



## NOZZLE SIZE SELECTION GUIDE

### Standard Gage Precision Nozzles

Color Code	Gage or Size	ID / OD (in)	ID / OD (mm)	Base Metal (Standard)	Available Coatings
	18	0.041 / 0.049	1.041 / 1.245	Phosphor Bronze	Entecoat, Electroless Nickel Class 2
	19	0.034 / 0.042	0.864 / 1.067	Phosphor Bronze	Entecoat, Electroless Nickel Class 2
	20	0.027 / 0.035	0.686 / 0.889	Phosphor Bronze	Entecoat, Electroless Nickel Class 2
	21	0.024 / 0.032	0.609 / 0.813	Phosphor Bronze	Entecoat, Electroless Nickel Class 2
	23	0.022 / 0.025	0.564 / 0.635	Phosphor Bronze, Nickel Silver	Entecoat, Electroless Nickel Class 2
	25	0.017 / 0.020	0.437 / 0.508	Phosphor Bronze, Nickel Silver	Entecoat, Electroless Nickel Class 2
	27	0.013 / 0.016	0.335 / 0.406	Phosphor Bronze, Nickel Silver	Entecoat, Electroless Nickel Class 2
	30	0.009 / 0.012	0.233 / 0.306	Phosphor Bronze, Nickel Silver	Entecoat, Electroless Nickel Class 2

### Micro Precision Nozzles

	06	.006 / .010	0.160 / 0.240	Nickel Silver	Entecoat
	04	.004 / .008	0.110 / 0.200	Nickel Silver	Entecoat
	02	.002 / .006	0.060 / 0.160	Nickel Silver	Entecoat

Note: Phosphor Bronze - UNS C51000, Nickel Silver – UNS C73500, Electroless Nickel Class 2 – Electroless Nickel MIL-C-26074 E Class 2, Entecoat – Symcoat Entecoat



## NOZZLE APPLICATION GUIDE

### Nozzle Variants

Base Metal / Coating	Features	Fluids	Industry Applications
Nickel Silver / Uncoated	Lower Cost, Oxidation Resistant, Bright Finish as Deep Drawn, Thinner Wall	Epoxies, Silver Epoxies, Silicones, UV Cure Adhesives, Thermal Greases	LED, Electronics, Gasketing, Underfill, Cavity Fill, Patterns, Encapsulating
Phosphor Bronze / Uncoated	Lower Cost, Rapid Heat Transfer, High Rigidity, Thinner Wall	Epoxies, Silver Epoxies, Silicones, UV Cure Adhesives, Thermal Greases	Electronics, Gasketing, Underfill, Cavity Fill, Patterns, Encapsulating
Phosphor Bronze / Electroless Nickel Class 2	Hard, Abrasion Resistant, High Rigidity, Bright Finish	Epoxies, Silver Epoxies, Silicones, UV Cure Adhesives, Thermal Greases	LED, Electronics, Gasketing, Underfill, Cavity Fill, Patterns, Encapsulating
Nickel Silver / Electroless Nickel Class 2	Hard, Abrasion Resistant, Bright Finish	Epoxies, Silver Epoxies, Silicones, UV Cure Adhesives, Thermal Greases	LED, Electronics, Gasketing, Underfill, Cavity Fill, Patterns
Phosphor Bronze / Entecoat	Inert, Hard, lubricious, Hydrophobic, Abrasion Resistant, High Rigidity, Dark Finish, PTFE Impregnated	Aqueous Fluids, Buffers, Slurries, Biomaterials, Emulsions	Medical, Biomedical Devices, Electronics, Well Deposition
Nickel Silver / Entecoat	Inert, Hard, lubricious, Hydrophobic, Abrasion Resistant, Dark Finish, PTFE Impregnated	Cyanoacrylates, Solder Pastes, Epoxies	Medical, Electronics

Note: Phosphor Bronze - UNS C51000, Nickel Silver – UNS C73500, Electroless Nickel Class 2 – Electroless Nickel MIL-C-26074 E Class 2, Entecoat – Symcoat Entecoat