

## YF2A25-050UB6XLEAX

Sensor/actuator cable

**PLUG CONNECTORS AND CABLES** 



## YF2A25-050UB6XLEAX | Sensor/actuator cable

PLUG CONNECTORS AND CABLES



#### Ordering information

Туре	Part no.
YF2A25-050UB6XLEAX	2095733

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



#### Detailed technical data

#### Technical specifications

Accessory gaupPlug connectors and cablesAccessory familyConnection, cablesConnection type head AFinal connector, M12, 5-pin, straight, AcodedConnection type head AFinal connection, M12, 5-pin, straight, AcodedConnection type head ASea connection, Straight, AcodedConnector onBiokConnector onBiokConnector onBiokConnector onBiokConnector onBiokContextor onSin Survice, Plug A, Survice, Plug A		
Connection type head AFemale connector, M12, S-pin, straight, A-codedConnection type head BFing leadsLocking plug connectorGrew connectionConnector materialTPUConnector colorBlackLocking nut materialRind Caractan	Accessory group	Plug connectors and cables
Connection spe head B         Flying leads           Locking plug connector         Sore connection           Connector onaterial         TPU           Connector color         Back           Locking nut material         Sind increase           Seal material         FKM           Tightening torque         0.6 Nm           Vidth across flats         13           Cable         Sin Swire, PUR, halogen-free           Jacket naterial         Back           Conductor coss section         Back           Cable diameter         Sin Sinder           Cable diameter         Sin Sinder           Stationary points         Sinder           Stationary points         Sinder           Fereibuse         Sinder           Stationary points         Sinder           Stationary points         Sinder Sinder           Stationary points         Sinder Sinder           Sinder Sinder Sinder         Sinder Sinde	Accessory family	Connecting cables
Locking pictore         Serve connection           Connector material         TPJ           Connector color         Back           Locking nut material         Cinciecast, nickel-plated           Seal material         KM           Tightening torque         0.6 Nm           Vidth across flats         13           Cable         Sm, Swire, PUR, halogen-free           Jacket naterial         Nm, Swire, PUR, halogen-free           Jacket color         Back           Jacket color         Sm, Swire, PUR, halogen-free           Jacket color         Sm, Swire, PUR, halogen-free           Conductor coss section         Sm, Swire, PUR, halogen-free           Shelding         Sm, Swire, PUR, halogen-free           Conductor coss section         Sm, Swire, PUR, halogen-free           Shelding         Sm, Swire, PUR, halogen-free           Ferking         Sm, Swire, PUR, halogen-free           Ferking         Sm, Swire, PUR, halogen-free           Shelding radius         Sm, Swire, PUR, halogen-free           Ferking         Sm, Swire, PUR, halogen-free           Ferking radiu         Sm (Sm (Sm (Sm (Sm (Sm (Sm (Sm (Sm (Sm (	Connection type head A	Female connector, M12, 5-pin, straight, A-coded
Connector colorFUConnector colorBackLocking nut materialCin die cast, nickel-platedSeal materialFKMTightening torque0.6 NmWidth across flats13CableSm. S-wire, PUR, halogen-freeJacket naterialPUR, halogen-freeJacket colorBackCable diameterS. Sm.Conductor cross section0.4 Mm <sup>2</sup> SheldingSheldedFlexible w> 10 x cable diameterFlexible w> 5x cable diameterTorag chain opped> 5x cable diameterFlexible w> 10 x cable diameterFlexible w> 10 x cable diameterFlexible w> 10 x cable diameterFlexible w> 5x cable diameterFlexible w> 000 vACReference voltage> 000 vACReferenc	Connection type head B	Flying leads
Conector colorBakaLocking nut materialincidecast, nickel-platedSeal materialKMTigheing torque0.6 NnWith across flats3.6 NnCableSn Swire PUR, halogen-freeJacket noderBackJacket noderBackConductor consection0.4 NnSheldingSn Swire PUR, halogen-freeConductor consection0.4 NnSheldingSn Swire PUR, halogen-freeSheldingSn Swire PUR, halogen-freeConductor consection0.4 NnSheldingSn Swire PURSheldingSn Swire PURSheldingSn Swire PURStationary power> 10 Acable diameterStationary power> 10 AcableStationary power> 10 AcableSta	Locking plug connector	Screw connection
Locking nut materialIn dieeast, nickel-platedSeal materialKMTighten group0.6 NmWith across flats3Cablesm. Swire, PUR, halogen-freeJacket noderBickJacket colorBickCollediameter0.34 nm <sup>2</sup> ScheldingShieldelBeding radius-Flexible> 10 cable diameterJacket of group> 10 cable diameterStationary position> 10 cable diameterDrag chain oper> 10 cable diameterStationary position> 10 cable diameterSta	Connector material	TPU
Seal materialFKMTightening torque6.6 NmWith across flats13Cable5.0 Swire, PUR, halogen-freeJacket naterial9UR, halogen-freeJacket colorBlackCable diameter5.6 mmConductor coss section0.34 mm²SheldingSidedaShelding radius>10 x cable diameterStationaryopic>5 x cable diameterStationaryopic>5 x cable diameterStationaryopic>500,000Rending voltage, cable300 vACText voltage, cableXou VACReference voltageSid VACStationaryopicSid VAC	Connector color	Black
Tightening torque0.6 NmWith across flats13Cable5m,5wire, PUR, halogen-freeJacket materialPUR, halogen-freeJacket colorBlackCable diameter5.6 mmConductor cross section0.34 mm²SheldingblaidedShelding radius-Flexible>10x cable diameterStationary position>10x cable diameterTorque factor cost section0.00,000Bending radius-Flexible>000,000Torque factor cost section300 VACReference voltage-Kording factor cost section-Solo Cost cost section-Stationary position-Stationary position <t< th=""><th>Locking nut material</th><th>Zinc die-cast, nickel-plated</th></t<>	Locking nut material	Zinc die-cast, nickel-plated
Width across flats13CableSm. Swire, PUR, halogen-freeJacket materialPUR, halogen-freeJacket colorBickJacket colorSin Swire, PUR, halogen-freeCable diameterSin Swire, PUR, halogen-freeConductor cross sectionSin Swire, PUR, halogen-freeSheldingSin Swire, PUR, halogen-freeBending radiusSin Swire, PUR, halogen-freeFreizieneSin Swire, PUR, halogen-freeStationary positionSin Scable diameterDrag chain operationSin Swire, PUR, halogen-freeBending ryclesSon Swire, PUR, halogen-freeNominal voltage, cableSon Swire, PUR, halogen-freeReference voltageSwire, PUR, halogen-freeKefference voltageSwire, PUR, halogen-freeStation operationSwire, PUR	Seal material	FKM
CableSin, Swine, PUR, halogen-freeJacket materialPIR, halogen-freeJacket colorBiakJacket colorBiakCable diameterSin Swine, PUR, halogen-freeConductor coss sectionSin Swine, PUR, AlongSheldingSin Swine, PUR, AlongBending radiusSin Swine, PUR, AlongStationary positionSin Scable diameterDarg chain operationSin Swine, PUR, AlongBending routesSin Swine, PUR, AlongStationary positionSin Scable diameterDarg chain operationSin Sun Sun Sun Sun Sun Sun Sun Sun Sun Su	Tightening torque	0.6 Nm
Jacket material       PUR, halogen-free         Jacket color       Black         Cable diameter       5.6 mm         Conductor cross section       0.34 mm²         Shielding       Shieldea         Bending radius       -         Flexibure       >10 x cable diameter         Stationary position       >10 x cable diameter </th <th>Width across flats</th> <th>13</th>	Width across flats	13
Jacket color         Black           Cable diameter         5.6 mm           Conductor cross section         0.34 mm <sup>2</sup> Shielding         bhielded           Bending radius         5.1 cable diameter           Flexible tas         5.0 cable diameter           Stationary positin         5.1 cable diameter           Drag chain operation         1.0 x cable diameter           Bending cycles         5.000,000           Nominal voltage, cable         3.00 V.AC           Reference voltage         6.00 V.AC           Gov AC         6.00 V.AC	Cable	5 m, 5-wire, PUR, halogen-free
Cable diameter       5.6 mm         Conductor cross section       0.34 mm <sup>2</sup> Shielding       bhelde         Shending radius       5.6 cable diameter         Flexible       >10x cable diameter         Stationary position       >5.5 cable diameter         Drag chain opperation       >10x cable diameter         Stationary position       >10x cable diameter         Drag chain opperation       >10x cable diameter         Stationary position       >10x cable diameter         Nominal voltage, cable       5.000,000         Reference voltage       000 VAC         Got VAC       Sind VAC         Stationary position	Jacket material	PUR, halogen-free
Conductor cross section0.34 nm²ShieldingShieldaShielding radius-Flexible10 x cable diameterStationary position5 x cable diameterDrag chain operation300 x 000Rending cycles300 y ACNominal voltage, cable2000 y ACReference voltage-Bending cycles-Bending cycles-Conductor conductor condu	Jacket color	Black
Shielding         Bielded           Bending radius         -           Flexible         >10 x cable diameter           Stationary position         >10 x cable diameter           Drag chain operation         >10 x cable diameter           Bending radius         >10 x cable diameter           Drag chain operation         >10 x cable diameter           Drag chain operation         >10 x cable diameter           Stationary position         >10 x cable diameter           Bending cycles         \$00 x 000           Reference voltage         >00 x 0XC           Go X AG         Sing Constant           Status         Sing Constant           Bieldid         Sing Constant	Cable diameter	5.6 mm
Bending radius       Flexible us         Flexible us       >10 x cable diameter         Stationary position       >5 x cable diameter         Drag chain operation       >10 x cable diameter         Bending cycles       >000 000         Nominal voltage, cable       300 V AC         Reference voltage       -         60 V AC       60 V AC	Conductor cross section	0.34 mm <sup>2</sup>
Flexible is> 10 x cable diameterStationary position> 5 x cable diameterDrag chain operation> 10 x cable diameterBending cycles5,000,000Nominal voltage, cable300 V ACTest voltage, cable2,000 V ACBeference voltage-Berding cycles-Berding cycles- <th>Shielding</th> <th>Shielded</th>	Shielding	Shielded
Stationary position       > 5 x cable diameter         Drag chain operation       > 10 x cable diameter         Bending cycles       5,000,000         Nominal voltage, cable       300 V AC         Test voltage, cable       2,000 V AC         Reference voltage       -         00 V AC       -	Bending radius	
Drag chain operation       > 10 x cable diameter         Bending cycles       5,000,000         Nominal voltage, cable       300 V AC         Test voltage, cable       2,000 V AC         Reference voltage       60 V AC         Over AC       60 V AC         Over AC       60 V AC	Flexi	ble use > 10 x cable diameter
Bending cycles5,000,000Nominal voltage, cable300 V ACTest voltage, cable2,000 V ACReference voltage600 V ACOUT DOUBLING600 V AC	Stationary p	position > 5 x cable diameter
Nominal voltage, cable       300 V AC         Test voltage, cable       2,000 V AC         Reference voltage       60 V AC         60 V DC       60 V DC	Drag chain op	eration > 10 x cable diameter
Test voltage, cable     2,000 V AC       Reference voltage     60 V AC       60 V DC     60 V DC	Bending cycles	5,000,000
Reference voltage 60 V AC 60 V DC	Nominal voltage, cable	300 V AC
60 V AC 60 V DC	Test voltage, cable	2,000 V AC
60 V DC	Reference voltage	
		60 V AC
Rated impulse voltage     1.5 kV		
	Rated impulse voltage	1.5 kV

# YF2A25-050UB6XLEAX | Sensor/actuator cable PLUG CONNECTORS AND CABLES

- ·· ·	
Current loading	4 A
Traversing speed	3.3 m/s
Travelling distance	5 m
Acceleration	$\leq 5 \text{ m/s}^2$
Signal type	Sensor/actuator cable
Torsion force	30°/1m
Torsion cycles	2,000,000
Cycles per minutes	35
Application	Zones with oils and lubricants Drag chain operation Robot
Authorizations	CE 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
Thermal resistance, piping	Flame retardant according to UL 1581 Section 1090 (H), CSA FT2 / IEC 60332-2-2

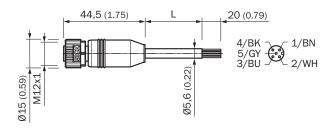
#### Classifications

ECLASS 5.0	19030312
ECLASS 5.0	19020215
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

## YF2A25-050UB6XLEAX | Sensor/actuator cable

PLUG CONNECTORS AND CABLES

#### 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 accessories						
	1 piece, M12 mounting key set for SW13 with calibrated torque 0.6 $\ensuremath{Nm}$	TOOL-TW06M12AF13	5337208			
Plug connectors and cables						
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight</li> <li>Description: Unshielded, Head A: female connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm 6 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1205-G	6009719			
	<ul> <li>Connection type head A: Male connector, M12, 5-pin, straight</li> <li>Description: Unshielded, Head A: male connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm 6 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> <li>Note: For field bus technology</li> </ul>	STE-1205-G	6022083			

## 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



Online data sheet

