

# FUDAR

## AgNi

<b>Overview</b>	AgNi is more resistant to welding and burnout than Ag or FAg. These two properties of the product are improved by the increased content of Ni, which has a high melting point. All AgNi materials are very machinable and easy to solder. There is little material transfer when DC is turned on and off.					
<b>Application</b>	AgNi products are widely used in low-voltage switchgear. Such as relays, small current contactor light switches, thermostats, protection switches (with AgC, AgZnO, AgSnO <sub>2</sub> , etc. constitute an asymmetric pair).					
Material Properties						
Tips	1#AgNi	3#AgNi	6#AgNi	8#AgNi	11#AgNi	12#AgNi
Ni Content (wt%)	10.0±1.0	12.0±1.0	20.0±1.0	30.0±1.0	30.0±1.0	40.0±1.0
Density (g/cm <sup>3</sup> )	≥10.20	≥10.20	≥10.00	≥9.80	≥9.70	≥9.50
Elec.Resistivity (μΩ·cm)	≤2.30	≤2.50	≤2.40	≤2.70	≤2.70	≤3.40
Hardness HV	≥50	≥60	≥55	≥60	≥75	≥80
Manufacturing Process	Sintering-Extruding			Mixing-Compacting-Sintering		

Wires	1#AgNi	3#AgNi	5#AgNi	25#AgNi	6#AgNi	8#AgNi
Ni Content (wt%)	10±1	12±1	15±1	15±1	20±1	30±1
Density (g/cm <sup>3</sup> )	≥10.20	≥10.20	≥10.10	≥10.15	≥10.00	≥9.80
Elec.Resistivity (μΩ·cm)	≤2.10	≤2.25	≤2.10	≤2.10	≤2.25	≤2.50
Hardness HV	≥55	≥55	≥65	≥65	≥65	≥70
Tensile Strength (MPa)	≥200	≥220	≥230	≥240	≥250	≥270
Elongation (%)	≥1	≥1	≥1	≥1	≥1	≥1
Manufacturing Process	Sintering-Extruding					

Product Types								
	1#AgNi	3#AgNi	5#AgNi	6#AgNi	8#AgNi	11#AgNi	12#AgNi	25#AgNi
Wires	√	√	√	√	√			√
Strips	√	√	√	√	√			√
Tips	√	√	√	√	√	√	√	√
Bimetal strips	√	√	√	√	√			
Rivets	√	√	√	√	√			√