

# YF2A15-100C1BM2A15

Industrial Ethernet cables and fieldbus cables

**PLUG CONNECTORS AND CABLES** 

**SICK**Sensor Intelligence.



### Ordering information

Туре	Part no.
YF2A15-100C1BM2A15	2106282

Other models and accessories -> www.sick.com/Industrial\_Ethernet\_cables\_and\_fieldbus\_cables



#### Detailed technical data

#### Technical specifications

Accessory group         Plug connectors and cables           Accessory family         Connection cables           Connection type head B         Female connector, M12, 5-pin, straight, A-coded           Locking plug connector         Screw connection           Connector material         TPU           Connector color         Black           Locking nut material         FKM           Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         10 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Violet           Cable diameter         6.9 mm           Conductor cross section         0.25 mm² + 0.35 mm² + 1 x drain wire           Shielded         Shielded           Bending radius         Shielded           Flexible use         > 10 x cable diameter           Stationary position Drag chain operation         2 0 x cable diameter           So x cable diameter         2 10 x cable diameter           Serving speed         2,000 v AC           Reference voltage         48 V AC           GOV DC           Rated impulse voltage         1.5 kV           C	•	
Connection type head A         Female connector, M12, 5-pin, straight, A-coded           Connection type head B         Male connector, M12, 5-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           Vidith across flats         13           Cable         10 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Violet           Cable diameter         6.9 mm           Conductor cross section         0.25 mm² + 0.35 mm² + 1 x drain wire           Shielding         Shielded           Bending radius         Flexible use Stationary position > 6 x cable diameter           Stationary position > 10 x cable diameter         > 10 x cable diameter           Nominal voltage, cable         300 v AC           Test voltage, cable         2,000 v AC           Reference voltage         48 v AC           60 v DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Accessory group	Plug connectors and cables
Connection type head B     Male connector, M12, 5-pin, straight, A-coded       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     10 m, 4-wire, PUR, halogen-free       Jacket material     PUR, halogen-free       Jacket color     Violet       Cable diameter     6.9 mm       Conductor cross section     0.25 mm² + 0.35 mm² + 1 x drain wire       Shielding     Shielded       Bending radius       Flexible use Stationary position Drag chain operation     > 10 x cable diameter       > 10 x cable diameter     > 6 x cable diameter       Shoninal vottage, cable     1,000,000       Reference voltage     48 V AC       60 V DC       Rated impulse voltage     1,5 kV       Current loading     4 A	Accessory family	Connection cables
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         10 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Violet           Cable diameter         6.9 mm           Conductor cross section         0.25 mm² + 0.35 mm² + 1 x drain wire           Shielding         Shielded           Bending radius         Flexible use           Flexible use         > 1.0 x cable diameter           Stationary position         > 6 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         1,000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         2,000 V AC           Reference voltage         48 V AC           60 V DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Connection type head A	Female connector, M12, 5-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         10 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Violet           Cable diameter         6.9 mm           Conductor cross section         0.25 mm² + 0.35 mm² + 1 x drain wire           Shielded         Shielded           Bending radius         Flexible use Stationary position Parag chain operation Parag chain	Connection type head B	Male connector, M12, 5-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     10 m, 4-wire, PUR, halogen-free       Jacket material     PUR, halogen-free       Jacket color     Violet       Cable diameter     6.9 mm       Conductor cross section     0.25 mm² + 0.35 mm² + 1 x drain wire       Shielding     Shielded       Bending radius     Flexible use Stationary position Drag chain operation     > 10 x cable diameter       Drag chain operation     > 10 x cable diameter       Polyonoon     > 10 x cable diameter       Val x cable diameter     2 10 x cable diameter       Stationary position Drag chain operation     2 10 x cable diameter       Polyonoon     2 x cable diameter       Reference voltage     48 V AC       GOV DC       Rated impulse voltage     1.5 kV       Current loading     4 A	Locking plug connector	Screw connection
Locking nut material  Evaluaterial  FKM  Tightening torque  Width across flats  Cable  10 m, 4-wire, PUR, halogen-free  Jacket material  Jacket color  Cable diameter  Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation  Drag chain operation  Drag chain operation  Sono V AC  Test voltage, cable  Reference voltage  Reference voltage  Rated impulse voltage  Cund to cross, inickel-plated  FKM  10 mm  10 mm  10 mm  10 mm, which in pure pure pure pure pure pure pure pure	Connector material	TPU
Seal material         FKM           Tightening torque         0.6 Nm           Width across flats         13           Cable         10 m, 4-wire, PUR, halogen-free           Jacket material         PUR, halogen-free           Jacket color         Violet           Cable diameter         6.9 mm           Conductor cross section         0.25 mm² + 0.35 mm² + 1 x drain wire           Shielding         Shielded           Bending radius         > 10 x cable diameter           Stationary position Drag chain operation         > 6 x cable diameter           Drag chain operation         > 10 x cable diameter           Bending cycles         1.000,000           Nominal voltage, cable         300 V AC           Test voltage, cable         2.000 V AC           Reference voltage         48 V AC           60 V DC           Rated impulse voltage         1.5 kV           Current loading         4 A	Connector color	Black
Tightening torque  Width across flats  13  Cable  10 m, 4-wire, PUR, halogen-free  PUR, halogen-free  Violet  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  48 V AC 60 V DC  Rated impulse voltage  Current loading  10 m, 4-wire, PUR, halogen-free  PUR, halogen-free  PUR, halogen-free  PUR, halogen-free  Violet  6.9 mm  0.25 mm² + 1 x drain wire  Shielding wire  6.9 mm  2.5 mm² + 1 x drain wire  8- x cable diameter  > 6 x cable diameter  > 10 x cable diameter  >	Locking nut material	Zinc die-cast, nickel-plated
Width across flats  Cable  10 m, 4-wire, PUR, halogen-free  PUR, halogen-free  Violet  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  Rated impulse voltage  Current loading  13  13  14  15  10  10  10  10  10  10  10  10  10	Seal material	FKM
Cable Jacket material Jacket color Violet Cable diameter Conductor cross section Shielding Bending radius Flexible use Stationary position Drag chain operation Drag chain operation Petrologe, cable Reference voltage Rated impulse voltage Current loading  10 m, 4-wire, PUR, halogen-free Purp Purp Purp Purp Purp Purp Purp Purp	Tightening torque	0.6 Nm
Jacket material  Jacket color  Cable diameter  Conductor cross section  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  PUR, halogen-free  Violet  6.9 mm  0.25 mm² + 1 x drain wire  Shielded  Shielded  Shielded  1.0 x cable diameter > 10 x cable diameter	Width across flats	13
Jacket color Cable diameter Conductor cross section Shielding Bending radius Flexible use Stationary position Drag chain operation Prag chain operation  Bending cycles Nominal voltage, cable Test voltage Reference voltage  48 V AC 60 V DC  Rated impulse voltage Current loading  Violet 6.9 mm  0.25 mm² + 1 x drain wire Shielded  1.0 x cable diameter > 10 x cable diameter > 10 x cable diameter > 1.0 x cable diameter > 1.0 x cable diameter > 1.000,000	Cable	10 m, 4-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 Reference voltage  Rated impulse voltage  Current loading  6.9 mm  0.25 mm² + 0.35 mm² + 1 x drain wire  Shielded  > 10 x cable diameter > 6 x cable diameter > 6 x cable diameter > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 4 x cable diameter  > 10 x cable	Jacket material	PUR, halogen-free
Conductor cross section  Shielding  Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation Position 2,000,000  Nominal voltage, cable  Test voltage, cable  Reference voltage  48 V AC 60 V DC  Rated impulse voltage  1.5 kV  Current loading  O.25 mm² + 1 x drain wire  Shielded  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  Shielded  An example + 1 x drain wire  Shielded  An example + 1 x drain wire	Jacket color	Violet
Shielding  Bending radius  Flexible use Stationary position Drag chain operation Drag chain operation 200 V AC  Test voltage, cable 2,000 V AC  Reference voltage  Rated impulse voltage  Current loading  Shielded  10 x cable diameter  > 10 x cable diameter   > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter    10 x cable diameter    10 x cable diameter	Cable diameter	6.9 mm
Bending radius  Flexible use Stationary position Drag chain operation  Drag chain operation  Sending cycles  Nominal voltage, cable  Test voltage, cable  Reference voltage  48 V AC 60 V DC  Rated impulse voltage  1.5 kV  Current loading  Plexible use Stationary position Stationary posi	Conductor cross section	$0.25 \text{ mm}^2 + 0.35 \text{ mm}^2 + 1 \text{ x drain wire}$
Flexible use Stationary position Drag chain operation  Bending cycles 1,000,000 Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading  > 10 x cable diameter > 6 x cable diameter > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter  > 10 x cable diameter	Shielding	Shielded
Stationary position Drag chain operation  Bending cycles 1,000,000 Nominal voltage, cable Test voltage, cable Reference voltage 48 V AC 60 V DC  Rated impulse voltage 1.5 kV Current loading  > 6 x cable diameter > 10 x cable diameter 1,000,000  4,000  48 V AC 60 V DC  48 V AC 60 V DC	Bending radius	
Drag chain operation > 10 x cable diameter  1,000,000  Nominal voltage, cable 300 V AC  Test voltage, cable 2,000 V AC  Reference voltage 48 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading 4 A	Flexible us	e > 10 x cable diameter
Description	Stationary position	> 6 x cable diameter
Nominal voltage, cable  Test voltage, cable  2,000 V AC  Reference voltage  48 V AC 60 V DC  Rated impulse voltage  1.5 kV  Current loading  300 V AC  2,000 V AC	Drag chain operatio	> 10 x cable diameter
Test voltage, cable  Reference voltage  48 V AC 60 V DC  Rated impulse voltage  1.5 kV  Current loading  4 A	Bending cycles	1,000,000
Reference voltage  48 V AC  60 V DC  Rated impulse voltage  1.5 kV  Current loading  4 A	Nominal voltage, cable	300 V AC
48 V AC 60 V DC  Rated impulse voltage 1.5 kV  Current loading 48 V AC	Test voltage, cable	2,000 V AC
Rated impulse voltage 1.5 kV Current loading 4 A	Reference voltage	
Rated impulse voltage 1.5 kV Current loading 4 A		
Current loading 4 A		
Traversing speed 3 m/s	Current loading	4 A
	Traversing speed	3 m/s

Travelling distance	5 m
Acceleration	≤ 5 m/s²
Signal type	Fieldbus, CANopen, DeviceNet™
Application	Drag chain operation Zones with oils and lubricants
Authorizations	CE UL
UL File No.	E513908
Enclosure rating	IP65 / IP66K / IP67
Ambient operating temperature	
Flexible use	-30 °C +70 °C
Stationary position	-40 °C +80 °C
Drag chain operation	-30 °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 acc. to UL 1581 Section 1090, Section 1100 (FT2) / IEC 60332-1-2

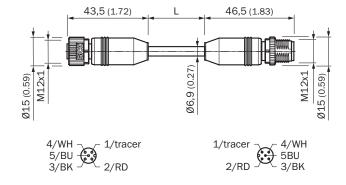
#### Classifications

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

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PLUG CONNECTORS AND CABLES

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



## 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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