





89 Uncompensated

SPECIFICATIONS

- 316L SS Pressure Sensor
- High Pressure
- 0 100mV Output
- Absolute

The 89 uncompensated is a small profile, media compatible, piezoresistive silicon pressure sensor packaged in a 316L stainless steel housing. The 89 uncompensated features 5/16-32 UNEF threads and can be welded in place. It can also be packaged in a variety of threaded fittings such as 1/4 and 1/8NPT, 1/4BSP as well as custom process fittings. Contact factory for threaded fitting options.

The 89 uncompensated is designed for high pressure OEM applications where compatibility with corrosive media is required. The sensing package utilizes silicon oil to transfer pressure from the 316L stainless steel diaphragm to the sensing element.

Please refer to the 89 compensated and constant voltage datasheets for more information on different features of the 89.

FEATURES

- Weldable and Threaded Process Fittings
- -40^oC to +125^oC Operating
 - 1. Temperature Range
- ±0.25% Pressure Non Linearity
- Solid State Reliability

APPLICATIONS

- Hydraulic Controls
- Process Control
- Pressure Calibrators
- Refrigeration/Compressors

STANDARD RANGES

Range	psia
0 to 01k	•
0 to 03k	•
0 to 05k	•
0 to 10k	•

PERFORMANCE SPECIFICATIONS

Supply Current: 1.5 mA

Ambient Temperature: 25°C (unless otherwise specified)					
PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Sensitivity	15	22	28	mV/V@FS	
Zero Pressure Output	-4		4	mV/V	
Pressure Non Linearity	-0.25		0.25	%Span	1
Pressure Hysteresis		±0.05		%Span	
Repeatability		±0.02		%Span	
Input/Output Resistance	3900	4500	5100	Ω	2
Temperature Coefficient – Resistance	1300	1510	1750	ppm/°C	3
Temperature Coefficient – Sensitivity	-1450	-1250	-1000	ppm/°C	3
Temperature Coefficient – Offset		2		μV/V/ºC	3
Thermal Hysteresis – Span		±0.05		%Span	3
Thermal Hysteresis – Offset		±0.05		%Span	3
Long Term Stability – Span		±0.1		%Span/Year	4
Long Term Stability – Offset		±0.1		%Span/Year	4
Supply Current	0.5	1.5	2.0	mA	
Supply Voltage			9.5	V	
Insulation Resistance (50Vdc)	50			ΜΩ	5
Pressure Overload			3X	Rated	6
Pressure Burst			4X	Rated	7
Operating Temperature	-40		+125	∘C	
Storage Temperature	-50		+125	ōC	
Torque	154		180	in-lb	8

Liquids and Gases compatible with 316/316L Stainless Steel

grams

Notes

Weight

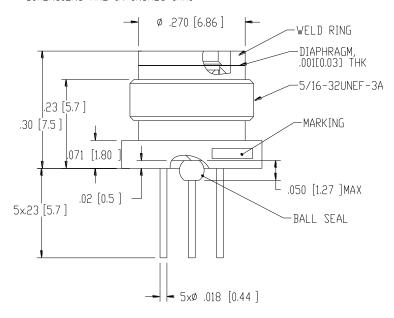
- 1. Measured at ambient temperature.
- 2. Best fit straight line.

Media - Pressure Port

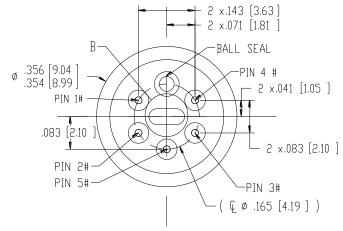
- 3. Measured with both -E pins shorted together.
- 4. Over the temperature range -20°C to +85°C with respect to 25°C.
- 5. Minimum resistance between case and pins.
- 6. 3X or 20,000psi, whichever is less. The maximum pressure that can be applied without changing the transducer's performance or accuracy.
- 7. 4X or 30,000psi, whichever is less. The maximum pressure that can be applied to a transducer without rupture of either the sensing element or transducer.
- 8. For devices without fittings, typical receptacle is 316 ST STL, tensile strength 75,000psi min.
- 9. Direct mechanical contact with diaphragm is prohibited. Diaphragm surface must remain free of defects (scratches, punctures, fingerprints, etc.) for device to operate properly. Caution is advised when handling parts with exposed diaphragms. Use protective cap whenever devices are not in use.
- 10. Testing: All 03k, 05k and 10kpsi parts are tested at 2500psi and calculated to full scale pressure respectively.
- 11. Marking: Parts are marked with company name, model number, pressure range, lot number, serial number, and date code
- 12. Shipping: The stainless steel diaphragm is protected by a static dissipative cap. Each unit is packaged individually in a plastic container with anti-static foam.

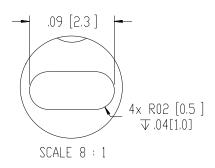
DIMENSIONS

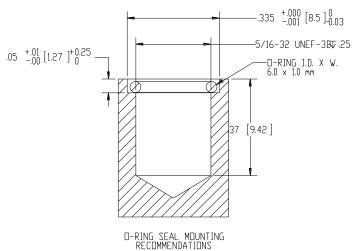
DIMENSIONS ARE IN INCHES [mm]



PIN NO	FUNCTION		
1	-0		
2	-E1		
3	+ []		
4	+E		
5	-E2		



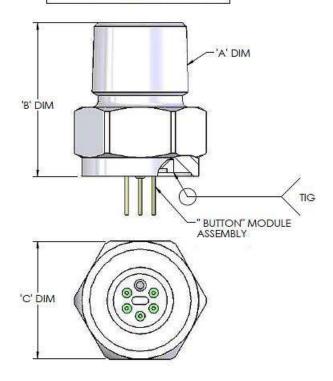




09/2017

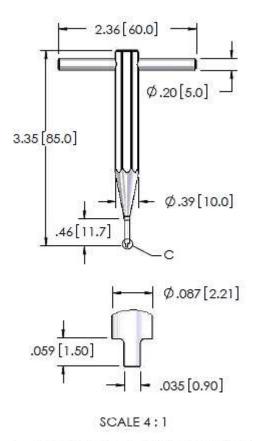
SENSOR SOLUTIONS ///89U

PROCESS FITTING OPTIONS



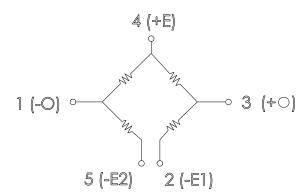
Fitting Dimensions Table						
Fitting Type	MEAS P/N	'A' DIM	'B' DIM	C' DIM		
1	IC-D00364	1/4-18 NPT	.93 [23.6]	7/8 [22.2] HEX		
2	IC-D00365	1/8-27 NPT	.91 [23.1]	7/8 [22.2] HEX		
3	IC-D00366	7/16-20 UNF	.77 [19.6]	7/8 [22.2] HEX		
4	IC-D00348	1/4-18 NPT	.82 [20.8]	5/8 [15.9] HEX		
5	IC-D00367	1/4-19 BSP	.82 [20.8]	3/4 [19.0] HEX		
8	IC-D00349	1/8-27 NPT	.71 [18.0]	5/8 [15.9] HEX		
9	IC-D00368	1/4-19 BSP	.89 [22.6]	7/8 [22.2] HEX		
Note: Fitting Type #47 Accomply Chaye						

ACCESSORIES

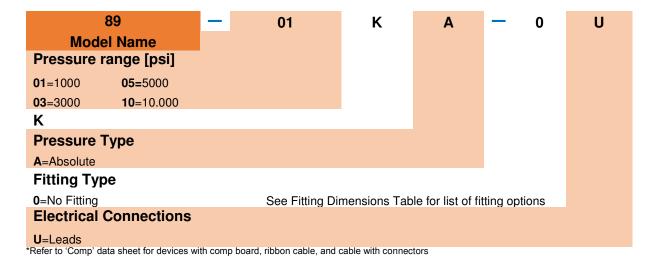


FOR PRODUCT W/o FITTING, WRENCH TOOL (MEAS P/N IC-D00546) CAN BE ORDERED SEPARATELY FROM MEAS.

CONNECTIONS



ORDERING INFORMATION



NORTH AMERICA

Measurement Specialties, Inc., a TE Connectivity Company Tel: 800-522-6752

Email: <u>customercare.frmt@te.com</u>

EUROPE

Measurement Specialties (Europe), Ltd., a TE Connectivity Company Tel: 800-440-5100

Email: <u>customercare.lcsb@te.com</u>

ASIA

Measurement Specialties (China), Ltd., a TE Connectivity Company Tel: 0400-820-6015

Email: customercare.shzn@te.com

TE.com/sensorsolutions

 $\label{eq:measurement} \mbox{Measurement Specialties, Inc., a TE Connectivity company.}$

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

ПОСТАВКА ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

многоканальный

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru_6 moschip.ru 4 moschip.ru 9