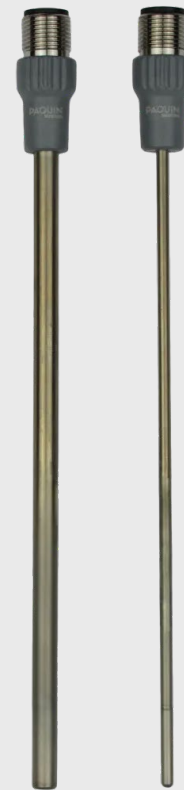**PAQUIN SENSORS**

A Division of The Paquin Company™

Mineral Insulated RTD with M12 for Food & Beverage and more

- Available with PT100 or PT1000 thermoresistance sensing
- Operates up to 1,450 psi
- From -58°F to 932°F
- Rapid response times
- AISI 316L stainless steel probe
- Custom lengths and diameters
- Suitable for food

About

The P54 is a multifunctional RTD with a 4-pin M12x1 connector and a compact mineral-insulated (M.I.C.) design. Featuring a durable IP67-rated over-molded connector, it offers high accuracy, rapid response times, and reliable performance in harsh industrial and food-processing environments. With a maximum operating temperature of 932°F, it provides a robust and flexible temperature monitoring solution.

Applications

- ✓ Food & beverage
- ✓ HVAC-R
- ✓ CNC machines
- ✓ Skid packagers
- ✓ Test benches
- ✓ more

Special Feature by Paquin

PAQUiN SENSORS
A Division of The Paquin Company™

Note

Paquin is pleased to offer a free of charge service which is unique within the temperature industry. This value-add feature is a differentiator that separates us from our competitors. We hope that all Paquin customers will take advantage and use this feature for their maximum benefit.

Paquin will mark (print) the resistance value @ 0.0°C onto the RTD. This certifies the accuracy class not only of the sensing element but also of the sensor in entirety. This can enable the user to correct error offsets within their data acquisition system. This capability will allow for a higher level of linearization.

RESISTANCE VALUE DISTRIBUTION REPORT at 0,0°C

Paquin Sensor P.N. :

Thin Film Element Pt100 :

Ωhm Value at 0,0°C	Number os Sensors	Class
100,16		
100,15		
100,14		
100,13		
100,12		Class B
100,11		
100,10		
100,09		
100,08		
100,07		
100,06		
100,05		
100,04		
100,03		
100,02		Cl. AA / Class A
100,01		
100,00		
99,99		
99,98		
99,97		
99,96		
99,95		
99,94		
99,93		Class B
99,92		
99,91		
99,90		
99,89		
99,88		
99,87		
99,86		
99,85		
99,84		
99,83		
99,82		
99,81		
99,80		
99,79		
99,78		
99,77		
99,76		
99,75		
99,74		

Build Your Part Number

PAQUiN SENSORS

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Series P54

Example: **P54S1L1D21A**

Series
P54

Sensing Element - *select one*	
S1	PT100
S2	PT1000

Probe Length - *select one*	
L1	100mm
L2	150mm
L4	250mm
L5	350mm
L6	500mm
L9	750mm
L7	1000mm
LX	Custom - please specify under part number; Example: LX = 315mm (in steps of 5mm please)

Probe Diameter - *select one*		Response Time *(test in water in accordance with IEC 751)*
D2	2mm (250mm probe length or longer)	Please ask
D3	3mm	< 3.5 seconds
D4	4.5mm	< 7 seconds
D5	6mm	< 13 seconds

Accuracy Class accordance to IEC751 - *select one*		
1A	Class A	Operating range -22 ... 572°F
1AA	Class AA (1/3 B)	Operating range 32 ... 302°F
2A	Class B	Operating range -58 ... 932°F

Mating Electrical Connection Assembly - *optional; will be quoted as a separate line item*	
Part#	
PSE1	M12x1, 5 pole – straight with cable gland (field wireable)
PSE2	M12x1, 5 pole - straight with 1 meter PUR cable
PSE3	M12x1, 5 pole - straight with 3 meter PUR cable
PSE4	M12x1, 5 pole - straight with 1 meter PUR shielded cable
PSE5	M12x1, 5 pole - straight with 3 meter PUR shielded cable
PSE6	M12x1, 5 pole - 90° (field wireable)
PSE7	M12x1, 5 pole - 90° with 1 meter PUR shielded cable
PSE8	M12x1, 5 pole - 90° with 3 meter PUR shielded cable

Technical Parameters

Technical Parameters	
Sensing element configuration	4-wire
Output signal type	PT100 PT1000
Probe material	AISI 316L
Temperature range probe	-58 ... 932°F
Temperature range housing	-40 ... 248°F
M.I.C. minimum bending radius	3 X outer diameter
Insulation resistance	100 M Ω@ 1000 Vdc
Electrical connector	M12x1, 4-pole
Housing material	Polyamide (molded)
Protection	IP67
Maximum working pressure	1,450 psi
Accuracy	Class A Class B

Dimensions (mm)

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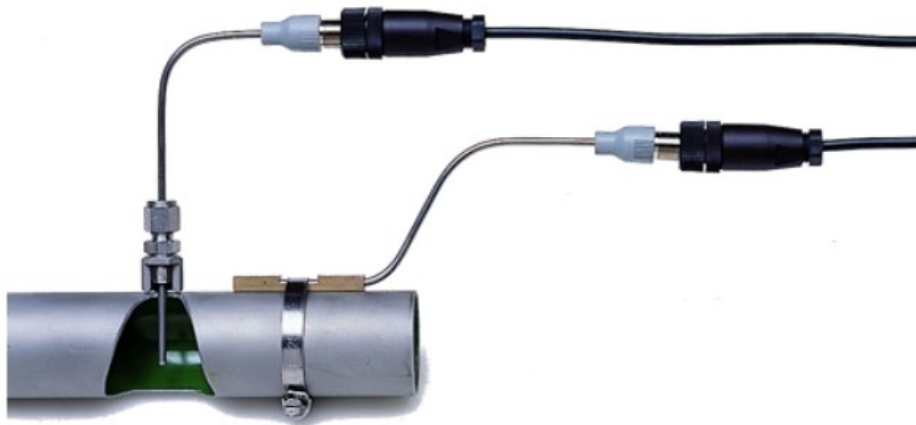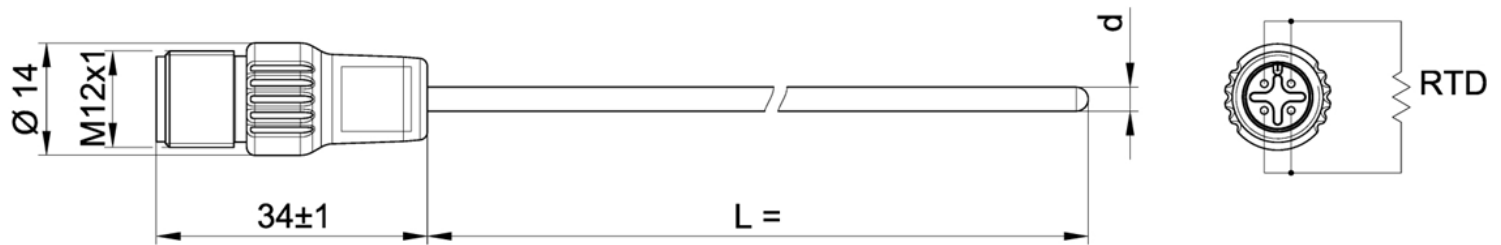
PAQUiN
SENSORS

Paquin Sensors' product portfolio is designed to provide options to fit the most diverse range of specifications.

We collaborate with our customers to match the best product technologies with your unique application requirements.

Please contact us or call +1 (800) 831-8217 anytime to discuss your needs!