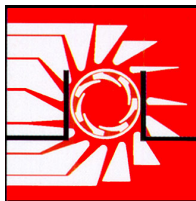


# TMA 31/1-C Multi Stage Centrifugal Pump



# TRAVAINI

- HEAD** : 200 to 1080 FT.
- CAPACITY** : 10 to 40 USGPM
- FEATURES** : 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 and angular bearing absorb remaining thrusts; One-piece stage/diffuser element increases efficiencies, simplifies maintenance and reduces weight
- SHAFT SEALING** : Single mechanical seals - (Optional) One mechanical seal with outboard bearing and sleeve bearing design - Double mechanical seals
- 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;  
*Note: Temperature limits are also dictated by the type of mechanical seal used*
- FLANGE ORIENTATION** : 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       | Flange size<br>In 1 1/2"<br>Out 1 1/4" | FT   | HP   | FT   | HP   | FT  | HP   | FT  | HP   |
| TMA 31-3    |  | 360  | 4.8  | 339  | 5.4  | 282 | 6.1  | 183 | 6.3  |
| TMA 31-4    |  | 480  | 6.4  | 452  | 7.2  | 376 | 8.2  | 244 | 8.4  |
| TMA 31-5    |  | 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 |
| TMA 31-7    |  | 840  | 11.1 | 791  | 12.6 | 658 | 14.3 | 427 | 14.7 |
| TMA 31-8    |  | 960  | 12.7 | 904  | 14.4 | 752 | 16.4 | 488 | 16.8 |
| TMA 31-9    |  | 1080 | 14.3 | 1017 | 16.2 | 846 | 18.4 | 549 | 18.9 |
| <b>NPSH</b> | <b>FT</b>                              | 5.0  |      | 5.2  |      | 5.6 |      | 6.3 |      |

## MODEL DESIGNATION

| STANDARD MATERIALS OF CONSTRUCTION ** |                              |                             |       |
|---------------------------------------|------------------------------|-----------------------------|-------|
| Part No.                              | Description                  | F                           | GH    |
| 106                                   | Suction casing               | Ductile iron                |       |
| 107                                   | Discharge casing             |                             |       |
| 108.1                                 | Stage casing                 | Cast iron                   |       |
| 165                                   | Heating or Cooling cover     |                             |       |
| 210                                   | Shaft                        | Stainless steel<br>AISI 420 |       |
| 230                                   | Impeller                     | Cast iron                   | Brass |
| 357                                   | Bearing & mech. seal housing | Cast iron                   |       |

| TMA 31 - 4 / 1 - C / F - M |   |
|----------------------------|---|
| T                          | Travaini manufacturer   |
| M                          | Multi-stage centrifugal pump  |
| A                          | High pressure   |
| 31                         | Pump series   |
| 4                          | Number of stages  |
| 1                          | Construction design level<br>1 = Standard bearings<br>1x = Double bearings at drive end                                       |
| C                          | Type of sealing on shaft<br>C = 2 Mechanical seals<br>RR = Double mec. seals back to back<br>R2 = Double mec. seals in series |
| F                          | Materials of construction (see table)   |
| M                          | Monoblock construction  |

\*\*Special Materials Available Upon Request  
-For further information please consult Premier Fluid Systems Inc.



**Premier Fluid Systems**  
Canadian Home Of Travaini Pumps

Dec./2006  
Page 14.2