Product data sheet

FX3-MOC Y-CABLE

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
FX3-MOC Y-CABLE	2123169

Other models and accessories ➜ www.sick.com/

Detailed technical data

Classifications

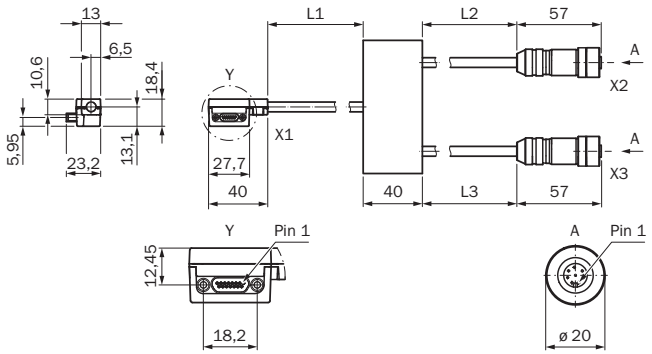
eCl@ss 5.0	19030312
eCl@ss 5.1.4	19030312
eCl@ss 6.0	27060304
eCl@ss 6.2	27060304
eCl@ss 7.0	27060304
eCl@ss 8.0	27060304
eCl@ss 8.1	27060304
eCl@ss 9.0	27060304
eCl@ss 10.0	27060304
eCl@ss 11.0	27060304
eCl@ss 12.0	27060304
ETIM 5.0	EC000830
ETIM 6.0	EC000830
ETIM 7.0	EC003249
ETIM 8.0	EC003249
UNSPSC 16.0901	26121604

Technical specifications

Accessory family	Other adapters
Connection type head A	Male connector, Micro D-Sub, 15-pin, angled
Connection type head B	2 x female connector, M12, 8-pin, straight
Locking plug connector	Screw connection
Connecting cable	0.5 m, for details see dimensional drawings, PVC
Cable material	PVC
Cable color	Black
Conductor cross section	AWG28 AWG26
Cable diameter	6.6 mm, 6.2 mm
Housing material	Plastic/metal
Housing color	Black
Locking nut material	Steel
Width across flats	Slot
Shielding	Galvanized copper braiding, opt. density approx. 85%

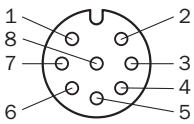
Bending radius	
Flexible use	> 12 x cable diameter
Stationary position	> 5 x cable diameter
Ambient operating temperature	–25 °C ... +80 °C, stationary position –10 °C ... +80 °C, flexible use
Description	For connecting the Motion Control Module FX3-MOC with two HTL, TTL, or sin/cos encoders

Dimensional drawing (Dimensions in mm (inch))



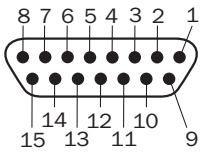
Part no.	L1	L2	L3
2071072	100	750	750
2094381	210	210	410
2100634	210	2.735	2.735
2116199	160	140	140
2117540	1.900	490	270
2117541	2.700	690	190
2121172	100	950	950
2121173	210	1.500	1.500
2123169	250	260	260

PIN assignment



2x M12 female connector, 8-pin, A-coded							Male connector, Micro D-Sub, 15-pin	
Encoder 1 (E1)	Sin/cos encoder		A/B incremental encoder			SSI encoder	FX3-MOC	
Pin	Sin/Cos	HIPERFACE®	2 output pairs (HTL 24 V, HTL 12 V, TTL)	2 outputs (HTL 24 V, HTL 12 V, TTL)	2 output pairs (RS-422)	SSI	Pin	Designation
1	Cos–	Cos_Ref	A–	GND	A–	Data–	9	ENC1_A–
2	Cos+	Cos	A+	A	A+	Data+	1	ENC1_A+

2x M12 female connector, 8-pin, A-coded							Male connector, Micro D-Sub, 15-pin	
3	Sin–	Sin_Ref	B–	GND	-	-	10	ENC1_B–
4	Sin+	Sin	B+	B	-	-	2	ENC1_B+
5	-	-	-	-	B+	Clock+	3	ENC1_C+
6	-	-	-	-	B–	Clock–	11	ENC1_C–
7	GND supply voltage						12	ENC_0V
8	24 V supply voltage						4	ENC1_24V
Encoder 2 (E2)	Sin/cos encoder		A/B incremental encoder			SSI encoder	FX3-MOC	
Pin	Sin/Cos	HIPERFACE®	2 output pairs (HTL 24 V, HTL 12 V, TTL)	2 outputs (HTL 24 V, HTL 12 V, TTL)	2 output pairs (RS-422)	SSI	Pin	Designation
1	Cos–	Cos_Ref	A–	GND	-	Data–	15	ENC2_A–
2	Cos+	Cos	A+	A	-	Data+	8	ENC2_A+
3	Sin–	Sin_Ref	B+	GND	-	-	14	ENC2_B–
4	Sin+	Sin	B–	B	-	-	7	ENC2_B+
5	-	-	-	-	-	Clock+	6	ENC2_C+
6	-	-	-	-	-	Clock–	13	ENC2_C–
7	GND supply voltage						12	ENC_0V
8	24 V supply voltage						5	ENC2_24V



2x M12 female connector, 8-pin, A-coded							Male connector, Micro D-Sub, 15-pin	
Encoder 1 (E1)	Sin/cos encoder		A/B incremental encoder			SSI encoder	FX3-MOC	
Pin	Sin/Cos	HIPERFACE®	2 output pairs (HTL 24 V, HTL 12 V, TTL)	2 outputs (HTL 24 V, HTL 12 V, TTL)	2 output pairs (RS-422)	SSI	Pin	Designation
1	Cos–	Cos_Ref	A–	GND	A–	Data–	9	ENC1_A–
2	Cos+	Cos	A+	A	A+	Data+	1	ENC1_A+
3	Sin–	Sin_Ref	B–	GND	-	-	10	ENC1_B–
4	Sin+	Sin	B+	B	-	-	2	ENC1_B+
5	-	-	-	-	B+	Clock+	3	ENC1_C+
6	-	-	-	-	B–	Clock–	11	ENC1_C–
7	GND supply voltage						12	ENC_0V
8	24 V supply voltage						4	ENC1_24V
Encoder 2 (E2)	Sin/cos encoder		A/B incremental encoder			SSI encoder	FX3-MOC	
Pin	Sin/Cos	HIPERFACE®	2 output pairs (HTL 24 V, HTL 12 V, TTL)	2 outputs (HTL 24 V, HTL 12 V, TTL)	2 output pairs (RS-422)	SSI	Pin	Designation
1	Cos–	Cos_Ref	A–	GND	-	Data–	15	ENC2_A–

2x M12 female connector, 8-pin, A-coded							Male connector, Micro D-Sub, 15-pin	
2	Cos+	Cos	A+	A	-	Data+	8	ENC2_A+
3	Sin–	Sin_Ref	B+	GND	-	-	14	ENC2_B–
4	Sin+	Sin	B–	B	-	-	7	ENC2_B+
5	-	-	-	-	-	Clock+	6	ENC2_C+
6	-	-	-	-	-	Clock–	13	ENC2_C–
7		GND supply voltage					12	ENC_0V
8		24 V supply voltage					5	ENC2_24V

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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