

Equivalent Ceramic Materials

Material Cross Reference Chart

PZT Material	Navy Type I	Navy Type II	Navy Type VI	Navy Type III
Supplier:				
Morgan Matroc	PZT-4	PZT-5A	PZT-5H	PZT-8
Channel Ind.	C5400	C5500	C5700	C5800
EDO Corp.	EC-64	EC-65	EC-76	EC-69
Keramoss	K-270	K-350	---	K-278
Transducer Products	LTZ-1	LTZ-2	LTZ-2H	---
Motorola (CTS)	---	3195	3203	---
Staveley Sensors	EBL1	EBL2	EBL3	EBL4

Disclaimer: Equivalency based on values as published by each supplier. BPO makes no claims as to accuracy of published information or attempts to promote the relative performance of any materials listed.

Navy Type I is suitable for both constant and repetitive conditions in sonar, ultrasonic cleaning, and other high power applications. This material produces large mechanical drive amplitudes while maintaining low mechanical and dielectric losses. Applications include STM, nano-positioning, and medical therapeutics.

Navy Type II has high sensitivity, permittivity, and time stability in applications when used as the receiver or generator element in accelerometers, vibration pickups, and hydrophones. Applications include flow and level sensing and medical Doppler transducers.

Navy Type III is used in high power applications and has an extremely high mechanical quality. With the ability to withstand high levels of electrical excitation and mechanical stress, Navy Type III has the best power handling capabilities. Applications include ultrasonic cleaners, cell disruption, phacoemulsification, and high power ultrasonics.

Navy Type VI has very high permittivity, coupling, and piezoelectric constant, but lower time stability. It is used in applications requiring fine movement control or for sensitive receivers. Its low Curie temperature restricts its operating temperature range. Applications include medical diagnostics, industrial NDT, STM/AFM, and nano-positioning.

Questions? [Contact us](#) to discuss your particular application.

