



**SmartWire-DT round cable IP67, 0,1 m, 5 pole, Prefabricated with angled M12 plug and M12 socket**



**Part no. SWD4-M1LR5-RS**  
**Catalog No. 183155**  
**Alternate Catalog No. SWD4-M1LR5-RS**

### Delivery program

Product range			SmartWire-DT accessories
Basic function			SWD round cable
Function			For directly connecting sensors/actuators to IP67 SWD modules
Description			5 pole Prefabricated with right-angle M12 plug and straight M12 socket, A-keyed
Length		m	0.1
Note regarding length			1 off
Connection to SmartWire-DT			yes
Protection type (IEC/EN 60529, EN50178, VBG 4)			IP67

### Technical data

#### Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP67
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#### Climatic environmental conditions

Operating ambient temperature (IEC 60068-2)		°C	
Operating ambient temperature max.		°C	+ 70
Condensation			permissible

### Design verification as per IEC/EN 61439

Technical data for design verification			
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
Degree of Protection			IP67
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Meets the product standard's requirements.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.

10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Technical data ETIM 7.0

Cables (EG000001) / Data and communication cable (copper) (EC003249)

Conductor surface		Bare
Diameter conductor	mm	1.5
Nominal cross section conductor	mm <sup>2</sup>	0.5
AWG-size		20
Conductor category		Class 2 = stranded
Number of cores		5
Number of stranding elements		5
Stranding element		Pairs
Core insulation material		
Specification core insulation		Other
Core identification		Colour
Screen over stranding element		Foil
Stranding		Bundle
Screen over stranding		None
Longitudinal water blocking cable		Yes
Radial water blocking cable		Yes
Protective sheath		
Armouring		No
Material outer sheath		Polyvinyl chloride (PVC)
Specification material outer sheath		Polypropylene
Colour outer sheath		Green
Reaction-to-fire class according to EN 13501-6		None
Smoke development class according to EN 13501-6		None
Euro class flaming droplets/particles according to EN 13501-6		None
Euro class acidity according to EN 13501-6		None
Halogen free (acc. EN 60754-1/2)		No
Halogen free (acc. IEC 60754-2)		No
Flame retardant		In accordance with EN 60332-1-2
Low smoke (acc. EN 61034-2)		No
Low smoke (acc. IEC 61034-2)		No
Oil resistant (acc. EN 60811-404)		Yes
Oil resistant (acc. IEC 60811-404)		Yes
Insulation integrity in accordance with IEC 60331		No
Circuit integrity		No
Outer diameter approx.	mm	5.6
Min. permitted bending radius, moving application with forced guidance	mm	38
Min. permitted bending radius, moving application/free movement	mm	38
Min. permitted bending radius, stationary application/permanent installation	mm	34
Permitted cable outer temperature during assembling/handling	°C	-40 - 80
Permitted cable outer temperature after assembling without vibration	°C	-40 - 80
Category		Other
NVP value	%	66.5
Underground installation		No
UV resistant		Yes

## Approvals

UL File No.		E149111
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North America Certification		UL listed, CSA certified
Specially designed for North America		No

## Dimensions



M12 SWD round cable, 5 pole

## Assets (links)

### Instruction Leaflets

IL120005ZU2018\_02

### Manuals

MN05006002Z\_DE (German)

MN05006002Z\_EN (English)

MN05006002Z\_IT (Italian)

## Additional product information (links)

instruction leaflet SWD I/O modules IP67 EU1E-SWD-..., EU2E-SWD-..., EU1S-SWD-..., EU2A-SWD-... IL120005ZU

instruction leaflet SWD I/O modules IP67 EU1E-SWD-..., EU2E-SWD-..., EU1S-SWD-..., EU2A-SWD-... IL120005ZU [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL120005ZU2018\\_02.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL120005ZU2018_02.pdf)

### SmartWire-DT manual, The System MN05006002Z

Handbuch SmartWire-DT, Das System MN05006002Z - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05006002Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_DE.pdf)

SmartWire-DT manual, The System MN05006002Z - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05006002Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_EN.pdf)

Manuale SmartWire-DT, il sistema MN05006002Z - italiano [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05006002Z\\_IT.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_IT.pdf)

SmartWire-DT product range catalog <http://ecat.moeller.net/flip-cat/?edition=SWKAT&startpage=Titel>

f1=1457&f2=1181&f3=1530;Download Wizard SWD-ASSIST <http://applications.eaton.eu/sdlc?LX=11&f1=1457&f2=1181&f3=1530;Download Wizard SWD-ASSIST>

Product overview (WEB) <http://www.eaton.eu/swd>