

# YF8U14-050UA3M2A14

Sensor/actuator cable

**PLUG CONNECTORS AND CABLES** 





#### Ordering information

Туре	Part no.
YF8U14-050UA3M2A14	2096137

Other models and accessories → www.sick.com/Sensor\_actuator\_cable



#### Detailed technical data

#### Technical specifications

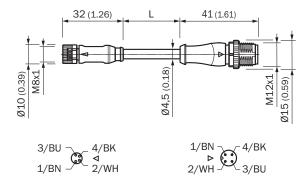
Accessory family         Connection cables           Connection type head B         Female connector, M12, 4-pin, straight, A-coded           Connection type head B         Male connector, M12, 4-pin, straight, A-coded           Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         FKM           Seal material         FKM           Tightening forque         0.4 Nm (M8), 0.6 Nm (M12)           Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4 wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use         > 10 x cable diameter           Flexible use         > 10 x cable diameter           S x cable diameter         > 5 x cable diameter           Set voltage, cable         2,500 V AC           Reference voltage         2,50 V AC           GoV DC           Rated Impulse voltage         1,5 kV           Current loading         4 A	real apacinations	
Connection type head A         Female connector, M8, 4-pin, straight, A-coded           Connection type head B         Male connector, M12, 4-pin, straight, A-coded           Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.4 Nm (M8), 0.6 Nm (M12)           Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position > 5 x cable diameter           Stationary position > 10 x cable diameter         > 10 x cable diameter           Nominal voltage, cable         300 v AC           Test voltage, cable         2,500 v AC           Go V DC         60 v DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Accessory group	Plug connectors and cables
Connection type head B         Male connector, M12, 4-pin, straight, A-coded           Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.4 Nm (M8), 0.6 Nm (M12)           Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4-wire, PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Drag chain operation         > 10 x cable diameter           Show a cable diameter         > 5 x cable diameter           Nominal voltage, cable         300 v AC           Test voltage, cable         2,500 v AC           Reference voltage         50 v AC           60 v DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Accessory family	Connection cables
Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.4 Nm (M8), 0.6 Nm (M12)           Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use           Flexible use         > 10 x cable diameter           Stationary position         > 5 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         10,000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         2,500 V AC           Reference voltage         50 V AC           60 V DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Connection type head A	Female connector, M8, 4-pin, straight, A-coded
Connector material Connector color Black Locking nut material Seal material FKM O.4 Nm (MB), 0.6 Nm (M12) Width across flats 9 (M8), 13 (M12) Sable Jacket material PUR, halogen-free Jacket color Black Cable diameter Conductor cross section Shielding Bending radius Flexible use Stationary position Drag chain operation Bending cycles Nominal voltage, cable Test voltage, cable Cated impulse voltage Current loading Flexible was 1.5 kV Current loading  TPU Black Zinc die-cast, nickel-plated FKM O.4 Nm (MB), 0.6 Nm (M12)  9 (M8), 13 (M12)  5 m, 4-wire, PUR, halogen-free Black A.5 mm Conductor cross section O.25 mm² Conductor	Connection type head B	Male connector, M12, 4-pin, straight, A-coded
Connector color Locking nut material Seal material FKM Tightening torque Width across flats 9 (M8), 13 (M12) Cable 5 m, 4-wire, PUR, halogen-free Jacket material Jacket color Black Cable diameter Conductor cross section Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Bending cycles Nominal voltage, cable Test voltage, cable Reference voltage Fated impulse voltage Current loading  Black J (MM2)  9 (M8), 13 (M12)  9 (M8), 13 (M12)  9 (M8), 13 (M12)  9 (M8), 0.6 Nm (M12)  9	Locking plug connector	Screw connection
Locking nut material  Seal material  FKM  Tightening torque  0.4 Nm (M8), 0.6 Nm (M12)  Width across flats  9 (M8), 13 (M12)  5 m, 4-wire, PUR, halogen-free  Jacket material  Jacket color  Cable diameter  Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation  Drag chain operation  Source  Sou	Connector material	TPU
Seal material         FKM           Tightening torque         0.4 Nm (M8), 0.6 Nm (M12)           Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         > 10 x cable diameter           Stationary position Drag chain operation         > 5 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         10,000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         2,500 V AC           Reference voltage         50 V AC           60 V DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Connector color	Black
Tightening torque	Locking nut material	Zinc die-cast, nickel-plated
Width across flats         9 (M8), 13 (M12)           Cable         5 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         4.5 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Drag chain operation         > 10 x cable diameter           Stationary position Drag chain operation         > 10 x cable diameter           Nominal voltage, cable         10,000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         2,500 V AC           Reference voltage         50 V AC           60 V DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Seal material	FKM
Cable 5 m, 4-wire, PUR, halogen-free  Jacket material PUR, halogen-free Black Cable diameter 4.5 mm Conductor cross section 0.25 mm² Shielding Unshielded  Flexible use Stationary position Drag chain operation Drag chain operation 2.5 x cable diameter 2.10 x cable diameter 3.10 x cable	Tightening torque	0.4 Nm (M8), 0.6 Nm (M12)
Jacket material  Jacket color  Cable diameter  Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation  Drag chain operation  Show AC  Reference voltage  Fated impulse voltage  Current loading  PUR, halogen-free  Black  4.5 mm  0.25 mm²  Unshielded  10,25 mm²  10 x cable diameter  > 10 x cable	Width across flats	9 (M8), 13 (M12)
Jacket color Cable diameter 4.5 mm Conductor cross section Chielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation  Bending cycles 10,000,000 Nominal voltage, cable Test voltage, cable Reference voltage 50 V AC 60 V DC  Rated impulse voltage Current loading 4 A	Cable	5 m, 4-wire, PUR, halogen-free
Cable diameter Conductor cross section Shielding Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation Pest voltage, cable Reference voltage  Current loading  A.5 mm  0.25 mm² Unshielded  10,000 cable diameter > 5 x cable diameter > 10 x cable diame	Jacket material	PUR, halogen-free
Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation  Nominal voltage, cable  Test voltage, cable  Reference voltage  Flexible use > 10 x cable diameter > 5 x cable diameter > 10 x cable diameter < 10 x cable di	Jacket color	Black
Shielding Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation Pending cycles  Nominal voltage, cable  Test voltage, cable  Reference voltage  50 V AC  60 V DC  Rated impulse voltage  Current loading  Unshielded  10 x cable diameter  > 5 x cable diameter  > 10 x cable diameter    10 x cable diameter    10 x cable diameter   10 x cable diameter   10 x cable diameter   10 x	Cable diameter	4.5 mm
Flexible use Stationary position Drag chain operation  Bending cycles 10,000,000  Nominal voltage, cable Test voltage, cable Reference voltage 50 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading  > 10 x cable diameter > 10 x cable diameter > 10,000,000  300 V AC 2,500 V AC  60 V DC  A A	Conductor cross section	0.25 mm <sup>2</sup>
Flexible use Stationary position Drag chain operation  Bending cycles 10,000,000  Nominal voltage, cable Test voltage, cable Reference voltage 50 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading  > 10 x cable diameter > 5 x cable diameter > 10,000,000  300 V AC 2,500 V AC  50 V AC 60 V DC  4 A	Shielding	Unshielded
Stationary position Drag chain operation  Bending cycles 10,000,000 Nominal voltage, cable Test voltage, cable Reference voltage 50 V AC  Rated impulse voltage 1.5 kV Current loading  > 5 x cable diameter > 10 x cable diameter 10,000,000  300 V AC 2,500 V AC  2,500 V AC  4 A	Bending radius	
Drag chain operation > 10 x cable diameter  10,000,000  Nominal voltage, cable 300 V AC  Test voltage, cable 2,500 V AC  Reference voltage 50 V AC  60 V DC  Rated impulse voltage 1.5 kV  Current loading 4 A	Flexible use	> 10 x cable diameter
Description	Stationary position	> 5 x cable diameter
Nominal voltage, cable  Test voltage, cable  2,500 V AC  Reference voltage  50 V AC  60 V DC  Rated impulse voltage  1.5 kV  Current loading  4 A	Drag chain operation	> 10 x cable diameter
Test voltage, cable  Reference voltage  50 V AC  60 V DC  Rated impulse voltage  1.5 kV  Current loading  4 A	Bending cycles	10,000,000
Reference voltage  50 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading 4 A	Nominal voltage, cable	300 V AC
50 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading 4 A	Test voltage, cable	2,500 V AC
60 V DC  Rated impulse voltage 1.5 kV  Current loading 4 A	Reference voltage	
Rated impulse voltage 1.5 kV Current loading 4 A		
Current loading 4 A		
Traversing speed 3 m/s		
	Traversing speed	3 m/s

Travelling distance	10 m
Acceleration	≤ 10 m/s²
Signal type	Sensor/actuator cable
Torsion force	180°/1m
Torsion cycles	2,000,000
Cycles per minutes	35
Application	Zones with oils and lubricants Drag chain operation Robot
Authorizations	UL
UL File No.	E335179
Enclosure rating	IP65 / IP66K / IP67
Ambient operating temperature	
Flexible use	-25 °C +80 °C
Stationary position	-40 °C +80 °C
Drag chain operation	-25 °C +80 °C
Head	-25 °C +85 °C
Contamination rating	3
Insulation resistance	100 ΜΩ
Overvoltage category	III
Specific insulation resistance	30 mΩ
<b>Thermal resistance</b> , <b>piping</b> Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1 IEC 60332-2	

#### Classifications

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

#### Dimensional drawing (Dimensions in mm (inch))



#### Recommended accessories

Other models and accessories → www.sick.com/Sensor\_actuator\_cable

	Brief description	Туре	Part no.
Other mounting	ng accessories		
	1 piece, M8 mounting key set for SW9 with calibrated torque 0.4 Nm	TOOL-TWO4M08AF09	5337207
	1 piece, M12 mounting key set for SW13 with calibrated torque 0.6 Nm	TOOL-TW06M12AF13	5337208

### 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:**

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