

# YF2A18-015UA5M2A18

Sensor/actuator cable

**PLUG CONNECTORS AND CABLES** 





### Ordering information

Туре	Part no.
YF2A18-015UA5M2A18	2096012

For 8-pin sensor-actuator cables, the wire colors are not standardized. Therefore, please observe the pin assignment of the sensor and the cable in the respective data sheet.

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



#### Detailed technical data

#### Technical specifications

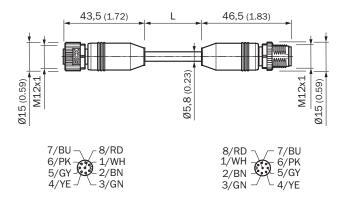
Connection type head A         Female connector, M12, 8-pin, straight, A-coded           Connection type head B         Male connector, M12, 8-pin, straight, A-coded           Locking plug connector         Screw connection           TPU         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Uith across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket act color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Drag chain operation         > 10 x cable diameter           S x cable diameter         > 5 x cable diameter           S x cable diameter         S x cable diameter           S x volte diameter         S x cable diameter           S x volte diameter         S x volte diameter           S x vo	Technical specifications	
Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         > 10 x cable diameter           Stationary position Drag chain operation         > 5 x cable diameter           > 10 x cable diameter           > 10 x cable diameter           > 10 x cable diameter           Stationary position Drag chain operation         > 10 x cable diameter           Stationary position Drag chain operation         > 10 x cable diameter           Sto x cable claimeter         > 10 x cable diameter           Sto x cable claimeter         > 10 x cable diameter           Sto x cable claimeter         > 10 x cable diameter           Sto x cable claimeter         > 10 x cable diameter <th>Connection type head A</th> <th>Female connector, M12, 8-pin, straight, A-coded</th>	Connection type head A	Female connector, M12, 8-pin, straight, A-coded
Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Prag chain operation         > 5 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation         > 10 x cable diameter           Stationary position Prag chain operation	Connection type head B	Male connector, M12, 8-pin, straight, A-coded
Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Drag chain operation         > 5 x cable diameter           Stationary position Drag chain operation         > 10 x cable diameter           Soundial voltage, cable         300 V AC           Test voltage, cable         2,500 V AC           Reference voltage         30 V AC           30 V DC           Rated impulse voltage         0.8 kV           Current loading         2 A           Traversing speed         3 m/s	Locking plug connector	Screw connection
Docking nut material   Zinc die-cast, nickel-plated   FKM	Connector material	TPU
Seal material FKM   Tightening torque 0.6 Nm   Width across flats 13   Cable 1.5 m, 8-wire, PUR, halogen-free   Jacket material PUR, halogen-free   Jacket color Black   Cable diameter 5.8 mm   Conductor cross section 0.25 mm²   Shielding Unshielded   Bending radius Flexible use Stationary position Drag chain operation > 10 x cable diameter   Stationary position Prag chain operation Drag chain operation Drag chain operation > 10 x cable diameter   Show AC 300 V AC   Test voltage, cable 2,500 V AC   Reference voltage 30 V AC   30 V AC 30 V DC   Rated impulse voltage 0.8 kV   Current loading 2 A   Traversing speed 3 m/s	Connector color	Black
Tightening torque         0.6 Nm           Width across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Black         PUR, balogen-free           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use           Stationary position         > 5 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         10,000,000           Nominal voltage, cable         30 V AC           Test voltage, cable         2,500 V AC           Reference voltage         30 V AC           30 V DC         30 V DC           Rated impulse voltage         0.8 kV           Current loading         2 A           Traversing speed         3 m/s	Locking nut material	Zinc die-cast, nickel-plated
Width across flats         13           Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use 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         30 V AC           30 V DC         30 V DC           Rated impulse voltage         0.8 kV           Current loading         2 A           Traversing speed         3 m/s	Seal material	FKM
Cable         1.5 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         5.8 mm           Conductor cross section         0.25 mm²           Shielding         Unshielded           Bending radius         Flexible use Stationary position Drag chain operation         > 10 x cable diameter           Drag chain operation         > 10 x cable diameter           Nominal voltage, cable         10,000,000           Reference voltage         30 V AC           Reference voltage         30 V AC           30 V DC         30 V DC           Rated impulse voltage         0.8 kV           Current loading         2 A           Traversing speed         3 m/s	Tightening torque	0.6 Nm
Jacket material   PUR, halogen-free	Width across flats	13
Jacket color Cable diameter 5.8 mm Conductor cross section 0.25 mm² Chielding Unshielded  Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Prag chain operation Section Subject Subje	Cable	1.5 m, 8-wire, PUR, halogen-free
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  30 V AC  30 V DC  Rated impulse voltage  Current loading  Traversing speed  5.8 mm  0.25 mm²  Unshielded  > 10 x cable diameter	Jacket material	PUR, halogen-free
Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation 2,50 x cable diameter 3,10	Jacket color	Black
Shielding Bending radius  Flexible use Stationary position > 5 x cable diameter  Drag chain operation > 10 x cable diameter  10,000,000  Sominal voltage, cable 300 V AC  Test voltage, cable 2,500 V AC  Reference voltage 30 V AC  Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 3 m/s	Cable diameter	5.8 mm
Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation  Bending cycles 10,000,000  Nominal voltage, cable Test voltage, cable 300 V AC  Reference voltage 30 V AC  Rated impulse voltage 0.8 kV  Current loading Traversing speed  > 10 x cable diameter > 10,000,000  300 V AC  2,500 V AC  8 V AC  30 V AC	Conductor cross section	0.25 mm <sup>2</sup>
Flexible use Stationary position > 5 x cable diameter > 5 x cable diameter > 10 x cable diameter = 10,000,000	Shielding	Unshielded
Stationary position Drag chain operation  Bending cycles 10,000,000  Nominal voltage, cable Test voltage, cable 2,500 V AC  Reference voltage 30 V AC 30 V DC  Rated impulse voltage 0.8 kV  Current loading Traversing speed > 5 x cable diameter > 10,000,000  300 V AC 2,500 V AC	Bending radius	
Bending cycles 10,000,000  Nominal voltage, cable 300 V AC  Test voltage, cable 2,500 V AC  Reference voltage 30 V AC  Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 10,000,000  To x cable diameter 10,000,000  300 V AC  300 V AC  30 V AC	Flexible use	> 10 x cable diameter
Bending cycles	Stationary position	> 5 x cable diameter
Nominal voltage, cable 300 V AC  Test voltage, cable 2,500 V AC  Reference voltage 30 V AC  30 V DC  Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 3 m/s	Drag chain operation	> 10 x cable diameter
Test voltage, cable  Reference voltage  30 V AC 30 V DC  Rated impulse voltage  0.8 kV  Current loading 2 A  Traversing speed  2,500 V AC 30 V AC 30 V DC 30 V DC	Bending cycles	10,000,000
Reference voltage  30 V AC 30 V DC  Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 3 m/s	Nominal voltage, cable	300 V AC
30 V AC 30 V DC  Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 3 m/s	Test voltage, cable	2,500 V AC
Rated impulse voltage 0.8 kV Current loading 2 A Traversing speed 3 m/s	Reference voltage	
Rated impulse voltage 0.8 kV  Current loading 2 A  Traversing speed 3 m/s		30 V AC
Current loading 2 A Traversing speed 3 m/s		30 V DC
Traversing speed 3 m/s		
Travelling distance 10 m	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
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
Thermal resistance, piping	Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1, IEC 60332-2-2

## 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, 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."

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