

GN 139.5

with Integrated Safety Switch

GN 139.6

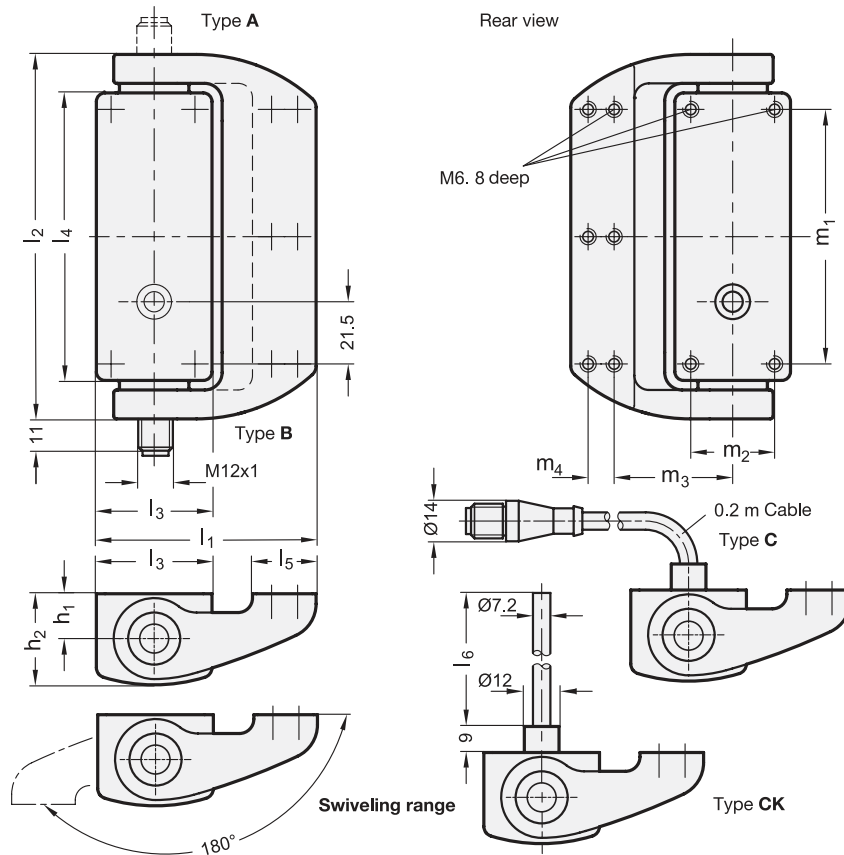
without Switch

Hinges

Stainless Steel



JWWINCO
A Ganter Company



SS Stainless Steel

3 Type

- A Connector plug at the top
- B Connector plug at the bottom
- C Connector plug at the backside (with 0.2 m cable)
- CK Cable at the backside

Metric table

| 1 | 2 | 3 | 4 | Dimensions in: millimeters - inches | | | | | | | | | |
|-------|-------|-------|-------|-------------------------------------|---------------------------------|---|-------|-------|-------|-------|-------|-------|--|
| l_1 | l_2 | l_3 | l_4 | l_5 | l_6 Cable length in meters | | h_1 | h_2 | m_1 | m_2 | m_3 | m_4 | |
| 76 | 126 | 40 | 99.4 | 22 | 2 | 5 | 15.5 | 31.5 | 88 | 29 | 41 | 9 | |
| 2.99 | 4.96 | 1.57 | 3.91 | 0.87 | | | 0.61 | 1.24 | 3.46 | 1.14 | 1.61 | 0.35 | |

Specification

- Body
Stainless steel precision casting AISI 316L
Polished, $R_a < 0.8 \mu\text{m}$
- Pin
Stainless steel AISI 316L
- *Stainless Steel Characteristics* → page 2143
- **RoHS compliant**

Accessory

- Cables with connector coupling → page 1436
8-pole, 5 or 10 meters long:
 - GN 330-M12x1-8-G-5
 - GN 330-M12x1-8-G-10

On request

- Hinges with operating angle $> 0^\circ$
- Hinges with other contact loadings

Information

GN 139.5 hinges with integrated safety switch are designed for monitoring doors and covers of machines and in manufacturing plants. Opening the door will activate the switch contacts which, in turn, will then e.g. interrupt a protective circuit via break contact (NC) and at the same time signal the door opening by closing a normally open contact element (NO). The contact blocks are fitted with positive opening slow-action contacts, i.e. they will definitely be separated when activated and have no hysteresis. The angle at which the switching points are reached are adjustable.

Together with the integrated contact blocks, the hinges are a compact, easy to mount unit with an attractive design. The mounting from the back make the hinge more tamper-proof.

The compact construction combines safety with an attractive design. The hinges are tamper-proof because of the covered mounting from the backside.

GN 139.6 hinges without switch are designed to be used in conjunction with GN 139.5 hinges with integrated safety switch, in applications with larger doors or gates where several hinges are required.

How to order (With integrated safety switch)

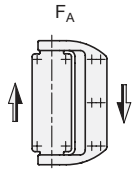
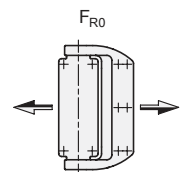

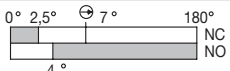
GN 139.5-76-126-CK-5

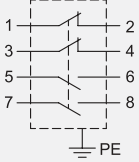
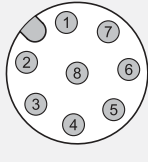
- 1 Width l_1
- 2 Length l_2
- 3 Type
- 4 Cable length l_6

How to order (Without switch)

GN 139.6-76-126

- 1 Width l_1
- 2 Length l_2

| Mechanical features | | | | |
|--|---|---|---|---|
| Maximum load Information with safety factor | Load direction |  |  |  |
| Examples of calculation → see operating instruction | F max. | 2000 N 449.62 lbf | 2000 N 449.62 lbf | 2000 N 449.62 lbf |
| Assembly | From the backside, 10 x thread M6, 8 mm deep | | | |
| Recommended torque | 10 Nm (Screws M6) | | | |
| Protection class | IP67 / IP69K (Mind the cable conduit!) | acc. to EN 60529 | | |
| Switching principle, contact opening | Slow-action contacts, force-fitted, with positive opening | acc. to IEC 60947-5-1 | | |
| Contact material | Silver alloy | | | |
| Operating travel diagram (scheme) | The switching points are adjustable up to 2° in direction of 0°. → see operating instruction |  | | |
| Maximum operating frequency | 600 operating cycles / hour | acc. to IEC 60947-5-1, | | |
| Mechanical life cycle | 10 ⁶ operating cycles | one operating cycle includes one opening and one closing action | | |
| Actuating speed | min. 2° / second, max. 90° / second | | | |

| Electrical features / Safety features | | |
|--|--|---|
| Utilization category | AC 15: 24 V AC / 2A / DC 13: 24 V DC / 2A (connector plug) AC 15: 250 V AC / 3A / DC 13: 250 V DC / 0.3 A (cable) | acc. to EN 60947-5-1 |
| Contact, termination 8-pole connector M12 or 9 wire cable with 2 m or 5 m length |  |  |
| Pin and cable assignment | 1 - black 3 - red 5 - brown 7 - purple PE - yellow-green (only type CK) | 2 - black-white 4 - red-white 6 - blue 8 - purple-white |
| Type of cable | 9x0.34 mm ² , PVC H05VV-F, black | acc. to IEC 60332-1 |
| Short-circuit current | 1000 A | acc. to EN 60947-5-1 |
| Rated insulation voltage | 30 V AC / 36 V DC (connector plug) / 250 V AC (cable) | |
| Short-circuit protection | 2 A, 500 V, Type gG (connector plug) / 3 A, 500 V, Type gG (cable) | |
| Ambient temperature | -13 °F up to +176 °F (- 25 °C up to + 80 °C) | |
| Degree of pollution, external | 3 | acc. to EN 60947-5-1 |
| Safety parameters | B10: 1 000 000, B10 d: 5 000 000, B10 / B10 d: 20% | acc. to EN ISO 13849-1 |

| Approvals, conformities, applicability | | |
|--|---|--|
| Low-voltage switchgear and control-gear CE declaration EAC- and UL-certified |    | EN 60947-1/2007 EN 60947-1-5 : 2004 + A1/2009 |
| Safety applications | until SIL 3 / PL e | acc. to EN ISO 13849-1 |

Other important details and hints are given in the operating instruction for GN 139.5 hinges which are included with every hinge and they are also available as PDF downloads from "www.jwwinco.com" under "Service".

The hinges with integrated safety switch must be mounted and commissioned by qualified technical personnel in compliance with the details given in the operating instructions and with the national / international rules and regulations along with the applicable standards. JW Winco will assume no statutory liability for missing or incorrect information and for any consequences arising therefrom.

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