

Exhaust Gas Temperature Sensor [R1000] Part Number #58053

Basic Specifications

Electrical

- Supply current 8 mA max, 4 mA typical
- Output – Variable resistance 169 Ω – 849 Ω

Physical

- Operating temperature range -40 to 1000 °C

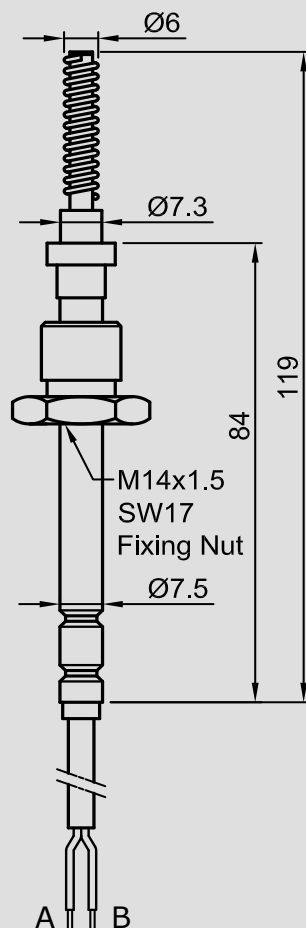
Compatibility

- All MoTeC ECUs
- All MoTeC Data Loggers

Accessories

- EGT (R1000) mild steel M14x1.5 weld-in fitting #59016

Dimensions [mm]



Applications

- The R1000 EGT allows high temperature measurement up to 1000 °C without the need for thermocouple amplifiers.

Features

- Temperature range: -40 °C to 1000 °C [-40 F to 1832 F]
- Response time T63: 8 s at 300 °C [572 F], gas velocity of 20 m/s [65.6 ft/s]
- Accuracy: <1%, 200 °C to 500 °C [392 F to 932 F]

Wiring

- Connect to any AT input

#58053 Sensor pin	Data Logger pin	ECU pin
A: +Signal	AT input	AT input
B: Common	Sensor 0 V	Sensor 0 V

Refer to the Data Logger or ECU User Manual for pin numbers*.

Calibration

- Load any of the following calibration files
 - R1000 EGT 0-1000C
 - R1000 EGT 32-1832F
- Or create a manual calibration (See next page)

*All MoTeC User Manuals are available from www.motec.com/downloads

Manual Calibration

M4/M48 ECU

Temp °C	-40	0	100	200	300	400	500	600	700	800	900	1000
Temp F	-40	32	212	392	572	752	932	1112	1292	1472	1652	1832
A/D Count	148	171	221	264	302	336	365	391	414	435	453	470

'hundred series' ECU

Temp °C	-40	0	100	200	300	400	500	600	700	800	900	1000
Temp F	-40	32	212	392	572	752	932	1112	1292	1472	1652	1832
Voltage V	0.72	0.83	1.08	1.29	1.47	1.63	1.78	1.90	2.01	2.11	2.20	2.29

Dash Logger

Temp °C	-40	0	100	200	300	400	500	600	700	800	900	1000
Temp F	-40	32	212	392	572	752	932	1112	1292	1472	1652	1832
Resistance Ω	169	200	275	348	419	488	554	617	679	738	794	849