## TMA 31/1-R Multi Stage Centrifugal Pump



HEAD CAPACITY FEATURES	<ul> <li>225 to 720 FT.</li> <li>10 to 40 USGPM</li> <li>Multi-stage centrifugal pumps which employ a closed type impeller design; Axial thrusts are balanced by special blades on back of impellers; Heavy duty outboard single bearing to absorb remaining thrusts and sleeve bearing at non-drive end; One-piece stage/diffuser element increases efficiencies, simplifies maintenance and reduces weight</li> </ul>
SHAFT SEALING	: One mechanical seal with outboard bearing and sleeve bearing design - Double mechanical seals are optional
OPTIONS	: Bareshaft - Close-coupled monoblock - Directly coupled to electric motor - Mounted on baseplate
OPERATING LIMITS	: Maximum liquid temperature 250°F; Max. liquid temp. with cooled seal housing 320°F; Max. discharge pressure 580 PSIG; Max. suction pressure of 230 PSIG;
FLANGE ORIENTATION	Note: the type of mechanical seal used also dictates temperature limits : Standard – Suction facing left viewed from drive end Optional – Suction facing right or top viewed from drive end

## TECHNICAL DATA at 3500 RPM (60 HZ)

CAPACITY	USGPM	10		20		30		40	
MODEL		FT	HP	FT	HP	FT	HP	FT	HP
TMA 31-3	Flange size	360	4.8	339	5.4	282	6.1	183	6.3
TMA 31-4	In 1 ½"	480	6.4	452	7.2	376	8.2	244	8.4
TMA 31-5	Out 1 ¼"	600	8.0	565	9.0	470	10.2	305	10.5
TMA 31-6		720	9.5	678	10.8	564	12.3	366	12.6
NPSH	FT	5.0		5.2		5.6		6.3	

S	STANDARD MATERIALS OF CONSTRUCTION **					
Part No.	Description	F	GH			
106	Suction casing Ductile iron		o iron			
107	Discharge casing					
108.1	Stage casing					
165	Heating or Cooling cover	Cast iron				
210	Shaft		ss steel 420			
230	Impeller	Cast iron	Brass			
310	Sleeve bearing	Brass				
357	Bearing & mech. seal housing	Cast iron				

F

Canadian Home Of Travaini Pumps

## MODEL DESIGNATION

	<u>TMA 31 - 4 / 1 - R / F - M</u>			
Т	Travaini manufacturer			
М	Multi-stage centrifugal pump			
Α	High pressure			
31	Pump series			
4	Number of stages			
1	Construction design level 1 = Standard bearings 1x = Double bearings at drive end			
R	Type of sealing on shaft R = 1 Mechanical seal 1 Sleeve bearing RR = Double mec. seals back to back R2 = Double mec. seals in series			
F	Materials of construction (see table)			
М	Monoblock construction for 1-R only			

ystems

\*\*Special Materials Available Upon Request

-For further information please consult Premier Fluid Systems Inc.



Dec./2006 Page 14.1