



## MM A MINI-IO CAB20

**PILZ**  
THE SPIRIT OF SAFETY

► Accessories PNOZmulti

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SD means Secure Digital

## Description

The connection cable MM A MINI-IO CAB20 is used to connect an encoder to the speed monitors PNOZ m EF 1MM, PNOZ m EF 2MM or PSSu K F EI.

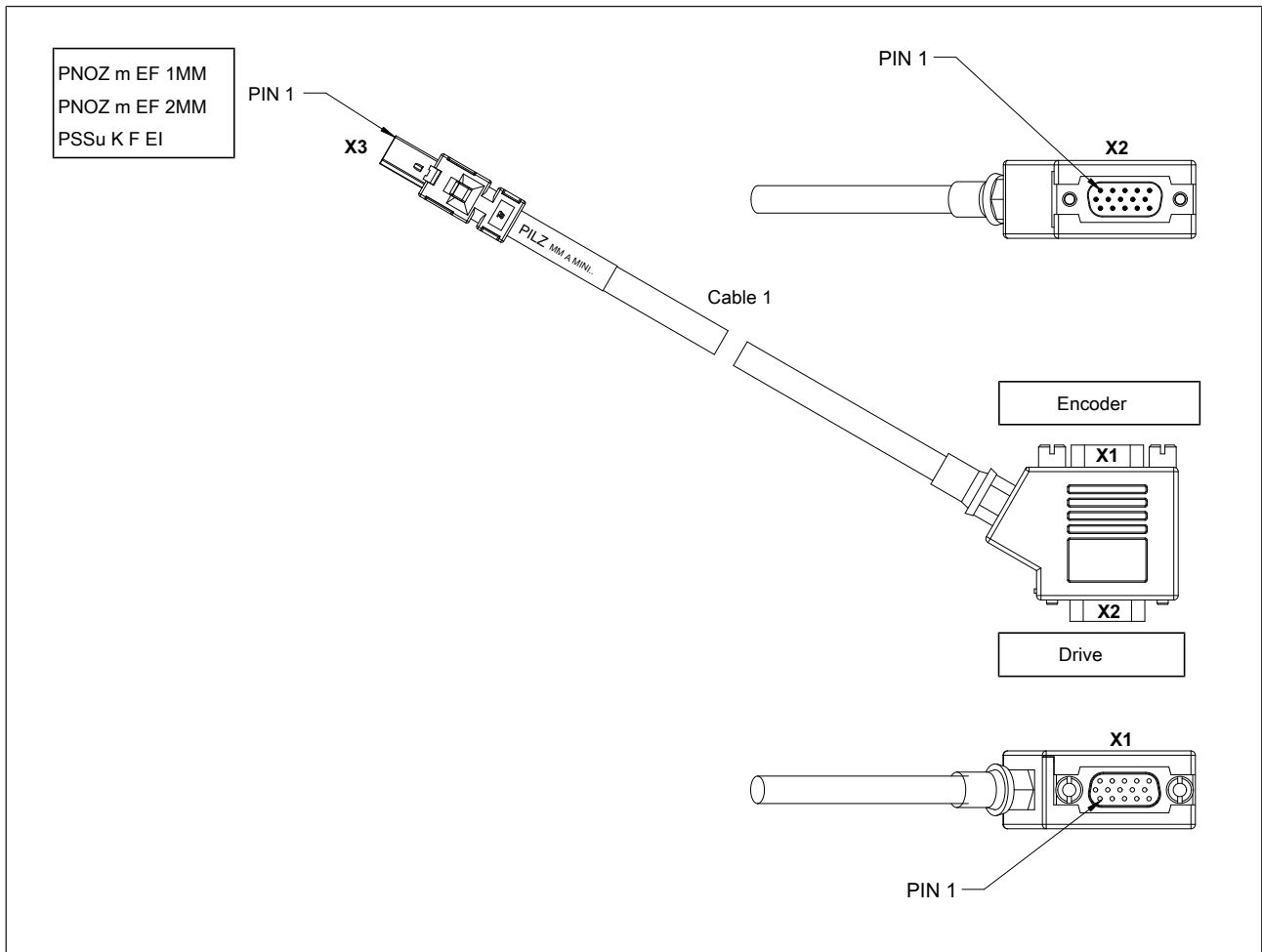
The connection to the speed monitor is made via the Mini-IO connector.



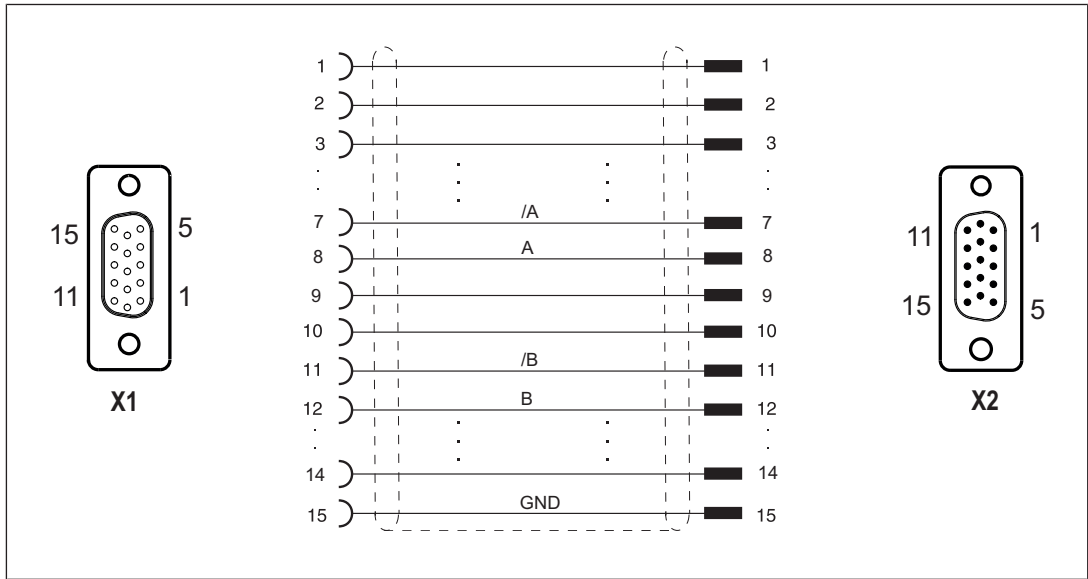
### CAUTION!

Communication errors may occur if the adapter cable is too long or there are any external sources of interference. Use an adapter cable that's less than 5 m in length. Lay the adapter cable separately from any potential sources of interference, such as drive cables leading to the motor, for example.

## Connection



### Connector pin assignment



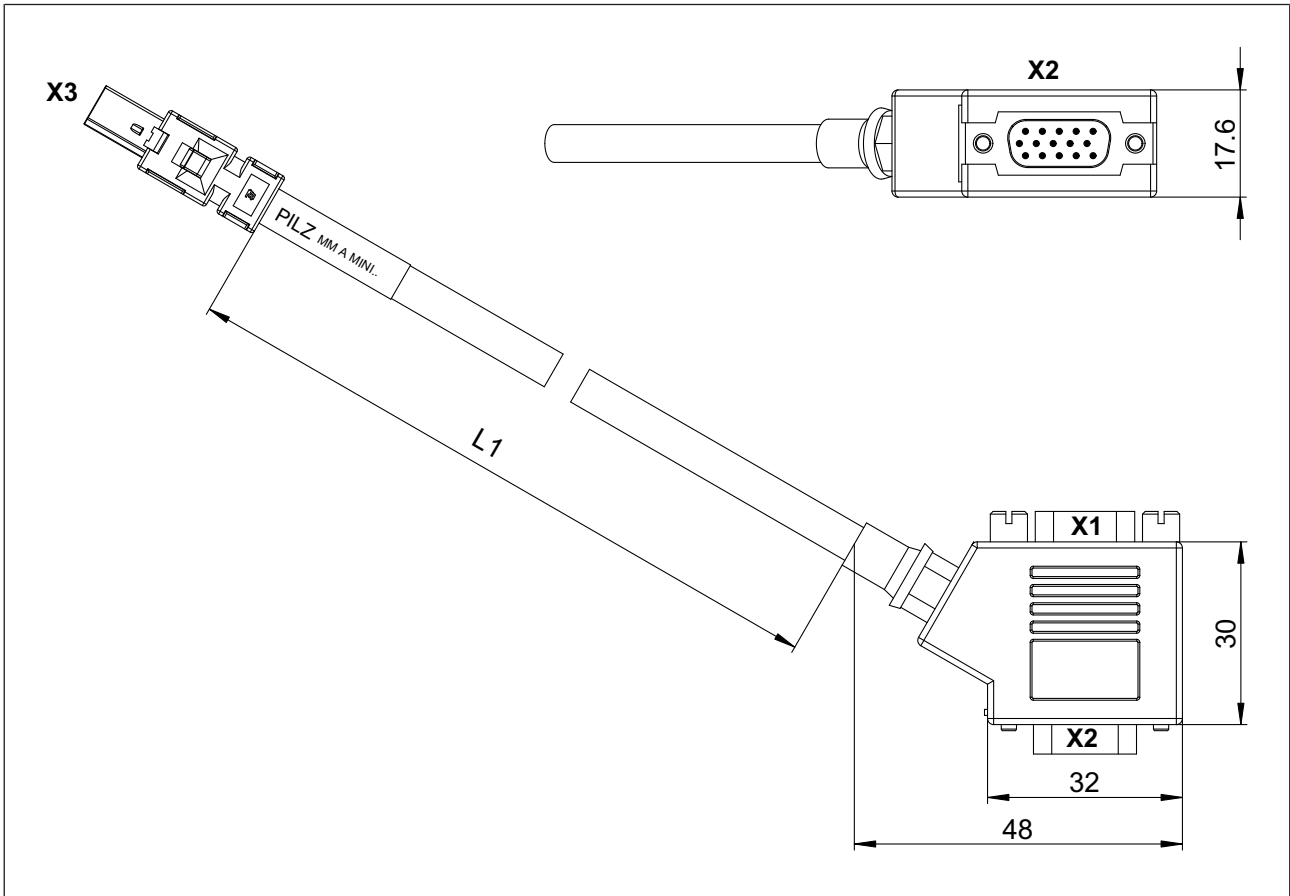
X3	Pin	Track
	1	S
	2	GND
	3	Z
	4	A
	5	/A
	6	/Z
	7	B
	8	/B



**INFORMATION**

The signals S, Z and /Z are not recorded.

### Dimensions



### Technical details

General	
Certifications	-
Electrical data	
Insulation resistance	20 MOhm
Environmental data	
Ambient temperature	
Temperature range	0 - 60 °C
Temperature range (moving)	0 - 60 °C
Storage temperature	
Temperature range	-25 - 70 °C
Condensation during operation	Not permitted
Protection type	
X1 when inserted	IP20
X2 when inserted	IP20
X3 when inserted	IP20
Housing	IP20
Mounting area (e.g. control cabinet)	IP54

<b>Mechanical data</b>	
Plug-in connector X1	<b>15-pin HD D-Sub female connector</b>
Form, plug-in connector X1	<b>Straight</b>
Plug-in connector X2	<b>15-pin HD D-Sub male connector</b>
Form, plug-in connector X2	<b>Straight</b>
Plug-in connector X3	<b>8-pin Mini-IO male connector</b>
Design of plug-in connector X3	<b>Straight</b>
Fixing screws	<b>UNC 4-40</b>
Housing material X1	<b>PBT</b>
Housing material X2	<b>PBT</b>
Housing material X3	<b>PBT</b>
Material of contact surface X1	<b>Au</b>
Material of contact surface X2	<b>Au</b>
Material of contact surface X3	<b>Au</b>
Material of pin	<b>Brass</b>
Material of socket	<b>Brass</b>
Mating cycles X1	<b>50</b>
Mating cycles X2	<b>50</b>
Mating cycles X3	<b>1500</b>
Cable length L1	<b>2,5 m</b>
Cable length tolerance K1	<b>+/- 0,15 m</b>
Colour of external cable insulation K1	<b>Green, similar to RAL6018</b>
Cable insulation material K1	<b>PUR</b>
Drag chain suitable K1	<b>yes</b>
Min. bending radius (fixed permanently) K1	<b>8 x Ø</b>
Min. bending radius (moving) K1	<b>10 x Ø</b>
Cable diameter K1	<b>5,8 mm</b>
Max. cable diameter K1	<b>6 mm</b>
Conductor cross section K1	<b>0,14 mm<sup>2</sup></b>
Conductor cross section AWG K1	<b>26</b>
Wire colour K1	<b>1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red</b>
Shielding K1	<b>yes</b>
Wire layer separation K1	<b>No</b>
No. of wires K1	<b>8</b>
Certification cable K1	<b>UL AWM-Style 20233</b>
Certification plug-in connector X1	<b>UL94 V-0</b>
Certification plug-in connector X2	<b>UL94 V-0</b>
Certification plug-in connector X3	<b>UL94 V-0</b>
Material	
Housing	<b>Zn</b>
Dimensions	
Height	<b>30 mm</b>
Width	<b>32 mm</b>
Depth	<b>17,6 mm</b>
Weight	<b>161 g</b>

### Order references

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
MM A MINI-IO CAB20 2.5m	2.5 m	15-pin HD D-Sub female connector	15-pin HD D-Sub male connector	8-pin Mini-IO male connector	772 247