

Bristol® Series 53011 and 53012

Pressure Recorders

8-inch round-chart recorders for pressure, vacuum and compound pressure and vacuum measurement. Available with 1 or 2 recording pens, for wall, panel or portable applications.

General

Measuring Elements

The superior performance of Bristol® pressure gauges, from Emerson Process Management, is due primarily to their high quality measuring elements. Every element is factory-calibrated to an accuracy of + 0.5% of span and built to maintain this accuracy under most adverse environmental conditions. The range limits of each element are chosen so that it operates at stresses well below its elastic limit. This not only allows the use of suppressed ranges, but also provides inherent overrange protection.

Special elements are available for use where extreme overpressures are expected. Helical elements may be protected to 10,000 psi, nested capsular elements to 1000 psi.

Pressure Ranges

Emerson offers a standard pressure recorder for virtually every industrial application. Ranges available include 0-4 inches of water to 0-10,000 psi gauge.

Permanent Chart Records

Emerson recording gauges provide a complete description of both past and present conditions. The exact time and duration of each pressure variation is permanently recorded – both for immediate guidance and for long-range planning purposes.



Panel Mountable



Portable Case

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Bristol® Pressure Recorders

Calibrated Accuracy

- $\pm 0.5\%$ of span

Range Limits

- 15 psi vacuum to 10,000 psig

Minimum Span

- 4" H₂O pressure or vacuum

Maximum Span

- 10,000 psi, pressure or compound (pressure and vacuum)

Suppressed Ranges

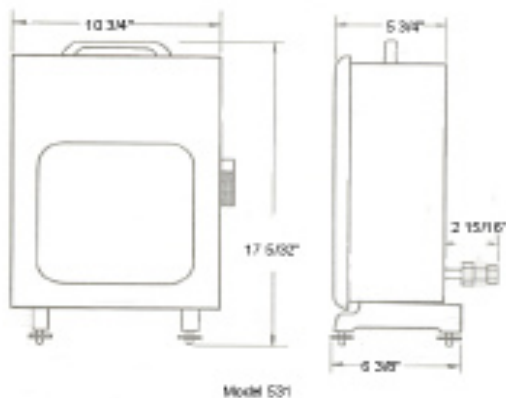
- Ni-Span capsular or helical elements, can be supplied for applications requiring up to 50% range suppression

Overrange Protection

- Standard capsular elements for ranges of 0-4" H₂O or greater will withstand 100% overpressure.
- Standard helical elements: overrange protection depends upon element material and range. Overage protected helical elements (Ni-Span C): will withstand pressures up to 10,000 psig

Case

- Rectangular, die-cast aluminum case with a gasketed aluminum door for moisture and



Portable Case

weather protection.. Gray epoxy paint finish. Portable models have adjustable leveling legs and carrying handle.

Case Dimensions

- 10 3/4" wide x 14 3/4" high x 5 3/4" deep

Panel Cut-Out Dimensions

- 10 5/16" wide x 13 9/16" high

Weight

- Approximately 20 pounds

Pressure Connections

- 1/4 NPT female

Chart

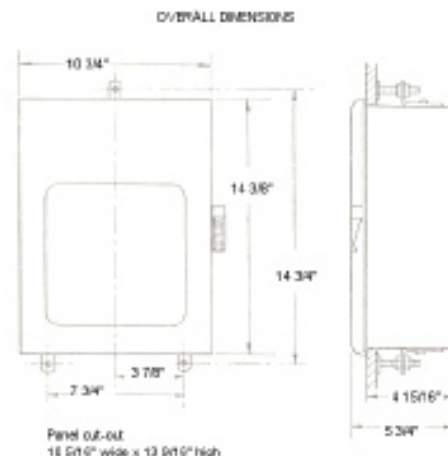
- Circular, 8 inch nominal diameter

Chart Drive

- 2 speed, 7 day/24 hour mechanical (spring) chart drive. Electric or battery powered chart drives also optionally available.

Power Consumption

- 6 watts with 120-volt, 60 hz electric chart drive



Panel Mountable

Remote Automation Solutions

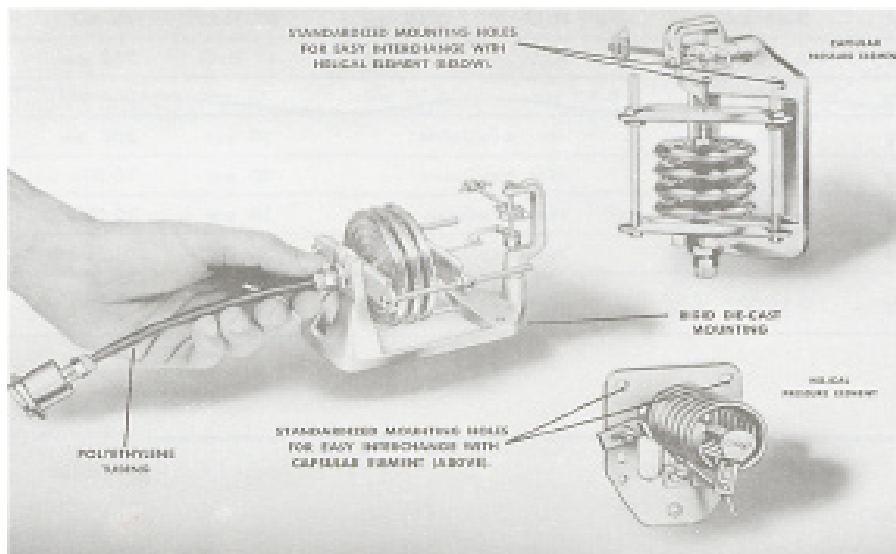
Website: www.EmersonProcess.com/Remote

MEASURING ELEMENTS

Type	Material	Range Limits
HELICAL	316 Stainless Steel	0-50 to 0-500 PSI
	316 Stainless Steel 0-6001-to 10000 PSI	0-501 to 0-6000 PSI
CAPSULAR	316 Stainless Steel	0-4.0 Wtr. to 0-7.9" Wtr. 0-8.0" Wtr. to 0-40 PSI
	Ni-Span-C	0-4.0" Wtr. to 0-200 PSI

SPECIAL PURPOSE ELEMENTS

CAPSULAR	Ni-Span-C	3-15 PSI or 3-27 PSI Receiver Elements
	Ni-Span-C	For Suppressed Ranges (Elevated Tanks)



**TWO PEN 8" STANDARD RANGE
PRESSURE RECORDERS**

Model No. 53012-10B - A - BCDE - E - GHJK - L - MNP - R - T - U

53012-10B

SELECT	DESCRIPTION	CODE
	TYPE	X5301210BA
	Two Pen (2G530)	2
A	CHART READING	
10	Direct (STD.) (Ctr. to Edge)	1
	Reverse (Edge to Ctr.)	2
BCDE	ELEMENT & MATERIALS - PEN NO. 1	X500ELEMNT
20/25	<i>Helical</i> S.S.	2 ___
	<i>Capsular</i> Ni-Span-C	3 ___
	S.S. (7.9 inch water Min.)	4 ___
F	RANGE PROTECTION - PEN NO. 1	RANGEPRO
30	Without	0
	With	1
GHJK	ELEMENT & MATERIAL - PEN NO. 2	X500ELEMNT2
40/45	<i>Helical</i> S.S.	2 ___
	<i>Capsular</i> Ni-Span-C	3 ___
	S.S. (7.9 inch water Min.)	4 ___
L	RANGE PROTECTION - PEN NO. 2	RANGEPRO2
50	Without	0
	With	1
MNP	CHART DRIVE	XCHARTDR2
60/65	Spring (See Page Y1905: P1 & P2)	1 __
	Battery (Select one rotation)	300
R	ELEMENT CONNECTION	
70	Bottom (STD.)	1
	Back	2

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Bristol® Pressure Recorders

T	MOUNTING	X500MOUNT
80	Wall	1
	Flush or Panel	2
	Pipe	3
	Portable	4
U	WINDOW	XWINDOW
90	Shatterproof Glass (Not Sealed)	1
	Shatterproof Glass (Sealed)	2
	Metal (Not Sealed)	3
	Metal (Sealed)	4
Notes:	1. Pressure range and chart number to be included in sales order. 2. When ordering a Pneumatic Receiver, the model string must be 53012-10B - * - 4256 - 1 - 4256 - 1 - * - * - * . 3. Range Protection is required if Min Range pressure is greater than 5% of Max Range pressure. 4. Electric Chart Drives are available on special order request only. Contact Customer Service	

**ONE PEN 8" STANDARD RANGE
PRESSURE RECORDERS**

Model No. 53011-10B - A - BCDE - F - GHJ - K - L - M - N - P

53011-10B

SELECT	DESCRIPTION	CODE
	One Pen (1G530)	X5301110BA
A	CHART READING	
10	Direct (STD.) (Ctr. to Edge)	1
	Reverse (Edge to Ctr.)	2
BCDE	ELEMENT & MATERIALS	X500ELEMNT
20/25	<i>Helical</i> S.S.	2 ___
	<i>Capsular</i> Ni-Span-C	3 ___
	S.S. (7.9 inch water Min.)	4 ___
F	RANGE PROTECTION	RANGEPRO
30	Without	0
	With	1
GHJ	CHART DRIVE & SPEED	XCHARTDR2
40/45	Spring (See Page Y1905: P1 & P2)	1 __
	Battery (Select one rotation)	300
K	ALARMS	XALRMS5301
50	None	0
	High and Low Level (Aux Scale Type Only)	1
L	PUMP CONTROL	XPUMP1
60	Without	0
	Single Pump Control	1
M	ELEMENT CONNECTION	
70	Bottom (STD.)	1
	Back If Mounting is "Portable" then select "Back" Connection	2
N	MOUNTING	X500MOUNT
80	Wall	1
	Flush or Panel	2
	Pipe	3
	Portable	4

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Bristol® Pressure Recorders

P	WINDOW	XWINDOW
90	Shatterproof Glass (Not Sealed)	1
	Shatterproof Glass (Sealed)	2
	Metal (Not Sealed)	3
	Metal (Sealed)	4
Notes:	1. Pressure range and chart number to be included in sales order 2. When ordering a Pneumatic Receiver, the model string must be 53011-10B-*-4256-1-*-*-*-*.*. 3. Range Protection is required if Min Range pressure is greater than 5% of Max Range pressure. 4. Alarm and Pump Control options are not available with an element selection of 3201, 3202, 3203, 3204, 3205, or 4251. 5. Alarms not available on spans less than 1 PSI (27.7" of Water) for 120v, 50/60 Hz only 6. Electric Chart Drives are available on special order request only. Contact Customers Service	

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