

Limit Switches

Thermoplastic International Style



Body Style Ti2

- Insulating plastic housing and integral cover
- Mounting and dimensions conform to DIN EN 50047
- Actuator head position can be changed in 90° increments
- Contacts galvanically isolated
- One cable entry point
- Conduit adapter or cord grip provided
- Manufactured per IEC 947-5-1 and VDE 0660 T200
- UL, CSA and BG approved
- Can be used as component in safety applications

Enclosure Body: PBT, Glass Fiber Reinforced (UL 94-V0)
Enclosure Cover: PA6.6 (Black)
Protection Class: NEMA 4
Mechanical Life: 3 x 10⁶
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.

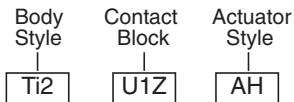
Contact Block Technical Data

Type	Contacts	Action	Forced Disconnect	Voltage (max.)	Current (max.)
U1Z	1 N.C. 1 N.O.	Slow	Yes	250 VAC	10 A
SU1Z	1 N.C. 1 N.O.	Snap	Yes	250 VAC	10 A

Notes:

1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

Model Identification



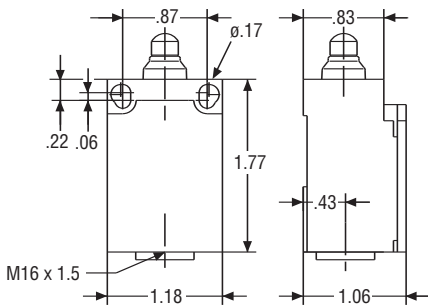
Switch Selection

Model	Part Number
Ti2-U1 AD	608-8137-027
Ti2-U1Z AH	608-8135-021
Ti2-SU1Z AH	608-8185-022
Ti2-SU1Z FF	608-8190-040
Ti2-U1Z Hw	608-8121-015
Ti2-SU1Z Hw	608-8171-016
Ti2-U1Z w	608-8103-001
Ti2-SU1Z w	608-8153-002
Ti2-U1Z Riw	608-8117-007
Ti2-SU1Z Riw	608-8167-008

SUVA Approved for Safety Applications

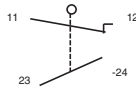
Mechanical Data

(Dimensions are in inches)

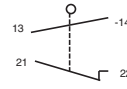


Contact Block Wiring Details

U1Z - Slow Make-and-Break



SU1Z Snap Action

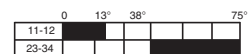
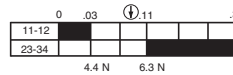


Types of Contact Block and Action

Linear Type Actuator

Rotary Type Lever

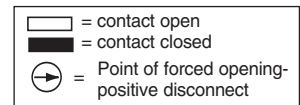
U1Z Break-Before-Make the NC contact opens before the NO contact closes



SU1 Snap action indicates direction of travel



11-12, 21-22, 23-24 Indicates terminal identification for wiring.
 Operating force shown in Newtons. Newtons x .2248 = lbs.
 Graduation Tolerance $\pm 3.5^\circ$
 Accuracy of switching point $\pm .009$
 Tolerance of switching pressure $\pm 10\%$



Switching Action Explanation

Slow Action

- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

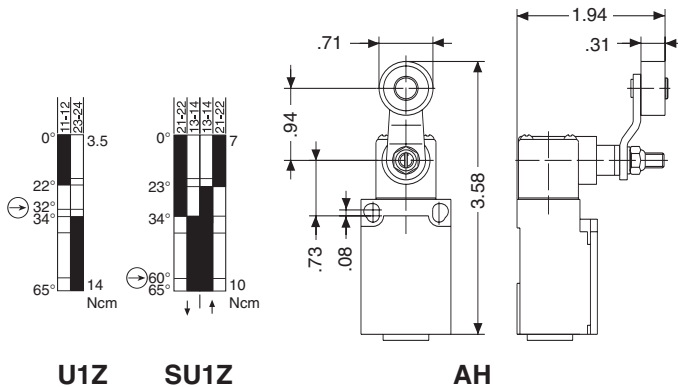
Snap Action

- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Mechanical Drawing Data

Contact Block Data

Mechanical Data (Dimensions are in inches)



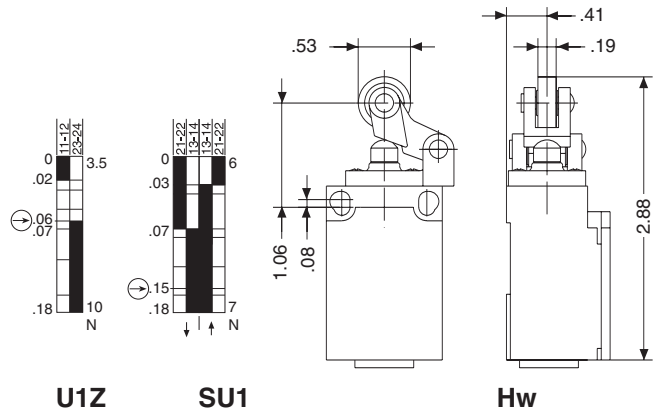
U1Z

SU1Z

AH

Contact Block Data

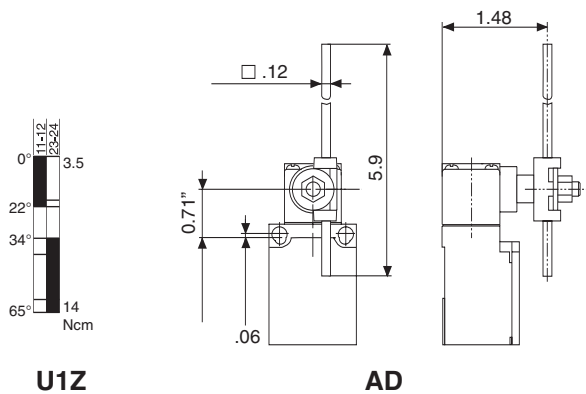
Mechanical Data (Dimensions are in inches)



U1Z

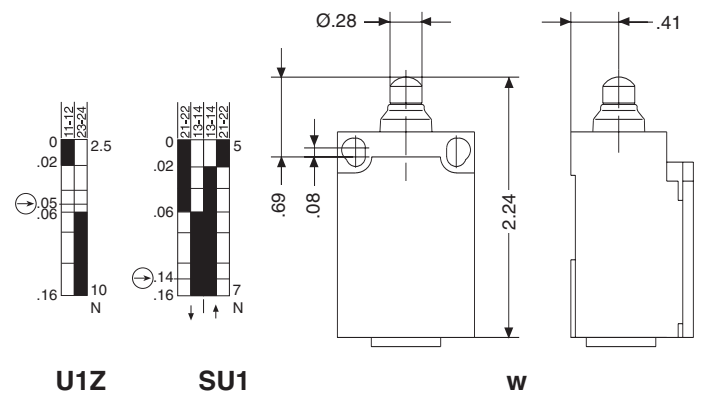
SU1

Hw



U1Z

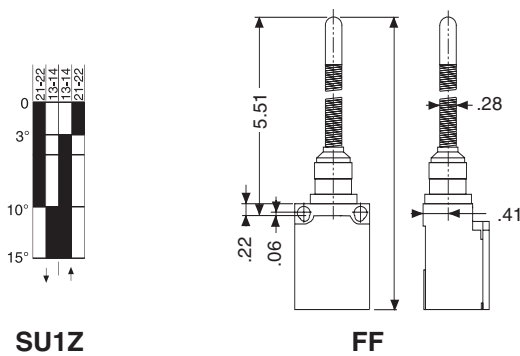
AD



U1Z

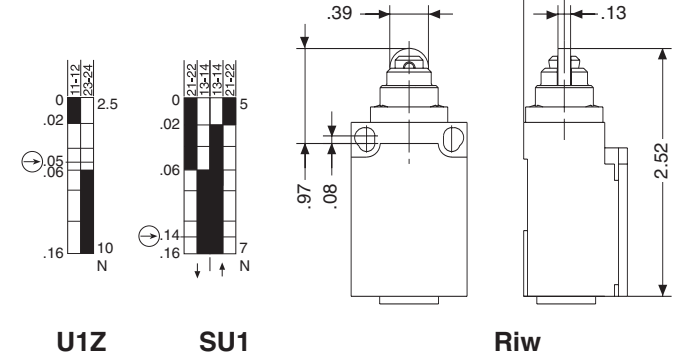
SU1

w



SU1Z

FF



U1Z

SU1

Riw

⊕ = Point of Forced Opening, Positive Disconnect
 U1Z = Slow Make-and-Break with Positive Disconnect
 SU1Z = Snap Action with Positive Disconnect

Mechanical Limit Switches

Thermoplastic International Style



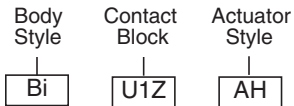
Body Style Bi

- Insulating plastic housing and integral cover
- Mounting and dimensions conform to DIN EN 50047
- Actuator head position can be changed in 90° increments
- Contacts galvanically isolated
- Two cable entry points
- Conduit adapter or cord grip provided
- Manufactured per IEC 947-5-1 and VDE 0660 T200
- UL, CSA and SEV approved

Enclosure Body: PA 6 Thermoplastic (UL 94-V0)
Enclosure Cover: PC Thermoplastic (UL 94-V0)
Protection Class: NEMA 4
Mechanical Life: 10 x 10⁶ Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.

Bi Body Style

Model Identification



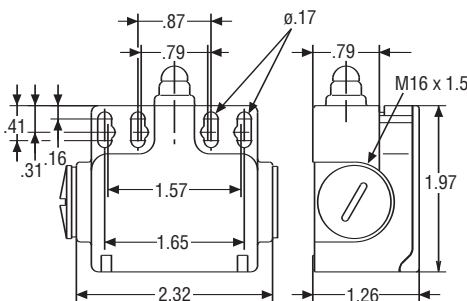
Switch Selection

Model	Part Number
Bi-U1 AD	608-5137-007
Bi-SU1Z AH*	608-5185-012
Bi-SU1 AV	608-5186-013
Bi-SU1 FF	608-5190-015
Bi-SU1Z Hw*	608-5171-017
Bi-U1Z w*	608-5103-001
Bi-SU1Z w*	608-5153-008
Bi-U1Z Riw*	608-5117-002
Bi-SU1Z Riw*	608-5167-009

*SUVA approved for safety applications
 Many more styles of actuators available.
 Contact local factory for more information.

Mechanical Data

(Dimensions are in inches)



Contact Block Technical Data

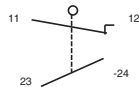
Type	Contacts	Action	Forced Disconnect	Voltage (max.)	Current (max.)
U1Z	1 N.C. 1 N.O.	Slow	Yes	500 VAC	10 A
SU1Z	1 N.C. 1 N.O.	Snap	Yes	500 VAC	10 A
SU1	1 N.C. 1 N.O.	Snap	No	500 VAC	10 A

Notes:

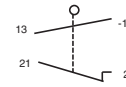
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

Contact Block Wiring Details

U1Z - Slow Make-and-Break

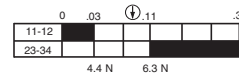


SU1Z Snap Action

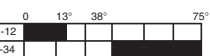


Types of Contact Block and Action

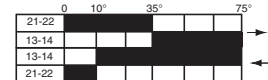
U1Z Break-Before-Make the NC contact opens before the NO contact closes



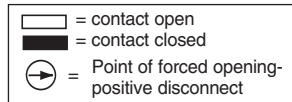
Linear Type Actuator



SU1Z Snap action indicates direction of travel



11-12, 21-22, 23-24 Indicates terminal identification for wiring.
 Operating force shown in Newtons. Newtons x .2248 = lbs.
 Graduation Tolerance ± 3.5°
 Accuracy of switching point ± .009
 Tolerance of switching pressure ± 10%



Switching Action Explanation

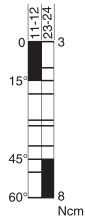
Slow Action

- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

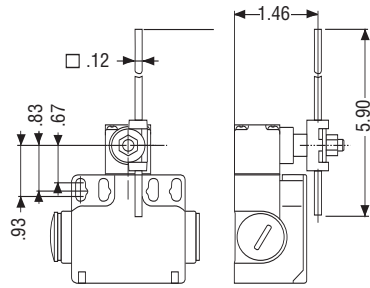
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data



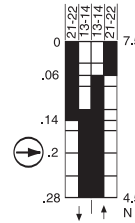
U1

Mechanical Data (Dimensions are in inches)



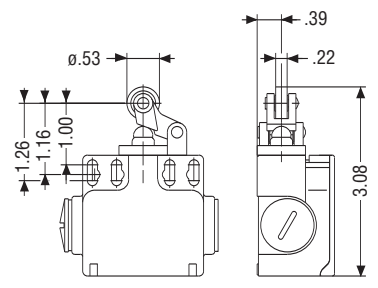
AD

Contact Block Data

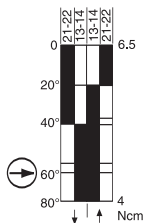


SU1Z

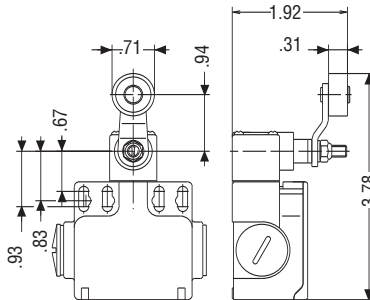
Mechanical Data (Dimensions are in inches)



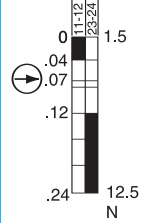
Hw



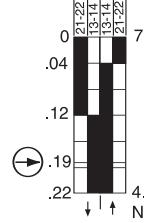
SU1Z



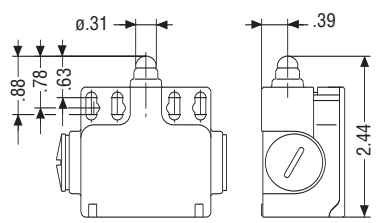
AH



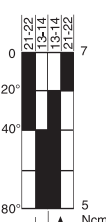
U1Z



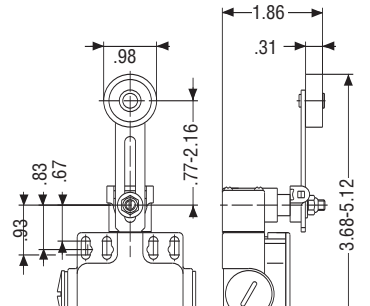
SU1Z



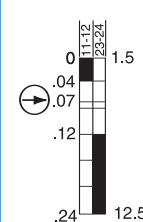
w



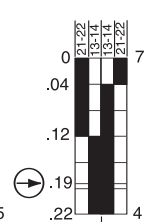
SU1



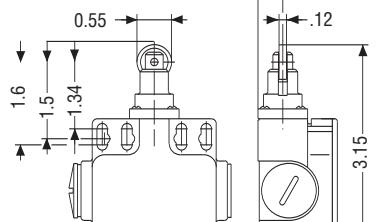
AV



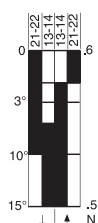
U1Z



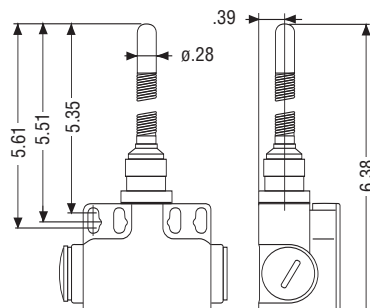
SU1Z



Riw



SU1



FF

⊕ = Point of Forced Opening, Positive Disconnect

U1Z = Slow Make-and-Break

SU1Z = Snap Action with Positive Disconnect

SU1 = Snap Action

Mechanical Limit Switches

Thermoplastic International Style



Body Style I88

- Insulating plastic housing and integral cover
- Mounting and dimensions conform to DIN EN 50047
- Actuator head position can be changed in 90° increments
- Contacts galvanically isolated
- One cable entry point
- Conduit adapter or cord grip provided
- Manufactured per IEC 947-5-1 and VDE 0660 T200
- UL, CSA and SEV Approved

Enclosure Body: PA 6 Thermoplastic (UL 94-V0)
Enclosure Cover: PC Thermoplastic (UL 94-V0)
Protection Class: NEMA 4
Mechanical Life: 10 x 10⁶ Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.

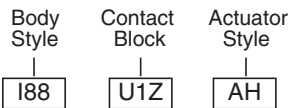
Contact Block Technical Data

Type	Contacts	Action	Forced Disconnect	Voltage (max.)	Current (max.)
U1Z	1 N.C. 1 N.O.	Slow	Yes	500 VAC	10 A
SU1Z	1 N.C. 1 N.O.	Snap	Yes	500 VAC	10 A
SU1	1 N.C. 1 N.O.	Snap	No	500 VAC	10 A

Notes:

1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts (⊖) Forced Disconnect per IEC 947-5-1 Ch.3 (as indicated)

Model Identification



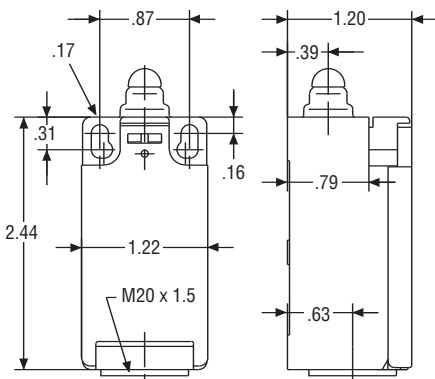
Switch Selection

Model	Part Number
I88-SU1 AD	608-6187-042
I88-U1Z AH*	608-6135-033
I88-SU1Z AH*	608-6185-034
I88-SU1 AF	608-6139-054
I88-U1 AV	608-6136-037
I88-SU1Z Hw*	608-6171-022
I88-U1Z Hw*	608-6121-021
I88-U1Z w*	608-6103-008
I88-SU1Z w*	608-6153-012
I88-U1Z RiWk*	608-6117-017
I88-SU1Z RiWk*	608-6167-018

* SUVA Approved for safety applications. Many more styles of actuators available. Contact local factory for more information.

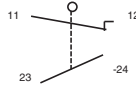
Mechanical Data

(Dimensions are in inches)

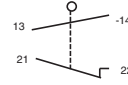


Contact Block Wiring Details

U1Z - Slow Make-and-Break



SU1Z Snap Action

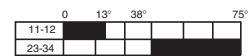
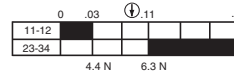


Types of Contact Block and Action

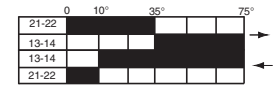
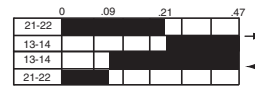
Linear Type Actuator

Rotary Type Lever

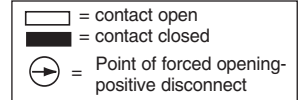
U1Z Break-Before-Make the NC contact opens before the NO contact closes



SU1Z Snap action → arrow indicates direction of travel



11-12, 21-22, 23-24 Indicates terminal identification for wiring. Operating force shown in Newtons. Newtons x .2248 = lbs. Graduation Tolerance ± 3.5° Accuracy of switching point ± .009 Tolerance of switching pressure ± 10%



Switching Action Explanation

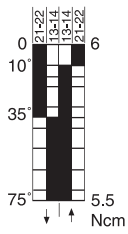
Slow Action

- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

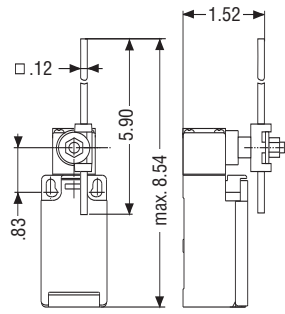
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data



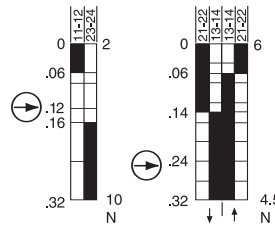
SU1

Mechanical Data
(Dimensions are in inches)



AD

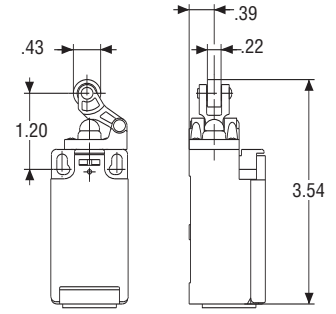
Contact Block Data



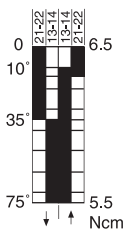
U1Z

SU1Z

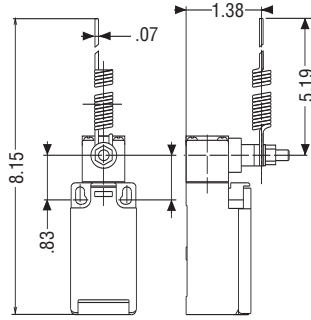
Mechanical Data
(Dimensions are in inches)



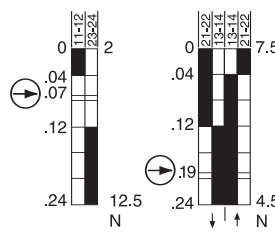
Hw



SU1

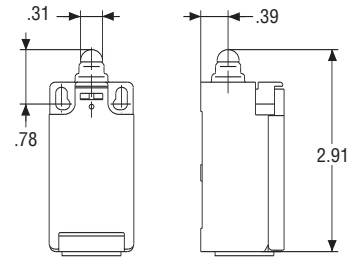


AF

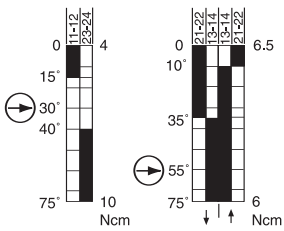


U1Z

SU1Z

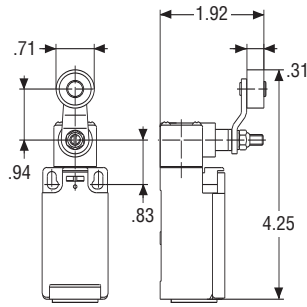


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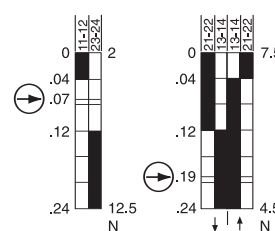


U1Z

SU1Z

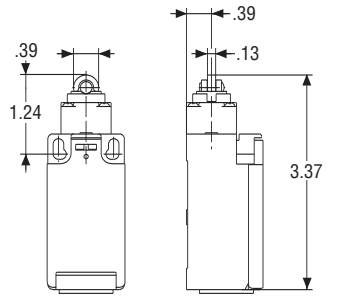


AH

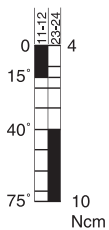


U1Z

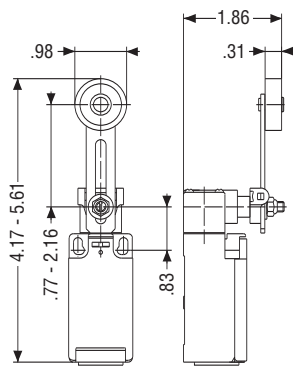
SU1Z



RiwK



U1



AV

- ⊕ = Point of Forced Opening, Positive Disconnect
- U1Z = Slow Make-and-Break
- SU1Z = Snap Action with Positive Disconnect
- SU1 = Snap Action

Mechanical Limit Switches

Thermoplastic International Style

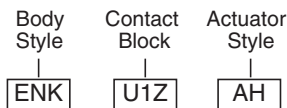


Body Style ENK

- Insulating plastic housing and integral cover
- Mounting and dimensions conform to DIN EN 50041
- Actuator head position can be changed in 90° increments
- Contacts galvanically isolated
- One cable entry point
- Conduit adapter or cord grip provided
- Manufactured per IEC 947-5-1 and VDE 0660 T200
- UL, CSA and SEV Approved

Enclosure Body: PA 6 Thermoplastic (UL 94-V0)
Enclosure Cover: PC Thermoplastic (UL 94-V0)
Protection Class: NEMA 4
Mechanical Life: 10 x 10⁶ Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.

Model Identification



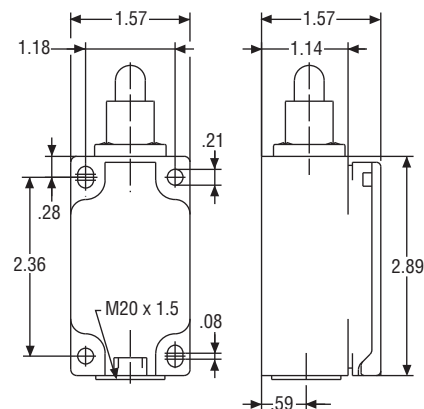
Switch Selection

Model	Part Number
ENK-U1Z AD	608-1137-011
ENK-SU1Z AD	608-1187-017
ENK-U1Z AHS-V	608-1135-003
ENK-SU1Z AHS-V	608-1185-009
ENK-U1 AV	608-1136-012
ENK-SU1 AV	608-1186-018
ENK-SU1 FF	608-1190-045
ENK-U1Z Riw*	608-1117-002
ENK-SU1Z Riw*	608-1167-008
ENK-U1Z iw*	608-1102-001
ENK-SU1Z iw*	608-1152-007

* SUVA Approved for safety applications. Many more styles of actuators and contact blocks available. Contact factory for more information.

Mechanical Data

(Dimensions are in inches)



Contact Block Technical Data

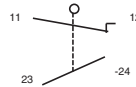
Type	Contacts	Action	Forced Disconnect	Voltage (max.)	Current (max.)
U1Z	1 N.C. 1 N.O.	Slow	Yes	500 VAC	10 A
SU1Z	1 N.C. 1 N.O.	Snap	Yes	500 VAC	10 A
SU1	1 N.C. 1 N.O.	Snap	No	500 VAC	10 A

Notes:

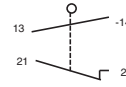
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts (⊖) Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

Contact Block Wiring Details

U1Z - Slow Make-and-Break



SU1Z Snap Action

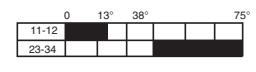
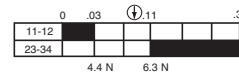


Types of Contact Block and Action

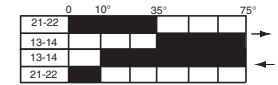
Linear Type Actuator

Rotary Type Lever

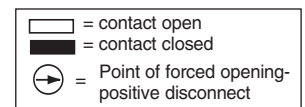
U1Z Break-Before-Make the NC contact opens before the NO contact closes



SU1Z Snap action → arrow indicates direction of travel



11-12, 21-22, 23-24 Indicates terminal identification for wiring. Operating force shown in Newtons. Newtons x .2248 = lbs. Graduation Tolerance ± 3.5° Accuracy of switching point ± .009 Tolerance of switching pressure ± 10%



Switching Action Explanation

Slow Action

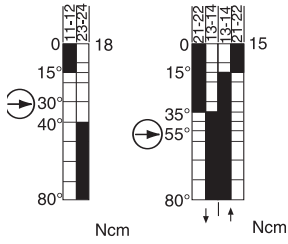
- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

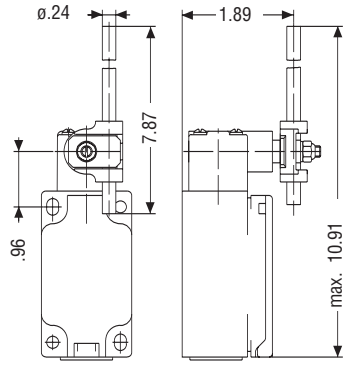
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data

Mechanical Data
(Dimensions are in inches)



U1Z SU1Z



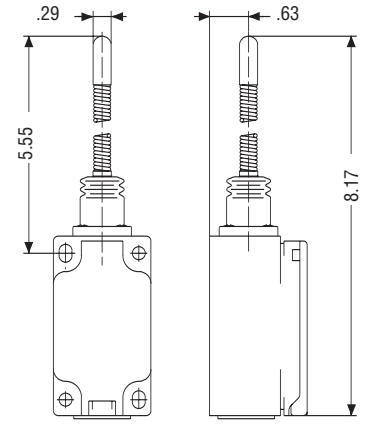
AD

Contact Block Data

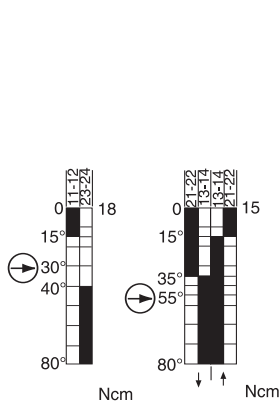
Mechanical Data
(Dimensions are in inches)



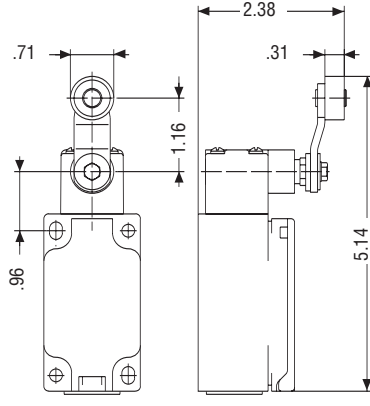
SU1



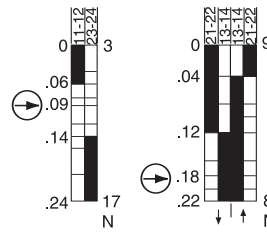
FF



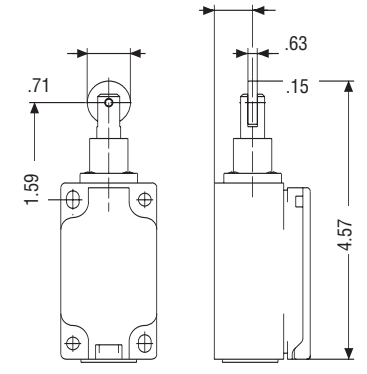
U1Z SU1Z



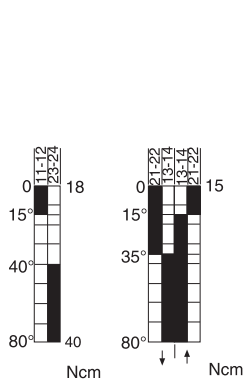
AHS-V



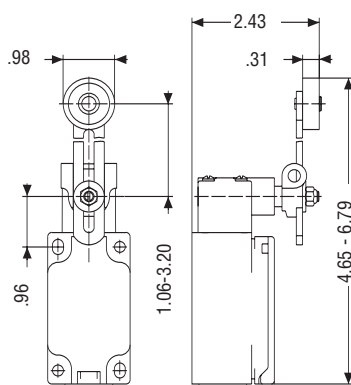
U1Z SU1Z



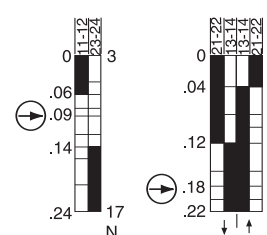
RiW



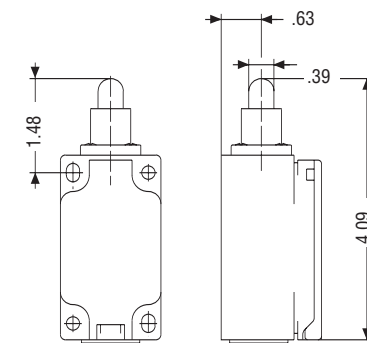
U1 SU1



AV



U1Z SU1Z



iw

- ☞ = Point of Forced Opening, Positive Disconnect
- U1Z = Slow Make-and-Break
- SU1Z = Snap Action with Positive Disconnect
- SU1 = Snap Action