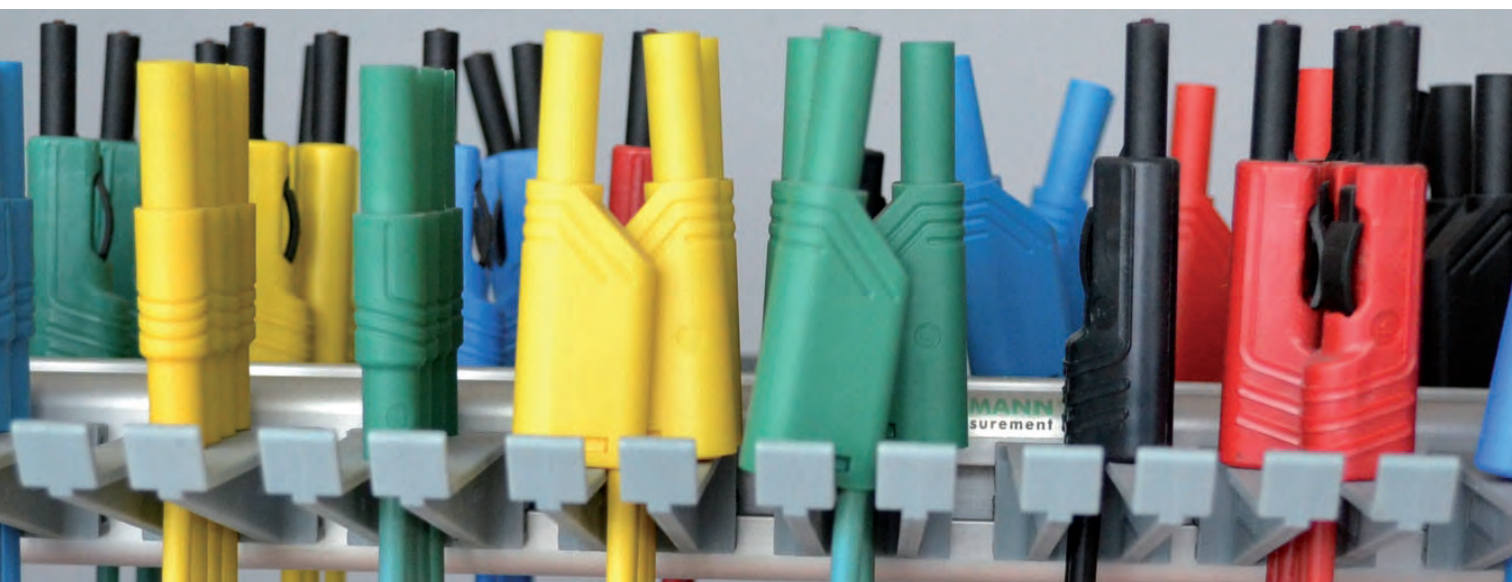
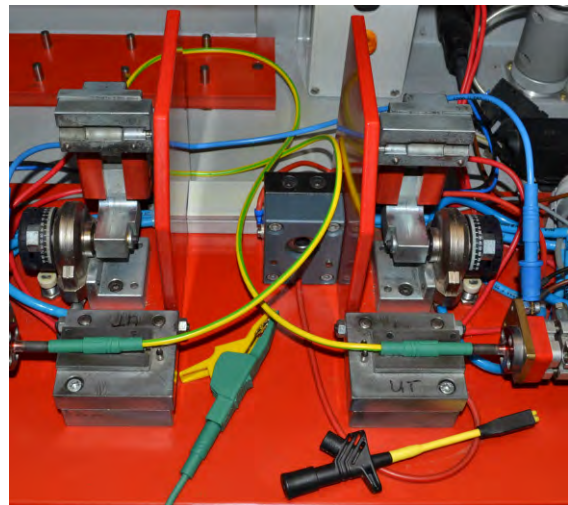




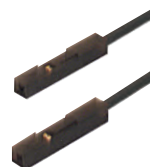
## Measuring Leads

Altech Test & Measurement Leads are often exposed to extensive wear and tear and other extreme conditions. They must be robust, flexible, carry heavy loads and long lasting. Therefore they are manufactured in a closely monitored process with high quality materials.

- Wide variety of colors, length and connections
- Double insulation
- Highly flexible also at low temperatures
- Silicone version for solder resistance
- Built-in white color indicator for damage identification
- Up to 1000V CAT III
- Wire size up to 2.5mm<sup>2</sup> for 32A
- Safety Systems
- Nickel and Gold plating



# Measuring Leads 0.64 mm System



## Type

### BNC AL 0,64

BNC adapter lead with insulated sockets for 0.64 mm round and rectangular pin. Red inner lead, black shielding; cable type RG 58 A/U, 50 Ohm. For use with oscilloscopes, PC cards, etc.

### MAL N 4-0,64/100-0,25

Injection-moulded measuring lead with spring loaded 4 mm diameter plug and 4 mm diameter socket for further connection and insulated socket for 0.64 mm round and rectangular pin. Highly flexible 0.25 mm<sup>2</sup> stranded wire.

### MKL 0,64/25-0,25

Measuring lead with two insulated sockets for 0.64 mm round and rectangular pin. Highly flexible 0.25 mm<sup>2</sup> stranded wire with two 0.64 mm diameter sockets.

Cable length	1.2m (47.2") BNC + 0.1m (3.9") wires
Cable size	-
Cable material	-
Pin dimensions	-
Cable type	RG 58 A/U

**PART NO. / Housing color** ● **933844001**

Cable length	0.1m (39.4")
Cable size	0.25 mm <sup>2</sup> (24 AWG)
Cable material	PVC
Pin dimensions	4 mm (0.157")
Cable type	LIY

● **934160100**  
● **934160101**

Cable length	25 mm
Cable size	0.25 mm <sup>2</sup> (24 AWG)
Cable material	PVC
Pin dimensions	4 mm (0.157")
Cable type	LIY

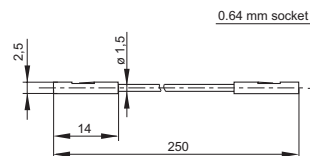
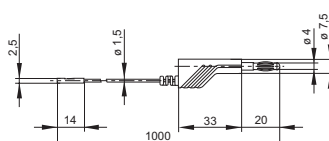
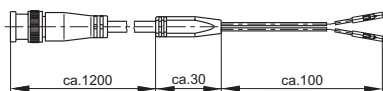
● **973604100**  
● **973604101**

## Technical Data

<b>Contact Type</b>	BNC conector, 2x0.64 mm (0.025") spring loaded square pin socket	pin (spring-loaded), 0.64mm (0.025") spring loaded square pin socket	2x0.64mm (0.025 in.) spring loaded square pin socket
<b>Voltage Rating</b>	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC
<b>Measurement Category (IEC61010)</b>	CAT I	CAT I	CAT I
<b>Current Rating*</b>	-	3 A	3 A
<b>Contact Resistance</b>	-	70 mOhm	20 mOhm
<b>Material Specifications</b>			
<b>Contact Pin</b>	-	nickel plated brass	gold plated copper beryllium
<b>Contact Spring</b>	-	nickel plated copper beryllium	-
<b>Housing</b>	-	PVC	PPO
<b>Environmental Conditions</b>			
<b>Temperature Range</b>	-15 °C to +70 °C (5°F to 158°F)	-15°C to +70°C (5°F to 158°F)	-40 °C to +60 °C (-40°F to 140°F)
<b>Flamability Rating</b>			
<b>Housing</b>	-	-	UL 94 HB

## Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

# Measuring Leads 2 mm System



## Type

### MVL 2/25; MVL 2/50; MVL 2/100

Injection-moulded measuring lead, at either end 2 mm diameter nickel-plated brass connector and 2 mm diameter socket with contact spring, for tower constructions. Highly flexible stranded lead, grip and lead shatter-proof.

### MAL S WS 2-4 100/1

Safety measuring lead according to IEC 61010, one end with 2 mm safety plug and other end with 4 mm safety plug, as well as 2 mm and 4 mm socket for onward connection capability. Gold-plated / nickel-plated copper-beryllium contact spring. Highly flexible, double insulated stranded lead and shatter-proof grip sleeves. Built in colour indicator for easy identification of insulation damages.

Cable length	0.25m (9.8"), 0.5m (19.7"), 1.0m (39.4")
Cable size	0.5 mm <sup>2</sup> (20AWG)
Cable material	PVC
Pin dimensions	2 mm (0.078")
Cable type	LF-Y
<b>PART NO. / Housing color</b>	0.25 m <b>973594100</b> ● <b>973594101</b> ● <b>973595101</b> ● <b>973595102</b> ● <b>973595103</b> ● <b>973595104</b> ● <b>973595105</b> ● <b>973595106</b> ● <b>973595107</b> ● <b>973595108</b> ● <b>973595109</b> ● <b>973595110</b> ● <b>973595111</b> ● <b>973595112</b> ● <b>973595113</b> ● <b>973595114</b> ● <b>973595115</b> ● <b>973595116</b> ● <b>973595117</b> ● <b>973595118</b> ● <b>973595119</b> ● <b>973595120</b> ● <b>973595121</b> ● <b>973595122</b> ● <b>973595123</b> ● <b>973595124</b> ● <b>973595125</b> ● <b>973595126</b> ● <b>973595127</b> ● <b>973595128</b> ● <b>973595129</b> ● <b>973595130</b> ● <b>973595131</b> ● <b>973595132</b> ● <b>973595133</b> ● <b>973595134</b> ● <b>973595135</b> ● <b>973595136</b> ● <b>973595137</b> ● <b>973595138</b> ● <b>973595139</b> ● <b>973595140</b> ● <b>973595141</b> ● <b>973595142</b> ● <b>973595143</b> ● <b>973595144</b> ● <b>973595145</b> ● <b>973595146</b> ● <b>973595147</b> ● <b>973595148</b> ● <b>973595149</b> ● <b>973595150</b> ● <b>973595151</b> ● <b>973595152</b> ● <b>973595153</b> ● <b>973595154</b> ● <b>973595155</b> ● <b>973595156</b> ● <b>973595157</b> ● <b>973595158</b> ● <b>973595159</b> ● <b>973595160</b> ● <b>973595161</b> ● <b>973595162</b> ● <b>973595163</b> ● <b>973595164</b> ● <b>973595165</b> ● <b>973595166</b> ● <b>973595167</b> ● <b>973595168</b> ● <b>973595169</b> ● <b>973595170</b> ● <b>973595171</b> ● <b>973595172</b> ● <b>973595173</b> ● <b>973595174</b> ● <b>973595175</b> ● <b>973595176</b> ● <b>973595177</b> ● <b>973595178</b> ● <b>973595179</b> ● <b>973595180</b> ● <b>973595181</b> ● <b>973595182</b> ● <b>973595183</b> ● <b>973595184</b> ● <b>973595185</b> ● <b>973595186</b> ● <b>973595187</b> ● <b>973595188</b> ● <b>973595189</b> ● <b>973595190</b> ● <b>973595191</b> ● <b>973595192</b> ● <b>973595193</b> ● <b>973595194</b> ● <b>973595195</b> ● <b>973595196</b> ● <b>973595197</b> ● <b>973595198</b> ● <b>973595199</b> ● <b>973595200</b>

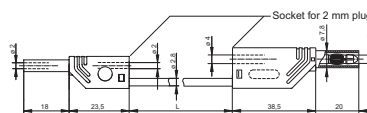
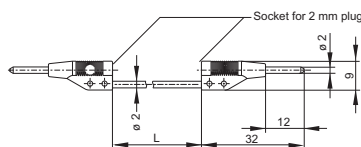
100 m (39.4")	● <b>975163100</b> ● <b>975163101</b> ● <b>975163102</b> ● <b>975163103</b> ● <b>975163104</b> ● <b>975163105</b> ● <b>975163106</b> ● <b>975163107</b> ● <b>975163108</b> ● <b>975163109</b>
1 mm <sup>2</sup> (18 AWG)	
PVC	
2 mm (0.078") / 4 mm (0.157")	
LEH-XY	

## Technical Data

Contact Type	stationary pin	spring-loaded pin
Voltage Rating	30 VAC / 60 VDC	AC/DC 1000V
Measurement Category (IEC61010)	CAT I	CAT II
Current Rating*	6 A	10 A
Contact Resistance	26 mOhm	21 mOhm
<b>Material Specifications</b>		
Contact Pin	nickel plated brass	nickel plated brass
Contact Spring	copper beryllium	gold plated copper beryllium
Housing	Polypropylene	Polyamide
<b>Environmental Conditions</b>		
Temperature Range	-40 °C to +60 °C (-40°F to 140°F)	-15 °C to +70 °C (5°F to 158°F)
<b>Flamability Rating</b>		
Housing	UL 94 HB	UL 94 V-2

## Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

# Measuring Leads 2 mm System



**Type** **MVL S WS 25/1 Au** **MVL S WS 50/1 Au** **MVL S WS 100/1 Au** **MVL S WS 200/1 Au**

Safety measuring lead according to IEC 61010, with 2 mm safety plugs on both sides and 2 mm sockets for onward connection capability. Gold-plated copper-beryllium contact spring. Highly flexible, double insulated stranded lead and shatter-proof grip sleeves. Built in colour indicator for easy identification of insulation damages.

Cable length	<b>0.25m (9.8")</b>	<b>0.5m (19.7")</b>	<b>1.0m (39.4")</b>	<b>2.0m (78.7")</b>
Cable size	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)
Cable material	PVC	PVC	PVC	PVC
Pin dimensions	2 mm (0.078")	2 mm (0.078")	2 mm (0.078")	2 mm (0.078")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY

<b>PART NO. / Housing color</b>	● 975694700	● 975695700	● 975696700	● 975698700
	● 975694701	● 975695701	● 975696701	● 975698701
	● 975694702	● 975695702	● 975696702	● 975698702
	● 975694703	● 975695703	● 975696703	● 975698703
	● 975694704	● 975695704	● 975696704	● 975698704
	● 975694705	● 975695705	● 975696705	● 975698705
	● 975694706	● 975695706	● 975696706	● 975698706
	○ 975694707	○ 975695707	○ 975696707	○ 975698707
	● 975694709	● 975695709	● 975696709	● 975698709

**Technical Data**

Contact Type	2x spring-loaded pin	2x spring-loaded pin	2x spring-loaded pin	2x spring-loaded pin
Voltage Rating	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V
Measurement Category (IEC61010)	CAT III	CAT III	CAT III	CAT III
Current Rating*	10A	10A	10A	10A
Contact Resistance	10 mOhm	15 mOhm	24 mOhm	44 mOhm

**Material Specifications**

Contact Pin	gold plated brass
Contact Spring	gold plated copper-beryllium
Housing	Polyamide

**Environmental Conditions**

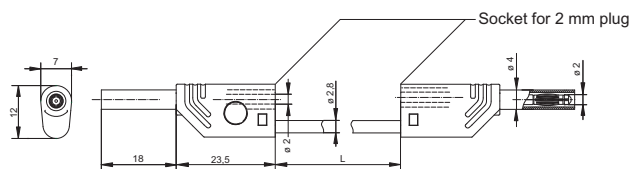
Temperature Range	-15 °C to +70 °C (5°F to 158°F)
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**Flamability Rating**

Housing	UL 94 V-2
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**Drawing**

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.

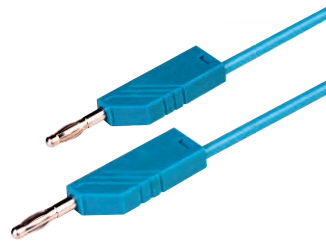


\* Please consider derating graph on page 80.



# Measuring Leads

## 4 mm Solder Resistant System



### Type

**MLN SIL 25/1      MLN SIL 50/1      MLN SIL 100/1      MLN SIL 150/1      MLN SIL 200/1**

Measuring lead, at either end 4mm diameter plug with caged spring and 4mm diameter socket for tower construction. Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, grip and lead shatter-proof. Built in colour indicator for easy identification of insulation damages.

	<b>0.25m (9.8")</b>	<b>0.5m (19.7")</b>	<b>1.0m (39.4")</b>	<b>1.5m (59.1")</b>	<b>2.0m (78.7")</b>
Cable length	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	1.5m (59.1")	2.0m (78.7")
Cable size	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)
Cable material	Silicone	Silicone	Silicone	Silicone	Silicone
Pin dimensions	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY	LEH-XY

### PART NO. / Housing color

● 934090100	● 934091100	● 934092100	● 934093100	● 934094100
● 934090101	● 934091101	● 934092101	● 934093101	● 934094101
● 934090102	● 934091102	● 934092102	● 934093102	● 934094102
● 934090103	● 934091103	● 934092103	● 934093103	● 934094103
● 934090104	● 934091104	● 934092104	● 934093104	● 934094104

### Technical Data

	MLN SIL 25/1	MLN SIL 50/1	MLN SIL 100/1	MLN SIL 150/1	MLN SIL 200/1
Contact Type	2x spring-loaded pin	2x spring-loaded pin	2x spring-loaded pin	2x spring-loaded pin	2x spring-loaded pin
Voltage Rating	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC
Measurement Category (IEC61010)	CAT I	CAT I	CAT I	CAT I	CAT I
Current Rating*	16A	16A	16A	16A	16A
Contact Resistance	8.5 mOhm	13 mOhm	22 mOhm	34 mOhm	40 mOhm

### Material Specifications

Contact Pin	nickel plated brass
Contact Spring	nickel plated copper-beryllium
Housing	Polyamide

### Environmental Conditions

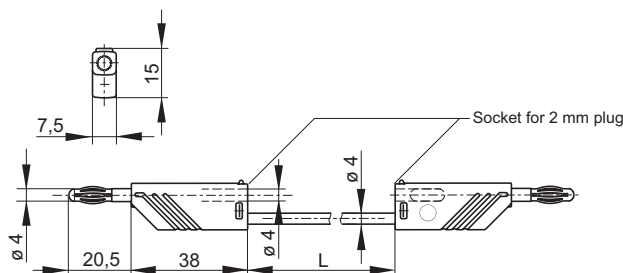
Temperature Range	-15 °C to +70 °C (5°F to 158°F)
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### Flamability Rating

Housing	UL 94 V-2
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### Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.

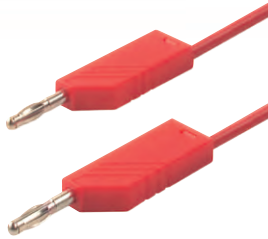


\* Please consider derating graph on page 80.





# Measuring Leads 4 mm System



## Type

**MLN 25/1      MLN 50/1      MLN 100/1      MLN 150/1      MLN 200/1**

Measuring lead, at either end 4mm diameter plug with caged spring and 4mm diameter socket for tower construction. Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, grip and lead shatter-proof. Built in colour indicator for easy identification of insulation damages.

	<b>MLN 25/1</b>	<b>MLN 50/1</b>	<b>MLN 100/1</b>	<b>MLN 150/1</b>	<b>MLN 200/1</b>
Cable length	<b>0.25m (9.8")</b>	<b>0.5m (19.7")</b>	<b>1.0m (39.4")</b>	<b>1.5m (59.1")</b>	<b>2.0m (78.7")</b>
Cable size	1 mm <sup>2</sup> (17 AWG)	1 mm <sup>2</sup> (17 AWG)	1 mm <sup>2</sup> (17 AWG)	1 mm <sup>2</sup> (17 AWG)	1 mm <sup>2</sup> (17 AWG)
Cable material	PVC	PVC	PVC	PVC	PVC
Pin dimensions	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY	LEH-XY
<b>PART NO. / Housing color</b>	● <b>934058100</b> ● <b>934058101</b> ● <b>934058102</b> ● <b>934058103</b> ● <b>934058104</b>	● <b>934060100</b> ● <b>934060101</b> ● <b>934060102</b> ● <b>934060103</b> ● <b>934060104</b>	● <b>934062100</b> ● <b>934062101</b> ● <b>934062102</b> ● <b>934062103</b> ● <b>934062104</b>	● <b>934064100</b> ● <b>934064101</b> ● <b>934064102</b> ● <b>934064103</b> ● <b>934064104</b>	● <b>934065100</b> ● <b>934065101</b> ● <b>934065102</b> ● <b>934065103</b> ● <b>934065104</b>

## Technical Data

	<b>MLN 25/1</b>	<b>MLN 50/1</b>	<b>MLN 100/1</b>	<b>MLN 150/1</b>	<b>MLN 200/1</b>
Contact Type	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin
Voltage Rating	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC
Measurement Category (IEC61010)	CAT I	CAT I	CAT I	CAT I	CAT I
Current Rating*	16A	16A	16A	16A	16A
Contact Resistance	8.5 mOhm	13 mOhm	22 mOhm	34 mOhm	40 mOhm

## Material Specifications

Contact Pin	nickel plated brass
Contact Spring	nickel plated copper-beryllium
Housing	Polyamide

## Environmental Conditions

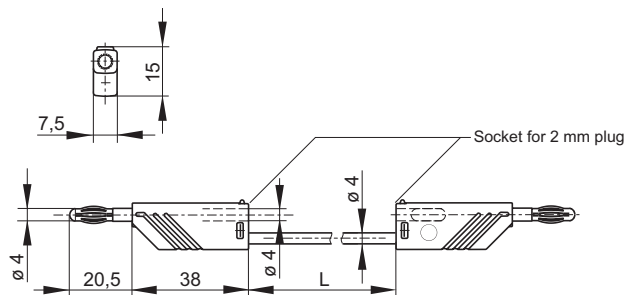
Temperature Range	-15 °C to +70 °C
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## Flamability Rating

Housing	UL 94 V-2
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## Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

For the latest on Altech Test & Measurement specifications please visit [www.altechcorp.com/test-equipment](http://www.altechcorp.com/test-equipment)

# Measuring Leads 4 mm System



## 2.5 mm<sup>2</sup> (14 AWG) Nickel plated contacts

Type	MLN 25/2.5	MLN 50/2.5	MLN 100/2.5	MLN 150/2.5	MLN 200/2.5
PART NO. / Housing color	● 934059100	● 934061100	● 934063100	● 934507100	● 934066100
	● 934059101	● 934061101	● 934063101	● 934507101	● 934066101
	● 934059102	● 934061102	● 934063102	● 934507102	● 934066102
	● 934059103	● 934061103	● 934063103	● 934507103	● 934066103
	● 934059104	● 934061104	● 934063104	● 934507104	● 934066104
	● 934059105	● 934061105	● 934063105	● 934507105	● 934066105
	● 934059106	● 934061106	● 934063106	● 934507106	● 934066106
	○ 934059107	○ 934061107	○ 934063107	○ 934507107	○ 934066107
	● 934059109	● 934061109	● 934063109	● 934507109	● 934066109
	● 934059188	● 934061188	● 934063188	● 934507188	● 934066188

## 2.5 mm<sup>2</sup> (14 AWG) Gold plated contacts

Type	MLN 25/2.5 Au	MLN 50/2.5 Au	MLN 100/2.5 Au	MLN 150/2.5 Au	MLN 200/2.5 Au
PART NO. / Housing color	● 934059700	● 934061700	● 934063700	● 934507700	● 934066700
	● 934059701	● 934061701	● 934063701	● 934507701	● 934066701
	● 934059702	● 934061702	● 934063702	● 934507702	● 934066702
	● 934059703	● 934061703	● 934063703	● 934507703	● 934066703
	● 934059704	● 934061704	● 934063704	● 934507704	● 934066704
	● 934059705	● 934061705	● 934063705	● 934507705	● 934066705
	● 934059706	● 934061706	● 934063706	● 934507706	● 934066706
	○ 934059707	○ 934061707	○ 934063707	○ 934507707	○ 934066707
	● 934059709	● 934061709	● 934063709	● 934507709	● 934066709
	● 934059788	● 934061788	● 934063788	● 934507788	● 934066788

<b>Technical Data</b>	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin
Contact Type					
Voltage Rating	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC	30 VAC / 60 VDC
Measurement Category (IEC61010)	CAT I	CAT I	CAT I	CAT I	CAT I
Current Rating*	32A	32A	32A	32A	32A
Contact Resistance	6 mOhm	8 mOhm	12 mOhm	16 mOhm	20 mOhm
<b>Material Specifications</b>					
Contact Pin			nickel /gold plated brass		
Contact Spring			nickel/gold plated copper-beryllium		
Housing			Polyamide		
<b>Environmental Conditions</b>					
Temperature Range			-15 °C to +70 °C		
<b>Flamability Rating</b>					
Housing			UL 94 V-2		

\* Please consider derating graph on page 80.



# Measuring Leads

## 4.0 mm Safety Plug System



### Type

MLS GG 25/1 MLS GG 25/2,5	MLS GG 50/1 MLS GG 50/2,5	MLS GG 100/1 MLS GG 100/2,5	MLS GG 200/1 MLS GG 200/2,5
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Safety measuring lead, at either end 4 mm diameter safety connector with straight outlet. Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, shatter-proof grip sleeve and lead. Built in colour indicator for easy identification of insulation damages.

	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	2.0m (78.7")
Cable length	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	2.0m (78.7")
Cable size	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)	1 mm <sup>2</sup> (18 AWG)
Cable material	PVC	PVC	PVC	PVC
Pin dimensions	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY

### 1 mm<sup>2</sup> (18 AWG)

PART NO. / Housing color

● 934070100	● 934072100	● 934074100	● 934076100
● 934070101	● 934072101	● 934074101	● 934076101
● 934070102	● 934072102	● 934074102	● 934076102
● 934070103	● 934072103	● 934074103	● 934076103
● 934070104	● 934072104	● 934074104	● 934076104

### 2.5 mm<sup>2</sup> (14 AWG)

PART NO. / Housing color

● 934071100	● 934073100	● 934075100	● 934077100
● 934071101	● 934073101	● 934075101	● 934077101
● 934071102	● 934073102	● 934075102	● 934077102
● 934071103	● 934073103	● 934075103	● 934077103
● 934071104	● 934073104	● 934075104	● 934077104
● 934071105	● 934073105	● 934075105	● 934077105
● 934071106	● 934073106	● 934075106	● 934077106
● 934071107	● 934073107	● 934075107	● 934077107
● 934071109	● 934073109	● 934075109	● 934077109
● 934071188	● 934073188	● 934075188	● 934077188

### Technical Data

Contact Type	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin
Voltage Rating	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V
Measurement Category (IEC61010)	CAT III	CAT III	CAT III	CAT III
Current Rating*	16 A 32 A	16 A 32 A	16 A 32 A	16 A 32 A
Contact Resistance	8.5 mOhm 6 mOhm	13 mOhm 8 mOhm	22 mOhm 12 mOhm	40 mOhm 20 mOhm

### Material Specifications

Contact Pin	nickel plated brass
Contact Spring	copper-beryllium
Housing	Polyamide

### Environmental Conditions

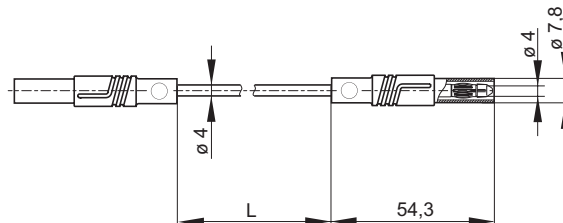
Temperature Range	-15 °C to +70 °C (5°F to 158°F)
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### Flamability Rating

Housing	UL 94 V-2
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### Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

# Measuring Leads

## 4.0 mm Safety Plug System



Type	MLS WG 25/1 MLS WG 25/2.5	MLS WG 50/1 MLS WG 50/2.5	MLS WG 100/1 MLS WG 100/2.5	MLS WG 200/1 MLS WG 200/2.5
Safety measuring lead, at either end 4mm diameter safety connector with straight and angled outlet. Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, shatter-proof grip sleeve and lead. Built in colour indicator for easy identification of insulation damages.				
Cable length	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	2.0m (78.7")
Cable size	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)
Cable material	PVC	PVC	PVC	PVC
Pin dimensions	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY
<b>1 mm<sup>2</sup></b> PART NO. / Housing color	● 934078100 ● 934078101 ● 934078102 ● 934078103 ● 934078104	● 934080100 ● 934080101 ● 934080102 ● 934080103 ● 934080104	● 934082100 ● 934082101 ● 934082102 ● 934082103 ● 934082104	● 934084100 ● 934084101 ● 934084102 ● 934084103 ● 934084104
<b>2.5 mm<sup>2</sup></b> PART NO. / Housing color	● 934079100 ● 934079101 ● 934079102 ● 934079103 ● 934079104 ● 934079188	● 934081100 ● 934081101 ● 934081102 ● 934081103 ● 934081104 ● 934081188	● 934083100 ● 934083101 ● 934083102 ● 934083103 ● 934083104 ● 934083188	● 934085100 ● 934085101 ● 934085102 ● 934085103 ● 934085104 ● 934085188

### Technical Data

	MLS WG 25/1 MLS WG 25/2.5	MLS WG 50/1 MLS WG 50/2.5	MLS WG 100/1 MLS WG 100/2.5	MLS WG 200/1 MLS WG 200/2.5
Contact Type	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin
Voltage Rating	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V	AC/DC 1000V
Measurement Category (IEC61010)	CAT III	CAT III	CAT III	CAT III
Current Rating*	16 A 32 A	16 A 32 A	16 A 32 A	16 A 32 A
Contact Resistance	8 mOhm 6 mOhm	13 mOhm 8 mOhm	22 mOhm 12 mOhm	40 mOhm 20 mOhm

### Material Specifications

Contact Pin	nickel plated brass
Contact Spring	copper-beryllium
Housing	Polyamide

### Environmental Conditions

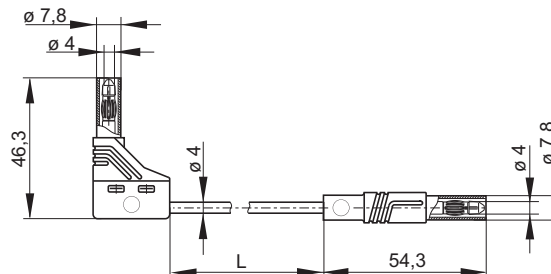
Temperature Range	-15 °C to +70 °C (5°F to 158°F)
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### Flamability Rating

Housing	UL 94 V-2
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### Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

# Measuring Leads

## 4 mm - Safety Plug System



### Type

MLS WS 25/1 MLS WS 25/2,5	MLS WS 50/1 MLS WS 50/2,5	MLS WS 100/1 MLS WS 100/2,5	MLS WS 200/1 MLS WS 200/2,5
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Safety measuring lead, at either end 4 mm diameter safety connector with onward connection capability (4mm socket). Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, shatter-proof grip sleeve and lead. Built in colour indicator for easy identification of insulation damages.

	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	2.0m (78.7")
Cable length	0.25m (9.8")	0.5m (19.7")	1.0m (39.4")	2.0m (78.7")
Cable size	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)	1 mm <sup>2</sup> (18 AWG) 2.5 mm <sup>2</sup> (14 AWG)
Cable material	PVC	PVC	PVC	PVC
Pin dimensions	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")	4 mm (0.157")
Cable type	LEH-XY	LEH-XY	LEH-XY	LEH-XY

### 1 mm<sup>2</sup>

PART NO. / Housing color

Color	934067100	934068100	934095100	934069100
Red	934067101	934068101	934095101	934069101
Blue	934067102	934068102	934095102	934069102
Yellow	934067103	934068103	934095103	934069103
Green	934067104	934068104	934095104	934069104

### 2.5 mm<sup>2</sup>

PART NO. / Housing color

Color	934086100	934087100	934088100	934089100
Red	934086101	934087101	934088101	934089101
Blue	934086102	934087102	934088102	934089102
Yellow	934086103	934087103	934088103	934089103
Green	934086104	934087104	934088104	934089104
Brown	934086105	934087105	934088105	934089105
Grey	934086106	934087106	934088106	934089106
White	934086107	934087107	934088107	934089107
Purple	934086109	934087109	934088109	934089109
Black	934086188	934087188	934088188	934089188

### Technical Data

	MLS WS 25/1 MLS WS 25/2,5	MLS WS 50/1 MLS WS 50/2,5	MLS WS 100/1 MLS WS 100/2,5	MLS WS 200/1 MLS WS 200/2,5
Contact Type	spring-loaded pin	spring-loaded pin	spring-loaded pin	spring-loaded pin
Voltage Rating	AC/DC 1000V**	AC/DC 1000V**	AC/DC 1000V**	AC/DC 1000V**
Measurement Category (IEC61010)	CAT II**	CAT II**	CAT II**	CAT II**
Current Rating*	16 A 32 A	16 A 32 A	16 A 32 A	16 A 32 A
Contact Resistance	8 mOhm 6 mOhm	13 mOhm 8 mOhm	22 mOhm 12 mOhm	40 mOhm 20 mOhm

### Material Specifications

Contact Pin	nickel plated brass
Contact Spring	copper-beryllium
Housing	Polyamide

### Environmental Conditions

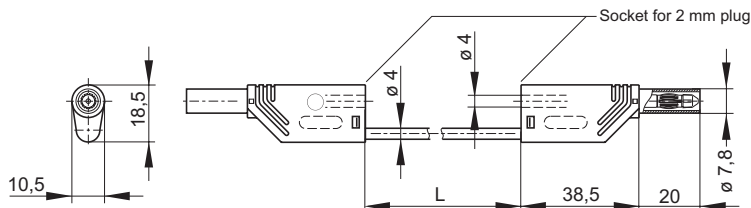
Temperature Range	-15 °C to +70 °C (5°F to 158°F)
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### Flamability Rating

Housing	UL 94 V-2
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### Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

\*\* 600V AC/DC CAT III

# Measuring Leads

## 4 mm - Safety Plug System



**Type**

**PL 2600 S**

Safety measuring lead with dual function safety test probe. Tip for penetration of insulation and oxide layers and 4 mm diameter pin for insertion into sockets. 4 mm diameter safety connector with straight outlet. Incl. Tip protection

Cable length	1.0m (39.4")
Conductor size	<b>1 mm<sup>2</sup> (18 AWG)</b>
Cable material	PVC
Pin dimensions	4 mm (0.157")
Clamp type	LEH-XY

**PART NO. / Housing color**

● 934159100
● 934159101
● 934159102



**PL 2600 S W**

Safety measuring lead with dual function safety test probe. Tip for penetration of insulation and oxide layers and 4 mm diameter pin for insertion into sockets. 4 mm diameter safety connector with right-angled outlet. Incl. Tip protection

Cable length	1.0m (39.4")
Conductor size	<b>1 mm<sup>2</sup> (18 AWG)</b>
Cable material	PVC
Pin dimensions	4 mm (0.157")
Clamp type	LEH-XY

**PART NO. / Housing color**

● 934158100
● 934158101

**Technical Data**

Contact Type	spring-loaded pin, stationary tip
Voltage Rating	AC/DC 1000 V
Measurement Category (IEC61010)	CAT II
Current Rating*	16 A
Contact Resistance	20 mOhm

**Material Specifications**

Contact Pin	nickel plated brass
Contact Spring	nickel plated copper-beryllium
Housing	PA, PP

**Environmental Conditions**

Temperature Range	-15°C to +70°C (5°F to 158°F)
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**Flamability Rating**

Housing	UL 94 HB
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Contact Type	spring-loaded pin, stationary tip
Voltage Rating	AC/DC 1000 V
Measurement Category (IEC61010)	CAT II
Current Rating*	16 A
Contact Resistance	20 mOhm

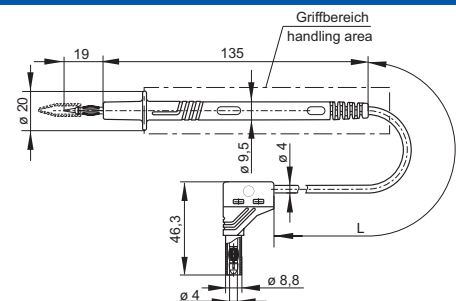
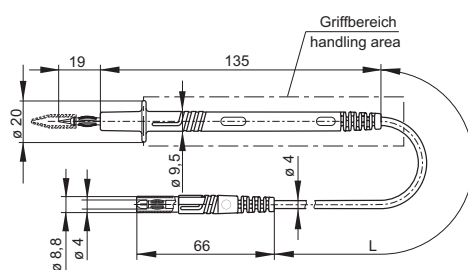
Contact Pin	nickel plated brass
Contact Spring	nickel plated copper-beryllium
Housing	PA, PP

Temperature Range	-15°C to +70°C (5°F to 158°F)
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Housing	UL 94 HB
---------	----------

**Drawing**

Measurements are shown in millimeters. Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.



# Measuring Leads 4 mm Safety System



## Type

### LMLH 50

Laboratory test lead holder with plastic brackets. Measuring leads can be laid neatly on walls, cabinets, etc. Consists: one aluminium profile rail, 30 plastic brackets, fastening kit.

### TW 120 BAN

SMD Test Tweezer for 2 wire measurements with multimeters. The gold-plating ensures lowest transition resistance. Available with BNC Connectors or Banana Plugs. Contacts gold-plated. Other cable lengths on request.

Cable length	-
Conductor size	-
Cable material	-
Pin dimensions	-
Clamp type	-

1.2m (47.2")
-
-
-
RG 174

PART NO. / Housing color

● 973919001

● 974330000

## Technical Data

Contact Type	-
Voltage Rating	-
Measurement Category (IEC61010)	-
Current Rating*	-
Contact Resistance	-

## Material Specifications

Contact Pin	-
Contact Spring	-
Housing	-

## Environmental Conditions

Temperature Range	-
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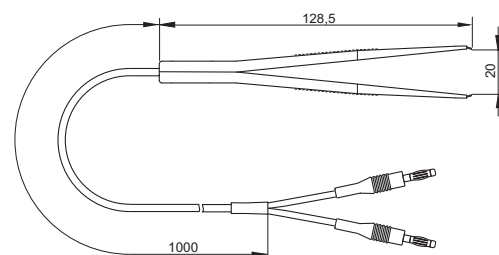
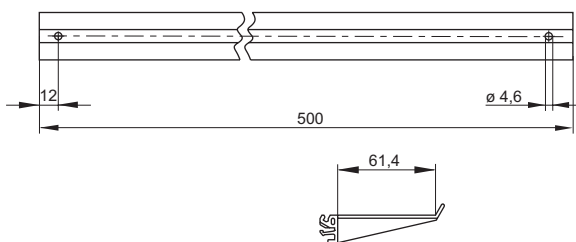
## Flamability Rating

Housing	-
---------	---

2 gold-plated 4 mm banana plugs to gold-plated tweezer tips
30 VAC / 60 VDC
CAT I
-
-
-
-
-
-
-

## Drawing

Measurements are shown in millimeters.  
Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.

# Measuring Leads 4 mm Safety System



## Type

### TKL 065 BAN

High quality Kelvin Measuring Leads for 4 wire measurements with LCR measuring bridges and multimeters. The gold-plating ensures lowest transition resistance. Available with BNC Connectors or Banana Plugs. Contacts gold-plated. Other cable lengths on request.

Cable length 0.65m (25.6")  
 Conductor size -  
 Cable material -  
 Pin dimensions 4 mm (0.157")  
 Clamp type RG 174

**PART NO. / Housing color** ● 974340000

### SML 100/1

Silicone measuring lead, 4 mm plug with caged spring on both sides. Nickel-plated copper beryllium contact spring. Highly flexible, double insulated stranded lead, resistant against soldering iron, grip and lead shatter-proof. Built in colour indicator for easy identification of insulation damages.

1m (39.37")  
 1 mm<sup>2</sup> (18 AWG)  
 silicone  
 4 mm (0.157")  
 LEH-XY

● 973388100  
 ● 973388101  
 ● 973388102  
 ● 973388103  
 ● 973388104

## Technical Data

Contact Type spring-loaded pin, stationary tip  
 Voltage Rating 30 VAC / 60 VDC  
 Measurement Category (IEC61010) CAT I  
 Current Rating\* -  
 Contact Resistance -

## Material Specifications

Contact Pin -  
 Contact Spring -  
 Housing -

## Environmental Conditions

Temperature Range -

## Flamability Rating

Housing -

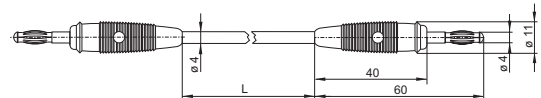
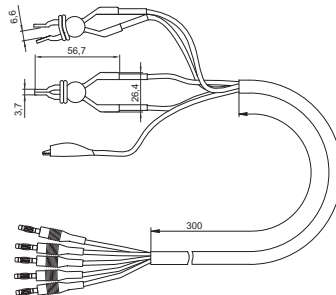
spring-loaded pin  
 30 VAC / 60 VDC  
 CAT I  
 16 A  
 20 mOhm

brass  
 nickel plated copper-beryllium  
 PA, PP

-15°C to +70°C (5°F to 158°F)

## Drawing

Measurements are shown in millimeters.  
 Multiply by 0.03937 to convert to inches.



\* Please consider derating graph on page 80.