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 10^6
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.


Ti2 Body Style

Model Identification

Body Style	Contact Block	Actuator Style
Ti2	U1Z	AH

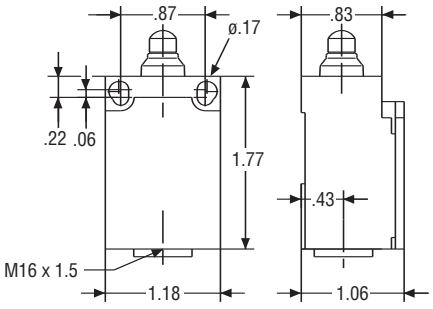
Switch Selection

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)



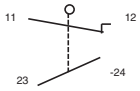
Contact Block Technical Data

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

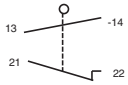
Notes:
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts ⊖ Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

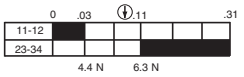
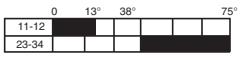
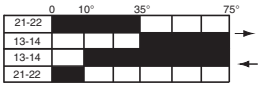
Contact Block Wiring Details

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 → 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%

= contact open
= contact closed
⊖ = Point of forced opening-positive disconnect

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

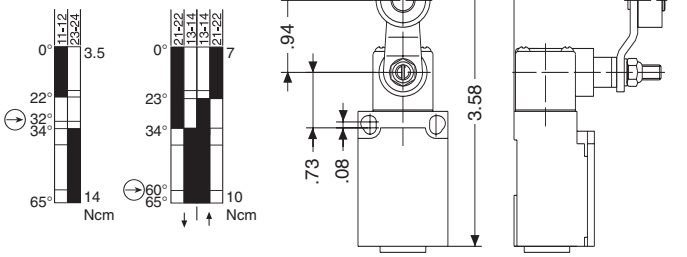
Snap Action

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

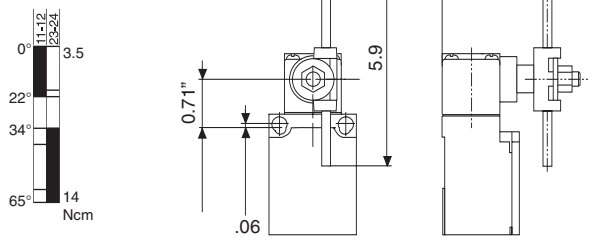
Mechanical Drawing Data

Contact Block Data

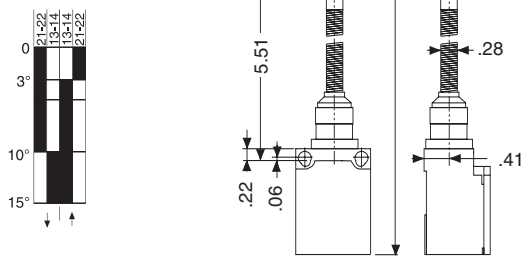
Mechanical Data
(Dimensions are in inches)



U1Z **SU1Z** **AH**



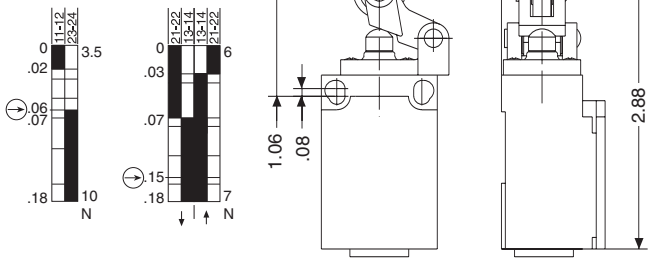
U1Z **AD**



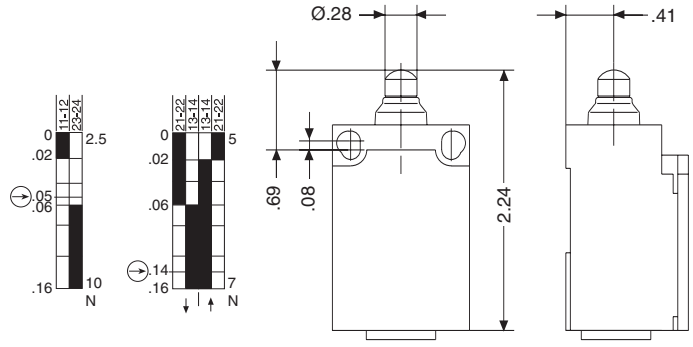
SU1Z **FF**

Contact Block Data

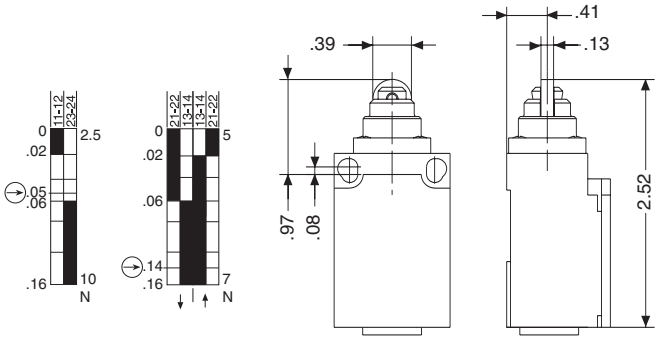
Mechanical Data
(Dimensions are in inches)



U1Z **SU1** **Hw**



U1Z **SU1** **w**



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 10^6 Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.

Bi Body Style

Model Identification

Body Style	Contact Block	Actuator Style
Bi	U1Z	AH

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

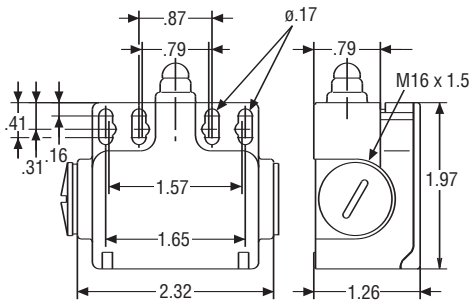
*SUVA approved for safety applications

Many more styles of actuators available.

Contact local factory for more information.

Mechanical Data

(Dimensions are in inches)



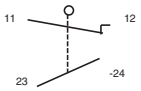
Contact Block Technical Data

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

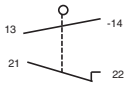
Notes:
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts ⊖ Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

Contact Block Wiring Details

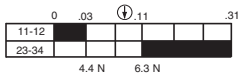
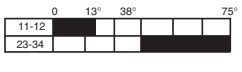
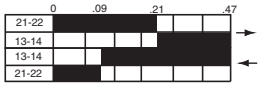
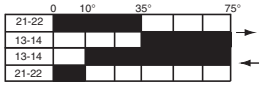
U1Z - Slow Make-and-Break



SU1Z Snap Action



Types of Contact Block and Action

		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		

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Accuracy of switching point ± .009
Tolerance of switching pressure ± 10%

= contact open
= contact closed
⊖ = Point of forced opening-positive disconnect

Switching Action Explanation

Slow Action

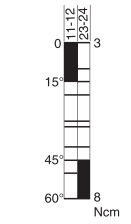
- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

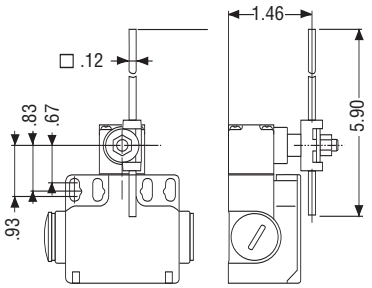
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data

Mechanical Data
(Dimensions are in inches)



U1



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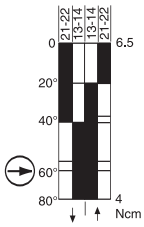
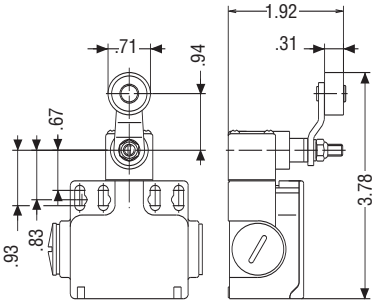
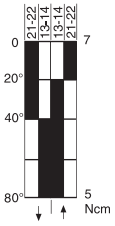


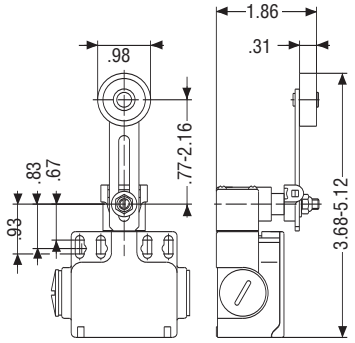
SU1Z



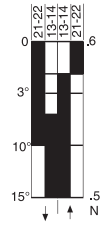
AH



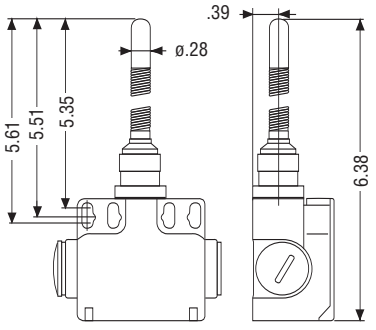
SU1



AV



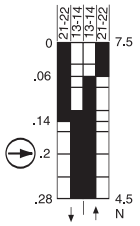
SU1



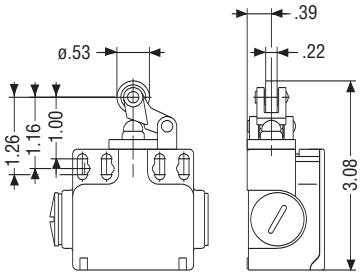
FF

Contact Block Data

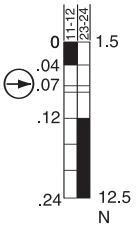
Mechanical Data
(Dimensions are in inches)



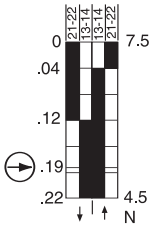
SU1Z



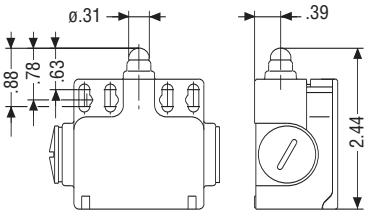
Hw



U1Z



SU1Z



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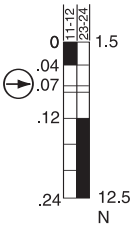
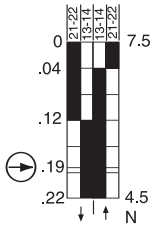
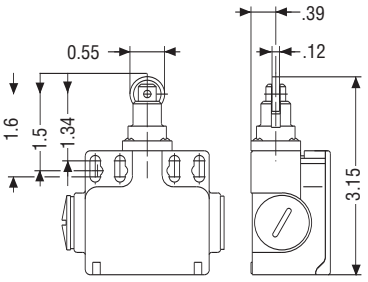


U1Z



SU1Z



Riw

⊖ = 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 90º 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 10^6 Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.


I88 Body Style

Model Identification

Body Style	Contact Block	Actuator Style
I88	U1Z	AH

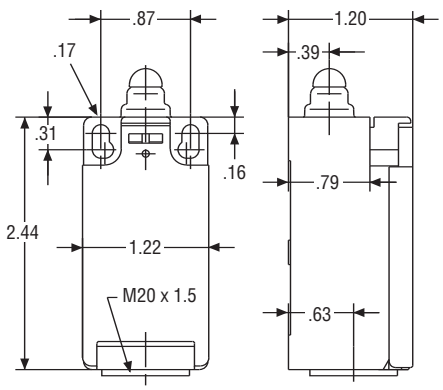
Switch Selection

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)



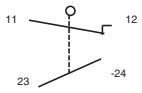
Contact Block Technical Data

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

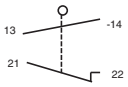
Notes:
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts ⊖ Forced Disconnect per IEC 947-5-1 Ch.3 (as indicated)

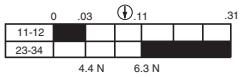
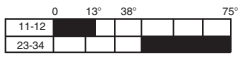
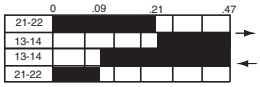
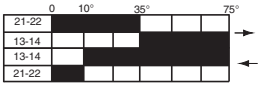
Contact Block Wiring Details

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%

= contact open
= contact closed
⊖ = Point of forced opening-positive disconnect

Switching Action Explanation

Slow Action

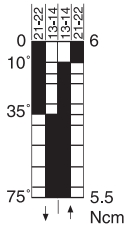
- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

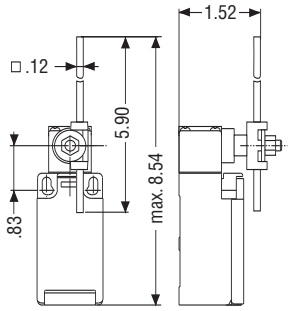
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data

Mechanical Data
(Dimensions are in inches)



SU1



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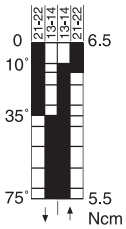
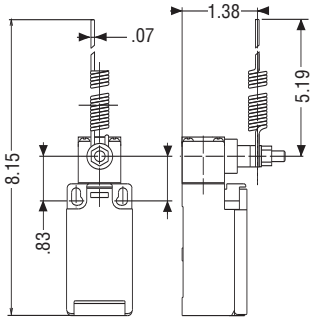
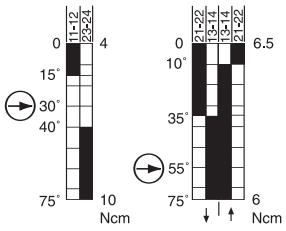


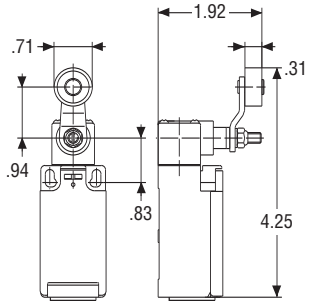
SU1



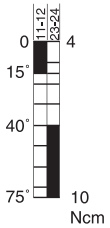
AF



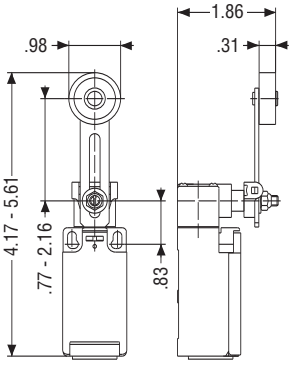
U1Z **SU1Z**



AH



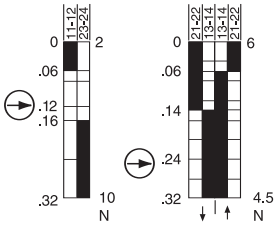
U1



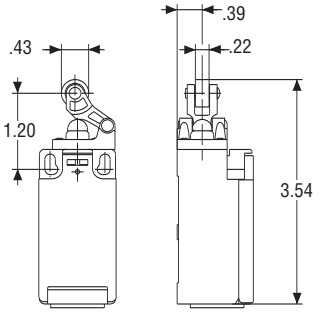
AV

Contact Block Data

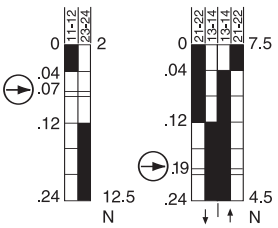
Mechanical Data
(Dimensions are in inches)



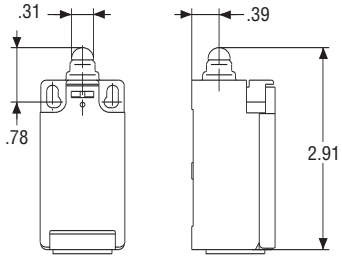
U1Z **SU1Z**



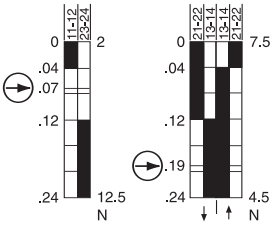
Hw



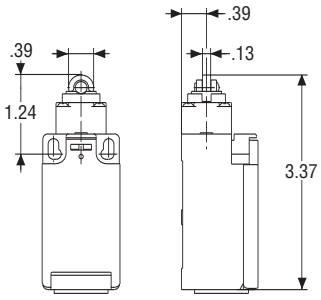
U1Z **SU1Z**



w



U1Z **SU1Z**



RiwK

⊖ = 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 10^6 Cycles
Temperature: -22°F to + 176°F
Switch Rate: 100 per minute max.


ENK Body Style

Model Identification

Body Style	Contact Block	Actuator Style
ENK	U1Z	AH

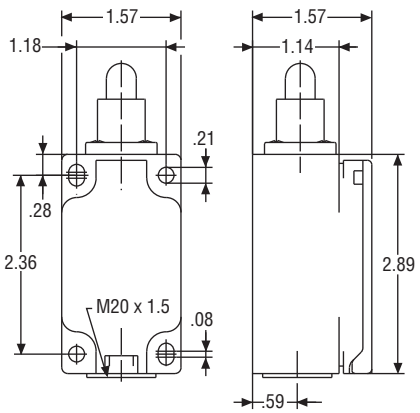
Switch Selection

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)



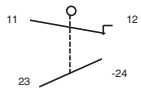
Contact Block Technical Data

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

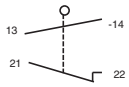
Notes:
1. All Contact Blocks Break-Before-Make
2. Normally Closed Contacts ⊖ Forced Disconnect per IEC 947-5-1 Ch.3 (As Indicated)

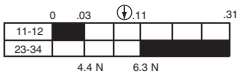
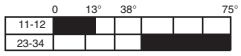
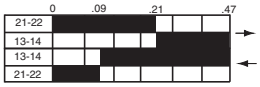
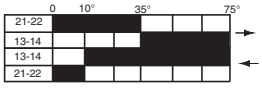
Contact Block Wiring Details

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%

= contact open
= contact closed
⊖ = Point of forced opening-positive disconnect

Switching Action Explanation

Slow Action

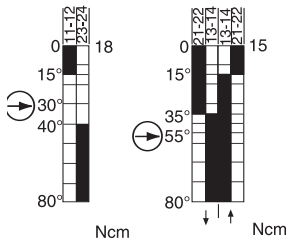
- Used in precision applications for switching on and off at the exact point
- Contact closes at the same speed as actuator/lever

Snap Action

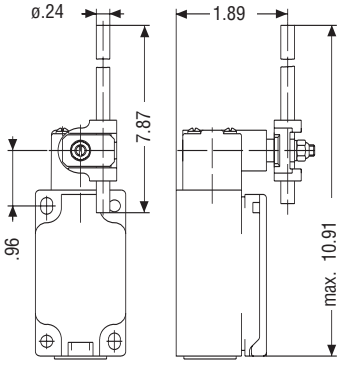
- Used when good solid contact is required
- Used with inductive loads to prevent arcing

Contact Block Data

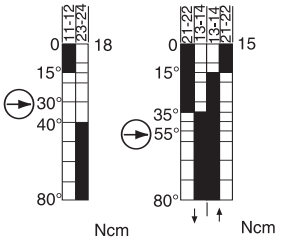
Mechanical Data
(Dimensions are in inches)



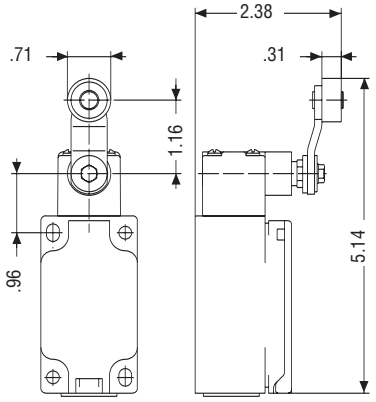
U1Z **SU1Z**



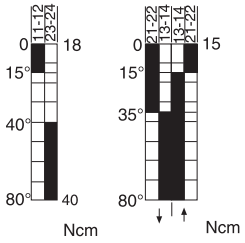
AD



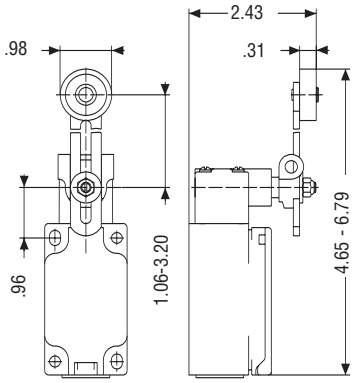
U1Z **SU1Z**



AHS-V



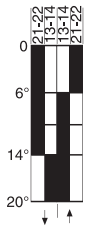
U1 **SU1**



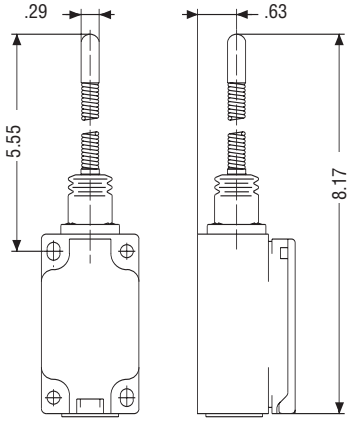
AV

Contact Block Data

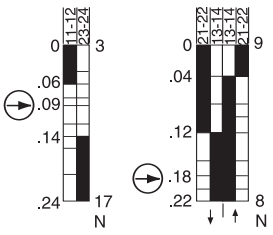
Mechanical Data
(Dimensions are in inches)



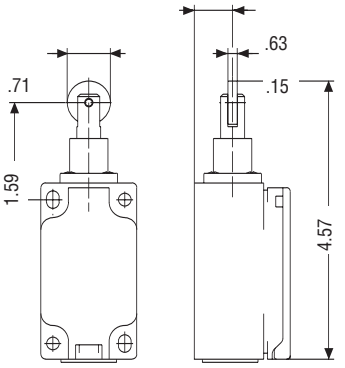
SU1



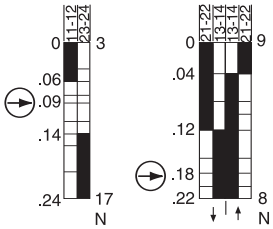
FF



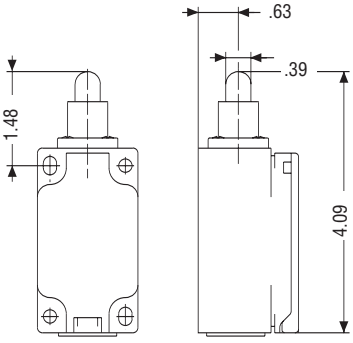
U1Z **SU1Z**



Riw



U1Z **SU1Z**



iw

= Point of Forced Opening, Positive Disconnect

U1Z = Slow Make-and-Break

SU1Z = Snap Action with Positive Disconnect

SU1= Snap Action