

Description

Definition

Limit switches are also dealt under position switches or limit switches. However, behind all these terms hides a switchgear which is primarily used to protect man and machine.

Characteristics of DUX Limit Switches

These limit switches offer quite a number of actuators to be selected depending on the required mode of operation. They are used in auxiliary and pilot circuits and are excellently suitable for the control and movement limitation, e.g. in machine tools and processing machines, lifts, conveyor systems, vehicles, cranes, technical building equipments, crane systems as well as trigger switches in safety and alarm systems, and many more. The limit switches are available in various designs and materials and can such be used in different fields of application and environmental conditions. In order to meet the diverse equipment controlling requirements, a multitude of contact configurations can be implemented to provide optimal solutions for nearly all mechanical switching requirements. The variety of actuators, which are rotatable by 90°, enable high flexibility for each particular case of application.

Set-up and Operation of Limit Switches

Limit switch and plunger drive should only be used when the switching point is subject to a tight tolerance range. The actuation movement should preferably be in the same direction as the plunger movement. The limit switches are constructed in a way that they may in no case be used as a mechanical limit stop. The reset force for other movable actuating appliances (such as flaps, doors, etc.) must not be taken from the limit switch actuator, because it was only designed for the plunger reset of the limit switch. In order to guarantee an optimal switching action the max. operating angles of the different actuators must be observed. The cam of the respective machine must actuate the plunger only in the permissible level. The over-travel of the actuator

may only be used as shown in the relative switch travel diagram. It is not permitted to shorten the working travel by operating the actuator in advance. The reset movement of the actuator must be guided by the return movement of the machine's cam, i.e. the actuator must not spring back freely to its original position.

The length of the actuating cam must be selected so that an actuating time with double safety is achieved. If e.g. the response time of the operated auxiliary contactor to its latching position is 15 ms, the min. actuating time of the limit switch should be 30 ms.

Limit Switch Mounting

Limit switches have to be mounted to be easy accessible and shock-resistant, following the a.m. instructions. To guarantee the specified degree of protection, the lid screws must be tightened evenly and the cable entry must be fixed appropriately according to the cable diameter.

The limit switches must be used under strict observance of the relative parameters and rules of application. Depending on the number of switching actuations and operating conditions, the operational reliability of the switches has to be checked regularly.

Limit Switches - EKU Series

Operating and ambient conditions compliant to
Degree of protection acc. to DIN 40050 IEC 144
Fastening dimensions acc. to DIN EN 50047
Contact base material
Transport, storage and operating temperature
Screw clamp connection
Terminal cross-section

Cable gland
Operating speed on plunger
Mechanical life
Operating force on plunger
Insulation group acc. to DIN VDE 110
Admissible on-load switching cycles
Min. switching current using silver contacts
with slow-action contact
with snap-action contact
Min. switching voltage using silver contacts
Electrical life

Max. rated current/AC
Rated frequency
Max. rated voltage

DIN IEC 721-3-1...3 and DIN IEC 721-3-6
IP 65
2x M4
PA6
-25°C up to +55°C
M 3.5
2x 0.75 ... 2.5 mm² solid, flexible
multicore with ferrule 2x 0.75..1.5 mm²
M16x1.5
max. 0.25 m/s min. 1mm/s AC; min. 20mm/s DC
1x10.000.000 switching cycles
10N
C
1200/h
0.1A
0.012A
0.012A
24V
5x 100.000 switching cycles
AC 380V/1A DC 220V/0,2A
6A
50...60Hz
AC 380V
DC 220V

Limit Switches

EKU

made in germany



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Type Index

IP65 IP65 IP65 IP65 IP65 IP65



1NC + 1NO



EKU1-KST

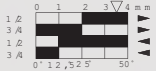
EKU1-KD

EKU1-KG

EKU1-KH

EKU1-KH

1NC + 1NO snap action contact



EKU1-SPR-KST

EKU1-SPR-KD

EKU1-SPR-KFS

EKU1-SPR-KG

EKU1-SPR-KH

EKU1-SPR-KH

1NC + 1NO slow action contact



EKU1-FD-KST

EKU1-FD-KD

EKU1-FD-KG

EKU1-FD-KH

△ recommended operating travel

▲ positive opening

Type EKU1
DIN EN 50 047
VDE 0880/200
6A/380V~ IP65

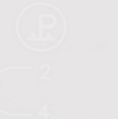
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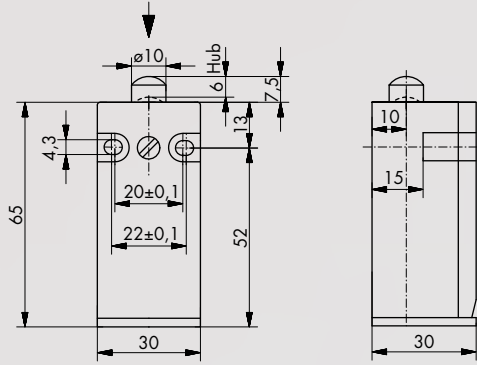
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VDE 0880/200
6A/380V~ IP65



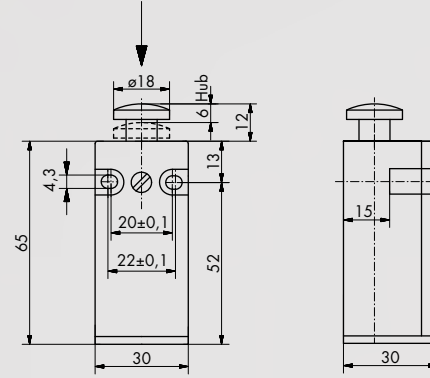
△ The EKU series are also available for AS-Interface applications.

								
	EKU1-KRHV	EKU1-KK	EKU1-KDH	EKU1-KDF	EKU1-KR	EKU1-KV	EKU1-KW	EKU1-KZ
PR-	EKU1-SPR-KRHV	EKU1-SPR-KK	EKU1-SPR-KDH	EKU1-SPR-KDF	EKU1-SPR-KR	EKU1-SPR-KV	EKU1-SPR-KW	
		EKU1-FD-KK			EKU1-FD-KR	EKU1-FD-KV	EKU1-FD-KW	

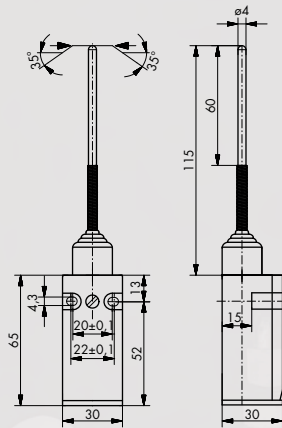
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EKU1-SPR-KST



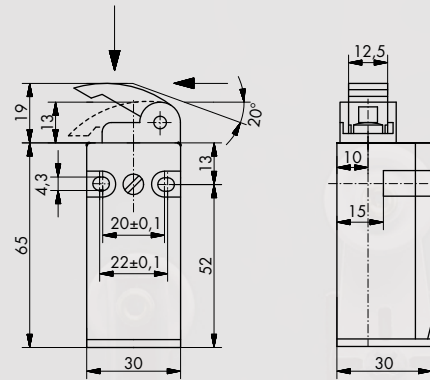
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EKU1-FD-KD



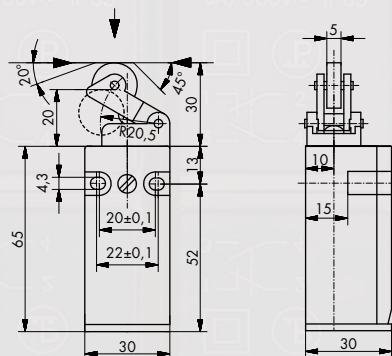
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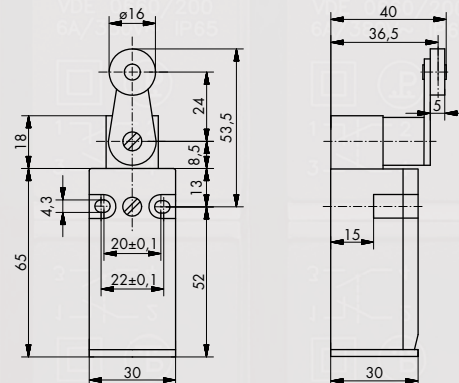
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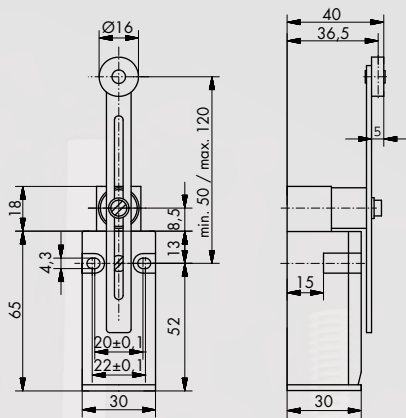
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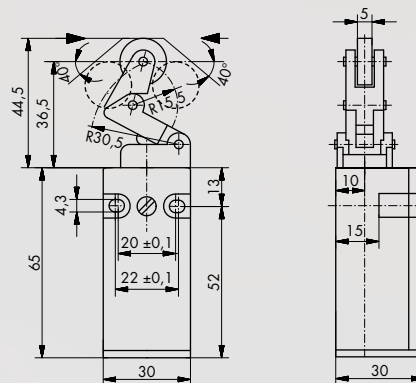
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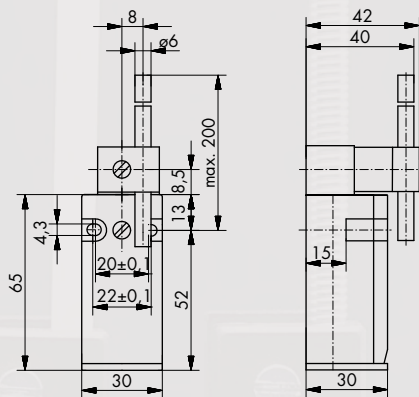
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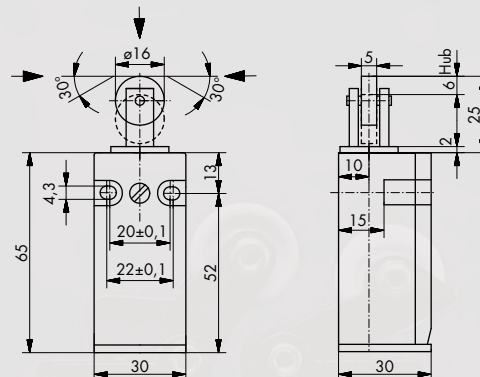
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EKU1-SPR-KK
EKU1-FD-KK



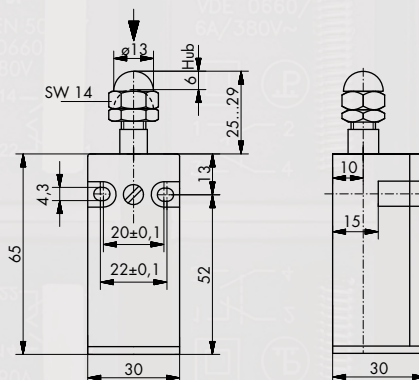
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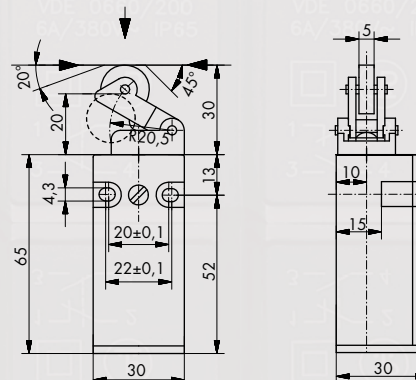
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EKU1-SPR-KR
EKU1-FD-KR



EKU1-KV
EKU1-SPR-KV
EKU1-FD-KV



EKU1-KW
EKU1-SPR-KW
EKU1-FD-KW



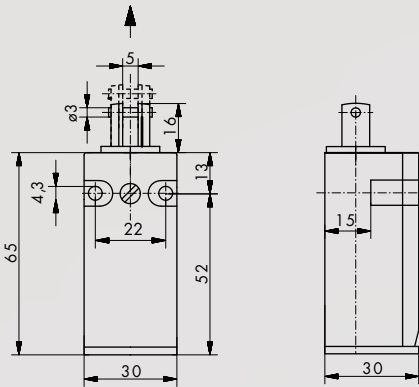
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EKU

EKU1-KZ



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