**NOTE:** Temperature and viscosity ratings given below apply to individual components **Only.** For actual maximum temperatures and viscosities for the rated pump, see **"Operating Limits"** on backside.

| PART NAME | STANDARD MATERIALS | AVAILABLE OPTIONS |
|---|---|---|
| Cylinder, Heads | Cast Iron: ASTM A48 | |
| Bearing Covers | Steel | |
| Bearings | Single Row Ball Bearing; Grease Lubricated to 300°F (149°C) | |
| **Rotor & Shaft** | | |
| Rotor | Ductile Iron: ASTM 536 | |
| Shaft | High Strength Steel – Double Ended, Keyed | |
| Relief Valve (R/V) | Nickel Plated Cast Iron | |
| Relief Valve Cover, Cap | Ductile Iron: ASTM 536 | |
| Relief Valve Spring | Plated Steel to 300°F (149°C) | Stainless Steel to 500°F (260°C) |
| R/V Spring Ranges | 76-110 psi (5.2 - 7.6 bar) | Springs ranges from 36 -125 psi (2.5 – 8.6 bar) - See Parts List. |
| Gaskets | Composition to 500°F (260°C) | |
| **Vanes** | **Duravane -** With 316 Stainless Steel Wear Plate to 240°F (115°C); 50,000 SSU (10,500 cP) Maximum. | **Laminate** – with SS Wear Plate to 350°F (176°C); 50,000 SSU (10,500 cP) Max. |
| Push Rods | Case Hardened Steel | |
| Lip Seals | PTFE Lip Seal with Buna-N O-ring | PTFE Lip Seal with FKM O-ring |
| Housing - Lip Seals | Cast Iron: ASTM A48 | |
| O-rings, Lip Seal Housing | Buna-N to 240°F (115°C) | FKM to 400°F (204°C) |
| O-Rings – Pump | Buna-N to 240°F (115°C) | FKM to 400°F (204°C) |
| Gage Ports | 1/4" NPT | |

## OPTIONAL MECHANICAL SEALS

| SEAL TYPE | IVBV |
|---|---|
| Stationary Seat | Cast Iron |
| Stationary O-ring | FKM to 400°F (204°C) |
| Rotating Face | Bronze |
| Rotating Seal Ring /O-ring | FKM to 400°F (204°C) |

## PIPE COMPANION FLANGES

| PUMP SIZE | STANDARD | OPTIONAL |
|---|---|---|
| TX400B | 4" x 4" Steel, Weld ASTM A216 WCB | 4" x 3" Steel, Weld ASTM A216 WCB |

## OPERATING LIMITS

| | |
|---|---|
| Maximum Fluid Temperature: 240°F (115°C) | Maximum Working Pressure: 175 psi (12.1 Bar) |
| Minimum Operating Temperature: -25ºF (-31ºC) | |
| Maximum Fluid Viscosity: 50,000 SSU (10,500 cP) | Maximum Torque: 6240 lb-ft (705Nm) |
| Maximum Differential Pressure*: 125 psi (8.6 Bar) | |

* Maximum Relief Valve Setting

Centipoise (cP) = centistokes (cSt) at fluid specific gravity of 1.0.