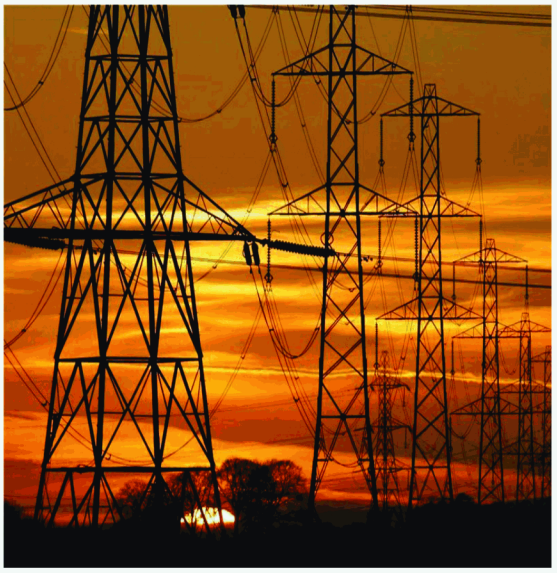
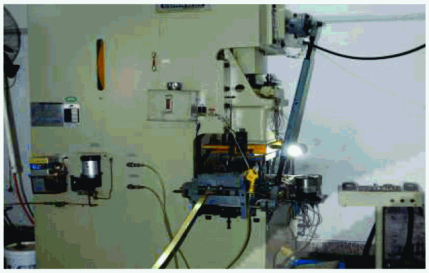
Sabet Gostar Electric Iranian

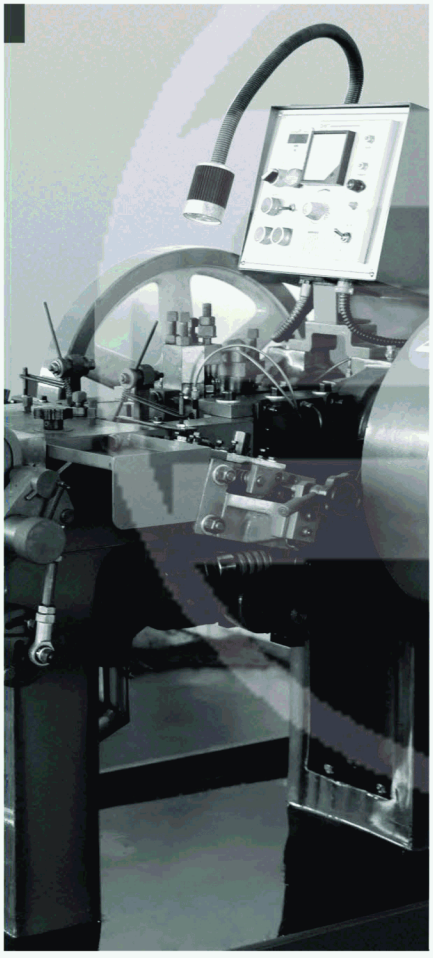
Manufacturer & Supplier Electrical Contacts

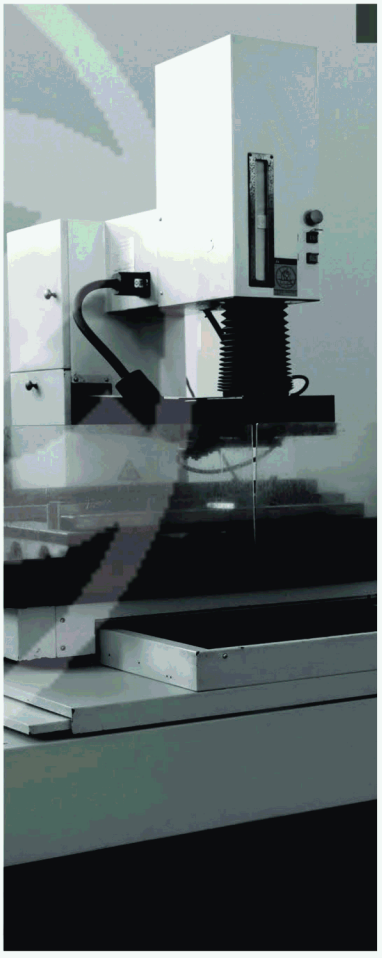


Sabet Gostar Electric Iranian

Sabet Gostar Electric Iranian is a special manufacturer and supplier of Electrical Contact Rivets which including Bimetal contact,Trimetal contact, Alloy sheet, and all of metal parts for all kinds of switches, we have more than 15 years experience in Electric Industry.
We have gained ISO9001 certificate for international quality system.
We aim to provide high quality and best services at reasonable prices.
We would like to recieve your detailed information including the drawing, picture, size, so that we could send you the competitive price and samples for your confirmation .





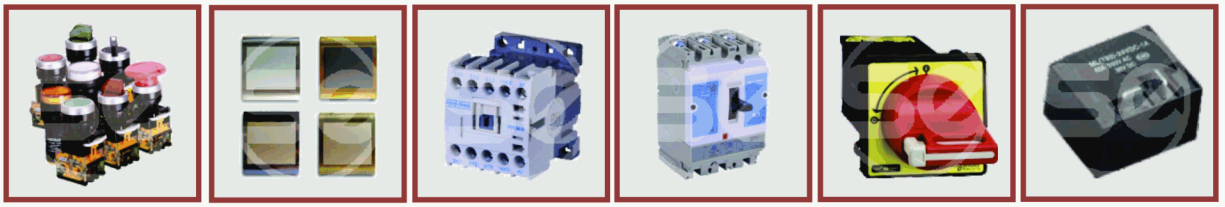


Contact Materials Selection

Series	Material Name	Ag Content (%)	Resistivity μΩ·cm	Hardness HV0.3	Density g/cm^3	Endure Current	Application
Ag	Ag	100	≤1.80	≥55	≥10.48	AC ≤8A	Communications, Relay, Timers, Auxiliary switches, Control switches
	FAg	99.85	≤1.90	≥65	≥10.48		
	AgCe0.5	99.5	≤1.90	≥65	≥10.42		
	AgCu3	97	≤1.90	≥70	≥10.4		
AgNi	AgNi10	90	≤2.00	≥70	≥10.2	AC ≤20A	Power relays, Small contactors, Household switches, Temerature controllers
	AgNi12	88	≤2.05	≥75	≥10.15		
	AgNi15	85	≤2.10	≥80	≥10.15		
	AgNi20	80	≤2.30	≥85	≥10.05		
	AgNi30	70	≤2.50	≥90	≥10.0		
AgCdO	AgCdO10	90	≤2.10	≥70	≥10.1	AC ≤120A	Microswitches, Household switches, Relays, Contactors, Protective switches, Circuit breakers
	AgCdO12	88	≤2.20	≥75	≥10.0		
	AgCdO13.5	86.5	≤2.30	≥75	≥9.9		
	AgCdO15	85	≤2.30	≥80	≥9.85		
	AgCdO17	83	≤2.40	≥85	≥9.8		
	AgCdO20	80	≤2.50	≥90	≥9.7		
AgSnO2	$AgSnO_2$10	90	≤2.30	≥75	≥9.8	AC ≤200A	Relays, Contactors, Circuit breakers, Switches
	$AgSnO_2$12	88	≤2.40	≥80	≥9.65		
	$AgSno_2$15	85	≤2.55	≥85	≥9.5		
	$AgSnO_2In_2O_3$10	90	≤2.45	≥85	≥9.9		
	$AgSnO_2In_2O_3$12	88	≤2.60	≥90	≥9.8		
	$AgSnO_2In_2O_3$14.5	85.5	≤2.70	≥100	≥9.6		
AgCuO	AgCuO10	90	≤2.30	≥70	≥9.65	DC ≤100A	DC relays,DC contactors
	AgCuO15	85	≤2.50	≥85	≥9.4		
AgZnO	AgZnO8	92	≤2.30	≥75	≥9.60	AC ≤1000A	Circuit breakers, Protective switches
	AgZnO10	90	≤2.50	≥80	≥9.50		
AgW	AgW10	90	≤2.90	≥80	≥11.0	AC ≤100A	Relays, Circuit breakers, Switches
	AgW15	85	≤3.10	≥90	≥11.30		

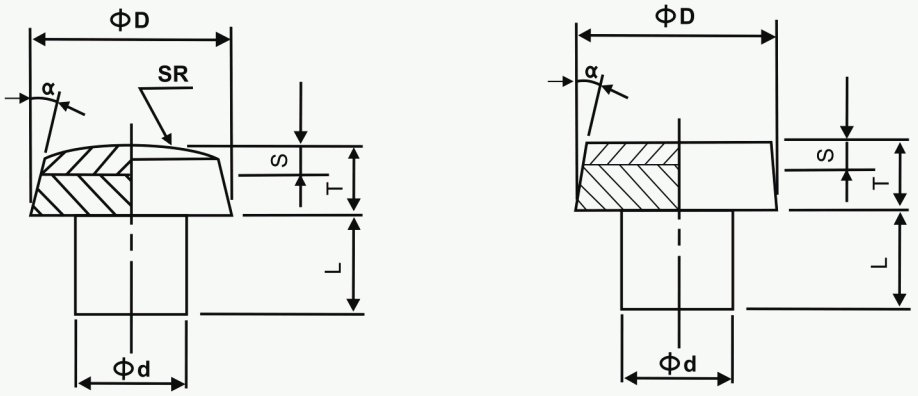
Electrical Contacts

Our silver alloy electrical contacts main varieties: silver contact(Ag),Ag/Cu composite contact (Ag/Cu), silver nickel contacts(AgNi), silver nickel / copper (AgNi/Cu) composite contact, silver nickel / copper- nickel alloy composite contact (AgNi / CuNi), silver cadmium oxide alloy contact (AgCdO), silver cadmium oxide / copper composite contact (AgCdO/Cu), silver cadmium oxide / copper-nickel (AgCdO/CuNi) composite contact, silver tin oxide alloy (AgSnO2) contacts, silver tin oxide / copper (AgSnO2/Cu) composite contact, silver oxide zinc alloy (AgZnO) electrical contacts, silver and copper alloy contacts (AgCu) and other varieties of the rivet-type silver alloy electrical contacts or plain films of various specifications of composite silver contacts (change with advanced cold forging molding process automation of production). Recently developed and put into production of silver tin oxide / copper-nickel alloy flat sheet type composites contact (AgSnO2/CuNi).
Our company can according to your special requirements, customized to your required specifications, and according to your needs, on behalf of research and development of new electronic metal products.



RIVET TYPE SILVER ALLOY CONTACTS LABELED DIAGRAM

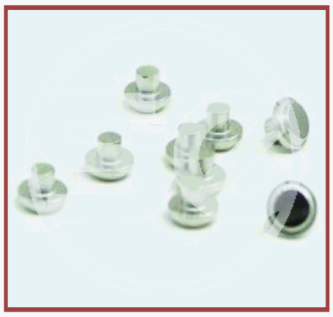
JB/T10383 - 2002 Rivet electrical contacts tolerance :			
ΦD=±0.05mm	T=±0.05mm	S=±0.03mm	SR=2～3D
Φd=+0-0.05mm	L=+0.1mm	α=7～9°C	



Touch point size and limited deviation

Item	Diameter of head	Thickness of head	Thickness of composite	Diameter of foot	Length of foot	Radius of sphere	Angel of mold
Limited deviation	±0.05	±0.03	S≤0.4 S>0.4±0.06	-0.03～-0.08	±0.03	SR≤6±1 SR>6+1.5	±2
Basic dimension	2.0	0.4,0.5,0.6	0.2～0.3	0.9,1.0	1～2	3,5	9～15
	2.5	0.6,0.8,1.0	0.3～0.4	1.2,1.5		4,6	
	3.0	0.8,1.0,1.2	0.35～0.5	1.5		6.8	
	3.5			1.5,2.0	1～3.0		
	4.0	1.0,1.2,1.5		2.0		8,10	
	4.5			2.0,2.5			
	5.0	1.0 1.2 1.5 2	0.40～0.60	2.5		10,15	
	5.5			2.5,3.0			
	6.0			3.0		15,20	
	6.5	1.2 1.5 2.0	0.50～0.70	3.0,3.5			
	7.0			3.5		20,25	
	8.0			4.0			
	9.0	1.5 2.0	0.50～1.00	4.0,5.0	2～4.0	35,45	
	10.0			4.0,5.0			
	12.0			4.0,6.0			
	14.0			5.0,6.0		50,55	
	16.0			6.0			

TUNGSTEN RIVET FOR ELECTRIC HORN



Product Material WU/FE General Description

The Tungsten point are arc resistance, redectory, and less current consumption when the metal contact on surface, strong on-off current capability, good wear properties and dynamic performance hit and its cheaper than any other metal or alloy material.

Application Scope

Mainly used in the electric products such as automobiles, motorcycles, electric horn, magneto etc.

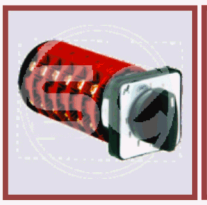
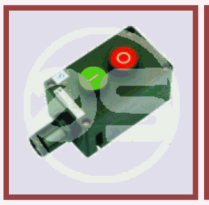
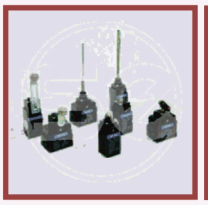
Material Properties

Material	Wu
Composition (%)	≥99.95
Grain number (PCS/mm2)	10000-20000
Density g/cm3	≥19.0
Hardness HV(Mpa)	680

SILVER NICKEL ALLOY ELECTRICAL CONTACT (AGNI10 20)






Silver nickel (AgNi) electrical contact made of advanced materials, sintering, extrusion technology, nickel fibrous particles were uniformly distributed . Silver nickel (AgNi) electrical contacts of the contact resistance low and stable, electrical conductivity, thermal conductivity, and the burning of small, electric wear small and uniform, silver-nickel alloy (AgNi) electrical contacts in DC under the opening and closing, the electrical contacts materials transfer less than the silver contacts, especially for small enclosure off use; but (AgNi) silver nickel alloy electrical contacts in the oxide Ershi off electrical contacts when the contact resistance increased the sulfur-sensetive, high current resistance poor welding performance .

(AgNi) nickel-silver electrical contacts are usually associated with (AgNiC) Silver graphite electrical contact pair used. Silver nickel alloy material (AgNi) contains a special additive trace significantly improve resistance to weld the material properties and resistance to electrical wear . Mainly used in small enclosure in the high-load contact, the contact with DC under the conditions; low-voltage, small current level of contact, instrument switch, light control switches, relays, thermostat and washing machine timer.

The main products are nickel-silver alloy electrical contacts AgNi,AgNi (10～20) / Cu Ag Ni / Cu composite electrical contact, silver nickel / copper-nickel alloy - AgNi (10～20) / CuNi (8～10) composite power contacts, etc.

Silver nickel electrical contacts of the mechanical and physical properties of materials

Type	AgNi 10	AgNi 15	AgNi 20
NI%	⩽10	⩽15	⩽20
Resistivity μΩ ·cm	1.88	2.01	2.10
Conductivity IACS%	94.10	90.70	78.40
Density g/cm^3	10.30	10.21	10.10
Hardness HV-N/mm^2	750～980	800～980	850～980
Tensile strength Mpa	320～360	320～360	260～320

Silver alloy electrical contacts

Silver cadmium oxide contact materials made by sintering or extrusion process, silver cadmium oxide (AgCdO) in cadmium oxide (CdO) particles dispersed in silver matrix, the electrical contacts when the arc action, because the temperature increase, oxidative cadmium (CdO) show sub-Pyrolysis, evaporation Ershi electrical contact surface cooling, reducing the arc energy. which greatly improved the performance of electrical contact of the interrupter, thus silver cadmium oxide (AgCdO) electrical contact material resistant to wear loss, anti-welding characteristics, and low and stable contact resistance . Increased oxidation of cadmium can increase the material resistance to weld, but will increase the contact resistance and temperature rise at the same time Reduce the material plasticity .

Silver cadmium oxide contact material in high-current Contactor in the electrical life of more than silver and silver-nickel alloy Ag AgNi has greatly improved and is widely used for low-voltage electrical appliances within the medium and high load electrical contact. Domestic AgCdO silver alloy oxide electrical contact material amount of the largest most widely used of a class; be large for medium and large-capacity relays, contactors, AC and DC switches and circuit breakers, etc.

In a wide range of small capacity low-voltage electrical fields . EU countries in recent years because of environment issues has been gradually disable the material is largely similar to the performance of silver tin oxide materials AgSnO alternative. The main products are AgCdo silver cadmium oxide alloy electrical contacts, AgCdO (10 ~15) /Cu alloy of silver cadmium oxide / copper composite electrical contacts, silver cadmium oxide alloy/copper-nickel alloy-AgCdO (10 ~ 15)/ cuNi (8 ~10)and other complex electrical contact.

Silver nickel electrical contacts of the mechanical and physical properties of materials

Type	AgCd015	AgCd015	AgCd015
Cdo%	⩽10	⩽12	⩽15
Resistivity μΩ ·cm	2.1	2.2	2.5
Density g/cm^3	10.1	10	9.9
Hardness HV-N/mm^2	750	800	850
Tensile strength Mpa	270~290	270 ~ 300	280 ~300
Stretching %	26	19	16

AgCdO Trimetal contact

Silver (Ag) in the material used for electrical contacts can be listed as the first. It has the highest metal conductivity, its value is 106% IACS . The disadvantage is that silver is easy to form a black sulfide (AgS) sulfide film, easy to wear and low hardness, but because of the physical properties of fine silver is widely used as a low energy circuit electrical contacts .
Mainly used in radio communication with the micro-switch, controlled switches, thermostats, relays, calculators, computers and other small current electrical failed . The main products are silver contacts, Ag/Cu-silver / copper composite electrical contacts, silver / copper-nickel alloy- Ag/CuNi (8～10) composite electrical contact.

Silver contact of the mechanical and physical properties of materials

Type	Ag
Ag%	99.95
Density g/cm^3	2.1
Resistivity μΩ·cm	10.1
Hardness HV-N/mm^2	650～950
Tensile strength Mpa	320～400
Stretching %	3

SILVER TIN OXIDE (AGSNO2) HAS AN EXCELLENT ELECTRICAL CONTACT MATERIALS

Silver tin oxide (AgSnO2) has an excellent electrical contact materials, stable performance and good resistance to welding arc erosion resistance properties . In the current large (500 3000A in the current range) conditions, the silver tin oxide (AgSnO2) contact than silver cadmium oxide (AgCdO) contact arc erosion resistance and better ability of the lamp or capacitive load next, (AgSnO2) of silver tin oxide contact ratio (AgCdO) silver cadmium oxide contacts,(AgNi) silver nickel contact demonstrated significantly better anti-welding properties, in exchange resistive load, silver tin oxide (AgSnO2) contact than silver cadmium oxide(AgCdO) contact with the slightly higher contact resistance (due to the small amount of special payments oxideas an additive, thereby ensuring that its contact resistance is to the extent permitted), but the lights in the DC circuit 13.5A/Motor (such as automotive relay) ying with the occasions, they show a low and stable resistance value . DC conditions, and silver cadmium oxide (AgCdO) contact than silver tin oxide (AgSnO2) low electrical contact material with better shift . Silver tin oxide (AgSnO2) electrical contacts are now widely used in large-capacity AC contactors (eg, CJ20, CJ40, 3TF series, etc .), high power AC switch (50KW and above), DC contactors, AC (direct) flow power relay, automotive electronics, and small low-voltage circuit breaker capacity . The main products are AgSnO2silver tin oxide alloy electrical contacts, AgSnO2 (8～12) / CU alloy of silver tin oxide / copper composite electrical contacts, silver tin oxide alloy / copper-nickel alloy-AgSnO2 (8～12) / CuNi (8～10) composite electrical contacts,etc .

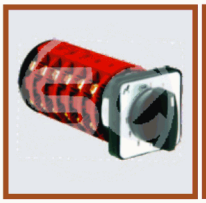
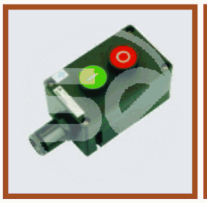
Silver tin oxide (AgSnO2) electrical contacts of the mechanical and physical properties of materials

Type	AgSnO2(8)	AgSnO2(10)	AgSnO2(12)
SnO2%	8	10	12
Resistivity μΩ·cm	2.10～2.50	2.10～2.50	2.10～2.50
Density g/cm^3	9.80～10.00	9.80～10.00	9.80～10.00
Hardness HV-N/mm^2	800～1100	800～1100	800～1100
Tensile strength Mpa	300～400	300～400	300～400

AGCDO TRIMETAL CONTACT





Used in AC contactors, relays, electric tool switches, buttons, timer, wall switch, photoelectric switch, micro switch . Features: The good contact conductivity, surface oxidation is not easy, when adding copper (3 - 30%), you can make silver significantly improved resistance to burning ability . Therefore, the incorporation of copper contact material can be applied to the current level of up to 16A . Because the addition of copper, especially copper content is high (eg 10%), the DC can transfer the material under working conditions has declined . In the beginning of the electric field is widely used, it can replace the solid silver contacts .

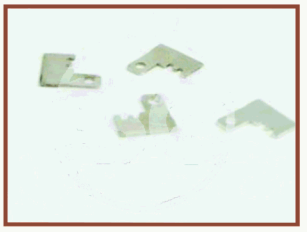
First performance

Type		AgCu3	AgCu10	AgCu30
Composition%	Ag	95	90	70
	CU	5	10	30
Density g/cm^3		10.4	10.3	10.1
Resistivity μΩ ·cm		1.92	2.08	2.17
Hardness HV-N/mm^2		>600	>650	>700



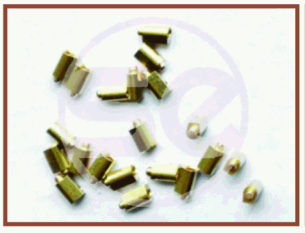












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