



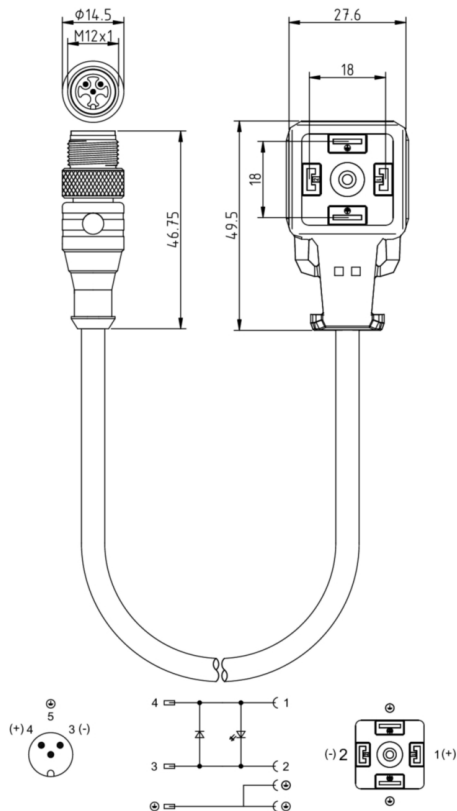
Product: [RST 5-3-GAN22LU-D24-241](#)

M12-Form A | M12- Male 0° | #Contacts: 3 | Form A - Female 90° | #Contacts: 2+2 PE | Recovery Diode (FRD) & yellow LED | 24 V | Cable: Orange (PUR); 0.50 mm²; IEC | cURus

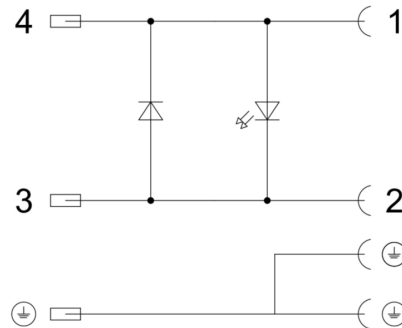
Product Description

M12 - Form A, Double-Ended Cordset | M12- Male Straight | #Contacts: 3, A-coded | Form A - Female Angled Cordset | #Contacts: 2+2 PE | Recovery Diode (FRD) & yellow LED | 24 V / 4 A | Cable: Orange PUR Jacket; 3x0.50 mm² (20 AWG); IEC | UL 2238; cURus

Technical Drawing



D2 - Fast Recovery Diode (FRD) and LED



Technical Specifications

Face View Side 1

Pin 3	Pin 4	Pin 5
blue	brown	green-yellow

Face View Side 2

Pin 1	Pin 2	PE1	PE2
brown	blue	green-yellow	green-yellow

Product Description

Product Family:	Valve Connectors
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Brand:	Hirschmann
Connector Type:	Cordset, double ended
Shielding:	Unshielded
Rated Voltage:	24 V
Rated Impulse Voltage:	4.0 kV (PCBA 2.0 kV)
Rated Current*:	4 A

Technical Data Side 1

Product Sub Family:	RST - M12 Standard
Type of Contact / Gender:	Pin Contact / Male
Connector Design:	Straight (0°) Body
Attachment Type:	Coupling Screw
Number of Pins:	3
Coding:	A
Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10 ⁹ Ohm
Mating Cycles:	≤ 100
Conductor Cross Section:	0.50 mm²
Ambient Temperature (Operation)*:	- 40 °C - + 90 °C
Protection Degree / IP Rating**:	IP65, IP67, IP68 (1 m / 24 h), IP69K
Design Standard:	IEC 61076-2-101
Pollution Degree:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Clearance / Creepage Distance:	DIN EN 60664-1 (2008/01); VDE 0110-1
Overvoltage Category:	III acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Base Material:	Copper Alloy (CuSn)
Contact Plating:	Gold over Copper (Cu/Au)
Contact Bearer Material:	Thermoplastic Polyurethane (TPU)
Contact Bearer Color:	Orange
Flammability Class (Contact Bearer):	UL 94 HB
Molded Body Material:	Thermoplastic Polyurethane (TPU)
Molded Body Color:	Grey Translucent
Flammability Class (Molded Body):	UL 94 HB
Attachment Material:	Brass (CuZn)
Attachment Plating:	Nickel (Ni)
Fastening Torque (Attachment):	M 12x1: (50-60) Ncm, hand-tight

Cable Data

Cable Number:	241
Conductor Size:	0.5 mm²
Number of Wires:	3
Minimal Bending Radius (Fixed Inst):	> 5 x D
Minimal Bending Radius (Flexible Inst):	> 10 x D
Cycles (Bending):	> 5 mio
Conductor material:	Cu
Cable Jacket Material:	Polyurethane (PUR)
Cable Jacket Color:	Orange
Cable Diameter D:	Ø 3.25 mm [0.128 "]
Wire Insulation Material:	High-density polyethylene (HDPE)
Insulated Wire Diameter:	Ø 1.50 mm [0.06 "]
Ambient Temperature (Fixed Installation):	- 40 °C to + 90 °C (UL: + 80 °C)
Ambient Temperature (Flex Installation):	- 20 °C to + 90 °C (UL: + 80 °C)

Ambient Temperature (Drag Chain Inst):	- 25 °C to + 60 °C
UL Cable Type:	AWM: 20549
Flammability Class (Cable Jacket):	DIN EN 50265-2-2, VDE 0482-265-2-2, IEC 60332-2-2, CSA FT2
Cable Characteristics:	Flexibility: Excellent Abrasion Resistance: Excellent Oil & Chemical Resistance: Excellent UV Resistance: Good to excellent Low Temp Performance: Excellent (flexible to -40°C) Flame Retardance: Varies Halogen-Free: Yes Mechanical Durability: High (resists impact, tear, and flex) Environmental Suitability: Outdoor, oily, wet, or rough environments

Technical Data Side 2

Product Sub Family, Side 2:	GAN - cURus 2238
Type of Contact / Gender, Side 2:	Socket Contact / Female
Connector Design, Side 2:	Angled (90°) Body
Attachment Type, Side 2:	Central Screw
Number of Pins, Side 2:	2+2 PE
Coding, Side 2:	A
Contact Resistance, Side 2:	≤ 10 mOhm
Insulation Resistance, Side 2:	> 10^9 Ohm
Mating Cycles, Side 2:	≤ 50
Ambient Temperature (Operation), Side 2*:	- 25 °C - + 85 °C [Extended Temperature - 40 °C - + 105 °C with additional gasket accessory, 934887001]
Protection Degree / IP Rating, Side 2**:	IP65, IP67 (IP69K: without additional gasket; max. +80 °C)
Design Standard, Side 2:	DIN EN 175301-803-A, ISO 4400
Pollution Degree, Side 2:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Clearance / Creepage Distance, Side 2:	DIN EN 60664-1 (2008/01); VDE 0110-1
Overvoltage Category, Side 2:	III acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Base Material, Side 2:	Brass (CuZn)
Contact Plating, Side 2:	Copper over Tin (Cu/Sn)
Contact Bearer Material, Side 2:	Glass-filled Polyamides (PA GF)
Contact Bearer Color, Side 2:	Black
Flammability Class (Contact Bearer), Side 2:	UL 94 V-0
Molded Body Material, Side 2:	Thermoplastic Polyurethane (TPU)
Molded Body Color, Side 2:	Grey Translucent
Flammability Class (Molded Body), Side 2:	UL 94 HB
Attachment Material, Side 2:	Steel, Philips combi slot
Gasket Material, Side 2:	Molded Integrated Gasket
Function Indicator, Side 2:	Yellow LED
Protective Circuit, Side 2:	Recovery Diode (FRD)
Fastening Torque (Attachment), Side 2:	(50-60) Ncm
Accessories to Order Separately, Side 2:	934887001 - GAN EPDM gasket and holding clip
Note, Side 2:	1. Do not connect or disconnect under load. 2. Extended temperature range of -40°C performed by Belden in mated condition using EPDM gasket accessory.

Approvals

UL-File:	E315587
UL:	UL 2238; cURus
VDE:	Yes

Safety & Environmental Compliance

RoHS Compliant:	Yes
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Resistances

Halogenfree:	Yes
Oil Resistance:	Good chemical and oil resistance

Notes

Note Derating:	Notice derating
Update and Revision:	Revision Number: 0.8 Revision Date: 07-03-2025

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