Anexo A

RUGGED STAINLESS STEEL CONSTRUCTION

5 Year Warranty

Gauge Pressure Sensors

The durable PG Series pressure transducers are ideal for a wide variety of HVAC/R and industrial applications, such as refrigeration measurement, pneumatic pressure measurement, gas pressure measurement, pump inlet, and outlet fluid pressure. They are even compatible with extreme applications, such as aerospace and motor sports equipment.

APPLICATIONS

- Pump inlet/outlet and compressors
- Hydraulic/pneumatic systems
- Energy & water management
- Refrigeration equipment, fluids
- Gas pressure measurement

Features

- High accuracy
- Rugged stainless steel construction (PG and PV)
- No silicon oil, no internal O-rings, no welds... fewer parts to fail
- Sturdy construction...suitable for high shock and vibration applications
- A wide operating temperature range of -40° to 85°C (-40° to 185°F) for operation versatility

PG/PV

17-4PH stainless steel housing, IP66, 20G peak vibration, EMI/RFI protection

PGE/PVE

Cold-rolled steel housing, IP65, 10G peak vibration

SPECIFICATIONS

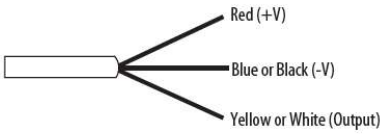
Electrical:	
Supply Voltage	10-28VDC
Output	Deluxe Models: 0-5/0-10VDC (3-wire) or 4-20mA (2-wire) Economy Models: 1-5VDC (3 wire) or 4-20mA (2-wire)
Load Impedance	>100kΩ
Standard Connection	Cable gland 24" (600mm) length
Pressure Port	1/4"NPT Male
Performance at 25°C (77°F):	
Accuracy *	±0.25% BFSL **
Media Compatibility (PG/PV)	Fluids & gases compatible with 17-4 stainless steel
Pressure Cycles	>100 million cycles
Over Pressure	2x F.S. without change in calibration
Burst Pressure	5x rated pressure or 20,000 PSI
Environmental:	
Operating Temp. Range	-40° to 85°C (-40° to 185°F)
Compensated Temp. Range	0° to 55°C (32° to 130°F)
Total Error Band Over Temp.	<±1% of FS
Humidity	0-95% RH, non-condensing

** Accuracy includes Nonlinearity and hysteresis.*
*** BFSL = Best fit straight line*

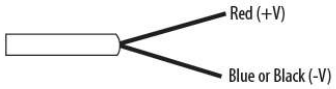
800.354.8556 503.598.4564 www.veris.com

WIRE COLOR CODING

3-wire, 0-5VDC/0-10VDC

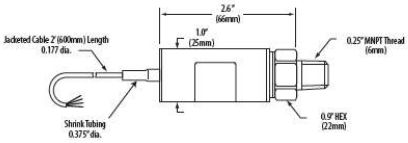


2-wire, 4-20mA

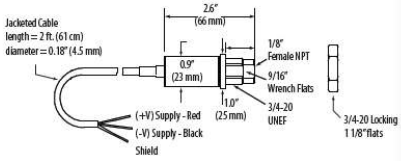


DIMENSIONAL DRAWINGS

PG/PV



PGE/PVE



ORDERING INFORMATION

CE

Type	Range	Wetted Material	Output
PG □	□	A	□
Blank = Deluxe **E** = Economy	**03** = 0 to 15 psig **04** = 0 to 25 psig **05** = 0 to 50 psig **06** = 0 to 75 psig **07** = 0 to 100 psig **08** = 0 to 250 psig **09** = 0 to 500 psig **10** = 0 to 1000 psig **11** = 0 to 5000 psig **12** = 0 to 10000 psig	= 17-4 stainless steel	**B** = 1-5VDC (economy only) **M** = 4-20mA **V** = 0-10VDC (deluxe only) **J** = 0-5VDC (deluxe only)

Example: PG □ 07 A V

Type	Range	Wetted Material	Output
PV □	□	A	□
Blank = Deluxe **E** = Economy	**03** = -14.7 to 15 psig **04** = -14.7 to 25 psig **05** = -14.7 to 50 psig **06** = -14.7 to 75 psig **07** = -14.7 to 100 psig **08** = -14.7 to 250 psig **09** = -14.7 to 500 psig **10** = -14.7 to 1000 psig **11** = -14.7 to 5000 psig **12** = -14.7 to 10000 psig	= 17-4 stainless steel	**B** = 1-5VDC (economy only) **M** = 4-20mA **V** = 0-10VDC (deluxe only) **J** = 0-5VDC (deluxe only)

Example: PV E 07 A M

Call factory for ranges not shown.

Anexo B

CORROSION RESISTANT STAINLESS STEEL PROBE

5 Year Warranty

TID

Box housing protects wires and connection

TIG

Service entry body for conduit connection

TIH

Available in five different probe lengths and with thermowells

Immersion Temperature Sensors

These immersion probe type temperature sensors are both highly accurate and cost effective. Installation could not be easier. The sensor is encased in a corrosion-resistant stainless steel probe for durability, with a choice of service entry body, indoor junction box, or threaded enclosures. A variety of RTD or thermistor sensor options and probe lengths are available for maximum application versatility.

- Cost-effective high accuracy thermistors/RTDs
- Corrosion resistant stainless steel probe design
- 1/2" NPT threads standard
- Variety of enclosures include duct mount, service entry body and threaded
- Thermowells available

APPLICATIONS

- Tanks
- Pipes
- Chillers

Class	Pt RTD		THERMISTOR								
Type	100 Ohm	1000 Ohm	3k	10k Type 2	10k Type 3	10k Dale	10k 3A221	10k "G" US	20k	100k	TAC 1.8k
Accuracy	±0.3°C	±0.3°C	±0.2°C	±1.0°C	±0.2°C	±0.2°C	±1.1°C	±0.2°C	Consult	Consult	Proprietary
	0.0385 curve	0.0385 curve	0/70°C	-50/150°C	0/50°C	-20/70°C	0/70°C	0/70°C	Factory	Factory	
Temp. Response*	PTC	PTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC

*PTC: Positive Temperature Coefficient
*NTC: Negative Temperature Coefficient

STANDARD RTD AND THERMISTOR VALUES (Ohms)

°C	°F	100 Ohm	1000 Ohm	3k	10k Type 2	10k Type 3	10k Dale	10k 3A221	10k "G" US	20k	100k	TAC 1.8k
-50	-58	80.306	803.06	205,800	692,700	454,910	672,300	-	441,200	1,267,600	-	63,880
-40	-40	84.271	842.71	102,680	344,700	245,089	337,200	333,562	239,700	643,800	3,366,000	35,680
-30	-22	88.222	882.22	53,730	180,100	137,307	177,200	176,081	135,300	342,000	1,770,000	20,720
-20	-4	92.160	921.60	29,346	98,320	79,729	97,130	96,807	78,910	189,080	971,200	12,460
-10	14	96.086	960.86	16,674	55,790	47,843	55,340	55,252	47,540	108,380	553,400	7,733
0	32	100.000	1000.00	9,822	32,770	29,588	32,660	32,639	29,490	64,160	326,600	4,940
10	50	103.903	1039.03	5,976	19,930	18,813	19,900	19,901	18,780	39,440	199,000	3,240
20	68	107.794	1077.94	3,750	12,500	12,272	12,490	12,493	12,260	24,920	124,900	2,177
25	77	109.735	1097.35	3,000	10,000	10,000	10,000	10,000	10,000	20,000	100,000	1,800
30	86	111.673	1116.73	2,417	8,055	8,195	8,056	8,055	8,194	16,144	80,580	1,496
40	104	115.541	1155.41	1,598	5,323	5,593	5,326	5,324	5,592	10,696	53,260	1,049
50	122	119.397	1193.97	1,081	3,599	3,894	3,602	3,600	3,893	7,234	36,020	750
60	140	123.242	1232.42	747	2,486	2,763	2,489	2,486	2,760	4,992	24,880	545
70	158	127.075	1270.75	527	1,753	1,994	1,753	1,751	1,990	3,512	17,510	403
80	176	130.897	1308.97	378	1,258	1,462	1,258	1,255	1,458	2,516	12,560	302
90	194	134.707	1347.07	-	919	1,088	917	915	1,084	1,833	9,164	230
100	212	138.506	1385.06	-	682	821	679	678	816.8	1,356	6,792	177
110	230	142.293	1422.93	-	513	628	511	509	623.6	1,016	5,108	139
120	248	146.068	1460.68	-	392	486	389	388	481.8	770	3,894	109
130	266	149.832	1498.32	-	303	380	301	299	376.4	591	3,006	87

To compute Linitemp Temperature:
2-Wire version (1µA/°C)
µA reading - 273.15=Temperature in °C
3-Wire version (10mV/°C)
mV reading/10 - 273.15 = Temperature in °C

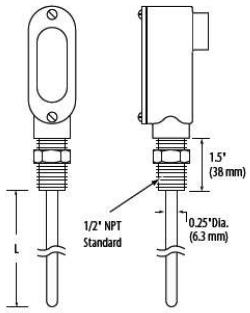
SPECIFICATIONS

Wiring		22AWG; 2-wire:RTD Thermistor, 4-20mA; 3-wire: Voltage output models
Probe		Stainless Steel
Test Pressure		200psi
Linitemp:		
Input Power		5 to 30VDC
Output		1µA/°C or 10mV/°C
Operating Temperature		-25° to 105°C (-13° to 221°F)
Accuracy	Calibration Error:	1.5°C (35°F) typical; 2.5°C (37°F) max. at 25°C (77°F)*
	Error over Temperature:	1.8°C typical (35°F); 3.0°C (34°F) max. over 0° to 70°C (32° to 158°F) range
		2.0°C (35°F) typical, 3.5°C (38°F) max. over -25° to 105°C (-13° to 221°F) range

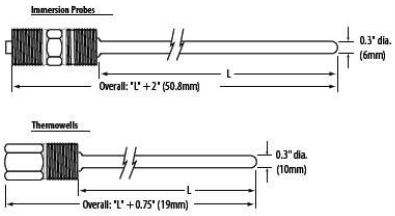
*Room temperature error documented on each unit.

DIMENSIONAL DRAWINGS

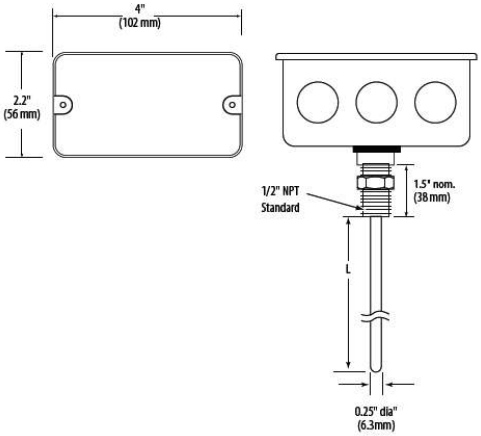
TIG Model



TIH Model



TID Model



ORDERING INFORMATION

Enclosure	Immersion Probe Length "L"	Thermowell	Sensor Type	Options: Cal Certificate	Options: Threads
TI [ ]	[ ]	[ ]	[ ]	[ ]	[ ]
D = Duct G = Service Entry Body H = Threaded NPT Only	A = 2 1/2" (64mm) B = 4" (102mm) C = 6" (152mm) D = 8" (203mm) E = 12" (305mm)	0 = None 1 = Add Thermowell	B = 100R Platinum, RTD C = 1k Platinum, RTD D = 10k T2, Thermistor E = 2.2k, Thermistor F = 3k, Thermistor G = 10k CPC, Thermistor H = 10k, T3, Thermistor J = 10k Dale, Thermistor K = 10k w/11k shunt,Thermistor M = 20k NTC, Thermistor N = 1800 ohm, Thermistor P = 10mV/°C, Linitemp R = 10k US, Thermistor S = 10k 3A221, Thermistor T = 100k, Thermistor	0 = None 1 = 1 point Cal validation 2 = 2 point Cal validation	**Blank** = NPT A = BSPT B = DIN 2999

Thermowell Sizing

Probe Length	Thermowell Length
A (2 1/2") (64mm)	1 1/2" (38mm)
B (4") (102mm)	3" (76mm)
C (6") (152mm)	5" (127mm)
D (8") (203mm)	7" (178mm)
E (12") (305mm)	11" (279mm)

Example:

TI [D] [B] [1] [D] [2] [A]

NOTE:
For 4-20mA transmitter output, order any TI with the 100Ω platinum RTD and accessory AA10xx.

Anexo C

	BANDA CUÁDRUPLE SA-G+	BANDA CUÁDRUPLE SA-EL
NÚMERO DE MODELO	**GSM1308**	**EDG1228**
CARACTERÍSTICAS		
Dimensions (L x W x H)	63.5 x 63.5 x 23.9 mm	63.5 x 63.5 x 23.9 mm
Weight	80 g	128.5 g
Housing	Plastic	Seamless aluminum extrusion
Antenna	SMA connector	SMA connector
DESEMPEÑO DE RADIO		
Frequency (MHz)	850/900/1800/1900	
Sensitivity	–106 dBm (typical)	
Transmit power	Class 4 (2W@850/900 MHz); Class 1 (1W@1800/1900 MHz)	
PAQUETE DE DATOS		
Mode	Class B, Multislot 10	Class B, Multislot 10
Protocol	GSM/GPRS Release 97,AMR Release 99	GSM/GPRS/EDGE/AMR Release 99
Coding schemes	CS1-CS4	CS1-CS4; MCS1-MCS9
Packet channel	PBCCH/PCCCH	PBCCH/PCCCH
FUNCIONALIDAD GSM		
Voice	FR, EFR, HR & AMR	
CS data	Asynchronous; Transparent and Non-Transparent up to 14.4 kb	
GSM SMS	Text, PDU, MO/MT, Cell Broadcast	
INTERFAZ		
Host Protocols	AT commands, UDP API, CMUX, PPP	AT commands, CMUX, PPP
Internal Protocols	PPP, UDP API, TCP API, UDP PAD, TCP PAD	PPP
API Control/Status	AT commnads, UDP API, TCP API, AT commands over SMS	AT Commands
Physical Interface	RS-232C	USB
Peripheral Interface	8-pin I/O: Mic in, headset out, audio return, ground, input power, 2 user-defined I/O, and 1 dedicate output	2.5 mm headset jack
ACCESO SIM	1.8/3V with locking mechanism	
ENTORNO		
Operating	–30°C to +70°C	
Compliant	–20°C to +60°C	
Storage	–40°C to +85°C	
Humidity	Up to 95% non-condensing	
ENERGÍA		
DC voltage	6-40 V	5 V (powered by USB)
GSM operating power (typical)	SA-G+ @ 9 V	SA-EL @ 5 V

Band	Mode	Avg (mA)	Peak (A)
GSM 850/900	1 TX/1RX	200	1.30
GSM 1800/1900	1TX/1RX	160	0.92
	Idle	50 DRX5	
	Sleep	20	

Band	Mode	Avg (mA)	Peak (A)
GSM 850/900	1 TX/1RX	340	0.9
	Idle	50	
GSM 1800/1900	1TX/1RX	300	0.8
	Idle	40	
	Sleep	20	

CERTIFICACIONES		
FCC	Parts 15, 22 & 24	Parts 15, 22 & 24
GCF	Version 3.27.0	Version 3.24.0
PTCRB	Version 3.12.0	Version 3.10.1
Industry Canada	Yes	Yes
CE Mark	Yes	Yes
RoHS Compliant	Yes	Yes
NÚMERO DE PARTES	GSM1308-50	EDG1228

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