



Microwave meter

Analog output or
2x PNP output

High precision

Water-based liquids

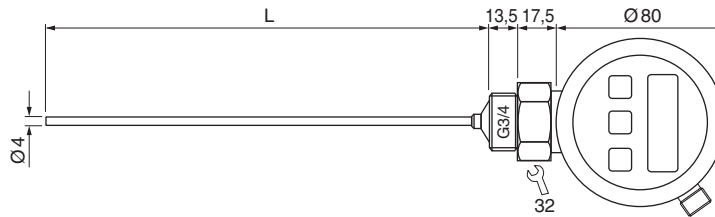
Guided Microwave



Design

DC Analog / DC PNP • G3/4

Dimensions



Design	Single probe	Single probe	
Output	4...20 mA, linear 	2x PNP, programmable 	
ID-No.	P.....	P.....	
Type-sensor length L	MFP 075 GA-LMxxx	MFP 075 GPP-LMxxx	
Supply voltage [V]	20...27 DC	20...27 DC	
Current consumption [mA]	< 45	< 45	
Current output [mA]	4...20	-	
Load resistance R _L [Ω]	200...500	-	
Switching current [mA]	-	200	
Reverse protection	•	•	
Precision [mm]	5	5	
Transition zone* [mm]	top: 25, bottom: 15	top: 25, bottom: 15	
Ambient temperature [°C]	0...+70	0...+70	
Medium temperature [°C]	0...+80	0...+80	
Sensitivity [ε _r]	≥20	≥20	
Protection [EN 60529]	IP 67	IP 67	
Housing material	Aluminium		
Material	AISI 316 Ti, PTFE		
Sealing material	NBR, AFM 34, different material on request		
Compressive strength [bar]	10 (25 °C)		
Connection	M12 connector		

Sensor length

The total length L of the sensors is specified by appending "xxx" to the type.

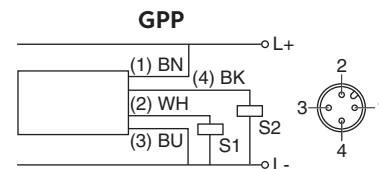
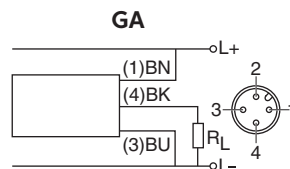
xxx: Length in cm

Preferred lengths GA	ID-No.
300 mm: LM030	P21220
500 mm: LM050	P21200
800 mm: LM080	P21201

Preferred lengths GPP	ID-No.
300 mm: LM030	P21222
500 mm: LM050	P21204
800 mm: LM080	P21205

Note:
Installation rules have to be observed.

* Depending on the installation conditions and the medium, deviations from the specified measuring accuracy can occur in this area.



Accessories connecting cable SLG / SLW 3..., SLG / SLW 4..., see page 2.38



Microwave meter

Analog output or
2x PNP output

High precision

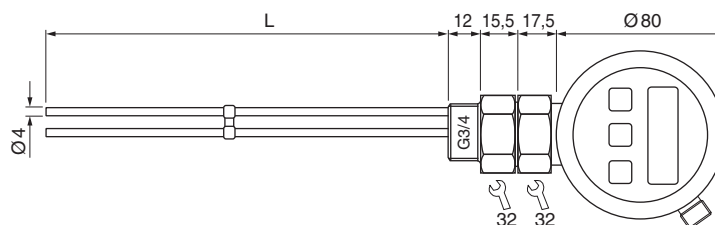
Liquids from oil to water

Guided Microwave



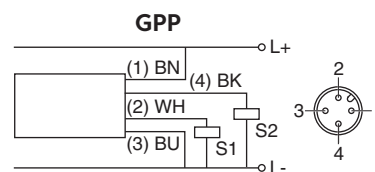
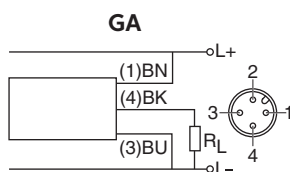
Design DC Analog / DC PNP • G3/4

Dimensions



Design	Parallel probe	Parallel probe																	
Output	4...20 mA, linear 	2x PNP, programmable 	<p>Sensor length</p> <p>The total length L of the sensors is specified by appending "xxx" to the type.</p> <p>xxx: Length in cm</p> <table border="0"> <tr> <td>Preferred lengths GA</td> <td>ID-No.</td> </tr> <tr> <td>300 mm: LP030</td> <td>P21202</td> </tr> <tr> <td>500 mm: LP050</td> <td>P21203</td> </tr> <tr> <td>800 mm: LP080</td> <td>P21221</td> </tr> <tr> <td>Preferred lengths GPP</td> <td>ID-No.</td> </tr> <tr> <td>300 mm: LP030</td> <td>P21206</td> </tr> <tr> <td>500 mm: LP050</td> <td>P21207</td> </tr> <tr> <td>800 mm: LP080</td> <td>P21223</td> </tr> </table>	Preferred lengths GA	ID-No.	300 mm: LP030	P21202	500 mm: LP050	P21203	800 mm: LP080	P21221	Preferred lengths GPP	ID-No.	300 mm: LP030	P21206	500 mm: LP050	P21207	800 mm: LP080	P21223
Preferred lengths GA	ID-No.																		
300 mm: LP030	P21202																		
500 mm: LP050	P21203																		
800 mm: LP080	P21221																		
Preferred lengths GPP	ID-No.																		
300 mm: LP030	P21206																		
500 mm: LP050	P21207																		
800 mm: LP080	P21223																		
ID-No.	P.....	P.....																	
Type-sensor length L	MFP 075 GA-LPxxx	MFP 075 GPP-LPxxx																	
Supply voltage [V]	20...27 DC	20...27 DC																	
Current consumption [mA]	< 45	< 45																	
Current output [mA]	4...20	-																	
Load resistance R _L [Ω]	200...500	-																	
Switching current [mA]	-	200																	
Reverse protection	•	•																	
Precision [mm]	5	5																	
Transition zone* [mm]	top: 25, bottom: 25	top: 25, bottom: 25																	
Ambient temperature [°C]	0...+70	0...+70																	
Medium temperature [°C]	0...+80	0...+80																	
Sensitivity [ε _r]	≥2.3	≥2.3																	
Protection [EN 60529]	IP 67	IP 67																	
Housing material	Aluminium																		
Material	AISI 316 Ti, PTFE, POM																		
Sealing material	NBR, AFM 34, different material on request																		
Compressive strength [bar]	10 (25 °C)																		
Connection	M12 connector																		

* Depending on the installation conditions and the medium, deviations from the specified measuring accuracy can occur in this area.



Accessories connecting cable SLG / SLW 3..., SLG / SLW 4..., see page 2.38



Microwave meter

Analog output or
2x PNP output

High precision
Easy cleaning

Liquids from oil to water

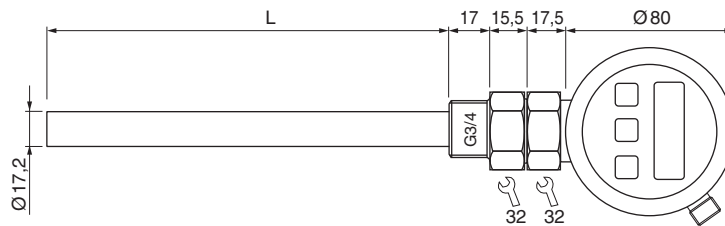
Guided Microwave



Design

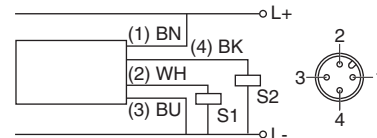
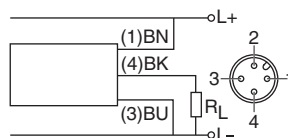
DC Analog / DC PNP • G3/4

Dimensions



Design	Coaxial probe	Coaxial probe																	
Output	4...20 mA, linear 	2x PNP, programmable 	<p>Sensor length</p> <p>The total length L of the sensor is specified by appending "xxx" to the type.</p> <p>xxx: Length in cm</p> <table border="0"> <tr> <td>Preferred lengths GA</td> <td>ID-No.</td> </tr> <tr> <td>300 mm: LK030</td> <td>P21217</td> </tr> <tr> <td>500 mm: LK050</td> <td>P21218</td> </tr> <tr> <td>800 mm: LK080</td> <td>P21219</td> </tr> <tr> <td>Preferred lengths GPP</td> <td>ID-No.</td> </tr> <tr> <td>300 mm: LK030</td> <td>P21214</td> </tr> <tr> <td>500 mm: LK050</td> <td>P21215</td> </tr> <tr> <td>800 mm: LK080</td> <td>P21216</td> </tr> </table>	Preferred lengths GA	ID-No.	300 mm: LK030	P21217	500 mm: LK050	P21218	800 mm: LK080	P21219	Preferred lengths GPP	ID-No.	300 mm: LK030	P21214	500 mm: LK050	P21215	800 mm: LK080	P21216
Preferred lengths GA	ID-No.																		
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ID-No.	P.....	P.....																	
Type-sensordlength L	MFP 075 GA-LKxxx	MFP 075 GPP-LKxxx																	
Supply voltage [V]	20...27 DC	20...27 DC																	
Current consumption [mA]	< 45	< 45																	
Current output [mA]	4...20	-																	
Load resistance R_L [Ω]	200...500	-																	
Switching current [mA]	-	200																	
Reverse protection [mm]	•	•																	
Precision [mm]	5	5																	
Transition zone* [mm]	top: 25, bottom: 25	top: 25, bottom: 25																	
Ambient temperature [$^{\circ}$ C]	0...+70	0...+70																	
Medium temperature [$^{\circ}$ C]	0...+80	0...+80																	
Sensitivity [ϵ_r]	≥ 2	≥ 2																	
Protection [EN 60529]	IP 67	IP 67																	
Housing material	Aluminium																		
Material	AISI 316 Ti, PTFE, POM																		
Sealing material	NBR, AFM 34, different material on request																		
Compressive strength [bar]	10 (25 $^{\circ}$ C)																		
Connection	M12 connector																		

* Depending on the installation conditions, deviations from the specified measuring accuracy can occur in this area.



Accessories

connecting cable SLG / SLW 3..., SLG / SLW 4..., see page 2.38