



# HYDRAULIC PUMPS

## GEAR PUMPS 60 Series Specification Sheet



The CROSS Series 60 gear pumps, with a maximum of 175 hp., feature a gear tooth design that provides more displacement within a given package design. Displacements from 4.05 to 9.25 cu. in./rev. are offered in 6 sizes with the largest delivering 100 gpm in a space less than 8" x 8½" x 9¼". Gear tooth design and pressure-balanced loading plates provide high volumetric and overall efficiency while operating at a low noise level.

### GENERAL SPECIFICATIONS

Displacement sizes:

4.05	5.15	6.15	7.15	8.15	9.25	cu.in./Rev.
66.4	84.4	100.8	117.2	133.6	151.6	cc/Rev.

Rated working pressure (Max. relief setting at full flow) .....	3000 psi (207 bar)
Maximum shock and surge pressure .....	3500 psi (242 bar)
Maximum flow rate (delivery) .....	90 gpm (341 l/m)
Maximum speed (Continuous - see Inlet Vacuum Curves) .....	Up to 3000 rpm
Maximum horsepower (at rated speed and pressure) .....	175 hp (130 kw)
Mounting (any position) .....	SAE "C" size (2 and 4-bolt)
Weight .....	Approx. 42 lbs. (19 kg)

### MATERIAL SPECIFICATIONS

End covers .....	Die cast aluminum alloy
Gears and shafts .....	Hardened steel
Bearings .....	Pressure lubricated, Teflon impregnated sleeve
Seals .....	Buna N
Body .....	Permold aluminum alloy

### STANDARD FEATURES

- Rotation: Left hand (counterclockwise), right hand (clockwise) or bi-directional (dual)
- O-ring ports: 1½" SAE #24 (1⅞ - 11) side location
- Shaft: 1¼" dia. with straight key • Shaft seal: 20 psi (1.4 bar)\*

### OPTIONAL FEATURES AVAILABLE

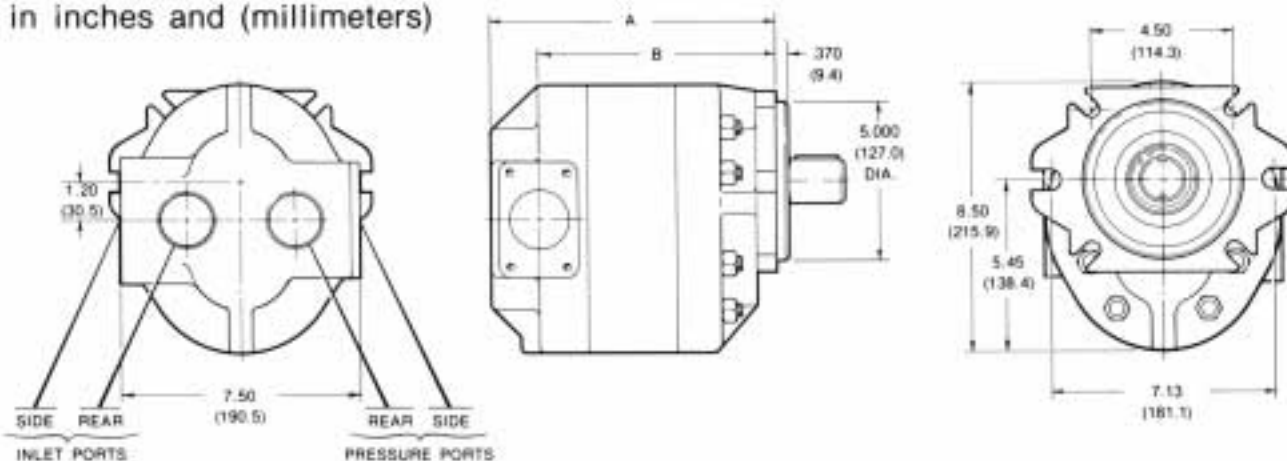
- Ports, straight thread inlet and outlet, rear port location, 1½" and 2" split flange side ports, inlet and outlet • Shaft: 1¼" splined (14 tooth, 12/24 pitch, 30° P.A. flat root, side fit) • Shaft seal: high pressure, 250 psi (17.2 bar)\*

NOTE: Refer to Cross pump and motor technical/service sheet for side and end load limitations, oil recommendations, start-up procedures, etc.

\* Dual rotation pumps are provided with 100 psi shaft seal.



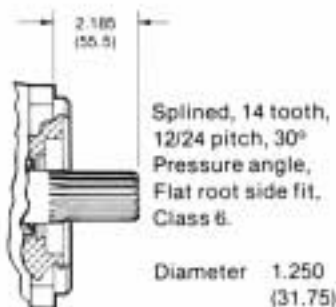
**DIMENSION DATA**  
in inches and (millimeters)



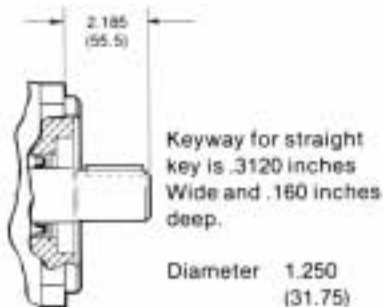
Displacement	4.05 (66.4)	5.15 (84.4)	6.15 (100.8)	7.15 (117.2)	8.15 (133.6)	9.25 (151.6)	cu.in./Rev. cc/Rev.
Dimension "A"	7.75 (197.0)	8.00 (203.2)	8.27 (210.1)	8.52 (216.4)	8.77 (222.8)	9.05 (229.9)	inches mm
Dimension "B"	6.24 (158.5)	6.50 (164.1)	6.77 (172.0)	7.02 (178.3)	7.27 (184.7)	7.55 (191.8)	inches mm

**OUTPUT SHAFT**

**Shaft A**



**Shaft C\***



	Port Location, Size and Type		
	Inlet	Outlet	
SA	1 1/2 (SAE #24)	1 1/4 (SAE #20)	SIDE
SB	1 1/2" Spl. Fig.	1 1/4" Spl. Fig.	
SC*	2" Spl. Fig.	1 1/4" Spl. Fig.	
SF	1 1/2 (SAE #24)	1 1/4 (SAE #24)	
SH	1 1/2" Spl. Fig.	1 1/4" Spl. Fig.	
RK	1 1/2 (SAE #24)	1 1/4 (SAE #24)	REAR

**ORDERING DATA**

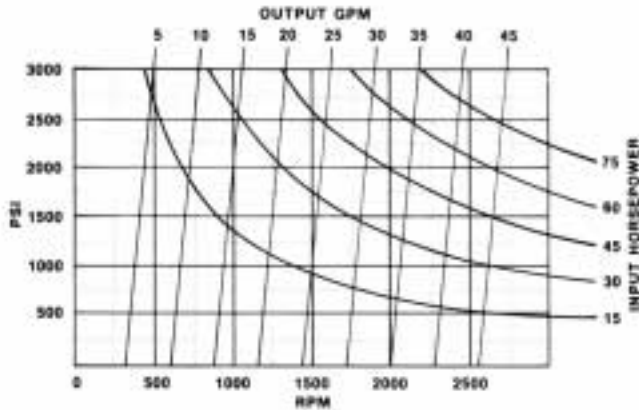
Series	Type	Special Options	Size cu.in./Rev. x 10	Rotation	Mounting	Shaft size and type
60	P pump	O 20 psi Shaft Seal	40	D	C	A
		B 100 psi Shaft Seal	51	dual	SAE "C"	1 1/4" dia. splined
		H 250 psi Shaft Seal	61	L	2 & 4	C
			71	Left	Bolt	1 1/4" dia.
			81	R	combi- nation	straight keyway
			92	Right		

EXAMPLE: 60P040RCCSC is a 60 series pump with 20 psi shaft seal, 4.05 cu. in. displacement per rev., right hand rotation, SAE "C" 2 and 4 bolt combination mounting with 2" split flange side inlet and 1 1/4" split flange side outlet.

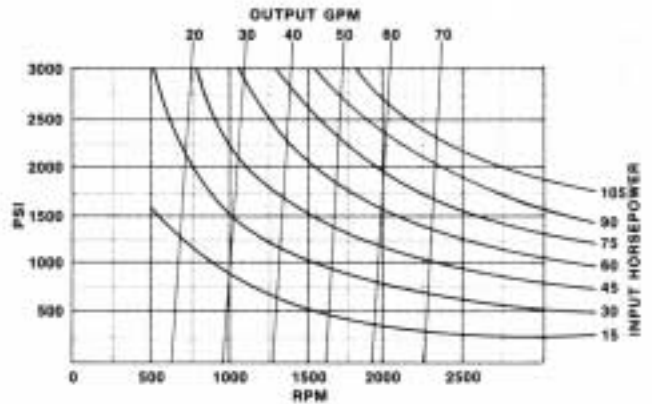


### TYPICAL PERFORMANCE DATA

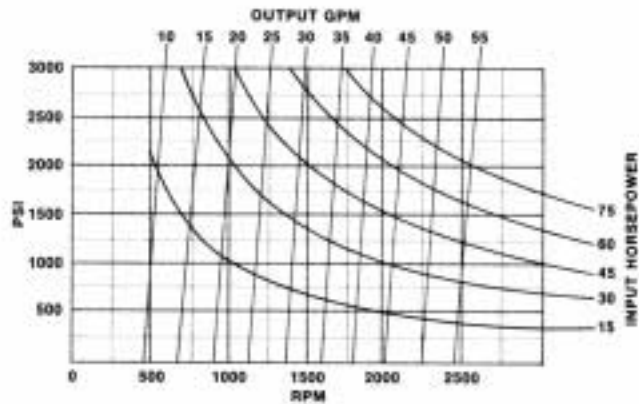
#### MODEL 60P040



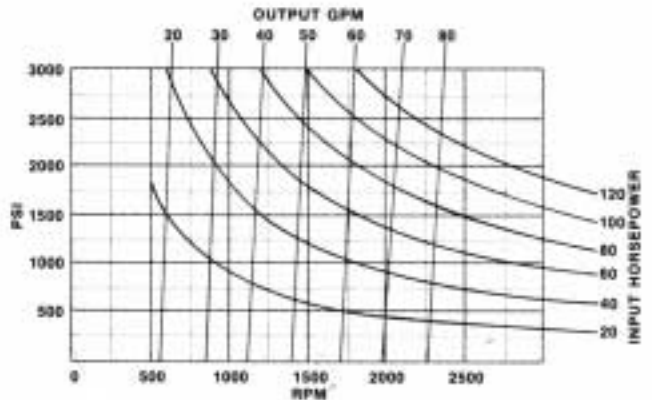
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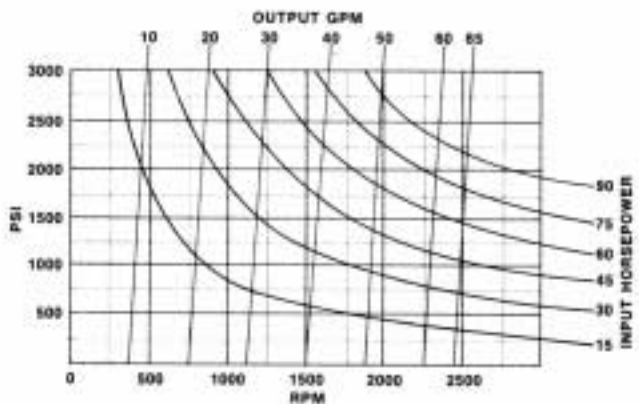
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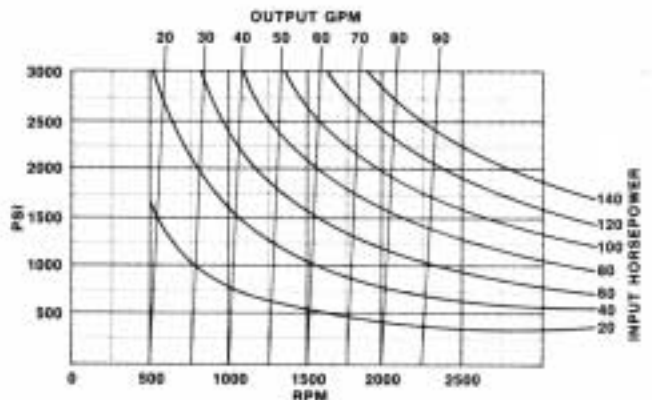
#### MODEL 60P081



#### MODEL 60P061



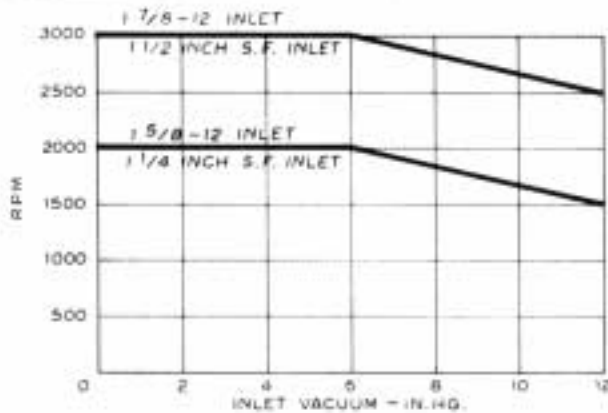
#### MODEL 60P092



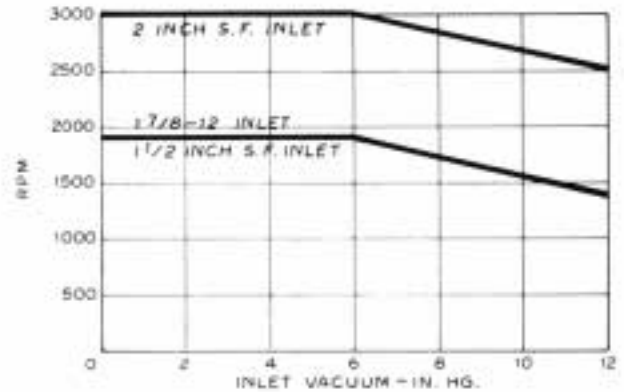


TYPICAL PERFORMANCE DATA

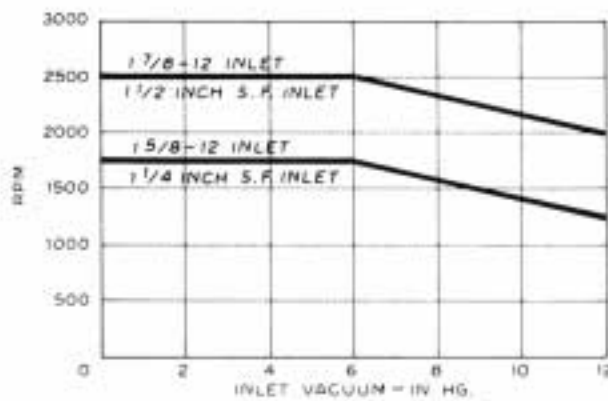
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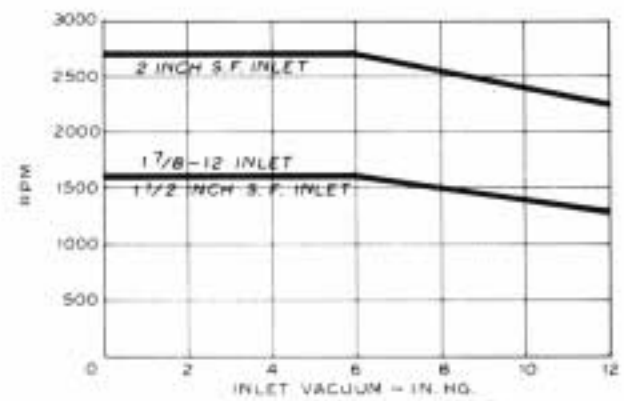
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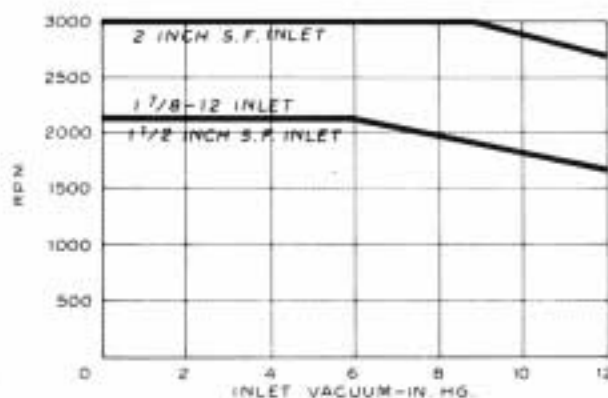
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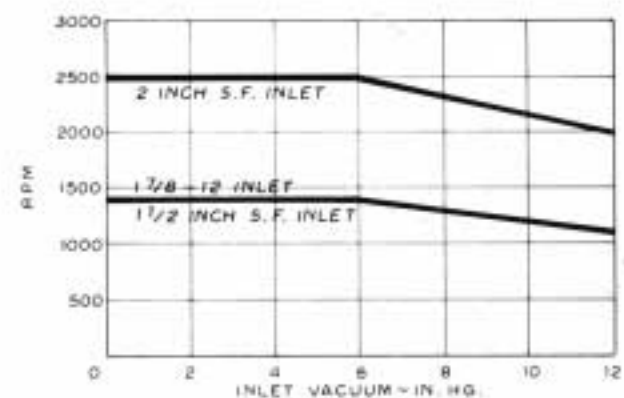
MODEL 60P081



MODEL 60P061



MODEL 60P092



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