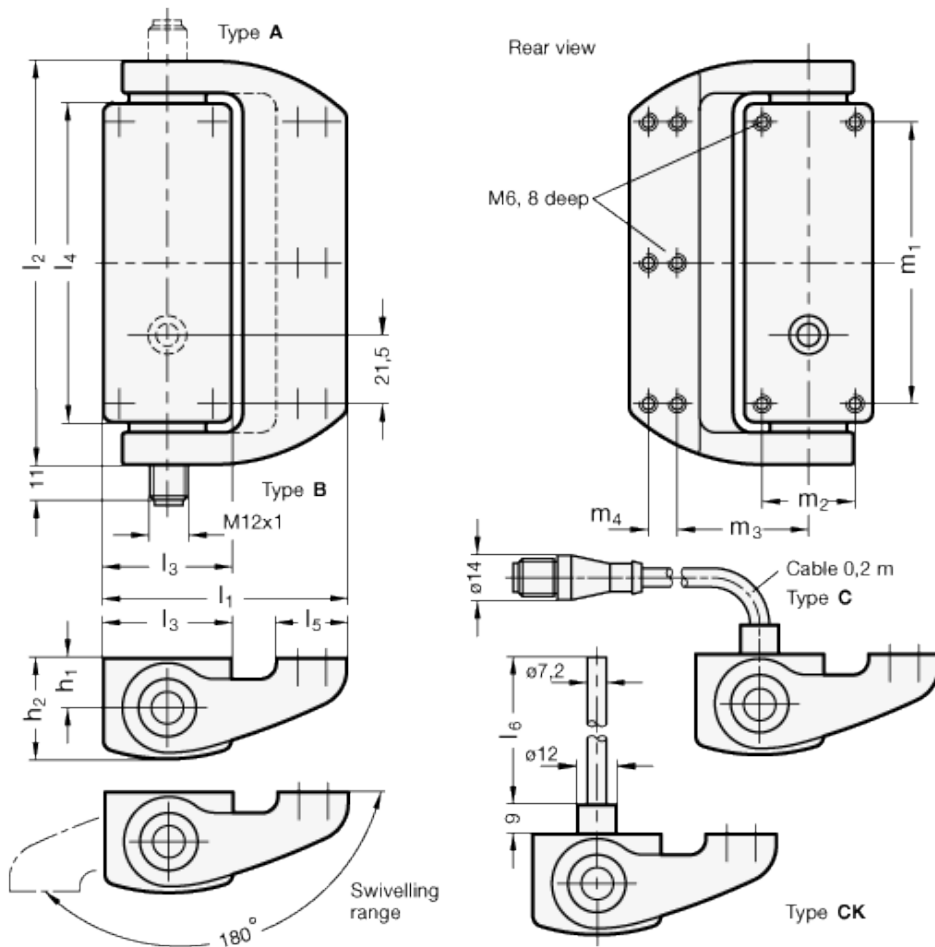


GN 139.5

Hinges with safety switch



INOX
Stainless Steel



technical informations

Specification

Type

- Type A: Connector plug at the top
- Type B: Connector plug from the bottom

- Type C: Connector plug at the back (with 0.2 m cable)
- Type CK: Cable from the back

Stainless Steel precision casting

- AISI 316L
- polished, Ra < 0.8 µm

Pin

Stainless Steel AISI 316L

Information

Hinges GN 139.5 with integrated safety switches have been designed for monitoring doors and covers of machines and 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.

Accessory

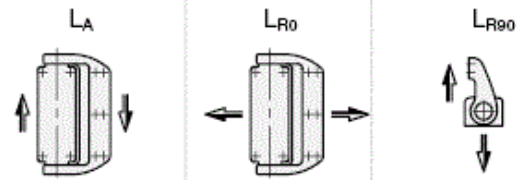
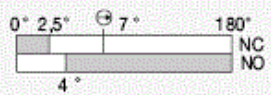
Cable with connector coupling

8-pole, 5 or 10 meter long:

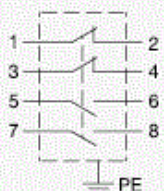
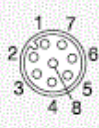
- GN 330-M12x1-8-G-5
- GN 330-M12x1-8-G-10

On request

- Hinges with operating angle > 0°
- Hinges with other contact loadings

| Mechanical features | | |
|--|---|---|
| Maximum load Information with safety factor | Load direction |  |
| Examples of calculation → see operating instruction | F max. | 2000 N 2000 N 2000 N |
| Fixing | from the back, 10 x threads 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, one operating cycle includes one opening and one closing action |
| Mechanical life span | 10 ⁶ operating cycles | |
| Actuating speed | min. 2° / second, max. 90° / second | |

Electrical features / Safety features

| | | |
|---|---|---|
| Utilization category | AC 15: 24 Vac / 2A / DC 13: 24 Vdc / 2A (connector plug) AC 15: 250 Vac / 3A / DC 13: 250 Vdc / 0,3 A (cable) | acc. to EN 60947-5-1 |
| Contacts, termination 8-pole connector M12 or 9 wire cable with 2 m or 5 m length |   | 1 - black 2 - black-white 3 - red 4 - red-white 5 - brown 6 - blue 7 - purple 8 - purple-white PE - yellow-green (only Type CK) |
| Pin and cable assignment | | |
| 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 Vac (cable) | |
| Short-circuit protection | 2 A, 500 V, Typ gG (connector plug) / 3 A, 500 V, Typ gG (cable) | |
| Ambient temperature | - 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 controlgear 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 |

| Standard Elements | Main dimensions | | | | | | | | | | | | | Weight g |
|----------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| | Description | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | l ₆ | h ₁ | h ₂ | m ₁ | m ₂ | m ₃ | m ₄ | |
| GN 139.5-76-126-A | 76 | 126 | 40 | 99.4 | 22 | - | 15.5 | 31.5 | 88 | 29 | 41 | 9 | 867 | |
| GN 139.5-76-126-B | 76 | 126 | 40 | 99.4 | 22 | - | 15.5 | 31.5 | 88 | 29 | 41 | 9 | 870 | |
| GN 139.5-76-126-C | 76 | 126 | 40 | 99.4 | 22 | - | 15.5 | 31.5 | 88 | 29 | 41 | 9 | 897 | |
| GN 139.5-76-126-CK-2 | 76 | 126 | 40 | 99.4 | 22 | 2 | 15.5 | 31.5 | 88 | 29 | 41 | 9 | 1304 | |
| GN 139.5-76-126-CK-5 | 76 | 126 | 40 | 99.4 | 22 | 5 | 15.5 | 31.5 | 88 | 29 | 41 | 9 | 1283 | |



STANDARD MACHINE ELEMENTS WORLDWIDE