

- 3 Type**
- A** Connector plug at the top
 - B** Connector plug from the bottom
 - C** Connector plug at the backside (with 0.2 m cable)
 - AK** Cable at the top
 - BK** Cable from the bottom
 - CK** Cable from the backside

Metric table

1		2				4								Dimensions in: millimeters - inches				
l_1	Hinge wing small	l_2	Hinge wing broad	l_3		l_4		l_5	Hinge wing small	Hinge wing broad	Cable length in meter	h_1	h_2	m_1	m_2	m_3	Hinge wing small	Hinge wing broad
49		101		30		81		15		30	2	5	12	22.5	71	17	27	50
1.93		3.98		1.18		3.19		0.59		1.18			0.47	0.89	2.80	0.67	1.06	1.97

Specification

- Body
Zinc die-cast
Powder coated
Silver metallic finish
- Pin
Stainless steel
European Standard No. 1.4305 (AISI 303)
- **RoHS compliant**

Accessory

- Cable with connector coupling
8-pole, 5 or 10 meters:
- GN 330-M12x1-8-G-5
- GN 330-M12x1-8-G-10
- GN 139.3 / GN 139.4 mounting plates

On request

- Hinges with operating angle > 0°
- Hinges with other contact load ratings

Information

GN 139.1 hinges with integrated safety switches have been designed for use on monitoring doors and covers of machines and equipment. Opening the door activates the switch contacts. This causes an interruption in a protective circuit via broken contact (NC) and at the same time signals 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 is adjustable.

GN 139.2 hinges without safety switch are identical to GN 139.1 except they lack the connector plug.

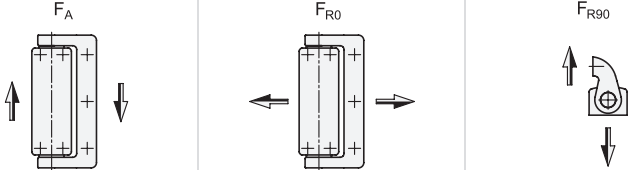
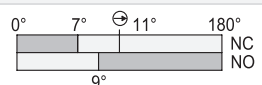
The compact construction combines safety and attractive design. The hinges are tamper-proof because of the covered mounting from the back side.

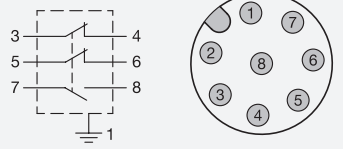
see also...

- *List of Hinge Types*

How to order (With safety switch)		1	Width l_1
		2	Length l_2
		3	Type
		4	Cable length l_6
GN 139.1-49-101-AK-5			

How to order (Without safety switch)		1	Width l_1
		2	Length l_2
GN 139.2-49-101			

Mechanical features									
Maximum load Information with safety factor									
	<table border="1"> <tr> <td>$I_1 = 49$</td> <td>1500 N 337.21 lbf</td> <td>1000 N 224.81 lbf</td> <td>1000 N 224.81 lbf</td> </tr> <tr> <td>$I_1 = 79$</td> <td>750 N 168.61 lbf</td> <td>500 N 112.40 lbf</td> <td>500 N 112.40 lbf</td> </tr> </table>	$I_1 = 49$	1500 N 337.21 lbf	1000 N 224.81 lbf	1000 N 224.81 lbf	$I_1 = 79$	750 N 168.61 lbf	500 N 112.40 lbf	500 N 112.40 lbf
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$I_1 = 79$	750 N 168.61 lbf	500 N 112.40 lbf	500 N 112.40 lbf						
Examples of calculation → see operating instruction									
Fixing	from the back, 7 x threads M5, 6 mm deep								
Recommended torque	5 Nm (Screws M5)								
Protection class	IP67 / IP69K (Mind the cable conduit)								
Switching principle, contact opening	Slow-action contacts force-fitted, with positive opening								
Contact material	Silver alloy								
Operating travel diagram (scheme)	<p>The switching points are adjustable up to 4° in direction of 0°. see operating instruction</p> 								
Maximum operating frequency	600 operating cycles / hour								
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) / acc. to EN 60947-5-1 AC 15: 250 Vac / 4A / DC 13: 250 Vdc / 0,3 A (cable)
Contacts, termination 8-pole connector M12 or cable with 2 m or 5 m length	 <ul style="list-style-type: none"> 1 - green-yellow 3 - black 5 - red 7 - brown 4 - black-white 6 - red-white 8 - blue
Pin and cable assignment	
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 Vac (cable)
Short-circuit protection	2 A, 500 V, Typ gG (connector plug) / 6 A, 500 V, Type 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, Applicability	
Low-voltage switchgear and controlgear CE declaration IMQ: CA02.03746 UL: E 131787	
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.jwwinco.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. JW Winco will assume no statutory liability for missing or incorrect information and for any consequences arising therefrom.