

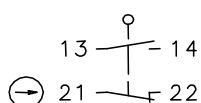
Plastic bodied limit switch

Series IN65

Description **IN65-SU1Z HK**

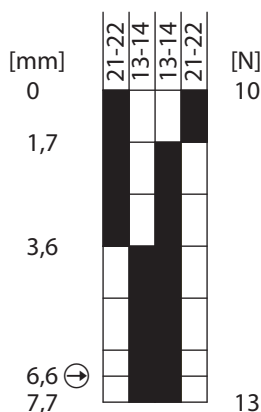
Article number **6083000221**

Operating symbol



Fixed positioning with
e.g. fixing screw M5
according to the standard
DIN EN ISO 4762.

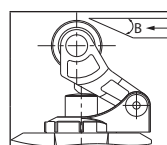
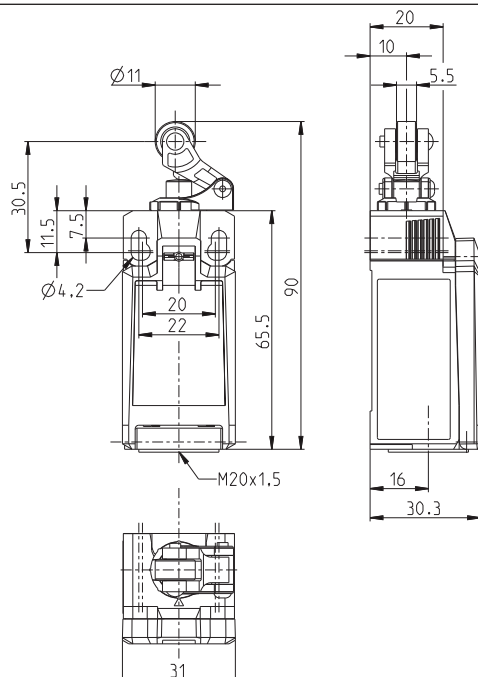
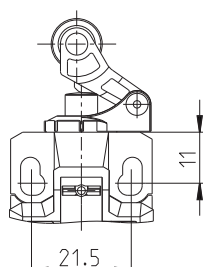
Operating diagram



ON

OFF

Tolerance:
Operating point $\pm 0,30$ mm;
Direct opening action $+ 0,30$ mm
Operating force ± 10 %



m/s	0,1	0,5	1	2	5
A	-	-	-	-	-
B	40°	40°	30°	20°	10°

Electrical Data

Rated insulation voltage	U_i	400 V AC
Rated impulse withstand voltage	U_{imp}	4 kV
Rated operational voltage	U_e	240 V
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conv. thermal current	I_{the}	5 A
Minimum current		1 mA
Reliability		1 Mio. acc. EN 60947-5-4 @ 24 V DC, 10 mA, 1 mA, U_{kd} 2,4 V DC
Utilization category		AC 15, U_e/I_e 240 V / 1,5 A DC 13, U_e/I_e 24 V / 1,5 A (B300/Q300 table A.1)
Direct opening action		acc. IEC/EN 60947-5-1, annex K; direct opening force: 23 N
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Max. contact resistance		25 mOhm (unused)
Electrical life		tbd

Mechanical data		
Enclosure		Thermoplastic, glass fibre reinforced (UL 94-V0)
Cover		Thermoplastic, glass fibre reinforced (UL 94-V0)
Actuator		Lever with roller (Thermoplastic)
Actuating force	F_B	$10\text{ N} \leq F_B \leq 30\text{ N}$
Operating temperature		$-30\text{ °C} \dots +75\text{ °C}$
Storage temperature		$-40\text{ °C} \dots +80\text{ °C}$
Protection type		IP66 / IP67 acc. EN 60529
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.
Operating rate	V	$0,06\text{ m/min} \leq V \leq 30\text{ m/min}$
Bounce duration	ms	$< 3\text{ ms}$
Switchover time	ms	$< 8\text{ ms}$
Switching frequency		$\leq 100 / \text{min.}$
Mechanical life		10×10^6 operating cycles
Mission time		≤ 20 years
Connection		4 screw connections (M3)
Conductor cross-sections		Solid or Litz wire with ferrules $0,34\text{ mm}^2 - 1,5\text{ mm}^2$; AWG 22-16
Cable entrance		1 x M20 x1,5
Weight		$\approx 0,08\text{ kg}$
Installation position		operator definable

Actuation	
The actuating device is preferably started from 1 side. By lifting the clamp the actuation assembly can be rotated in 45° increments such that 8 actuation directions are possible. The actuation assembly is to be again fastened to the housing by lowering the clamp.	

ID for safety engineering	
B10d N.C.	20×10^6 cycles Tbd (check acc. to DIN EN 60947-5-1)
B10d N.O.	aim: 1×10^6 cycles (Tbd contact with reduced power for consumers with resistive load)

Standards	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	VDE 0660 T211, DIN EN 60947-5-4, IEC 60947-5-4
	DIN EN ISO 13849-1
	DIN EN ISO 13849-2
	UL 508

EU Conformity	
	acc. to directive 2014/35/EU

Approvals

DGUV (in preparation)

CCC (in preparation)

cUL_{US} B300/Q300 (in preparation)**Notes**

The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.