Honeywell

Model CIP

Ultra Sanitary Process Transmitter

These CIP (Clean-In-Place) sanitary process transmitters are manufactured in stainless steel and offer a variety of flanges, electrical connections, and operating temperatures designed to meet the environmental demands found in the applications listed below in potential applications.

FEATURES

- 10 psig/a to 600 psig/a range
- Track temperature changes, 93 °C/minute [200 °F/minute]
- 4 mA to 20 mA output
- 500 s pressure response time
- Secondary containment exceeds 1500 psi
- Accuracy to 0.1 %
- Intrinsically safe available (2N option only)[9]
- CE approved[10]

A3
Complies to standard

Model CIP

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Pressure ranges	38,1 mm [1.5 in] flange, 10 psi to 600 psi; 51 mm [2 in] flange, 10 psi to 500 psi; 63,5 mm [2.5 in] flange, 10 psi to 400 psi; 76 mm [3 in] flange, 10 psi to 250 psi
Max. flange pressure	600 psi with 13MHHS clamp at 22 °C [72 °F], 38,1 mm [1.5 in]
Response time (comb. mech. & elect.)	500 ms
Resolution	Infinite
Orientation sensitivity	0.03 psi/G

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Process temperature[2,3]	-29 °C to 127 °C [-20 °F to 260 °F]
Sensor temperature[4]	-1 °C to 82 °C [30 °F to 180 °F]
Temperature effect, zero[5]	1 % full scale/38 °C [100 °F] (2 % full scale/38 °C [100 °F] for 1 psi)
Temperature effect, span[5]	1 % full scale/38 °C [100 °F] (2 % full scale/38 °C [100 °F] for 1 psi)

ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Supply voltage	13 Vdc to 32 Vdc
Electrical connection (std)	1/2-14 NPT conduit exit with 1,5 m [5 ft] cable
Load impedance (max.)	950 ohm @ 32 Vdc
Zero balance	4 mA ± 0.16 mA
Output (std)	4 mA to 20 mA, two-wire

MECHANICAL SPECIFICATIONS

Characteristic	Measure
Media	Steam, ethylene oxide, liquid, gas
Wetted parts material	316-L stainless, Hastelloy C-276
Fill material	NEOBEE M-20
Weight (nominal)	454 g [16 oz]
Case material	316-L stainless
Sanitary standard	3-A, #74-03
Over pressure	4X to max. flange pressure

RANGE CODES

Range Code	Available ranges
AV	10 psi
BJ	15 psi
BL	25 psi
BN	50 psi
BR	100 psi
CL	200 psi
CN	250 psi
CQ	400 psi
CR	500 psi
CS	600 psi

OPTION CODES

Range Code	**Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings.**
Pressure ranges	10, 15, 25, 50, 100, 200, 250, 400, 500, 600 psi
Temperature compensation	-1 °C to 82 °C [30 °F to 180 °F] 1i. -54 °C to 121 °C [-65 °F to 250 °F]
Internal amplifiers	2n(2N).Intrinsically safe amp 4 mA to 20 mA, two-wire current
Internal amplifier enhancements	Special filtering
Pressure ports	Tri-clover
Electrical termination	6j. 1/2-14 NPT conduit fitting with 1,5 m [5 ft] of four conductor PVC cable 6a. Bendix PTIH-10-6P or equivalent 6 pin 6m. DIN 436508 6n. DIN 40050
Shunt calibration	3d. Remote buffered shunt calibration
Special calibration	Compound, vacuum, barometric Bar
Wetted diaphragm	10c. Hastelloy C-276
Bridge resistance	12b. 5000 ohm (foil) (max. 121 °C [250 °F])
Zero and span adjustments	14b. Top access to pots

INTERNAL AMPLIFIERS

Amplifier specifications	Intrinsically safe amp: Option 2n(2N)***
Output signal	4 mA to 20 mA
Input power (voltage)	9 Vdc to 32 Vdc3
Input power (current)	4 mA to 20 mA
Frequency response	2000 Hz
Power supply rejection	60 dB
Operating temperature	-29 °C to 85 °C [-20 °F to 185 °F]
Reverse voltage protection	Yes
Short circuit protection	Yes
Wiring code: connector	A (+) Supply B No connection C No connection D (+) Output E Case ground F No connection
Wiring code: cable (std)[6,7]	R (+) Supply Bl (+) Output W Case ground

*** See Honeywell's Web site for the most up-to-date information regarding intrinsically safe approvals, ref. #008-0547-00.*** See Honeywell's Web site for the most up-to-date information regarding Intrinsically safe approvals. Ref #008-0547-00.

WIRING CODES

Cable	Two-wire current, 4 mA to 20 mA
Red	(+) Supply
Black	(+) Output (4 mA to 20 mA)
White	Case ground

Flanges

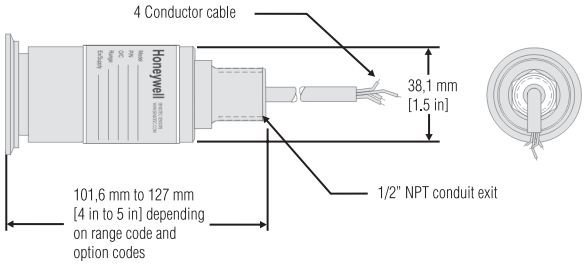
Code	Size	Flange
16b*	38,1 mm [1.5 in]	Tri-clover
16c	51 mm [2 in]	Tri-clover
16d	63,5 mm [2.5 in]	Tri-clover
16e	76 mm [3 in]	Tri-clover

* Does not comply to 3A standards

SPECIAL REQUIREMENTS (CONSULT FACTORY)

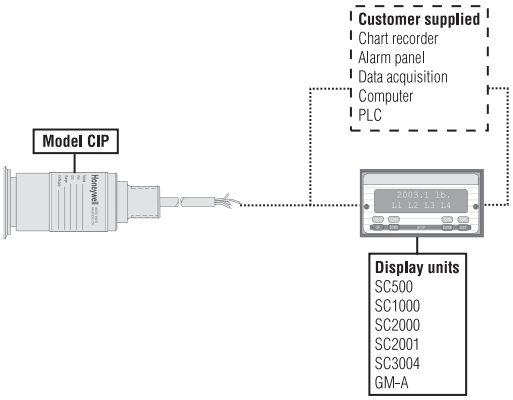
Have a special requirement? New case pressure, different cable lengths, electrical connectors, or materials? Consult our factory by calling +1 614-850-5000 (800-848-6564). Customization is key to our test and measurement business. Special outputs, wiring codes, and calibrations are all standard to us.

MOUNTING DIMENSIONS AND CHARACTERISTICS



For reference only

TYPICAL SYSTEM DIAGRAM



Model CIP

Ultra Sanitary Process Transmitter

NOTES

1. Accuracies stated are expected for best fit straight line for all errors, including linearity, hysteresis and non-repeatability.
2. Higher ranges may be available for special applications. Consult factory.
3. Specifications may vary with flange size and pressure range. Consult factory.
4. -1 °C to 54 °C [30 °F to 130 °F] for 1 psi range (only applicable for CP100, CP101, CP200, and CP201).
5. Temperature profile for heated vessels:

Process temperature	Sensor temperature
127 °C [260 °F]	82 °C [180 °F]
93 °C [200 °F]	63 °C [145 °F]
66 °C [150 °F]	49 °C [120 °F]
38 °C [100 °F]	32 °C [90 °F]
24 °C [75 °F]	24 °C [75 °F]
10 °C [50 °F]	18 °C [65 °F]
-18 °C [0 °F]	4 °C [40 °F]
-29 °C [-20 °F]	-1 °C [30 °F]

6. G=Green; B=Blue; W=White; Bl=Black; Br=Brown; Y=Yellow; R=Red; O=Orange. Color specifying cable and number or letter specifying connector.
7. No mating connector necessary with cable option.
8. For zero and span adjustment by instrumentation tech. Electrical termination is DIN 43650 Hirschmann plug; environmental class IP65 (NEMA 4). Conduit attachment by PG 9 thread on plug.
9. Range dependent; consult factory.
10. Termination dependent; consult factory.

Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847
Email inquiries to info.sc@honeywell.com

⚠ WARNING

PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING

MISUSE OF DOCUMENTATION

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

Sensing and Control
Automation and Control Solutions
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422 USA
+1-815-235-6847
www.honeywell.com/sensing

Honeywell

008697-1-EN IL50 GLO
May 2008