

E52-E

The E52-E PT100 and thermocouples provide accurate temperature sensing for standard as well as challenging environments, special applications and special mounting requirements. The E52-E series is optimized to work with the range of E5 temperature controllers.






- Thermocouples and PT100 elements
- Wide range of housing, mounting and connection options
- Best performance match with E5 temperature controller portfolio
- Line up for best fitting application performance



Ordering information

Line	Shape type ¹	Type			Temperature range		Sensing tube			Connection			Order code							
		Series	Tech-nology	Sub-type	Min [°C]	Max [°C]	Diameter [mm]	Length [mm]	Material	Type	Fixing	Length [m]								
PRO	smooth tube	Thermo-couple	T	-80	400	3	100	SUS 316	2-wire	pre-wired with cable end shoes	2	E52-ETT3-100-2-A								
						6						E52-ETT6-100-2-A								
						1						E52-ETJ1-100-2-A								
					2	E52-ETJ2-100-2-A														
					3	E52-ETJ3-100-2-A														
					4.5	E52-ETJ4.5-100-2-A														
				0	400	6		E52-ETJ6-100-2-A												
						4		E52-ELTJ4-100-2-A												
						5		E52-ELTJ5-100-2-A												
					600	6		E52-ELTJ6-100-2-A												
						8		E52-ELTJ8-100-2-A												
						1		E52-ETK1-100-2-A												
LITE	smooth tube	Thermo-couple	J	-80	1100	2	100	INCONEL 600	2-wire	pre-wired with cable end shoes	2	E52-ETK2-100-2-A								
						3						E52-ETK3-100-2-A								
						4.5						E52-ETK4.5-100-2-A								
					0	400						6	E52-ETK6-100-2-A							
												4	E52-ELTK4-100-2-A							
												5	E52-ELTK5-100-2-A							
				600	400	6		E52-ELTK6-100-2-A												
						8		E52-ELTK8-100-2-A												
						1		E52-ELTK1-100-2-A												
				PRO	smooth tube	PT100		class B				-50	500	3	100	SUS 316	3-wire	pre-wired with open cable ends	2	E52-EP3-250-2-B
														6						E52-EP6-250-2-B
														4						E52-ELP4-50-2-A
0	400	5	E52-ELP5-100-2-A																	
		6	E52-ELP6-100-2-A																	
		8	E52-ELP8-100-2-A																	
-50	500	6	E52-EP6-35-2-BG1/4G-B																	
		35	E52-EP6-35-2-BG1/4G-B																	
		15	E52-ETJ6-15-2-BG1/4G-B																	
	0	1150	6				E52-ETK6-200-T2-B													
			200				E52-ETK6-200-T2-B													
			6				E52-ETJ6-200-T2-B													
720		200	6	E52-ETJ6-200-T2-B																
			200	E52-ETJ6-200-T2-B																
			6	E52-EP6-200-T2-B																
LITE	smooth tube	PT100	class B	-50	500	6	100	SUS 316	2-wire	enclosed screw terminals	-	E52-EP6-200-T2-B								
						200						E52-EP6-200-T2-B								
						6						E52-EP6-200-T2-B								
					0	500						6	E52-EP6-200-T2-B							
												200	E52-EP6-200-T2-B							
												6	E52-EP6-200-T2-B							

¹ See Dimensions on page 3

Line	Shape type ¹	Type			Temperature range		Sensing tube			Connection			Order code	
		Series	Tech-nology	Sub-type	Min [°C]	Max [°C]	Diameter [mm]	Length [mm]	Material	Type	Fixing	Length [m]		
		enclosed terminals, G1/2" g mounting	Thermo-couple	K	0	1150	6	200	INCONEL 600	2-wire			E52-ETK6-200-T2-CG1/2G-B	
				J	720	6	200	E52-ETJ6-200-T2-CG1/2G-B						
		enclosed terminals; Clamp mounting 1.5"	PT100	class B	-50	200	6	100	SUS 316	3-wire	enclosed screw terminals			E52-EP6-100-T2-CC1.5-B
														enclosed terminals; Clamp mounting 2"
		Surface temperature	Thermo-couple	J	0	250	10	dia 4 mm screw hole	Cu (tin plated)	2-wire	pre-wired with open cable ends	2	E52-ETJS1-B	
		Environmental temperature	PT100	class B	-40	80	-	-	Aluminium	3-wire	enclosed screw terminals		E52-EPE1-B	
	-40				80		PVC	E52-EPE2-B						
		Non-contact	Infrared sensor	up to Sn = 60 mm	10	260	M18	44.5	ABS	4-wire	pre-wired with open cable ends			ES1B
				up to Sn = 1 m	0	400	M18	120	SUS 304	5-wire				E52-ES1C-A40

¹ See Dimensions on page 3

Note: Models with tube diameters of 2 inches, 3 inches and 4 inches are available. Refer to the separate E52 Inch Temperature Sensor Datasheet.

Accessories

Type	Temperature range		Size	Length	Material	Order code
	Min [°C]	Max [°C]				
Compression fitting	RC 1/2	-200	800	6	AISI 316	E52-EACF1/2-6-B
				8		E52-EACF1/2-8-B
	RC 1/4			6		E52-EACF1/4-6-B
				8		E52-EACF1/4-8-B
	M20x1.5			6		E52-EACFM20-6-B
				8		E52-EACFM20-8-B
Compensation cable	Thermocouple	-40	200	n.a.	Silicone rubber	E52-EACW-K1-B
				K		25
	J	1	E52-EACW-J1-B			
		25	E52-EACW-J25-B			
Compensation connector	male	-50	120		Thermoplastic	E52-EACC-JM1-B
	female					E52-EACC-JF1-B
	male	K	E52-EACC-KM1-B			
	female		E52-EACC-KF1-B			
Thermo well ¹	G1/2 gas	-200	800	6 (for 3)	AISI 316	E52-EATW1/2G-6-3-150-B
				10 (for 6)		E52-EATW1/2G-10-6-150-B
				12 (for 8)		E52-EATW1/2G-12-8-150-B
Signal converters (for enclosed terminal type)	DIGITAL	Pt100				E52-EASCP1-B
		K				E52-EASCK1-B
		J				E52-EASJ1-B

¹ Thermo wells with different tube lengths and diameters are available. For solutions with matching pairs of temperature sensors and thermowells with fitting screw connections, contact your Omron representative.

Options (available on request)

1) Sensing head variations

- tip shapes
- lengths please specify required length
- diameters please specify required diameter (metric or inch)

2) Mounting variations

- thermowell (different process side thread and well fittings)
- bajonet (different process side thread and bajonet fittings)
- thread (different sizes and types (metric, inch))

3) Connection variations

- pre-wired length please specify length
material (fiberglass, silicone, PTFE, PVC)
colour codings (refer to page 5)
ends (open, cable shoes, cable clamps)
- Terminals open
enclosed

4) Special types

Please contact your OMRON representative for special applications e.g. surface temperature measurement, for hygienic environments, special shapes, mountings, materials, etc.