



Product: [RKTS 5K-1023](#)

M12 Single-Ended Cordset, Industrial Power Applications, PUR black cable, shielded, female, straight, K-coded, 5-Pin (4+PE), 5x2.5 mm²

Product Description

M12 Single-Ended Cordset, Industrial Power Applications, PUR black cable, shielded, AWM: 20939, female, straight, K-coded, 5-pin, 5x2.5 mm², 600 V AC / DC operating voltage, rated current 24 A (20 A UL pending) (20 A UL pending), -40 °C ... 125 °C (operating temp.), suited for IP65, IP67, IP69K environment, IEC 61076-2-111, UL 2237; cULus

Technical Specifications

Face View

Pin 1	Pin 2	Pin 3	Pin 4	PE
black 1	black 2	black 3	black 4	green-yellow

Technical Data

Product Family:	Power Connector
Side 1 Product Sub Family:	M12 Power
Brand:	Belden
Connector Type:	Cordset, single ended
Side 1 Type of Contact/Gender:	female
Connector Design:	straight
Number of Pins:	5(4+PE)
Shielding Type:	Shielded
Attachment Type:	Coupling Nut
Voltage Rating:	630 V
Rated Voltage (UL):	600 V
Rated Impulse Voltage:	6.0 kV
Operating Voltage:	600 V AC/DC
Current Rating:	24 A
Rated Current (UL)*:	16 A (UL Certified); Product is designed to meet UL 20 A requirements, it is NOT certified yet; a UL 20 A certification process can be initiated upon special request based on a separate agreement with us.
Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10 ⁹ Ohm
Mating Cycles:	≤ 100
Ambient Temperature (Operation)*:	-40 °C ... 125 °C, notice derating
Protection Degree / IP Rating**:	IP65, IP67, IP69K
Design Standard:	IEC 61076-2-111
Pollution Degree:	3 acc. to IEC 60664-1
Clearance / Creepage Distance:	IEC 60664-1 (2020-05)
Overvoltage Category:	III acc. to IEC 60664-1

Materials

Contact Base Material:	CuNi
Side 1 Contact Plating:	Cu/Au
Contact Bearer Material:	PBT GF
Contact Bearer Color:	blue

Flammability Class (Contact Bearer):	UL 94 V-2
Molded Body Material:	TPE
Molded Body Color:	black
Flammability Class (Molded Body):	UL 94 HB
Attachment Material:	CuZn
Attachment Plating:	Cu/Ni
O-Ring Material:	FKM

Additional Technical Data

Fastening Torque (Contact Screw):	M 12x1: (60-65) Ncm, hand-tight
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Cable Data

Cable Number:	1023
Number of Wires:	5
Minimal Bending Radius (Fixed Inst):	> 4 x D
Minimal Bending Radius (Flexible Inst):	> 7.5 x D
Cycles (Bending):	> 10 Mio, max. 50 m/s²
Cycles (Torsion):	> 5 Mio @ ± 30 °/1 m
Conductor Material:	Cu
Cable Jacket Material:	PUR
Cable Jacket Color:	black
Cable Diameter D:	ø 10.6 ±0,2
Wire Insulation Material:	PP
Insulated Wire Diameter:	ø 2.55 mm
Ambient Temperature (Fixed Installation):	-30 °C ... 80 °C
Ambient Temperature (Flex Installation):	-40 °C ... 125 °C
Ambient Temperature (Fixed Installation short-term 100h):	-40 °C ... 80 °C
Ambient Temperature (Drag Chain Inst):	-20 °C ... 60°C
UL Cable Type:	AWM: 20939
Flammability Class (Cable Jacket):	VDE 0482-332-1-2, DIN EN 60332-1-2 / IEC 60332-1 / UL VW-1, CSA FT1

Approvals

UL-File:	E497237
UL:	UL 2237; cULus
VDE:	-

Safety & Environmental Compliance

RoHS Compliant:	yes
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Resistances

Halogenfree:	DIN VDE 0472 T.815, IEC 60754-1
Oil Resistance:	HD 22.10 Appendix A, DIN EN 60811-404

Notes

Note Derating:	* Notice derating
Product Characteristics:	To ensure ingress protection, please check the O-ring's position before connecting. Improperly positioned O-ring leads to ingress protection potential failure.

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