Safety applications



3.1

Mechanical features						
Maximum load			F _A	F _{R0}	F _{R90}	
Information without safety factor		Load direction			→	
Examples of calculation		GN 239.6	2100 N	2800 N	1300 N	
→ see operating instruction		GN 239.7	4500 N	7600 N	5800 N	
Fixing		from the front, with contersunk screws or socket cap screws, e.g. DIN 7991 / DIN 912 from the back, with hexagon head screws or nuts, e.g. DIN 933 / DIN 934				
Recommended torque		5 Nm (Screws and nuts M6)				
Protection class		IP67 ad		acc. to I	acc. to EN 60529	
Switching principle, contact opening		force-fitted, with positive opening			EC 60947-5-1, K	
Contact material Silver alloy Ag 999						
Operating travel diagram (scheme)		The switching points are adjustable up to 4° in direction of 0°. see operating instruction		0° 5°	→ 11° 180° NC NO	
Maximum operating frequency		600 operating cycles / hour			EC 60947-5-1,	
Mechanical life span		is speraming system			rating cycle includes one	
Actuating speed		min. 2° / second, max. 90° / second oper			and one closing action	
Electrical features						
Utilization category	acc. to IMQ	DC 13: 24 V DC / 2 A (connector plug) AC 15: 400 V AC / 4 A / DC 13: 250 V AC / 0,3 A (cable)			acc. to EN 60947-5-1 acc. to EN 60947-5-2	
	acc. to UL	Plug - C 300 / Q 300: AC / DC Control signals 24 V / 2 A electrical circuit cat. 2 Cable - C 300: 240 V AC / 0,75 A / Q 300: 250 V DC / 0,27 A / therm. current 2,5 A				
Contact termination 8-pole connector M12 or cable with 2 m or 5 m length Pin and cable assignment		1	1 Identification no. 2 1 2 3 4 5 6 7 8	(1) (7) (8) (6) (3) (4) (5)	1 - red 2 - pink 3 - brown 4 - gray 5 - yellow 6 - blue 7 - green 8 - white	
Type of cable		UL/CSA STYLE 2587 8X AWG 22				
Short-circuit current		1000 A			acc. to IQM	
Rated insulation voltage		30 V AC/DC (connector plug) and 400 AC (cable)				
Short-circuit protection		4 A, 500 V, Type gG				
Ambient temperature		- 20 °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)		2 000 000 acc. to EN 61820-2				
Approvals, Conformities, Applicability						
Low-voltage switchgear and controlge CE declaration IMQ: CA02.04800 UL: E 360222			E D : ULISTE) us	EN 60947-1/2007 EN 60947-1-5 : 2004 + A1/2009	

Other important details and hints are given in the operating instructions for GN 239.6 hinges which are included with every hinge and which are also available as PDF downloads from "www.ganternorm.com" under ,Service'.

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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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nach EN ISO 13849-1