Hinges with safety switch



GN 139.2 without switch





Specification

- Zinc die casting plastic coated
- silver metallic • Pin
- Stainless Steel German Material No. 1.4305
- RoHS compliant

Accessories

- Cable with connection coupling
 - 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

On request

• Hinge with operation angle > 0°

Information

The hinges with safety switch GN 139.1 have been designed for the position monitoring of pivoted protective safety equipment, e.g. protection covers.

The switching element is fully integrated in the mechanical hinge and invisible from the outside. Hinges with and without safety switch are identical except the connector plug. In addition, the covered bolts at the rear make the hinge tamper-proof.

The compact construction combines safety and attractive design.

The version with broad hinge wing has been designed for mounting against glass or polycarbonate doors.

Hinge with safety switch	1	l ₁
GN 139.1-49-101-A	2	l ₂
	3	Туре
Hinge without safety switch GN 139.2-79-101	1	h
	-	·1
	2	l ₂



Continuation of GN 139.1 / 139.2 Hinges with safety switch

Technical information			
Switch type	Interlocking mechanism without tension pickup acc. to EN 1088		
Actuator, internal	Safety switch encapsulated in hinge		
Max. load	GN 139.1 / GN 139.2 I ₁ = 49 I ₁ = 79		
	$1000 \text{ N} \qquad 500 \text{ N} \qquad 12 \text{ Nm} \qquad 500 \text{ N} \qquad 12 \text{ Nm} \qquad 1300 \text{ N} \qquad 750 \text{ N} \qquad 75$		
Actuating velocity	min. 2°/second, max. 90°/second		
Operating angle for forced separation (after switching point 0°)	The switching point is adjustable $0^{\circ} 3^{\circ} \xrightarrow{\bigcirc} 7^{\circ} 180^{\circ}$ within +4°.		
	→ see operating instruction 5°		
Mechanical life acc. to IEC 60947-5-1	10 ⁶ operating cycles		
Operating frequency acc. IEC 60947-5-1	max. 720 / hour		
Useful life (T _M) acc. to EN ISO 13849-1	20 years		
Number of cycles until hazardous failure (B10 d) acc. to EN 61820-2	5 000 000		
Utilisation category acc. to EN 60947-5-1	AC 15 / DC 13: Ue 24 V, le 2 A		
Protection class	IP 67 (plug) / IP69K (cable)		
Contact material	Silver alloy, solid		
Contact complement	8-pin plug 2x NC (Normally closed) 1 4 - black-white 1 5 - red 1 6 - red-white 1 x NO (Normally open) 1 x NO (Normally open) 1 x - brown 1 - 1 - brown 1 - bro		
Switching principle	Slow-action contact		
Contact opening	Force-locking, forced		
Design isolation voltage	30 V AC, 36 V DC		
Conventional technical current	max. 2 A		
Short-circuit protection acc. to IEC 60269-1	2 A, 500 V, Type gG		
Ambient temperature	- 25 °C bis + 80 °C		
Degree of polution external acc. to EN 60947-5-1	3		





Conformity with international directives

The GN 139.1 / GN 139.2 hinges with safety switch comply with the following international directives:	BG-GS-ET-15
	CEI 17-45
	CEI 44-5
	CEI 70-1
	CEI EN 60947-5-1
	EN 1088
	EN 60204-1
	EN 60529
	EN 60947-5-1
	EN ISO 12100-1
	EN ISO 12100-2
	IEC 204-1
	IEC 337-1
	IEC 529
	IEC 947-5-1
	NFC 63-140
	VDE 0113
	VDE 0660-200

Special features

Double safety function with 2 contact switches

High load-bearing capacity owing to robust zinc die cast design

Load ratings: 1500 Nm (axial) 1000 Nm (radial) 25 Nm (torsion)

GN 139.2 hinges without switch in the same design for uniform appearance

Switching angle adjustment

Encapsulated inside actuator guarantees the proper function also under difficult conditions

Tamper-proof owing to bolting from the rear

Protection class IP 67 (plug) IP 69K (cable)

More important details and notices are found in the operating instructions for the hinges GN 139.1 and GN 139.2. They are included with every hinge and can also be downloaded as PDF under "www.ganter-griff.com" at ,Service'.