



# FX3-MOC Y-CABLE

Y- and T-splitters

CONNECTORS AND CABLES

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
FX3-MOC Y-CABLE	2116199

Other models and accessories → [www.sick.com/Y\\_and\\_T-splitters](http://www.sick.com/Y_and_T-splitters)



### Detailed technical data

#### Technical specifications

<b>Connection type head A</b>	Male connector, Micro D-Sub, 15-pin, angled				
<b>Connection type head B</b>	Female connector, M12, 8-pin, straight, A-coded				
<b>Connection type head C</b>	Female connector, M12, 8-pin, straight, A-coded				
<b>Locking plug connector</b>	Screw connection				
<b>Connecting cable</b>	0.3 m, for details see dimensional drawings, PVC and PP				
<b>Cable material</b>	PVC and PP				
<b>Cable color</b>	Black				
<b>Conductor cross section</b>	AWG28, AWG26				
<b>Cable diameter</b>	6.6 mm, 6.2 mm				
<b>Housing material</b>	Plastic/metal				
<b>Housing color</b>	Black				
<b>Locking nut material</b>	Steel				
<b>Width across flats</b>	Slot				
<b>Shielding</b>	Shielded				
<b>Bending radius</b>	<table border="0"> <tr> <td style="padding-right: 20px;">Flexible use</td> <td>&gt; 10 x cable diameter</td> </tr> <tr> <td>Stationary position</td> <td>&gt; 5 x cable diameter</td> </tr> </table>	Flexible use	> 10 x cable diameter	Stationary position	> 5 x cable diameter
Flexible use	> 10 x cable diameter				
Stationary position	> 5 x cable diameter				
<b>Operating temperature</b>	-25 °C ... +80 °C, stationary position -10 °C ... +80 °C, flexible use				
<b>Description</b>	Y-cable to connect a Flexi Soft Motion Control Module FX3-MOC with two encoders (HTL, TTL, Sin/Cos, SSI).				

#### Certificates

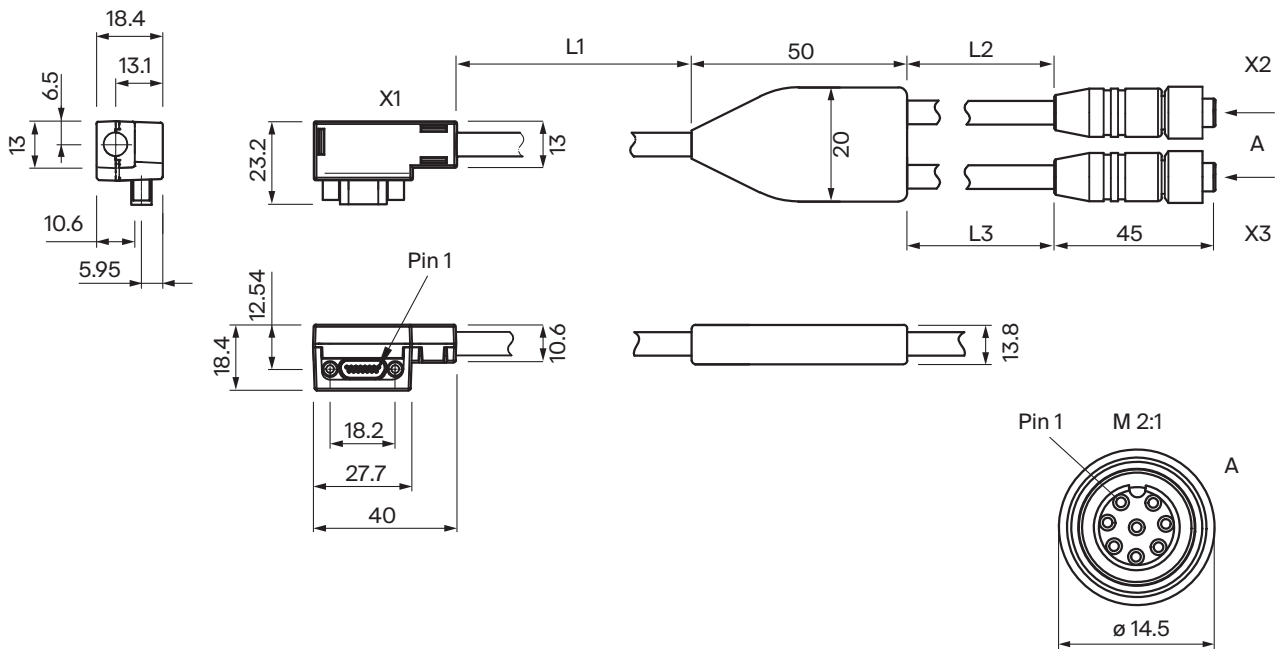
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓

#### Classifications

<b>ECLASS 5.0</b>	19030312
<b>ECLASS 5.1.4</b>	19030312
<b>ECLASS 6.0</b>	27060304
<b>ECLASS 6.2</b>	27060304
<b>ECLASS 7.0</b>	27060304

<b>ECLASS 8.0</b>	27060304
<b>ECLASS 8.1</b>	27060304
<b>ECLASS 9.0</b>	27060304
<b>ECLASS 10.0</b>	27060304
<b>ECLASS 11.0</b>	27060304
<b>ECLASS 12.0</b>	27060304
<b>ETIM 5.0</b>	EC000830
<b>ETIM 6.0</b>	EC000830
<b>ETIM 7.0</b>	EC003249
<b>ETIM 8.0</b>	EC003249
<b>UNSPSC 16.0901</b>	26121604

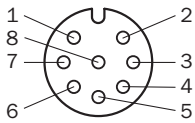
Dimensional drawing And cable lengths L1 / L2 / L3 (click on and scroll down)



Dimensions in mm (inch)

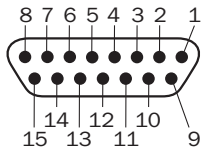
Part no.	L1	L2	L3
2071072	100	750	750
2094381	210	210	410
2100634	210	2.735	2.735
2116199	160	140	140
2117540	1.900	490	270
2117541	2.700	690	190
2121172	100	950	950
2123169	250	260	260

pin assignment (click on and scroll down)



Head A		Head B							Head C								
Male connector, Micro D-Sub, 15-pin		Female connector M12, 8-pin, A-coded							Female connector M12, 8-pin, A-coded								
Head A for connection to FX3-MOC		Head B for connection to encoder E1	Sin/cos encoder		A/B incremental encoder		SSI encoder	Head C for connection to encoder E2	Sin/cos encoder		A/B incremental encoder		SSI encoder				
Pin	Designation	Pin	Sin/Cos	HIPER-FACE®	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	Sin/Cos	HIPER-FACE®	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		
1	ENC1_A+	2	Cos+	Cos	A+	A	A+	Data+	-	-	-	-	-	-	-		
2	ENC1_B+	4	Sin+	Sin	B+	B	-	-	-	-	-	-	-	-	-		
3	ENC1_C+	5	-	-	-	-	B+	Clock+	-	-	-	-	-	-	-		
4	ENC1_24V	8	24 V supply voltage							-	-	-	-	-	-	-	
5	ENC2_24V	-	-	-	-	-	-	-	8	24 V supply voltage							
6	ENC2_C+	-	-	-	-	-	-	-	5	-	-	-	-	-	Clock+		
7	ENC2_B+	-	-	-	-	-	-	-	4	Sin+	Sin	B-	B	-	-		
8	ENC2_A+	-	-	-	-	-	-	-	2	Cos+	Cos	A+	A	-	Data+		
9	ENC1_A-	1	Cos-	Cos_Ref	A-	GND	A-	Data-	-	-	-	-	-	-	-		
10	ENC1_B-	3	Sin-	Sin_Ref	B-	GND	-	-	-	-	-	-	-	-	-		
11	ENC1_C-	6	-	-	-	-	B-	Clock-	-	-	-	-	-	-	-		
12	ENC_0V	7	GND supply voltage							7	GND supply voltage						
13	ENC2_C-	-	-	-	-	-	-	-	6	-	-	-	-	-	Clock-		
14	ENC2_B-	-	-	-	-	-	-	-	3	Sin-	Sin_Ref	B+	GND	-	-		
15	ENC2_A-	-	-	-	-	-	-	-	1	Cos-	Cos_Ref	A-	GND	-	Data-		

pin assignment (click on and scroll down)



Head A		Head B							Head C								
Male connector, Micro D-Sub, 15-pin		Female connector M12, 8-pin, A-coded							Female connector M12, 8-pin, A-coded								
Head A for connection to FX3-MOC		Head B for connection to encoder E1	Sin/cos encoder	A/B incremental encoder			SSI encoder	Head C for connection to encoder E2	Sin/cos encoder	A/B incremental encoder			SSI encoder				
Pin	Designation	Pin	Sin/Cos	HIPER-FACE®	2 output pairs (HTL 24 V (HTL 24 VHTL 12 V,(RS-422) HTL 12 V, TTL)		SSI	Pin	Sin/Cos	HIPER-FACE®	2 output pairs (HTL 24 V (HTL 24 VHTL 12 V,(RS-422) HTL 12 V, TTL)		SSI				
1	ENC1_A+	2	Cos+	Cos	A+	A	A+	Data+	-	-	-	-	-				
2	ENC1_B+	4	Sin+	Sin	B+	B	-	-	-	-	-	-	-				
3	ENC1_C+	5	-	-	-	-	B+	Clock+	-	-	-	-	-				
4	ENC1_24V	8	24 V supply voltage							-	-	-	-	-			
5	ENC2_24V	-	-	-	-	-	-	-	8	24 V supply voltage							
6	ENC2_C+	-	-	-	-	-	-	-	5	-	-	-	-	Clock+			
7	ENC2_B+	-	-	-	-	-	-	-	4	Sin+	Sin	B-	B	-			
8	ENC2_A+	-	-	-	-	-	-	-	2	Cos+	Cos	A+	A	Data+			
9	ENC1_A-	1	Cos-	Cos_Ref	A-	GND	A-	Data-	-	-	-	-	-				
10	ENC1_B-	3	Sin-	Sin_Ref	B-	GND	-	-	-	-	-	-	-				
11	ENC1_C-	6	-	-	-	-	B-	Clock-	-	-	-	-	-				
12	ENC_OV	7	GND supply voltage							7	GND supply voltage						
13	ENC2_C-	-	-	-	-	-	-	-	6	-	-	-	-	Clock-			
14	ENC2_B-	-	-	-	-	-	-	-	3	Sin-	Sin_Ref	B+	GND	-			
15	ENC2_A-	-	-	-	-	-	-	-	1	Cos-	Cos_Ref	A-	GND	Data-			

## 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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)