

YM2A28-100UA7XLEAX





## Ordering information

Туре	Part no.
YM2A28-100UA7XLEAX	6054490

Other models and accessories → www.sick.com/

## Detailed technical data

#### Technical specifications

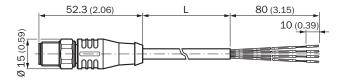
Accessory group         Plug connectors and cables           Accessory family         Connecting cables           Connection type head A         Male connector, M12, 8 pin, straight           Connection type         Flying leads           Connector material         TPU           Connector material         TPU           Connector material         Stainless steel (V4A/1.4404)           Cable         10 m, 8 wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Flexible use stationary position         12 x cable diameter           Stationary position         > 5 x cable diameter           Bending cycles         2 1,000,000           Reference voltage         2 30 V           Current loading         2 A           Traversing speed         1,7 m/s           Travelling distance         5 m/s²           Signal type         Sensor/actuator cable           Torsion force         ± 360° / 1 m           Torsion cycles         1,000,000           Application         2 cones with oils and lubricants bring chain operation <t< th=""><th>rechnical specifications</th><th></th></t<>	rechnical specifications	
Connection type head A         Male connector, M12, 8-pin, straight           Connection type         Flying leads           Connector material         TPU           Connector color         Black           Locking nut material         Stainless steel (V4A/1,4404)           Cable         10 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Bliack           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Shielded           Bending radius         Flexible use Stationary position         > 12 x cable diameter           Stationary position         > 5 x cable diameter           Sending cycles         ≥ 1.000,000           Reference voltage         ≥ 1.000,000           Current loading         2 A           Taversing speed         1.7 m/s           Travelling distance         5 m           Acceleration         ≤ 5 m/s²           Signal type         Sensor/actuator cable           Torsion force         ± 360* / 1 m           Torsion cycles         4,000,000           Application         2 cones with oils and lubricants Oring chain operation           Enclosure rating	Accessory group	Plug connectors and cables
Connection type         Flying leads           Connector material         TPU           Connector color         Black           Locking nut material         Stainless steel (V4A/1.4404)           Cable         10 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Shielded           Bending radius         Flexible use Stationary position         > 12 x cable diameter           Stationary position         > 5 x cable diameter           Stationary position         > 5 x cable diameter           Plexible use Stationary position         > 1000,000           Reference voltage         ≤ 30 V           Current loading         2 A           Traversing speed         1.7 m/s           Travelling distance         5 m/s²           Acceleration         ≤ 5 m/s²           Signal type         Sensor/actuator cable           Torsion cycles         1,000,000           Application         20nes with oils and lubricants Drag chain operation           Enclosure rating         IP67/ IP69K	Accessory family	Connecting cables
Connection type         Flying leads           Connector material         TPU           Connector color         Black           Locking nut material         Stainless steel (V4A/1.4404)           Cable         10 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Shielded           Bending radius         Flexible use Stationary position         > 12 x cable diameter           Stationary position         > 5 x cable diameter           Stationary position         > 5 x cable diameter           Bendling cycles         ≥ 1,000,000           Reference voltage         ≤ 30 V           Current loading         2 A           Traversing speed         1.7 m/s           Travelling distance         5 m           Acceleration         ≤ 5 m/s²           Signal type         Sensor/actuator cable           Torsion force         ± 360° / 1 m           Torsion cycles         1,000,000           Application         Zones with oils and lubricants Drag chain operation           Enclosure rating         IP67/ IP69K	Connection type head A	Male connector, M12, 8-pin, straight
Connector material         TPU           Connector color         Black           Locking nut material         Stainless steel (V4A/1.4404)           Cable         10 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Shielded           Bending radius         Flexible use Stationary position           Stationary position         > 12 x cable diameter           5 x cable diameter         > 5 x cable diameter           Bending cycles         ≥ 1,000,000           Reference voltage         ≥ 30 V           Current loading         2 A           Traversing speed         1.7 m/s           Travelling distance         5 m/s²           Acceleration         ≤ 5 m/s²           Signal type         Sensor/actuator cable           Torsion force         ± 360° / 1 m           Torsion cycles         1,000,000           Application         Zones with oils and lubricants Drag chain operation           Enclosure rating         IP67/ IP69K           Ambient operating temperature	Connection type head B	Flying leads
Connector color       Black         Locking nut material       Stainless steel (V4A/1.4404)         Cable       10 m, 8-wire, PUR, halogen-free         Jacket material       PUR, halogen-free         Jacket color       Black         Cable diameter       6.3 mm         Conductor cross-section       0.25 mm²         Shielding       Shielded         Bending radius       Flexible use stationary position	Connection type	Flying leads
Locking nut material Cable 10 m, 8-wire, PUR, halogen-free  Jacket material PUR, halogen-free  PUR, halogen-free  Black Cable diameter 6.3 mm  Conductor cross-section 0.25 mm² Shielding Shielded  Bending radius  Flexible use Stationary position > 5 x cable diameter Stationary position > 5 x cable diameter  Bending cycles Reference voltage Current loading 1.7 m/s  Traversing speed 1.7 m/s  Travelling distance Acceleration Signal type Sensor/actuator cable Torsion force 1.000,000 Application Zones with oils and lubricants Drag chain operation  Enclosure rating Ambient operating temperature	Connector material	TPU
Cable         10 m, 8-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Black           Cable diameter         6.3 mm           Conductor cross-section         0.25 mm²           Shielding         Shielded           Bending radius         Flexible use Stationary position           Flexible use Stationary position         > 1.2 x cable diameter           S x cable diameter         > 5 x cable diameter           Bending cycles         ≥ 1,000,000           Reference voltage         ≤ 30 V           Current loading         2 A           Traversing speed         1.7 m/s           Travelling distance         5 m           Acceleration         ≤ 5 m/s²           Signal type         Sensor/actuator cable           Torsion force         ± 360* / 1 m           Torsion cycles         1,000,000           Application         Zones with oils and lubricants Drag chain operation           Enclosure rating         IP67/ IP69K	Connector color	Black
Jacket material     PUR, halogen-free       Jacket color     Black       Cable diameter     6.3 mm       Conductor cross-section     0.25 mm²       Shielding     Shielded       Bending radius     Flexible use Stationary position     > 12 x cable diameter       Stationary position     > 5 x cable diameter       Bending cycles     ≥ 1,000,000       Reference voltage     ≤ 30 V       Current loading     2 A       Traversing speed     1.7 m/s       Travelling distance     5 m       Acceleration     ≤ 5 m/s²       Signal type     Sensor/actuator cable       Torsion force     ± 360° / 1 m       Torsion cycles     1,000,000       Application     Zones with oils and lubricants Drag chain operation       Enclosure rating     IP67/ IP69K       Ambient operating temperature	Locking nut material	Stainless steel (V4A/1.4404)
Jacket color     Black       Cable diameter     6.3 mm       Conductor cross-section     0.25 mm²       Shielding     Shielded       Bending radius     Flexible use Stationary position     > 12 x cable diameter       Stationary position     > 5 x cable diameter       Bending cycles     \$ 1,000,000       Reference voltage     \$ 30 V       Current loading     2 A       Traversing speed     1.7 m/s       Travelling distance     5 m       Acceleration     \$ 5 m/s²       Signal type     Sensor/actuator cable       Torsion force     ± 360° / 1 m       Torsion cycles     1,000,000       Application     Zones with oils and lubricants Drag chain operation       Enclosure rating     IP67/ IP69K       Ambient operating temperature	Cable	10 m, 8-wire, PUR, halogen-free
Cable diameter       6.3 mm         Conductor cross-section       0.25 mm²         Shielding       Shielded         Bending radius       Flexible use Stationary position       > 12 x cable diameter         S x cable diameter       > 5 x cable diameter         Bending cycles       ≥ 1,000,000         Reference voltage       ≤ 30 V         Current loading       2 A         Traversing speed       1.7 m/s         Travelling distance       5 m         Acceleration       ≤ 5 m/s²         Signal type       Sensor/actuator cable         Torsion force       ± 360° / 1 m         Torsion cycles       1,000,000         Application       Zones with oils and lubricants Drag chain operation         Enclosure rating       IP67/ IP69K         Ambient operating temperature	Jacket material	PUR, halogen-free
Conductor cross-section       0.25 mm²         Shielding       Shielded         Bending radius       > 12 x cable diameter         Stationary position       > 5 x cable diameter         Bending cycles       ≥ 1,000,000         Reference voltage       ≤ 30 V         Current loading       2 A         Traversing speed       1.7 m/s         Travelling distance       5 m         Acceleration       ≤ 5 m/s²         Signal type       Sensor/actuator cable         Torsion force       ± 360° / 1 m         Torsion cycles       1,000,000         Application       Zones with oils and lubricants Drag chain operation         Enclosure rating       IP67/ IP69K         Ambient operating temperature	Jacket color	Black
Shielding Bending radius  Flexible use Stationary position  Bending cycles  Reference voltage  Current loading  Traversing speed  1.7 m/s  Travelling distance  Acceleration  Signal type  Sensor/actuator cable  Torsion force  \$ 360° / 1 m  Torsion cycles  1,000,000  Application  Enclosure rating  Ambient operating temperature  Shielded  Stacklede  Stacklede  Stacklede  Stacklede  1,000,000  Application  Some with oils and lubricants Drag chain operation  IP67/ IP69K	Cable diameter	6.3 mm
Bending radius  Flexible use Stationary position  Stationary position  Stationary position  Flexible use Stationary position  Stationa	Conductor cross-section	0.25 mm <sup>2</sup>
Flexible use Stationary position  Bending cycles  Reference voltage  Current loading  Traversing speed  1.7 m/s  Travelling distance  Acceleration  Signal type  Torsion force  1.000,000  Sensor/actuator cable  1.7 m/s  Sensor/actuator cable  Torsion cycles  Application  Cones with oils and lubricants Drag chain operating  IP67/ IP69K  Ambient operating temperature	Shielding	Shielded
Stationary position       > 5 x cable diameter         Bending cycles       ≥ 1,000,000         Reference voltage       ≤ 30 V         Current loading       2 A         Traversing speed       1.7 m/s         Travelling distance       5 m         Acceleration       ≤ 5 m/s²         Signal type       Sensor/actuator cable         Torsion force       ± 360° / 1 m         Torsion cycles       1,000,000         Application       Zones with oils and lubricants Drag chain operation         Enclosure rating       IP67/ IP69K	Bending radius	
Bending cycles       ≥ 1,000,000         Reference voltage       ≤ 30 V         Current loading       2 A         Traversing speed       1.7 m/s         Travelling distance       5 m         Acceleration       ≤ 5 m/s²         Signal type       Sensor/actuator cable         Torsion force       ± 360° / 1 m         Torsion cycles       1,000,000         Application       Zones with oils and lubricants Drag chain operation         Enclosure rating       IP67/ IP69K         Ambient operating temperature	Flexible use	> 12 x cable diameter
Reference voltage ≤ 30 V  Current loading 2 A  Traversing speed 1.7 m/s  Travelling distance 5 m  Acceleration ≤ 5 m/s²  Signal type Sensor/actuator cable  Torsion force ± 360° / 1 m  Torsion cycles 1,000,000  Application Zones with oils and lubricants Drag chain operation  Enclosure rating IP67/ IP69K  Ambient operating temperature	Stationary position	> 5 x cable diameter
Current loading  2 A  Traversing speed  1.7 m/s  Travelling distance  5 m  Acceleration  ≤ 5 m/s²  Signal type  Sensor/actuator cable  Torsion force  ± 360° / 1 m  Torsion cycles  Application  Zones with oils and lubricants Drag chain operation  Enclosure rating  Ambient operating temperature	Bending cycles	≥ 1,000,000
Traversing speed  1.7 m/s  Travelling distance  5 m  4cceleration  ≤ 5 m/s²  Signal type  Sensor/actuator cable  ± 360° / 1 m  Torsion cycles  1,000,000  Application  Zones with oils and lubricants Drag chain operation  Enclosure rating  IP67/ IP69K  Ambient operating temperature	Reference voltage	≤ 30 V
Travelling distance 5 m  Acceleration ≤ 5 m/s²  Signal type Sensor/actuator cable  Torsion force ± 360° / 1 m  Torsion cycles 1,000,000  Application Zones with oils and lubricants Drag chain operation  Enclosure rating IP67/ IP69K  Ambient operating temperature	Current loading	2 A
Acceleration       ≤ 5 m/s²         Signal type       Sensor/actuator cable         Torsion force       ± 360° / 1 m         Torsion cycles       1,000,000         Application       Zones with oils and lubricants Drag chain operation         Enclosure rating       IP67/ IP69K         Ambient operating temperature       IP67/ IP69K	Traversing speed	1.7 m/s
Signal type  Torsion force  ± 360° / 1 m  Torsion cycles  1,000,000  Application  Zones with oils and lubricants Drag chain operation  Enclosure rating  IP67/ IP69K  Ambient operating temperature	Travelling distance	5 m
Torsion force ± 360° / 1 m  Torsion cycles 1,000,000  Application Zones with oils and lubricants Drag chain operation  Enclosure rating IP67/ IP69K  Ambient operating temperature	Acceleration	≤ 5 m/s²
Torsion cycles  1,000,000  Application  Zones with oils and lubricants Drag chain operation  Enclosure rating  IP67/ IP69K  Ambient operating temperature	Signal type	Sensor/actuator cable
Application  Zones with oils and lubricants Drag chain operation  Enclosure rating  IP67/ IP69K  Ambient operating temperature	Torsion force	± 360° / 1 m
Drag chain operation  Enclosure rating  IP67/ IP69K  Ambient operating temperature	Torsion cycles	1,000,000
Ambient operating temperature	Application	
	Enclosure rating	IP67/ IP69K
Flexible use -30 °C +90 °C	Ambient operating temperature	
	Flexible use	-30 °C +90 °C

Stationary position	-40 °C +90 °C
Drag chain operation	-25 °C +60 °C

#### Classifications

ECI@ss 5.0	19030312
ECI@ss 5.1.4	19030312
ECI@ss 6.0	27060304
ECI@ss 6.2	27060304
ECI@ss 7.0	27060304
ECI@ss 8.0	27060304
ECI@ss 8.1	27060304
ECI@ss 9.0	27060304
ECI@ss 10.0	27060304
ECI@ss 11.0	27060304
ETIM 5.0	EC000830
ETIM 6.0	EC000830
ETIM 7.0	EC003249
UNSPSC 16.0901	26121604

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





- ① White
- 2 Brown 3 Green 4 Yellow

- ⑤ Gray⑥ Pink⑦ Blue
- 8 Red

## 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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