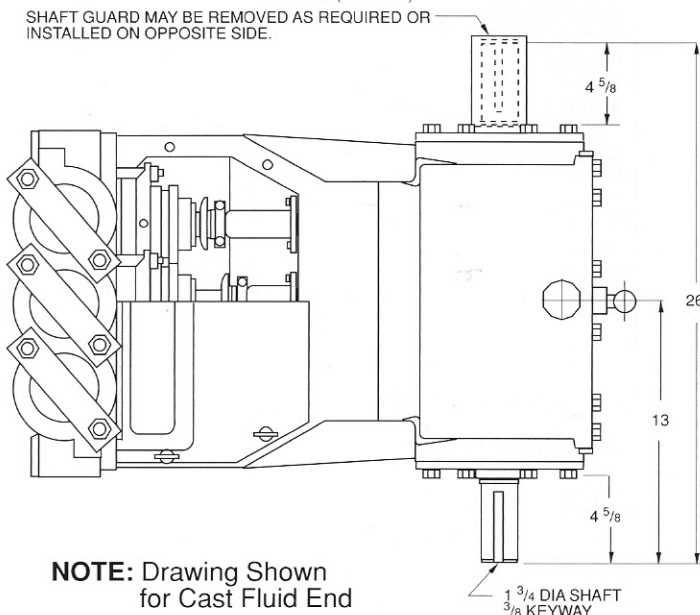
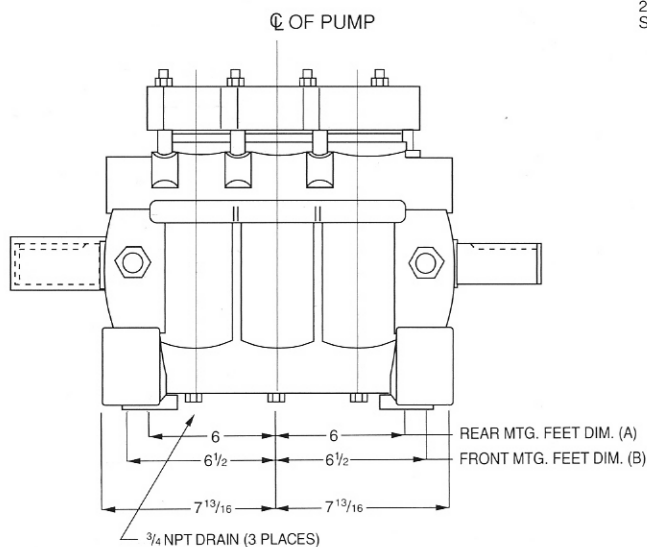
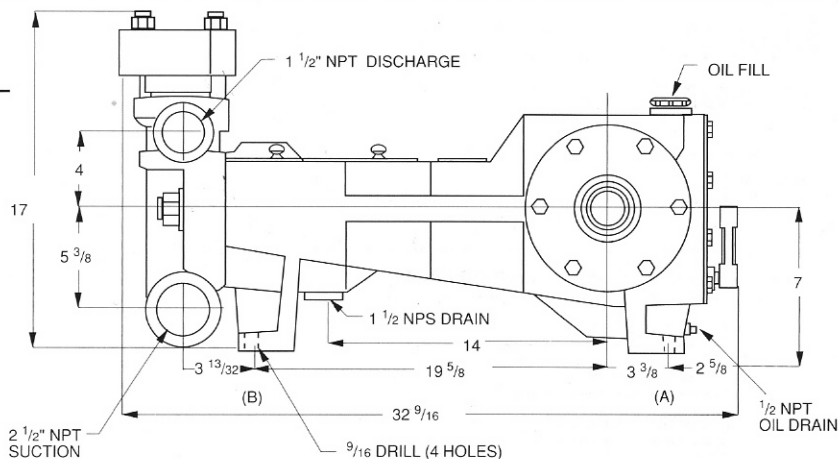


# Pump data 45 BHP

## Model M08

### Plunger Pump



**Pump type:** Triplex plunger

**NOTE:** Drawing Shown for Cast Fluid End

### Drive-end specifications

Stroke — 2"  
 Oil Type — SAE 30  
 Direction of Rotation — Top of Shaft toward Head  
 Shaft Extension — Double Ended

Shipping Weight — 550 lbs  
 Maximum Speed — 600 RPM  
 Minimum Speed — 100 RPM  
 No. of Plungers — 3  
 Crankcase Material — Cast Iron  
 Oil Capacity — 1.5 gallons

## M08 TRIPLEX POWER PUMP

2" , (57.2 mm) STROKE 4450 lb. (19800N) FRAME (PLUNGER) LOAD

	PLUNGER DIAMETER *		Displacement		Maximum Discharge Pressure		STD VALVE DATA			CYLINDER CONNECTIONS		
	INCH	MM	GAL/REV	L/REV	PSIG	BAR	DISC. DIAMETER	SEAT HOLE AREA	% Area	SUCTION	DISCHARGE	
<b>A</b>	806	.75	19.1	.0115	.044	10000	690	.97" (24.6 mm)	.307 IN <sup>2</sup> (198 mm <sup>2</sup> )	69	1 1/2"	3/4"
	807	.875	22.2	.0156	.059	7400	510			51		
	808	1.0	25.4	.0204	.077	5650	390			39		
<b>B</b>	810	1.25	31.8	.0319	.121	3620	250	2" (50.8 mm)	1.25 IN <sup>2</sup> (806 mm <sup>2</sup> )	102	2 1/2"	1 1/2"
	812	1.50	38.1	.0459	.174	2520	174			71		
<b>C</b>	814	1.75	44.5	.0625	.237	1850	128	2" (50.8 mm)	1.25 IN <sup>2</sup> (806 mm <sup>2</sup> )	52	2 1/2"	1 1/2"
	816	2.00	50.8	.0816	.309	1420	97.90			40		
	818	2.25	57.2	.1033	.391	1120	77.20			31		

# M08 TRIPLEX POWER PUMP

## STANDARD MATERIAL OF CONSTRUCTION

REF#	DESCRIPTION	MATERIAL					
		FLUID END		DI	DI/AI	AB	SS
	Fluid Cylinder (valve chamber)	A536 GR 80-55-06 Ductile Iron		CDA 954 Alum Bronze	316 Stn Stl	Wrought Carbon Steel	
	Stuffing Box	A536 GR 80-55-06 Ductile Iron		Type 316 SS		316 Stn Stl	416 Stn Stl
	Throat Ring	CDA 954 Alum Bronze	Glass Filled PPS	CDA 954 Alum Bronze	Glass Filled PPS		C360 Brass
	Lantern Gland	CDA 954 Alum Bronze			316 Stn Stl	Carbon Steel	C360 Brass
	Adjusting Nut	CDA 954 Alum Bronze	1018 Stl	CDA 954 Alum Bronze	316 Stn Stl	Carbon Steel	C360 Brass
	Plunger	Solid Ceramic w. 316 SS Quill or Hard Faced 1018 Stl				Hard Faced 1018 Stl	Hard Faced 416 Stn Stl
	Valve Disc	Celcon or 316 Stn Stl or 17-4 Ph					440 Stn Stl
	Valve Seat	316 Stn Stl or 17-4 Ph					440 Stn Stl
	Valve Spring	Inconel 600					17-7 Ph Stn Stl
	Valve Spring Retainer	316 Stn Stl					416 Stn Stl
	Valve Fastener (Stud)	6Al-4V Titanium					N/A
	Valve Cover	Carbon Steel	316 Stn Stl		Carbon Steel	Carbon Steel	
	Packing Spring (if used)	Inconel X-750					17-7 Ph Stn Stl
	Stuffing Box O-Ring	Teflon			Teflon	Teflon	Teflon
	Valve Cover O-Ring	Teflon			Teflon	Teflon	Teflon
<b>POWER END</b>							
	Power Frame (pump case)	A48 Class 30 Cast Iron					
	Crank	A536 GR 100-70-03 Ductile Iron					
	Main Bearings	Steel-Tapered Roller Type					
	Connecting Rod	A536 GR 80-55-06 Ductile Iron					
	Crosshead	A48 Class 30 Cast Iron					
	Crosshead Extension (pony rod)	17-4 Ph					

### Horsepower

MO810 requires 45 HP @ 3620 PSI; 19.0 GPM  
 MO812 requires 45 HP @ 2520 PSI; 27.5 GPM  
 MO814 requires 45 HP @ 1850 PSI; 37.5 GPM  
 MO816 requires 45 HP @ 1420 PSI; 49.0 GPM  
 MO818 requires 45 HP @ 1120 PSI; 62.0 GPM

### Brake Horsepower Required For Specific Applications

$$= \frac{(\text{GPM}) (\text{PSI})}{1543} \text{ or } \frac{(\text{BPD}) (\text{PSI})}{52903}$$

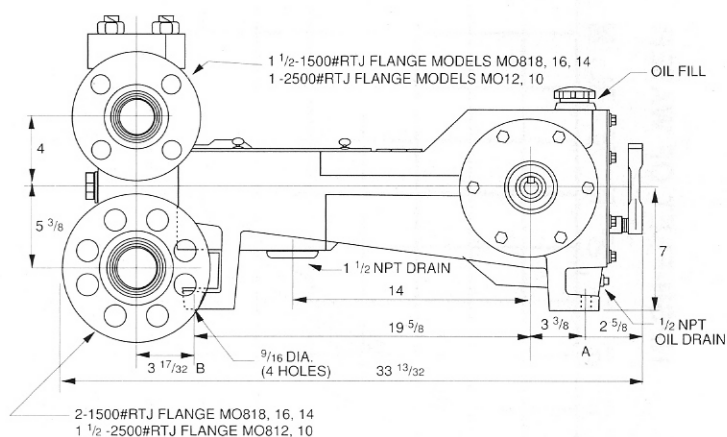
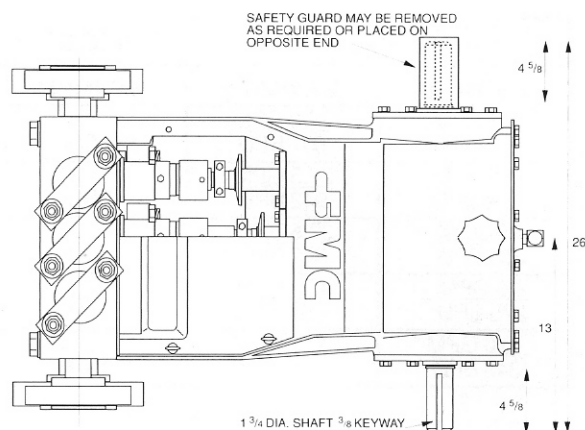
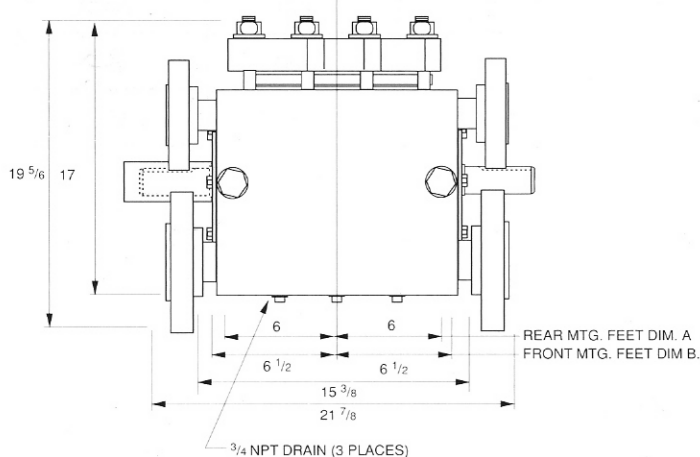
### Technical Notes

1. Volumes indicated are based on 100% Volumetric Efficiency.
2. Horsepower required based on 90% Mechanical Efficiency.
3. Ratings are nominal speeds and pressures and may vary on FMC written approval.

FMC Corporation Fluid Control Division. P.O. Box 1377, Stephenville, Texas 76401, Phone: 817/968-2181, Fax: 817/968-5709

# Pump data 45 BHP

## Model MO8 API



### Pump type: Triplex plunger

### Drive-end specifications

Stroke — 2"

Oil Type — SAE 30

Direction of Rotation — Top of Shaft toward Head

No. of Plungers — 3

Crankcase Material — Cast Iron

Oil Capacity — 6 Quarts

Shaft Extension — Double Ended Standard

### Fluid-end specifications

Fluid-end materials — Forged-Steel, Stainless Steel, Duplex Stainless

Valves Available — 316 Stainless Steel Valve with Celcon Plates  
316 Stainless Steel Valves with 316 S.S. Plates (opt.)  
Hastelloy "C", 17-4 Wing Guided (abrasion resistant)

Seal Materials  
O-Rings — Teflon  
Gaskets — None  
Packing — Kevlar & Teflon

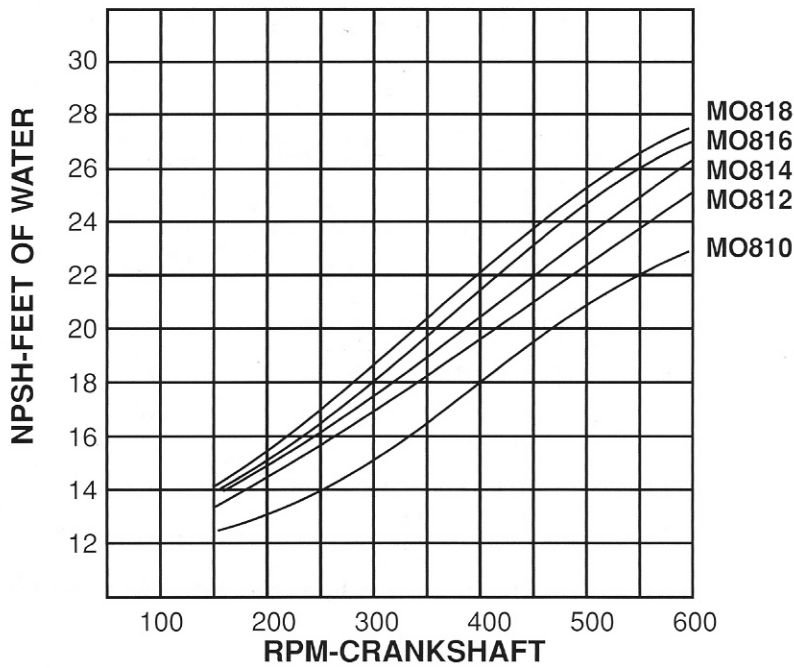
Plunger Material — Hard Coated Stainless

Connections — 2" suction Flanged  
1 1/2" and 1" discharge Flanged

Estimated Shipping Weight — 575 lbs.

# Performance Specifications

	Displacement		Input		RPM	PLUNGER DIAMETER INCHES	MAXIMUM PSI	DISPLACEMENT GALLONS PER REVOLUTION
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MAXIMUM			
MO810	3.0 GPM 103 BPD	19.0 GPM 651 BPD	100	600	600	1 1/4	3620	.0319
MO812	4.5 GPM 152 BPD	27.5 GPM 942 BPD	100	600	600	1 1/2	2520	.0459
MO814	6.0 GPM 206 BPD	37.5 GPM 942 BPD	100	600	600	1 3/4	1850	.0625
MO816	8.0 GPM 275 BPD	49.0 GPM 1679 BPD	100	600	600	2	1420	.0816
MO818	10.0 GPM 343 BPD	62.0 GPM 2126 BPD	100	600	600	2 1/4	1120	.1033



## Horsepower

MO810 requires 45 HP @ 3620 PSI; 19.0 GPM  
 MO812 requires 45 HP @ 2520 PSI; 27.5 GPM

MO814 requires 45 HP @ 1850 PSI; 37.5 GPM  
 MO816 requires 45 HP @ 1420 PSI; 49.0 GPM  
 MO818 requires 45 HP @ 1120 PSI; 62.0 GPM

## Brake Horsepower Required For Specific Applications

$$= \frac{(\text{GPM}) (\text{PSI})}{1543} \text{ or } \frac{(\text{BPD}) (\text{PSI})}{52903}$$

## Technical Notes

1. Volumes indicated are based on 100% Volumetric Efficiency.
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