Connection Cable
M12 × 1; 4-pin

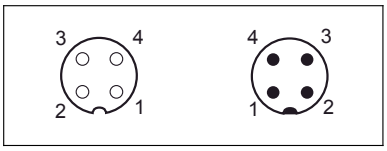
wenglor
the innovative family

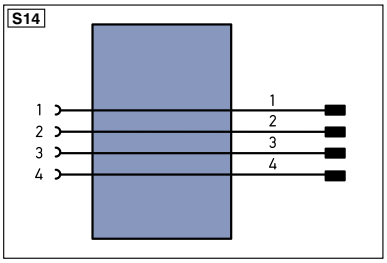
BG2SG2V3-2M
Part Number

Technical Data

Mechanical Data	
Connection 1	Socket, straight
Connection mode 1	M12 × 1, 4-pin
Connection 2	Plug, straight
Connection mode 2	M12 × 1, 4-pin
Torque	M12: 0,5 Nm
Cable Length	2 m
Diameter Cable	4,7 mm
Wire cross-section	0,34 mm²
Degree of Protection	IP67
Temperature Range	-25...80 °C
Material Cable Jacket	PUR
Material Wire Isolation	PP
Material Cap Nut	CuZn, nickel-plated
Halogen-free	yes
Drag Chain Suitable	yes
Bending radius (fixed installation)	> 5 × d
Bending radius (used in motion)	> 10 × d
Travel speed (with 5 m horizontal travel distance)	≤ 3,3 m/s
Acceleration	≤ 5 m/s²
Bending cycles	> 2000000
Packaging unit	1 Piece
Connection Diagram No.	S14
Connection Technology No.	2 / 2s

- **Plug M12 × 1, straight**
- **PUR, halogen free**
- **Socket M12 × 1, straight**





Legend

+	Supply Voltage +
–	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
V̄	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0 RS422	Encoder 0-pulse 0-0̄ (TTL)
PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
O	Analog Output
O–	Ground for the Analog Output
BZ	Block Discharge
AMV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
E+	Receiver-Line
S+	Emitter-Line
⏚	Grounding
SnR	Switching Distance Reduction
Rx+/–	Ethernet Receive Path
Tx+/–	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(–)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring
ENA RS422	Encoder A/Ā (TTL)
ENB RS422	Encoder B/B̄ (TTL)
ENA	Encoder A
ENB	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance

Wire Colors according to DIN IEC 757

BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE	Green/Yellow

Specifications are subject to change without notice