

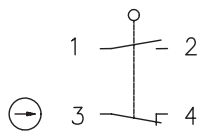
Metal bodied limit switch

Series MN78

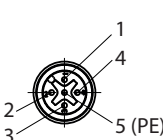
Description **MN78-S11 AHK 04**

Article number **6087000129**

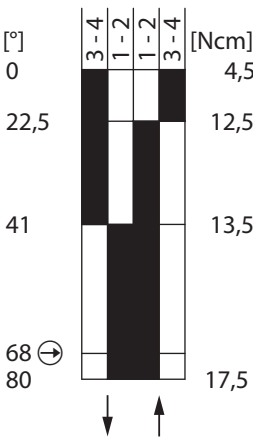
Operating symbol



Plug



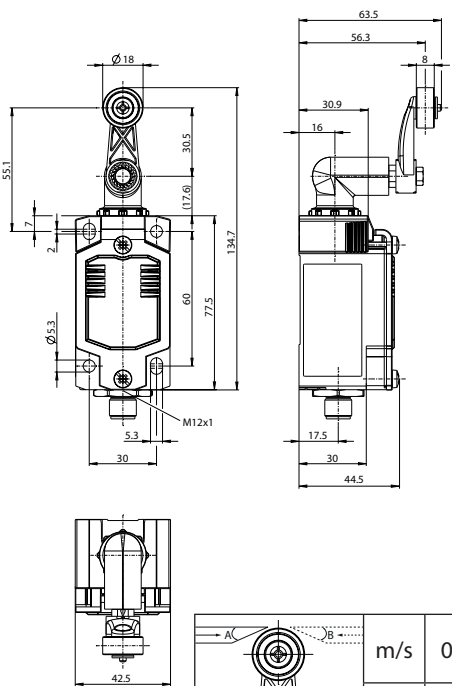
Operating diagram



ON

OFF

Tolerance:
Operating point $\pm 4,5^\circ$
Direct opening action $+ 4,5^\circ$
Operating torque $\pm 20\%$



m/s	0,1	0,5	1	2	5
A	45°	45°	45°	40°	30°
B	45°	45°	45°	40°	30°

Electrical Data		
Rated insulation voltage	U_i	63 V
Rated impulse withstand voltage	U_{imp}	4 kV
Rated operational voltage	U_e	60 V AC / 24 V DC
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conv. thermal current	I_{the}	3 A
Minimum current		1 mA
Utilization category		AC 15, U_e/I_e 60 V / 3 A; DC 13, U_e/I_e 24 V / 1,5 A
Direct opening action	$\ominus$	acc. IEC/EN 60947-5-1, annex K
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Protection class		I

Mechanical data		
Enclosure		Die-cast aluminium
Cover		Sheet aluminium
Actuator		Metal lever with plastic roller / lever in 15 ° increments adjustable
Operating temperature		-30 °C ... +75 °C
Storage temperature		-40 °C ... +80 °C
Protection type		IP66 / IP67 acc. EN 60529, Type 4X
Pollution degree (built-in switch)		3
Contact material		silver
Device Class (built-in switch)		Category E (MC3+CC2+SC1) acc. EN 60947-1 annex Q
Contact type		1 N.C. (Form Zb), 1 N.O.
Bounce duration	ms	< 3 ms
Switchover time	ms	< 8 ms
Switching frequency		≤ 60 / min.
Mechanical life		15 x 10 ⁶ operating cycles
Mission time		≤ 20 years
Connection		Plug M12x1, 5-pole, A-coded
Earth bolt		1 x M3,5
Weight		≈ 0,25 kg
Installation position		operator definable

Actuation	
The actuating device is preferably started from 2 sides.	
The actuation assembly can be rotated in 45° increments such that 16 actuation directions are possible.	

ID for safety engineering	
B10d N.C.	20 x 10 ⁶ cycles
B10d N.O.	1 x 10 ⁶ cycles

Standards	
	DIN EN 60947-5-1
	UL 508 / CSA C22.2 No.14
	DIN EN ISO 13849-1
	DIN EN ISO 13849-2

EU Conformity	
	acc. to directive 2014/35/EU (Low-Voltage-Directive)

Approvals	
	CCC
	cUL _{US}

Notes	
The degree of protection specified (IP code) applies only to a properly closed cover and the use of an equivalent connector. The connector and the cable (fix or flexible mounted) must at least be suitable for the described ambient air temperatures. The connector must not be connected or disconnected when voltage is applied.	