Features

- All-welded stainless steel sensor and pressure connection
- Highly configurable; wide selection of pressure connections and electrical terminations
- Field proven polysilicon thin film pressure sensor
- Ranges 30 psi 20,000 psi

Typical Uses

- Off road vehicles
- Construction machinery
- Hydraulic and pneumatic sensing
- Performance racing
- Railroad/transportation
- Agriculture implements
- Compressor control
- HVAC/R
- Process automation and control
- Pump monitoring

Specifications

Reference 72 °F ±2 °F (21 °C ±1 °C)

Temperature:

Accuracy Class ± 0.25% of span

(BFSL):

Total Error Band ±1% of Span: From -20 to 85 °C (-4 to 185 °F) Accuracy (TEB): **±1.5% of Span:** From -40 to -20 °C (-40 to -4 °F)

±1.5% of Span: From 85 to 125 °C (185 to 257 °F) Includes the combined effects of non-linearity (Terminal Point Method), hysteresis, non-repeatability, temperature and zero offset and span setting errors

Stability: $\leq \pm 0.25\%$ of span/year

Durability: 50 million cycles

NSF-61, CE, UL (UL 61010-1), (CSA 222 6101-1) Approvals:

UL Recognized component per UL-610101, and CSA 22.2 6101-1, Electrical Equipment for Measurement,

Control and Laboratory use

Environmental Specifications

Storage: -40 °F to 257 °F (-40 °C to 125 °C) **Temperature** Limits: Operating: -40 °F to 257 °F (-40 °C to 125 °C) Compensated: -40 °F to 257 °F (-40 °C to 125 °C

Humidity Effects: 0 to 100% R.H., no effect

Functional Specifications

Vibration Effects: Random vibration (20 g) over temperature range

(-40 °C to 125 °C)

Shock Effects: 100 gs, 6 ms

Drop Test: Withstands 1 meter on concrete









Key Benefits

- Broad temperature capability
- High EMI/RFI immunity ratings
- IP67 Ingress rating
- High performance ASIC based electronics

Functional Specifications

Response Time: < 1 msec Warm-up Time: < 500 msec Position Effect: $< \pm 0.01\%$ span

Overpressure (F.S): Proof Burst 2X Range 10X Range ≤750 psi ≥1,000 to ≤4,000 psi 2X Range 5X Range \geq 5.000 to \leq 7.500 psi 1.5X Range 5X Range \geq 10,000 to \leq 20,000 psi 1.2X Range 2.4X Range

Electrical Specifications

Reverse Polarity & Yes Miswired Protected:

100 Vac Insulation

Breakdown Voltage:

>100 Mh @ 100 Vdc Insulation

Resistance:

Circuit Protection: Reverse polarity and miswire protection

Continued on page 2



Output Signals Available				
Voltage Output	Excitation	Supply Current		
0-5 Vdc, 3 wire	9-36 Vdc	5 mA		
0-10 Vdc, 3 wire	14-36 Vdc	5 mA		
1-5 Vdc, 3 wire	9-36 Vdc	4 mA		
1-6 Vdc, 3 wire	9-36 Vdc	4 mA		
0.5-4.5 Vdc, 3 wire	9-36 Vdc	4 mA		
Ratiometric Output				
0.5-4.5 Vdc, 3 wire	5 Vdc ±0.5 Vdc	3.5 mA		
Current Output				
4-20 mA, 2 wire	9-36 Vdc			

Environmental Rating

Rating	Electrical Connections
IP67, NEMA 4X	Metri-Pack®, Shielded cable, Flying leads Deutsch® DT & DTM, AMP® Superseal® and M12
IP65, NEMA 4X	Hirschmann® G, EN 175301-803 Form A & C (DIN 43650 A & C)

Wetted Components

Diaphragm 17-4 PH® Stainless steel
Process Connection 304 Stainless steel

Non-Wetted Components

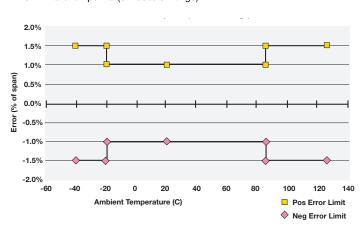
Housing 20% Glass reinforced nylon, Fire retardant to UL94 V1

Optional Features

Electrical Termination:	See ordering code
Process Connection Location:	See ordering code
Consult Factory For:	Pressure range options, process connection locations, approval descriptions

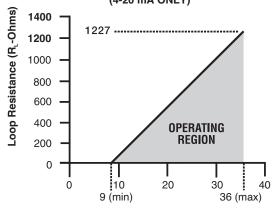
Total Error Band (TEB)

Error limits of all points (0-100% of range)



Power Supply & Load Resistance

Power Supply Voltage vs. Loop Resistance (4-20 mA ONLY)



Loop Supply Voltage (Vdc) [LSV]



Ordering Code	Example:	G27	M01	42	M2	60#	G -	XTU
Model G27 - G2 Series, 1.0% Total Error Band -20 °C to 85	5 °C • 1 5 % Total Error Rand -40 °C to -20 °C							
& 85 °C to 125 °C	7 0, 1.3 70 Total Effor Balla -40 O to -20 O	G27						
Pressure Connection Size M01 - 1/8 NPT - Male			M01	-				
M02 - ¼ NPT - Male			IVIUI	-				
MEK - 7/6 20 SAE #4 - Male, not UL reconginzed of								
MEV - 9 ⁶ -18 SAE #6 Male w/Buna-N O-ring, not MS2 - 1/4-19 BSP - Male, not UL recognized over 1				-				
MG2 - G ¼ B - Male	10,000 parrange			_				
M38 - ¾-24 SAE #3 Male w/Buna-N O-ring								
M33 - ^{3/6} -24 UNJF3A (w/37° cone seat) M76 - ^{7/6} -20 UNJF3A (w/37° cone seat)				-				
Output Signal								
05 - 0-5 Vdc								
10 - 0-10 Vdc 15 - 1-5 Vdc								
16 - 1-6 Vdc								
42 - 4-20 mA				42				
RM - 0.5-4.5 Vdc ratiometric to 5 Vdc supply 45 - 0.5 - 4.5 Vdc ratiometric to 9-36 Vdc supply								
Electrical Termination								
EN 175301-803 Form C (DIN 43650, Form C)								
DC - No mating connector								
N1 - Mating connector, no cable N2 - Mating connector, 1 meter (3 feet) of cable								
N3 - Mating connector, 3 meter (10 feet) of cable						-		
N9 - Mating connector with customer specified le								
M12 - Mates to Hirschmann® 933 172-100 or si EW - No mating connector	milar					-		
E0 - W/mating connector, no cable						-		
E2 - W/mating connector, 1 meter (3 feet) of shield								
E4 - W/mating connector, 3 meter (10 feet) of shie								
E1 - W/mating connector & customer defined cab Pigtail - Shielded cable with PVC jacket and 20								
F2 - W/1 meter (3 feet) cable length						-		
F3 - W/3 meter (10 feet) of cable length								
P1 - Customer specified length Metri-Pack®						-		
GN - No mating connection						-		
G2 - Mating connection with 1 meter (3 feet) of ca								
G3 - Mating connection with 3 meter (10 feet) of c G1 - Mating connector with customer specified le						-		
Hirschmann® G Series	ingtii					-		
HM - No mating connection								
M1 - W/mating connector, no cable M2 - Mating connection with 1 meter (3 feet) of ca	hla				140	-		
P9 - Mating connector with customer specified le					M2	-		
Flying Leads								
W2 - 1 meter (3 feet) of flying leads								
W9 - Customer specifed length Deutsch® DT Series DT04-3P						-		
DT - Without mating connector						-		
T2 - W/1 meter (3 feet) of cable								
T3 - W/3 meter (10 feet) of cable	. 0.					-		
T1 - W/mating connector, customer specified leng	gth					-		
DS- Without mating connector						-		
S2 - W/1 meter (3 feet) of cable								
S3 - W/3 meter (10 feet) of cable S1 - W/mating connector, customer specified length	a+h					-		
AMP® Superseal®	gui					-		
AP - Without mating connector								
A2 - W/1 meter (3 feet) of cable								
A3 - W/3 meter (10 feet) of cable A1 - W/mating connector, customer specified lend	nth					-		
Pressure Ranges (see range table on page 4)	g							
60# - 60 psi						60#		
Measurement Type G - Gauge								
Option (if including an option(s) must include	an "X")						G	X
TU - Throttle Plug								TU
6B - Clean for Oxygen Service (unit is cleaned, ba	agged and labeled for use in O2 service)							
RH - Calibration certificate								

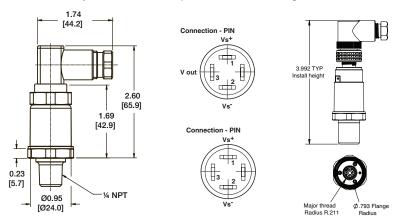


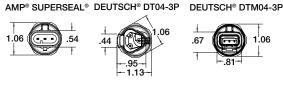
G2 Ra	G2 Range Table				
	Range	Code			
	30 psi/-14.7 psi	30#&vac			
	45 psi/-14.7 psi	45#&vac			
	60 psi/-14.7 psi	60#&vac			
puno	85 psi/-14.7 psi	85#&vac			
Compoun	100 psi/-14.7 psi	100#&vac			
	150 psi/-14.7 psi	150#&vac			
	200 psi/-14.7 psi	200#&vac			
	300 psi/-14.7 psi	300#&vac			
	500 psi/-14.7 psi	500#&vac			
	30 psi	30#			
	50 psi	50#			
	60 psi	60#			
	100 psi	100#			
	150 psi	150#			
	200 psi	200#			
	250 psi	250#			
	300 psi	300#			
	400 psi	400#			
	500 psi	500#			
re	650 psi	650#			
Positive Pressure	750 psi	750#			
tive P	1,000 psi	1000#			
Posi	1,500 psi	1500#			
	2,000 psi	2000#			
	2,500 psi	2500#			
	3,000 psi	3000#			
	4,000 psi	4000#			
	5,000 psi	5000#			
	6,000 psi	6000#			
	7,500 psi	7500#			
	10,000 psi	10000#			
	15,000 psi ¹	15000#			
	20,000 psi ¹	20000#			

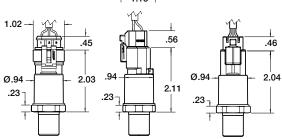
bar, kPa, and mPa ranges also available

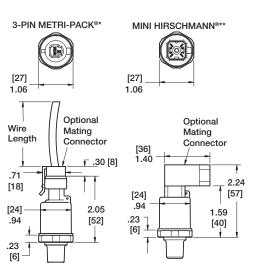
Dimensions in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings









*Mates to Metri-Pack® Connector Body 12065286 **Mates to Hirschmann® G4W1I Connector or Similar

¹ Only available with M01, M02, MG2, M76, M03 & M33 process connections