



*MATERIALS of CONSTRUCTION*  
*Models TXH3C, TXH35A*

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**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 Cover	Steel	
Bearings	Single Row Ball Bearing; Grease Lubricated, to 300°F (149°C) Max.	
Rotor & Shaft		
Rotor	Ductile Iron: ASTM 536	
Shaft	High Strength Steel, Keyed	
Bearing Locknut and Lockwasher	Steel with nylon tipped setscrew	
Relief Valve (R/V)	TXH3 Cast Iron ASTM A48	Nickel Plated Cast Iron ASTM A48
	TXH35 Aluminum	Air-Operated Piston RV
Relief Valve Cover	Cast Iron: ASTM A48	
Relief Valve Cap	Std & Nickel Plated R/V	
	Piston RV (TXH3 only)	
Relief Valve Spring	Plated Steel	
R/V Spring Ranges	TXH3 Std & Nickel Plated R/V: 76-110 psi (5.24-7.58 bar) Piston R/V: 70-125 psi (4.83 – 8.62 bar)	Std & Nickel Plated R/V: 41-50 psi (2.83-3.45 bar) 51-75 psi (3.52-5.17 bar) 111-125 psi (7.65-8.62 bar)
	TXH35 Plated Steel: 55-125 psi (3.79-8.62 bar)	
O-Rings: Other than Mechanical Seal	FKM to 400°F (204°C)	
Gaskets	Fiber to 300°F (148°C)	
Vanes	Duravane - With 316 Stainless Steel Wear Plate to 240°F (115°C); 20,000 SSU (4,250 cP) Maximum.	
Push Rods	Case Hardened Steel	
Mechanical Seals		
Stationary O-Ring	FKM	
Stationary Seat	Cast Iron	
Rotating O-Ring	FKM	
Rotating Seal Face	Carbon - 20,000 SSU (4,250 cP) Max.	
Seal Jacket	Plated Steel	
Seal Spring	Stainless Steel	
Gage Ports	1/4" NPT	

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

# MATERIALS OF CONSTRUCTION

Models: TXH3C, THX35A

## PIPE COMPANION FLANGES

PUMP SIZE	STANDARD	OPTIONAL
TXH3	<b>Two 3" NPT</b> Tapped Flanges, Cast Iron: ASTM A48	<b>3" Weld</b> Flanges, Steel: ASTM A216 WCB <b>3" Untapped</b> Flanges, Cast Iron: ASTM A48
TXH35	<b>Two 3" NPT</b> Tapped Flanges, Cast Iron: ASTM A48	<b>3" Weld</b> Flanges, Steel: ASTM A216 WCB

## OPERATING LIMITS

	STANDARD MATERIALS
Maximum Temperature	240°F (115°C)
Minimum Temperature	-25°F (-31°C)
Maximum Viscosity	20,000 SSU (4,250 cP)
Maximum Differential Pressure*	125 psi (8.6 Bar)
Maximum Working Pressure	175 psi (12.1 Bar)

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

\* Maximum Relief Valve Setting