74624

FEATURES:

- Compact, light weight axial piston motors in durable aluminium housings
- Bi-directional
- Numerous options for shaft types and porting
- SAE mounting flanges and SAE O-ring ports
- Fixed and variable motors
- Displacements from 12.3 cc/rev to 82.6 cc/rev with 3 frame sizes
- Unique construction 82.6 cc/rev motor with two opposite rotating groups in a housing

SPECIFICATIONS:

- | | |
|---|---|
| • Motor element | Piston |
| • Displacement | 82.6 cm ³ /r (5.04 in ³ /r) |
| • Rated flow @ rated speed and pressure | 128.7 l/min (34 GPM) |
| • Speed, rated | 1500 RPM (max.) |
| • Continuous pressure | 241.7 bar (3500 PSI) |
| • Intermittent pressure | 267 bar (3900 PSI) (max.) |
| • Torque @ rated speed and pressure | 280.3 Nm (2481 lb-in) |

OPTIONS:

- Thru-shaft (Order model 74144)



Eaton Model 71302

FEATURES:

- Compact, light weight axial piston motors in durable aluminium housings
- Bi-directional
- Numerous options for shaft types and porting
- SAE mounting flanges and SAE O-ring ports
- Fixed and variable motors
- Displacements from 12.3 cc/rev to 82.6 cc/rev with 3 frame sizes
- Unique construction 82.6 cc/rev motor with two opposite rotating groups in a housing



SPECIFICATIONS:

- Motor element Piston
- Displacement (max.) 40.6 cm³/r (2.48 in³/r)
- Flow @ max. displacement @ 17° 126.4 l/min (34 GPM)
- Speed @ 17° 3600 RPM (max.)
- Speed @ 9° 4500 RPM (max.)
- Continuous pressure 210 bar (3000 PSI)
- Intermittent pressure 370 bar (5400 PSI) (max.)
- Torque @ rated speed and pressure @ 17° 127 Nm (1125 lb-in)

ORDERING INFORMATION: Fixed Displacement Motors

Base Model	Shaft Type	Ports	Drain Location	Thru-drive Option	Destroke Option	Rest of Code (std)
AAV 20.3 cc/rev (12.3 cc/rev)	AA: 13T Spline	A: 1-1/16" Side	A: Upper rear	0: Non-thru	0: No destroke	000A0B
	AE: 7/8" Keyed	B: 1-1/16" Rear	B: Lower rear	1: Thru-drive (3/4" Keyed)	B: Destroked (to 12.3 ccr)	
		C: 1-1/16" One face (Thru-drive only)	C: Bottom (Thru-drive)			
AAJ 40.6 cc/rev (32.9 cc/rev)	AA: 13T Spline	A: 1-1/16" Side	A: Top	0: Non-thru	0: No destroke	000A0B
	AB: 15T Spline	B: 1-5/16" Side	B: Top/bottom	3: Thru-drive (7/8" Keyed)	A: Destroked (to 32.9 ccr)	
	AD: 1-1/8" Keyed	C: 1-5/16" Rear	G: Upper rear			
	AE: 7/8" Keyed	E: 1-1/16" Rear	J: Upper rear			
AAZ 82.6 cc/rev	AA: 1" Keyed	A: 1-1/16" Rear,	A: Horizontal	0: Non-thru	N/A	000A0B
	AD: 15T Spline	1-1/16" Top	B: Vertical	A: 1" Keyed C: 15T Splined		

ORDERING INFORMATION: Variable Displacement Motors

Base Model	Control Pintle Dia. & Location	Shaft Type	Ports	Drain Location	Thru-drive Option	Min/Max Angle	Rest of Code (std)
AAM 40.6 cc/rev	A: 25.3 Left	A: 13T Spline	1: 1-1/16" Rear	1: Right	0: Non-thru	H: Std	000A0B
	B: 25.3 Right	B: 13T Spline		2: Rear			
	F: Hyd. port down	(w/Snap ring)	3: Both				
	G: Hyd. port up		4: Top				

* These are base options only. Consult Berendsen Fluid Power for other option availability.



HEAVY DUTY PISTON MOTORS

Eaton Fixed Displacement Motors



FEATURES:

- 415 bar (5800 PSI) Pressure rating
- Speeds to 4510 RPM
- Variety of drive shafts
- High strength swashplates
- High strength cast iron housing
- Large case drain ports
- Valve plate hardened steel for long life
- Optional high pressure relief valves
- Shuttle for loop flushing/cooling
- Optional speed pickup

SPECIFICATIONS:

- | | |
|------------------------------|--|
| ● Motor element | Piston |
| ● Speed (min.) | 50 RPM |
| ● Pressure | 240 bar (3500 PSI) |
| ● Pressure (max.) | 415 bar (6000 PSI) |
| ● Charge pressure | 11 bar (160 PSI) |
| Model 33, 39, 46, 54, 64, 76 | |
| ● Displacement | 54.4 cm ³ /r (3.32 in ³ /r) |
| | 63.7 cm ³ /r (3.89 in ³ /r) |
| | 75.3 cm ³ /r (4.60 in ³ /r) |
| | 89.1 cm ³ /r (5.44 in ³ /r) |
| | 105.5 cm ³ /r (6.44 in ³ /r) |
| | 124.8 cm ³ /r (7.62 in ³ /r) |
| ● Flow | 231 l/min (61 GPM) to 371 l/min (98 GPM) |
| ● Speed (min.) | 2775 RPM max. to 4510 RPM max. |
| ● Torque | 334 Nm (2959 lb-in) max. to 781 Nm (6911 lb-in) max. |



ORDERING INFORMATION: Typical options only. Consult Berendsen Fluid Power for other options & stock models.

HHD 46 3 3 14 A B 1 B 1 K 1 K 0000B
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)

(1) HEAVY DUTY FIXED MOTOR TITLE

HHD = Heavy Duty Fixed Motor Series 0, 1, 3

(2) BASIC MODELS - DISPLACEMENT

cu.in/rev x 10 (eg. 46 = 4.6 cu.in./rev = 75.3 cc/rev)

(3) UNIT BASIC FUNCTIONS

3 = Fixed Motor

(4) SERIES NUMBER

0 = Model 76
 3 = Other models replacing 1

(5) SHAFT OPTIONS

01 = 1.5" dia Straight keyed (model 33-64)
 02 = 1.75" dia Straight keyed (model 76)
 13 = 13T Spline (model 76)
 14 = 14T Spline (model 33-64)
 21 = 21T Spline (model 33-64)
 23 = 23T Spline (model 46-64)

(6) MAIN PORTS

A = Code 61 SAE 1" flange
 B = Code 62 SAE 1" flange

(7) END COVER & VALVE BLOCK

A = Valve block c/w high rate shuttle spring
 B = Valve block c/w low rate shuttle spring
 C = No valve block (c/w cover plate)
 G = Integral shuttle c/w low rate spring

(8) CHARGE RELIEF

0 = None
 1 = c/w Relief - standard

(9) CHARGE RELIEF SETTING CODE

B = 11 bar (Standard)
 E = 15.1 bar
 H = 19.3 bar
 L = 22.5 bar

(10) PORT A HIGH PRESSURE RELIEF

0 = None
 1 = c/w Relief - standard

(11) PORT A RELIEF SETTING CODE

F = 210 bar
 G = 241 bar
 J = 310 bar
 K = 345 bar
 L = 379 bar
 M = 414 bar

(12) PORT B HIGH PRESSURE RELIEF

0 = None
 1 = c/w Relief - standard

(13) PORT B RELIEF SETTING CODE

F = 210 bar
 G = 241 bar
 J = 310 bar
 K = 345 bar
 L = 379 bar
 M = 414 bar

(14) OTHER OPTIONAL FEATURES

0000B = Standard



COMBINATION UNITS

Eaton Model 6/Model 7 - Light Duty Pumps and Motors



FEATURES:

- Excellent response
- Precise speed
- Ease of operation
- Low maintenance
- Self contained
- Simplified final product design
- Positive braking

SPECIFICATIONS:

- | | |
|---------------------------|---|
| ● Pump element | Ball piston |
| ● Pump displ. variable | 0-7, 6 cm ³ /r (.465 in ³ /r) |
| ● Motor element | Ball piston |
| ● Motor displ. fixed | 12, 6 cm ³ /r (.767 in ³ /r) |
| ● Input speed | 3600 RPM |
| ● Output speed | 2150 RPM |
| ● Power input @ 3600 RPM | 3 kW (4 HP) (Max.) |
| ● Torque output cont. | 14 Nm (120 lb-in) |
| ● Torque output intermit. | 20 Nm (180 lb-in) |
| ● Torque output peak | 27 Nm (240 lb-in) |
| ● Operating temperature | 82°C (180°F) (Max.) |

ORDERING CODES: Berendsen Fluid Power Stock Models

600 - 021
600 - 022
700 - 001
700 - 003

Eaton Model 11 - Light Duty Pumps and Motors



FEATURES:

- Excellent response
- Precise speed
- Ease of operation
- Low maintenance
- Self contained
- Simplified final product design
- Positive braking

SPECIFICATIONS:

- | | |
|---------------------------|---|
| ● Pump element | Ball piston |
| ● Pump displ. variable | 0-19 cm ³ /r (1.15 in ³ /r) |
| ● Motor element | Ball piston |
| ● Motor displ. fixed | 34.2 cm ³ /r (2.09 in ³ /r) |
| ● Input speed | 3600 RPM |
| ● Output speed | 1950 RPM |
| ● Power input @ 3600 RPM | 15 kW (20 HP) (Max.) |
| ● Torque output cont. | 41 Nm (360 lb-in) |
| ● Torque output intermit. | 61 Nm (540 lb-in) |
| ● Torque output peak | 81 Nm (720 lb-in) |
| ● Operating temperature | 82°C (180°F) (Max.) |

ORDERING CODES: Berendsen Fluid Power Stock Models

1100 - 004



Eaton Model 11 - Light Duty Ball Piston Pump

FEATURES:

- Excellent response
- Precise speed
- Ease of operation
- Low maintenance
- Self contained
- Simplified final product design
- Positive braking

SPECIFICATIONS:

- | | |
|-----------------------------------|---|
| ● Pump element | Ball piston |
| ● Pump displ. variable | 0-19 cm ³ /r (1.15 in ³ /r) |
| ● Flow @ rated speed and pressure | 65.2 l/min (16.5 GPM) |
| ● Input speed | 3600 RPM |
| ● Cont. operating pressure | 86.2 bar (1250 PSI) |
| ● Intermit. operating pressure | 120.7 bar (1750 PSI) |
| ● Peak operating pressure | 155.2 bar (2250 PSI) |