

# YF2A18-C50UA5M2A18

Sensor/actuator cable





#### Ordering information

Туре	Part no.
YF2A18-C50UA5M2A18	2108996

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

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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
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	0.5 m, 8-wire, PUR, halogen-free
Jacket material	PUR, halogen-free
Jacket color	Black
Cable diameter	5.8 mm
Conductor cross section	0.25 mm <sup>2</sup>
Shielding	Unshielded
Bending radius	
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	
	30 V AC
	30 V DC
Rated impulse voltage	0.8 kV
Current loading	2 A
Traversing speed	3 m/s
Travelling distance	10 m

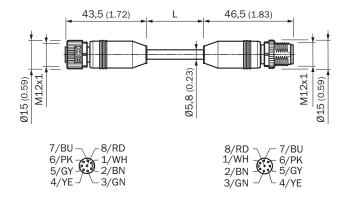
Signal type         Sensor/actuator cable           Torsion force         180° / 1 m           Torsion cycles         2,000,000           Cycles per minutes         35           Application         Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation           Authorizations         UL           UL File No.         E335179           Enclosure rating         IP65 / IP66K / IP67           Operating temperature         Flexible use Stationary position -40 °C +80 °C -25 °C +80 °C -25 °C +80 °C -25 °C +80 °C -25 °C +85 °C           Contamination rating         3           Insulation resistance         100 MΩ           Overvoltage category         III           Specific insulation resistance         30 mΩ		
Torsion force  180° / 1 m  2,000,000  Cycles per minutes  35  Application  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation  UL  UL File No.  E335179  Enclosure rating  Operating temperature  Flexible use -25°C +80°C -40°C +80°C -25°C +80°C -25°C +80°C  Contamination rating  3  Insulation resistance  Overvoltage category  Thermal resistance, piping  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Acceleration	≤ 10 m/s²
Torsion cycles  Cycles per minutes  Application  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation  UL  UL File No.  E335179  Enclosure rating  Operating temperature  Flexible use Stationary position Drag chain operation  Drag chain operation  Head  Contamination rating  Insulation resistance  Overvoltage category  Thermal resistance, piping  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Signal type	Sensor/actuator cable
Cycles per minutes  Application  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation  UL  UL File No.  E335179  Enclosure rating  Operating temperature  Flexible use Stationary position Drag chain operation  V=25 °C +80 °C -40 °C +80 °C -25 °C +80 °C -25 °C +85 °C  Contamination rating Insulation resistance  Overvoltage category  III  Specific insulation resistance  Thermal resistance, piping  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation V=305 °C +80 °C -25 °C +80 °C -25 °C +80 °C -25 °C +85 °C  Som MΩ  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Torsion force	180°/1 m
Application  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation  UL  UL File No.  Enclosure rating  Operating temperature  Flexible use Stationary position Drag chain operation  Opag chain operation  Flexible use Stationary position Drag chain operation  Overvoltage category  Thermal resistance, piping  Uncontaminated zones Zones with oils and lubricants Robot Drag chain operation UL  E335179  IP65 / IP66K / IP67  Overvoltage category  III  Specific insulation resistance  30 mΩ  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Torsion cycles	2,000,000
Zones with oils and lubricants Robot Drag chain operation  UL  UL File No.  E335179  Enclosure rating  Operating temperature  Flexible use Stationary position Drag chain operation  Drag chain operation  Flexible use Stationary position Drag chain operation Drag chain operation Head  Secondary 100 MΩ  Insulation resistance  100 MΩ  Specific insulation resistance  Thermal resistance, piping  Zones with oils and lubricants Robot Drag chain operation UL  E335179  IP65 / IP66K / IP67  C  -25 °C +80 °C -40 °C +80 °C -25 °C +80 °C -25 °C +85 °C  Zontamination rating Solution resistance  100 MΩ  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Cycles per minutes	35
UL File No.  Enclosure rating    P65 /   P66K /   P67	Application	Zones with oils and lubricants Robot
Enclosure rating  Operating temperature  Flexible use Stationary position Drag chain operation Drag chain operation Head  Contamination rating  Insulation resistance  Overvoltage category  Thermal resistance, piping  IP65 / IP66K / IP67  P65 / IP66K / IP67  P66 / IP67  P67 / IP66K / IP67  P66 / IP67  P66 / IP67  P67 / IP66K / IP67  P68 / I	Authorizations	UL
Flexible use  Flexible use  Stationary position  Drag chain operation  Head  Contamination rating  Insulation resistance  Overvoltage category  Thermal resistance, piping  Flexible use  -25 °C +80 °C  -40 °C +80 °C  -25 °C +85 °C  25 °C +85 °C  30 mΩ  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	UL File No.	E335179
Flexible use Stationary position Drag chain operation Head -25 °C +80 °C -25 °C +80 °C -25 °C +80 °C -25 °C +85 °C  Contamination rating 3 Insulation resistance 100 MΩ  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,	Enclosure rating	IP65 / IP66K / IP67
Stationary position Drag chain operation Head -25 °C +80 °C -25 °C +85 °C  Contamination rating 3 Insulation resistance 100 MΩ  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,	Operating temperature	
Drag chain operation Head -25 °C +80 °C -25 °C +85 °C  Contamination rating 3 Insulation resistance 100 MΩ  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,	Flexible use	-25 °C +80 °C
Head       -25 °C +85 °C         Contamination rating       3         Insulation resistance       100 MΩ         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,	Stationary position	-40 °C +80 °C
Contamination rating       3         Insulation resistance       100 MΩ         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,	Drag chain operation	-25 °C +80 °C
Insulation resistance $100 \text{ M}\Omega$ Overvoltage category III  Specific insulation resistance $30 \text{ m}\Omega$ Thermal resistance, piping Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Head	-25 °C +85 °C
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,	Contamination rating	3
Specific insulation resistance       30 mΩ         Thermal resistance, piping       Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Insulation resistance	100 ΜΩ
Thermal resistance, piping  Flame retardant according to UL 1581, horizontal flame test/CSA FT2 / IEC 60332-1,	Overvoltage category	III
	Specific insulation resistance	30 mΩ
	Thermal resistance, piping	

#### 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

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



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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.

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