

## Sliding Contact Materials Alloy Information

The information listed below will provide you with a general comparison of materials offered for most sliding contact applications. For more detailed assistance, please contact us to discuss your application with one of our engineers.

	Paliney 5	Paliney 6	Paliney 7	Paliney 8	Paliney 9	NeyOro G	NeyOro-28	Paliney-2000
Major Elements	Ag	Pd	Pd	Pd	Pd	Au	Au	Ag
	Pd	Ag	Ag	Ag	Ag	Cu	Ag	Pd
	Cu	Cu	Cu	Cu	Cu	Pt		Cu
			Pt		Pt			
			Au		Au			
Available Condition	A, SR, HT	A, SR, HT	A, SR	A, DHT, HT	SR	A, SR, HT	A, WH, SR	A, WH, SR, HT
				DHT, HT				
Typical Applications	Potentiometers	Automotive	Aerospace	Potentiometers	Communications	Professional	Potentiometers	Potentiometers
	Sensors	Potentiometers	IC Test	Military	Relays	Video Cameras	Slip Rings	Position Sensors
	Instrumentation	Position Sensors	Contactors		Arm Circuits	Gyro Gimbals		
			Medical			Munition Safe		
			Communications			Medical Ultrasound Sensors		
		Strain Gauges						
Properties (Typical)	Heat-Treated	Heat-Treated	Heat-Treated	Heat-Treated	Stress-Relieved	Heat-Treated	Work-Hardened	Heat-Treated
Proportional Limit (psi)	110,000	110,000	145,000	155,000	120,000	130,000	35,000	120,000
Ultimate Tensile Strength (psi)	150,000	175,000	180,000	210,000	150,000	170,000	70,000	185,000
Elongation (%)	5-Jan	6	5	1	12	5	< 5	< 5
Modulus of Elasticity (psi)	16.5 x 10(6)	16 x 10(6)	17.0 x 10(6)	16.0 x 10(6)	17.0 x 10(6)	16.0 x 10(6)	12 x 10(6)	15 x 10(6)
Vickers Hardness (50-gram)	260 - 320	290 - 370	330 - 400	340 - 440	275 - 340	290 - 370	95-125	300-350
Oxidation Resistance	Good	Very Good	Very Good	Good	Very Good	Excellent	Excellent	Very Good

A = Annealed WH = Work-Hardened SR = Stress-Relieved

DHT = Ductile Heat-Treated HT = Heat-Treated (Age-Hardened)

The information contained in this Data Sheet is intended to assist you in the use of this product. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular application. The user should determine the suitability of this material for each application. Data subject to change without notice.

### For More Information

[Contact Us to discuss your application with one of our Materials Specialists.](#)