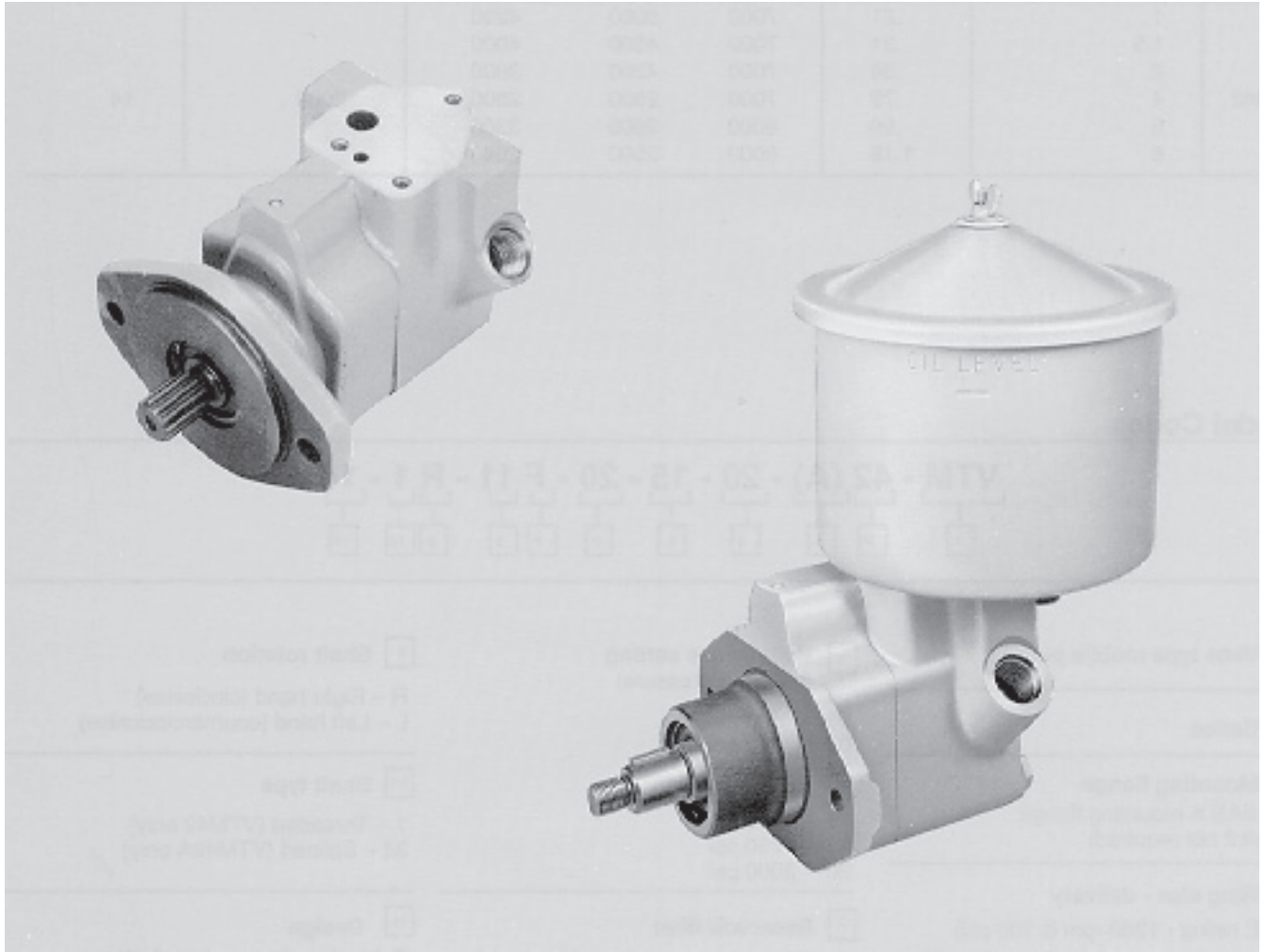


VTM42 Power Steering Pumps



High Efficiency

Optimum running clearances and hydraulic balance provide sustained high efficiency throughout pump life.

Hydraulic Balance

Vickers' design eliminates pressure-induced bearing loads to provide longer life and reduced maintenance.

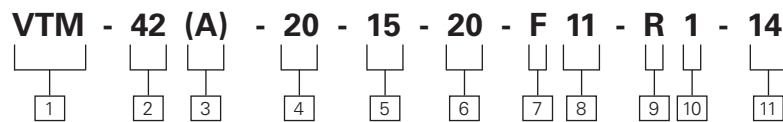
Integral Valves

Flow control and relief eliminate the need for separate valves. Vickers pumps supply, in one package, a complete power source for steering.

Operating Specifications

Model Series	Delivery USgpm @ 1200 r/min 7 bar (100 psi)	Displ. cm ³ /r (in ³ /r)	Maximum speed -r/min		Maximum pressure bar (psi)	Approx. weight kg (lbs.)
			@ 7 bar (100 psi)	@ 100 bar (1500 psi)	@ 140 bar (2000 psi)	
VTM42	1	3,4 (.21)	7000	5000	4250	140 (2000)
	1.5	5,1 (.31)	7000	4500	4000	
	2	6,2(.38)	7000	4200	3800	
	4	12,9 (.79)	7000	2800	2800	
	5	15,7 (.96)	6000	2600	2300	
	6	19,3 (1.18)	5000	2500	2000	

Model Codes



1 Vane type mobile pump

2 Series

3 Mounting flange

A – SAE A mounting flange
(Omit if not required)

4 Ring size - delivery

(SAE rating - 1200 rpm & 7 bar (100 psi))

10 – 1.0 USgpm **40** – 4.0 USgpm
15 – 1.5 USgpm **50** – 5.0 USgpm
20 – 2.0 USgpm **60** – 6.0 USgpm

5 Controlled flow rate

(at 1500 rpm & 7 bar (100 psi))

15 – 6 L/min (1.5 USgpm)
20 – 8 L/min (2 USgpm)
25 – 9,5 L/min (2.5 USgpm)
30 – 11 L/min (3 USgpm)
35 – 13 L/min (3.5 USgpm)
40 – 15 L/min (4 USgpm)
45 – 17 L/min (4.5 USgpm)
50 – 19 L/min (5 USgpm)
55 – 21 L/min (5.5 USgpm)
60 – 23 L/min (6 USgpm)
65 – 25 L/min (6.5 USgpm)
70 – 26,5 L/min (7 USgpm)
75 – 28 L/min (7.5 USgpm)

6 Relief valve setting

(cracking pressure)

05 – 35 bar (500 psi)
07 – 52 bar (750 psi)
10 – 70 bar (1000 psi)
12 – 86 bar (1250 psi)
15 – 100 bar (1500 psi)
17 – 120 bar (1750 psi)
20 – 140 bar (2000 psi)

7 Reservoir filter

F – Filter instead of standard baffle.
Omit if not required.

8 Reservoir or manifold

07 – 1147 mL (70 in³) reservoir
(Omit for VTM42A)
11 – 1884 mL (115 in³) reservoir
(Omit for VTM42A)
MA – Manifold without bypass tube
MB – Manifold with bypass tube
MD – Manifold with 90° tank connection
ME – Cast manifold without bypass tube
MF – Cast manifold with bypass tube
NO – None (shipping closure only)

9 Shaft rotation

R – Right hand (clockwise)
L – Left hand (counterclockwise)

10 Shaft type

1 – Threaded (VTM42 only)
38 – Splined (VTM42A only)

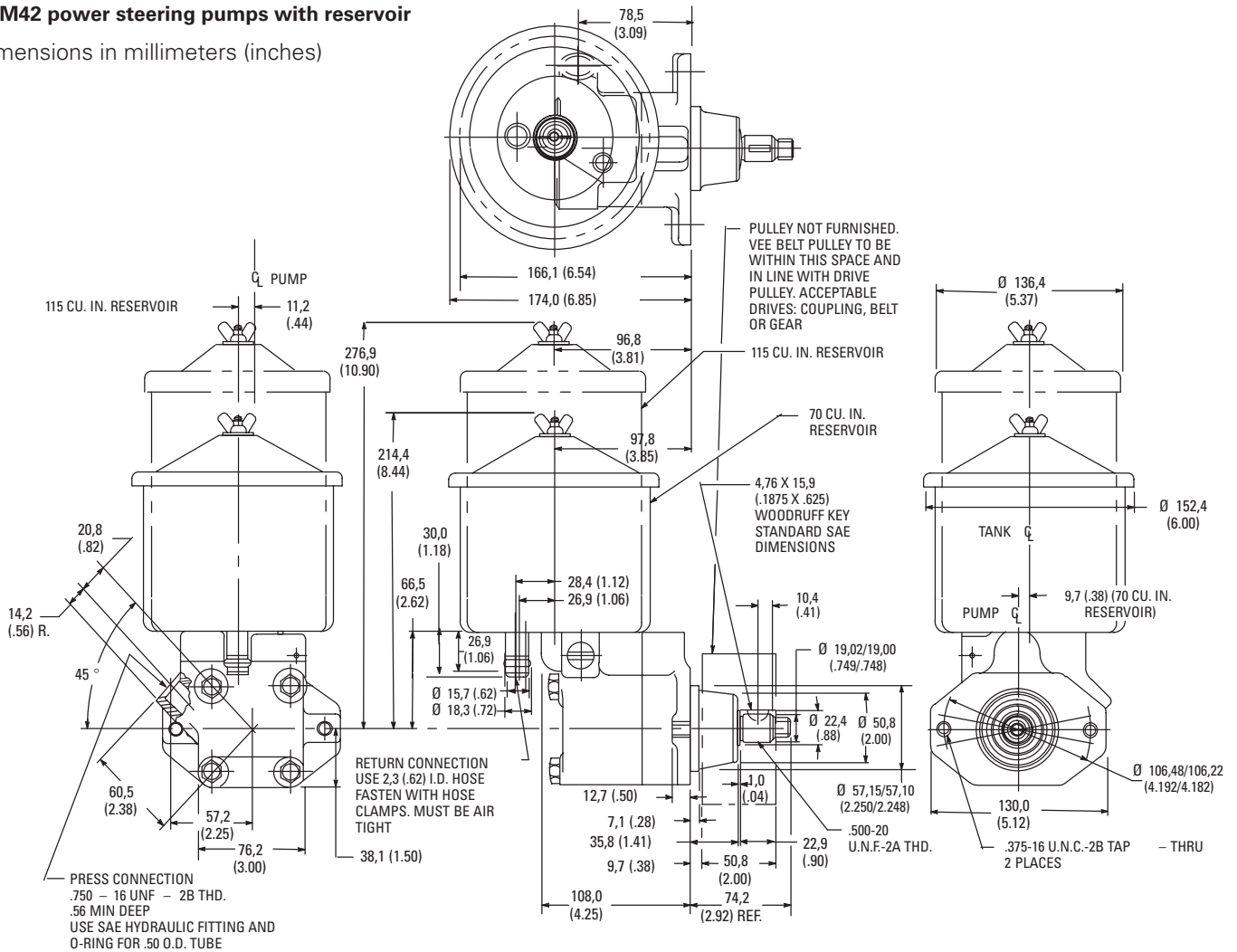
11 Design

Subject to change. Installation dimensions remain the same for designs –10 through –19.

Installation Dimensions

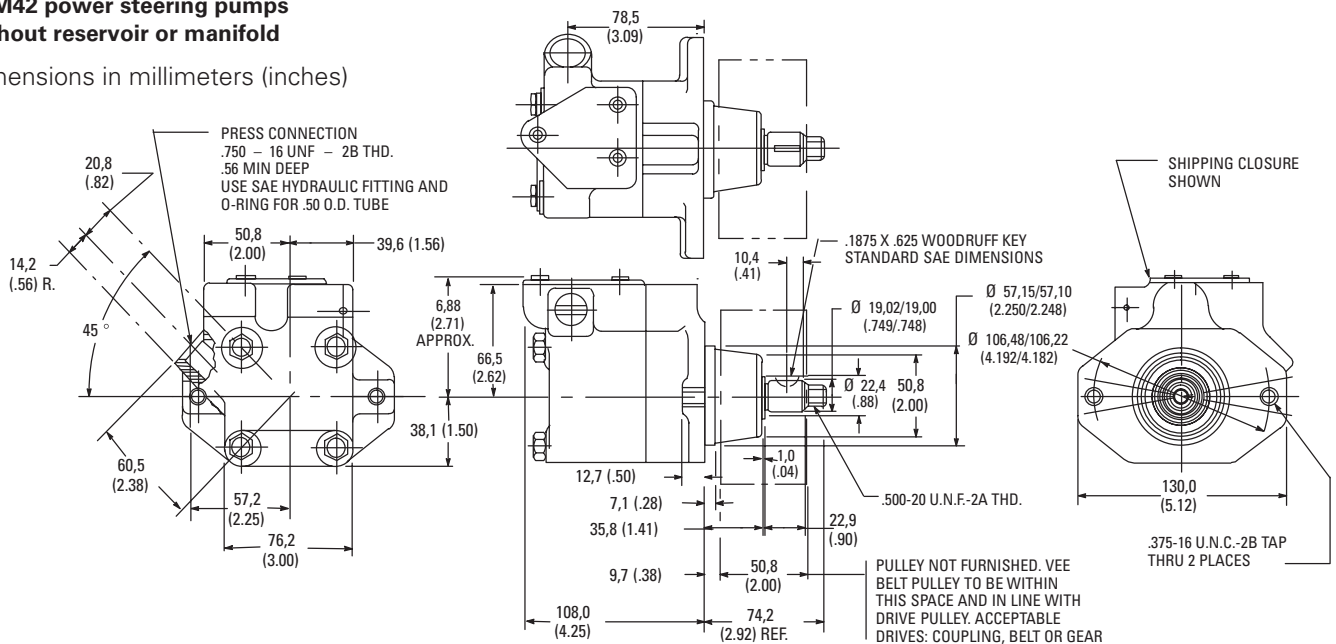
VTM42 power steering pumps with reservoir

Dimensions in millimeters (inches)



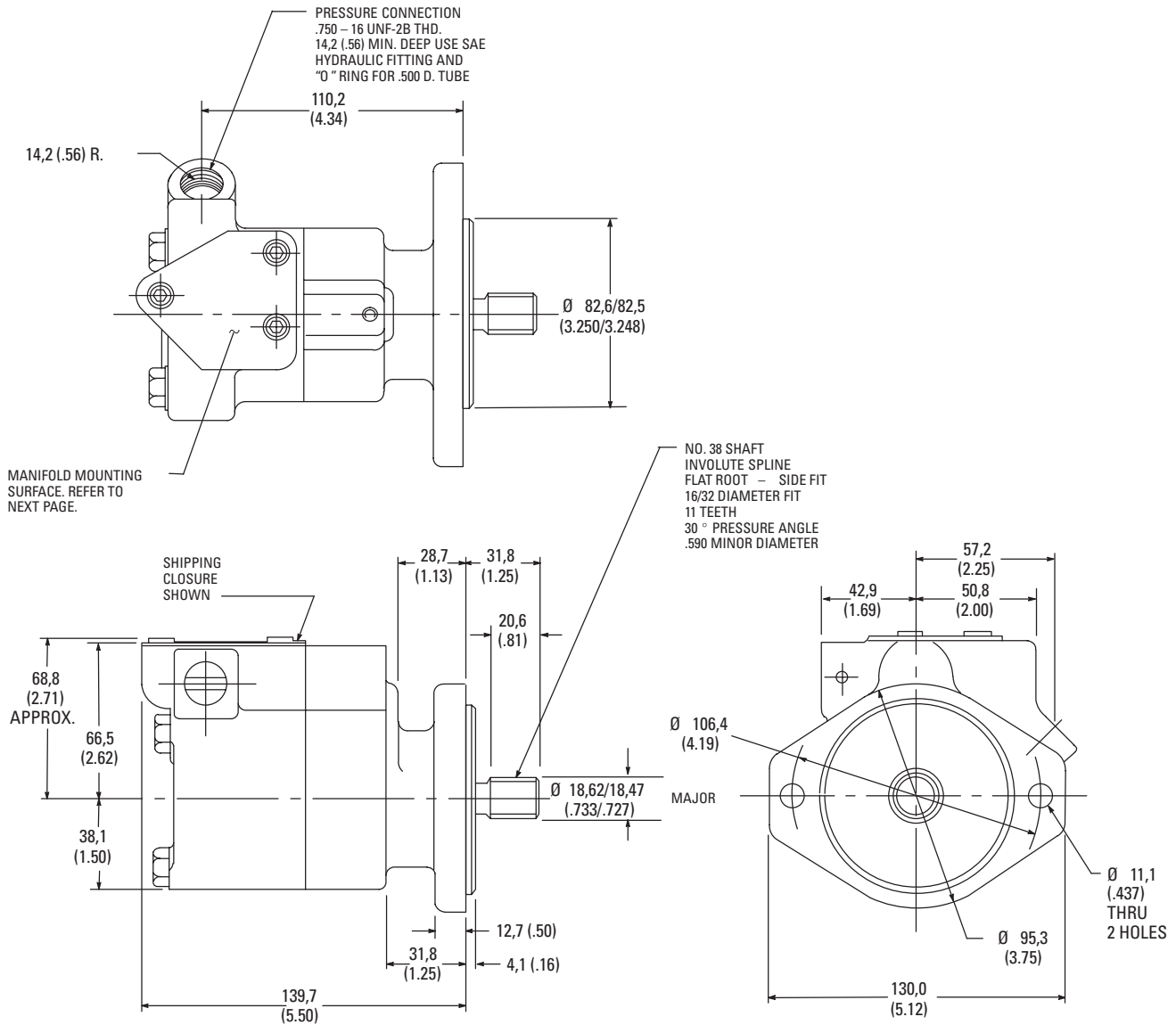
VTM42 power steering pumps without reservoir or manifold

Dimensions in millimeters (inches)



VTM42A power steering pumps without manifold

Dimensions in millimeters (inches)

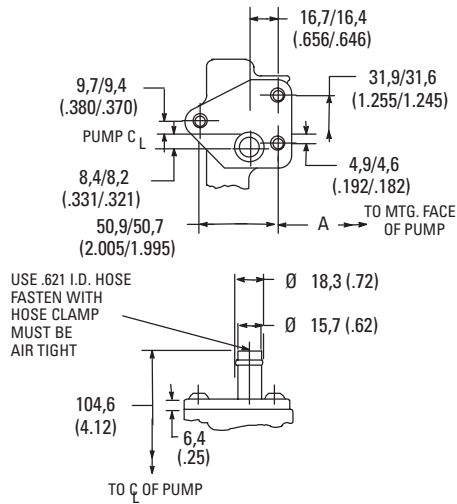


Installation Dimensions

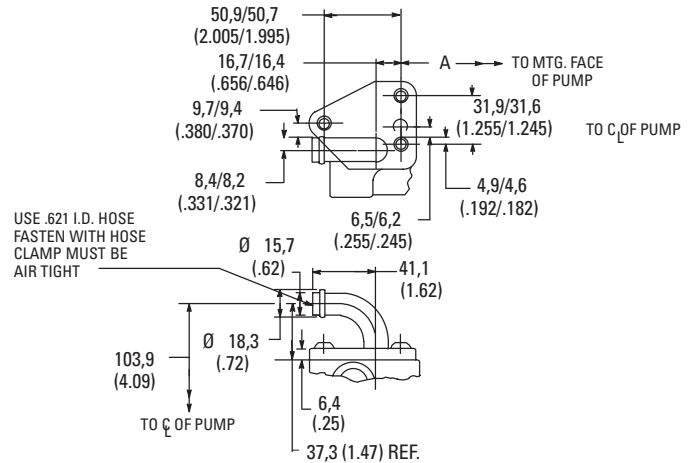
Manifolds for power steering pumps

Dimensions in millimeters (inches)

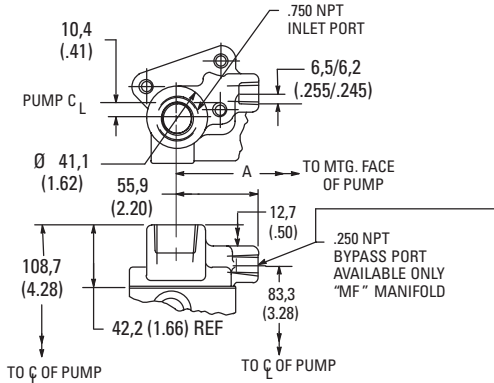
"MA" MANIFOLD



"MD" MANIFOLD

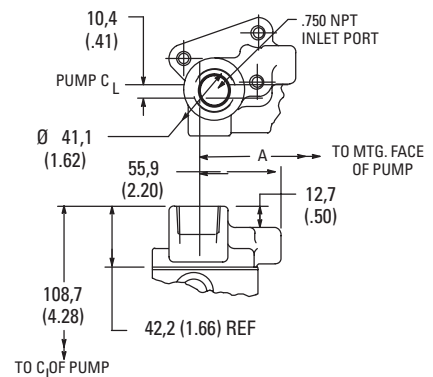


"MF" MANIFOLD

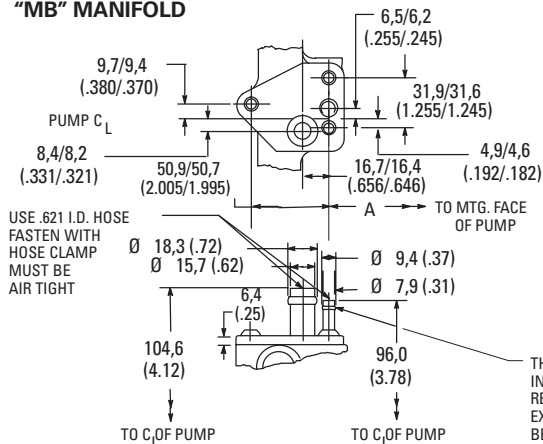


THIS TANK BYPASS CONN. IS REQUIRED FOR INSTALLATIONS WHICH OPERATE AT PUMP RELIEF VALVE PRESSURES FOR PERIODS EXCEEDING 15 SECONDS. CONNECTION MUST BE MADE BELOW OIL LEVEL IN RESERVOIR.

"ME" MANIFOLD



"MB" MANIFOLD

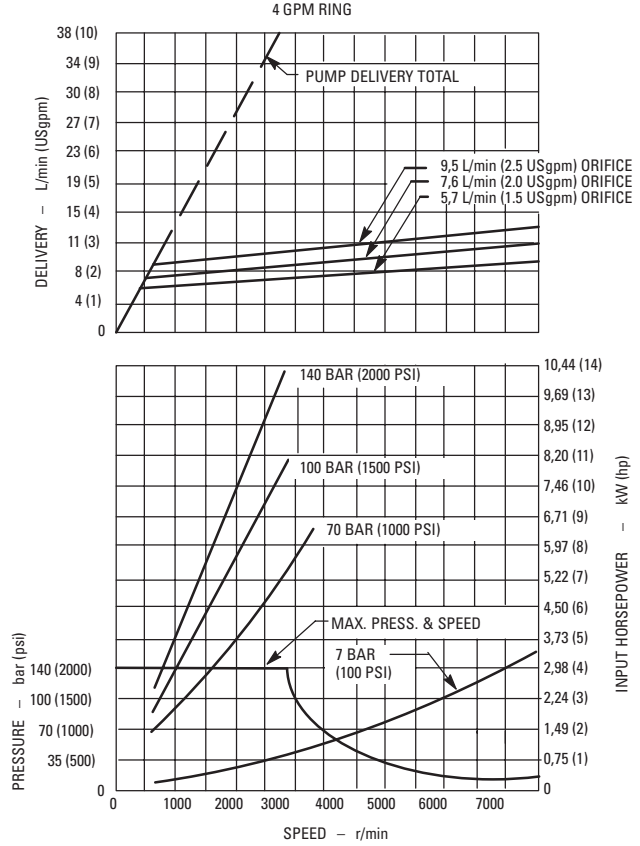
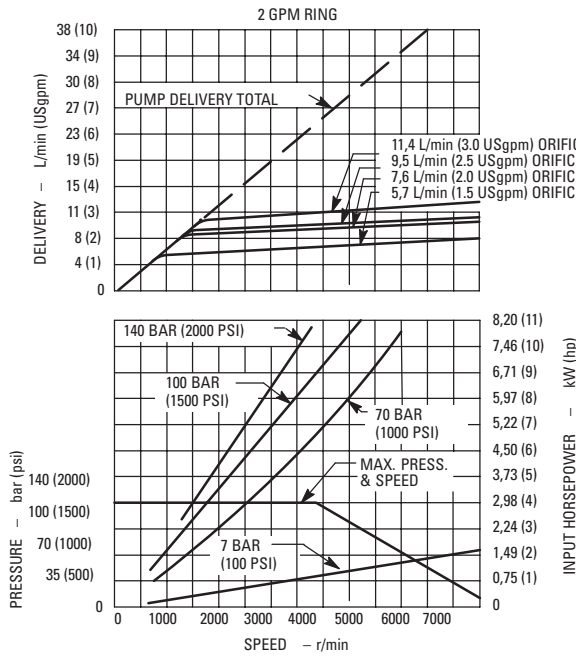
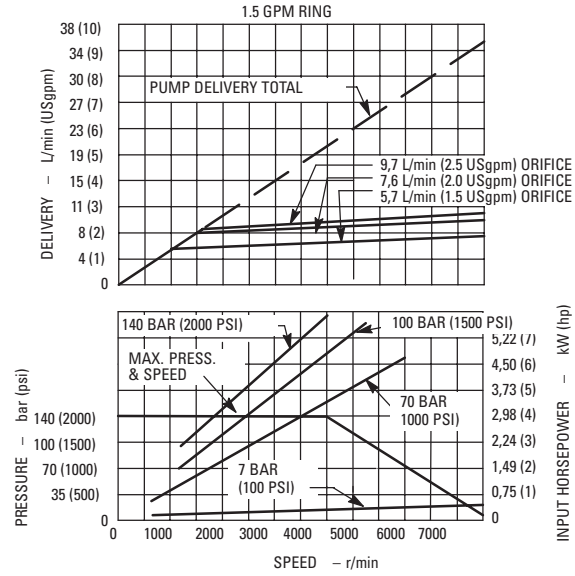
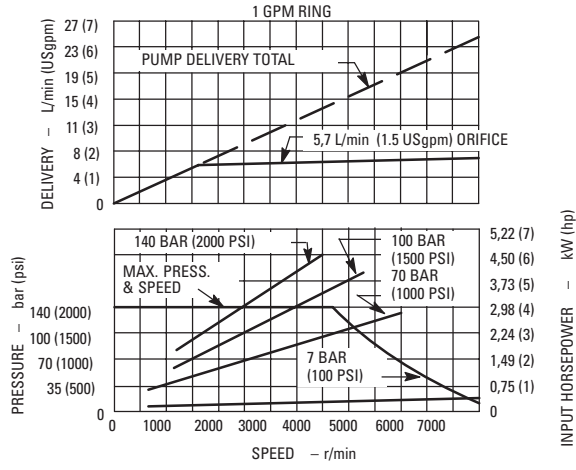


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Manifold Code	Dimension A	
	VTM42	VTM42A
MA		
MB	47,0	78,7
MD	(1.85)	(3.10)
ME	75,9	107,7
MF	(2.99)	(4.24)

Typical Performance

VTM42(A) power steering pumps



Typical Performance

VTM42(A) Power Steering Pumps

