







	II2G	Ex	ia	IIC	T6	TÜV	2008	ATEX	1234	-	
Type approval to RAL 94/9/EC	Application	Explosion protection	Protection class	Device group	Temperature class	Inspection authority	Year	As per Directive 94/9/EC	Consecutive number	Additional conditions	
Types of protection for gas-explosion hazardous areas											
Symbol	Type of protection								Standard		
	Ex „d“	Flameproof encapsulation Switching devices, motors, transformers etc. IEC60079-1								IEC60079-1	
	Ex „p“	Pressurized encapsulation Control cabinets px = Use in Zone 1, 2 py = Use in Zone 1, 2 pz = Use in Zone 2								IEC60079-2	
	Ex „q“	Powder-filled encapsulation Transformers, capacitors								IEC60079-5	
	Ex „o“	Oil immersion encapsulation Transformers, load resistors								IEC60079-6	
	Ex „e“	Increased safety Terminal boxes, control cabinets, enclosures for installing devices of other protection class								IEC60079-7	
	Ex „i“	Intrinsically safe Terminal boxes, control cabinets, sensors, measurement and control equipment ia = Use in Zone 0, 1, 2 ib = Use in Zone 1, 2								IEC60079-11	
		Intrinsically safe systems								IEC60079-25	
	Ex „n“	Non sparking Systems that, due to their design, cannot spark								IEC60079-15	
	Ex „m“	Encapsulation Command and signaling devices, sensors, display/indicator devices ma = Use in Zone 0,1,2 mb = Use in Zone 1,2								IEC60079-18	
	Ex „op“	Optical radiation op is = Intrinsically safe optical radiation op pr = Protected optical radiation op sh = Shutdown optical radiation								IEC60079-28	
IP Protection Classes											
IP 1st digit	Contact	Foreign bodies		IP 2nd digit	Water	Max. permissible surface temperature		Temperature classes for gases			
0	No protection	No protection		0	No protection						
1	Large body parts	Solid object > 50 mm		1	Water dripping vertically						
2	Finger	Solid object > 12.5 mm		2	Water dripping at angle up to 15°	450°		T1			
3	Tool > 2.5 mm	Solid object > 2.5 mm		3	Water sprayed at an angle up to 60°	300°		T2			
4	Tool > 1 mm	Solid object > 1 mm		4	Spayed water 360°	200°		T3			
5	Complete protection	Dust accumulation		5	Hose water 360°	135°		T4			
6	Complete protection	Dust infiltration		6	Strong hose water 360°	100°		T5			
				7	Temporary submersion	85°		T6			
				8	Submersion	Explosion groups for gases					
Device group I Mining								Group	Typical gas	Ignition energy	
IM1	Safety provided by 2 safety measures, 2 faults							I	Methane	280 µJ	
IM2	Shutdown on occurrence of explosive atmosphere							IIA	Propane	> 180 µJ	
Device group II All potentially explosive atmospheres except mining								II B	Ethylene	60...180 µJ	
II 1	Zone 0	Zone 20	1 Zone 0 zone 20 Safety provided by 2 safety measures, 2 faults					IIC	Hydrogen	< 60 µJ	
II 2	Zone 1	Zone 21	2 Zone 1 Zone 21 Safety in the event of frequent equipment malfunctions, 1 fault								
II 3	Zone 2	Zone 22	3 Zone 2 Zone 22 Safety in trouble-free operation								
Zone categories, device group II								Additional conditions			
Hazard								-	No restriction		
Permanent or frequent								X	Special conditions		
Occasional											
Rare, temporary no longer than 30 min per year								U	Component certification Parts certification		

ATEX-Approved Product Range

- Ex e, Ex ia and Ex e\ia terminal boxes made from polyester and aluminum
- Ex d limit switches, cable pull switches and foot switches
- Ex mb/Ex tD magnetic switches



Terminal boxes and empty enclosures

Only materials that correspond to the temperature range T6 required for Ex enclosures are used in these enclosures and components.

The minimum type of protection rating of all enclosures and screw connections is IP64, other protection classes available on request.

The latching devices on the enclosures are optionally available as captive screw connections or quick-release fasteners.

Various CA versions are available with flange plates.

All built-in components must conform to the relevant approvals.



Momentary contact, cable pull and foot switches

An Ex d-certified switching element lies at the heart of these Ex-approved switches.

It is available in the several types of switch enclosures. The mechanical actuator and its installation are certified separately.

The approval of additional actuators and switch enclosures from other series is possible on request.

All switches and momentary contact switches feature one NO contact and one NC contact.



Magnetic switches

The magnetic switches are fitted at the factory with an up to 7 meter long connection cable.

The cable is permanently connected to the switch which is part of the approval.

All sensors are certified for a maximum ambient temperature of 80 °C.

ATEX - General Information

EX versions of the many of the standard BERNSTEIN switches with ATEX approval are also available for applications involving potentially gas and dust explosive atmospheres.

Approvals for gas "ii G"
in accordance with
DIN EN 60079-XX



Approvals for dust "ii D"
in accordance with
DIN EN 61241-XX

Make use of our Ex protection expertise for your applications.

What is ATEX?

ATEX = Atmosphère explosive. The European Directive 94/4/EC governs the production and the circulation of devices and components for explosive atmospheres in the European Union. The IEC Standards harmonized throughout the EU stipulate that ATEX products approved by a certification authority can be used anywhere throughout the EU.

In most aspects the certification authorities of non-European countries such as North America, Russia etc. closely follow ATEX-relevant standards so that various approvals can be acquired worldwide based on an ATEX approval. Corresponding national approvals are available on request.

Where are devices with ATEX approval used?

The fields of application for Ex-protected switches include mixing and processing machines in bakeries (flour dust explosion), processing machines in the food industry where spices are mixed (spice dust explosion), sewer manholes, pump stations and sewage treatment plant (explosive gases "fermentation/digester gas"), waste disposal and recycling industry (various sources of dust and gas explosion), automotive industry and wherever paints and lacquers are used (painting booth) in addition to the classic explosion-hazard branches of industry such as the chemical, petrochemical, pharmaceutical industries as well as the coal, gas and oil-producing and processing industries. Mobile equipment and systems such as vacuum cleaners, stacker lift trucks, fans etc. that are used in the above fields of application must exhibit a corresponding ATEX approval. ATEX products are therefore a part of our everyday lives..

Who is responsible for what in Ex applications?

The device or component manufacturer must obtain a type approval certificate (ATEX approval) for these devices and components. The machine manufacturer can acquire his system approval based on these approvals and the declaration of conformity.

The manufacturer of a machine or system that is used in Ex applications must obtain a corresponding system approval for the machines it markets. The entire system must be taken into consideration both from a mechanical as well as from an electrical aspect.

In accordance with the ATEX Operator Directive 1999/92/EC (ATEX137), the operator of technical facilities shall be responsible for avoiding or restricting the formation of explosive atmospheres (primary explosion protection), avoiding effective ignition sources (secondary or design explosion protection) and restricting the effect of an explosion to a safe level (tertiary explosion protection). An explosion protection document describing the implemented measures and hazard assessments is to be compiled.

In addition to foot switches and cable pull switches, our current ATEX-certified product range also includes various standard limit switches, limit switches and miniature limit switches.

Customer-specific individual approvals or approvals for switches and components from the BERNSTEIN range not yet certified are available on request.



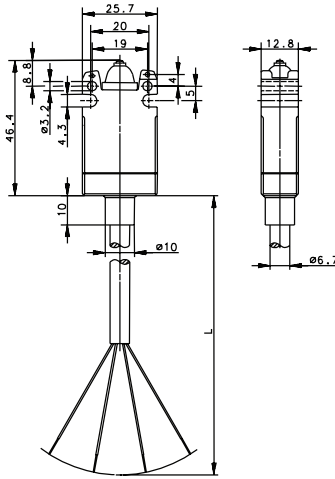
ATEX - Technical Information

Technical data	EEX	GC	ENM2	F
Electrical data				
Rated insulation voltage U_i max.	250 V	250 V	250 V	250 V
Rated operating voltage U_e max.	230 V AC	230 V AC	230 V AC	230 V AC
Conventional thermal current I_{the}	5 A	5 A	5 A	5 A
Utilization category: switching capacity	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Mechanical data				
Mechanical Switching frequency	max. 120/min.	max. 50/min.	max. 50/min.	max. 50/min.
Mechanical service life	2 x 10 ⁶ switching cycles	2 x 10 ⁶ switching cycles	2 x 10 ⁶ switching cycles	2 x 10 ⁶ switching cycles
Contact type	1 NC /1 NO contact (Zb)	1 NC /1 NO contact (Zb)	1 NC /1 NO contact (Zb)	2 NC /2 NO contact (Zb)
B10d	4 mill.	4 mill.	4 mill.	4 mill.
Short-circuit protection	Fuse 4 A gL (Human protection function)	Fuse 4 A gL (Human protection function)	Fuse 4 A gL (Human protection function)	Fuse 4 A gL (Human protection function)
Protection class	II, Insulated	II, Insulated	II, Insulated	II, Insulated
Approval for Zone	II 2G (GAS)	II 2G (GAS)	II 2G (GAS)	II 2G (GAS)
Admissible ambient temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Protection class of built-in snap-action switch	IP66/IP67 conforming to IEC/EN 60529	IP66/IP67 conforming to IEC/EN 60529	IP66/IP67 conforming to IEC/EN 60529	IP66/IP67 conforming to IEC/EN 60529
Type of connection	Control line (with ferrules)	Control line (with ferrules)	Control line (with ferrules)	Control line (with ferrules)
Conductor cross sections	4 x 0,75 mm ²	4 x 0,75 mm ²	4 x 0,75 mm ²	4 x 0,75 mm ²
Enclosure	PEI	Aluminum pressure die-casting	Aluminum pressure die-casting	Aluminum pressure die-casting
Cable entry	Cast	1 x cable screw connection M20 x 1,5	1 x cable screw connection M20 x 1,5	1 x cable screw connection M20 x 1,5

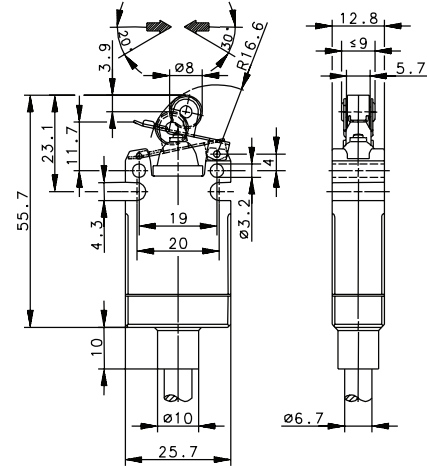
Technical data	SN2	SI2 U2Z AW	SI2 U2Z AK	
Electrical data				
Rated insulation voltage U_i max.	400 V AC	400 V AC	400 V AC	
Rated operating voltage U_e max.	240 V	240 V	240 V	
Conventional thermal current I_{the}	10 A	10 A	10 A	
Utilization category: Switching capacity	AC 15, U_e / I_e 240 V / 3 A	AC 15, U_e / I_e 240 V / 3 A	AC 15, U_e / I_e 240 V / 3 A	
Mechanical data				
Mechanical Switching frequency	≤ 60/min.	≤ 10/min.	≤ 10/min.	
Mechanical service life	10 x 10 ⁶ switching cycles	2 x 10 ⁶ switching cycles	2 x 10 ⁶ switching cycles	
Actuation	Achshebel (Zn-Al), Rolle (Termoplast)	Roller lever (St)	Lever (St)	
Ambient temperature	-20°C to +80°C	-20°C to +60°C	-20°C to +60°C	
Contact type	1 NC /1 NO contact	2 NC /2 NO contact (Zb)	2 NC /2 NO contact (Zb)	
B10d	20 mill.	4 mill.	4 mill.	
Short-circuit protection	Fuse 2 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG	
Protection class	I	I	I	
Approval for Zone	II 2D IP65 T85°C (STAUB)	II 3D IP65 T80°C (STAUB)	II 3D IP65 T80°C (STAUB)	
Surface temperature T	85°C	80°C	80°C	
Protection class of built-in snap-action switch	IP65 conforming to IEC/EN 60529	IP65 conforming to IEC/EN 60529	IP65 conforming to IEC/EN 60529	
Type of connection	Contact screws	Screw connections	Screw connections	
Conductor cross sections	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²	
Enclosure	AL-Aluminium pressure die-casting	Cast iron	Cast iron	
Cable entry	3 x M20 x 1.5	3 x M20 x 1.5	3 x M20 x 1.5	
Standards				
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1 EN 60079-0, DIN EN 60079-0 EN 60079-1, DIN EN 60079-1 Directive 94/9 EG (ATEX 95)				

EEX Series Limit Switches

EEX W



EEX RH



6.5' (2 meter) connection cable

609.0153.002 EEX-SU1Z W -2M-

609.0148.022 EEX-SU1Z RH -2M-

16.4' (5 meter) connection cable

-
-

609.0148.024 EEX-SUTZ RH -5M-

29.5' (9 meter) connection cable

609.0153.005 EEX-SU1Z W -9M-

609.0148.025 EEX-SUTZ RH -9M-

EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

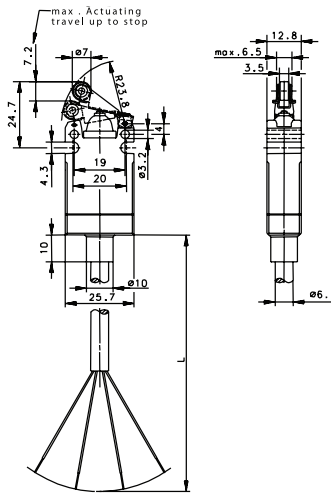
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 120/min	≤ 120/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

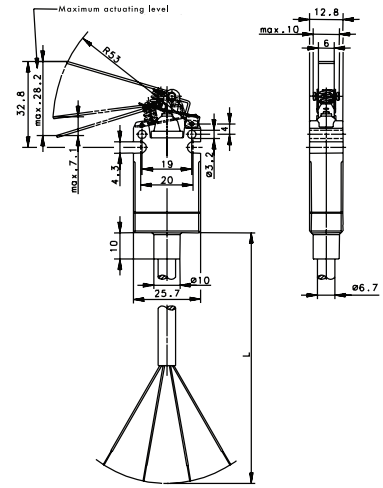
Drawing dimensions in mm

EEX Series Limit Switches

EEX RHL

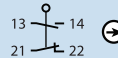


EEX UH

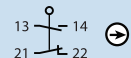


6.5' (2 meter) connection cable

609.0149.027
EEX-SU1Z RHL -2M-

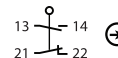


609.0146.012
EEX-SU1 UH -2M-



16.4' (5 meter) connection cable

609.0149.029
EEX-SU1Z RHL -5M-



609.0146.014
EEX-SU1 UH -5M-



29.5' (9 meter) connection cable

-

-

EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

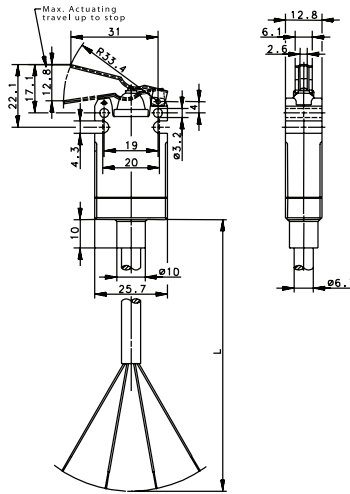
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 120/min	≤ 120/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

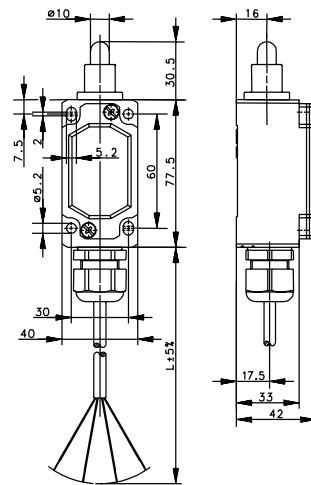
Drawing dimensions in mm

EEX and ENM2 Series Limit Switches

EEX FH

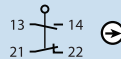


ENM2 IW

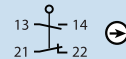


6.5' (2 meter) connection cable

609.0145.007
EEX-SU1Z FH -2M-



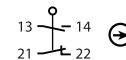
609.7152.052
ENM2-SU1Z EX IW -2M-



16.4' (5 meter) connection cable

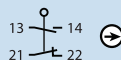
-

609.7152.054
ENM2-SU1Z EX IW -5M-

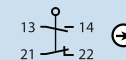


29.5' (9 meter) connection cable

609.0145.010
EEX-SU1Z FH -9M-



609.7152.055
ENM2-SU1Z EX IW -9M-



EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

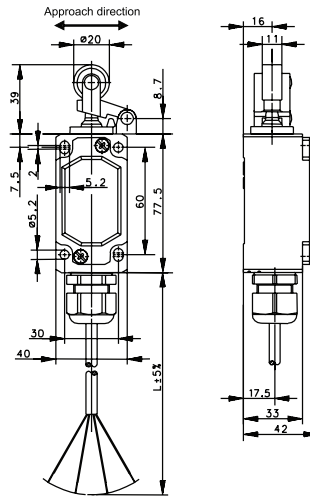
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 120/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

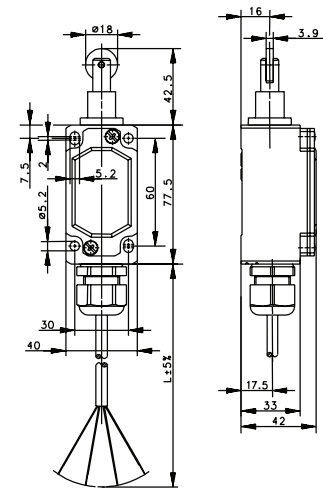
Drawing dimensions in mm

ENM2 Series Limit Switches

ENM2 HW

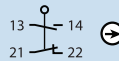


ENM2 RIW

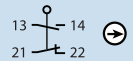


6.5' (2 meter) connection cable

609.7171.072
ENM2-SU1Z EX HW -2M-

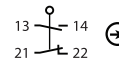


609.7167.062
ENM2-SU1Z EX RIW -2M-



16.4' (5 meter) connection cable

609.7171.074
ENM2-SU1Z EX HW -5M-

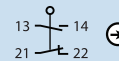


609.7167.064
ENM2-SU1Z EX RIW -5M-



29.5' (9 meter) connection cable

609.7171.075
ENM2-SU1Z EX HW -9M-



609.7167.065
ENM2-SU1Z EX RIW -9M-



EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

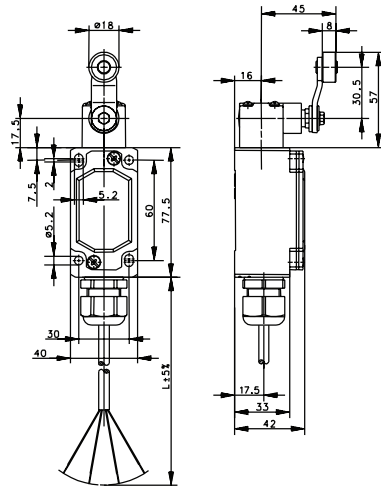
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

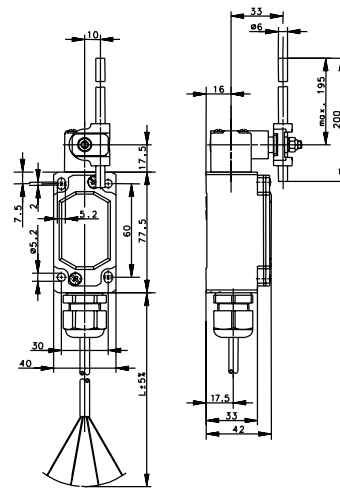
Drawing dimensions in mm

ENM2 Series Limit Switches

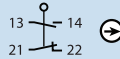
ENM2 AHT




ENM2 AD




6.5' (2 meter) connection cable

609.7185.082
ENM2-SU1Z EX AHT -2M- 

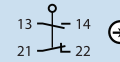
609.7187.092
ENM2-SU1 EX AD -2M- 


16.4' (5 meter) connection cable

609.7185.084
ENM2-SU1Z EX AHT -5M- 

609.7187.094
ENM2-SU1 EX AD -5M- 

29.5' (9 meter) connection cable

609.7185.085
ENM2-SU1Z EX AHT -9M- 

609.7187.095
ENM2-SU1 EX AD -9M- 

EX Certification

 II 2 G EEx d IIC T6

 II 2 G EEx d IIC T6

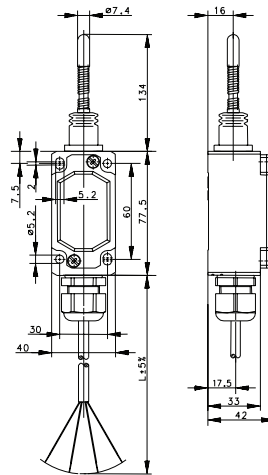
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

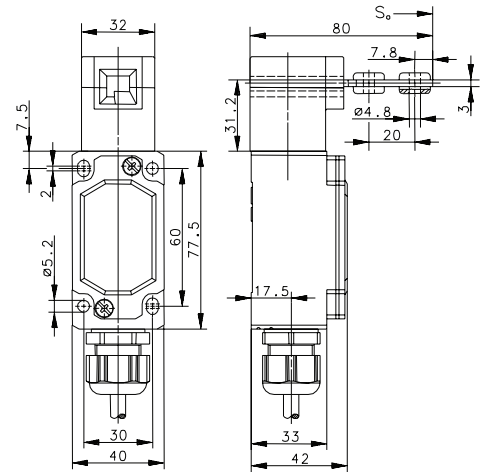
Drawing dimensions in mm

ENM2 Series Limit Switches and Keyed Safety Switches

ENM2 FF



ENM2 VTW



6.5' (2 meter) connection cable

609.7190.097
ENM2-SU1 EX FF -2M-



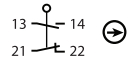
-

16.4' (5 meter) connection cable

609.7190.099
ENM2-SU1 EX FF -5M-



619.7100.010
ENM2-SU1Z EX VTW -5M-



29.5' (9 meter) connection cable

609.7190.100
ENM2-SU1 EX FF -9M-



-

EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

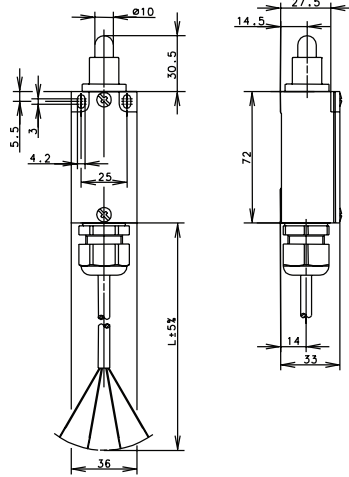
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

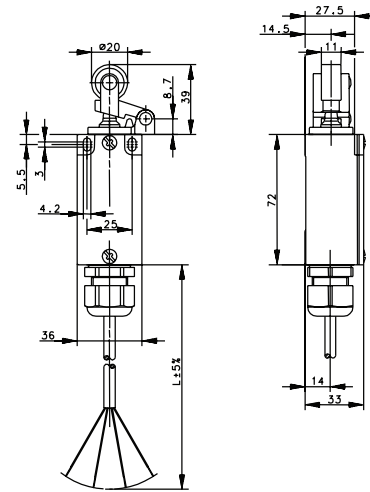
Drawing dimensions in mm

GC Series Limit Switches

GC IW

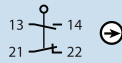


GC HW



6.5' (2 meter) connection cable

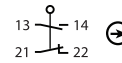
609.2152.002
GC-SU1Z EX IW -2M-



-

16.4' (5 meter) connection cable

609.2152.004
GC-SU1Z EX IW -5M-

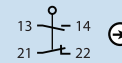


609.2171.024
GC-SU1Z EX HW -5M-

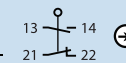


29.5' (9 meter) connection cable

609.2152.005
GC-SU1Z EX IW -9M-



609.2171.025
GC-SU1Z EX HW -9M-



EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

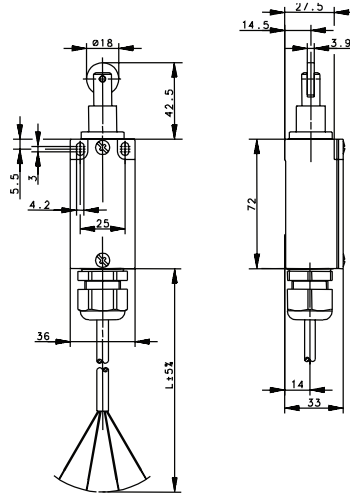
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

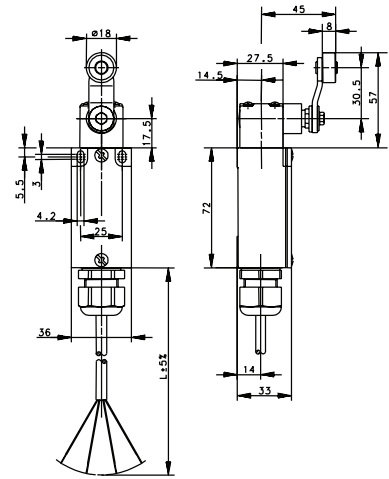
Drawing dimensions in mm

GC Series Limit Switches

GC RIW



GC AHT



6.5' (2 meter) connection cable

609.2167.012
GC-SU1Z EX RIW -2M-

609.2185.032
GC-SU1Z EX AHT -2M-

16.4' (5 meter) connection cable

-

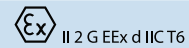
609.2185.034
GC-SU1Z EX AHT -5M-

29.5' (9 meter) connection cable

609.2167.015
GC-SU1Z EX RIW -9M-

609.2185.035
GC-SU1Z EX AHT -9M-

EX Certification



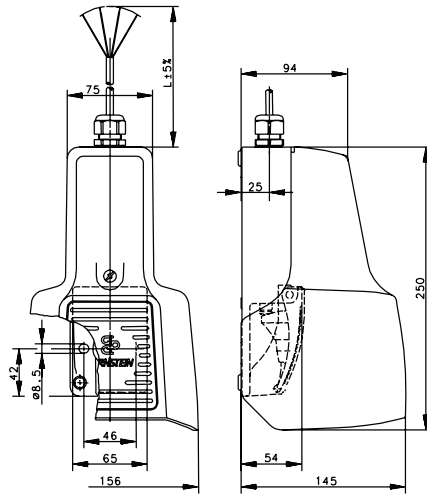
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

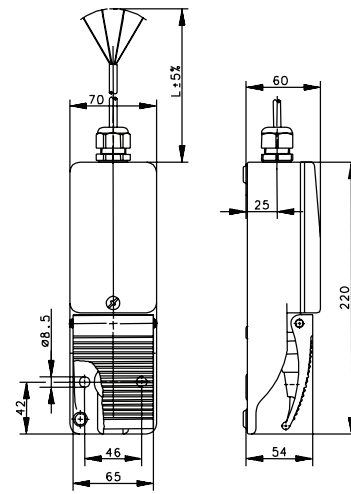
Drawing dimensions in mm

F Series - Single Pedal Foot Switches

F1 UN



GC HW



6.5' (2 meter) connection cable

609.6197.017
F1-SU1Z EX UN -2M-

-

16.4' (5 meter) connection cable

609.6197.019
F1-SU1Z EX UN -5M-

609.6198.014
F1-SU1Z EX -5M-

29.5' (9 meter) connection cable

-

-

EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

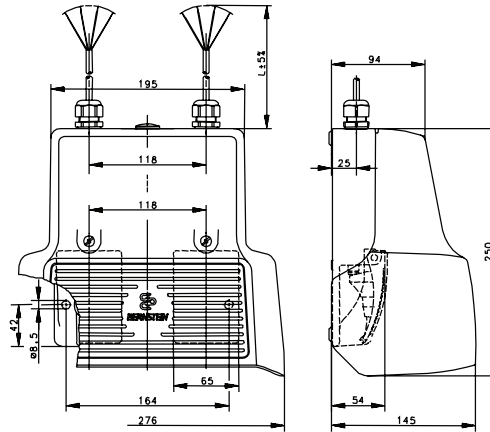
Technical Information

Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

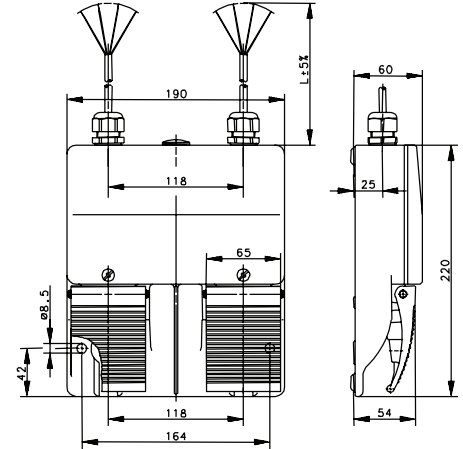
Drawing dimensions in mm

F2 Series Double Pedal Foot Switches

F2 UN



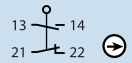
F2



6.5' (2 meter) connection cable

-
-

609.6198.022
F2-SU1Z/SU1Z EX -2M-



16.4' (5 meter) connection cable

609.6197.029
F2-SU1Z/SU1Z EX UN -5M-



-
-

29.5' (9 meter) connection cable

-
-

-
-

EX Certification

II 2 G EEx d IIC T6

II 2 G EEx d IIC T6

Technical Information

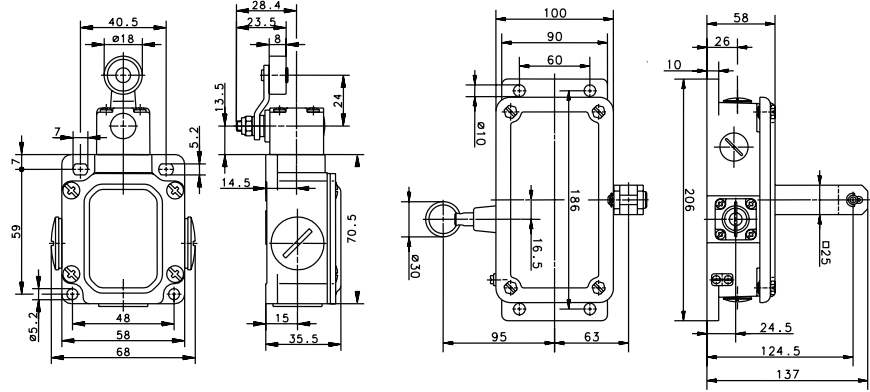
Maximum Switching Voltage	230V	230V
Maximum Switching Amperage	5A	5A
B10d	4 Million	4 Million
Mechanical Service Life	2 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 50/min	≤ 50/min
Operating Temperature	-20 °C to +65 °C	-20 °C to +65 °C
Protection Rating	IP66 / IP67	IP66 / IP67
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	250VAC	250VAC

Drawing dimensions in mm

SN2 Series Limit Switch and Double Sided Cable Pull Switch

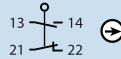
SN2 Limit Switch without Cable

Series SI2 Double Sided Rope Pull



1 NC / 1 NO contact

619.3285.001
SN2-SUTZ AH EXD 180 Gr.



-

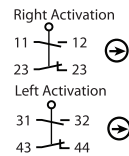
-

2 NC / 2 NO contacts

-

-

609.1288.024
SI2-U2Z AK EXD



EX Certification

Ex II 2 D IP65 T 85 °C

Ex II 3 D Ex tD A22 IP65 T 80 °C

Technical Information

Maximum Switching Voltage	240V	240V
Maximum Switching Amperage	10A	10A
B10d	20 Million	4 Million
Mechanical Service Life	10 x 10 ⁶	2 x 10 ⁶
Switching Frequency	≤ 60/min	≤ 10/min
Operating Temperature	-20 °C to +80 °C	-20 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A	AC 15, 240 V / 3 A; DC 13, 250 V / 0.27 A
Rate Insulation Voltage	400VAC	400VAC

Drawing dimensions in mm