Quick-Shield



This patented spiral is the best *low cost* EMI gasket solution. The spiral is wound out of spring temper stainless steel for excellent spring memory and compression set resistance. The stainless steel spiral exhibits moderate to high shielding properties at a very low cost.



Quick-Shield Part Numbers (Stainless Steel)				Recommended Groove Dimensions		
Diameter	Standard Force*	Moderate Force	Low Force	Depth (L) +.002"000"	Width (G) +.007"005"	Width (W) +.000"002"
.034" ± .002"	NI-02			.023"	.046"	.033"
.047" ± .002"	NI-03	NM-03 NC**		.035"	.063"	.045"
.063" ± .003"	NI-04	NM-04 NC	NL-04 NC	.046"	.094"	.060"
.070" ± .003"	NI070	NM070 NC	NL070 NC	.053"	.094"	.067"
.078" ± .003"	NI-05	NM-05 NC	NL-05 NC	.059"	.109"	.075"
.094" ± .004"	NI-06	NM-06 NC	NL-06 NC	.070"	.125"	.090"
.103" ± .004"	NI103	NM103 NC	NL103 NC	.077"	.141"	.099"
.109" ± .004"	NI-07	NM-07 NC	NL-07 NC	.082"	.156"	.105"
.125" ± .004"	NI-08	NM-08 NC	NL-08 NC	.094"	.171"	.121"
.139" ± .005"	NI139	NM139 NC	NL139 NC	.104"	.187"	.134"
.141" ± .005"	NI-09	NM-09 NC	NL-09 NC	.105"	.187"	.136"
.172" ± .005"	NI-11	NM-11 NC	NL-11 NC	.128"	.234"	.165"
.187" ± .006"	NI-12	NM-12 NC	NL-12 NC	.140"	.250"	.181"
.250" ± .007"	NI-16	NM-16 NC	NL-16 NC	.185"	.343"	.240"
.312" ±.009"	NI-20	NM-20 NC	NL-20 NC	.234"	.422"	.300"

Moderate and low force gaskets may be ordered with cord insert. (See Options).

See page 51 for groove mounting techniques. Dovetail Groove Cutters detailed on page 36.

Application Information

The low cost and moderate shielding of this gasket offer an excellent solution for meeting FCC and European Community EMI requirements. Combining it with a die-cast or molded "pinch boss" groove gives you the optimal price/performance combination. See page 53 for more details.

Materials

See page 59 for material specifications.

Spiral: Stainless steel.



^{*} All standard force gaskets come without a cord. ** These sizes cannot be ordered with a cord.

Shielding Quality

This gasket offers shielding quality in excess of 95 dB at 1 GHz. The shielding quality may vary depending on the specific application. Refer to page 49 for more complete performance data.

Compression Force

Quick-Shield gaskets come in three different resiliencies (as shown below). Optimal compression of the gasket is 25% of the diameter of the spiral. Since the force to compress the gasket is a function of the cube of the thickness of the stainless steel ribbon, the compression forces shown are approximate.

Standard Force: ~30 pounds per linear inch compression. **Moderate Force:** ~10 pounds per linear inch compression. **Low Force:** ~1.5 pounds per linear inch compression.

Mounting

This gasket is groove mounted.

Available Options

Cord Insert

To keep costs low, we recommend you omit the cord usually used in the spiral. However, if over-compression of the gasket is a concern or problem, remove the "NC" from the part number on the moderate and low force series gaskets.

Example: NM-06 NC will come without a cord. NM-06 will include cord.

All Standard Force gaskets come without cord (no NC required).

Custom Sizes

We can manufacture Quick-Shield gaskets in any size diameter, from .034" up to approximately 1.5". The functional length of the part may be short at very large diameters. Please contact us with your requirements.

Plating

For plating options, see pages 5-6 for *Ultra* Quick-Shield.

Ordering Information

Quick-Shield is sold by the foot and typically packaged on spools except in small quantities. It can also be ordered cut-to-length in specific sizes at a low cost, or you can cut it yourself using a sharp pair of scissors. Custom o-rings are also available. (See page 37).

