# Series 26 Model 26000 GEAR PUMPS





# MacMILLIN

Quiet Operation

Improved Efficiency

Field Reversible



### **Quiet Operation**

- The 13-tooth gears, versus 10 teeth in previous pumps, minimizes the flow ripple. This reduces noise as well as vibration.
- The improved trap reliefs not only increase power, they also help keep oil flowing smoothly to reduce noise.

#### **Improved Efficiency**

- Improved bearing lubrication system uses inlet oil instead of high pressure oil, improving volumetric efficiency for more power output.
- The super polished shaft and gears improve mechanical efficiency and reduce wear on these components, adding to the service life and reliability of the pump.

 The optimized trapped oil relief areas help reduce pressure ripple for quieter operation. This also decreases the input power requirements.

#### **Field Reversible**

 The innovative new wear plate permits simple field reversibility of the pump direction. Simply open the pump, switch the drive gear and idler gear, reposition the plug and reassemble. No extra parts are needed.

#### Interchangeability

 The Series 26 Gear Pump has been designed to retrofit equipment using the B1 and B2 Gear Pumps. Extra shafts, porting, and mounting configurations, as well as 13 available displacements, give you the choices you need for an easy conversion to this superior pump.

## **General Specifications**

Rotation F	ield Reversible
Mounting Flange	SAE 2 Bolt A
Max. Continuous Pressure†	207 bar (3000 PSI)*
Max. Intermittent Pressure††	241 bar (3500 PSI)**
Min. Speed at Cont. Pressure	750 RPM

Max. Rotating Torque at 0 Pressure 4 Nm (36 lb-in)
Max. Continuous Inlet Temperature 107°C (225°F)
Min. Operating Temperature
Max. Inlet Vacuum at Operating Condition 6.0 In. Hg

- † Continuous pump may be run continuously at these ratings.
- **††** Intermittent intermittent operation, 10% of every minute.
- \* 30.6 cm3/rev. (1.87 in<sup>3</sup>/rev.) displacement max. continuous pressure is 190 bar (2750 PSI).
- \*\* 30.6 cm3/rev. (1.87 in<sup>3</sup>/rev.) displacement max. intermittent pressure is 224 bar (3250 PSI).

## Performance Data

Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	5,1 (.31)	6,6 (.40)	8,2 (.50)	9,5 (.58)	10,8 (.66)	13,8 (.84)	16,7 (1.02)	19,7 (1.20)
Max.Intermittent Pressure bar (PSI)	241 (3500)	241 (3500)	241 (3500)	241 (3500)	241 (3500)	241 (3500)	241 (3500)	241 (3500)
Rated Speed (RPM)	3600	3600	3600	3600	3600	3600	3200	3200
Output Flow at 207 bar (3000 PSI) and Rated Speed LPM (GPM)	18,2 (4.8)	24,3 (6.4)	29,6 (7.8)	35,0 (9.2)	39,0 (10.3)	50,5 (13.3)	54,7 (14.4)	61,9 (16.3)
Input Power at Rated Speed and Cont. Pressure kW (HP)	8,7 (11.6)	9,7 (13.0)	11,9 (15.9)	14,1 (18.9)	15,5 (20.8)	20,0 (26.8)	22,0 (29.4)	26,2 (35.2)

Note: Performance Data was collected using a mineral base oil with a viscosity of 133 SUS at 49°C (120°F)

Displacement cm <sup>3</sup> /r (in <sup>3</sup> /r)	22,5 (1.37)	24,3 (1.48)	25,2 (1.54)	27,7 (1.69)	29,0 (1.77)	30,6 (1.87)	35,1 (2.14)
Max.Intermittent Pressure bar (PSI)	241 (3500)	241 (3500)	241 (3500)	241 (3500)	234 (3400)	224 (3250)	200 (2900)
Rated Speed (RPM)	3000	3000	3000	3000	3000	3000	2750
Output Flow at 207 bar (3000 PSI) and Rated Speed LPM (GPM)	66,6 (17.5)	73,0 (19.2)	76,0 (20.0)	83,6 (22.0)	87,4 (23.0)	91,6 (24.1)	95,5 (25.5)
Input Power at Rated Speed and Cont. Pressure kW (HP)	27,3 (36.6)	30,5 (40.9)	31,0 (41.6)	33,4 (44.8)	35,4 (47.4)	37,4 (50.1)	37,8 (50.7)

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## How to Order MacMillin Gear Pumps

<b>Aillin</b>			
Pump5	<b>Displacements</b>	<b>Rotation</b>	Shaft and Port Combination
	14 = 0.31  C.I.R.	<b>R</b> = Right Hand	A = 3/4" 11T Spline Shaft w/Side Ports SAE #16 Inlet, #10 Outlet
	01 = 0.40  C.I.R. 02 = 0.50  C.I.R.		<b>B</b> = 3/4" 11T Spline Shaft w/Rear Ports SAE #16 Inlet, #10 Outlet
	03 = 0.58  C.I.R. 04 = 0.66  C.I.R		C = 3/4" Keyed Shaft w/Side Ports SAE #16 Inlet, #10 Outlet
	05 = 0.84 C.I.R.		D = 3/4" Keyed Shaft w/Rear Ports SAE #16 Inlet, #10 Outlet
	<b>06</b> = 1.02 C.I.R. <b>07</b> = 1.20 C.I.R.		E = *5/8" 9T Spline Shaft w/Side Ports SAE #16 Inlet, #10 Outlet
	<b>08</b> = 1.37 C.I.R.		F = *5/8" 9T Spline Shaft w/Rear Ports SAE #16 Inlet, #10 Outlet
	<b>09</b> = 1.48 C.I.R. <b>10</b> = 1.54 C.I.R.		<b>G</b> = **5/8" Keyed Shaft w/Side Ports SAE #12 Inlet, #10 Outlet
	<b>11</b> = 1.69 C.I.R. <b>12</b> = 1.77 C.I.R		H = **5/8" Keyed Shaft w/Rear Ports SAE #12 Inlet, #10 Outlet
	12 = 1.77  C.I.R. 13 = 1.87  C.I.R.		J = *5/8" 9T Spline Shaft w/Side Ports SAE #12 Inlet, #10 Outlet
Evenue	<b>15</b> = 2.14 C.I.R.		K = *5/8" 9T Spline Shaft w/Rear Ports SAE #12 Inlet, #10 Outlet
Example:	Part Number 26008 Gear pump with 1.37 dispright hand rotation, 3/4" k	- R Z D blacement, reved shaft,	Notes: The SAE #12 Inlet Port (G - K) is recommended for use with pump sizes 07 and smaller only.
	rear ported SAE #16 inle	t, #10 outlet.	* 5/8 9T Spline has maximum allowable input torque of 62Nm (550 lb-in)
			** 5/8 Keyed Shaft has maximum allowable input torque of 56Nm (500 lb-in)

Dimensions

All dimensions given in mm (in.)



#### Left Hand Rotation Shown

Suction Port - SAE #16 (1-5/16 -12) or #12 (1-1/16 - 12) Pressure Port - SAE #10 (7/8 - 14)

Model	26001	26002	26003	26004	26005	26006	26007
Displacement (cm <sup>3</sup> /r [in <sup>3</sup> /r])	6.6 [.40]	8.2 [.50]	9.5 [.58]	10.8 [.66]	13.8 [.84]	16.7 [1.02]	19.7 [1.20]
Dimension A (mm [in.])	72.6 [2.86]	74.3 [2.93]	75.9 [2.99]	77.5 [3.05]	80.7 [3.18]	83.9 [3.30]	87.1 [3.43]
Dimension B (mm [in.])	93.2 [3.67]	94.9 [3.74]	96.5 [3.80]	98.1 [3.86]	101.3 [3.99]	104.5 [4.11]	107.7 [4.24]
Model	26008	26009	26010	26011	26012	26013	
Displacement (cm <sup>3</sup> /r [in <sup>3</sup> /r])	22.5 [1.37]	24.3 [1.48]	25.2 [1.54]	27.7 [1.69]	29.0 [1.77]	30.6 [1.87]	

Displacement (cm <sup>3</sup> /r [in <sup>3</sup> /r])	22.5 [1.37]	24.3 [1.48]	25.2 [1.54]	27.7 [1.69]	29.0 [1.77]	30.6 [1.87]
Dimension A (mm [in.])	90.3 [3.56]	92.7 [3.65]	93.5 [3.68]	96.7 [3.81]	98.6 [3.88]	99.9 [3.93]
Dimension B (mm [in.])	110.9 [4.37]	113.3 [4.46]	114.1 [4.49]	117.3 [4.62]	119.1 [4.69]	120.5 [4.74]



NOTE: Series 26 Gear Pump components can be assembled into many optional configurations to meet your specific needs. Common configurations include:

• Double OR triple pump units with common OR isolated suction.

• Backplates with an integrated "Relief", "Flow Divider", or "Relief & Flow Divider" combination.

MacMillin is an Eaton Authorized Service Center.



## Power Units and Circuit Blok<sup>®</sup> Manifolds



Eaton gear pumps are at the heart of most MacMillin systems. As hydraulic specialists, we design and build power units and Circuit Blok<sup>®</sup> manifolds to individual system requirements and physical needs.

At MacMillin we prove every power unit and circuitry we build. We set pressure and flow, and test for valve performance. Parts and service is readily available on all system components and accessories.

> Adhesive mixer is powered by this hydrostatic variable drive power unit with top mounted reservoir and filter package. System includes remote

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Power unit features a tandem fixed displacement pump with two pressure controls. The two circuits are independent so each pump section can be unloaded with its own solenoid valve.



Vertically mounted power units are used in applications such as lubricating systems, broaching machines and vertical conveyors.

## AUTHORIZED FACTORY DISTRIBUTORS OF:

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