



FEATURES

- Suitable for measuring the temperature of Urea liquid used in the Selective Catalytic Reduction (SCR) systems
- Standard style connector
- Available in a range of R/T curves
- Temperature range -20°C to +125°C
- Capable of withstanding high pressures

APPLICATIONS

- Temperature measurement of Urea liquid used in the Selective Catalytic Reduction (SCR) systems.
- Closed loop pressurized systems
- Water tank applications

UREA TEMPERATURE SENSOR WITH INTEGRATED CONNECTOR

- Robust, compact design
- Improved overall reliability
- Resistant to Urea
- Integrated connector
- RoHS Compliant
- Stainless Steel Tip

DESCRIPTION

This assembly consists of a NTC thermistor welded to gold plated brass pins. The sensor is inserted into a Stainless Steel tip and over-molded together using GF30% Nylon to give a high degree of protection against water/moisture ingress. The molded unit has an integrated Molex style connector and O ring to provide a water tight seal during assembly.

This Urea Temperature Sensor is used to measure the temperature of the Urea liquid used in the Selective Catalytic Reduction (SCR) systems. This is an integral part of NOx emission control and compliance strategy with SCR systems. This exhaust after treatment method is used with diesel engines to reduce NOx emissions. The SCR system relies on the injection of an aqueous urea solution into the exhaust stream in order to facilitate the reduction of NOx emissions. This Sensor is also suitable for other immersion applications.

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	10000
Tolerance from +25°C to +85°C	°C	±1
Beta Value 25/85	K	3976
Tolerance on Beta Value	%	±1
Time response in still water (T63%)	Seconds	<40

MECHANICAL DETAILS

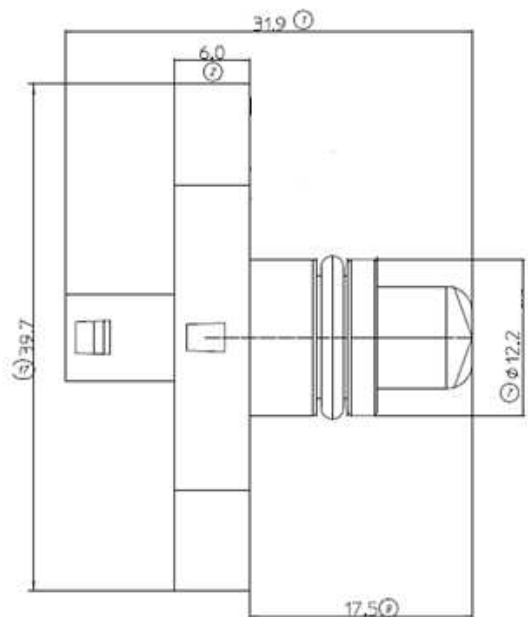


Figure 1: Urea Temperature probe with integrated connector – mechanical drawing

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms
-40	336098	2	29500	44	4542	86	1037
-39	314553	3	28054	45	4367	87	1005
-38	294524	4	26687	46	4200	88	974
-37	275897	5	25395	47	4040	89	945
-36	258563	6	24172	48	3887	90	916
-35	242427	7	23016	49	3741	91	888
-34	227398	8	21921	50	3601	92	862
-33	213394	9	20885	51	3467	93	836
-32	200339	10	19903	52	3339	94	811
-31	188163	11	18973	53	3216	95	787
-30	176803	12	18092	54	3098	96	764
-29	166198	13	17257	55	2985	97	741
-28	156294	14	16465	56	2877	98	720
-27	147042	15	15714	57	2773	99	699
-26	138393	16	15001	58	2674	100	678
-25	130306	17	14324	59	2579	101	659
-24	122741	18	13682	60	2487	102	640
-23	115661	19	13073	61	2399	103	622
-22	109032	20	12493	62	2315	104	604
-21	102824	21	11943	63	2234	105	587
-20	97006	22	11420	64	2157	106	571
-19	91553	23	10923	65	2082	107	555
-18	86439	24	10450	66	2011	108	539
-17	81641	25	10000	67	1942	109	524
-16	77138	26	9572	68	1876	110	510
-15	72911	27	9165	69	1813	111	496
-14	68940	28	8777	70	1752	112	482
-13	65209	29	8408	71	1693	113	469
-12	61703	30	8056	72	1637	114	457
-11	58405	31	7721	73	1582	115	444
-10	55304	32	7402	74	1530	116	432
-9	52385	33	7097	75	1480	117	421
-8	49638	34	6807	76	1432	118	410
-7	47050	35	6530	77	1385	119	399
-6	44613	36	6266	78	1341	120	388
-5	42317	37	6014	79	1298	121	378
-4	40151	38	5774	80	1256	122	368
-3	38110	39	5544	81	1216	123	359
-2	36184	40	5325	82	1178	124	350
-1	34366	41	5116	83	1141	125	341
0	32651	42	4916	84	1105		
1	31031	43	4724	85	1070		

ORDERING INFORMATION

Part No.	FSR Part No.	Description	Ω @25°C	MOQ
10K3D1317	FSR1013415	Urea Temperature Probe with Integrated Connector	10000	1000*

* For quantities less than Minimum Order Quantity – Contact Distribution

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
1711 139th Lane NW
Andover, MN 55304
Tel: +1 763 689 4870
Fax: +1 763 689 5033
customercare.ando@te.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
Ballybrit Business Park
Galway Ireland
Tel : +353-91-753238
Fax : +353-91-770789
Email: customercare.glwy@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 368 Wulian 1st Road
Gongxing Town
Shuangliu, Chengdu
Sichuan, 610200
China
Tel: +86 (0) 28 8573 9088
Fax: +86 (0) 28 8573 9070
Email: customercare.chdu@te.com

te.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties (MEAS), American Sensor Technologies (AST), 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.

© 2016 TE Connectivity Ltd. family of companies All Rights Reserved.