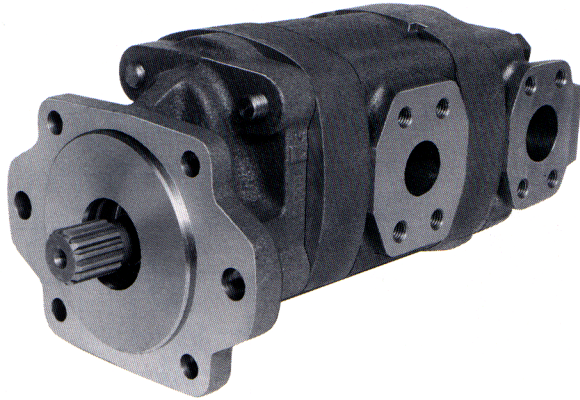


Model TPM23



Description Gear Pumps or Motors
 Flow Range . . . To 68.0 GPM (257 LTR.) Per Section
 Displacements To 6.33 C.I.R.
 (103.71 CC's/REV.) Per Section
 Maximum Pressure to 2500 PSI (172 BAR)
 Maximum Speed to 2500 RPM
 Rotation Bi-Directional
 Bearing Roller
 Construction Cast Iron

Performance Data

PUMP MODEL	SECTION SIZE	DISPLACEMENT/REVOLUTION (Theoretical)					MAXIMUM PRESSURE		MAXIMUM SPEED
		US Gallons	Cubic Inches	Liters	Cubic Centimeters	Imperial Gallons	PSI	BAR	RPM
TPM23	13	.0109	2.518	.0413	41.263	.0091	2500	172	2500
TPM23	16	.0137	3.165	.0519	51.865	.0114	2500	172	2500
TPM23	19	.0164	3.788	.0621	62.074	.0137	2500	172	2500
TPM23	22	.0192	4.435	.0727	72.677	.0160	2500	172	2500
TPM23	25	.0219	5.059	.0829	82.902	.0182	2500	172	2500
TPM23	28	.0247	5.706	.0935	93.505	.0206	2500	172	2500
TPM23	31	.0274	6.329	.1037	103.714	.0228	2500	172	2500

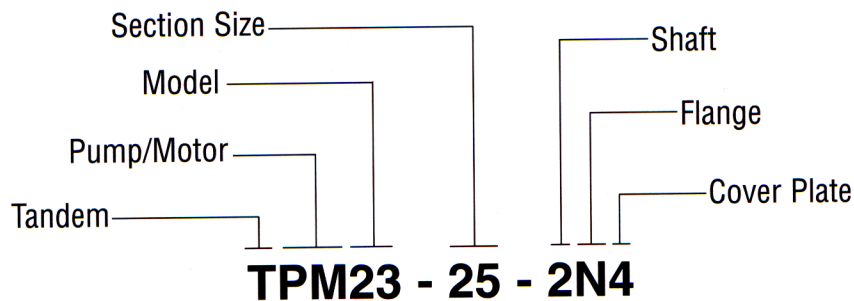
All data based on SAE 10W oil.
 Available for use with phosphate ester base fluids.

CAUTION: "Inlet vacuum" should not exceed 5" Hg at normal operating speed and temperature.
 Operation of pumps in excess of 5" Hg requires factory approval.

When sizing pumps or motors, refer to the performance charts in the back of the catalog to determine the volumetric efficiency and input or output horsepower requirements.

How To Order

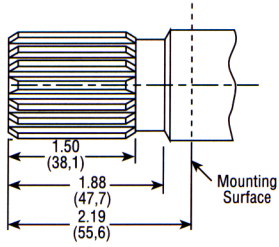
'A' denotes counterclockwise rotation
 'C' denotes clockwise rotation
 When viewed from drive shaft end



Note: Add prefix 'V' to pump model number (VPM23) when ordering pumps with Viton Seals for use with phosphate ester base fluids.

Shafts Available

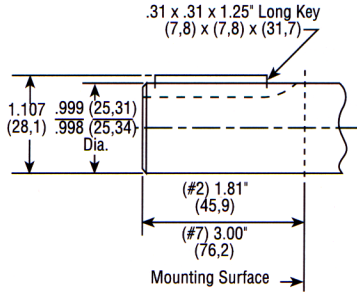
1 1-1/4" 14 Tooth Spline
Flat Root Side Fit
Torque limit 655 Lbs. Ft. (291,3 Nm)



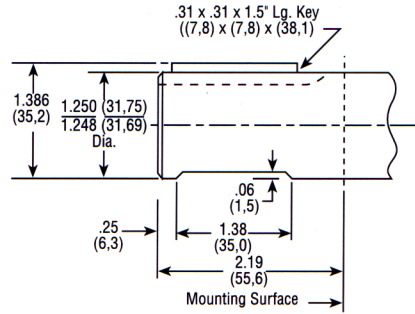
Spline Data

Diametral Pitch 12/24
Pressure Angle 30°
No. Of Teeth 14

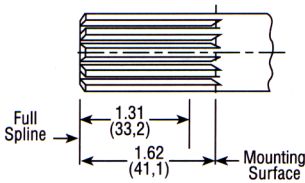
2 1" Straight
Torque limit 341 Lbs. Ft. (462,3 Nm)



3 1-1/4" Straight
Torque limit 655 Lbs. Ft. (291,3 Nm)



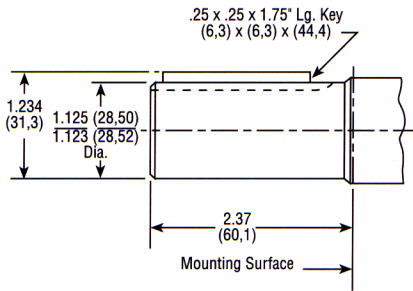
4 7/8" 13 Tooth Spline
Flat Root Side Fit
Torque limit 184 Lbs. Ft. (249,4 Nm)



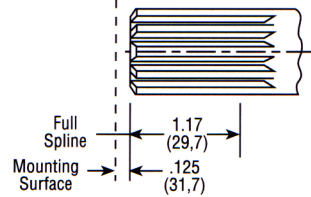
Spline Data

Diametral Pitch 16/32
Pressure Angle 30°
No. Of Teeth 13

5 1-1/8" Straight
Torque limit 450 Lbs. Ft. (610, Nm)



6 7/8" 13 Tooth Spline
Flat Root Side Fit
Torque limit 184 Lbs. Ft. (249,4 Nm)
Available with 'S' Flange Only

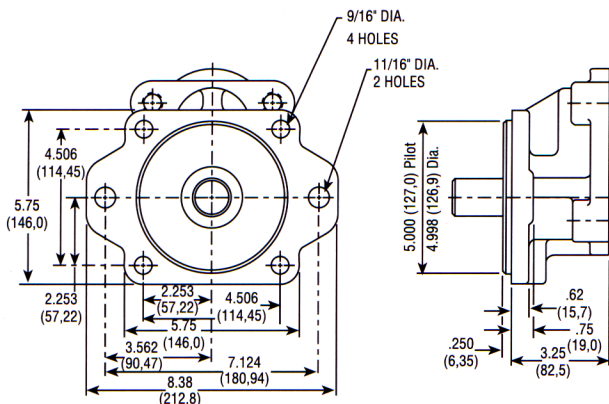


Spline Data

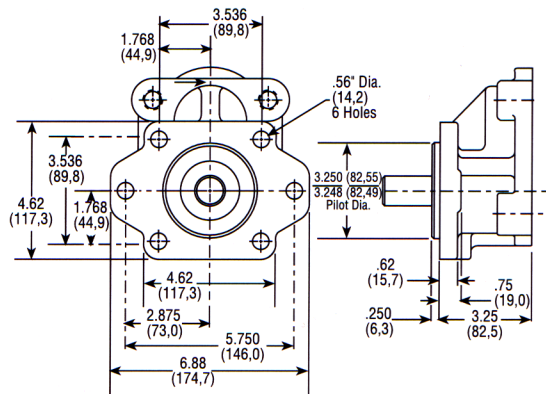
Diametral Pitch 16/32
Pressure Angle 30°
No. Of Teeth 13

Mounting Flanges Available

D SAE 'C' 2 & 4-Bolt



H SAE 'B' 2 & 4-Bolt With 'A' Pilot



See "General Product & Safety Information" on inside front cover of this catalog



Mounting Flanges Available

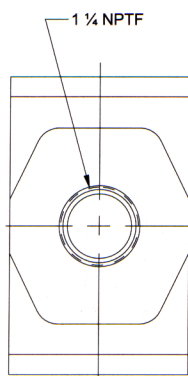
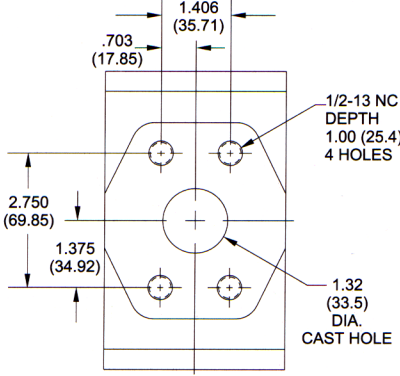
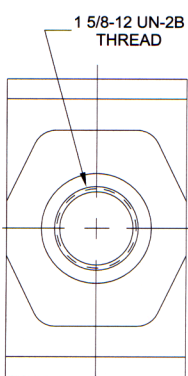
<p>N SAE 'B' 2&4 Bolt</p> <p>Dimensions (inches / millimeters):</p> <ul style="list-style-type: none"> Overall width: 5.75 (146.0) Overall height: 4.62 (117.3) Distance between bolt centers: 3.54 (89.9) Distance from center to bolt center: 1.77 (44.9) Distance from center to edge: 2.88 (73.1) Inner diameter: 4.000 (101.60) Outer diameter: 5.6 DIA. (14.2) 6 HOLES Side view dimensions: .25 (6.3), .62 (15.7), .75 (19.0), 3.25 (82.5) PILOT DIA. 3.998 (101.54) 	<p>S PTO Direct Mount Available with No. 6 Shaft Only</p> <p>Dimensions (inches / millimeters):</p> <ul style="list-style-type: none"> Overall width: 2.63 (66.7) Overall height: 2.62 (66.6) Distance between bolt centers: 1.31 (33.3) Distance from center to bolt center: .19 (4.9) Distance from center to edge: 1.9 (47.7) Distance from center to shaft: 3.75 (95.3) Inner diameter: 2.74 Dia. (69.8) Outer diameter: 2.75 Pilot (69.9) Shaft diameter: .33 Dia. (8.3) Typical dimension: .50 (12.7) Labels: P.T.O. Pilot, Shaft
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Cover Plates Available

<p>3 Blank Cover</p> <p>1-1/2" SAE 4-Bolt Conn. Max. Size For Side</p> <p>1-1/4" SAE 4-Bolt Conn. Max. Size For Rear</p>	<p>4 Side Ported NPT</p> <p>1-1/4" -11-1/2 NPT Both Sides</p>	<p>5 Rear Ported NPT</p> <p>1-1/4" -11-1/2 NPT</p>
<p>6 SAE 4-Bolt Connector</p> <p>Dimensions (inches / millimeters):</p> <ul style="list-style-type: none"> Overall width: 1.406 Distance between bolt centers: .70 Overall height: 2.750 Distance from center to bolt center: 1.37 Thread: 1/2"-13UNC Depth .81 1-1/2" SAE 4-Bolt Conn. Both Sides 	<p>7 Side Ported SAE Straight Thread—O Ring</p> <p>Side</p> <p>1-5/8"-12UN-2B Both Sides</p>	<p>8 SAE Straight Thread – O-Ring</p> <p>O-Rings Rear Ported</p> <p>1-5/8"-12UN-2B</p>

* These dimensions locate \bar{C} of bolt pattern only
SAE 4-Bolt NPT Connectors are available. See Accessory Section

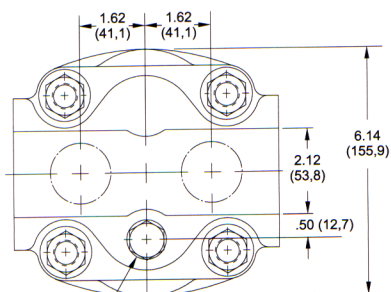
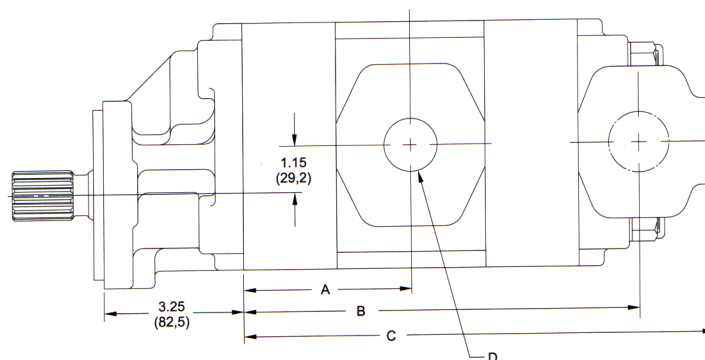
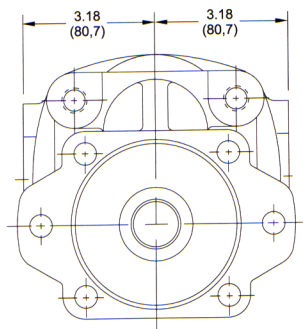
Connector Plate Ports

4 NPTF	6 SAE 4-Bolt	7 SAE Straight Thread
 <p>1 1/4 NPTF</p> <p>1-1/4 NPT PORT BOTH SIDES</p>	 <p>1.406 (35.71)</p> <p>.703 (17.85)</p> <p>2.750 (69.85)</p> <p>1.375 (34.92)</p> <p>1/2-13 NC DEPTH 1.00 (25.4) 4 HOLES</p> <p>1.32 (33.5) DIA. CAST HOLE</p> <p>1-1/2 SAE 4-BOLT BOTH SIDES</p>	 <p>1 5/8-12 UN-2B THREAD</p> <p>#20 SAE PORT BOTH SIDES</p>

Dimensional Data

Mounting Dimensions

PUMP SIZES	A		B		C		SHIPPING WEIGHTS (Approx.)	
	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.
TPM23-13	2.85	(72,39)	3.47	(88,14)	4.69	(119,1)	35.0	15.9
TPM23-16	3.04	(77,22)	3.66	(92,96)	4.88	(124,0)	37.5	17.1
TPM23-19	3.23	(82,04)	3.85	(97,79)	5.07	(128,8)	40.0	18.2
TPM23-22	3.42	(86,87)	4.04	(102,6)	5.26	(133,6)	42.5	19.3
TPM23-25	3.60	(91,44)	4.22	(107,2)	5.44	(138,2)	45.0	20.5
TPM23-28	3.79	(96,27)	4.41	(112,0)	5.63	(143,0)	47.5	21.6
TPM23-31	3.98	(101,1)	4.60	(116,8)	5.82	(147,8)	50.0	22.7



Drain - SAE 9/16-18 UNF-2B
To be used if back pressure
Exceeds 150 PSI

* These dimensions locate \bar{C} of bolt pattern only



See "General Product & Safety Information" on inside front cover of this catalog

