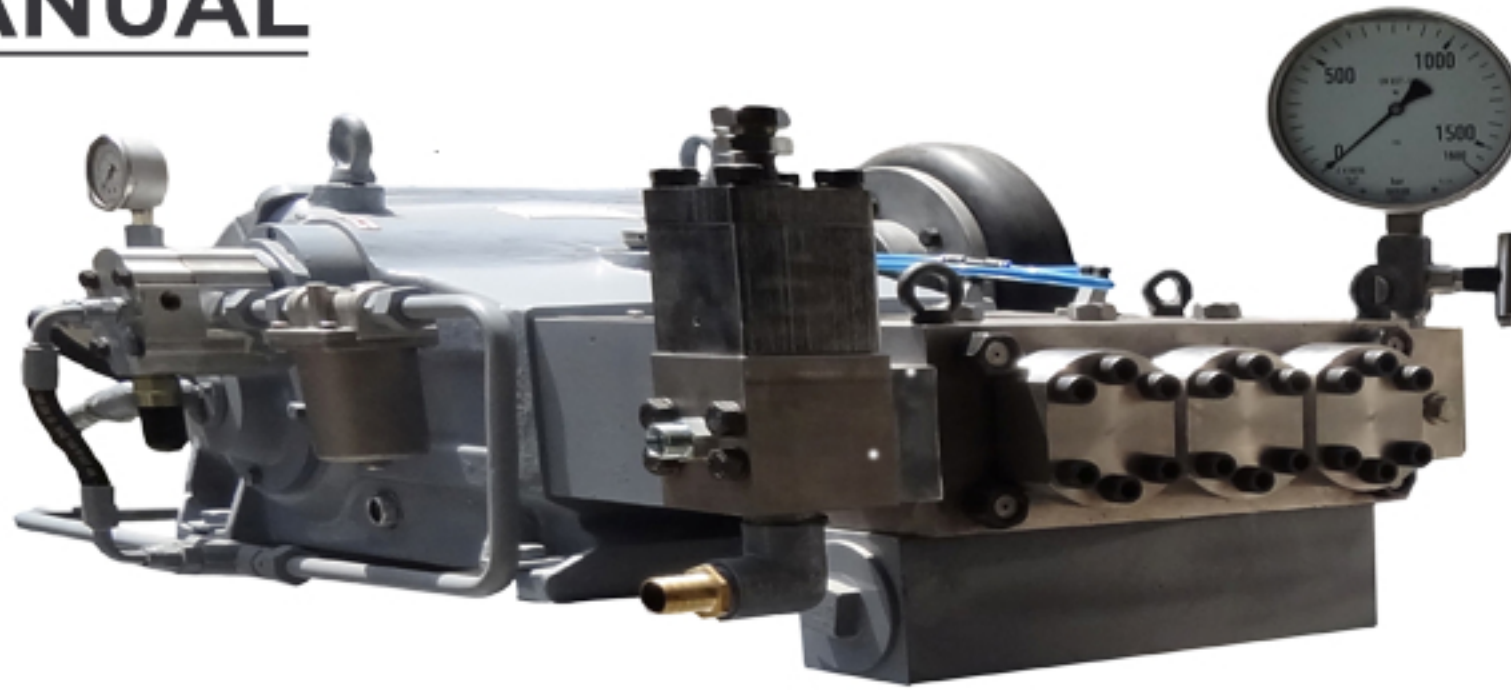


VM - SERIES | TRII-PLEX

PUMP MANUAL



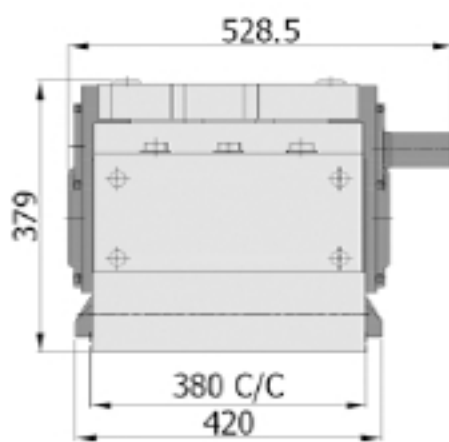
MATERIAL OF CONSTRUCTION:-

- >**CRANKSHAFT** - Alloy steel: Crankshaft is made of nitrated, hardened and precision ground for extremely long life and durability.
- >**MAIN BODY(CRANK CASE)** - Spheroidal Graphite Iron: Main body in spheroidal graphite Iron casting with honned surface finish bore.
- >**PISTON (CROSSHEAD)** - Grey Iron & Stainless Steel: Alloy steel casting piston & stainless steel piston rod are hardened & super finish surface.
- >**CONNECTING ROD** - Alloy Steel: Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.
- >**BEARING** - Oversized for maximum life and load disbursement. Self-alignment roller bearing enables it to handle 26% more load than other pumps.
- >**PUMP HEAD** - Stainless Steel: Liquid end is made of high corrosion resistant. Forged stainless steel.
- >**COMPLETE VALVE** - Stainless Steel: Valves made stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% efficiency plus.

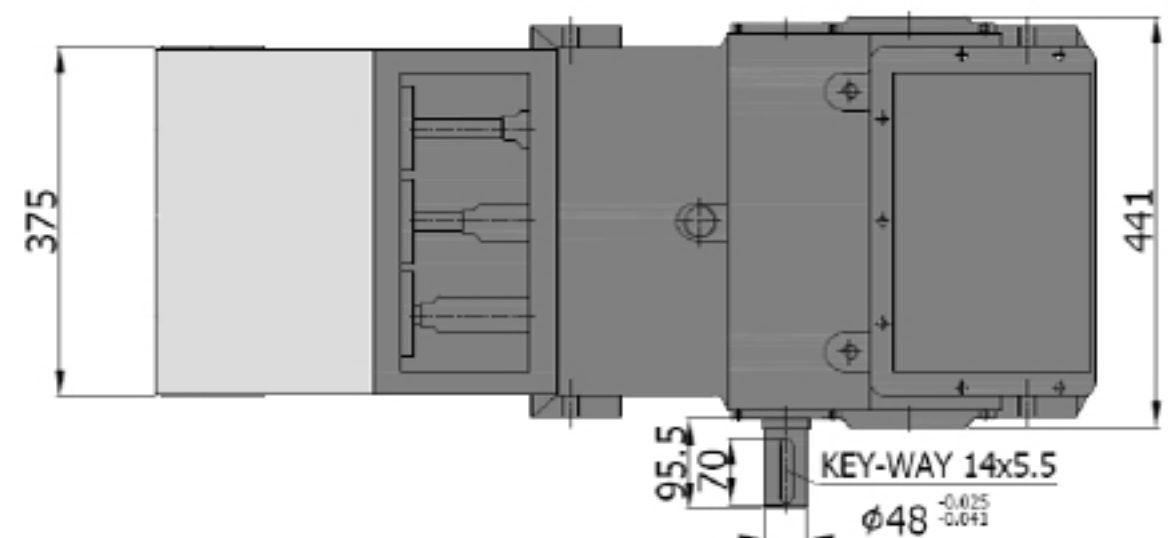
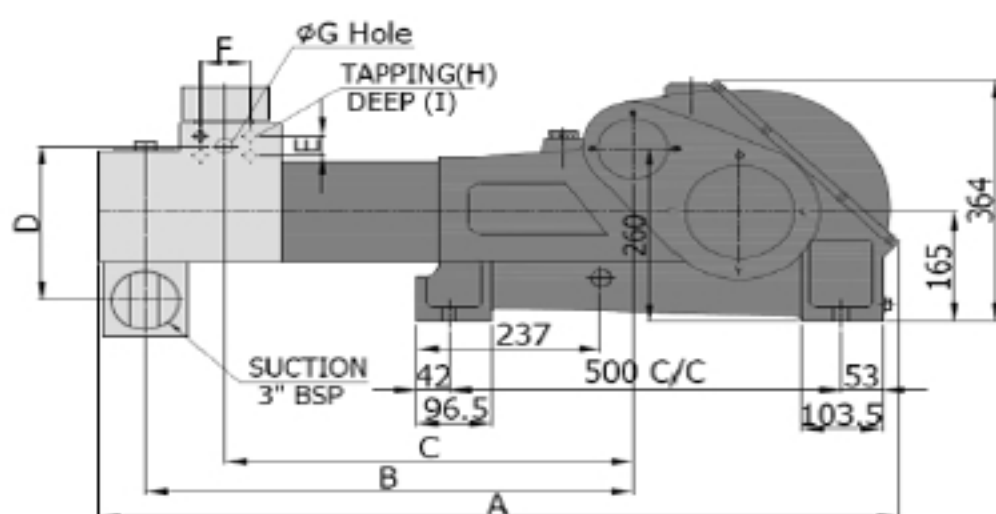
- >**PLUNGER (SOLID CERAMIC)** - Surface roughness is extremely good i.e. <math><0.2 Ra.</math> (99.5% Alumina Grade)
- >**PLUNGER SEAL** - PTFE Aramide: Aramide fibre yarn packing with PTFE fibre face or carbonaceous aramide yarn packing with GFO fibre face for high compressive & tensile strength ensure effective sealing.
- >**WHITE METAL BEARING** - Antifriction bearings for long life of crankshaft
- >**HELICAL GEAR** - Alloy steel: Helical gear is nitride hardened and precision ground for extremely long life and durability.
- >**PINION SHAFT** - Alloy steel: Pinion shaft is nitride hardened and precision ground for extremely long life and durability.

TECHNICAL DETAILS:-

- >**Plunger Stroke** - 105mm
- >**Plunger Force** - 40 KN (4080 Kgf)
- >**Max. Plunger Speed** - 1.52 m/sec. @ 500 spm



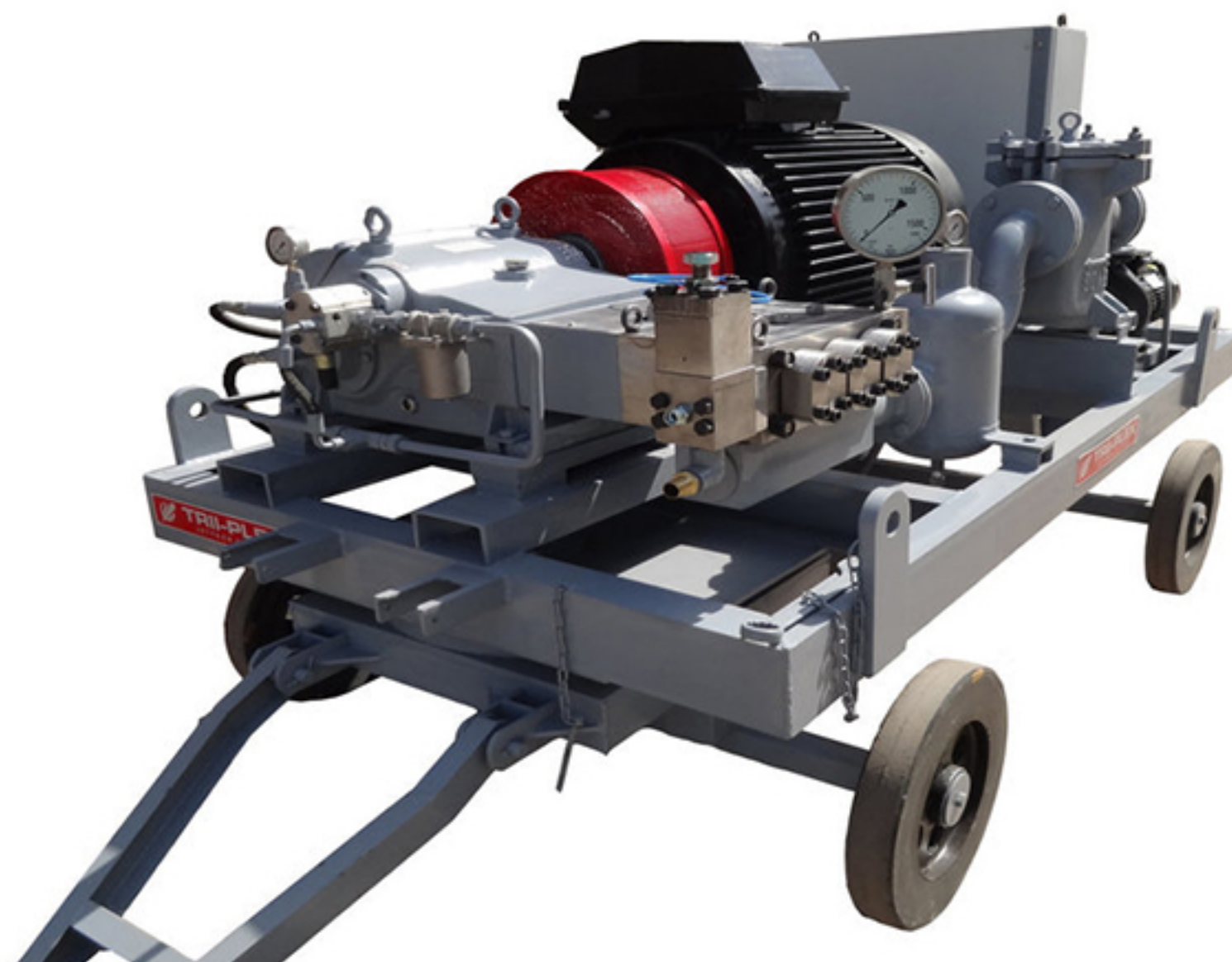
DIMENSIONAL DRAWING OF VM BARE PUMP



- Note:** - (1) Flow rates indicated are at 100% volumetric efficiency. Actual flow rate will be $\geq 90\%$
 (2) All models are suitable for 50 Hz (1450-RPM) and 60 Hz (1800-RPM) power specification

PUMP MANUAL | TRII-PLEX JETTECH SYSTEMS

VM SYSTEM PHOTO



VM SERIES - 15000 PSI (1000 BAR) Pump

Pump Model	Plunger Dia. (mm)	Flow Rate (lpm)	Crank Shaft speeds 435 Min with 1450 RPM Electric Motor		
			100 HP / 75 KW	125 HP / 90 KW	150 HP / 110 KW
			VM-20	20	38
VM-22	22	47	800	950	1000
VM-24	24	56	650	800	950
VM-26	26	65	550	700	800
VM-28	28	76	480	600	700
VM-30	30	87	410	500	600
VM-32	32	99	375	450	525
VM-36	36	126	280	350	400

1. Maximum permissible fluid temperature is 70° C.
2. Power Calculations shown in the table is based on maximum rated pressure. However, for low pressure requirement, power will also be proportionally reduced. Pump speed lower than specified in above chart is also available for special application.
3. Volumetric efficiency is considered @ 100% where not specified.

SUITABLE APPLICATIONS OF VM SERIES RANGE

HYDROBLASTING, TUBE CLEANING, PAINT REMOVAL, HYDRO TEST, SURFACE PREPARATION