

# YG2A18-050UA5XLEAX

Sensor/actuator cable

**PLUG CONNECTORS AND CABLES** 





#### Ordering information

Туре	Part no.
YG2A18-050UA5XLEAX	2095780

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

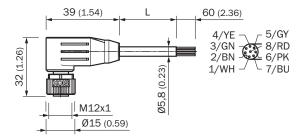
Connection type head A         Female connector, M12, 8-pin, angled, A-coded           Connector type head B         Flying leads           Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         Zinc die-cast, nickel-plated           Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         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           Stack cable         30 v Ac acide diameter           Stationary position Drag chain operation         30 x cable diameter           Stationary position Drag chain operation         30 v Ac acide diameter           Stationary position Drag chain operation         30 v Ac           30 V AC         30 V AC           30 V AC         30 V AC           30 V AC         30 V AC	rediffical openitionalistic	
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         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           Flexible use         > 5 x cable diameter           Stationary position paration         > 5 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         1,0000,000           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	Connection type head A	Female connector, M12, 8-pin, angled, 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         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         > 10 x cable diameter           Stationary position         > 5 x cable diameter           Drag chain operation         10,000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         30 V AC           30 V AC         30 V DC           Rated impulse voltage         0.8 kV           Current loading         2 A	Connection type head B	Flying leads
Connector color     Black       Locking nut material     Zinc die-cast, nickel-plated       Seal material     FKM       Tightening torque     0.6 Nm       Width across flats     13       Cable     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     > 5 x cable diameter       Nominal voltage, cable     10,000,000       Nominal voltage, cable     2,500 V AC       Reference voltage     30 V AC       30	Locking plug connector	Screw connection
Locking nut material     Zinc die-cast, nickel-plated       Seal material     FKM       Tightening torque     0.6 Nm       Width across flats     13       Cable     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       Flexible use Stationary position Drag chain operation     > 10 x cable diameter       > 5 x cable diameter     > 10 x cable diameter       Stacked impulse, cable     300 V AC       Reference voltage     30 V AC       Rated impulse voltage     0.8 kV       Current loading     2 A	Connector material	TPU
Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         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         > 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	Connector color	Black
Tightening torque         0.6 Nm           Width across flats         13           Cable         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           > 5 x cable diameter         > 10 x cable diameter           Sound 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	Locking nut material	Zinc die-cast, nickel-plated
Width across flats         13           Cable         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         > 10 x cable diameter           Vacable diameter         > 5 x cable diameter           Vacable diameter         > 10 x cable diameter           Vacable diameter         30 v AC           Test voltage, cable         300 v AC           Reference voltage         30 v AC           30 v DC         30 v DC           Rated impulse voltage         0.8 kV           Current loading         2 A	Seal material	FKM
Cable 5 m, 8-wire, PUR, halogen-free  Jacket material PUR, halogen-free  Black Cable diameter 5.8 mm Conductor cross section 0.25 mm² Shielding Unshielded  Flexible use Stationary position Drag chain operation Drag chain operation Abministrative Cable diameter 10,000,000  Bending cycles 10,000,000  Nominal voltage, cable 300 V AC  Test voltage, cable 30 V AC  Reference voltage 30 V AC  Rated impulse voltage 0.8 kV  Current loading 2	Tightening torque	0.6 Nm
Jacket color Black Cable diameter 5.8 mm Conductor cross section 0.25 mm² Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Person VAC  Test voltage, cable Reference voltage Rated impulse voltage Current loading PUR, halogen-free Black Black  5.8 mm 0.25 mm² Unshielded  10,25 mm² Vacable diameter > 10 x cable diameter > 10	Width across flats	13
Black   S.8 mm   S.	Cable	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 Position Stationary position Drag chain operation Drag chain operation Drag chain operation Sending cycles 10,000,000 Nominal voltage, cable Test voltage, cable 300 V AC 2,500 V AC Reference voltage 30 V AC 30 V DC  Rated impulse voltage 0.8 kV Current loading 2 A	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  Rated impulse voltage  Current loading  Conductor cross section  Unshielded  Unshielded  Unshielded  Unshielded  Inshielded  Inshielded	Jacket color	Black
Shielding Bending radius  Flexible use Stationary position Drag chain operation  Bending cycles  Nominal voltage, cable  Test voltage, cable  Reference voltage  Rated impulse voltage  Current loading  Lunshielded  > 10 x cable diameter > 5 x cable diameter > 10 x cable diameter	Cable diameter	5.8 mm
Bending radius  Flexible use Stationary position Drag chain operation  Bending cycles  Nominal voltage, cable  Test voltage, cable  Reference voltage  30 V AC  Rated impulse voltage  Current loading  Flexible use > 10 x cable diameter > 5 x cable diameter > 10 x c	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 300 V AC  Reference voltage 30 V AC 30 V DC  Rated impulse voltage 0.8 kV  Current loading  > 10 x cable diameter > 5 x cable diameter > 10,000,000  > 200 V AC  2,500 V AC  30 V AC  30 V AC  30 V AC  2 A	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  > 5 x cable diameter > 10,000,000  300 V AC  2,500 V AC  2,500 V AC	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 30 V AC  Rated impulse voltage 0.8 kV  Current loading 2 A	Flexible use	> 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	Stationary position	> 5 x cable diameter
Nominal voltage, cable  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	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  2,500 V AC  20 V AC  20 V AC  20 V AC	Bending cycles	10,000,000
Reference voltage  30 V AC 30 V DC  Rated impulse voltage  0.8 kV  Current loading  2 A	Nominal voltage, cable	300 V AC
30 V AC 30 V DC  Rated impulse voltage 0.8 kV  Current loading 2 A	Test voltage, cable	2,500 V AC
30 V DC  Rated impulse voltage 0.8 kV  Current loading 2 A	Reference voltage	
Rated impulse voltage 0.8 kV Current loading 2 A		30 V AC
Current loading 2 A		30 V DC
	Rated impulse voltage	0.8 kV
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
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 accessories				
	1 piece, M12 mounting key set for SW13 with calibrated torque 0.6 Nm	T00L-TW06M12AF13	5337208	
Plug connectors and cables				
	Connection type head A: Female connector, M12, 8-pin, straight Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.25 mm² 0.5 mm²	DOS-1208-G	6028422	
	<ul> <li>Connection type head A: Male connector, M12, 8-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.25 mm² 0.5 mm²</li> <li>Note: For field bus technology</li> </ul>	STE-1208-G	6033269	

## 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

