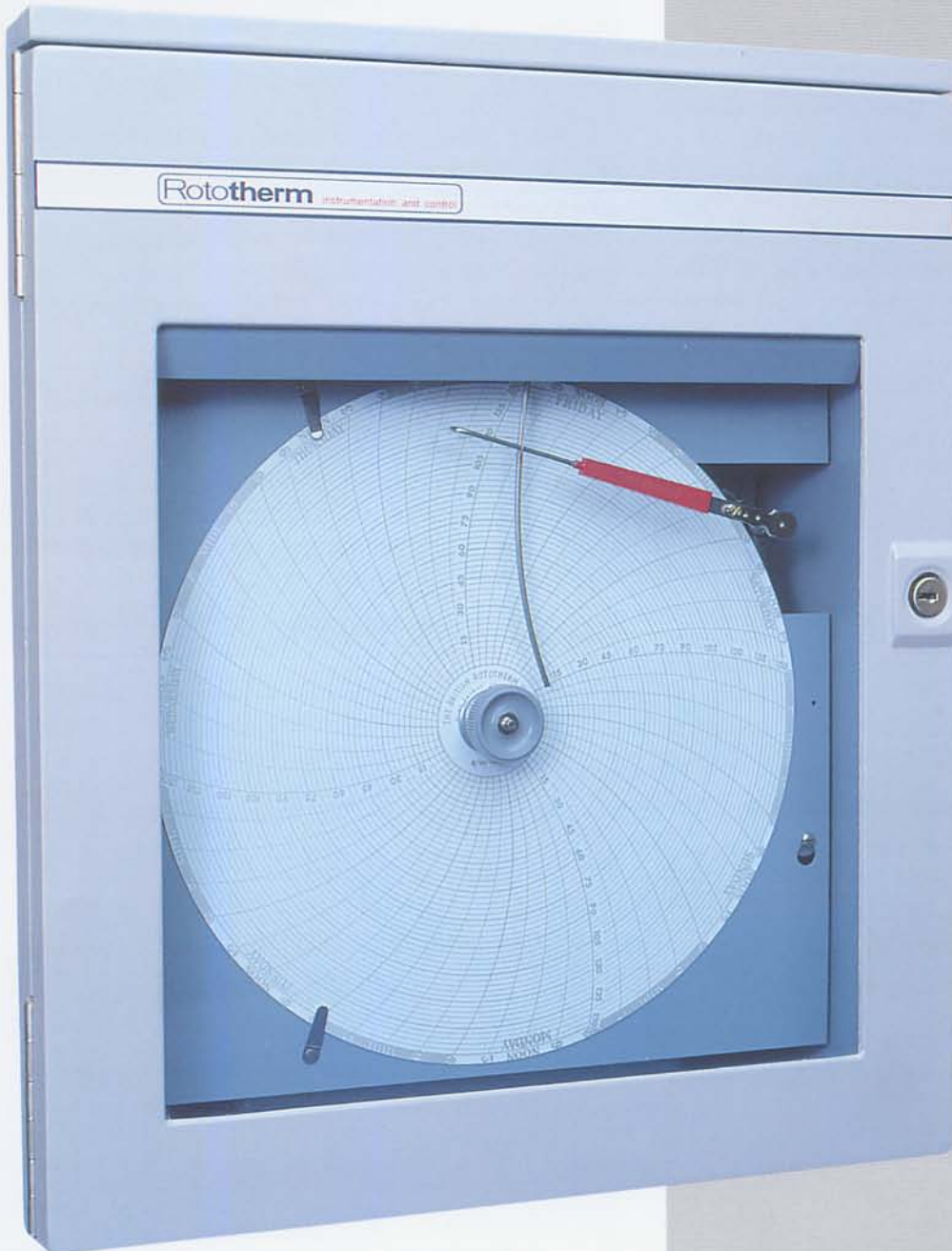


RPO-94

PRESSURE RECORDERS & RECORDER/ CONTROLLERS



Rotothem
instrumentation and control

PRESSURE RECORDERS & RECORDER/CONTROLLERS

FEATURES

- Single, two and three pen pressure recording and controlling at low cost.
- Simple installation and maintenance requirement.
- Uses proven and reliable ROTOTHERM pressure systems to record or control gauge pressure, vacuum, combined pressure and vacuum, absolute pressure and differential pressure.
- Cases are suitable for panel or surface mounting.
- Short case for shallow compartments.
- Portable stand or pipe mounting available.
- Fully mechanical versions available.
- Electrical, battery or mechanical chart drive options.
- Standard 24 hour or 7 day per chart revolution options (other revolutions available).
- Electrical control options.
- Combinations of pressure, temperature and flow can be specified.
- Supplied with 100 charts and pack of pens.

These reliable and accurate instruments are suitable for most applications where there is a requirement for low cost pressure recording.

Up to three pens can be fitted with three pressure systems or combination of pressure, temperature (see applicable data sheet) or flow sensing systems.

The case is suitable for surface or panel mounting or may be specified as portable or pipe mounting.

PENS

Fitted to the pen arms are disposable fibre tipped pens which are readily replaced without mess. Single pen recorders and the first pen of two and three pen recorders trace in red ink, the second pen in blue, the third in green.

CHARTS AND CHART DRIVE

Charts are supplied normally with the minimum value of pressure at the centre, although other styles are available. Standard chart durations are one revolution every 24 hours or 7 days with special durations available on request. Chart drive may be electric, spring wound or battery operated. A pen lift is fitted to ease chart changing.

INTRINSICALLY SAFE APPLICATIONS

An all mechanical version is available for applications where no electrical supply is available or where an intrinsically safe instrument is required. Chart drive for this version uses a mechanical spring wound motor.

CONTROL OPTIONS:

- Full pneumatic control is also available on this range of recorders, for full specification and details, reference should be made to the appropriate Data sheet or contact our application engineers.
- Electrical Control/Alarm.
One and two pen recorders in this range may be specified with electrical alarm or control options.
- The contacts may be specified for each pen, giving a single set of high and low contacts.
- If required an internal 10 amp relay may be specified for each contact when larger loads are to be switched.

STANDARD RANGE	SENSING ELEMENT TYPE	MATERIAL
0 - 10" WG 0 - 15" WG 0 - 25" WG	Box Element	Beryllium Copper
-30/+30" WG -50/+50" WG 0 - 40" WG 0 - 60" WG 0 - 100" WG 0 - 160" WG	Open Stack	Beryllium Copper or Stainless Steel
0 - 30" Hg Vac 0 - 250" WG -15 /+15 Psi 0 - 15 Psi 0 - 20 Psi 0 - 25 Psi 0 - 30 Psi 0 - 40 Psi 0 - 60 Psi 0 - 80 Psi	Single Capsule	Beryllium Copper or Stainless Steel
3 - 15 Psi	Single Capsule	Beryllium Copper or Stainless Steel (BS970 316 S16)
0 - 6 Bar 0 - 10 Bar 0 - 16 Bar 0 - 25 Bar 0 - 40 Bar 0 - 60 Bar 0 - 100 Bar	Bourdon Tube	Phosphor Bronze or Stainless Steel (BS970 316 S16)
0 - 160 Bar 0 - 250 Bar 0 - 300 Bar 0 - 400 Bar 0 - 600 Bar 0 - 1000 Bar 0 - 1200 Bar 0 - 1600 Bar	Bourdon Tube	Stainless Steel (BS970 316 S16)

CALIBRATIONS IN OTHER UNITS OF PRESSURE ARE AVAILABLE

SPECIFICATION

ACCURACY	+/-1% FSD.
AMBIENT TEMPERATURE	-20°C to +50°C.
MEASURING ELEMENT	Bourdon tube or pressure capsule, as applicable.
CHART DRIVE	Synchronous electric, mechanical spring wound or battery operated. 24 hour or 7 day. Other rotations on request.
CHARTS	Disc 240mm (9.5 inches) diameter. Standard dividing 40, 50, 60, 70, or 80 linear divisions.
INKING SYSTEM	Disposable Fibre Tipped Pen. Single pen: red. 2 pen: red and blue. 3 pen: red, blue and green.
CASE	Glass filled polyester resin. Protection to IP55.
WINDOW	Acrylic.
POWER SUPPLY	200 to 250 volts, 50Hz (60 Hz available). 100 to 120 volts, 50Hz (60 Hz available). Instruments without electrical control require no power supply provided that a mechanical spring wound chart drive is fitted. For battery operation 1.5 volts 'C' type cell.
ELECTRICAL ALARM AND CONTROL	
Contact rating: (when fitted)	0.1A at 250V A.C. (non inductive). 0.01A at 250V D.C. (non inductive).
Relay contact rating: (when fitted)	10A at 250V 50Hz. 5A at 415V 50Hz.
Contact adjustment range:	2% to 100%.
CONNECTION	
Standard	3/8" BSP male, with nut and tail pipe suitable for 6.35mm (1/4") outside diameter tube.
Portable	3/8" BSP male, with nut and tail pipe suitable for 6.35mm (1/4") outside diameter tube or 3/8" inside diameter tube.
Receiver type: input 3 - 15 p.s.i. 0.2 - 1 Bar	1/4" BSP female.
MOUNTING	
	Suitable for surface or panel mounting. (Pipe mounting and portable options available).
WEIGHT (approx)	
	Single pen: 6.5 kg (14.25 lb). Two pen: 7 kg (15.5 lb). Three pen: 7.5 kg (16.75 lb). Portable single pen: 8.6 kg (19 lb).

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