

Hydrex Chart Recorders Pressure & Temperature

Hydrex chart recorders are the industry standard for accurate, reliable measurement and recording of pressure, differential pressure and temperature in a variety of applications

- Suitable for use on all hydro & industrial pressures.



Common Components

- **Case** - The case is made of rugged, lightweight die-cast aluminum that features a built-in rainshield. It is finished in polyurethane electrostatic powder paint that has a high resistance to weathering, scratches, and industrial fumes.
- **Recording Mechanism** - All parts are stainless steel for long life. The pen mount is exceptionally rugged and pen shafts are fitted with ball pivots to
- **Pressure Elements** - Are precision wound helical-type available pressure ranges up to 30,000 psi (up to 2068 bar).
- **Thermal Systems** - The systems consist of a bourdon tube, a capillary with stainless steel armor and a bulb with a bendable extension. All parts are stainless steel. Temperature ranges for each design are listed below. A thermal system must have a span of more than 50° F (27° C) and the high temperature limit must be greater than 95° F (35° C).
Standard (fully compensated)
-40° F to 600° F (-40° C to 315° C)

Mechanical Chart Recorders

Is a 12" chart recorder designed to measure flow, static pressure and temperature in all industrial pressure and ambient temperatures applications.

Is available in 1 to 2 or 3 pens configurations. The additional pens can be used to record temperature and supplemental pressure data.

HTS Code 9026200000

Hydrex models pressure ranges:

MCR-500-REX (0-500 Psi)

MCR-1K-REX (0-1,000 Psi)

MCR-3K-REX (0-3000 Psi)

MCR-5K-REX (0-5000 Psi)

MCR-10k-REX (0-10,000 Psi)

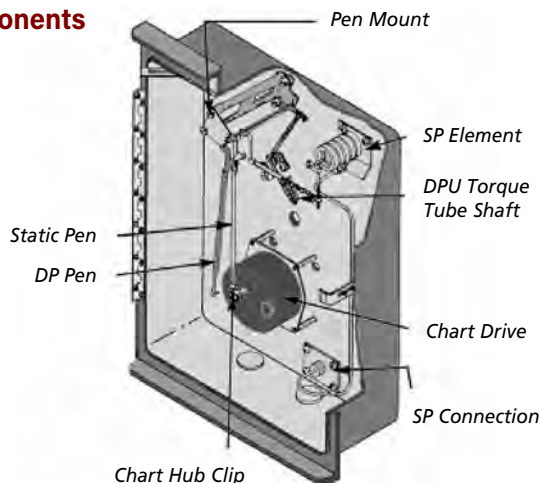
MCR-15K-REX (0-15,000 Psi)

MCR-20K-REX (0-20,000 Psi)

MCR-25K-REX (0-25,000 Psi)

MCR-30K=REX (0-30,000 Psi)

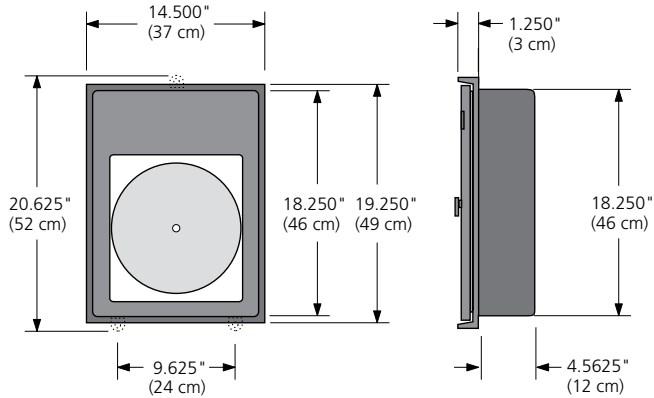
Main Components



Static pressure measurements are provided by precision wound K-monel helical-type elements.

HYDROREX

Recorder Dimensions - Standard



Weight is approximately 25 lb (11 kg). For SST "S" versions, add 10 lb (6 kg) to standard weights.

Pelican Case Weatherproof or Aluminum Housing



Portable Stand with Handle



Mounting Options

- Panel
- Wall
- Pipe mount, slip-on, non-thread (1-1/2" or 2" std. pipe)
- Portable stand, with handle
- Wall shock-mounting kit

When Ordering specify the following items:

Case Mounting: Wall, Pipestand, or Portable

Chart Size: 8" & 12"

Pens: 2 or 3 pen

Range: From -30° up to 1000°F Temperature
From -30° up to 600°F Mercury Free
From 0 up to 30,000 PSI Pressure

Accuracy: ± 1 chart graduation for Temperature
± 1/2 chart graduation for Pressure

Chart Drive: Battery Operated, Electric or Spring Wound

Pen Configurations: Available in 2 or 3 pen configurations

Size: 8" 16.44" x 13.00" x 6.82" (41.8 x 33 x 17.3cm)
12" 19.78" x 15.77" x 7.41" (50.2 x 40.1 x 18.8 cm)
(NOTE: Size does not include Feet or Pedestal, CASE ONLY)

Available Case Colors: Black (Standard), Silver, Orange, Yellow, OD Green (Olive Drab) and Desert Tan

Wall / Panel Mount



PRESSURE RANGES

PSI Pressure Ranges	
0 to 1 PSI	0 to 350 PSI
0 to 3 PSI	0 to 400 PSI
0 to 5 PSI	0 to 500 PSI
0 to 6 PSI	0 to 600 PSI
0 to 8 PSI	0 to 750 PSI
0 to 10 PSI	0 to 800 PSI
0 to 15 PSI	0 to 1000 PSI
0 to 20 PSI	0 to 1500 PSI
0 to 25 PSI	0 to 2000 PSI
0 to 30 PSI	0 to 2500 PSI
0 to 35 PSI	0 to 3000 PSI
0 to 45 PSI	0 to 4000 PSI
0 to 50 PSI	0 to 5000 PSI
0 to 60 PSI	0 to 6000 PSI
0 to 75 PSI	0 to 8000 PSI
0 to 100 PSI	0 to 10,000 PSI
0 to 120 PSI	0 to 15,000 PSI
0 to 150 PSI	0 to 20,000 PSI
0 to 200 PSI	0 to 30,000 PSI
0 to 250 PSI	3 to 15 PSI
0 to 300 PSI	

oz/in ² Pressure Ranges
0 to 10 oz/in ²
0 to 15 oz/in ²
0 to 20 oz/in ²
0 to 25 oz/in ²
0 to 30 oz/in ²
0 to 50 oz/in ²
kPa Pressure Ranges
0 to 5 kPa
0 to 20 kPa
0 to 80 kPa
0 to 100 kPa
0 to 500 kPa
0 to 800 kPa
0 to 1000 kPa
0 to 2000 kPa
0 to 5000 kPa

Hg Pressure Ranges
0 to 10 Hg
0 to 39 Hg
0 to 50 Hg
inH ₂ O Pressure Ranges
0 to 10 in H ₂ O
0 to 15 in H ₂ O
0 to 20 in H ₂ O
0 to 25 in H ₂ O
0 to 30 in H ₂ O
0 to 40 in H ₂ O
0 to 50 in H ₂ O
0 to 60 in H ₂ O
0 to 100 in H ₂ O

TEMPERATURE RANGES

Standard Recorder Temperature Ranges: From -30° up to 1000°F / 0° up to 600°C

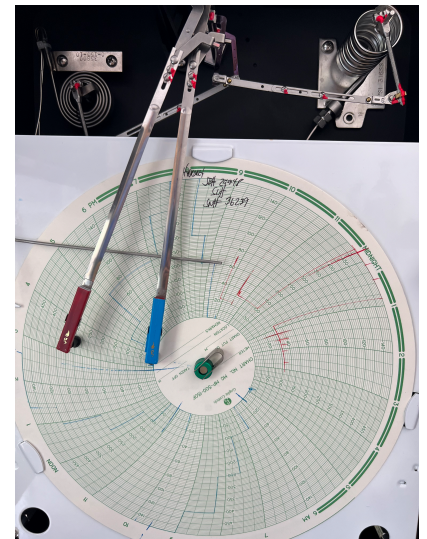
Mercury Free Temperature Ranges: From -30°F up to 600°F

NOTE: If other ranges are required, please contact Customer Service.

°F Temperature Ranges
-30° to 120°F
0° to 100°F
0° to 120°F
0° to 150°F
0° to 200°F
0° to 250°F
0° to 300°F
0° to 400°F
0° to 500°F
0° to 600°F
0° to 800°F *
0° to 1000°F *

°C Temperature Ranges
0° to 60°C
0° to 100°C
0° to 120°C
0° to 150°C
0° to 200°C
0° to 250°C
0° to 300°C
0° to 350°C *
0° to 400°C *
0° to 500°C *
0° to 600°C *

NOTE: * Mercury Ranges Only



PRESSURE ELEMENTS

Pressure Ranges are offered in 8" and 12" Chart Recorders

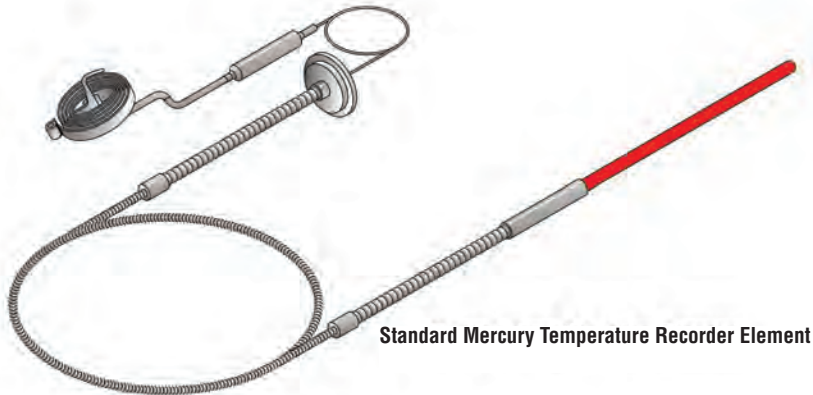
Standard Pressure Element: 316 SS helical coil with Stainless Steel Fittings and tubing for ranges 30 to 10,000 PSI, with 1/4" NPT.

High Pressure Element: 316 Stainless Steel bourdon tube for ranges > 10,000 PSI, with autoclave fitting. 15,000, 20,000 and 30,000 with calibration on rise only.

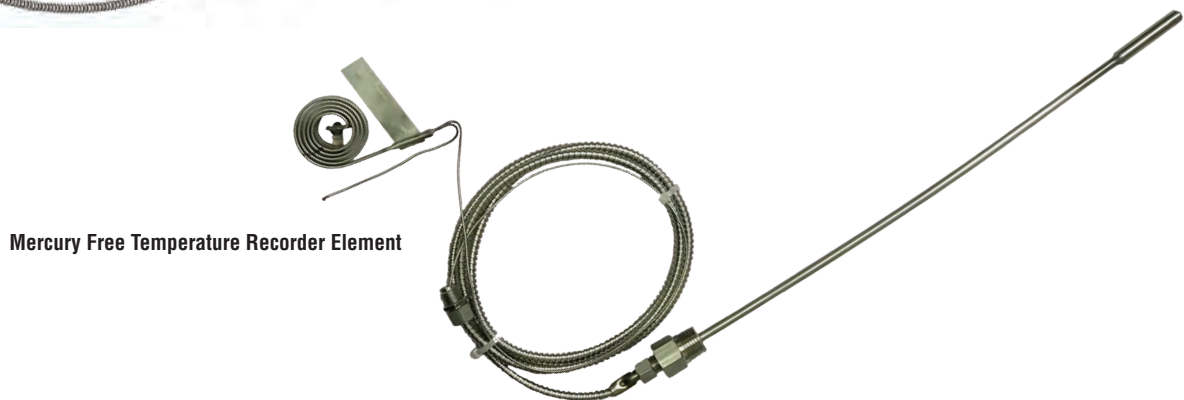
Low-pressure Material: 316 Stainless Steel bellows diaphragm, tubing and fittings, for ranges below 30 PSI.



TEMPERATURE RECORDER ELEMENTS



Standard Mercury Temperature Recorder Element



Mercury Free Temperature Recorder Element

RECORDER DRIVES

PC-11 battery Intrinsically safe (1.5 volt "C" cell*) powered eleven speed motor (60 min., 96 min., 12 hr., 24 hr., 48 hr., 7 day, 8 day, 14 day, 16 day, 31 day, or 32 day rotation speed).



With "OFF" option.

PC-12 battery Intrinsically safe (1.5 volt "C" cell*) powered twelve speed motor (30 min., 60 min., 2 hr., 4 hr., 6 hr., 8 hr., 12 hr., 24 hr., 3 day, 4 day, or 7 day rotation speed).
*3.6 volt lithium "C" cell for very cold ambient temperatures.

No "OFF" Option.

Spring Wound Drive:

Switchable Dual Speed Clock. - By use of a shift lever, the drive can be set for 24 hour or 7 day rotation. Rotation is set at factory to conform to your specifications. Verify that the drive is set properly. To wind the drive, remove chart and use the key furnished with the recorder.

Standard Rotation: 24 hour / 7 day

Special Order Rotations:

Dual Speed: 15 minute / 1 hour

1 hour / 3 hour

2 hour / 8 hour

96 minute / 24 hour

Single Speed: 4 hour



RECORDER PENS

Disposable Fine point, felt tip pens in Red, Green and Blue. Also available in Black and Purple.

Colors other than standard may be specified for either pen arm.

One pen recorder - Red pen (Standard)

Two pen recorder - Red pen and Blue pen (Standard)

Three pen recorder - Red pen, Blue pen and Green pen (Standard)



RECORDER CHARTS

Explore our in-stock recorder charts for 8 inch and 12 inch circular temperature chart recorders. Special order charts are always available.

Stocked 8"

Circular Charts Ranges

0° to 100°F or °C or PSI	24HR
0° to 100°F or °C or PSI S	7DAY
0° to 150°F or PSI	24HR
0° to 200°F or PSI	24HR
0° to 250°F or PSI	24HR
0° to 300°F or PSI	24HR
0° to 1000PSI	24HR
0° to 2000PSI	24HR
0° to 3000PSI	24HR
0° to 5000PSI	24HR
0° to 10000PSI	24HR

Stocked 12"

Circular Charts Ranges

0° to 100°F or °C or PSI	24HR
0° to 100°F or °C or PSI S	7DAY
0° to 150°F or PSI	24HR
0° to 150°F or PSI S	7DAY
0° to 200°F or PSI	24HR
0° to 200°F or PSI S	7DAY
0° to 1000PSI	24HR
0° to 3000PSI	24HR

