GN 139.2 without Switch

Hinges with Safety Switch

Zinc Die Casting

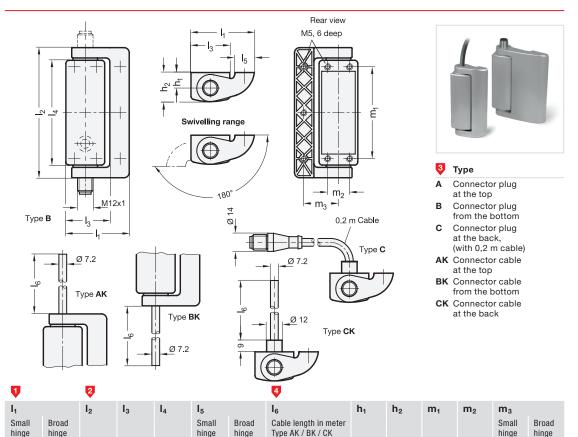


wing

27

wing

50



Specification

wing 49 wing

79

- Zinc die casting Powder coated Silver metallic
- Pin
 Stainless steel AISI 303
- Load Rating Information → Page 2121

101

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81

- Stainless Steel Characteristics → Page 2166
- RoHS

Accessory

- Cable with connector coupling → Page 1412
 8-pin, 5 and/or 10 meter long:
 - GN 330-M12x1-8-G-5
 - GN 330-M12x1-8-G-10
- Mounting plates GN 139.3 / GN 139.4

→ Page 1402

On request

- Hinges with operation angle $> 0^{\circ}$
- · Hinges with other contact terminations

Information

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wing

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wing

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Hinges GN 139.1 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 (see contact travel diagram).

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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 139.2** without switching function act as additional hinges e.g. for larger doors or gates where several hinges are required.

How to order (With switch)

1 | I₁

How to order (With switch)	1 I ₁
	2 12
1 2 3 4	3 Type
GN 139.1-49-101-AK- 5	4 I ₆
How to order (Without switch)	1 1
GN 139.2-79-101	2 12



Mechanical features					
Maximum load Information with safety factor	Load	F _A	F _{R0}	F _{R90}	
	direction	↑	++++	₩ ₩	
Examples of calculation	I ₁ = 49	1500 N	1000 N	1000 N	
→ see operating instruction	I ₁ = 79	750 N	500 N	500 N	
Fixing	from the back, 7 x threads M5, 6 mm deep				
Recommended torque	5 Nm (Screws M5)				
Protection class	IP67 / IP69K (Mind the cable cor	nduit!)	acc. to EN	acc. to EN 60529	
Switching principle, contact opening	Slow-action contact force-fitted, with po		acc. to IEC	60947-5-1, K	
Contact material	Silver alloy				
Operating travel diagram (scheme)	The switching point up to 4° in direction	•	0° 7° ⊕ 1	° 7° ⊕ 11° 180° NC NO 9°	
	see operating instr	ruction	9°		
Maximum operating frequency	600 operating cycle	es / hour	acc. to IEC	acc. to IEC 60947-5-1, one operating cycle includes one opening and one closing action	
Mechanical life span	10 ⁶ operating cycle	s	•		
Actuating speed	min. 2° / second, m	nax. 90° / second	opening an		

Electrical features / Safety features				
Utilization category	AC 15: 24 V AC / 2A / DC 13: 24 V DC / 2A (connect AC 15: 250 V AC / 4A / DC 13: 250 V DC / 0,3 A	. 0,		
Contacts, termination 8-pole connector M12 or cable with 2 m or 5 m length Pin and cable assignment	3 1 - gr 5 1 6 2 8 6 3 - br 7 1 1 8 3 4 5 7 - br	ed 6 - red-white		
Type of cable	Typ N 7x0,5 mm ² , jacket PVC H05VV-F	acc. to IEC 60332-1-2 et seqq.		
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, Typ gG (connector plug) / 6 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		
Mission time (T _M)	20 years	acc. to EN ISO 13849-1		
Number of cycles (B10 d)	5 000 000	acc. to EN 61820-2		

Approvals, Conformities, Applic	ability		
Low-voltage switchgear and controlgear CE declaration IMQ: CA02.03746 UL: E 131787	CE	c UL us	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 139.1 hinges which are included with every hinge and which are also available as PDF downloads from "www.ganternorm.com" under ,Service'.

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. Otto Ganter GmbH & Co. KG will assume no statutory liability for missing or incorrect information and for any consequences arising therefrom.



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