# Honeywell

#### **APPLICATIONS**

HYDRAULIC/ PNEUMATIC CONTROLS AIR COMPRESSORS

ENERGY MANAGEMENT 'smart' compressors, refrigeration/chiller control PROCESS CONTROL

SYSTEMS

ENGINE CONTROLS AND MONITORS

## **MODEL ECLIPSE** • OEM PRESSURE TRANSDUCER

The model EC pressure transducer is designed for OEM's who require a reliable pressure transducer for industrial or heavy-duty applications. The model EC features our proven all wetted stainless steel design, rugged packaging, internal signal amplifications, and price which make it an ideal sensor for a variety of applications.

The model EC offers a broad selection of pressure ranges, output ranges, process connections and electrical termination to meet the demanding requirements of customers worldwide. Output options include voltage and current styles. Process connections include English and Metric forms. Electrical terminations include cable and connector styles. The cable style version is suitable for harsh environments that require IP66 type sealing.

The model EC is fully temperature compensated and calibrated and delivers excellent accuracy over a wide temperature range. CE versions are available.



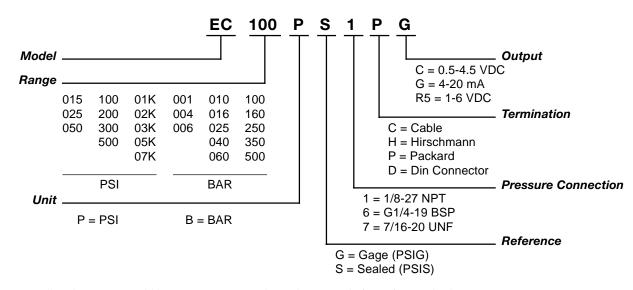
#### FEATURES

- Voltage or current output
- Broad selection of pressure ranges
- CE, UL and ULc listings are standard for some combinations
- Weather proof type connector
- Reverse polarity protection
- Low excitation voltage
- IP65 sealed steel case, with appropriate connector (IP66 with cable termination)

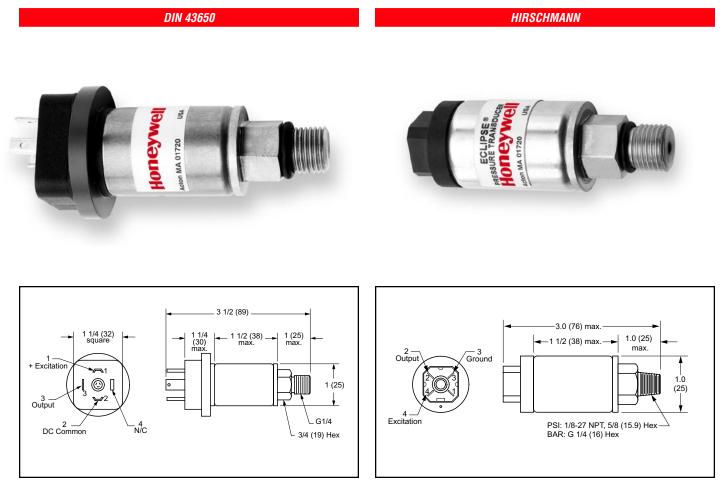
## BENEFIT

- · Flexibility for the designer
- Suitable for many applications
- Ready for Europe
- · High reliability in tough environments
- Not damaged by reversed excitation
- Suitable for ORV or marine use
- Complete environmental protection for electronics

### HOW TO ORDER



Note: Not all combinations are available. Minimum quantity orders apply. Contact the factory for more details.



## ECLIPSE MODEL DIN 43650

This version of the Model Eclipse features electrical connectors, pressure port threads and pressure ranges attractive to users requiring European standards. The electrical connector meets DIN 43650 and offers the user the advantage of wiring to screw terminals inside the mating connector. The environmental rating is IP 65 when used with the proper cable size and with the mating connector installed on the transducer. The mating connector features a center screw fastener for rigid attachment to the transducer. The pressure port connection is the popular G 1/4 thread and pressure ranges of 0 to 1 bars to 0 to 500 bars are available. The mating connector is included with this version.

## ECLIPSE MODEL HIRSCHMANN

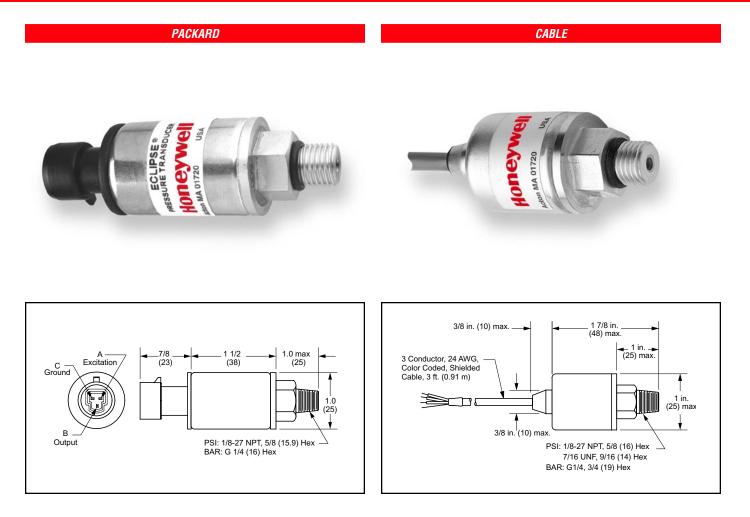
The Model Eclipse is available with a mini DIN style electrical connector. This connection is a popular choice throughout the world and offers quick disconnection but can be rigidly attached with the center screw fastener. The cable exit can be adjusted for any 90-degree direction. The Hirschmann version is rated IP 65 for environmental protection when used with the proper cable size and with the mating connector installed on the transducer. The choice of pressure fittings is 1/8-27 NPT or G 1/4. The mating connector is included with this version.

Pin	Voltage	Current
1	+ Excitation	+ Excitation
2	Common	N/C
3	Output	- Excitation (return)
4	N/C	N/C

DIN CONNECTOR PINS

## HIRSCHMANN CONNECTOR PINS

Pin	Voltage	Current
1	N/C	N/C
2	Output	N/C
3	Common	- Excitation (return)
4	+ Excitation	+ Excitation



## ECLIPSE MODEL PACKARD

To meet the requirements of automotive applications the Model Eclipse is offered with the Packard Metri-Pack<sup>TM</sup> electrical connector. This connector has been specified for the extreme environments found in engine and hydraulic applications. The connector has a locking lug to maintain connection with the mating plug. This version is available with 1/8-27 NPT or G 1/4 pressure fittings and pressure ranges from 0 to 15 through 0 to 7000 psi. The mating connector is not included with this version.

## ECLIPSE MODEL CABLE

The Model Eclipse can be provided with an all stainless steel case and an integral cable for electrical connection. The advantage of this arrangement is that the environmental rating is increased to IP66 and would be recommended for extreme outdoor or industrial environments. This version is available with the 1/8-27 NPT or G 1/4 pressure fittings and pressure ranges from 0 to 15 psi through 0 to 7000 psi or 0 to 1 bar to 0 to 500 bars.

Pin	Voltage	Current
а	+ Excitation	+ Excitation
b	Output	- Excitation (return)
С	Common	N/C

## PACKARD CONNECTOR PINS

## WIRE CODE

Wire	Voltage	Current
Red	+ Excitation	+ Excitation
White	Output	- Excitation (return)
Black	Common	N/A
Bare	Shield	Shield

TECHNICAL SPECIFICATION	S
-------------------------	---

RANGES		015, 025, 050 psig			
	100, 2	100, 200, 300, 500, 1K, 2K, 3K, 5K, 7K psis			
	6, 10, 16,	1, 2.5, 4 barg 25, 40, 60, 100,160, 250, 350, 5	00 bars		
PHYSICAL					
Proof Pressure	< 500 psi, 2	X rated range; ≥ 500 psi, 1.5 X ra	ated range		
Burst Pressure	< 500 psi, 10 X rate	< 500 psi, 10 X rated range; ≥ 500 psi, 10 X rated range (30 kpsi max)			
Material in Contact with Me	dia 3	300 series SS, braze compound			
Weight		3.0 oz (75 gm)			
ENVIRONMENTAL					
Shock	50 g'	50 g's peak (5 ms), 100 g's peak (11 ms)			
Vibration	Figure 514.2-5, Curve AK, Table	Figure 514.2-5, Curve AK, Table 514.2-V, Random Vibration Test (Overall g rms = 20.7 minimum)			
ELECTRICAL	Ratiometric Voltage	Regulated	Current		
Zero Output	0.5 Vdc	1.0 Vdc	4.0 mA		
Full Scale Output	4.0 Vdc (0.50-4.50 Vdc)	5.0 Vdc (1.0-6.0 Vdc)	16.0 mA (4-20 mA)		
Excitation	5 Vdc ±250 mV (7.0 V max)	7-35 Vdc	9.5-35 Vdc		
Supply Current	15.0 mA typical (17.0 mA max)	15.0 mA typical (17.0 mA max)	N/A		
Source (nominal)	2.0 mA	2.0 mA	N/A		
Sink (nominal)	0.3 mA @ zero output	20 μA @ zero output	N/A		
Supply Rejection Ratio	90 db	90 db	90 db		
PERFORMANCE					
Response Time		< 500 microseconds			
EMI/RFI	Exceeds CE he	Exceeds CE heavy industrial (30 v/m radiated 150 kHz-1 gHz)			
Electrical Connection		Packard Metri-Pack™ connector requires, Packard #12065287 mating connector, chmann (mating connector supplied), DIN 43650 (mating connector supplied) or 1 meter, 22 AWG Cable			
Accuracy		$\pm 0.25\%$ F.S.O. best fit straight line, Includes: non-linearity, hysteresis, non-repeatability. Thermal errors are not included, $\pm 0.5\% < 100$ psi, 6 gbars			
Total Error Band	$\pm 3.0\%$ Typical ( $\pm 4.0\%$ Max.) F.S.O. Includes: zero offset error, span error, thermal effect on zero and thermal effect on span, non-linearity, hysteresis, non-repeatability				
Compensated Operating an Storage Temperature Range		-40° to 105°C (-40° to 221°F)			

Note: Contact the factory to discuss other pressure ranges.

*Note:* All specifications are measured at 25°C (77°F)

and at rated excitation unless otherwise specified.

Note: Meets IEC-68-2 or MIL-STD 810C.

#### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

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.

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.

Item # 1096500 MG 10/01

Sensing and Control Honeywell 100 Discovery Way Acton, MA 01720 USA Tel: (877) 384-1300; Fax: (978) 263-0630

www.honeywell.com/sensing/

Honeywell