HY-HV Series

HY-TRAX® – High Viscosity Fluid Sampling System

Features and Benefits

- Provides local visibility to the fluid condition of critical systems.
- Integrated micro variable speed driven pump-motor provides optimal flow for accurate sensor readings in variable conditions
- The HY-TRAX® High Viscosity Fluid Sampling System allows a user to monitor fluid condition from a reservoir tank or a low-pressure sampling point
- The compact design allows for installations with tight space constraints
- The potentiometer-based pump controller is housed in a compact IP40 enclosure
- Optional AC adapter available for converting 115V AC / 60 Hz to 24V DC
- Fluorocarbon elastomer (FKM) seals.
- Fluid viscosities up to 3,250 SUS (700 cSt)
- Adjustable flow control valve providing optimal pressure for accurate sensor readings

Applications

- Industrial gearboxes
- Wind turbine gearboxes
- Bulk fluid storage vessels
- Industrial hydraulics in cooler climates

What's Included

- HY-TRAX® High Viscosity Fluid Sampling System according to Model Code
- Sensor cables for integration with control module according to Model Code *(pass-through communication cables ordered separately)*
- Operation and maintenance manual

Technical Specifications

Contamination measurement range according to ISO 4406:1999	Full-scale: 9/8/7 to 25/24/23 Calibrated: 13/11/10 to 23/21/18
Contamination output code	Standard: ISO 4406:1999 and SAE AS 4059(D) Optional: ISO 4406:1987, NAS 1638 and ISO 4406:1999
Self-diagnostics	Continuous with error indication via status LED on CS1000
Permissible inlet pressure range	-9.8 to 50 psig (-0.7 to 3.5 bar)
Maximum permissible operating pressure	160 psig
Inlet port thread type	SAE J1926-1: 3/4-16 - Female
Outlet port thread type	SAE J514: 7/16-20 37 - Male
Seal material	FKM (Viton®)
Permissible fluid temperature range	32˚F to 185˚F (0˚C to 85˚C)
Permissible ambient temperature range	32˚F to 104˚F (0˚C to 40˚C)
Maximum permissible fluid viscosity	3,250 SUS (700 cSt)
Pump type	External gear
Power supply voltage	24V DC
Maximum power consumption	100W
Contamination sensor analog ouput signal	Standard: 4-20mA *(time-coded)* Optional: 2-10V *(time-coded)*
Water sensor (AS1000 & AS3000) analog output signal	4-20mA
Oil aging sensor (HLB) analog output signal	4-20mA *(time-coded)*
Ingress protection rating	IP 40 *(control enclosure)*, IP 34 *(pump motor)*
Weight	Control enclosure: 5 lbs. Fluid sampling and condition monitoring unit: 10 lbs.

PN#02075860 / 03.24 / FSP2105-2273

Model Code

HY-HV - 12 2 0 _ _ _ - P -

Model
- HY-HV = HY-TRAX® High Viscosity System - Oils to 700cSt
  (includes strainer and pressure gauge in manifold block)

ISO Code Preference
- NT = Manifold supplied w/o CS1xx0
  (customer will supply own manifold mount CS1xx0 with or without display)
- 12 = ISO 4406:1999 and SAE AS 4059(D)
- 13 = ISO 4406:1999 and SAE AS 4059(D) or ISO 4406:1987 and NAS 1638

Display Options
- 2 = with display

Fluids
- 0 = Hydraulic/Mineral Oil

Analog Interfaces *(for CS1000)*
- (omit) = 4 - 20 mA *(Standard)*
- S = 2 - 10V Analog Output

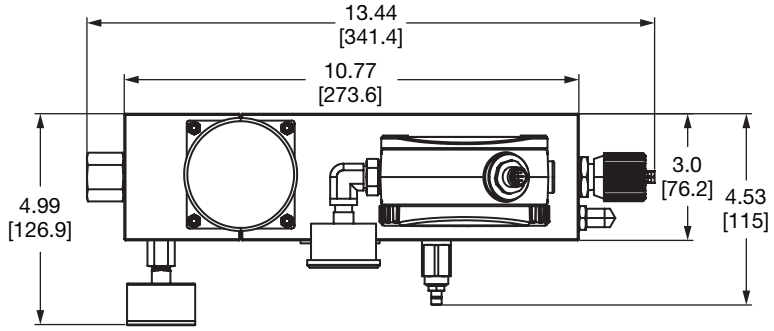
Option Sensors
- (omit) = None *(Standard)*; plugged port for HLB1 or HLB2 option
- AS = AquaSensor AS1008-C-000
- AS-D = AquaSensor AS3008-5-000
- HLB1 = HYDACLAB® HLB14J8-1C000-000
- HLB2 = HYDACLAB® HLB14J8-00S12-000

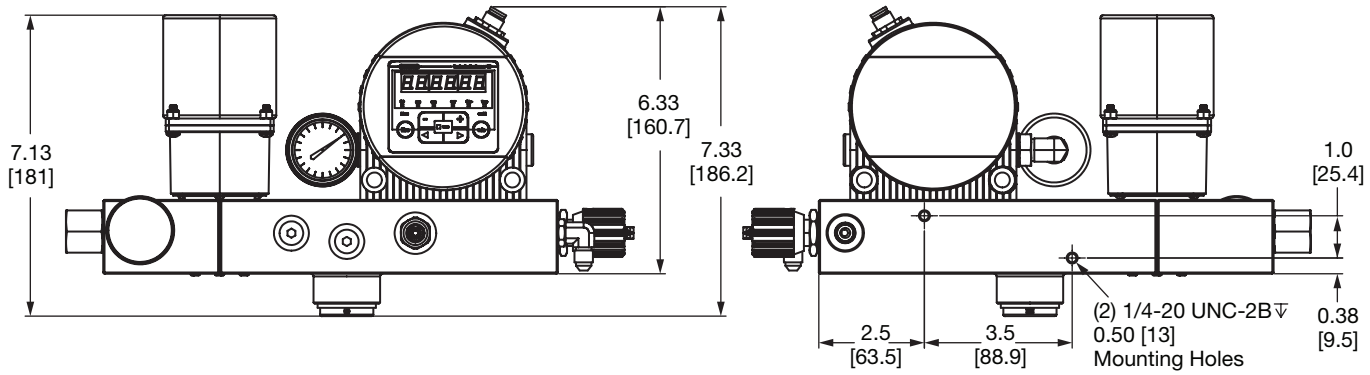
Control Options
- (omit) = Manually Controlled - Panel with potentiometer-based flow control and signal output *(Standard)*

Power Options
- (omit) = 24V DC w/ field-wireable female XLR connector *(Standard)*
- P = 24V DC w/115V AC / 24V DC power supply with cable and plug

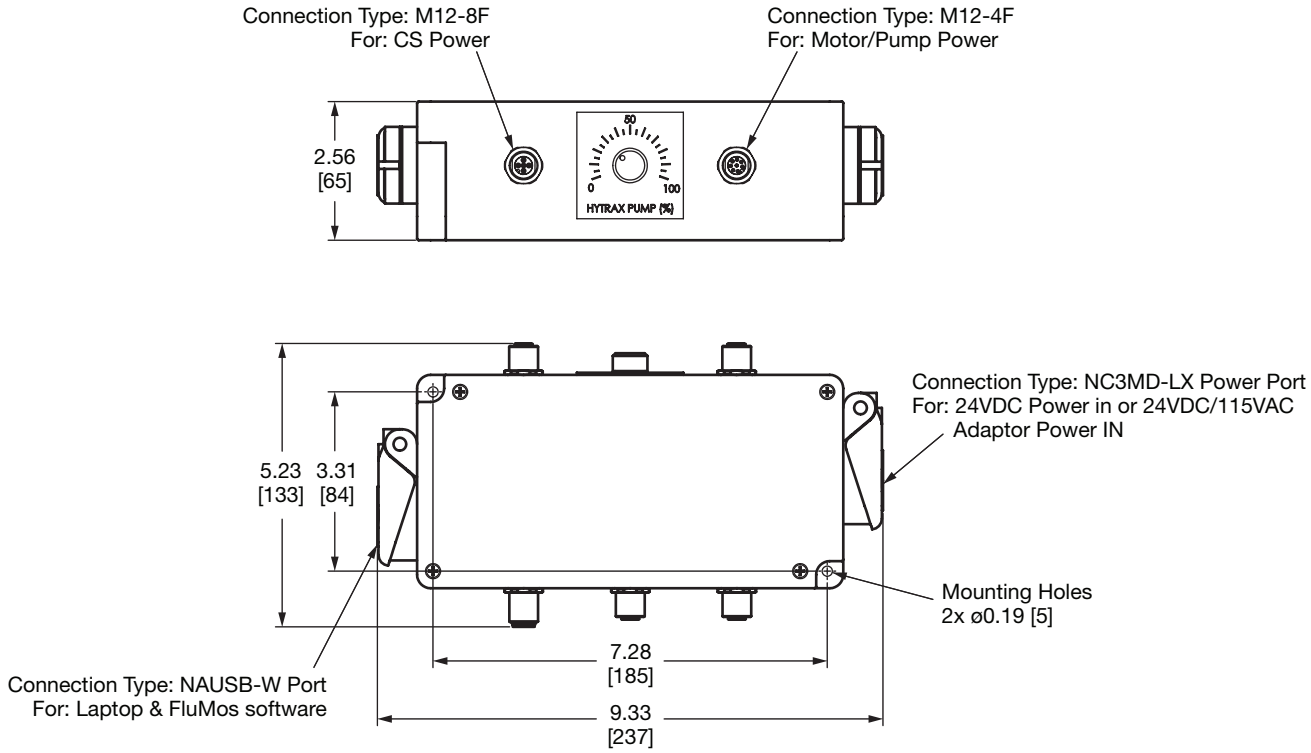
Air Suppression Loop
- (omit) = none *(Standard)*
- L = Air-suppression hose loop *(recommended)*

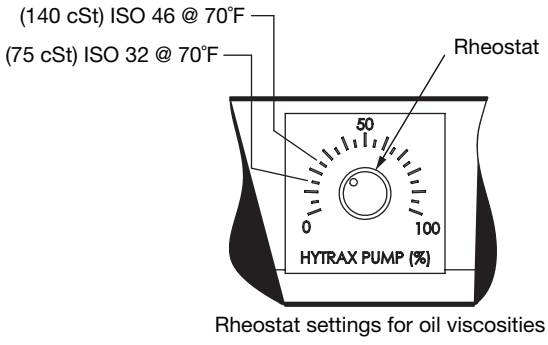
Dimensions
HY-HV-1220





Dimensions
Manual Control Box for HYTRAX





Rheostat settings for oil viscosities

Notes