

IN62, IN65 and I81



Recommended use

Thanks to its standard dimensions as well as its wide range of contacts and actuators, these switches can be used on safety facilities and for position monitoring in virtually any industrial application.

Product advantages

- Standard switch conforming to DIN EN 50047
- Standard actuator conforming to DIN EN 50047 (see page 16)
- Protection class IP66 and IP67 to VDE 0470 T1
- Enclosure and cover self-extinguishing (UL-94-V0)
- Actuator can be repositioned by 8 x 45°
- Tool-free rotation and changing of actuator
- Connection designation conforming to DIN EN 50013
- Metal Actuator
- Metal fixing plate
- High reliability at low currents (1 mA)

Options

- Available with M12 connector
- Cable entry M16 x 1.5

Design layout

- Slow-action and snap-action contacts
- Versions: 1 NC / 1 NO, 2 NC, 2 NO, overlapping contacts
- All NC contacts with $\ominus$ in the circuit diagram are positively opening contacts
- Type: Zb (galvanically isolated changeover contact)

Mounting

- Two M4 screws (distance between centres 22 mm), adjustment with slots
- Two M5 screws for safety applications without additional fixing element (Fig. 1)
- Additionally secured by guide plate for lateral approach forces (Fig. 2 and page 71)
- Front mounting (depending on type, Fig. 3)

Installation advantages

- Snap-on cover can be released with screwdriver
- Cover opening range 135° (cover can also be detached from hinge)
- Cover protects switching element during installation
- Screw connections with self-lifting clamping plates
- Easy-action cover lock (close and press)

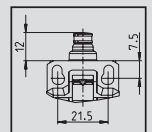


Fig. 1

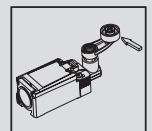


Fig. 2

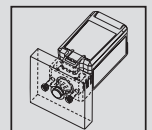


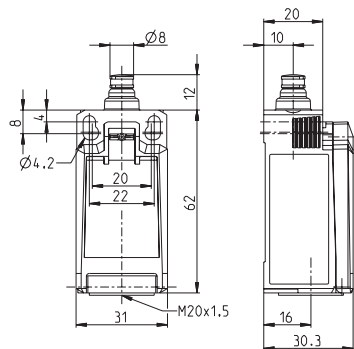
Fig. 3

Technical data

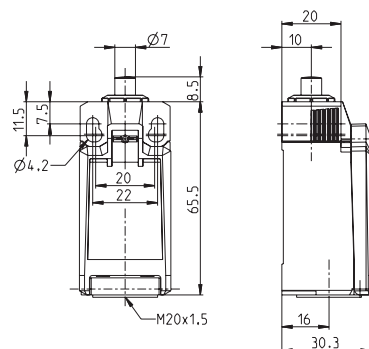
Electrical data	
Rated insulation voltage	U _i max. 400 V AC
Conventional thermal current (up to)	I _{the} 5 A
Rated operating voltage	U _e max. 240 V AC / 24 V DC
Utilisation category (up to)	AC-15, U _e /I _e 240 V/1.5 A DC-13 U _e /I _e 24 V/1.5 A (B300 Table A.1)
Short-circuit protection (up to)	Fuse 4 A gG
Protection class	II, Insulated
Mechanical data	
Enclosure material	Thermoplastic, glass fibre-reinforced (UL 94-V0)
Ambient temperature	-30 °C to +75 °C
Mechanical service life (up to)	30 x 10 ⁶ switching cycles
B10d (NC contact) cycles (up to)	30 Mio.
B10d (NO contact) cycles (up to)	1 Mio.
Switching frequency	≤ 60/min.
Type of connection	4 Screw connections (M3)
Conductor cross sections	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²
Cable entry	1 x M20 x 1.5
Standards	
VDE 0660 T211, DIN EN 60947-5-4, IEC 60947-5-4 DIN EN ISO 13849-1, DIN EN ISO 13849-2	

IN62, IN65

IN62 (Form B)



IN65-... SM (Form B)



Switching operation

1 NC / 1 NO contact

Slow-action

Snap-action

6083000201
IN62-U1Z SK

6083000200
IN62-SU1Z SK

Slow-action

Snap-action

6083000208
IN65-U1Z SM

6083000207
IN65-SU1Z SM

2 NC contacts

6083000203
IN62-A2Z SK

6083000202
IN62-SA2Z SK

6083000210
IN65-A2Z SM

6083000209
IN65-SA2Z SM

2 NO contacts

6083000205
IN62-E2 SK

6083000204
IN62-SE2 SK

6083000212
IN65-E2 SM

6083000211
IN65-SE2 SM

1 NC / 1 NO contact
Overlapping

6083000206
IN62-UV1Z SK

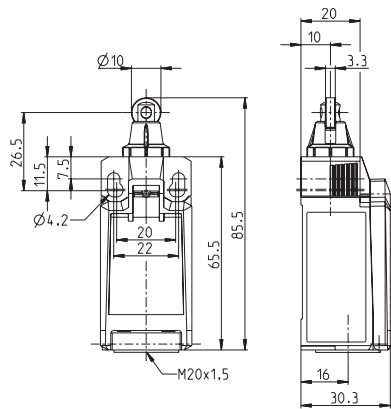
6083000213
IN65-UV1Z SM

Approvals

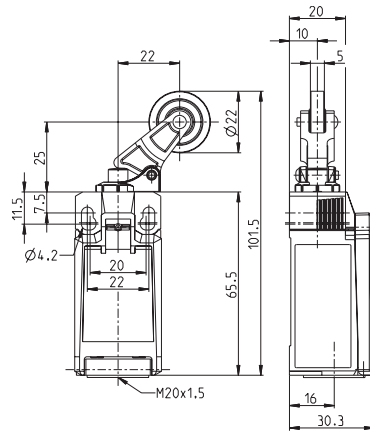


Replacement actuator: 3918052341

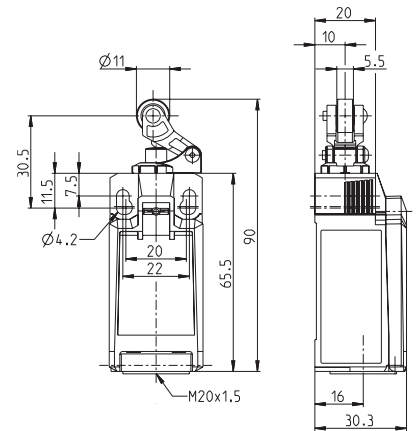
IN65-... RK (Form C)



IN65-... KNK

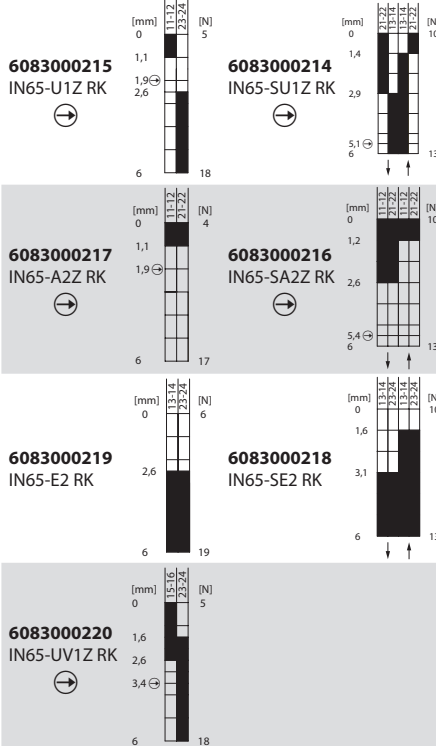


IN65-... HK (Form E)



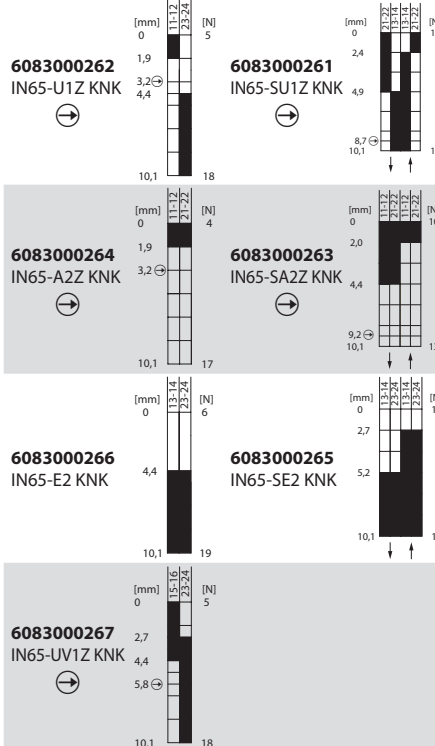
Slow-action

Snap-action



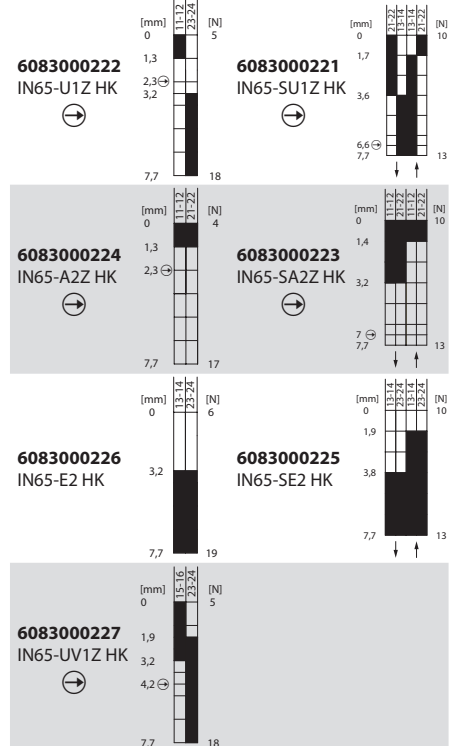
Slow-action

Snap-action



Slow-action

Snap-action



Replacement actuator: 3918172342

Replacement actuator: 3918262349

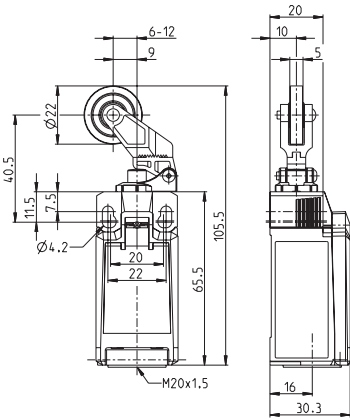
Replacement actuator: 3918202343

IN65

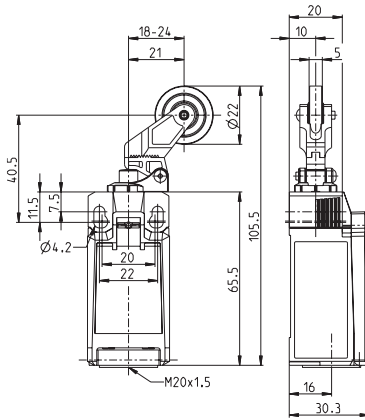
IN65-... AHK (Form A)		IN65-... AVK
Switching operation		
Slow-action	Snap-action	
1 NC / 1 NO contact		
6083000236 IN65-U1Z AHK	6083000235 IN65-SU1Z AHK	6083000284 IN65-U1 AVK
2 NC contacts		
6083000238 IN65-A2Z AHK	6083000237 IN65-SA2Z AHK	6083000279 IN65-A2 AVK
2 NO contacts		
6083000240 IN65-E2 AHK	6083000239 IN65-SE2 AHK	6083000287 IN65-E2 AVK
1 NC / 1 NO contact Overlapping		
6083000241 IN65-UV1Z AHK		6083000285 IN65-UV1 AVK
Approvals		

Replacement actuator: 3918352345

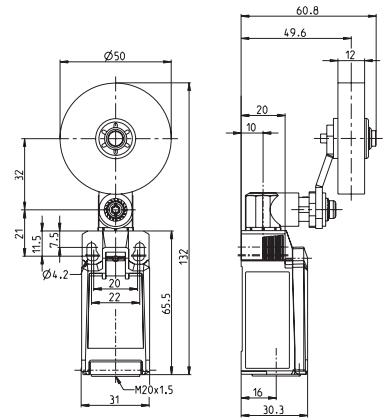
IN65-... DGHK



IN65-... DGKK

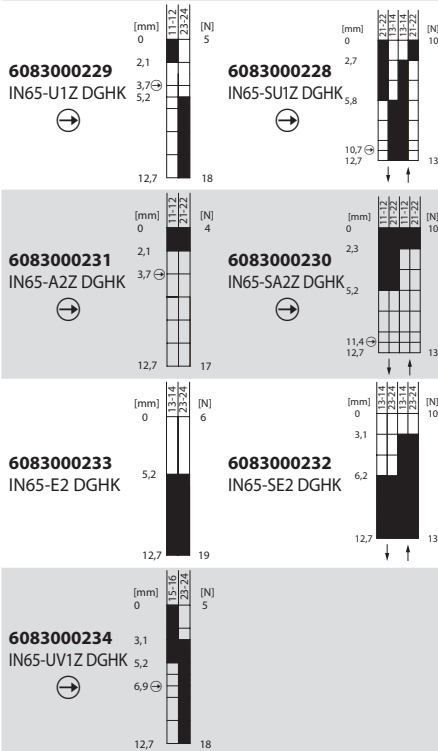


IN65-... AHSKU RO50



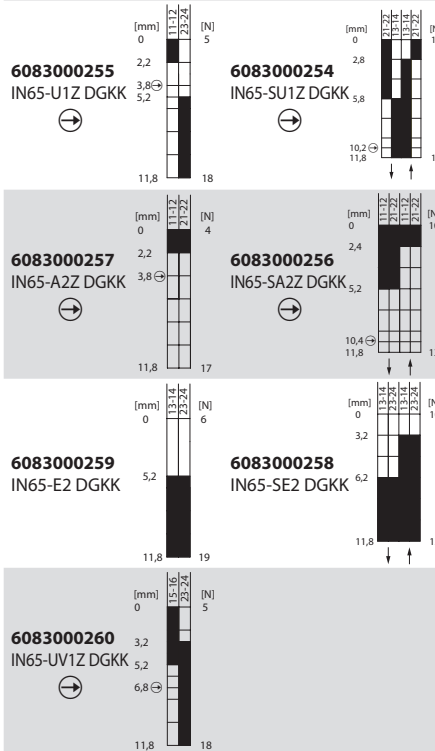
Slow-action

Snap-action



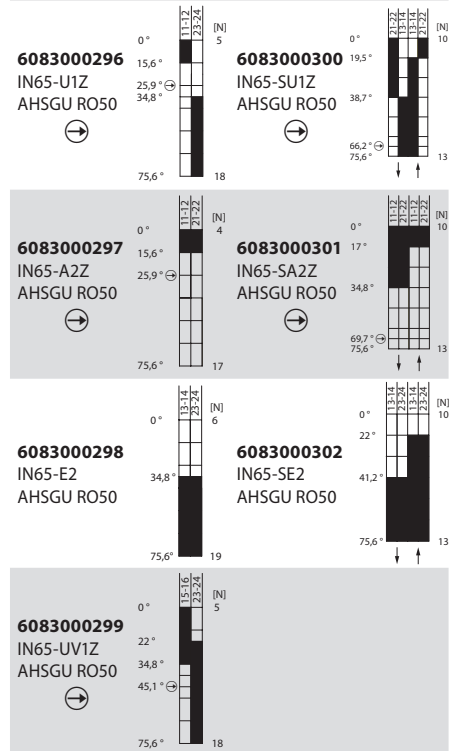
Slow-action

Snap-action



Slow-action

Snap-action



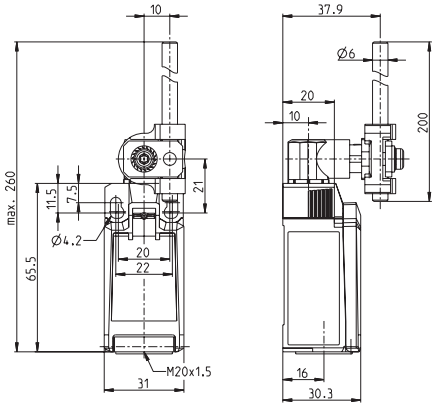
Replacement actuator: 3918202344

Replacement actuator: 3918202348

Replacement actuator: 3918352359

IN65

IN65-... AHDM



Switching operation

1 NC / 1 NO contact

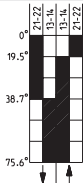
Slow-action

6083000303
IN65-U1 AHDM



Snap-action

6083000307
IN65-SU1 AHDM



2 NC contacts

6083000304
IN65-A2 AHDM



6083000308
IN65-SA2 AHDM

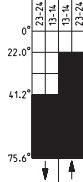


2 NO contacts

6083000305
IN65-E2 AHDM



6083000309
IN65-SE2 AHDM



1 NC / 1 NO contact
Overlapping

6083000306
IN65-UV1 AHDM



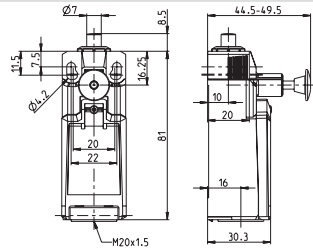
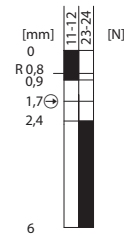
Approvals



I81 Actuator

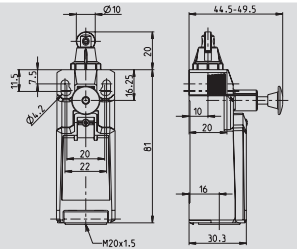
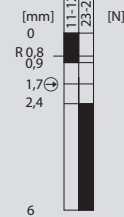
1 NC / 1 NO contact – Slow-action

I81-... SM


6083000242
 I81-U1Z SM


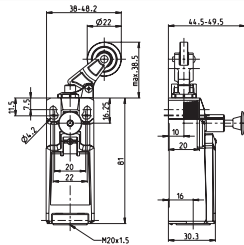
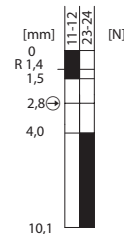
Replacement actuator: 3918052341

I81-... RK


6083000243
 I81-U1Z RK


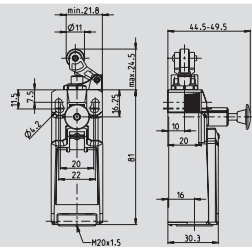
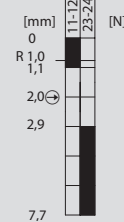
Replacement actuator: 3918172342

I81-... KNK


6083000269
 I81-U1Z KNK


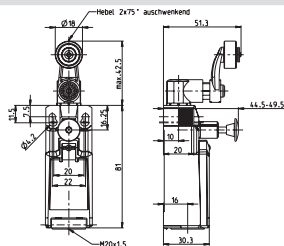
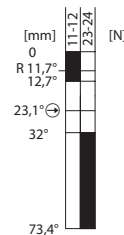
Replacement actuator: 3918262349

I81-... HK


6083000244
 I81-U1Z HK


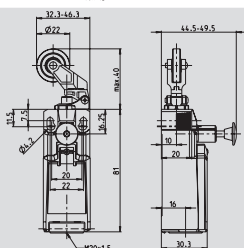
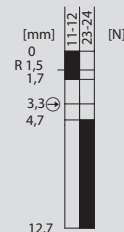
Replacement actuator: 3918202343

I81-... AHK


6083000246
 I81-U1Z AHK


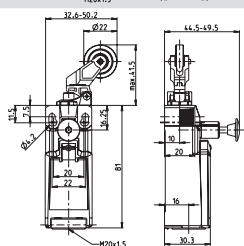
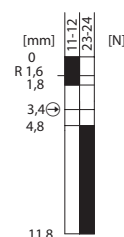
Replacement actuator: 3918352345

I81-... DGHK


6083000245
 I81-U1Z DGHK


Replacement actuator: 3918202344

I81-... DGKK


6083000268
 I81-U1Z DGKK


Replacement actuator: 3918202348

Approvals



R = Locking function