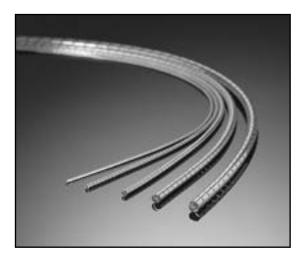
# **Quick-Shield**



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.

**Cord:** "No cord" is the default to keep costs low. See Options if cord is desired.



<sup>\*</sup> 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** 

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 to request cord.

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. Not all configurations are stock items. Contact us for availability. Custom o-rings are also available as described on page 37.

### **Groove Mounted Gasket Matrix**

This matrix lists Spira's various **groove mounted** gaskets. See product pages for more information.

Product	Shielding	Base Material	Plating	Application Notes
Spira-Shield	Excellent EMI	Beryllium Copper	Tin/Lead, RoHS Tin or other	Best EMI Shielding, Salt-Fog Option*
Ultra Quick-Shield	Excellent EMI	Stainless Steel	Tin/Lead or RoHS Tin	Lower Cost Commercial Option
Quick-Shield	Moderate EMI	Stainless Steel	None	Lowest Cost, Salt Fog*
Flexi-Shield	High to Moderate EMI Rain/Wind/Dust	Beryllium Copper or Stainless Steel	Tin/Lead, RoHS Tin or other	Rain/Wind/Dust, Highest Resiliency, Low Cost Sliding, Lowest Compression Force
Enduro-Shield	High to Excellent EMI Rain/Wind/Dust	Beryllium Copper or Stainless Steel	Tin/Lead, RoHS Tin or other	Rain/Wind/Dust, Sliding, Extremely Durable Nearly Indestructible
"D" Multi-Seal	High to Excellent EMI True Environmental Seal	Beryllium Copper or Stainless Steel	Tin/Lead, RoHS Tin or other	Groove-Mounted EMI & True Environmental Seal

