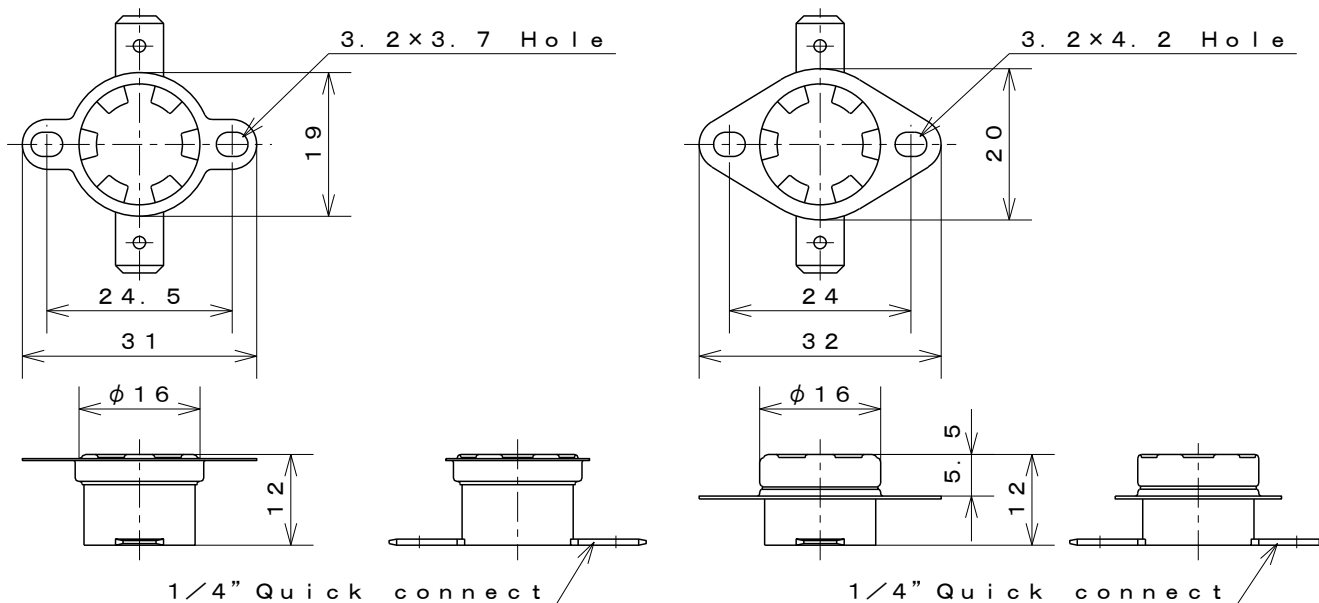


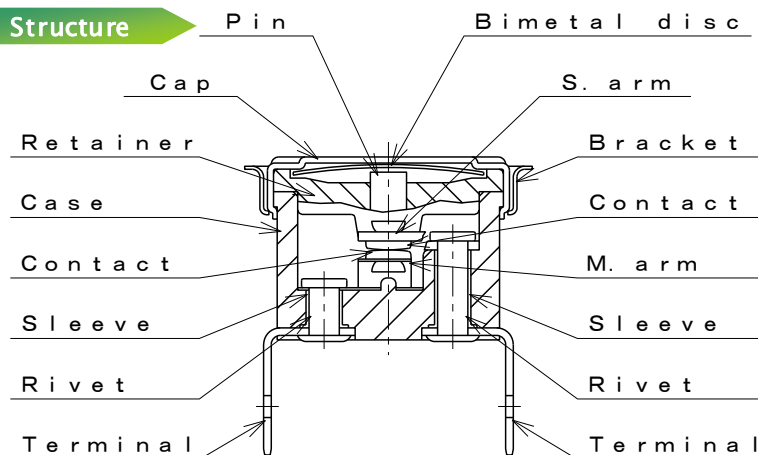
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

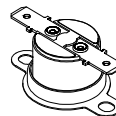
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		Res.AC250V/16A 10,000 cycles	150°C	J-195
KC	KC60730-1, K60730-2-9	Res.AC250V/16A 10,000 cycles	150°C	YU02032-15001
CQC	GB14536.1-2008, GB14536.10-2008	Res.AC250V/16A 10,000 cycles	150°C	CQC14002108569
UL	UL873	Res.AC120V/15A AC240V/10A 100,000 cycles	150°C	E43273
UL	UL873	Ind.AC120V/15A AC240V/10A 6,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC240V/10A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Ind.AC125V/13.5A AC250V/8A 6,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A 100,000 cycles	150°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 30,000 cycles	150°C	40004992
EN(VDE)	EN 60730-1, -2-9	Ind.AC250V/1.66A 100,000 cycles	150°C	40004992

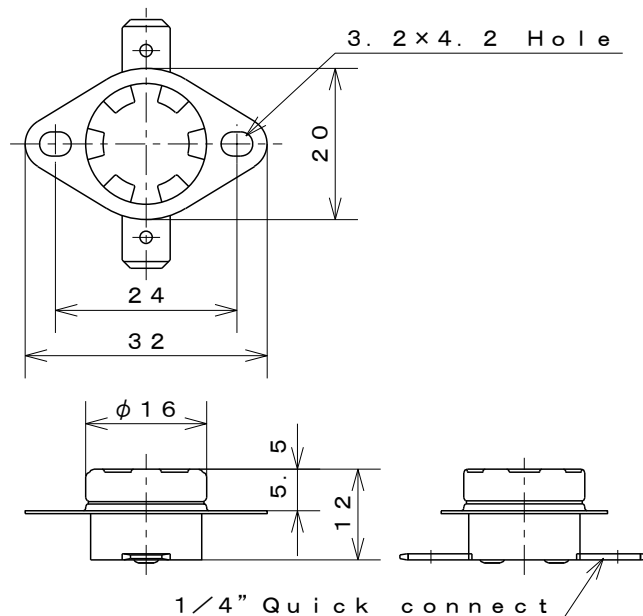
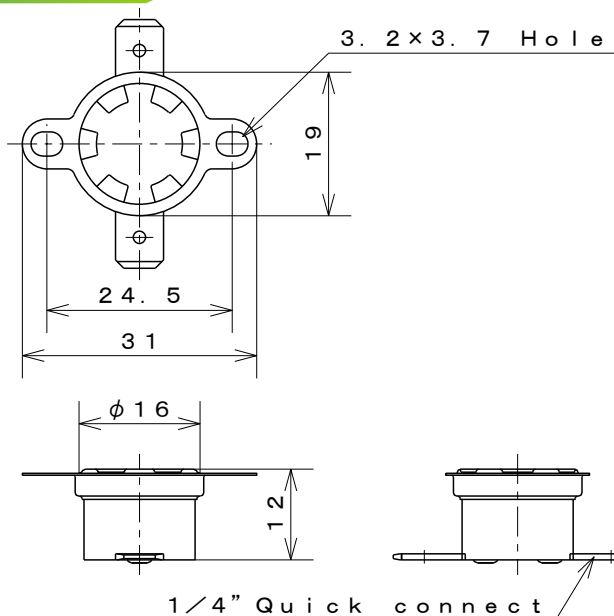


1/2" Disc Type Thermostat Automatic Reset

Type 03EP



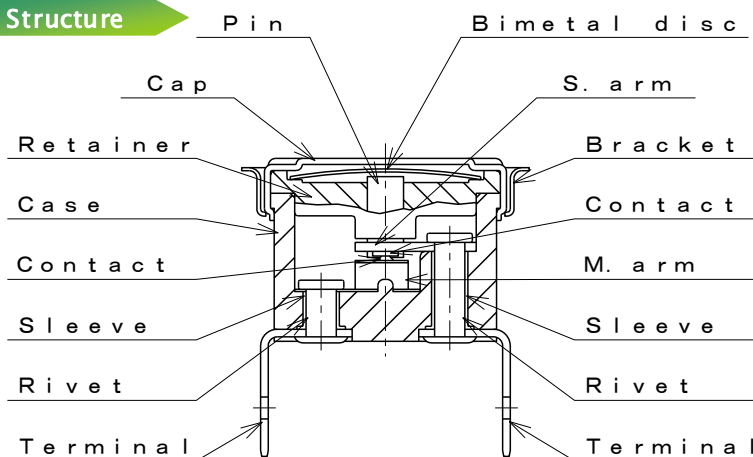
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	PGS-Crossbar

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC250V/0.2A DC42V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

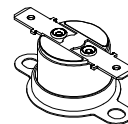
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	150°C	40004992



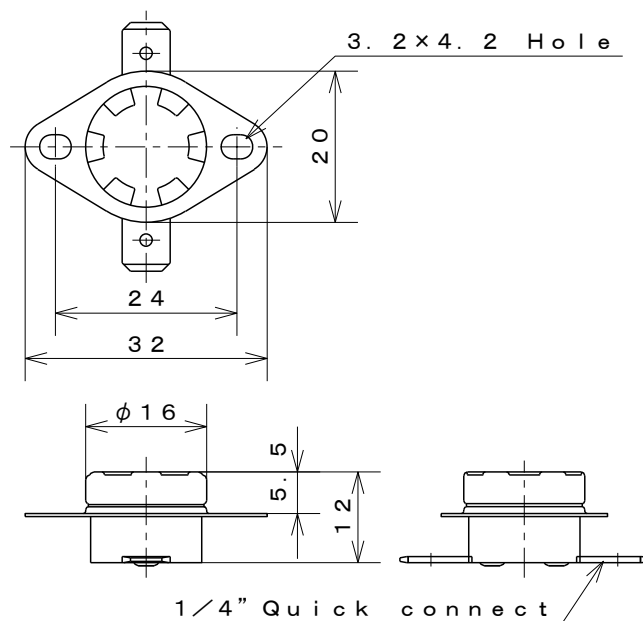
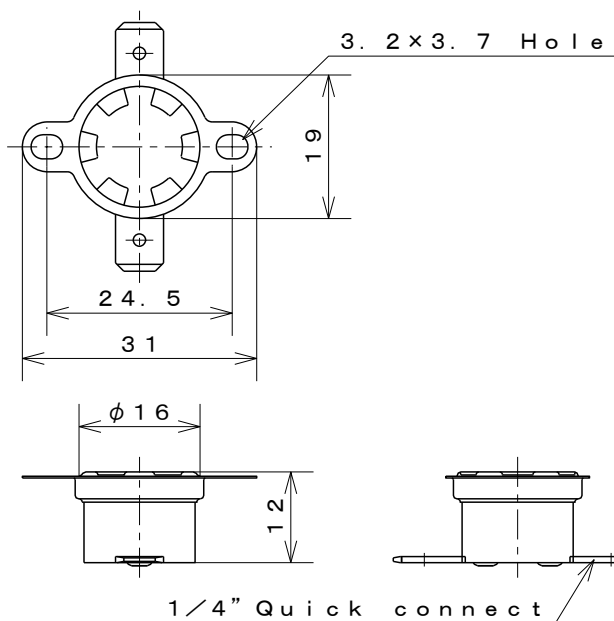


1/2" Disc Type Thermostat Automatic Reset

Type 03EC



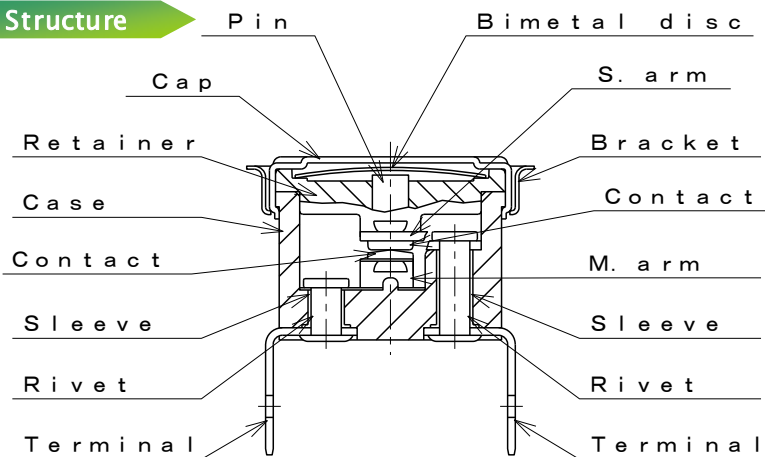
Dimensions



Materials of parts

Part	Material
Cap	Aluminum
	Copper
	Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver

Structure



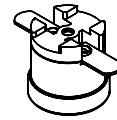
Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/6A AC250V/3A DC24V/15A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

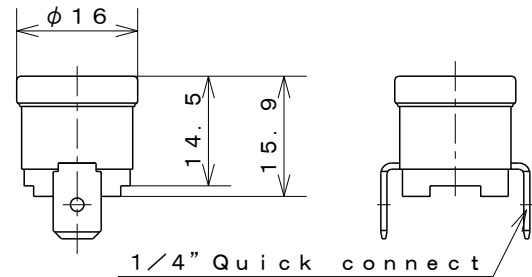
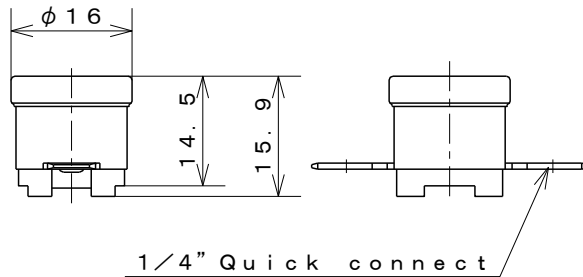
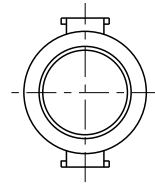
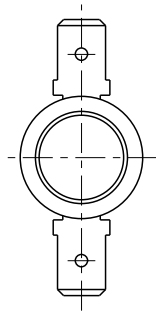
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL60730-1A, -2-9	Res.AC250V/3A DC24V/15A 100,000 cycles	150°C	E43273
cUL	CAN/CSA-E60730-1, -2-9	Res.AC250V/3A DC24V/15A 100,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.DC24V/15A 10,000 cycles	150°C	40004992





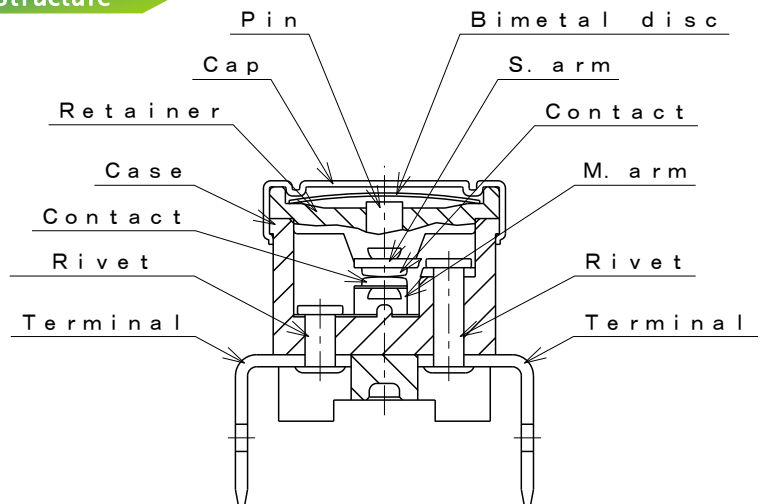
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 230°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

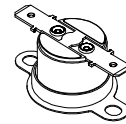
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC125V/15A 100,000 cycles	200°C	E43273
UL	UL873	Res.AC250V/10A 100,000 cycles	230°C	E43273
UL	UL873	Res.AC120V/15A 30,000 cycles	260°C	E43273
UL	UL873	Ind.AC125V/15A AC250V/10A 6,000 cycles	200°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A 100,000 cycles	200°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/10A 100,000 cycles	230°C	E43273
cUL	CSA C22.2 No.24	Res.AC120V/15A 30,000 cycles	260°C	E43273
cUL	CSA C22.2 No.24	Ind.AC125V/15A AC250V/10A 100,000 cycles	200°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A 100,000 cycles	230°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/13A 30,000 cycles	230°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 10,000 cycles	230°C	40004992

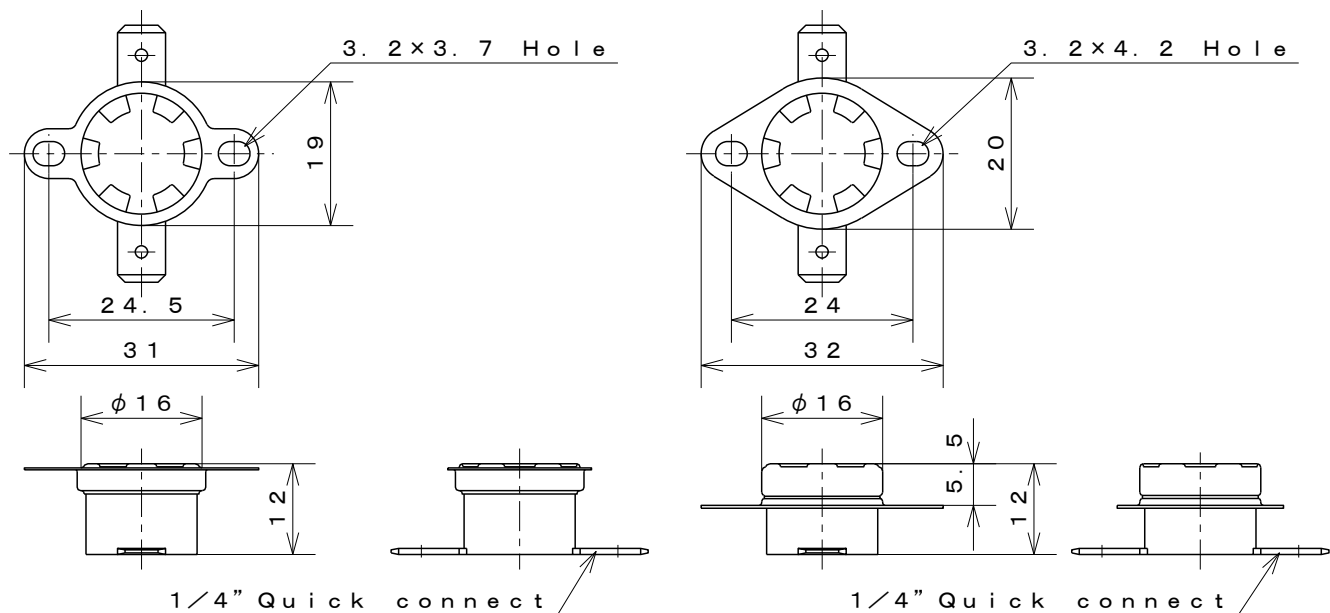


1/2" Disc Type Thermostat Automatic Reset

Type 21EN



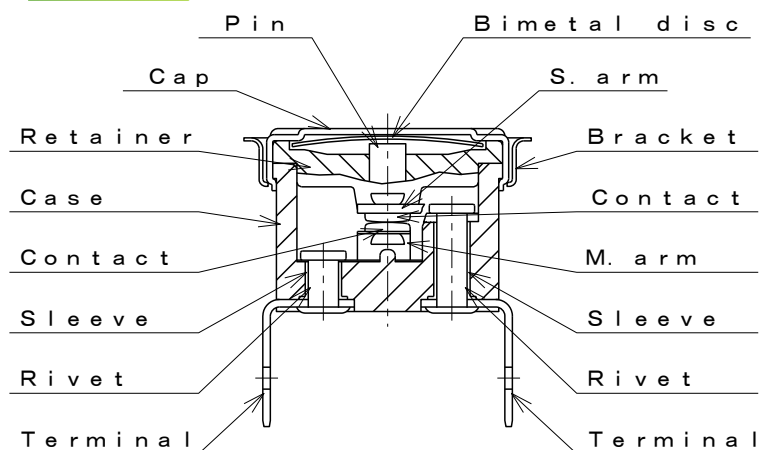
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Polyester resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



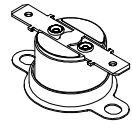
Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 180°C	
6. Insulation resistance	1,000MΩ or more / DC500V	
7. Dielectric strength	AC1,500V/1min. or AC1,800V/1sec.	

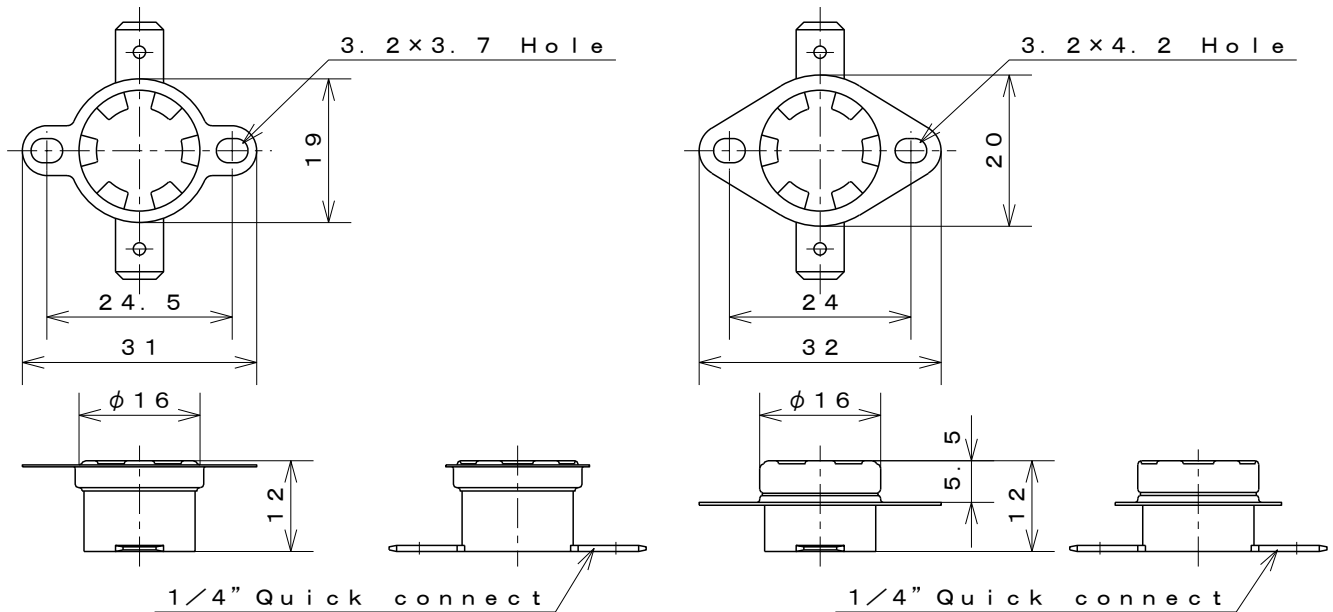
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		Res.AC250V/16A 10,000 cycles	180°C	J-147
UL	UL873	Res.AC250V/10A 100,000 cycles	180°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/10A 100,000 cycles	180°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 10,000 cycles	180°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 30,000 cycles	150°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A 100,000 cycles	180°C	40004992





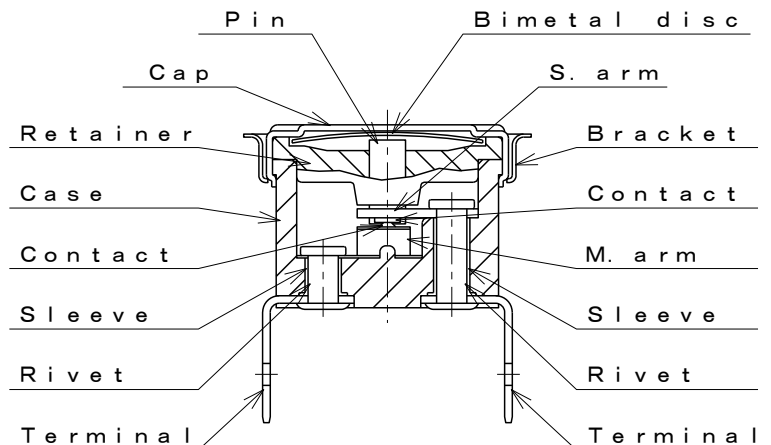
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Polyester resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	PGS-Crossbar

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC250V/0.2A DC42V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 180°C	
6. Insulation resistance	1,000MΩ or more / DC500V	
7. Dielectric strength	AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

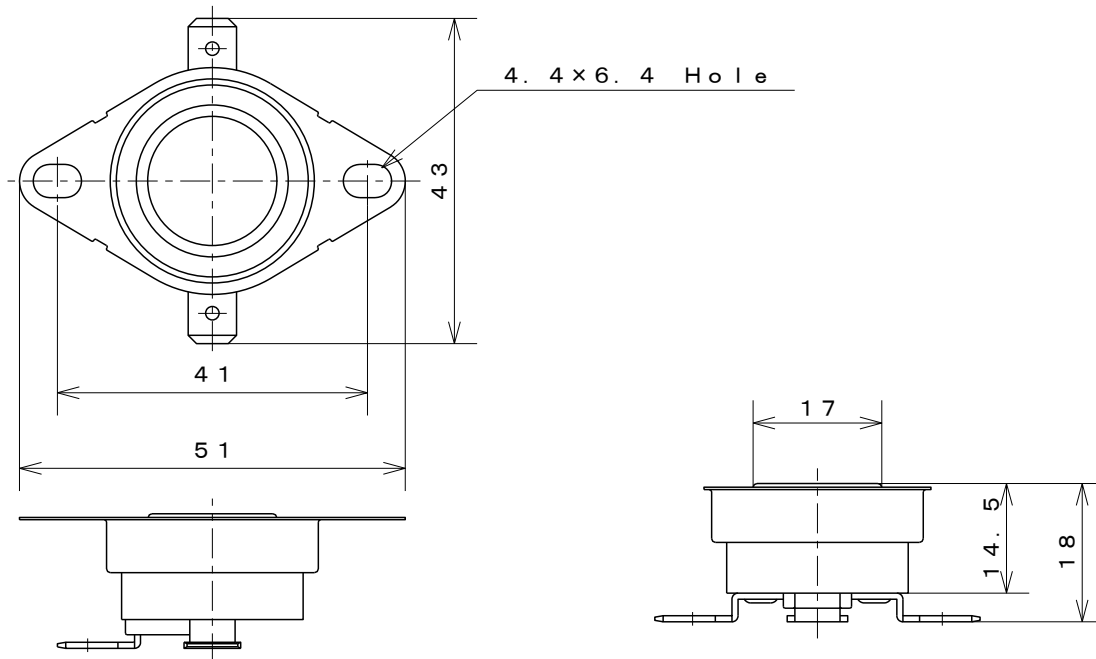
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	180°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	180°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	180°C	40004992



3/4" Disc Type Thermostat Automatic Reset

Type 30 Series

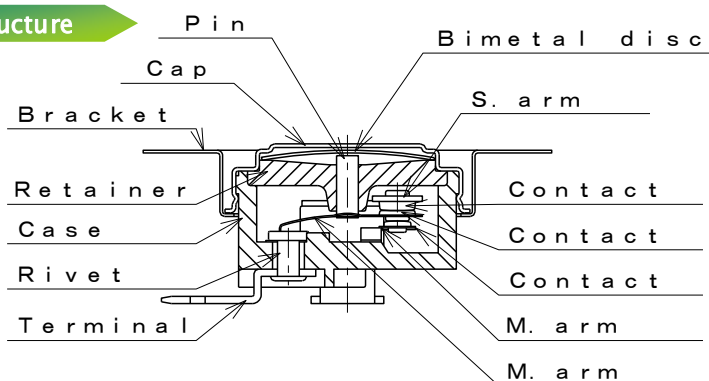
Dimensions



Materials of parts

Part	Material
Cap	Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure

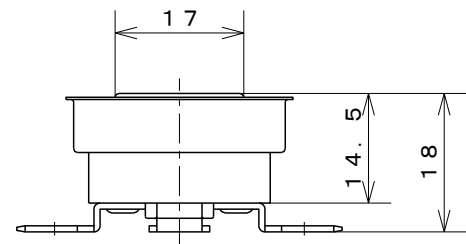
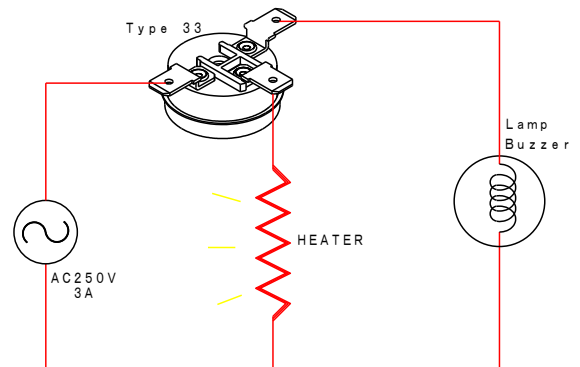
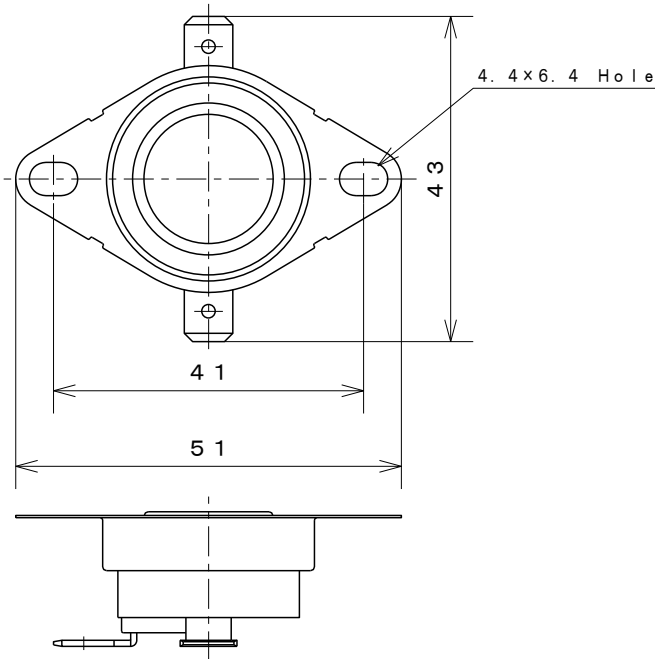


Specification

Item	Specification
1. Basic features	SPDT Automatic reset
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise
3. Electrical rating by variation of Type	31 : C-A AC125V/20A AC250V/15A : C-B AC125V/10A AC250V/ 8A 32 : C-A AC125V/20A AC250V/15A : C-B AC125V/ 3A AC250V/ 3A
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 150°C
6. Insulation resistance	Not less than 1,000MΩ/DC500V
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.



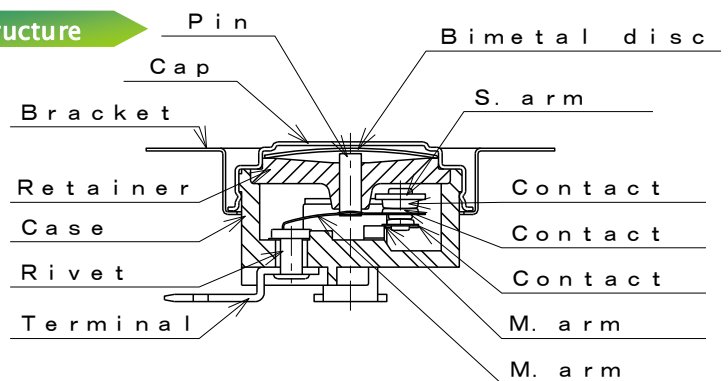
Dimensions



Materials of parts

Part	Material
Cap	Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver

Structure



Specification

Item	Specification
1. Basic features	SPDT Automatic reset
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise
3. Electrical rating	C-A AC125V/3A AC250V/3A C-B AC125V/3A AC250V/3A
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 150°C
6. Insulation resistance	Not less than 1,000MΩ/DC500V
7. Dielectric strength	Not less than AC2,000V/2sec.

Safety Approval

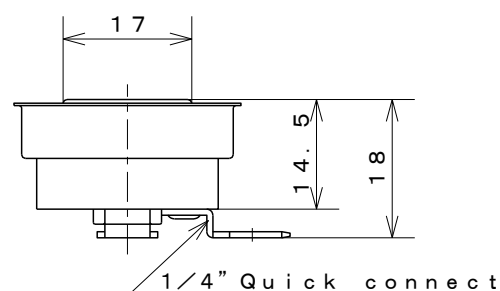
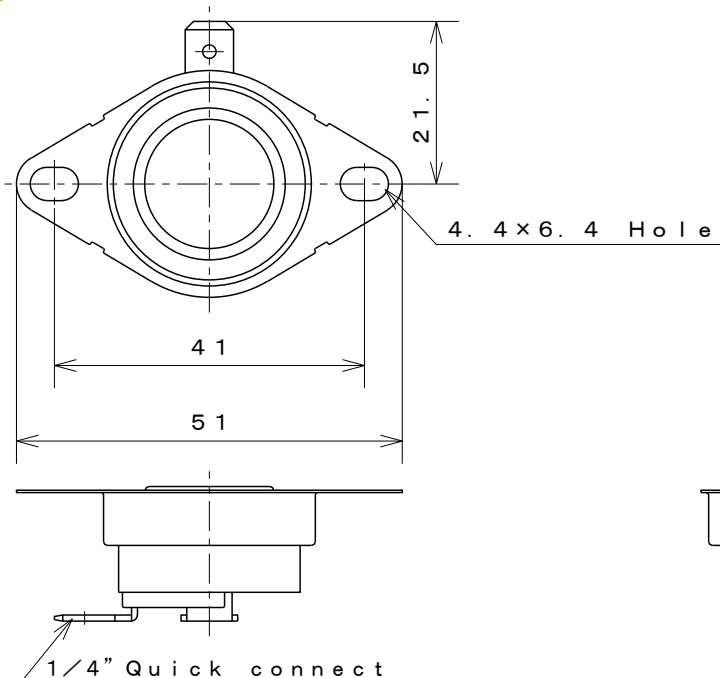
Agency	Standard	Electrical rating	Max Temp.	File No.
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/3A 10,000 cycles	150°C	40032694



3/4" Disc Type Thermostat Automatic Reset

Type 41

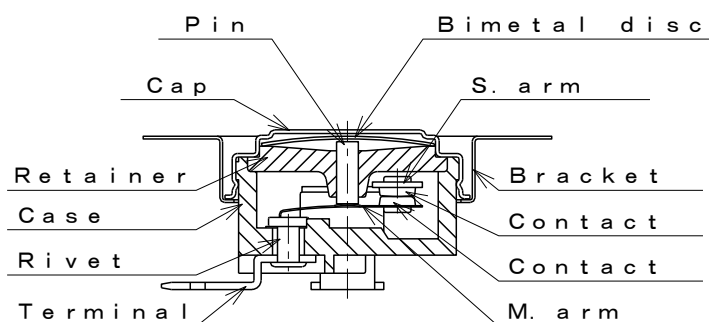
Dimensions



Materials of parts

Part	Material
Cap	Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

★Compliance with RoHS Directives

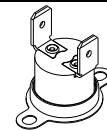
Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise
3. Electrical rating	AC125V/20A AC250V/15A
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 150°C
6. Insulation resistance	Not less than 1,000MΩ/DC500V
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.



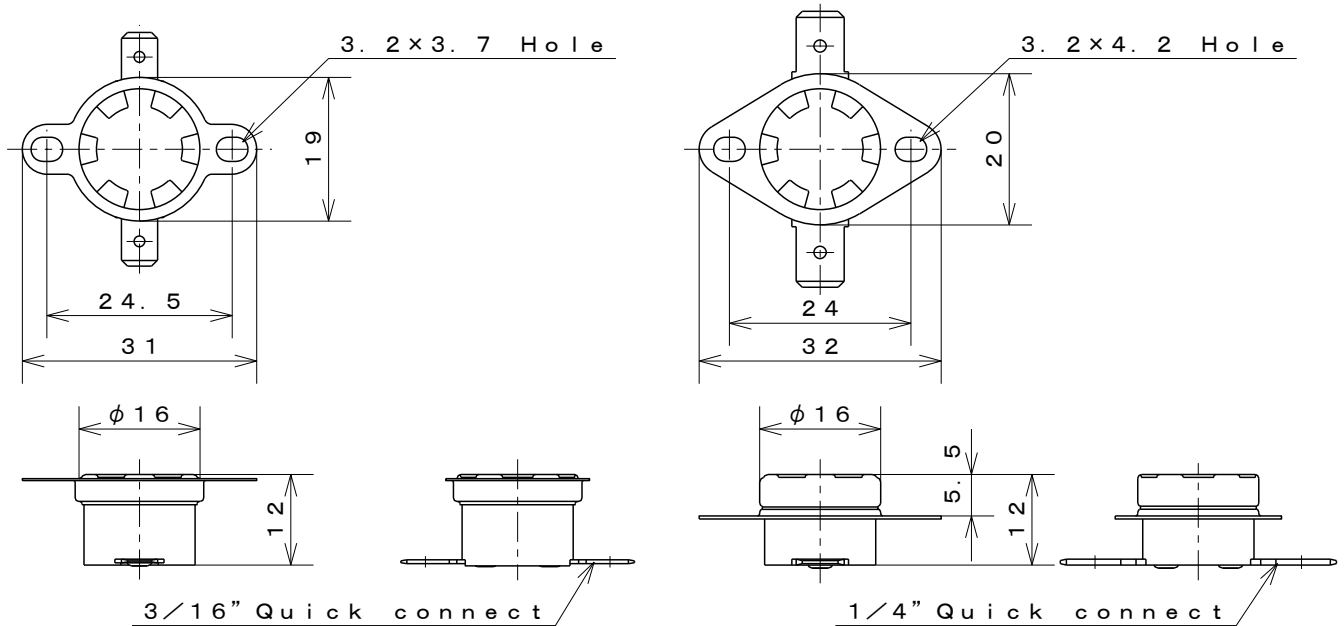


1/2" Disc Type Thermostat High Temp. Type

Type 52N



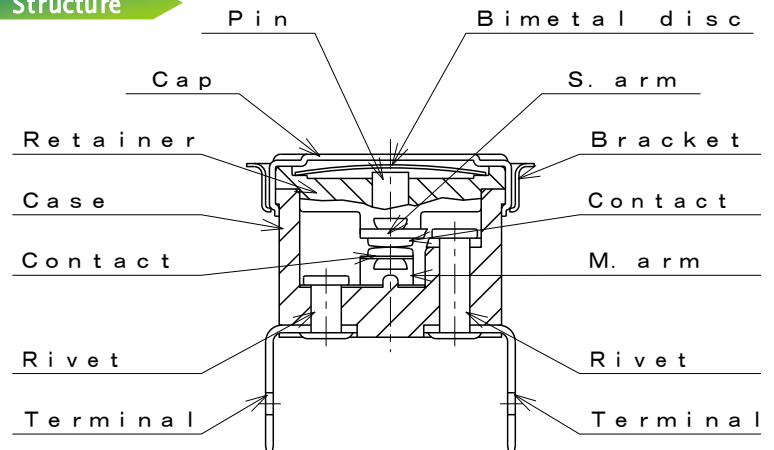
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 230°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

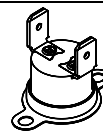
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		Res.AC250V/15A 10,000 cycles	200°C	J-202
KC	KC60730-1, K60730-2-9	Res.AC250V/16A 20,000 cycles	230°C	YU02024-13002
UL	EN IEC60079-0, -15	Res.AC125V/15A AC250V/16A 10,000 cycles	135°C	UL21 ATEX 2621U
UL	UL873	Res.AC125V/15A 100,000 cycles	200°C	E43273
UL	UL873	Res.AC250V/10A 100,000 cycles	230°C	E43273
UL	UL873	Res.AC120V/15A 30,000 cycles	260°C	E43273
UL	UL873	Ind.AC125V/15A AC250V/10A 6,000 cycles	200°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A 100,000 cycles	200°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/10A 100,000 cycles	230°C	E43273
cUL	CSA C22.2 No.24	Res.AC120V/15A 30,000 cycles	260°C	E43273
cUL	CSA C22.2 No.24	Ind.AC125V/15A AC250V/10A 100,000 cycles	200°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A 100,000 cycles	230°C	40004992
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 10,000 cycles	230°C	40004992

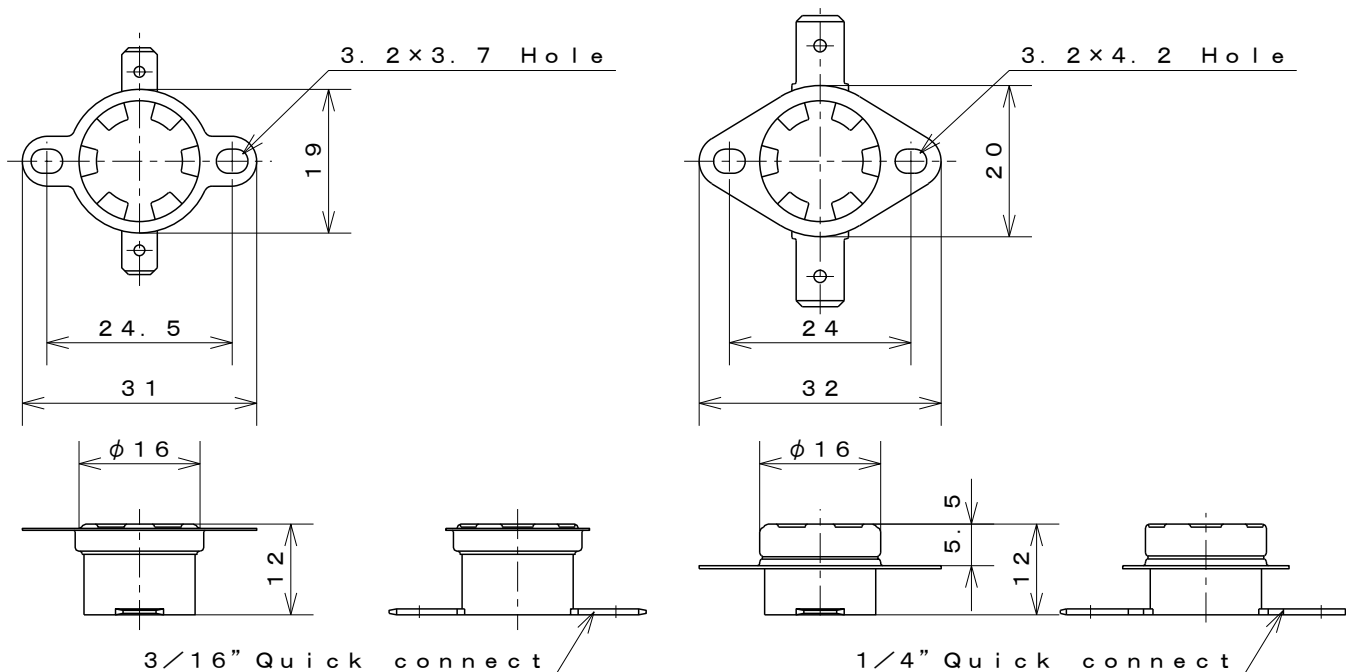


1/2" Disc Type Thermostat High Temp. Type

Type 52P



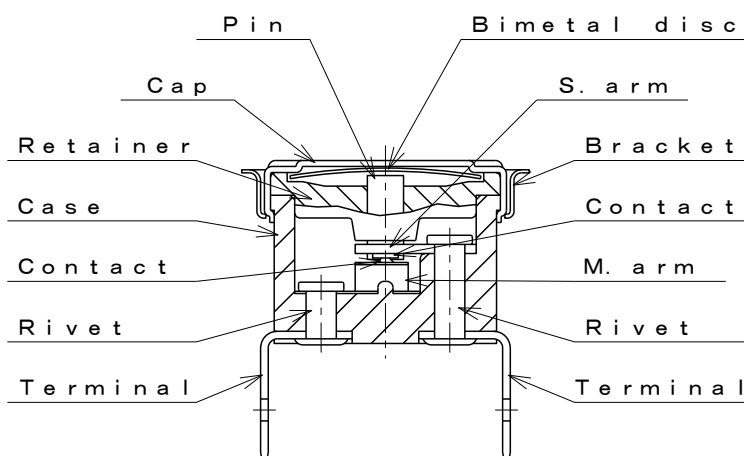
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	PGS-Crossbar

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC250V/0.2A DC42V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 230°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

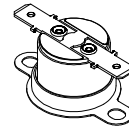
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	230°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	230°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/0.2A DC42V/0.2A 100,000 cycles	230°C	40004992



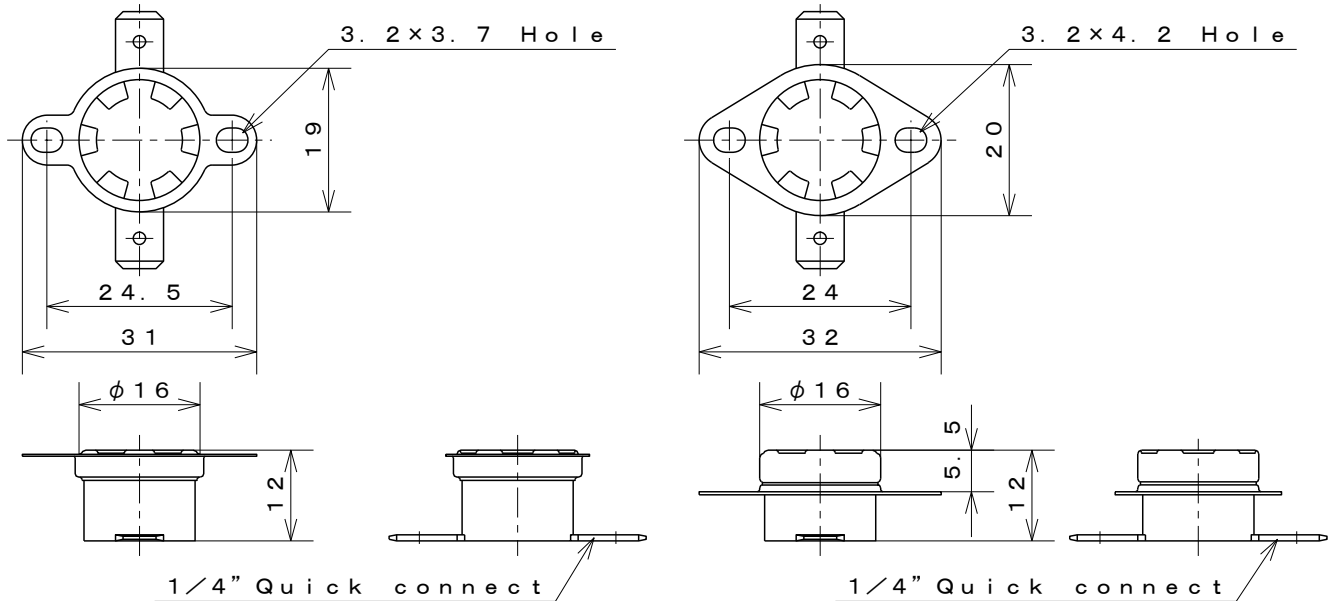


1/2" Disc Type Thermostat Automatic Reset

Type 54N



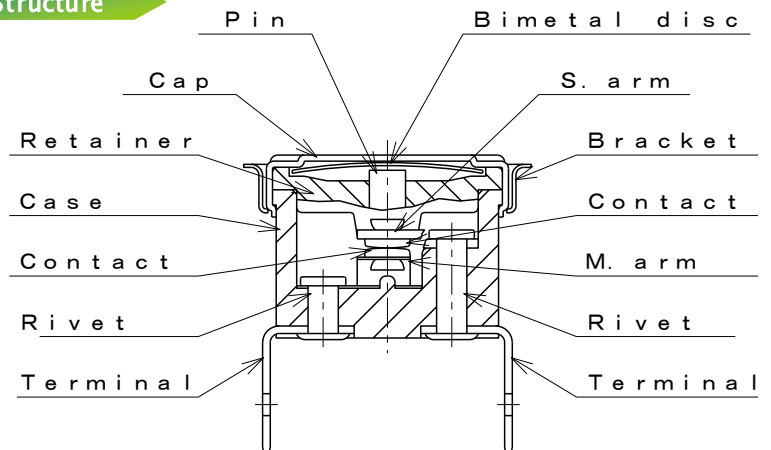
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC120V/15A AC240V/10A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC250V/8A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Ind.AC125V/13.5A 100,000 cycles	150°C	E43273

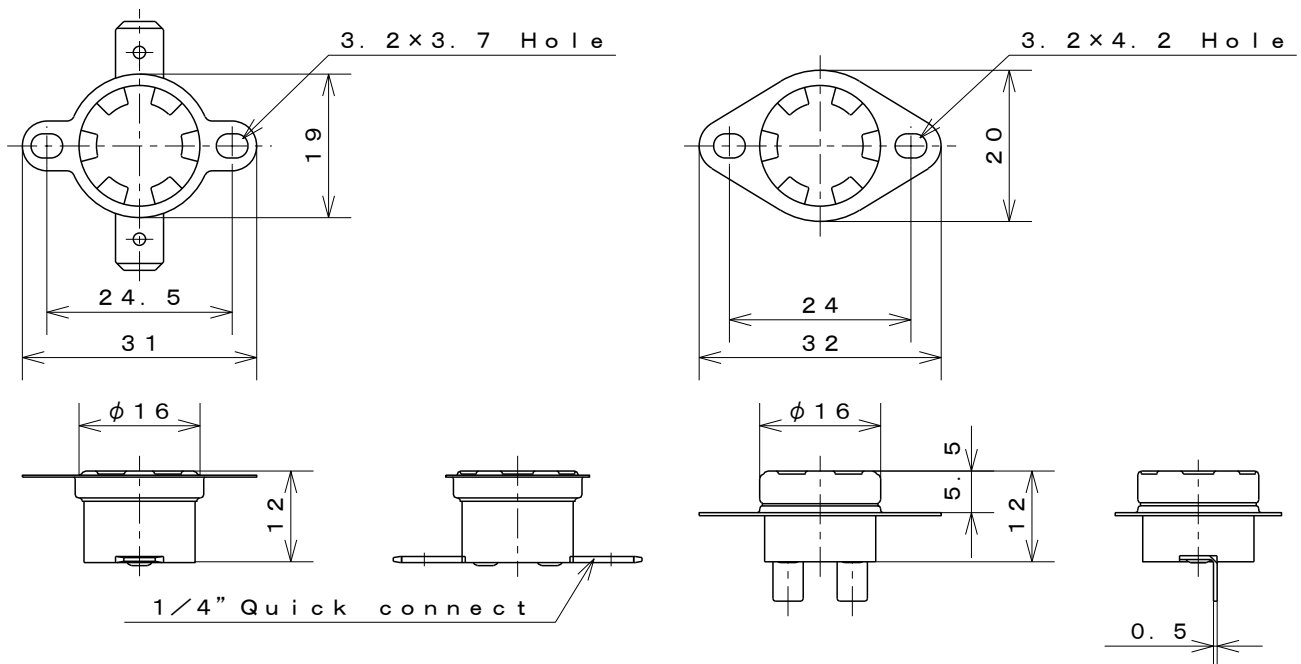




1/2" Disc Type Thermostat High Temp. Type

Type 55H

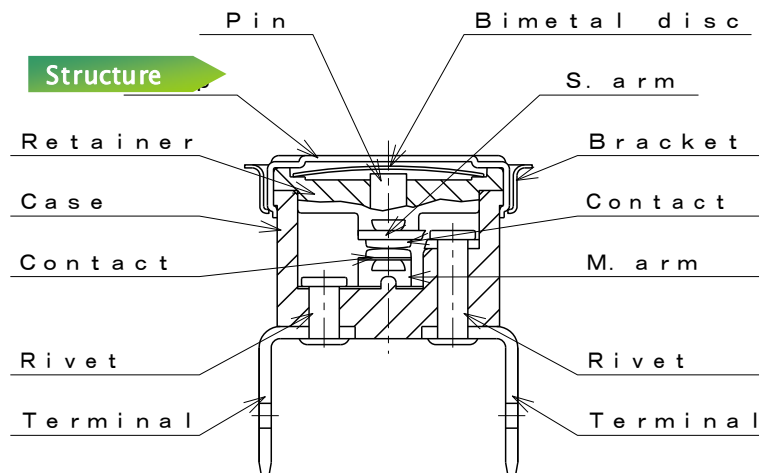
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Nickel alloy
Terminals	Steel #250 Tab, Weld
Bracket	Stainless steel
Contacts	Silver

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC250V/7A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 260°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

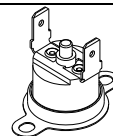
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/7A 30,000 cycles	260°C	40004992

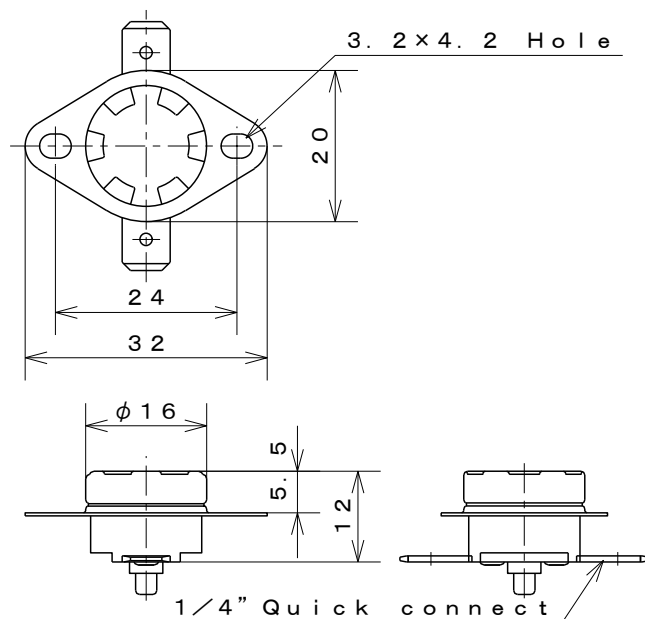
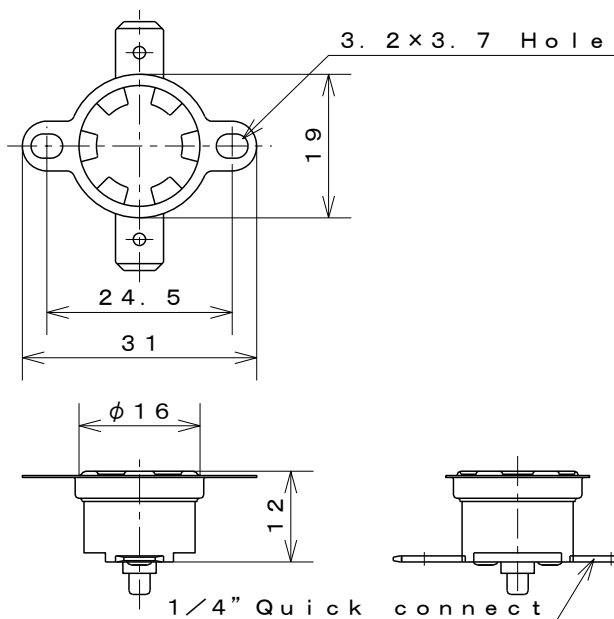


1/2" Disc Type Thermostat Manual Reset

Type 05EN



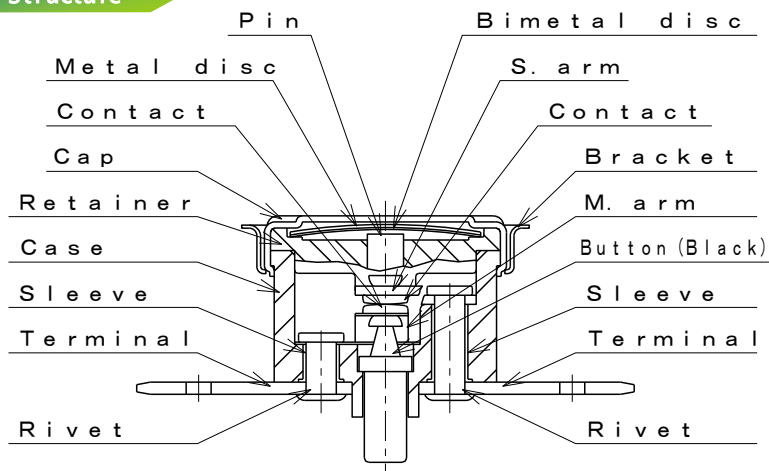
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy
Button	Phenolic resin

Structure



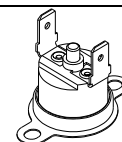
Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Manual reset	
2. Operation	A : Contacts open on temperature rise Not automatic reset	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

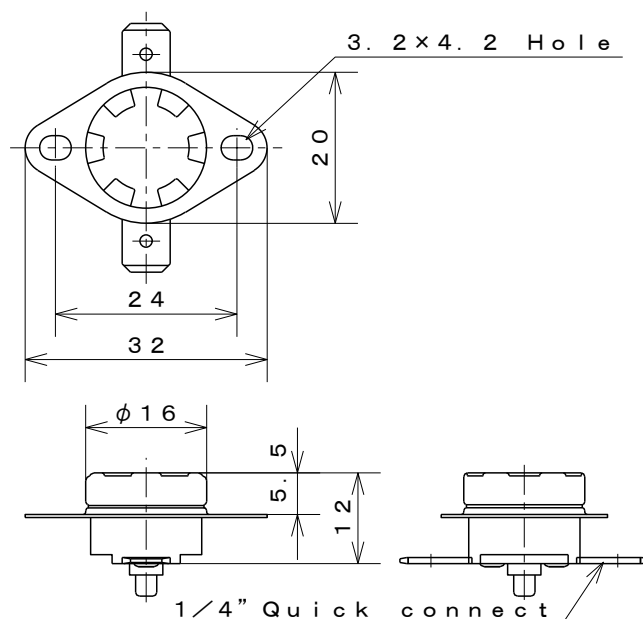
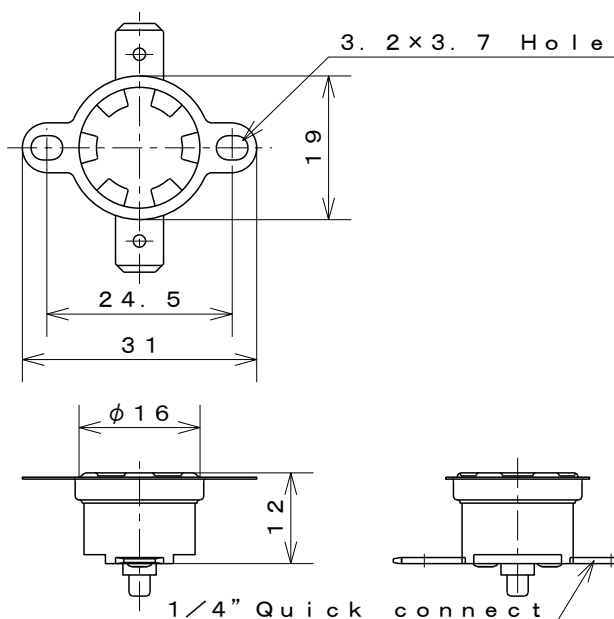
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC120V/15A AC240V/10A 6,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC250V/10A 6,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 3,000 cycles	150°C	40012267





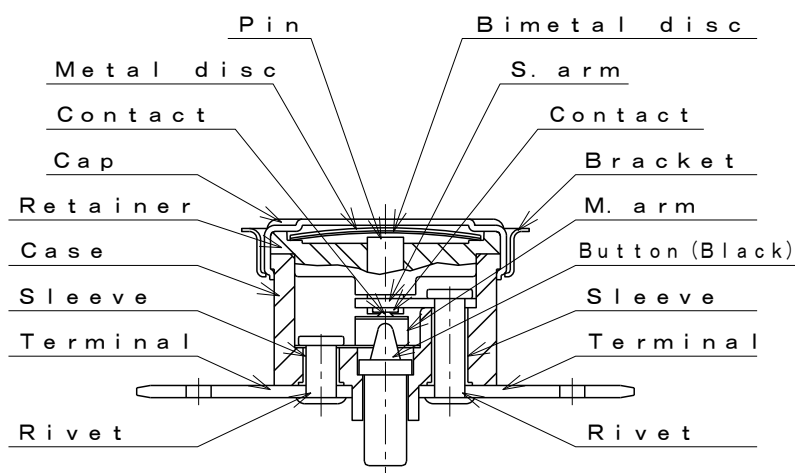
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	PGS-Crossbar
Button	Phenolic resin

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Manual reset	
2. Operation	A : Contacts open on temperature rise Not automatic reset	
3. Electrical rating	AC250V/0.2A DC42V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

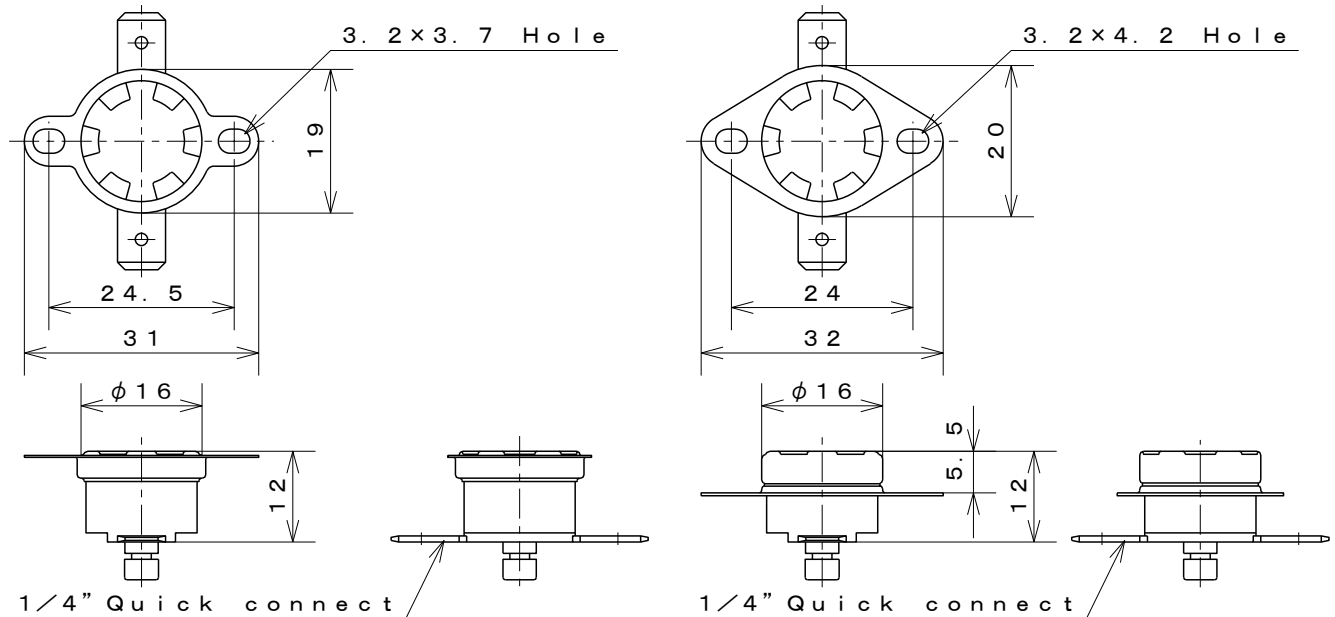
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/0.1A DC30V/0.1A 6,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/0.1A DC30V/0.1A 6,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/0.2A DC42V/0.2A 3,000 cycles	150°C	40012267



1/2" Disc Type Thermostat High Temp. Manual Reset

Type 15N

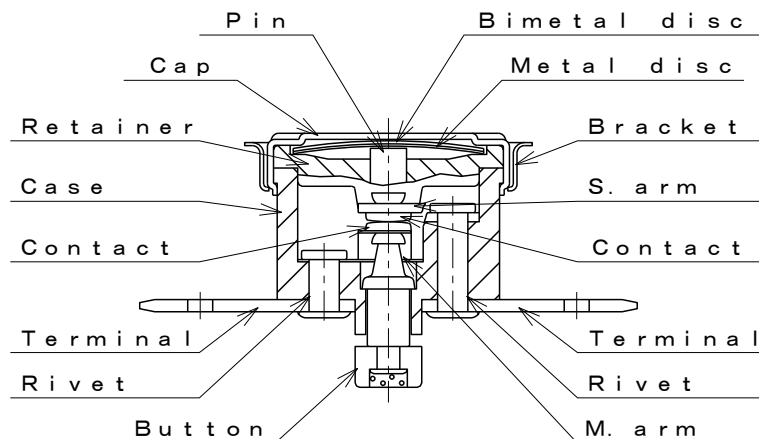
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★ Compliance with RoHS Directives
1. Basic features	SPST Manual reset	
2. Operation	A : Contacts open on temperature rise Not automatic reset	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 250°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

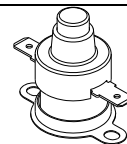
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		Res.AC250V/15A 1,000 cycles	200°C	J-58
JIA		Res.AC125V/15A DC30V/15A 1,000 cycles	250°C	名-PC-1002-20, 21
KC	K60730-1, K60730-2-9	Res.AC250V/16A 3,000 cycles	250°C	YU02024-13001
CQC	GB14536.1-2008, GB14536.10-2008	Res.AC250V/16A 6,000 cycles	250°C	CQC16002148338
UL	60730-1A, -2-9	Res.AC250V/16A AC277V/15A 6,000 cycles	250°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/16A 6,000 cycles	250°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 6,000 cycles	250°C	40019831

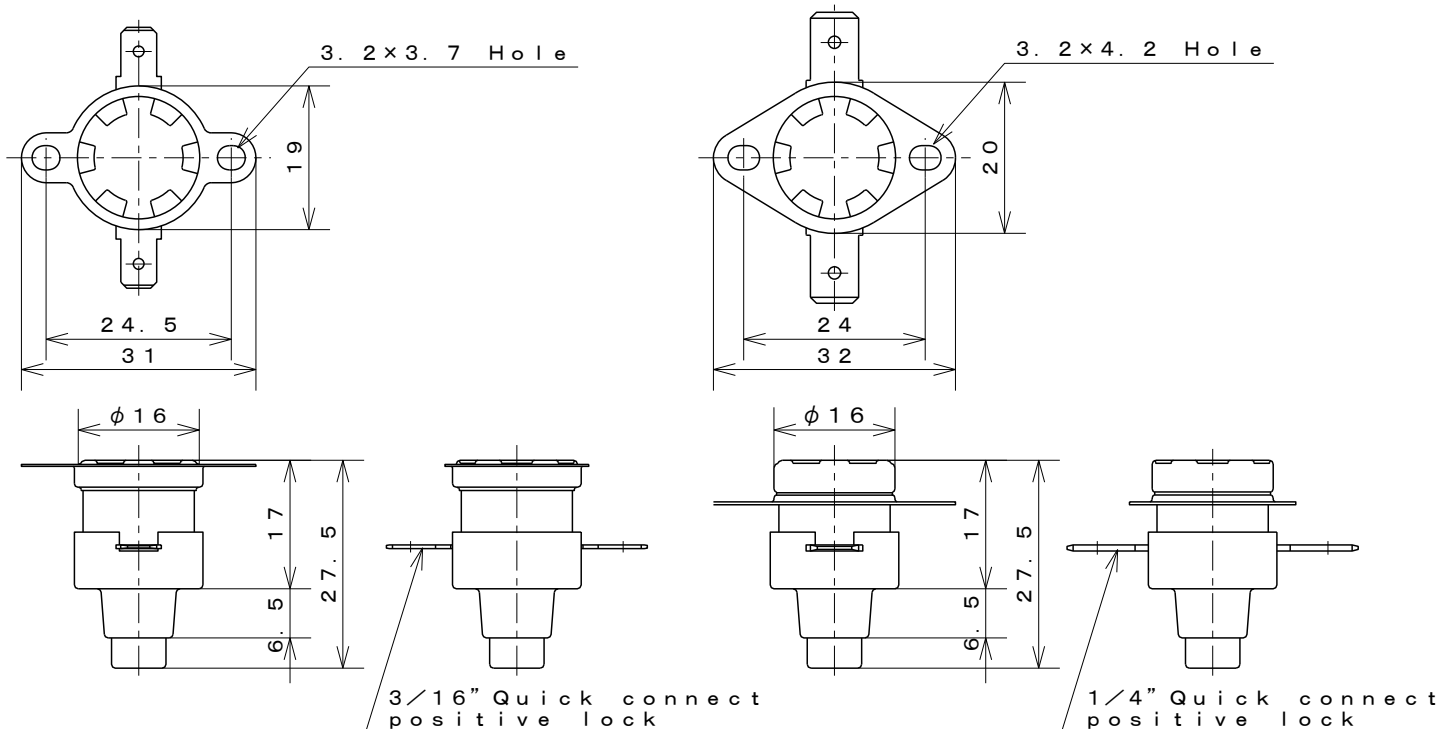


1/2" Disc Type Thermostat Manual Reset

Type 23EN



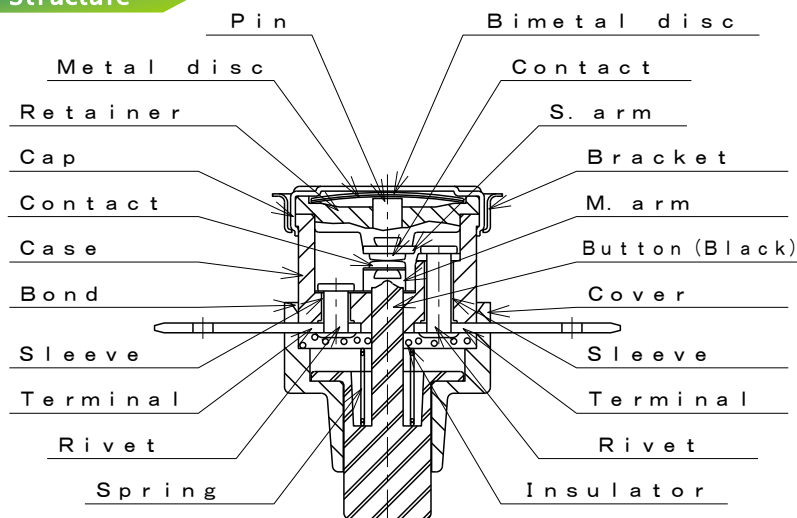
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy
Button	Phenolic resin

Structure



Specification

Item	Specification
1. Basic features	SPST Manual reset
2. Operation	A : Contacts open on temperature rise Not automatic reset
3. Electrical rating	AC125V/15A AC250V/10A
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 150°C
6. Insulation resistance	Not less than 1,000MΩ/DC500V
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.

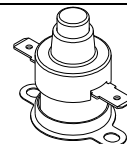
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC120V/15A AC240V/10A 6,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC250V/10A 6,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 3,000 cycles	150°C	40012267

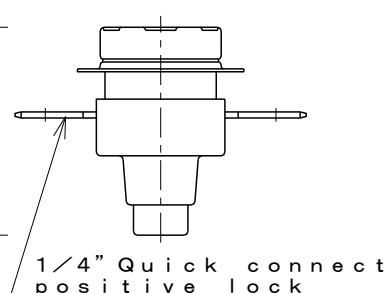
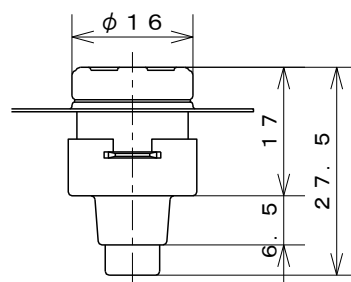
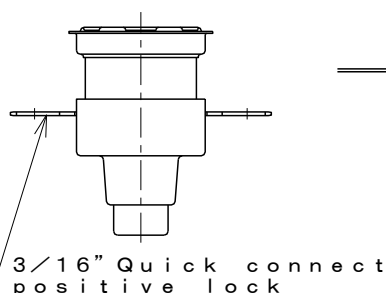
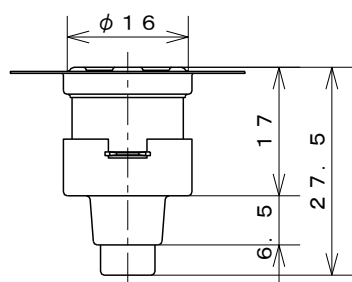
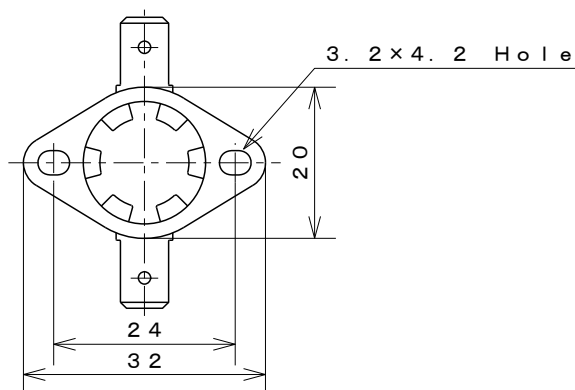
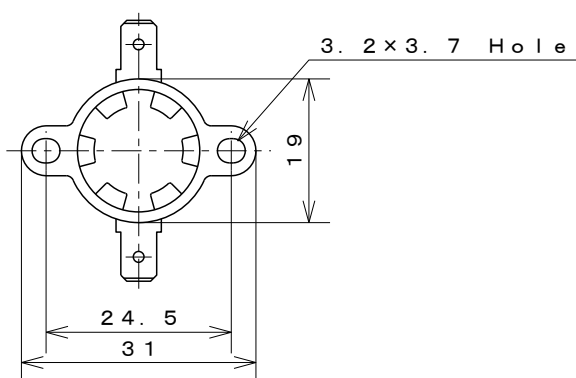


1/2" Disc Type Thermostat Manual Reset

Type 23EP



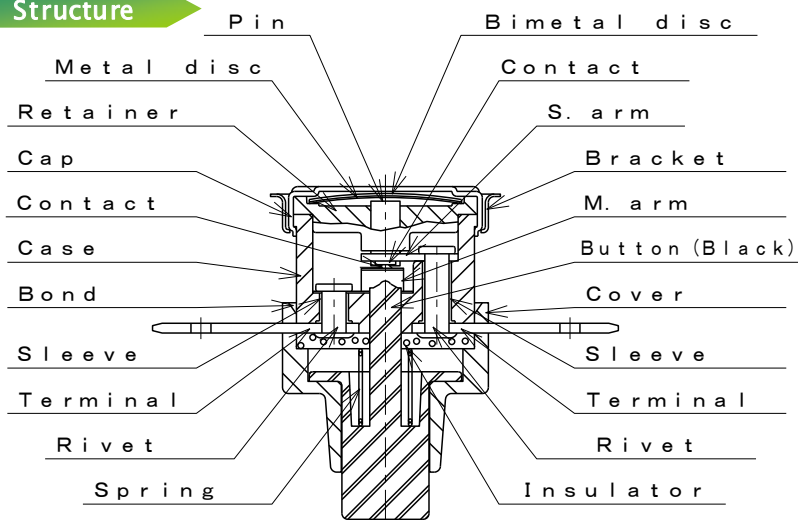
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	PGS-Crossbar
Button	Phenolic resin

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Manual reset	
2. Operation	A : Contacts open on temperature rise	Not automatic reset
3. Electrical rating	AC250V/0.2A DC42V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

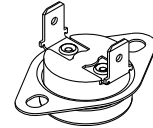
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/0.2A DC42V/0.2A 3,000 cycles	150°C	40012267

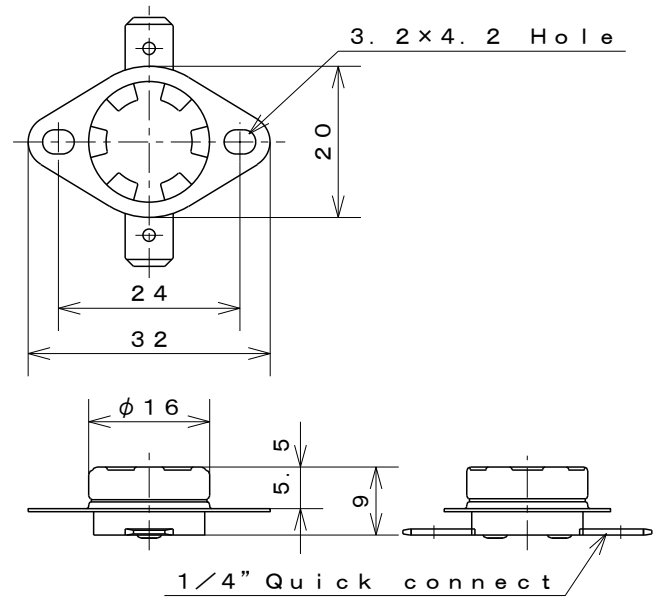
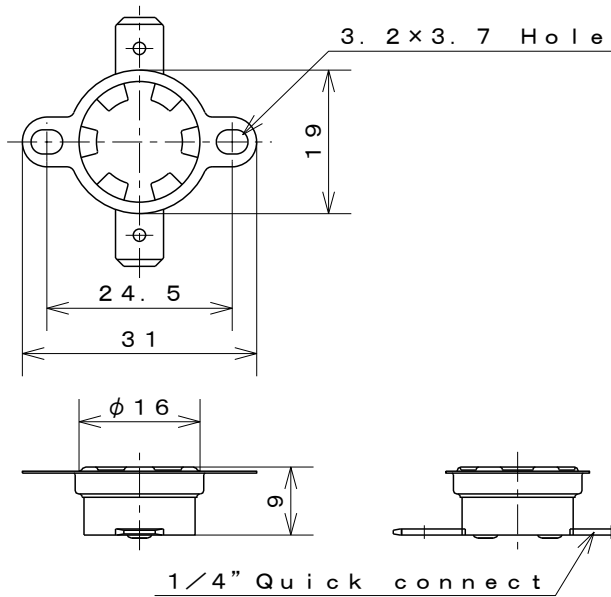


1/2" Disc Type Thermostat Thin Type

Type 10N



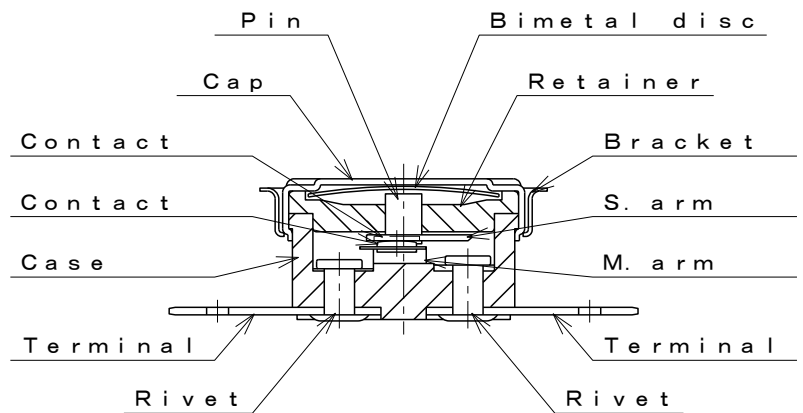
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Copper alloy
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 200°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

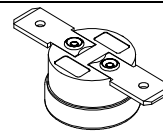
Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		Res.AC250V/15A 10,000 cycles	200°C	J-53
UL	UL873	Res.AC125V/15A AC250V/10A 100,000 cycles	175°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC250V/10A 100,000 cycles	200°C	E43273



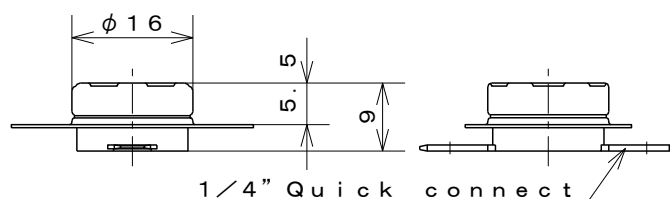
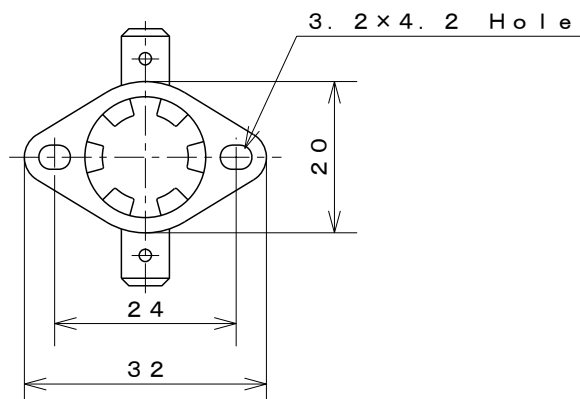
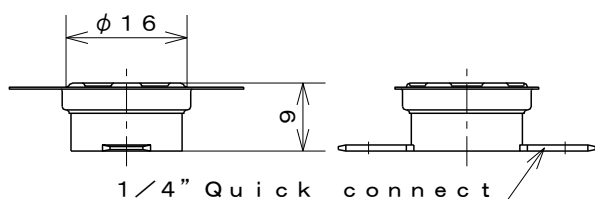
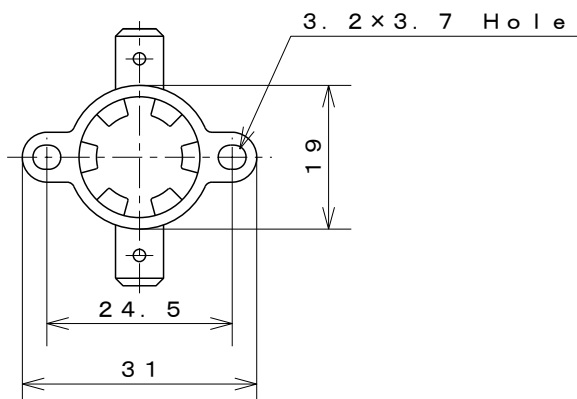


1/2" Disc Type Thermostat Thin Type

Type 11EN



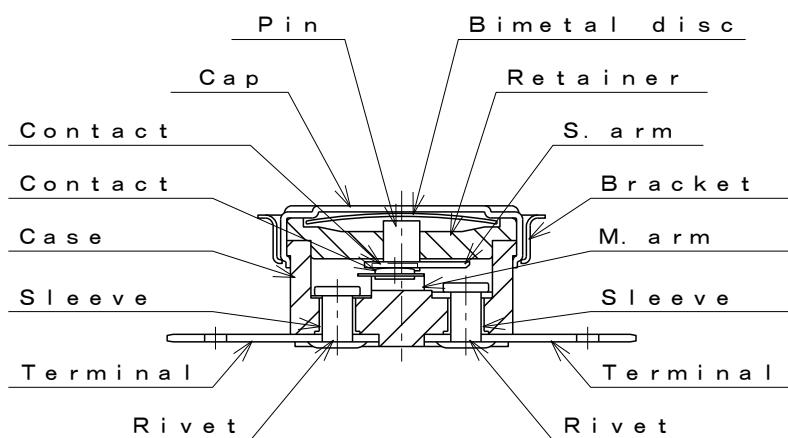
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



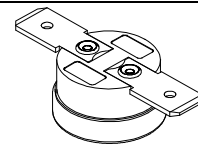
Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

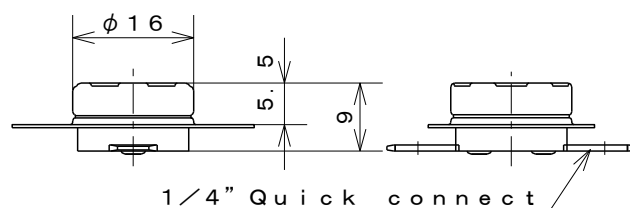
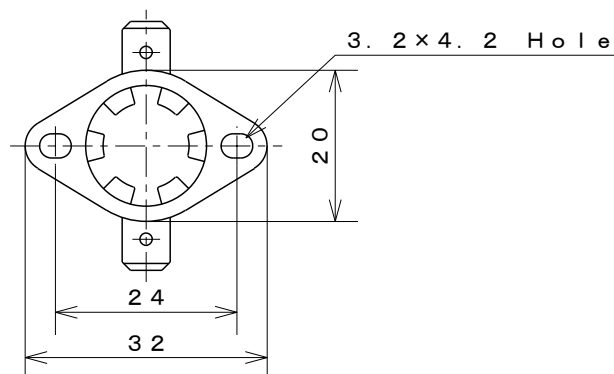
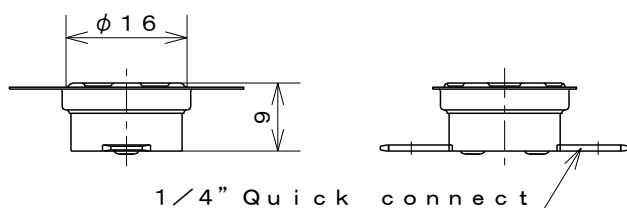
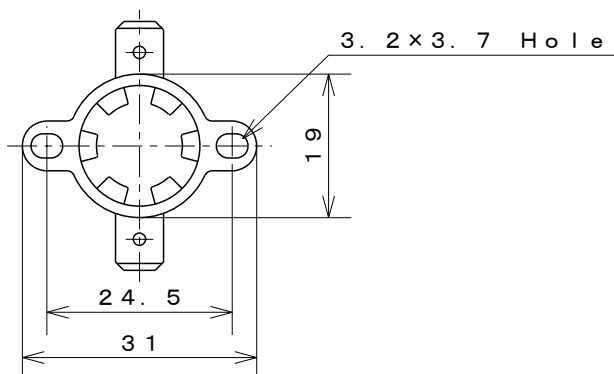
Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC125V/15A AC250V/10A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/15A AC250V/10A 100,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A 10,000 cycles	150°C	40004286





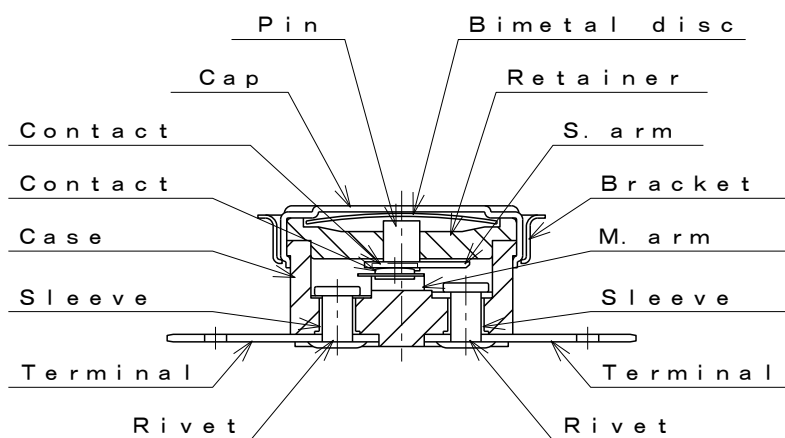
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/10A AC250V/5A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

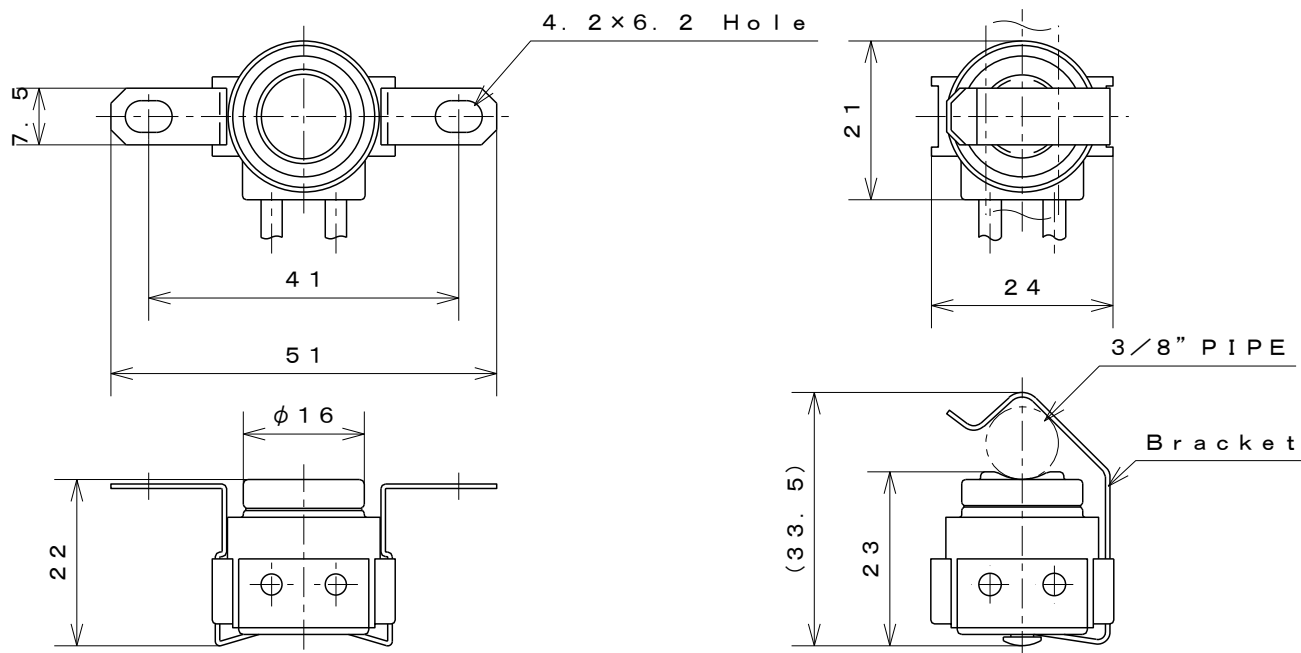
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC125V/6A AC250V/3A 100,000 cycles	150°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/6A AC250V/3A 100,000 cycles	150°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A 10,000 cycles	150°C	40004286



1/2" Disc Type Thermostat Water Proof Type

Type **12E□** for Europe

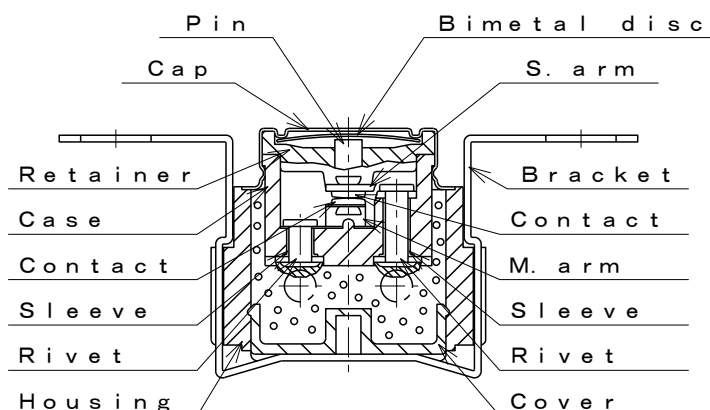
Dimensions



Materials of parts

Part	Material
Cap	Copper Stainless steel
Case	Phenolic resin
Husing	Polycarbonate
Bracket	Stainless steel
Fulling	Polyurethane
Leads	PVC 1.25mm ²
Contacts	Silver-Nickel alloy (N) Silver (C) PGS-Crossbar (X, P)

Structure

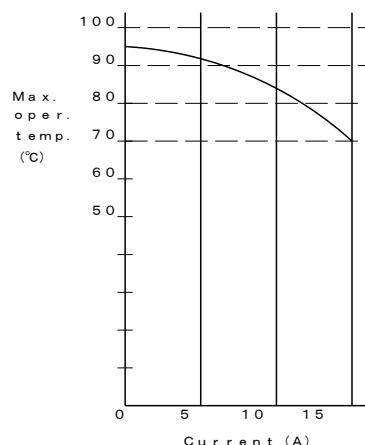


Specification

★Compliance with RoHS Directives

Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	L : Contacts open on temp. rise F : Contacts close on temp. rise
3. Electrical rating by variation of contacts	N : AC125V/15A AC250V/ 8A C : AC125V/ 6A AC250V/ 3A X : AC125V/ 1A DC30V/ 1A P : AC250V/0.2A DC42V/0.2A
4. Calibration method	Hot & cold air or liquid circulation system
5. Insulation resistance	Not less than 1,000MΩ/DC500V
6. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.
7. Resistance between Lead (at Lead is 1 meter)	N,C : Not more than 100mΩ X,P : Not more than 50mΩ

Relation of current & Max. operating temp.

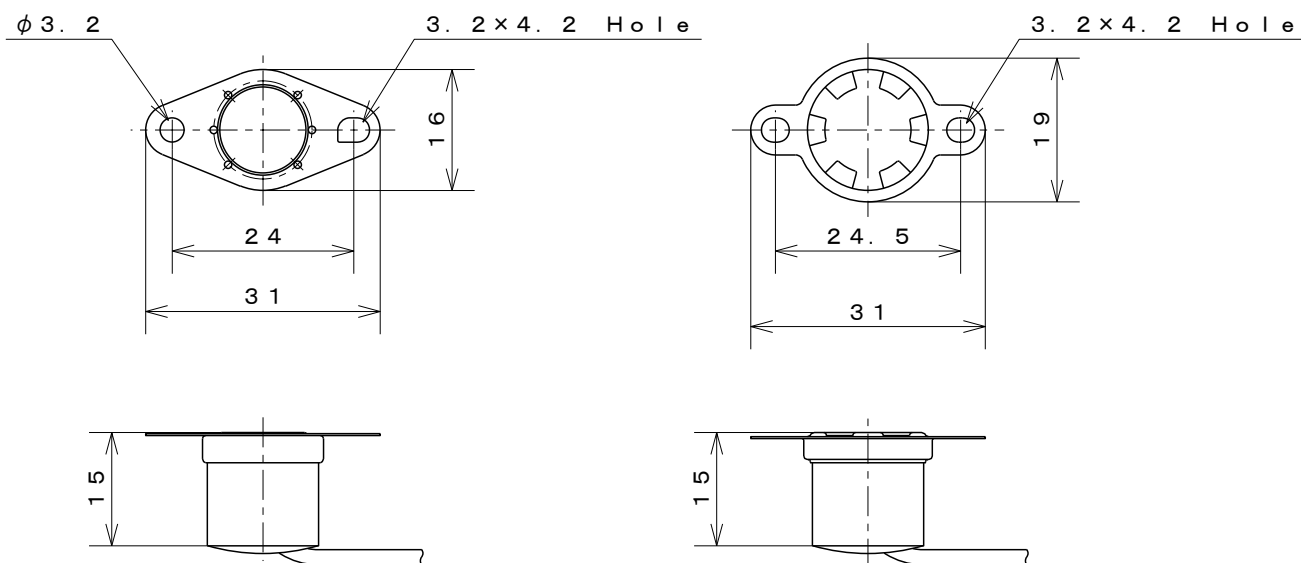




1/2" Disc Type Thermostat Drip-proof Type. Automatic Reset

Type 20N

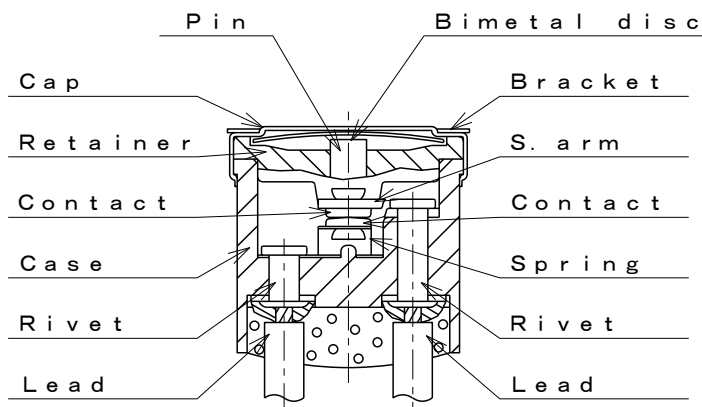
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M. arm	Beryllium Copper alloy
Leads	UL1430 etc
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 80°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC120V/15A AC240V/10A 100,000 cycles	80°C	E43273
cUL	CSA C22.2 No.24	Res.AC120V/15A AC240V/10A 100,000 cycles	80°C	E43273

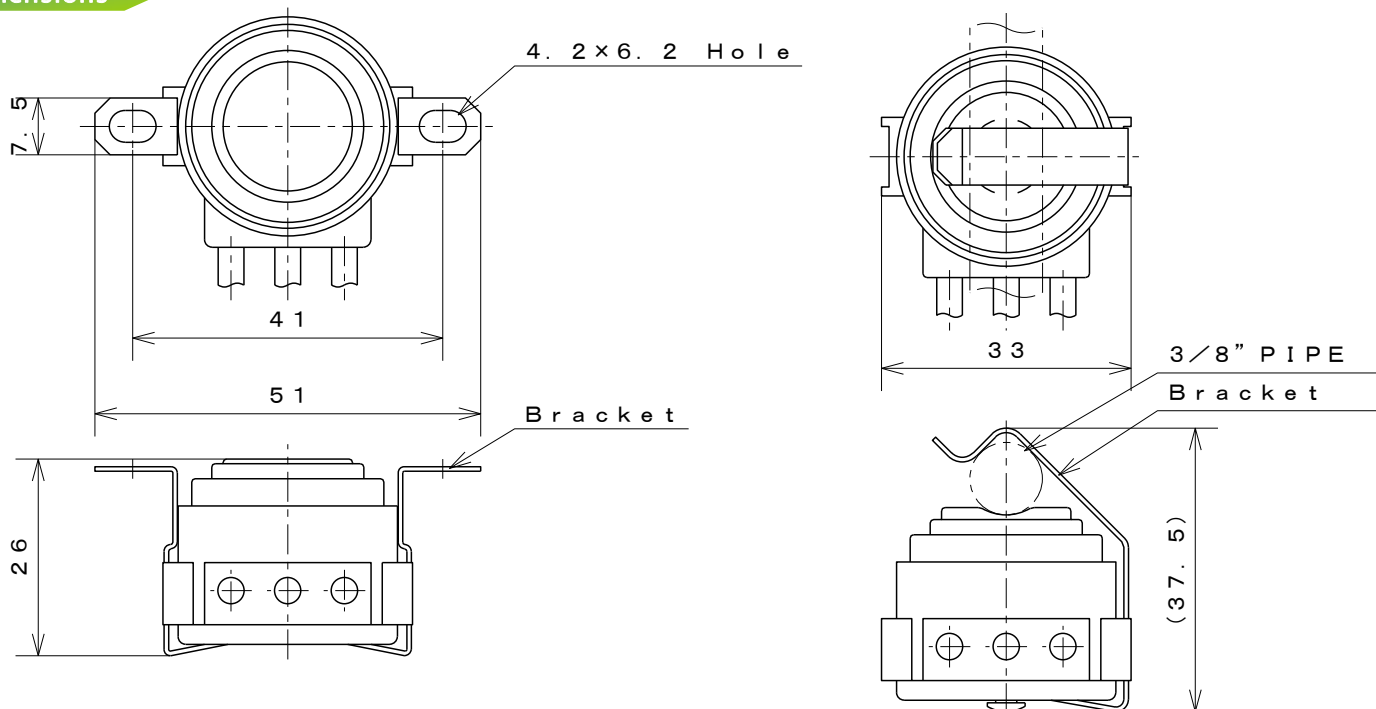




3/4" Disc Type Thermostat Water-proof Type Automatic Reset

Type **30** Series

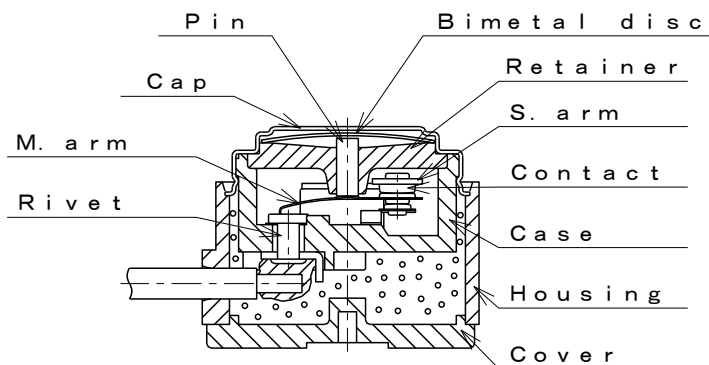
Dimensions



Materials of parts

Part	Material
Cap	Copper Stainless steel
Case	Phenolic resin
Housing	Polycarbonate
Bracket	Stainless steel
Fulling	Polyurethane
Leads	PVC
Contacts	Silver-Nickel alloy (36) Silver (38)

Structure

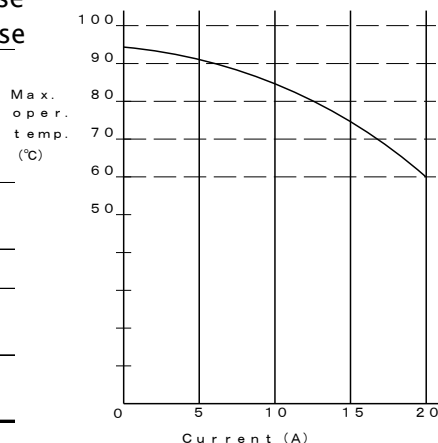


Specification

Compliance with RoHS Directives

Item	Specification
1. Basic features	SPDT Automatic reset
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise
3. Electrical rating	36 :C-A AC125V/20A AC250V/15A :C-B AC125V/10A AC250V/ 8A 38 :C-A AC125V/ 3A AC250V/ 3A :C-B AC125V/ 3A AC250V/ 3A
4. Calibration method	Hot & cold air or liquid circulation system
5. Insulation resistance	Not less than 1,000MΩ/DC500V
6. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.
7. Resistance between Lead (at lead is 1m)	Not more than 100mΩ

Relation of current & Max. operation temp.

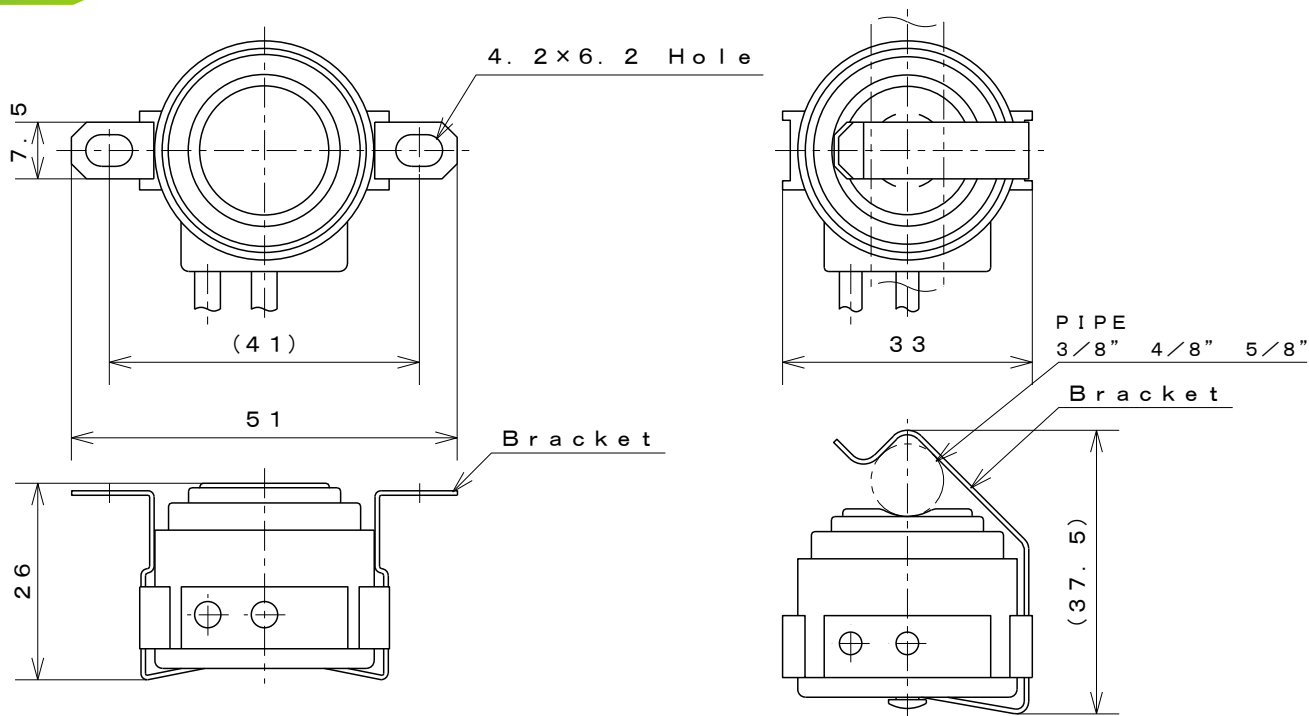




3/4" Disc Type Thermostat Water-proof Type Automatic Reset

Type 46

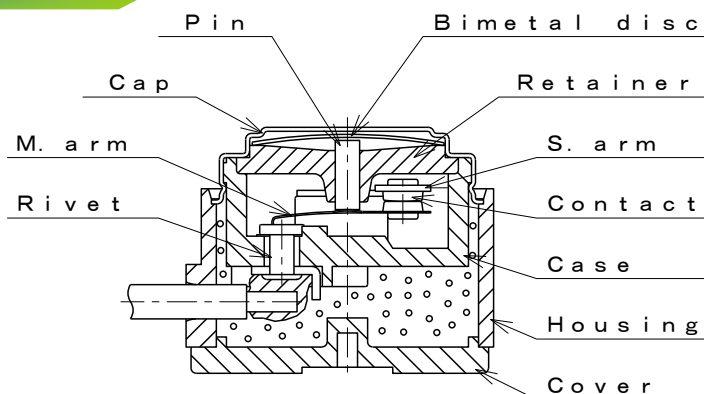
Dimensions



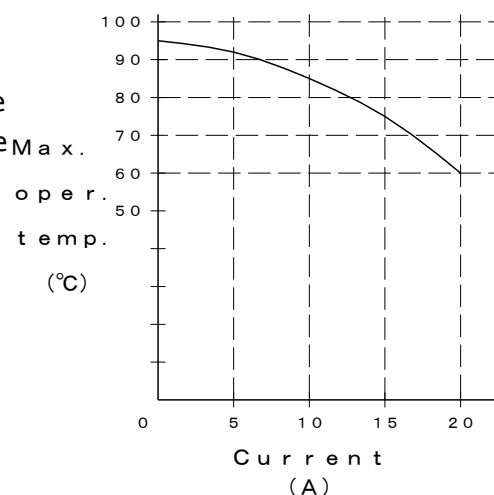
Materials of parts

Part	Material
Cap	Copper
	Stainless steel
Case	Phenolic resin
Housing	Polycarbonate
Bracket	Stainless steel
Fulling	Polyurethane
Leads	PVC
Contacts	Silver-Nickel alloy

Structure



Relation of current & Max. operation temp.



Specification

Compliance with RoHS Directives

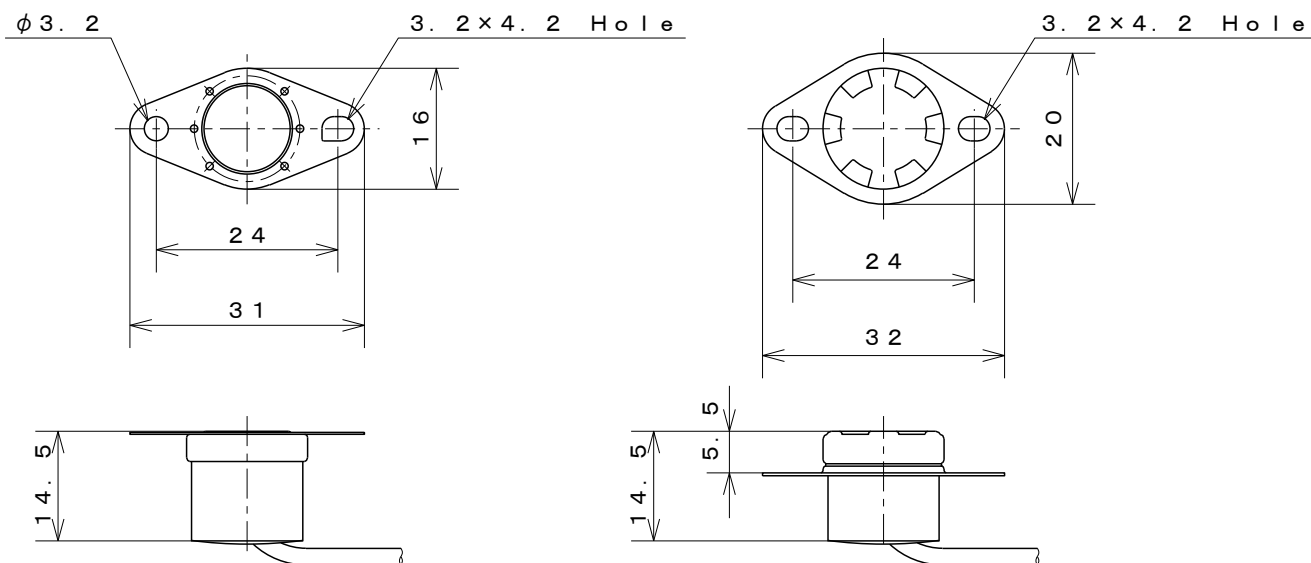
Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise
3. Electrical rating	AC125V/20A AC250V/15A
4. Calibration method	Hot & cold air or liquid circulation system
5. Insulation resistance	Not less than 1,000MΩ/DC500V
6. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.
7. Resistance between Lead (at lead is 1m)	Not more than 100mΩ



1/2" Disc Type Thermostat Splash-proof Type Automatic Reset

Type 60EN

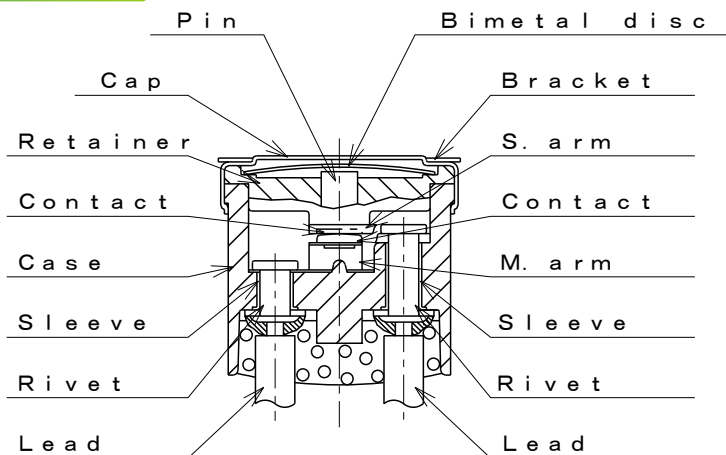
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
Spring	Beryllium Copper alloy
Leads	PVC etc
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

★Compliance with RoHS Directives

Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise
3. Electrical rating	AC125V/15A AC250V/10A (at 1.25mm ² lead wire) 1,000 cycles
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 80°C (100°C)
6. Insulation resistance	1,000MΩ or more / DC500V
7. Dielectric strength	AC1,500V/1min. or AC1,800V/1sec.

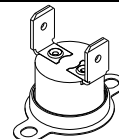
Standard



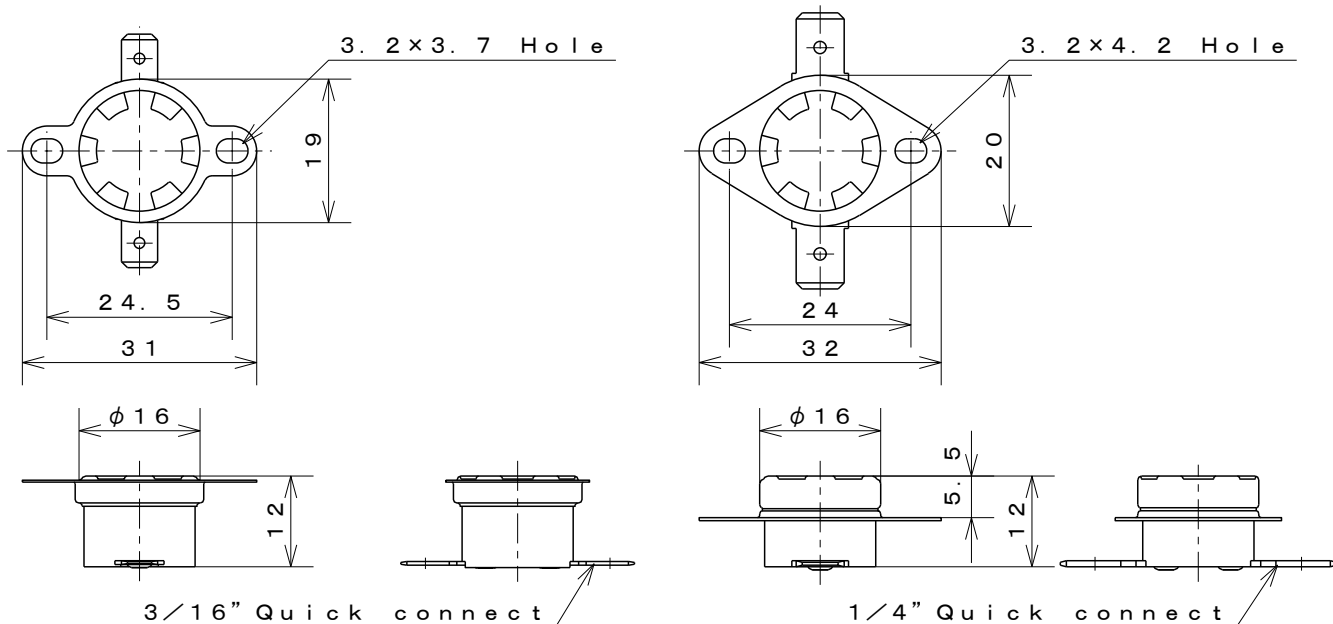


Single Operation Device Very High Temp. Type

Type 51N



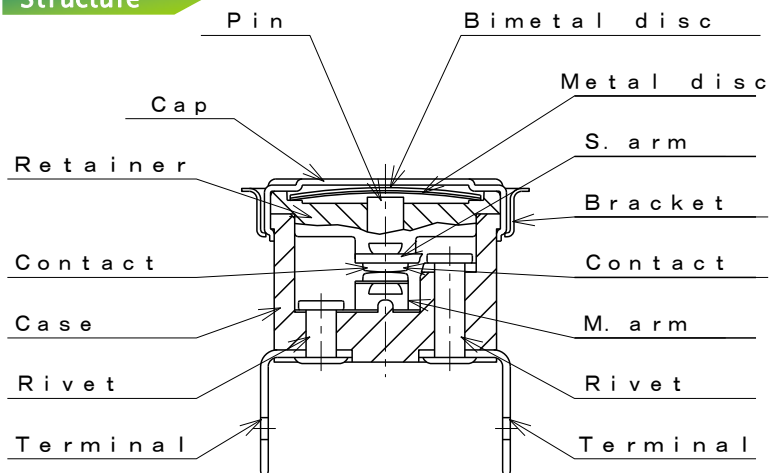
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/15V AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 270°C No Resetting	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	40022774

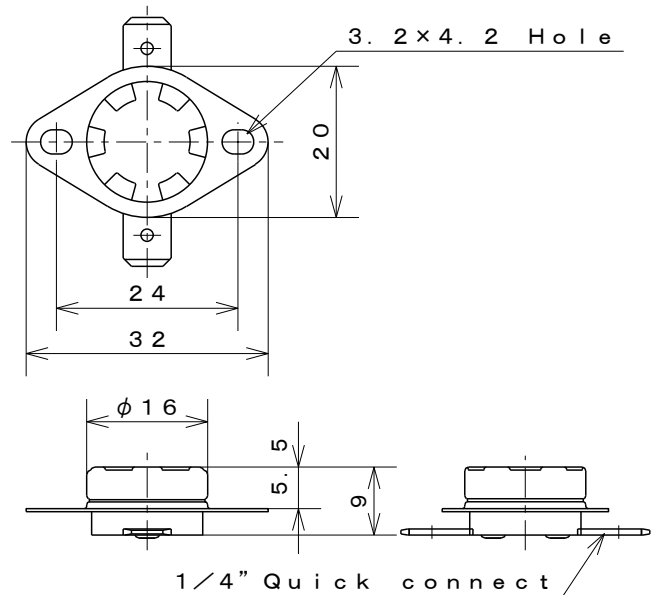
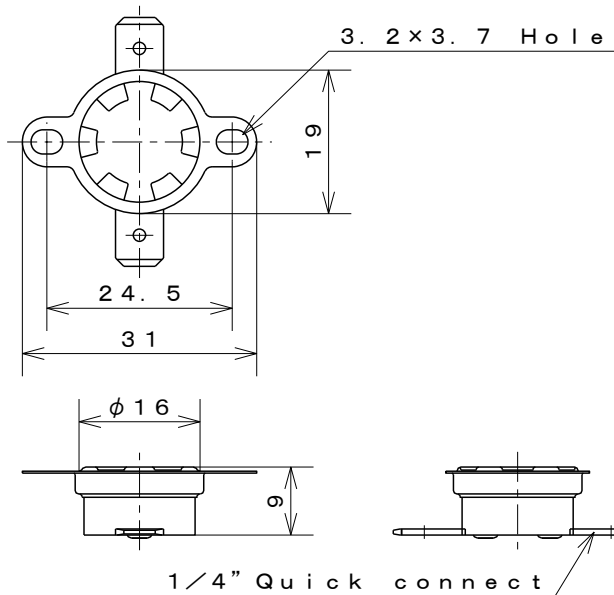




Single Operation Device Low Profile

Type 80N

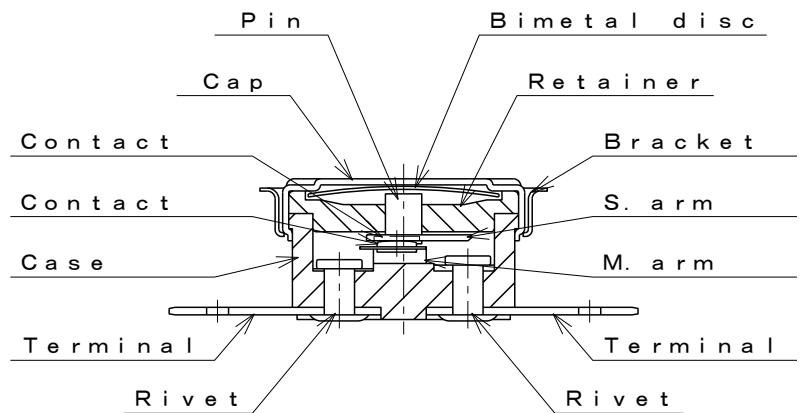
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 200°C Resetting Temp. less than -35°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/16A SOD(-35°C)	200°C	E43273
cUL	C22.2 No.24	Res.AC250V/16A SOD(-35°C)	200°C	E43273
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A SOD(-35°C)	200°C	40022774

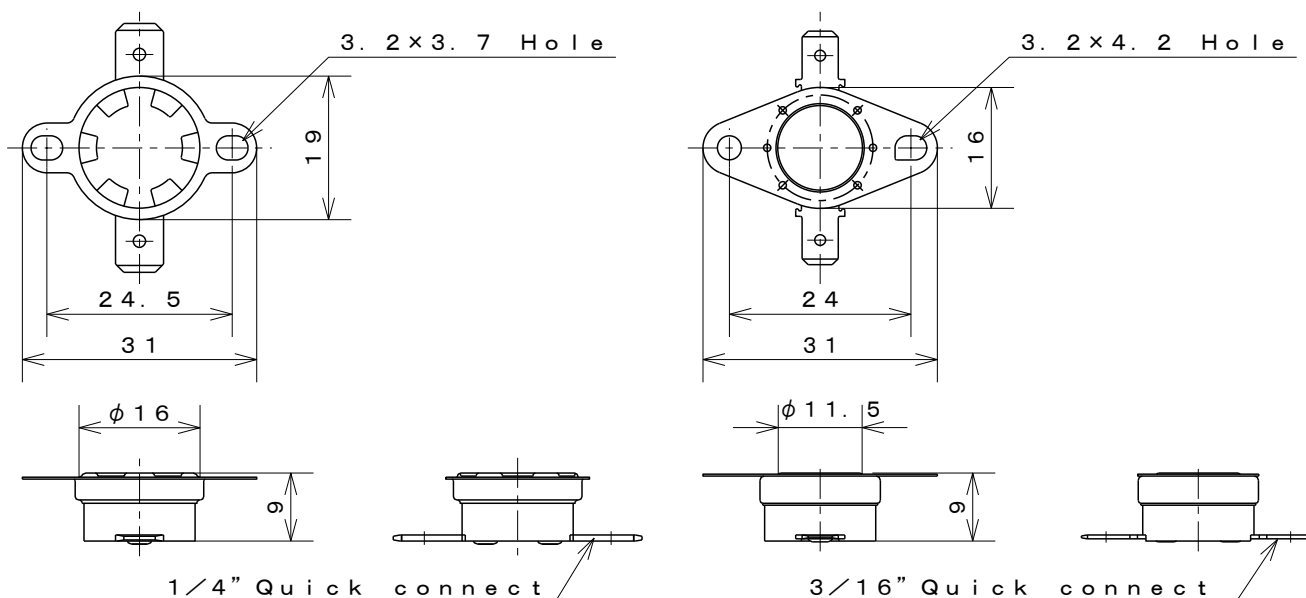




Single Operation Device Low Profile

Type 81ES

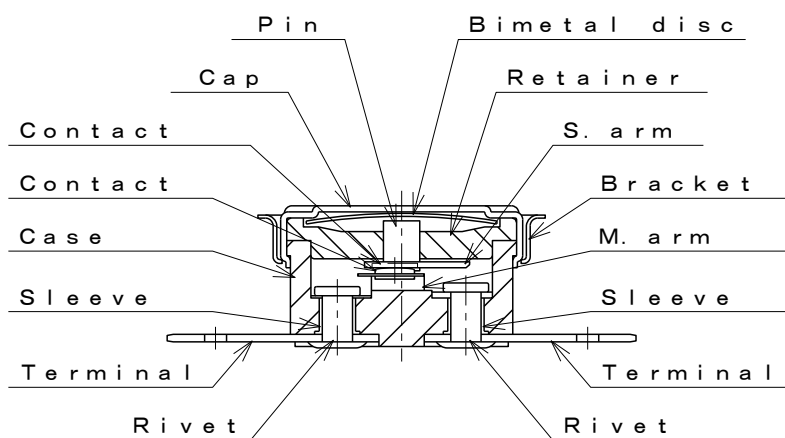
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenoli resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/10V AC250V/5A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C Resetting Temp. less than -35°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

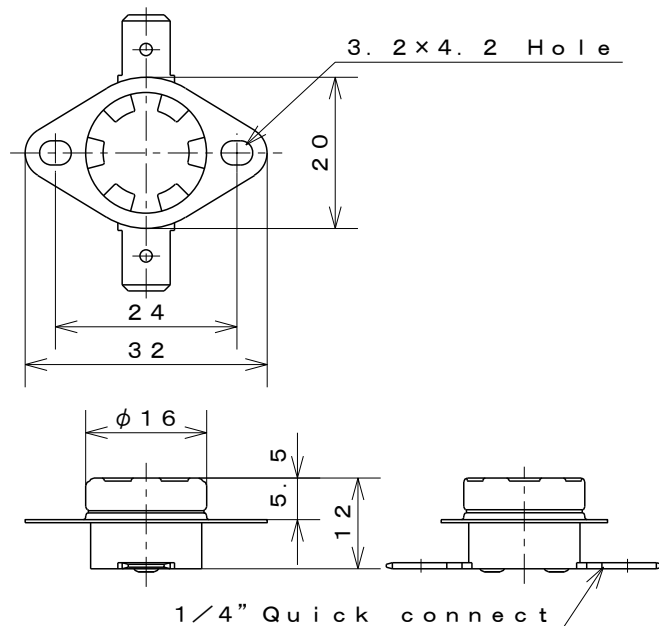
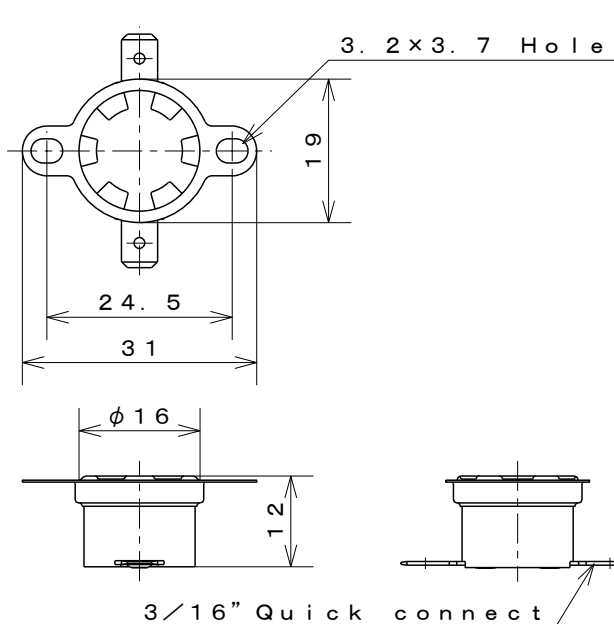
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/10A SOD(-35°C)	150°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/10A SOD(-35°C)	150°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/10A SOD(-35°C)	150°C	40022774



Single Operation Device High Temp. Type

Type 82N

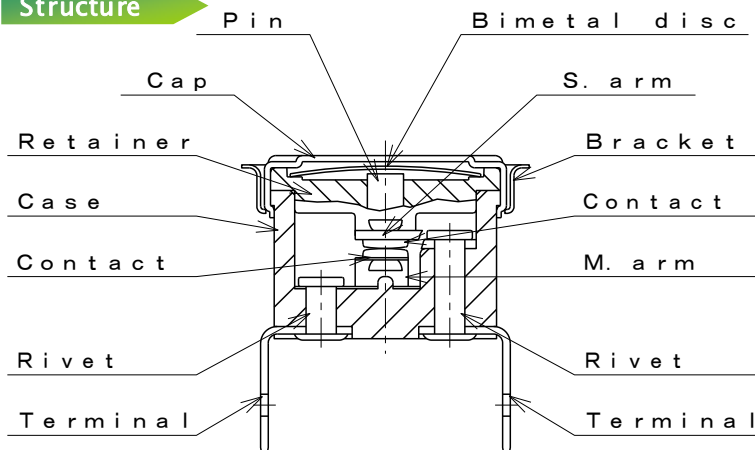
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium Copper alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 270°C Resetting Temp. less than -35°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

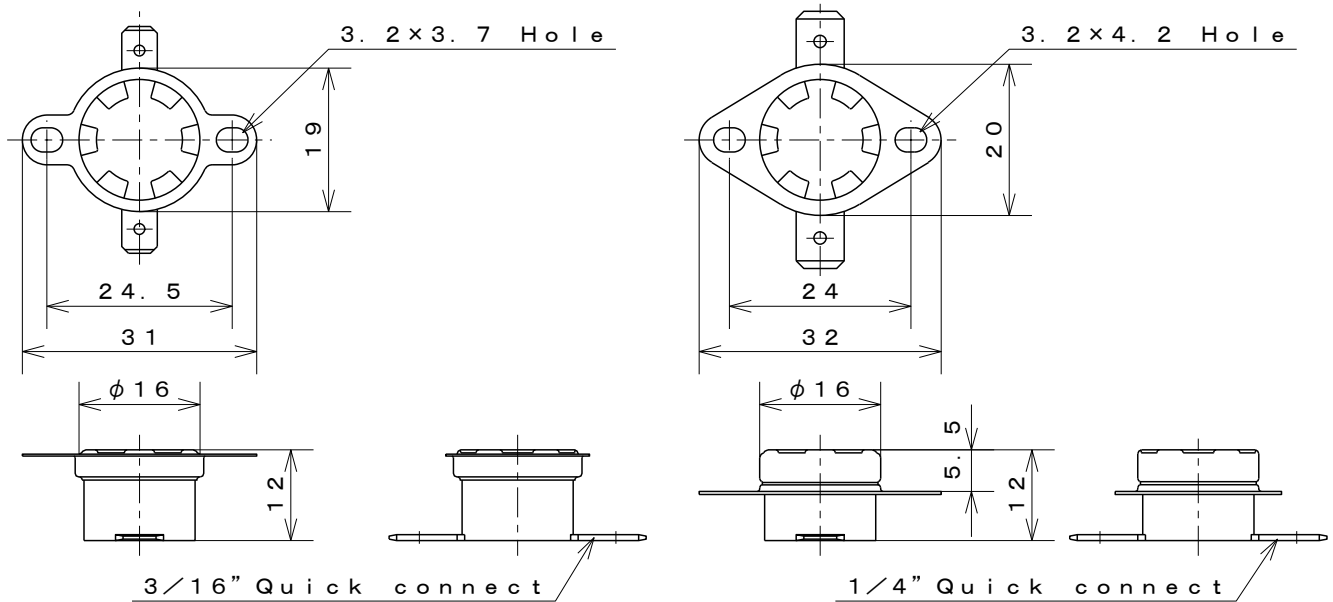
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	40022774



Single Operation Device

Type 83EN

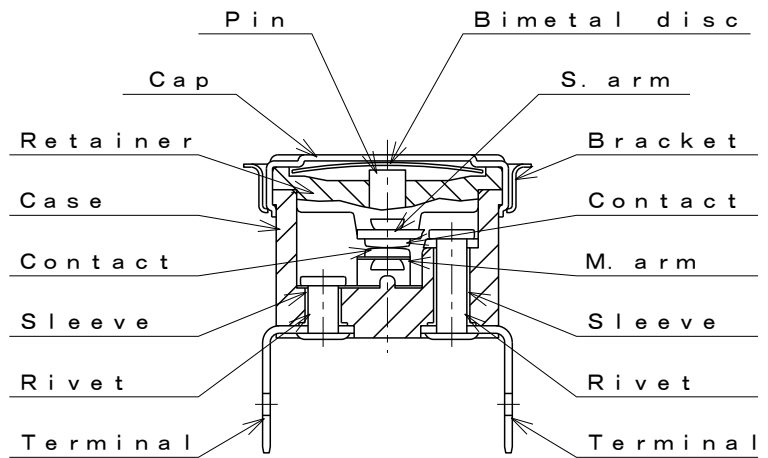
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Phenolic resin
M.arm	Beryllium Copper alloy
Terminals	Brass
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure

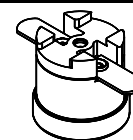


Specification

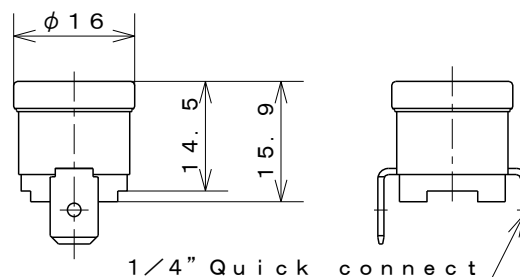
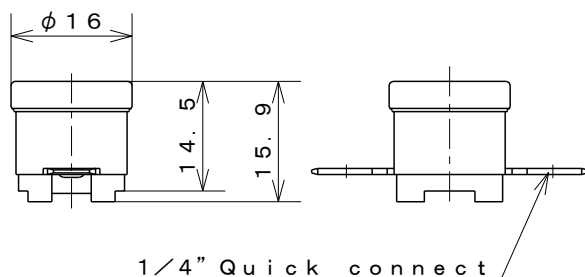
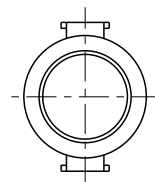
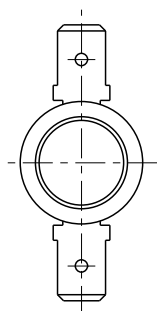
Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 150°C Resetting Temp. less than -35°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/16A SOD(-35°C)	150°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/16A SOD(-35°C)	150°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A SOD(-35°C)	150°C	40022774



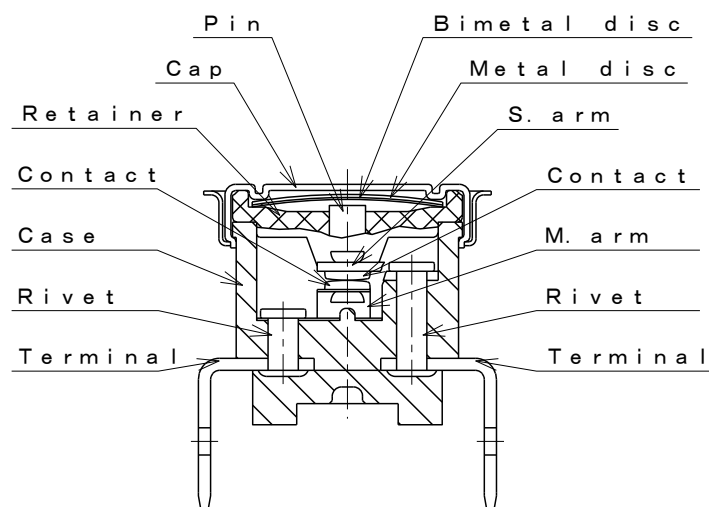
Dimensions



Materials of parts

Part	Material
Cap	Aluminum Copper Stainless steel
Case	Ceramic
M.arm	Beryllium alloy
Terminals	Brass, Steel
Bracket	Stainless steel
Contacts	Silver-Nickel alloy

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Single Operation Device	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC125V/15A AC250V/10A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 270°C Non Resetting	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	E201152
EN(VDE)	EN 60730-1, -2-9	Res.AC250V/16A SOD(-35°C)	270°C	40022774



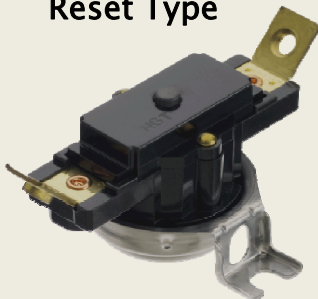
Type 43 Series

● 3/4" Disc Type Thermostat

Automatic Reset Type



Manual Reset Type



Registration number on Electrical Appliances and Material Safety Act J-174 (43M · 43ML)

VDE Approval

Type 43MDL

UL, CSA Approval

Type 43X 43XL 43S 43SL 43SLS

43SX 43SXL 43M

UL, CSA, VDE Approval

Type 43 43L 43ML 43DL

★Compliance with RoHS Directives

Type and Rating

Type of action	Type	Electrical Rating	Safety Approval	Endurance Cycle (UL, CSA)	Endurance Cycle (VDE)
Automatic Reset	43L	250V/25A, 45A 277V/25A	UL, CSA, VDE	25A/100,000 Cyc. 45A/ 6,000 Cyc.	10,000 Cyc.
	43XL	480V/13A	UL, CSA	100,000 Cyc.	-
Manual Reset	43ML	250V/25A, 45A	UL, CSA, VDE	25A/ 6,000 Cyc.	45A/ 3,000 Cyc.
SOD	43SL	277V/25A	UL, CSA	1 Cyc.	-
	43SLS	277V/45A			
	43SXL	480V/10A			
Double Action (Auto+Manual)	43MDL	250V/25A, 45A	VDE	-	6,000 Cyc. (Auto) 100 Cyc. (Manual)
Double Action (Auto+SOD)	43DL	277V/25A 250V/45A	UL, CSA, VDE	25A/100,000 Cyc.(Auto) 1 Cyc.(SOD)	45A/6,000 Cyc. (Auto) 1 Cyc. (SOD)

Safety Approval

※Requires Screw terminals above 25Amp.

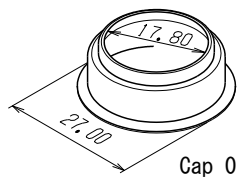
Agency	Standard	File No.
UL	UL 60730-1A,-2-9	E201152
cUL	CAN/CSA-E730-1,-2-9	E201152
EN(VDE)	EN 60730-1,-2-9	40026121

Specification

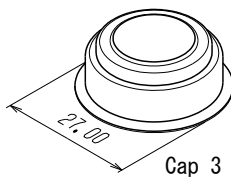
Item	Specification		
	Automatic Reset		Manual Reset , SOD, Double Action
1. Basic features	SPST、Dust proof type		
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise		L : Contacts open on temperature rise
3. Temperature setting	0 ~ 100℃	100 ~ 150℃	
4. Tolerance setting (Ex.)	± 3K	± 4K	
5. Differential (Ex.)	10℃	20℃	
6. Temperature test condition	1℃/2min. Measured by LED loaded 20mA or less using Hot air circulation system of NGT manufacture.		
7. Insulation resistance	Not less than DC500V Megger 1,000MΩ		
8. Dielectric strength	Not less than AC2,000V /2sec.(AC250V) AC3,600V / 2sec.(AC480V)		
9. Resistance between terminals	Less than 30mΩ		



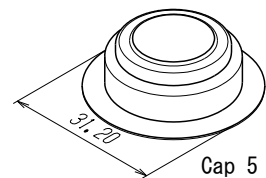
43 Series Caps and Terminals



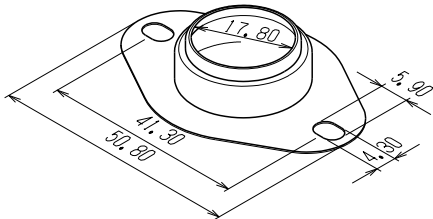
Cap 0



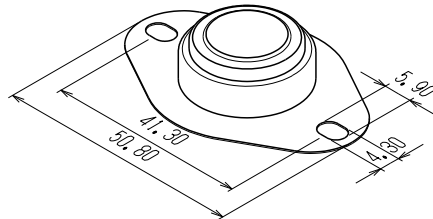
Cap 3



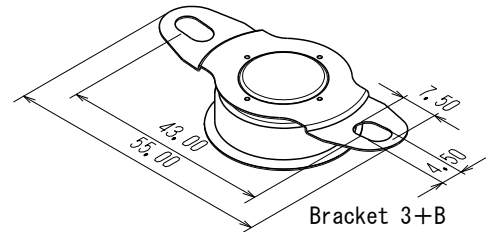
Cap 5



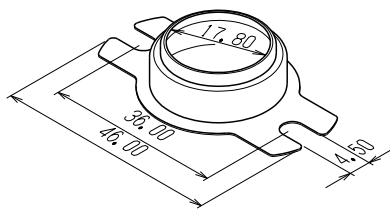
Cap 0+5



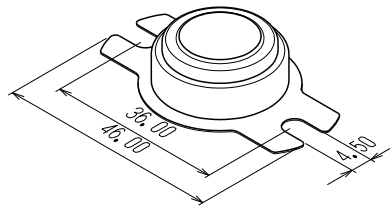
Cap 3+5



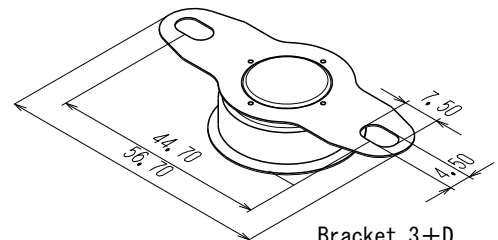
Bracket 3+B



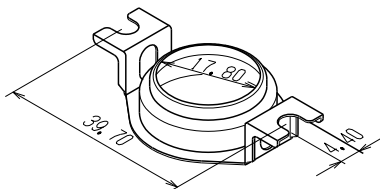
Cap 0+6



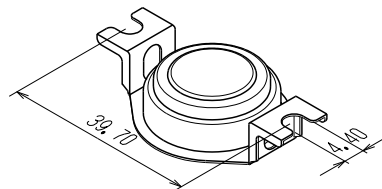
Cap 3+6



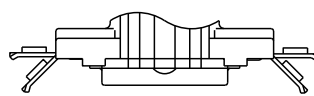
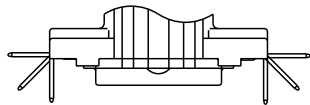
Bracket 3+D



Cap 0+H

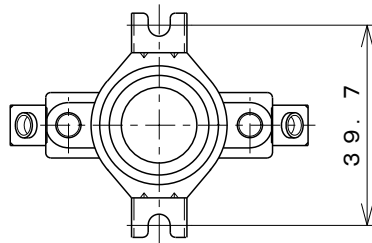


Cap 3+H

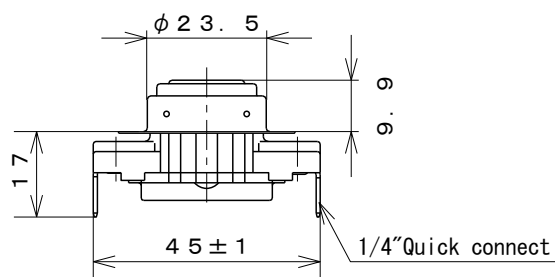
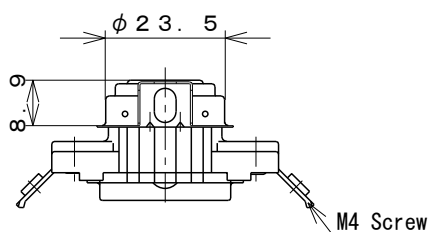
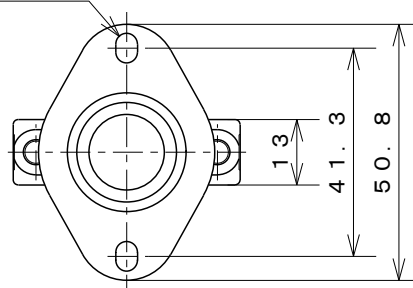


#250terminal (Horizontal· 45°·vertical) M4/UNC screw (Horizontal·45°)

Drawing(Ex.)

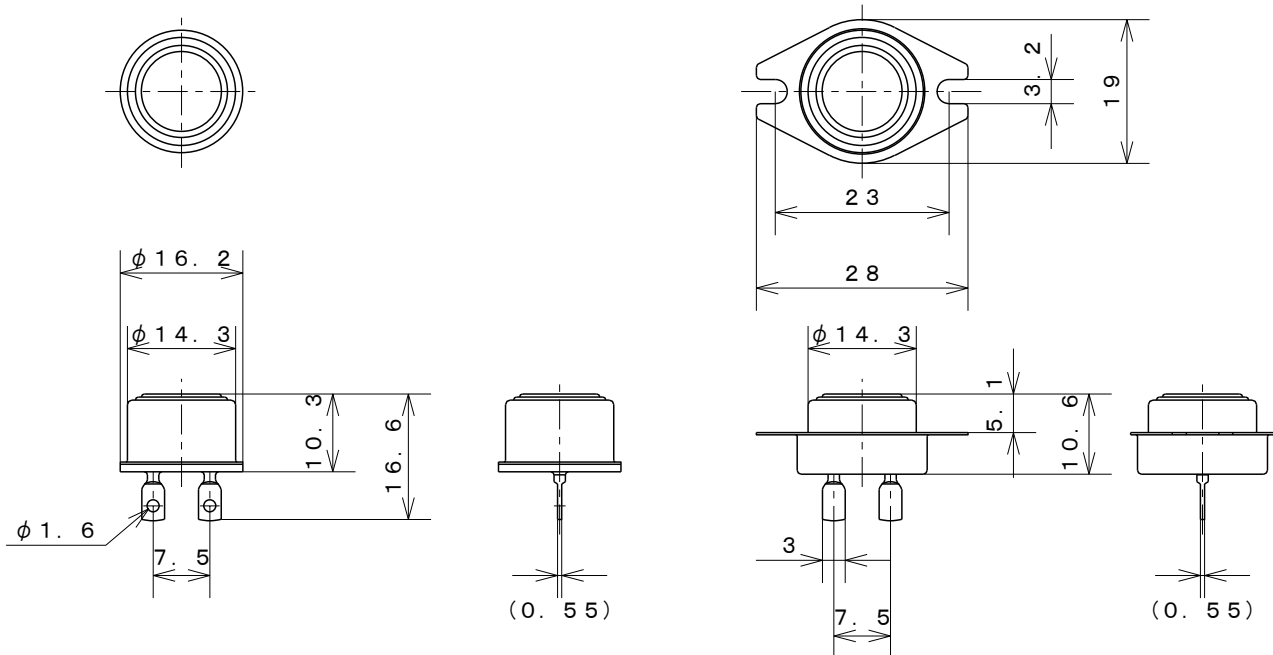


4. 3×5. 9 H o l e



※ In case of inquiry, please let us know temperature, application, actual rating, actual load, and other spec information.

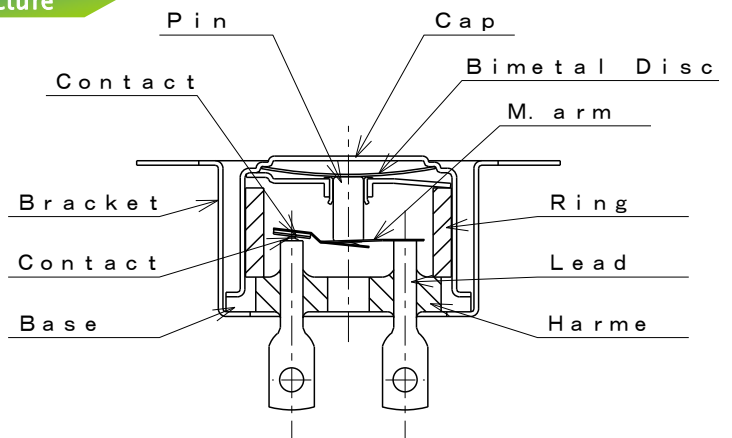
Dimensions



Materials of parts

Part	Material
Cap	Stainless steel
Base	Steel
M.arm	Nickel alloy (63HP) Copper alloy (63RP)
Leads	Steel + Copper alloy
Bracket	Stainless steel

Structure



Specification

Item	Specification	★ Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	A : Contacts open on temperature rise B : Contacts close on temperature rise	
3. Electrical rating	DC42V/0.5A AC250V/0.2A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 200°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	
8. Resistance between Leads	Not less than 30mΩ (63HP) · 10mΩ (63RP)	

Safety Approval

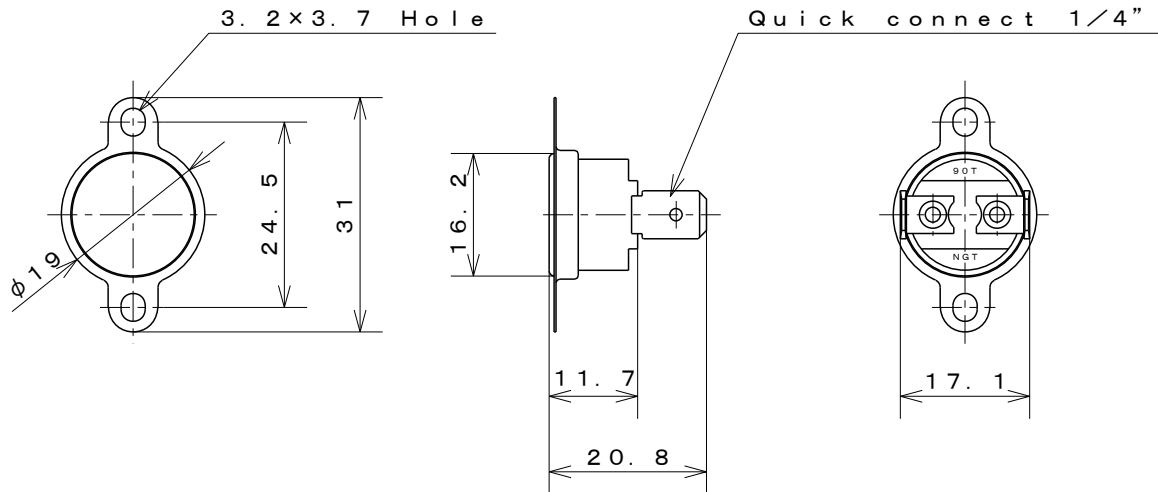
Agency	Standard	Electrical rating	Max Temp.	File No.
CMJ		63HP : Res.AC125V/0.5A 30,000 cycles	150°C	J-151
JIA		63HP : Res.DC42V/0.5A 1,000 cycles	200°C	名-PC-1001-48
JIA		63RP : Res.DC42V/0.5A 1,000 cycles	250°C	名-PC-1001-51



1/2" Thermistor Sensor

Type **90T**

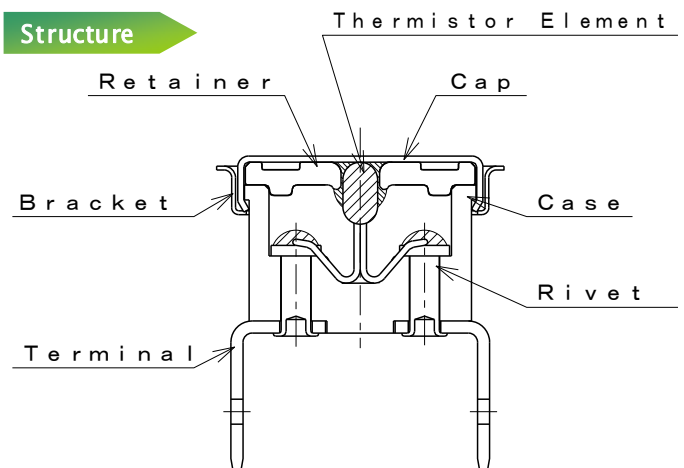
Dimensions



Materials of parts

Part	Material	Type
Sensing-cap	Aluminum	Surface-mounting
Bracket	Stainless steel	
Retainer	Aluminum	
Element	—	Hermetic type
Case	Polyester	
Rivet	Cu, Ni Alloy	
Terminals	Plated Brass	Quick-connect 1/4" 3/16"

Structure



Specification

★Compliance with RoHS Directives

Item	Specification
Temperature range	-20~150°C
Time-constant (63.2%)	With 20 seconds (surface of the heated plate)
Insulating resistance	Over 1,000M Ω by 500V DC500V megger
Dielectric strength	AC1,500V $\times$ one second (leakage current 0.5mA)

No.	PB-36	PB-41E	PT-43C	PT-51F
Nominal-resistance (at 25)	2.186 k Ω	5.369 k Ω	0.68 k Ω (at 100)	49.12 k Ω
B-value (25-85°C)	3420K $\pm$ 68K	3480K $\pm$ 69K	3950K $\pm$ 2% (0-100°C)	3992K $\pm$ 79K

Above are the standard specifications. Please contact us for further information.

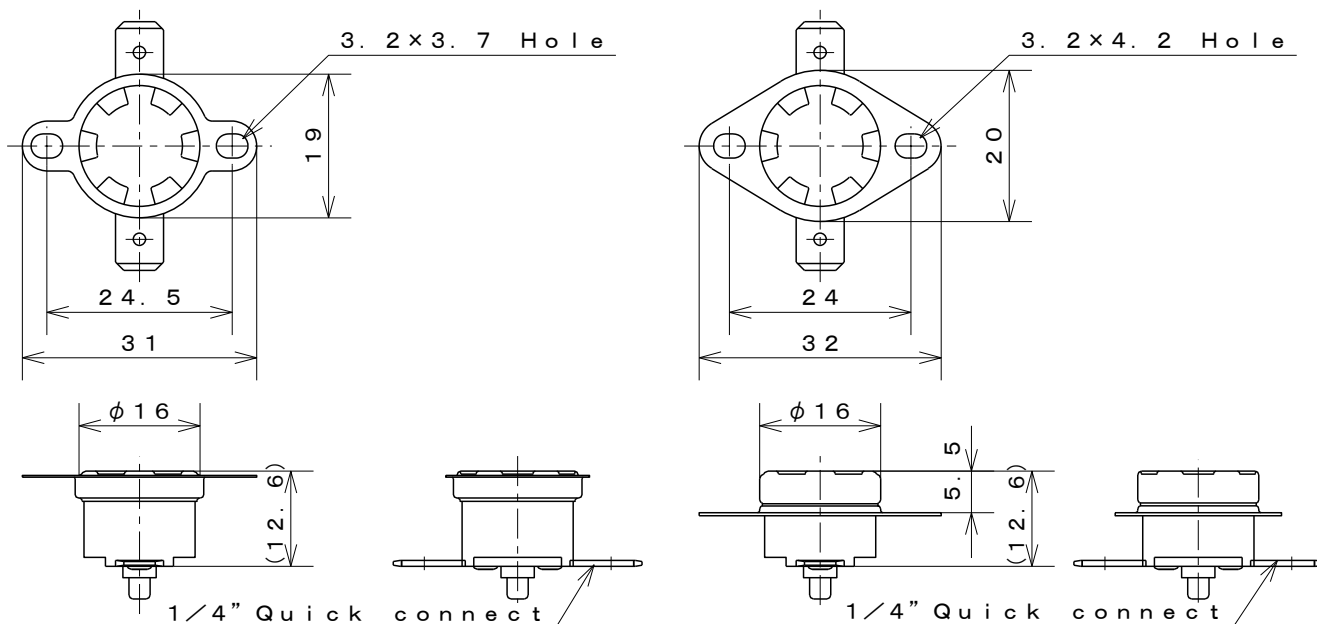




1/2" Disc Type Thermostat Double Action (Auto/Manual)

Type 95EL·95EF

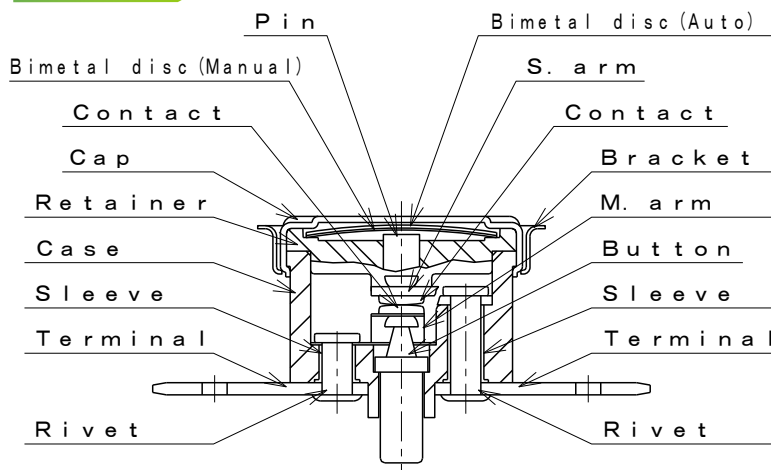
Dimensions



Materials of parts

Part	Material	
Type	95EL	95EF
Cap	Aluminum	Copper
	Copper	Stainless steel
Case	Polyester resin	
M.arm	Beryllium Copper alloy	
Terminals	Steel	Brass
Bracket	Stainless steel	
Contacts	Silver-Nickel alloy	
Button	Phenolic resin	

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Manual reset	
2. Operation	A : Contacts open on temperature rise	
3. Electrical rating	AC250V/25A 6,000 cycles (Auto) 100 cycles (Manual)	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 120°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	95EL: Res.AC250V/25A Auto. 6,000 cycles Manu 6,000 cycles	110°C 120°C	E201152
UL	60730-1A, -2-9	95EF: Res.AC250V/16A Auto. 6,000 cycles Manu 6,000 cycles	110°C 120°C	E201152
cUL	CAN/CSA-E60730-1, -2-9	95EL: Res.AC250V/25A Auto. 6,000 cycles Manu 6,000 cycles	110°C 120°C	E201152
cUL	CAN/CSA-E60730-1, -2-9	95EF: Res.AC250V/16A Auto. 6,000 cycles Manu 6,000 cycles	110°C 120°C	E201152



Small & Thin
Drip-proof Type Automatic Reset
PCB on board Type

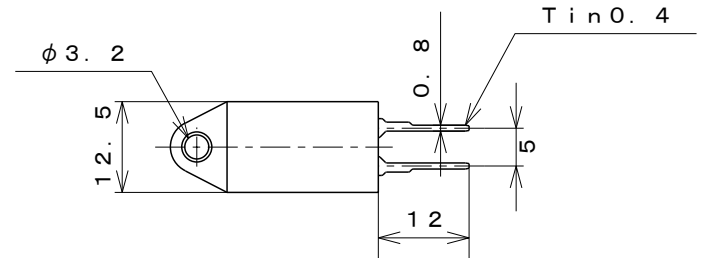
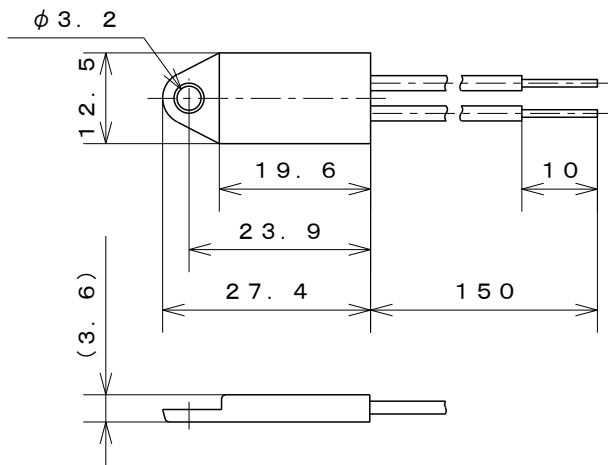
Type **SS1**

Dimensions

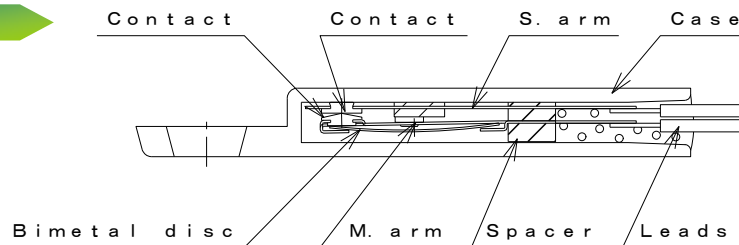
SS1U

SS1U/B

(PCB on board type)



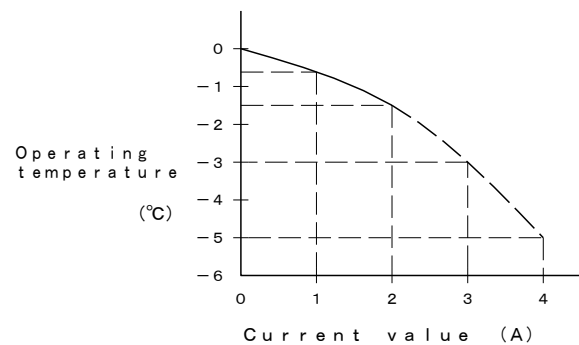
Structure



Materials of parts

Part	Material
Case	Polybutylene terephthalate
M. arm	Beryllium copper
Contacts	Silver-Nickel alloy
Leads	PVC 0.3mm ²
Terminals	Tin plated brass

Drift of operating temperature by current value



Specification

Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	L : Contacts open on temperature rise F : Contacts close on temperature rise
3. Electrical rating	AC125V/4A AC250V/3A
4. Calibration method	Hot & cold air circulation system
5. Temperature rating	Operating temperature Max. 105°C Differential: 8~15°C
6. Insulation resistance	1,000MΩ or more / DC500V
7. Dielectric strength	AC1,500V/1min. or AC1,800V/1sec.

Safety Approval

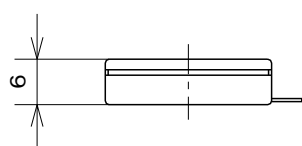
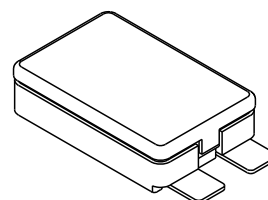
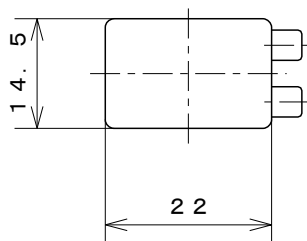
Agency	Standard	Electrical rating	Max Temp.	File No.
UL	60730-1A, -2-9	Res.AC250V/2A 100,000 cycles	105°C	E201152
UL	60730-1A, -2-9	Res.AC250V/3A 30,000 cycles	105°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/2A 100,000 cycles	105°C	E201152
cUL	CAN/CSA-E730-1, -2-9	Res.AC250V/3A 30,000 cycles	105°C	E201152



Thin Box Type

Type **MH3**

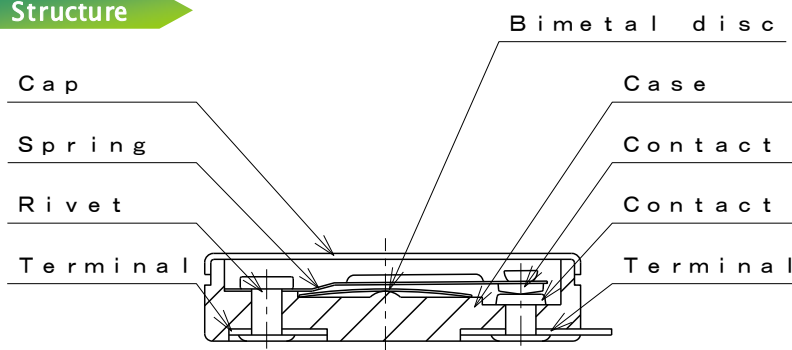
Dimensions



Materials of parts

Part	Material
Cap	Aluminum
Case	Phenolic resin
Spring	Beryllium Copper alloy
Rivet	Copper
Contacts	Silver
Terminal	Brass

Structure



Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	L : Contacts open on temperature rise	
3. Electrical rating	AC125V/6A AC250V/3A (Separately, the insulation protection is necessary) DC13.5V/5A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 70°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	

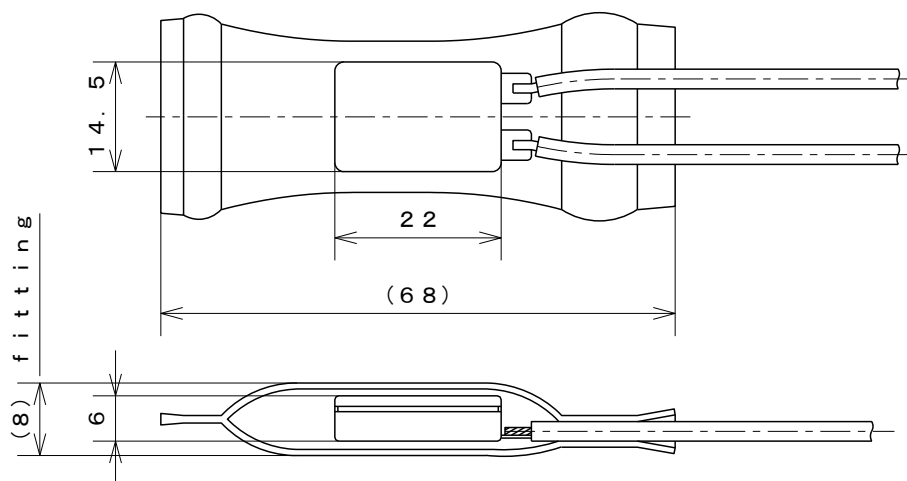




Sealed by PVC tube
Water-proof Type

Type **MH3U**

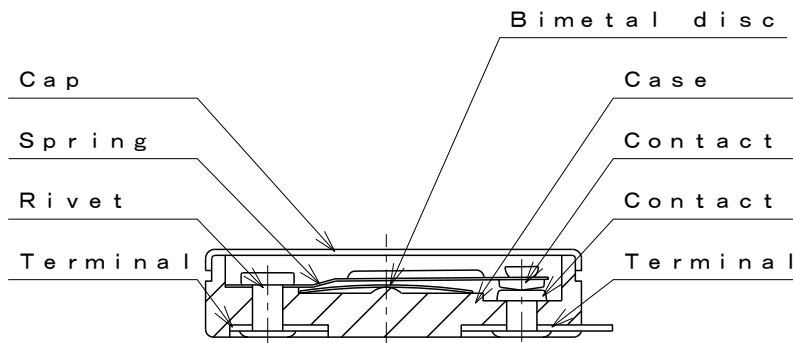
Dimensions



Materials of parts

Part	Material
Cap	Aluminum
Case	Phenolic resin
Spring	Beryllium Copper alloy
Contacts	Silver
Rivets	Copper
Terminals	Copper alloy
Leads	PVC AWG No.20

Structure



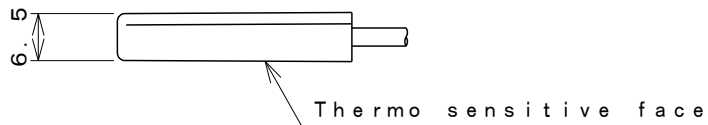
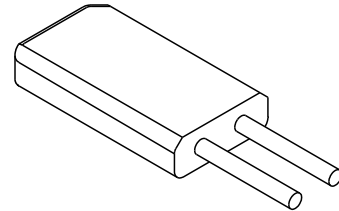
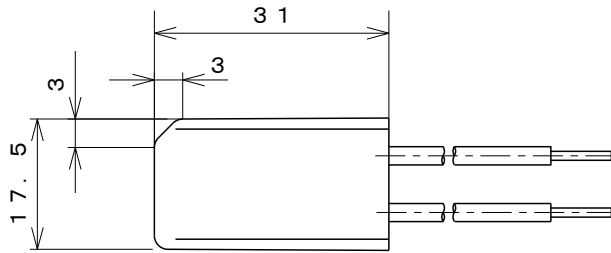
Specification

Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	L : Contacts open on temperature rise	
3. Electrical rating	AC125V/6A AC250V/3A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 70°C (CSA Max.80°C)	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	
7. Dielectric strength	Not less than AC1,500V/1min. or AC1,800V/1sec.	

Safety Approval

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC125V/3A AC250V/2A 30,000 cycles	70°C	E43273
cUL	CSA C22.2 No.24	Res.AC125V/3A AC250V/2A 100,000 cycles	80°C	E43273

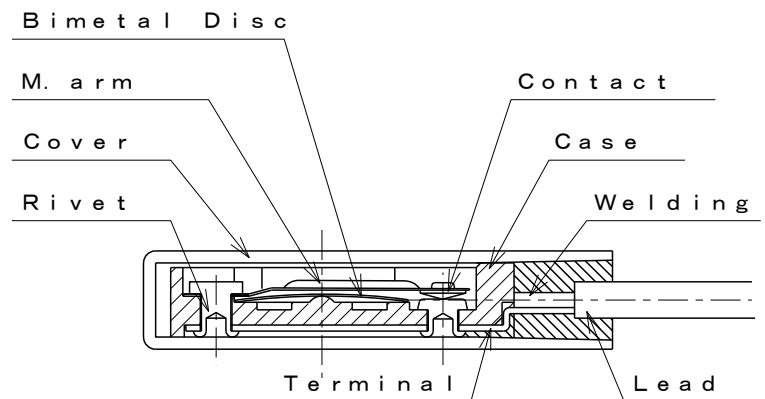
Dimensions



Materials of parts

Part	Material
Cover	PBT
Case	Phenolic resin
Spring	Beryllium Copper alloy
Contacts	Silver / Silver-Nickel alloy
Rivet	Copper
Terminal	Brass
Leads	PVC

Structure



Specification

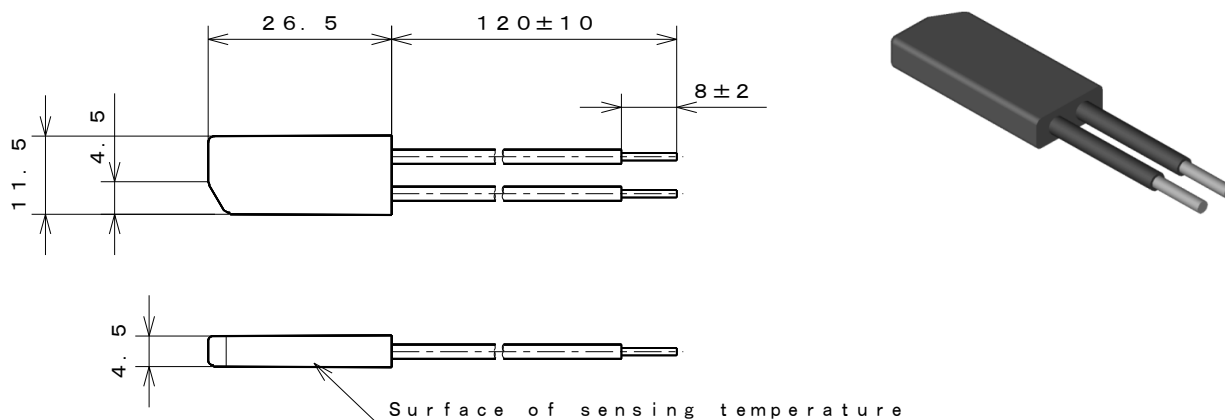
Item	Specification	★Compliance with RoHS Directives
1. Basic features	SPST Automatic reset	
2. Operation	L : Contacts open on temperature rise	
3. Electrical rating	AC125V/8A AC250V/4A , DC13.5V/5A	
4. Calibration method	Hot & cold air circulation system	
5. Temperature rating	Operating temperature Max. 70°C	
6. Insulation resistance	Not less than 1,000MΩ/DC500V	



Low profile Water-proof type
High current version

Type **MH5·MH5U**

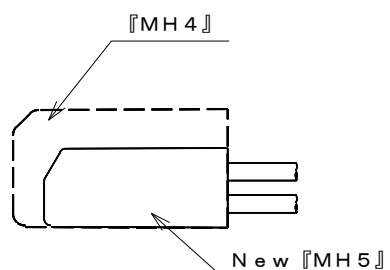
Dimensions



Features

- ☺ Low profile & High current version
Rating up to DC16V/30A
- ☺ The smallest self heating structure!
This makes your temp designing easy
Not only Thermal protection
but also Thermal control is possible
- ☺ Application: Car seat heating, Car Steering Heater

Comparison with type MH4



- * Width about **-6 mm**
- * Height about **-4.5 mm**
- * Thickness about **-2 mm**

Specification

★Compliance with RoHS II Directives

Item	Specification
1. Basic features	SPST Automatic reset
2. Operation	L : Contacts open on temperature rise
3. Electrical rating	MH5U: AC250V/ 8A (Min: AC6V/50mA) MH5 : DC16V/30A (Min: DC5V/50mA)
4. Temperature rating	MH5U: Operating temperature Max. 150°C / Min. 25°C MH5 : Operating temperature Max. 100°C / Min. 25°C
5. Temperature test condition	1°C/2min. Measured by LED loaded 20mA or Less, Hot air circulation system of NGT manufacture
6. Insulation resistance	Not less than 1,000MΩ/DC500V
7. Dielectric resistance	Not less than AC1,500V/1min. AC1,800V /1sec.

※ Please feel free to ask us in case that electrical rating is not standard mentioned above.

Agency	Standard	Electrical rating	Max Temp.	File No.
UL	UL873	Res.AC250V/8A 100,000 cycles	130°C	E43273
cUL	CSA C22.2 No.24	Res.AC250V/8A 100,000 cycles	130°C	E43273

