

KC-0161ZE451025 - Master cable



1591241

<https://www.phoenixcontact.com/us/products/1591241>

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.



Master cable, application: Sensor/actuator box Plastic, number of positions: 19, slot assignment: Double, status display: no; master cable connection: M23 plug connection, PUR/PVC, cable length: 25 m, shielding: no

Commercial data

Item number	1591241
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	ABRDCB
GTIN	4046356188944
Weight per piece (including packing)	44.72 g
Weight per piece (excluding packing)	44.72 g
Country of origin	DE

KC-0161ZE451025 - Master cable



1591241

<https://www.phoenixcontact.com/us/products/1591241>

Technical data

Notes

Notes on operation	The master cable is earmarked for use on the sensor/actuator boxes with an M23 plug-in connection.
--------------------	--

Product properties

Product type	Master cable, assembled
Application	Sensor/actuator box
Number of positions	19

Electrical properties

Nominal voltage U_N	150 V
-----------------------	-------

Connection data

Connection method	Fixed connection
-------------------	------------------

Signaling

Status display present	no
------------------------	----

Material specifications

Material Housing	PUR
Material of contact, master cable side	CU alloy
Material of the contact carrier on the master cable side	PA
Material of contact surface, master cable side	gold-plated

Connector

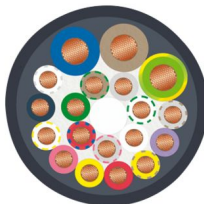
Connection 2

Head design	Socket
Head cable outlet	angled
Head thread type	M23

Cable/line

Cable length	25 m
--------------	------

PUR/PVC black [PUR]

Dimensional drawing	
---------------------	--

KC-0161ZE451025 - Master cable



1591241

<https://www.phoenixcontact.com/us/products/1591241>

Cable weight	183.7 kg/km
UL AWM Style	20549 (80°C/300 V)
Number of positions	19
Shielded	no
Cable type	PUR/PVC black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor structure, voltage supply	56x 0.15 mm
AWG power supply	17
Conductor cross-section	16x 0.5 mm ² (Signal line) 3x 1 mm ² (power line)
Wire diameter incl. insulation	1.5 mm ±0.1 mm (Signal line) 2.1 mm ±0.1 mm (power line)
External cable diameter	10.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown
Inner sheath thickness	≥ 0.15 mm
Thickness, outer sheath	≥ 0.76 mm
Overall twist	Wires twisted in layers
Nominal voltage, cable	300 V
Test voltage	2000 V
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	79 mm
Smallest bending radius, movable installation	105 mm
Dynamic load capacity (bending)	Max. bending cycles: 1500000, Bending radius: 10 x D, Traversing path: 2 m, Traversing rate: 2 m/s
Flame resistance	according to DIN EN 50265
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Special properties	Silicone-free
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-40 °C ... 125 °C (Plug / socket)

KC-0161ZE451025 - Master cable

1591241

<https://www.phoenixcontact.com/us/products/1591241>

Drawings

Schematic diagram



Pin assignment M23 socket, 19-pos., female side view

KC-0161ZE451025 - Master cable



1591241

<https://www.phoenixcontact.com/us/products/1591241>

Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com