

- 3 Identification**
- SH** Bores for countersunk screw, without switch
 - SL** Bores for countersunk screw, switch left
 - SR** Bores for countersunk screw, switch right
- 4 Type**
- AS** Connector plug at the top
 - CS** Connector plug at the backside
 - AK** Cable at the top
 - CK** Cable at the backside

Metric table

1		2		5 Dimensions in: millimeters - inches										
l_1	l_2			h_1	h_2	h_3	h_4	l_3	l_4	l_5	l_6 Cable length in meters		m_1	m_2
	EN 239.4	EN 239.3									Type AK / Type CK			
70 2.76	53 2.09	60 2.36		16 0.63	8 0.31	16 0.63	14.5 0.57	110 4.33	51.5 2.03	22.5 0.89	2 5		45 1.77	34 1.34

Specification

- Body
Plastic
Technopolymer (Polyamide PA-HP)
- Glass fiber reinforced
- Black, matte finish
- Temperature resistant up to 176 °F (80 °C)
- Pin
Stainless steel AISI 303
- IP Protection Classes → page 2130
- Plastic Characteristics → page 2135
- Stainless Steel Characteristics → page 2143
- RoHS compliant

Accessory

- Cables with connector coupling → page 1436
4-pole, 5 or 10 meters long:
- GN 330-M12x1-4-G-5
- GN 330-M12x1-4-G-10

On request

- Hinges with operation angle > 0°

Information

EN 239.4 hinges with integrated switch are designed for monitoring guard doors and covers of machines and production equipment. Opening the door activates the switch contacts, which then interrupts a protective circuit via a break contact (NC) and at the same time signal the door opening by closing a make-contact element (NO).

The integrated switch design, which features an ultrasonically-welded enclosure, makes these hinges compact, tamper-proof and easy to mount.

EN 239.3 hinges without switch are designed to be used in conjunction with EN 239.4 hinges with integrated switch, in applications with larger doors or gates where several hinges are required.

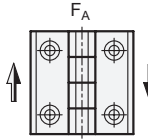
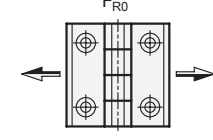
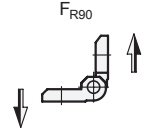
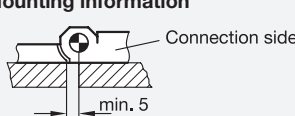
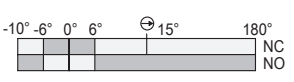
An operating instruction with important technical information is included with every hinge.

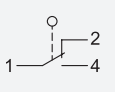
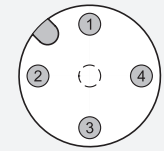
see also...

- List of Hinge Types → page 1324
- Product Family Standard Parts for Profile Systems → page 18

<p>How to order (With integrated switch)</p> <p>1 2 3 4 5</p> <p>EN 239.4-70-53-SL-AK-5</p>	1	Width l_1
	2	Length l_2
	3	Identification
	4	Type
	5	Cable length l_6

<p>How to order (Without switch)</p> <p>1 2 3</p> <p>EN 239.3-70-60-SH</p>	1	Width l_1
	2	Length l_2
	3	Identification

Mechanical features		
Maximum load Information without safety factor Examples of calculation → see operating instruction	Load direction	
	F max.	2100 N 472.10 lbf
		
		2800 N 629.47 lbf
		
		1300 N 292.25 lbf
Assembly	Types SH, SL und SR with countersunk for countersunk screws e.g. DIN 7991	
	Mounting information 	
Recommended torque	5 Nm (Screws M6)	
Protection class	IP67	acc. to EN 60529
Switching principle, contact opening	Changeover contact, with positive opening	acc. to IEC 60947-5-1
Contact material	Silver alloy Ag 90 Ni 10	
Operating travel diagram (scheme)	The switching points are fix at 6°. By reaching the lifespan, it can rise up to 9°. → see operating instruction 	
Maximum operating frequency	1200 / hour	
Mechanical life span	10 ⁶ operating cycles	acc. to IEC 60947-5-1
Actuating speed	min. 2° / second, max. 90° / second	

Electrical and safety features		
Utilization category	DC 13: 24 V DC / 4 A or 127 V DC / 0.3 A AC 15: 220 V AC / 4 A or 440 V AC / 3 A	acc. to EN 60947-5-2 acc. to EN 60947-5-1
Contact termination 4-pole plug M12 or cable with 2 m or 5 m length Pin and cable assignment	 	1 - blue 2 - gray 3 - black 4 - black
Type of cable	UL/CSA STYLE 2587 3X AWG 22	
Short-circuit current	1000 A	
Rated insulation voltage	250 V	
Short-circuit protection	6 A, 500 V, Type gl	
Ambient temperature	-4 °F to +176 °F (-20 °C to 80 °C)	
Degree of pollution, external	3	
Mission time (T_M)	20 years	
Number of cycles (B10 d)	2 000 000	

Approvals, conformities		
Low-voltage switchgear and controlgear		EN 60947-1-5 : 2003 + A1/2009
CE declaration		

Other important details and hints are given in the operating instructions for EN 239.4 hinges which are included with every hinge and they are also available as PDF downloads from "www.jwwinco.com" under "Service".

The hinges with integrated switch must be mounted and commissioned by qualified technical personnel in compliance with the details given in the operating instructions and with the national / international rules and regulations along with the applicable standards. JW Winco will assume no statutory liability for missing or incorrect information and for any consequences arising therefrom.

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