

# Connection Line

M12 × 1; 12-pin

## ZDCL010

Part Number



### Technical Data

#### Electrical Data

Supply Voltage ≤ 30 V DC

#### Mechanical Data

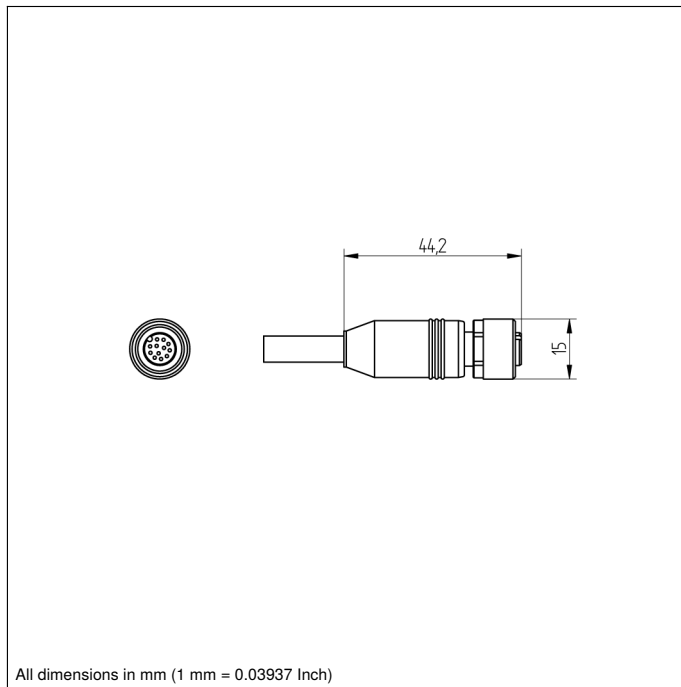
Connection 1	Socket, straight
Connection mode 1	M12 × 1, 12-pin
Connection 2	stripped
Cable Length	30 m
Outer diameter (d)	6 mm
Wire cross-section	0,14 mm <sup>2</sup>
Degree of Protection	IP65/IP67/IP69K
Temperature range (fixed installation)	-30...90 °C
Cable Jacket Material	PUR
Material Wire Insulation	PP
Material Sleeve Nut	CuZn, nickel-plated
Screened	yes
Halogen-free	yes
Drag Chain Suitable	yes
Bending radius (fixed installation)	5 × d
Bending radius (used in motion)	12 × d
Bending cycles	≥ 2000000
Number of torsion cycles	≥ 500000
Torsional stress	± 180°/m
Packaging unit	1 Piece

Connection Diagram No.

**S89**

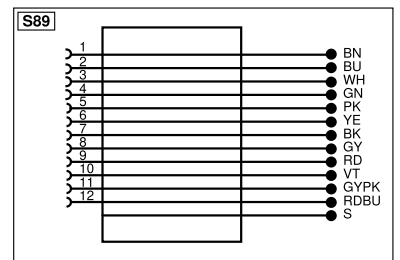
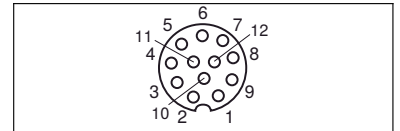
Connection Equipment No.

**87**



All dimensions in mm (1 mm = 0.03937 Inch)

- Drag chain suitable
- PUR, straight
- Screened
- Suitable for robots



\* Per terminal

Legend					
+	Supply Voltage +	nc	Not connected	ENB89422	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENb	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
Ṽ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AMV	Valve Output	QLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	⊕	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
Bi_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENAS422	Encoder A/Ā (TTL)		