

Hinges with Safety Switch

Stainless Steel

SPECIFICATION

Types

- 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

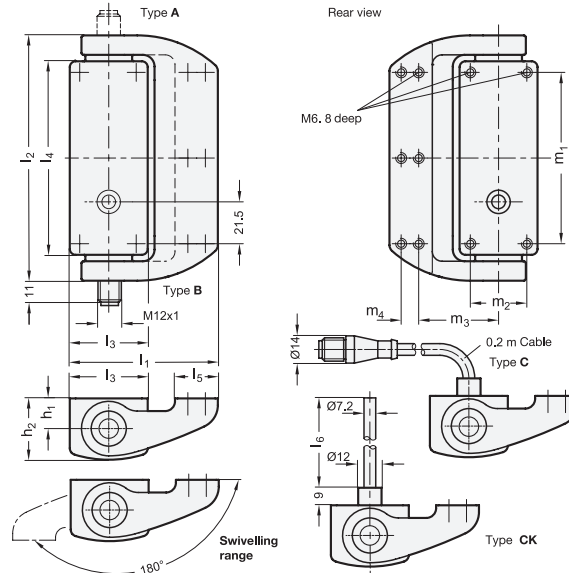
INFORMATION

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. Hinges GN 139.6 (see page 1447) without switching function act as additional hinges, e.g. for larger doors or gates where several hinges are required.

TECHNICAL INFORMATION

- Stainless Steel characteristics (see page A26)
- Load rating information of hinges (see page A40)






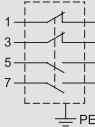

GN 139.5

STAINLESS STEEL

Description	l1	l2	l3	l4	l5	l6	l7	l8	m1	m2	m3	m4	⚖
GN 139.5-76-126-A	76	126	40	99.4	22	-	15.5	31.5	88	29	41	9	1055
GN 139.5-76-126-B	76	126	40	99.4	22	-	15.5	31.5	88	29	41	9	1058
GN 139.5-76-126-C	76	126	40	99.4	22	-	15.5	31.5	88	29	41	9	1100
GN 139.5-76-126-CK-2	76	126	40	99.4	22	2	15.5	31.5	88	29	41	9	1034
GN 139.5-76-126-CK-5	76	126	40	99.4	22	5	15.5	31.5	88	29	41	9	1283



Mechanical features			
Maximum load Information with safety factor	Load direction		
Examples of calculation	F max.	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, K	
Contact material	Silver alloy		
Operating travel diagram (scheme)	The switching points are adjustable up to 2° in direction of 0°.		
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	acc. to IEC 60947-5-1, one operating cycle includes one opening and one closing action	
Actuating speed	min. 2° / second, max. 90° / second	acc. to IEC 60947-5-1, one operating cycle includes one opening and one closing action	

Electrical features / Safety features			
Utilization category	AC 15: 24 Vac / 2A / DC 13: 24 Vdc / 2A (connector plug), AC 15: 250 Vac / 4A / 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 Pin and cable assignment			<ul style="list-style-type: none"> 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)
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	up to 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 which is included with every delivery and which is also available as PDF downloads from „www.lesa-ganter.com“ under „Downloads“.

The hinges with 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 and international rules and regulations and the applicable standards. Eles+Ganter will assume no statutory liability for missing or incorrect information and for any consequences arising therefrom.