

# Connection Cable

M12 × 1; 4-pin

## 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
Cable Diameter	4,7 mm
Wire cross-section	0,34 mm <sup>2</sup>
Degree of Protection	IP67
Temperature Range	-25...80 °C
Cable Jacket Material	PUR
Material Wire Insulation	PP
Material Sleeve 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/s <sup>2</sup>
Bending cycles	> 2000000
Packaging unit	1 Piece

Connection Diagram No.

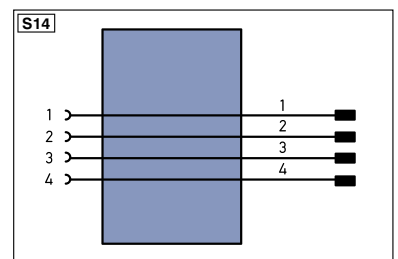
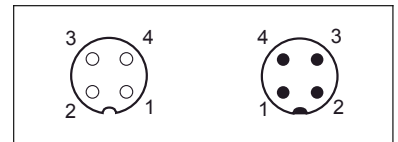
**S14**

Connection Equipment No.

**2**

**2s**

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



Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	EN <sub>A</sub> rs4z	Encoder A/A (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sub>B</sub> rs4z	Encoder B/B (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sub>A</sub>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sub>B</sub>	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY in	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
Z	Time Delay (activation)	AW	Valve Output	DiT	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	≡	Grounding	OG	Orange
⊕	IO-Link	SnR	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx +/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx +/-	Ethernet Send Path	BU	Blue
QSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
BL-D +/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sub>rs4z</sub>	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GNYE	Green/Yellow