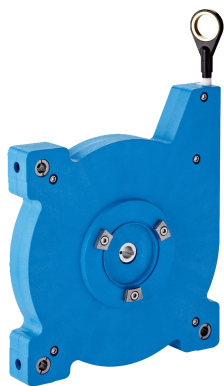


## MRA-G190-110D3

Wire draw mechanism for wire draw encoders

**WIRE DRAW MECHANISM**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
MRA-G190-110D3	5326242

Other models and accessories → [www.sick.com/Wire\\_draw\\_mechanism\\_for\\_wire\\_draw\\_encoders](http://www.sick.com/Wire_draw_mechanism_for_wire_draw_encoders)

### Detailed technical data

#### Features

<b>Description</b>	EcoLine wire draw mechanism for servo flange with 6 mm shaft, measuring range 0 m ... 10 m
<b>Items supplied</b>	Without encoder
<b>Measurement range</b>	0 m 10 m
<b>Reproducibility</b>	≤ 0.2 mm
<b>Linearity</b>	≤ ± 2 mm
<b>Hysteresis</b>	≤ 0.4 mm
<b>Weight</b>	1.9 kg Wire draw mechanism
<b>Weight (measuring wire)</b>	7.1 g/m
<b>Measuring wire material</b>	Highly flexible stranded steel 1,4401 stainless steel V4A
<b>Housing material</b>	Plastic, Noryl
<b>Housing material, wire draw mechanism</b>	Plastic, Noryl
<b>Length of wire pulled out per revolution</b>	555 mm
<b>Actual wire draw length</b>	10.2 m
<b>Spring return force</b>	9 N 12 N <sup>1)</sup>
<b>Measuring wire diameter</b>	0.55 mm
<b>Wire acceleration</b>	8 m/s <sup>2</sup>
<b>Operating speed</b>	3 m/s
<b>Resolution</b>	To calculate the resolution of the system please use following formula: length of wire draw per revolution / steps per revolution = resolution of the combination of wire draw + encoder
<b>Ambient operating temperature</b>	-30 °C +70 °C
<b>Enclosure rating mechanic</b>	IP50
<b>Life of wire draw mechanism</b>	Typ. 1,000,000 cycles <sup>2) 3)</sup>

<sup>1)</sup> These values were measured at an ambient temperature of 25 °C. There may be variations at other temperatures.

<sup>2)</sup> Average values, which depend on the application.

<sup>3)</sup> The service life depends on the type of load. This is influenced by environmental conditions, the installation location, the measuring range in use, the traversing speed, and acceleration.

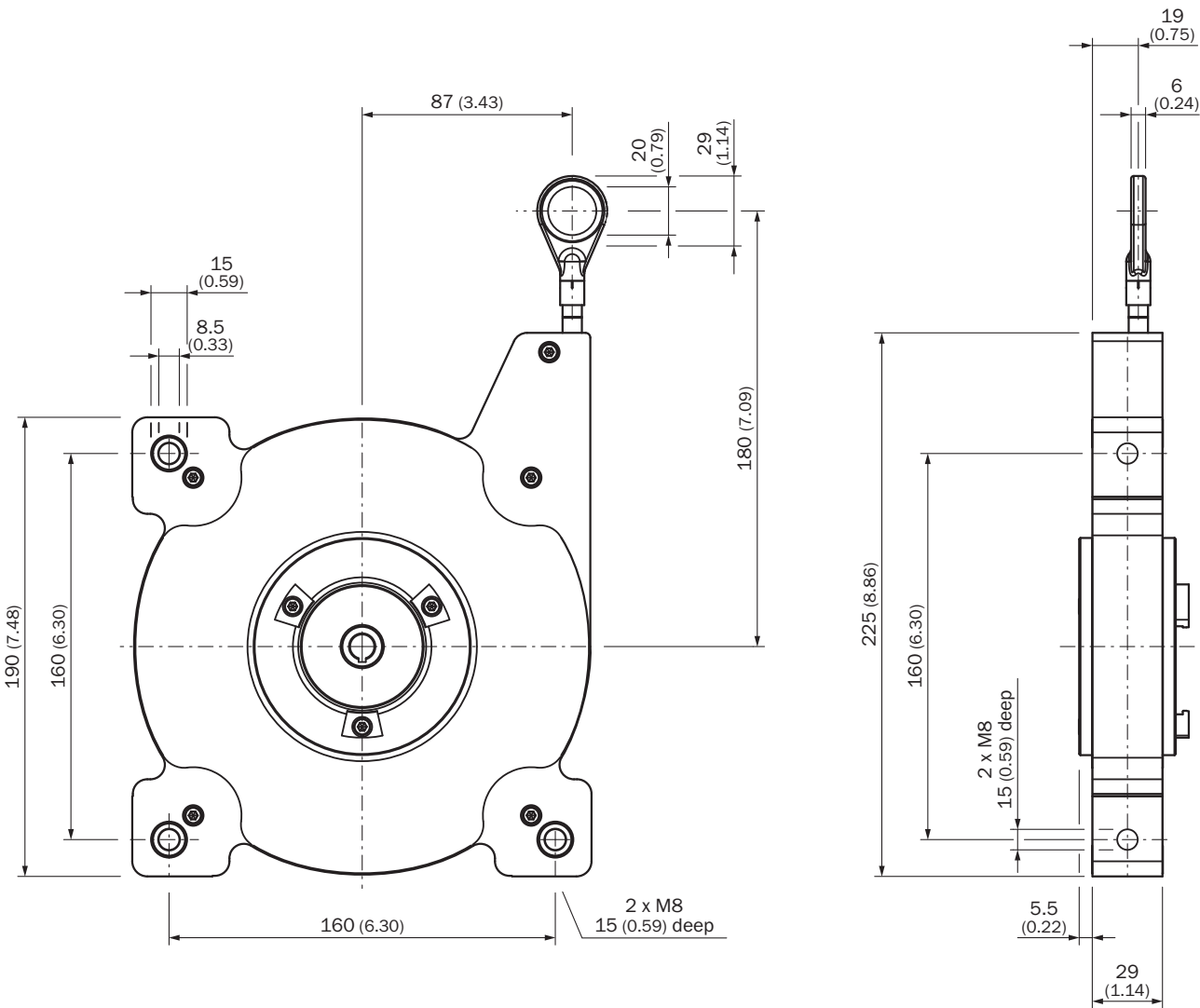
#### Certificates

<b>China RoHS</b>	✓
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Classifications

ECLASS 5.0	27270591
ECLASS 5.1.4	27270591
ECLASS 6.0	27279103
ECLASS 6.2	27279103
ECLASS 7.0	27279103
ECLASS 8.0	27279103
ECLASS 8.1	27279103
ECLASS 9.0	27270591
ECLASS 10.0	27270591
ECLASS 11.0	27270591
ECLASS 12.0	27270591
ETIM 5.0	EC002026
ETIM 6.0	EC002026
ETIM 7.0	EC002026
ETIM 8.0	EC002026
UNSPSC 16.0901	39122221


Dimensional drawing



Dimensions in mm (inch)

Recommended accessories

Other models and accessories → [www.sick.com/Wire\\_draw\\_mechanism\\_for\\_wire\\_draw\\_encoders](http://www.sick.com/Wire_draw_mechanism_for_wire_draw_encoders)

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"><li><b>Description:</b> Joint ball for later insertion in wire end ring with 20 mm diameter. The use of this joint ball enables movement in multiple levels of freedom.</li></ul>	Joint protection for wire rope BTF/PRF/MRA	5318683

## 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](http://www.sick.com)