

1404149

https://www.phoenixcontact.com/au/products/1404149

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, free cable end, on Socket straight M8, coding: A, cable length: 5 m

### Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Save space with high-pos. connectors
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

Item number	1404149
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF1BNA
Product key	AF1BNA
Catalog page	Page 210 (C-2-2019)
GTIN	4046356680677
Weight per piece (including packing)	244.7 g
Weight per piece (excluding packing)	230 g
Customs tariff number	85444290
Country of origin	PL



1404149

https://www.phoenixcontact.com/au/products/1404149

### Technical data

#### Product properties

Product type	Sensor/actuator cable		
Application	Standard		
Number of positions	8		
No. of cable outlets	1		
Shielded	yes		
Coding	A		
Insulation characteristics			
Overvoltage category	III		
Degree of pollution	3		

#### Material specifications

Flammability rating according to UL 94	НВ	
Seal material	NBR	
Material of grip body	TPU, hardly inflammable, self-extinguishing	
Contact material	CuSn	
Contact surface material	Ni/Au	
Contact carrier material	TPU GF	
Material for screw connection	Zinc die-cast, nickel-plated	

### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	1.5 A

### Mechanical properties

Mechanical data

Insertion/withdrawal cycles ≥ 100
-----------------------------------

### Signaling

Status display	no
Status display present	no

#### Connection data

Conductor connection

Tightening torque	0.2 Nm (M8 connectors)

#### Connector

Connection 1



1404149

https://www.phoenixcontact.com/au/products/1404149

Type Socket straight M8 Number of positions 8 Number of positions 9 Number of positions 5 m  Cable length 5 m  UR halogen-free black [PUR]  Dimensional drawing 45 kg/km  UL AWM Style 20549 Number of positions 8 Shielded yes Cable type PUR halogen-free black [PUR]  Canductor structure signal line 18x 0.10 mm  AWG signal line 26 Conductor roross section 8x 0.14 mm² (Signal line)  Wire diameter incl. insulation 1 mm ±0.02 mm (Signal line)  External sheath, material PUR  External sheath, material PUR  External sheath, color black-gray RAL 7021  External sheath, color black-gray RAL 7021  External sheath, color black-gray RAL 7021  Conductor material Bare Cu litz wires  Material, filler PE  Material, filler PE  Single wire, color white, brown, green, yellow, gray, pink, blue, red  Thickness, insulation PP Single wire, color white, brown, green, yellow, gray, pink, blue, red  Length of twist, overall twist 58 mm Optical shield covering 85 %  Max. conductor resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 19 Ω Ω mm (at 20 °C)  Insulation resistance 2 2000.00 ∨ ΛC (Spark test)  Test voltage Core/Shield \$2000.00 ∨ ΛC (Spark test)	Туре	free cable end
Number of positions         8           Coding type         A           ble/fine         5 m           UR hatogen-free black (PUR)         Free black (PUR)           Dimensional drawing         Free black (PUR)           Cable weight         45 kg/km           UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black (PUR)           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material, filler         PE           Material, wire insulation         pp           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation <t< td=""><td>Connection 2</td><td></td></t<>	Connection 2	
Coding type         A           Cable length         5 m           UR halogen-free black (PUR)         Formal Purchaster of	Туре	Socket straight M8
Delefine   Cable length   5 m   S	Number of positions	8
Cable length         5 m           PUR halogen-free black [PUR]         Thickness, insulation           Cable weight         45 kg/km           UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         9 0.21 mm (Signal line)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering	Coding type	A
Cable length         5 m           PUR halogen-free black [PUR]         Thickness, insulation           Cable weight         45 kg/km           UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         9 0.21 mm (Signal line)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering	ole/line	
Cable weight         45 kg/km           UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material wire insulation         PP           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         PO 3.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist,		F.:.
Cable weight       45 kg/km         UL AVM Style       20549         Number of positions       8         Shielded       yes         Cable type       PUR halogen-free black (PUR)         Conductor structure signal line       18x 0.10 mm         AWG signal line       26         Conductor cross section       8x 0.14 mm² (Signal line)         Wire diameter incl. insulation       1 mm ±0.02 mm (Signal line)         External cable diameter       5.90 mm ±0.2 mm         Outer sheath, material       PUR         External sheath, color       black-gray RAL 7021         Conductor material       Bare Cu litz wires         Material wire insulation       PE         Material wire insulation       PP         Single wire, color       white, brown, green, yellow, gray, pink, blue, red         Thickness, insulation       ≥ 0.21 mm (Signal line)         Querall twist       8 wires around filler to the core         Length of twist, overall twist       58 mm         Optical shield covering       85 %         Max. conductor resistance       1 GO'km (at 20 °C)         Nominal voltage, cable       ≤ 300 V AC         Test voltage       ≤ 3000 V AC (Spark test)	Cable length	5 M
Cable weight         45 kg/km           UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         ≥ 0.21 mm (Signal line)           ≥ 0.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         1 GO'km (at 20 °C)           Nominal voltage, cable         ≤ 300 V AC		
UL AWM Style         20549           Number of positions         8           Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         ≥ 0.21 mm (Signal line)           ≥ 0.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         139 Ω/km (at 20 °C)           Insulation resistance         1 GΩ*km (at 20 °C)           Nominal voltage, cable         ≥ 3000 V AC     <	Difficultional drawing	
Number of positions       8         Shielded       yes         Cable type       PUR halogen-free black [PUR]         Conductor structure signal line $18x 0.10 \text{ mm}$ AWG signal line $26$ Conductor cross section $8x 0.14 \text{ mm}^2$ (Signal line)         Wire diameter incl. insulation $1 \text{ mm} \pm 0.02 \text{ mm}$ (Signal line)         External cable diameter $5.90 \text{ mm} \pm 0.2 \text{ mm}$ Outer sheath, material       PUR         External sheath, color       black-gray RAL 7021         Conductor material       Bare Cu litz wires         Material, filler       PE         Material wire insulation       PP         Single wire, color       white, brown, green, yellow, gray, pink, blue, red         Thickness, insulation       ≥ 0.21 mm (Signal line)         ≥ 0.38 mm (Outer cable sheath)       0 verall twist         Length of twist, overall twist       8 wires around filler to the core         Length of twist, overall twist       58 mm         Optical shield covering       85 %         Max. conductor resistance       139 Ω/km (at 20 °C)         Insulation resistance       1 GΩ*km (at 20 °C)         Nominal voltage, cable       ≤ 300 V AC         Test voltage       ≥ 3000 V AC	Cable weight	45 kg/km
Shielded         yes           Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         ≥ 0.21 mm (Signal line)           ≥ 0.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         1 GΩ*km (at 20 °C)           Insulation resistance         1 GΩ*km (at 20 °C)           Nominal voltage, cable         ≤ 300 V AC           Test voltage         ≥ 3000 V AC (Spark test)	UL AWM Style	20549
Cable type         PUR halogen-free black [PUR]           Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         2 0.21 mm (Signal line)           2 0.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         139 Ω/km (at 20 °C)           Insulation resistance         1 GΩ*km (at 20 °C)           Nominal voltage, cable         ≤ 300 V AC           Test voltage         ≥ 3000 V AC (Spark test)	Number of positions	8
Conductor structure signal line         18x 0.10 mm           AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         ≥ 0.21 mm (Signal line)           ≥ 0.38 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         139 Ω/km (at 20 °C)           Insulation resistance         1 GΩ*km (at 20 °C)           Nominal voltage, cable         ≤ 300 V AC           Test voltage         ≥ 3000 V AC (Spark test)	Shielded	yes
AWG signal line         26           Conductor cross section         8x 0.14 mm² (Signal line)           Wire diameter incl. insulation         1 mm ±0.02 mm (Signal line)           External cable diameter         5.90 mm ±0.2 mm           Outer sheath, material         PUR           External sheath, color         black-gray RAL 7021           Conductor material         Bare Cu litz wires           Material, filler         PE           Material wire insulation         PP           Single wire, color         white, brown, green, yellow, gray, pink, blue, red           Thickness, insulation         ≥ 0.21 mm (Signal line)           ≥ 0.33 mm (Outer cable sheath)           Overall twist         8 wires around filler to the core           Length of twist, overall twist         58 mm           Optical shield covering         85 %           Max. conductor resistance         139 Ω/km (at 20 °C)           Insulation resistance         1 GΩ*km (at 20 °C)           Nominal voltage, cable         ≤ 300 V AC           Test voltage         ≥ 3000 V AC (Spark test)	Cable type	PUR halogen-free black [PUR]
Conductor cross section $8 \times 0.14 \text{ mm}^2$ (Signal line)Wire diameter incl. insulation $1 \text{ mm} \pm 0.02 \text{ mm}$ (Signal line)External cable diameter $5.90 \text{ mm} \pm 0.2 \text{ mm}$ Outer sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation $\geq 0.21 \text{ mm}$ (Signal line)Overall twist $8 \text{ wires around filler to the core}$ Length of twist, overall twist $58 \text{ mm}$ Optical shield covering $85 \%$ Max. conductor resistance $139 \Omega/\text{km}$ (at $20 \degree \text{C}$ )Insulation resistance $1 \text{ G}\Omega^*\text{km}$ (at $20 \degree \text{C}$ )Nominal voltage, cable $\leq 300 \text{ V AC}$ Test voltage $\geq 3000 \text{ V AC}$ (Spark test)	Conductor structure signal line	18x 0.10 mm
Wire diameter incl. insulation1 mm $\pm$ 0.02 mm (Signal line)External cable diameter $5.90 \text{ mm} \pm 0.2 \text{ mm}$ Outer sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation $\geq$ 0.21 mm (Signal line)Overall twist8 wires around filler to the coreLength of twist, overall twist $58 \text{ mm}$ Optical shield covering $85 \%$ Max. conductor resistance $139 \Omega/\text{km}$ (at 20 °C)Insulation resistance $1 \text{ G}\Omega^*\text{km}$ (at 20 °C)Nominal voltage, cable $\leq$ 300 V ACTest voltage $\geq$ 3000 V AC (Spark test)	AWG signal line	26
External cable diameter $5.90 \text{ mm} \pm 0.2 \text{ mm}$ Outer sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation $\geq 0.21 \text{ mm}$ (Signal line) $\geq 0.38 \text{ mm}$ (Outer cable sheath)Overall twist8 wires around filler to the coreLength of twist, overall twist $58 \text{ mm}$ Optical shield covering $85 \%$ Max. conductor resistance $139 \Omega/\text{km}$ (at $20 \degree \text{C}$ )Insulation resistance $1 \text{ G}\Omega^*\text{km}$ (at $20 \degree \text{C}$ )Nominal voltage, cable $\leq 300 \text{ V AC}$ Test voltage $\geq 3000 \text{ V AC}$ (Spark test)	Conductor cross section	8x 0.14 mm² (Signal line)
Outer sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation≥ 0.21 mm (Signal line)≥ 0.38 mm (Outer cable sheath)Overall twist8 wires around filler to the coreLength of twist, overall twist58 mmOptical shield covering85 %Max. conductor resistance139 $\Omega$ /km (at 20 °C)Insulation resistance1 G $\Omega$ *km (at 20 °C)Nominal voltage, cable≤ 300 V ACTest voltage≥ 3000 V AC (Spark test)	Wire diameter incl. insulation	1 mm ±0.02 mm (Signal line)
External sheath, color  Conductor material  Bare Cu litz wires  Material, filler  PE  Material wire insulation  PP  Single wire, color  Thickness, insulation  Overall twist  Length of twist, overall twist  Optical shield covering  Max. conductor resistance  Insulation resistance $1 G\Omega^*$ km (at 20 °C)  Nominal voltage, cable $2 0.00 \times AC$ Test voltage  black-gray RAL 7021  Bare Cu litz wires  Bare Cu litz wires  PE  PE  White, brown, green, yellow, gray, pink, blue, red $2 0.21 \text{ mm (Signal line)}$ $2 0.21 \text{ mm (Signal line)}$ $2 0.38 \text{ mm (Outer cable sheath)}$ 8 wires around filler to the core  185 %  190 \( \text{Max. conductor resistance} \)  190 \( \text{Max. (at 20 °C)} \)  Nominal voltage, cable $2 0.21 \text{ mm (Signal line)}$ $3 0.21  mm (Signal$	External cable diameter	5.90 mm ±0.2 mm
Conductor materialBare Cu litz wiresMaterial, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation≥ 0.21 mm (Signal line)≥ 0.38 mm (Outer cable sheath)Overall twist8 wires around filler to the coreLength of twist, overall twist58 mmOptical shield covering85 %Max. conductor resistance139 $Ω/km$ (at 20 °C)Insulation resistance1 $GΩ*km$ (at 20 °C)Nominal voltage, cable≤ 300 V ACTest voltage≥ 3000 V AC (Spark test)	Outer sheath, material	PUR
Material, fillerPEMaterial wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation $\geq 0.21 \text{ mm (Signal line)}$ $\geq 0.38 \text{ mm (Outer cable sheath)}$ Overall twist8 wires around filler to the coreLength of twist, overall twist58 mmOptical shield covering85 %Max. conductor resistance $139 \Omega/\text{km (at } 20 \degree \text{C)}$ Insulation resistance $1 \text{ G}\Omega^*\text{km (at } 20 \degree \text{C)}$ Nominal voltage, cable $\leq 300 \text{ V AC}$ Test voltage $\geq 3000 \text{ V AC (Spark test)}$	External sheath, color	black-gray RAL 7021
Material wire insulationPPSingle wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation≥ 0.21 mm (Signal line)≥ 0.38 mm (Outer cable sheath)Overall twist8 wires around filler to the coreLength of twist, overall twist58 mmOptical shield covering85 %Max. conductor resistance139 $\Omega$ /km (at 20 °C)Insulation resistance1 G $\Omega$ *km (at 20 °C)Nominal voltage, cable≤ 300 V ACTest voltage≥ 3000 V AC (Spark test)	Conductor material	Bare Cu litz wires
Single wire, colorwhite, brown, green, yellow, gray, pink, blue, redThickness, insulation≥ 0.21 mm (Signal line)≥ 0.38 mm (Outer cable sheath)Overall twist8 wires around filler to the coreLength of twist, overall twist58 mmOptical shield covering85 %Max. conductor resistance139 $\Omega$ /km (at 20 °C)Insulation resistance1 G $\Omega$ *km (at 20 °C)Nominal voltage, cable≤ 300 V ACTest voltage≥ 3000 V AC (Spark test)	Material, filler	PE
Thickness, insulation $≥ 0.21 \text{ mm (Signal line)}$ $≥ 0.38 \text{ mm (Outer cable sheath)}$ Overall twist $8 \text{ wires around filler to the core}$ Length of twist, overall twist $58 \text{ mm}$ Optical shield covering $85 \%$ Max. conductor resistance $139 \Omega/\text{km (at } 20 \degree\text{C)}$ Insulation resistance $1 G\Omega^*\text{km (at } 20 \degree\text{C)}$ Nominal voltage, cable $≤ 300 \text{ V AC}$ Test voltage $≥ 3000 \text{ V AC (Spark test)}$	Material wire insulation	PP
	Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Overall twist 8 wires around filler to the core  Length of twist, overall twist 58 mm  Optical shield covering 85 %  Max. conductor resistance 139 $\Omega$ /km (at 20 °C)  Insulation resistance 1 $\Omega$ *km (at 20 °C)  Nominal voltage, cable $\Omega$ 300 V AC  Test voltage $\Omega$ 300 V AC (Spark test)	Thickness, insulation	≥ 0.21 mm (Signal line)
Overall twist 8 wires around filler to the core  Length of twist, overall twist 58 mm  Optical shield covering 85 %  Max. conductor resistance 139 $\Omega$ /km (at 20 °C)  Insulation resistance 1 $\Omega$ *km (at 20 °C)  Nominal voltage, cable $\Omega$ 300 V AC  Test voltage $\Omega$ 300 V AC (Spark test)		≥ 0.38 mm (Outer cable sheath)
Length of twist, overall twist       58 mm         Optical shield covering       85 %         Max. conductor resistance       139 Ω/km (at 20 °C)         Insulation resistance       1 GΩ*km (at 20 °C)         Nominal voltage, cable       ≤ 300 V AC         Test voltage       ≥ 3000 V AC (Spark test)	Overall twist	
Optical shield covering 85 %  Max. conductor resistance 139 $\Omega$ /km (at 20 °C)  Insulation resistance 1 $\Omega$ *km (at 20 °C)  Nominal voltage, cable $\Omega$ 300 V AC  Test voltage $\Omega$ 300 V AC (Spark test)		
Max. conductor resistance139 $\Omega$ /km (at 20 °C)Insulation resistance1 G $\Omega$ *km (at 20 °C)Nominal voltage, cable≤ 300 V ACTest voltage≥ 3000 V AC (Spark test)		
Insulation resistance       1 GΩ*km (at 20 °C)         Nominal voltage, cable       ≤ 300 V AC         Test voltage       ≥ 3000 V AC (Spark test)		139 Ω/km (at 20 °C)
Nominal voltage, cable       ≤ 300 V AC         Test voltage       ≥ 3000 V AC (Spark test)	Insulation resistance	
Test voltage ≥ 3000 V AC (Spark test)	Nominal voltage, cable	≤ 300 V AC
		≥ 3000 V AC (Spark test)



1404149

https://www.phoenixcontact.com/au/products/1404149

Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 59 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥1000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	Low adhesion
	abrasion-resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °C (Cable, flexible installation)

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65	
	IP67	
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)	

### Standards and regulations

#### M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

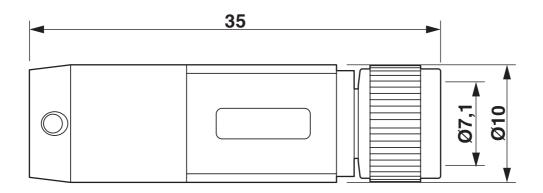


1404149

https://www.phoenixcontact.com/au/products/1404149

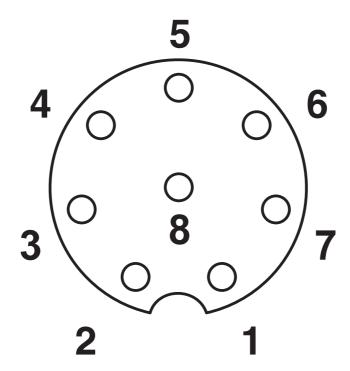
## Drawings

### Dimensional drawing



Socket M8 x 1, straight

Schematic diagram

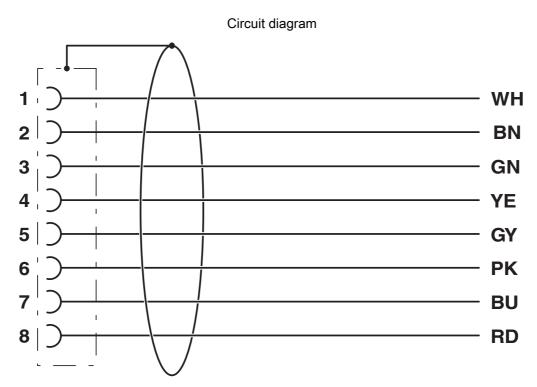


Connector pin assignment of M8 socket, 8-pos., view of socket side



1404149

https://www.phoenixcontact.com/au/products/1404149



Contact assignment of M8 socket



1404149

https://www.phoenixcontact.com/au/products/1404149

### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1404149

<u> </u>	<b>UL Listed</b> Approval ID: FILE E 221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1.5 A	-	-

•	<b>cUL Listed</b> Approval ID: FILE E 221474	ı			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1.5 A	-	-

EAC	EAC-RoHS Approval ID: RU D-DE.HB35.B.00387
-----	--



1404149

https://www.phoenixcontact.com/au/products/1404149

## Classifications

<b>ECLASS</b>
---------------

ECLASS-13.0	27060311			
ETIM				
ETIM 9.0	EC001855			
UNSPSC				
UNSPSC 21.0	26121600			



1404149

https://www.phoenixcontact.com/au/products/1404149

## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	3.884 kg CO2e

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT PTY Ltd Unit 7, 2-8 South Street Rydalmere NSW 2116 1300 786 411 customerservice@phoenixcontact.com.au