HYDRAULIC FLUID WARMERS



Heats hydraulic fluid, water and other fluids to improve productivity.

BENEFITS

- Reduces cold weather viscosity
- Increases productivity reduces idle equipment and workers waiting for hydraulics to warm up
- Reduces pump cavitation and resulting damage
- Versatile design for use on various equipment
- Ample coolant flow due to large (3/4" NPT) connectors

WHERE TO USE

- Logging
- Construction
- Mining
- Utility and Maintenance vehicles
- * Install horizontally at bottom of tank

HYDRA LINER SERIES



SPECIFICATIONS

- All stainless steel construction
- Large surface area exposed to fluid to maximize heat rise
- Threads into standard 2" NPT female pipe thread or standard 2" Straight Thread-O-Ring (STOR) coupling
- 3/4" NPT coolant connections
- 5-year-600,000 mile (965,000km) warranty
- Ability to install multiple units for larger tanks or faster heat rise

Customer service: Toll Free: 800.328.6108 Email: customerservice@phillipsandtemro.com

www.phillipsandtemro.com



HYDRAULIC FLUID WARMERS

Part Number	"A" Dimension Nominal	" B" Dimension Nominal	Surface Area Nominal	BTU/hr Nominal (1)	Typical application (ambient air temp) to -20°F / -29°C (2)	Typical application (ambient air temp) to -40°F / -40°C (2)
H-4000-8	7 inches	10 inches	105 in ²	Water 4,200	Up to 20 US gallons	Up to 8 US gallons
H-4000-8-STOR	178 mm	254 mm	8 dm ²	Oil 2,100	76 Liters	30 Liters
H-4000-12	11 inches	14 inches	180 in ²	Water 7,200	Up to 35 US gallons	Up to 14 US gallons
H-4000-12-STOR	280 mm	356 mm	12 dm ²	Oil 3,600	133 Liters	53 Liters
H-4000-16	15 inches	18 inches	250 in²	Water 10,000	Up to 50 US gallons	Up to 19 US gallons
H-4000-16-STOR	381 mm	457 mm	16 dm²	Oil 5,000	190 Liters	72 Liters
H-4000-20	19 inches	22 inches	315 in ²	Water 13,000	Up to 63 US gallons	Up to 25 US gallons
H-4000-20-STOR	483 mm	559 mm	20 dm ²	Oil 6,500	239 Liters	90 Liters
H-4000-24	23 inches	26 inches	385 in ²	Water 16,000	Up to 77 US gallons	Up to 30 US gallons
H-4000-24-STOR	584 mm	660 mm	24 dm ²	Oil 8,000	292 Liters	113 Liters

 (1) Nominal BTU/hr based upon 180°F / 82°C Coolant flowing at 5 US Gallons / 19 Liters per minute. Water—beginning temperature at +35°F / +2°C
Oil—ISO 32 Hydraulic Oil beginning temperature -20°F / 29°C

(2) Actual temperature rise will be affected by factors such as coolant temperatures and flow rate, specific heat capacity of fluids and air movement around reservoir.

**Contact Arctic Fox Application Engineering for estimated temperature rise for your specific application.



WELD ON TANK ADAPTERS

Part Number	Description	Application	
A-3228HD	Steel—Schedule 80 2" NPT Female Coupling	Preferred for most installations on steel tanks	
A-3228AHD	Aluminum T-6061—Schedule 80 2" NPT Female Coupling	Preferred for most installations of aluminum tanks	
A-3228HD-STOR	Steel—Combination 32 STOR & 1/2" NPT	May be used to install either style of Hydra Liner	
V6216	Steel—Half Coupling—32 STOR	Used when external tank clearance is limited	
A-5878SSHD	Stainless Steel—Half Coupling—32 STOR	Used when external tank clearance is limited	
IS43THCK	Stainless Steel—2" NPT Half Coupling 300#	Preferred for most installations of Stainless Steel Tanks	
TWF-32	Steel—Flange 32 STOR	Used when external clearance is limited	
TWF-32N	Steel—Flange 2" NPT	Used when external clearance is limited	

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