



Knitted Wire Mesh Gasket

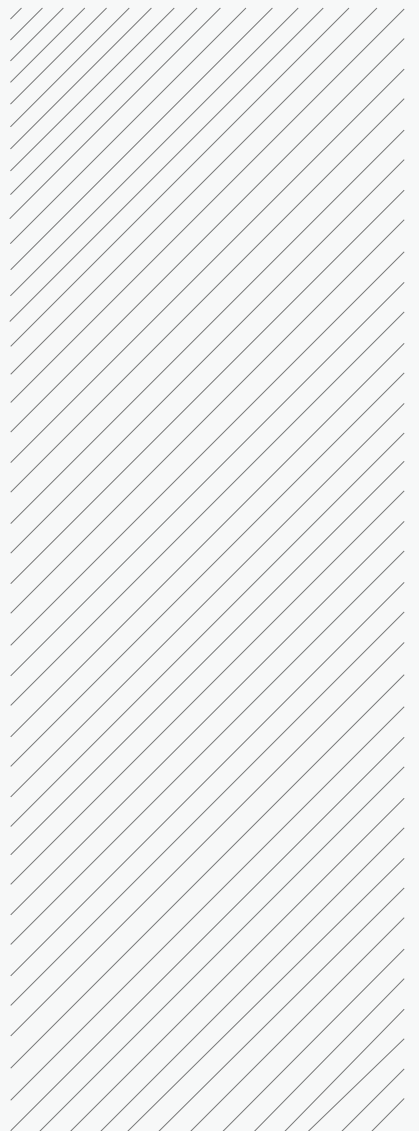
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KNITTED WIRE MESH GASKET

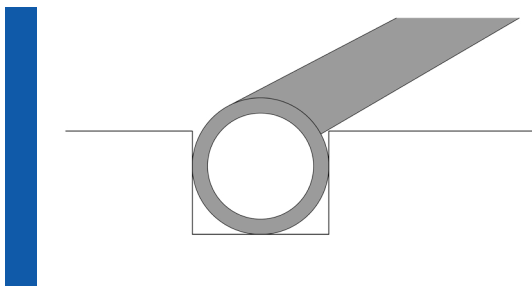


Knitted wire mesh gasket are made of metal wire mesh or metal wire mesh over elastomer core for EMI and RFI shielding of electronic equipment.

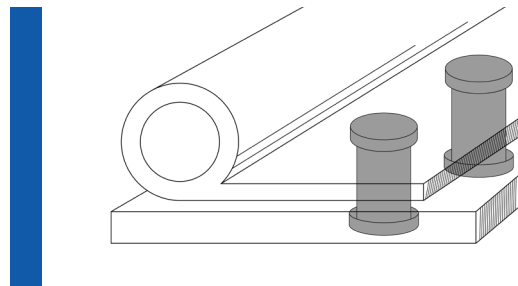
Electronic components are generally installed in an enclosure. However, during the installation, there are holes or slots between electronic components and the enclosure, electromagnetic fields will pass through these holes or slots, causing electromagnetic leakage. As the electromagnetic interference or signals increase, these EMI signals may have a negative influence on the device and other vulnerable components in the surrounding equipment, causing various device-related problems, such as degraded performance or even permanent damage. To protect these components, proper shielding measures are required to ensure the safe operation of the system.

Knitted wire mesh gaskets are a kind of effective electromagnetic shielding material to cover these holes or slots to prevent electromagnetic signal leakage and ensure the smooth operation of electrical equipment.

Installation

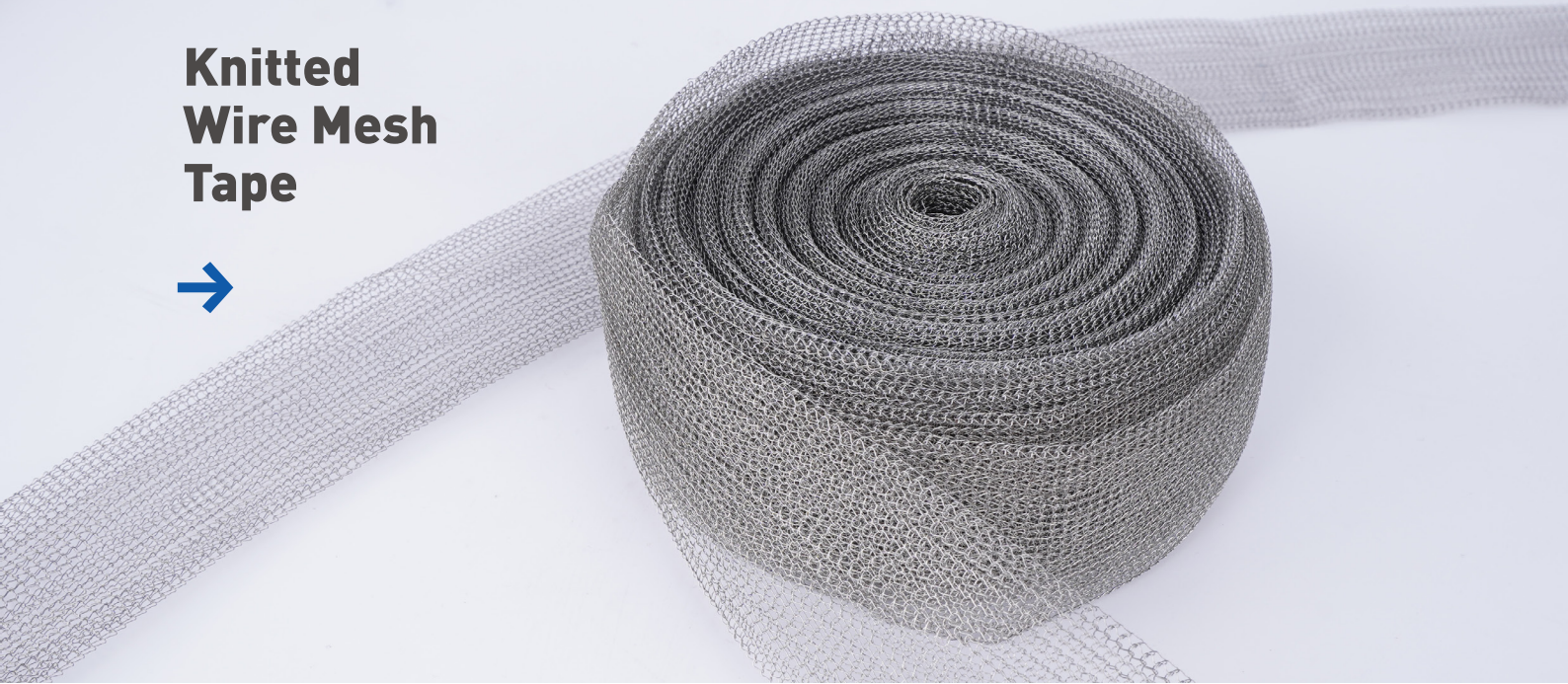


It can be fixed in the groove of the electric component enclosure and bonded with conductive glue for fixing.



It can be used in sheet-metal enclosure and fixed by riveting or spot welding.

Knitted Wire Mesh Tape



Knitted wire mesh tapes are a kind of double-layer knitted wire mesh tape. Due to its shapes and features, it can be used for the EMI shielding, grounding and electrostatic discharge of cables and cable bunches. Standard EMI shielding tape is made of tin-plated copper clad steel (Sn/Cu/Fe) knitted wire mesh and offers good adaptability to the environment, high tensile strength and good shielding performance.

When wrapping the cable bundles, cover the main cable first and then branch cables. At least 100 mm allowance must be reserved at the beginning and the end. Conductive epoxy resin adhesive can be used for end connection, welding or banding can also be used for end connection to ensure the knitted wire mesh bandage is evenly wrapped around the cable bunches.

Commonly used material is tin-plated copper clad steel (Sn/Cu/Fe), with a wire diameter of 0.114 mm, in compliance with ASTM B-520.

EMI Shielding Effectiveness

Material	Magnetic Field	Electric Field	Plane Wave	
	100 KHz	10 MHz	1 GHz	10 GHz
	dB	dB	dB	dB
Sn/Cu/Fe	45	60	40	30

Notes: Commonly used size is 12.7 mm × 25.4 mm

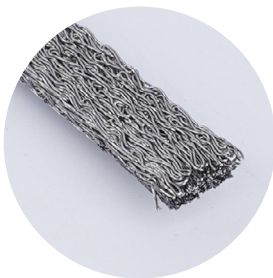
All-Metal Knitted Wire Mesh Gasket



All-metal knitted wire mesh gaskets are a kind of elastic metal wire mesh strips, generally used as gasket materials and offer effective EMI shielding at the seams of the electronic equipment enclosure. They are often supplied in rectangular, round, round with tail and double round shapes.

Common Materials

- Tin-plated phosphor bronze (Sn/Ph/Bz). Wire diameter: 0.114 mm, comply with ASTM-B-105.
- Tin-plated copper-clad steel (Sn/Cu/Fe). Wire diameter: 0.114 mm, comply with ASTM-B-520
- Monel. Wire diameter: 0.114 mm, comply with QQN-281 AMS-4730.



Rectangular All-Metal Knitted Wire Mesh Gasket

For casts or machining parts.



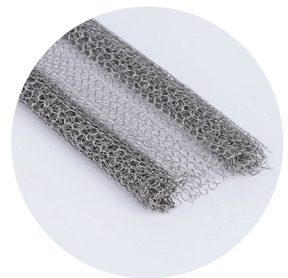
Round All-Metal Knitted Wire Mesh Gasket

For sheet metal enclosures



Round with Tail All-Metal Knitted Wire Mesh Gasket

For sheet metal enclosures



Double Round All-Metal Knitted Wire Mesh Gasket

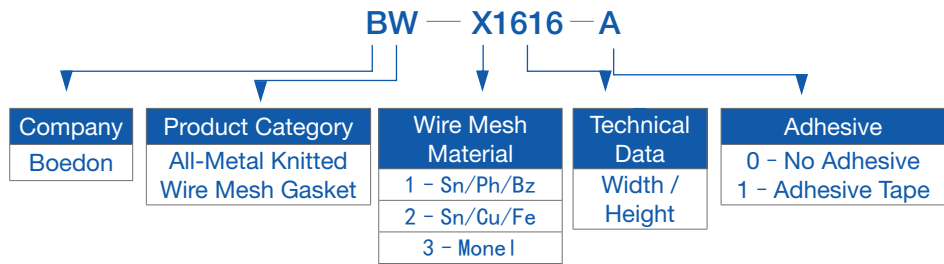
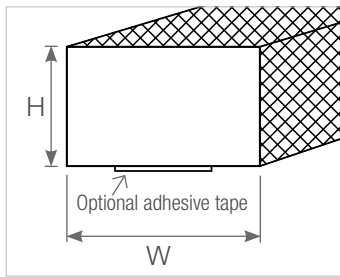
For sheet metal enclosures

EMI Shielding Effectiveness

Material	Magnetic Field	Electric Field	Plane Wave	
	100 KHz	10 MHz	1 GHz	10 GHz
	dB	dB	dB	dB
Sn/Ph/Bz	80	130	95	95
Sn/Cu/Fe	60	125	80	80
Monel	60	125	80	80

Notes: Take 127 mm × 127 mm holes as standard size.

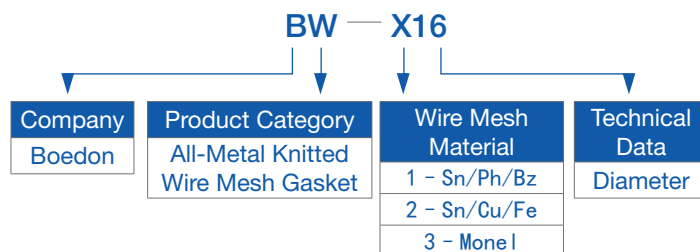
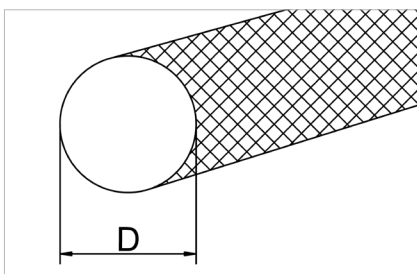
Rectangular All-Metal Knitted Wire Mesh Gasket



Width: 1.60 - 25.40 mm Tolerance: 0.79- 0 mm
 Height: 1.57 - 9.53 mm Tolerance: 0.14- 0 mm

Model	Width (mm)	Height (mm)	Model	Width (mm)	Height (mm)
BW-X1616	1.60	1.60	BW-X7923	7.95	2.39
BW-X2323	2.39	2.39	BW-X7931	7.95	3.18
BW-X3116	3.18	1.60	BW-X7947	7.95	4.78
BW-X3123	3.18	2.39	BW-X7963	7.95	6.35
BW-X3131	3.18	3.18	BW-X7979	7.95	7.95
BW-X3139	3.18	3.96	BW-X9516	9.53	1.60
BW-X4716	4.78	1.60	BW-X9523	9.53	2.39
BW-X4723	4.78	2.39	BW-X9531	9.53	3.18
BW-X4731	4.78	3.18	BW-X9547	9.53	4.78
BW-X4747	4.78	4.78	BW-X9563	9.53	6.35
BW-X6316	6.35	1.60	BW-X9595	9.53	9.53
BW-X6323	6.35	2.39	BW-X1263	12.70	6.35
BW-X6331	6.35	3.18	BW-X1215	12.70	1.57
BW-X6347	6.35	4.78	BW-X1231	12.70	3.18
BW-X6363	6.35	6.35	BW-X1931	19.05	3.18
BW-X7916	7.95	1.60	BW-X2531	25.40	3.18

Round All-Metal Knitted Wire Mesh Gasket



Diameter: 1.60 - 4.78 mm
 Tolerance: 0.79. - 0 mm

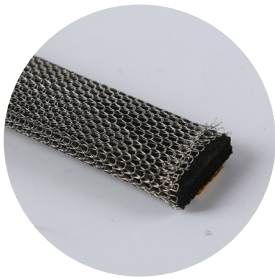
Model	Diameter (mm)	Model	Diameter (mm)
BW-X16	1.60	BW-X63	6.35
BW-X23	2.39	BW-X79	7.95
BW-X31	3.18	BW-X96	9.63
BW-X39	3.96	BW-X11	11.13
BW-X47	4.78	BW-X12	12.70

Elastomer Cored Knitted Wire Mesh Gasket

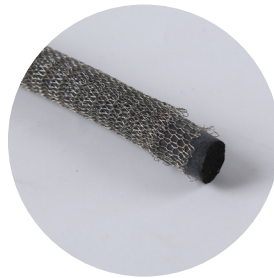


Elastomer cored knitted wire mesh gasket is a product combined knitted wire mesh with elastomer cores. The base material is covered with 2 layers of knitted wire mesh. The core material includes neoprene rubber, silicone rubber sponge and rubber tube.

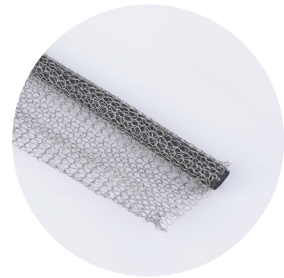
It is easy to remove, relatively softer and can be used in irregular or uneven seams of the electronic enclosure.



Rectangular elastomer cored double-layer knitted wire mesh gasket



Round elastomer cored double-layer knitted wire mesh gasket



Round with tail elastomer cored double-layer knitted wire mesh gasket

Materials

Knitted Wire Mesh

- Tin-plated phosphor bronze (Sn/Ph/Bz). Wire diameter: 0.114 mm, comply with ASTM-B-105.
- Tin-plated copper clad steel (Sn/Cu/Fe). Wire diameter: 0.114 mm, comply with ASTM-B-520
- Monel. Wire diameter: 0.114 mm, comply with QQN-281 AMS-4730.

Elastomer Core

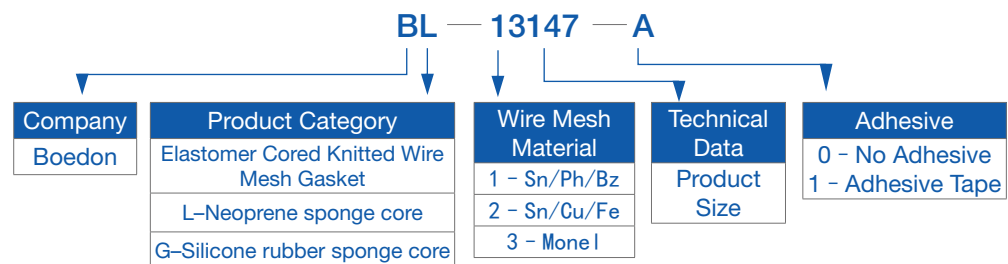
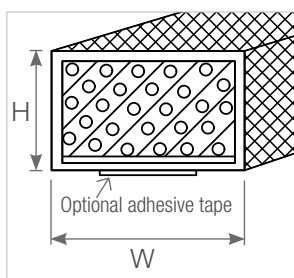
- Neoprene foamed rubber. Comply with MIL-R-6031, type II, grade A, ordinary, temperature ranges from -30 °C to +100 °C.
- Silicone foamed rubber. Comply with AMS-3159, temperature ranges from -75 °C to +205 °C.
- Solid silicone rubber. Comply with ZZ-R-765, temperature ranges from -60 °C to +260 °C.

EMI Shielding Effectiveness

The best EMI shielding effectiveness is achieved when the double-layer knitted wire mesh gasket is compressed to 75% of its original height. The shielding effectiveness of the single-layer knitted wire mesh gasket is reduced by 5–10 dB and the shielding effectiveness of knitted wire mesh with double-layer above will not significantly increased.

Material	Magnetic Field	Electric Field	Plane Wave	
	100 KHz	10 MHz	1 GHz	10 GHz
	dB	dB	dB	dB
Sn/Ph/Bz	80	130	95	95
Sn/Cu/Fe	60	125	80	80
Monel	60	125	80	80

Rectangular Elastomer Cored Double-Layer Knitted Wire Mesh Gasket

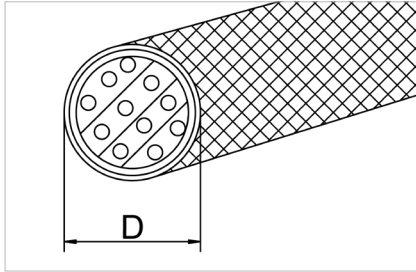


Width: 3.18 - 12.70 mm

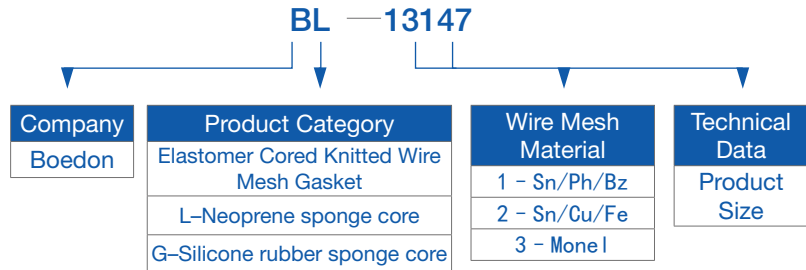
Height: 3.18 - 12.70 mm

Elastomer Size Minimum Height × Width (mm)	Neoprene Sponge Core			Silicone Rubber Sponge Core		
	Sn/Ph/Bz	Sn/Cu/Fe	Monel	Sn/Ph/Bz	Sn/Cu/Fe	Monel
3.18 × 3.18			BL-33131			
3.18 × 4.78	BL-13147	BL-23147	BL-33147	BG-13147	BG-23147	BG-33147
3.18 × 6.35	BL-13163	BL-23163	BL-33163	BG-13163	BG-23163	BG-33163
3.18 × 9.53	BL-13195	BL-23195	BL-33195	BG-13195	BG-23195	BG-33195
4.78 × 4.78	BL-14747	BL-24747	BL-34747	BG-14747	BG-24747	BG-34747
4.78 × 9.53	BL-14795	BL-24795	BL-34795	BG-14795	BG-24795	BG-34795
6.35 × 12.70			BL-36312			
9.53 × 6.35			BL-39563			
9.53 × 12.70			BL-39512			
12.70 × 12.70			BL-31212			

Round Elastomer Cored Double-Layer Knitted Wire Mesh Gasket

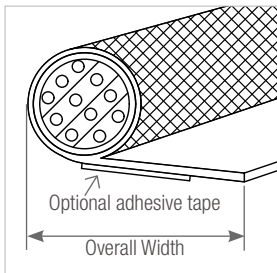


Diameter: 1. 60- 12.70 mm



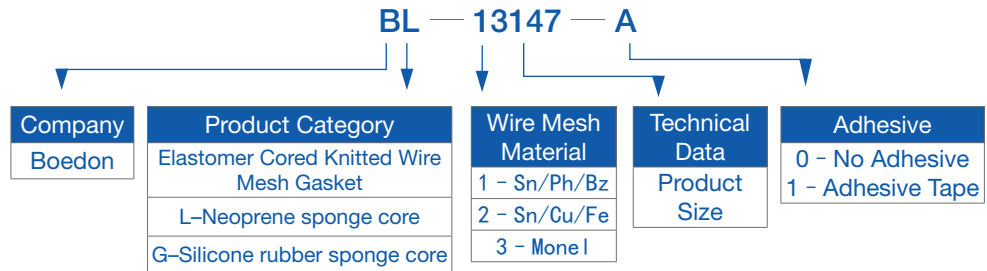
Elastomer Size Minimum Height × Width (mm)	Neoprene Sponge Core			Silicone Rubber Sponge Core		
	Sn/Ph/Bz	Sn/Cu/Fe	Monel	Sn/Ph/Bz	Sn/Cu/Fe	Monel
1.60					BG-216	
3.18	BL-131	BL-231	BL-331	BG-131	BG-231	BG-331
4.78	BL-147	BL-247	BL-347	BG-147	BG-247	BG-347
6.35	BL-163	BL-263	BL-363	BG-163	BG-263	BG-363
7.92		BL-279	BL-379		BG-279	BG-379
9.53		BL-295	BL-395		BG-295	BG-395
12.70		BL-212	BL-312		BG-212	BG-312

Round with Tail Elastomer Cored Double-Layer Knitted Wire Mesh Gasket



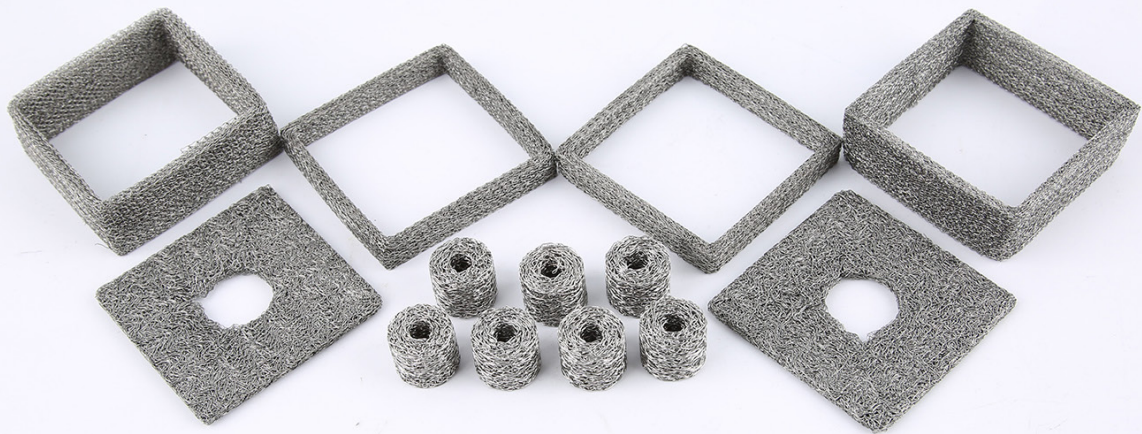
Diameter: 3.18- 6.35 mm

Overall Width: 12.70- 19.05 mm



Elastomer Size Minimum Height × Width (mm)	Neoprene Sponge Core			Silicone Rubber Sponge Core		
	Sn/Ph/Bz	Sn/Cu/Fe	Monel	Sn/Ph/Bz	Sn/Cu/Fe	Monel
3.18 × 12.70	BL-13112	BL-23112	BL-33112	BG-13112	BG-23112	BG-33112
3.18 × 15.88	BL-13115	BL-23115	BL-33115	BG-13115	BG-23115	BG-33115
3.18 × 19.05	BL-13119	BL-23119	BL-33119	BG-13119	BG-23119	BG-33119
4.78 × 12.70	BL-14712	BL-24712	BL-34712	BG-14712	BG-24712	BG-34712
4.78 × 15.88	BL-14715	BL-24715	BL-34715	BG-14715	BG-24715	BG-34715
4.78 × 19.05	BL-14719	BL-24719	BL-34719	BG-14719	BG-24719	BG-34719
4.78 × 25.40	BL-14725	BL-24725	BL-34725	BG-14725	BG-24725	BG-34725
6.35 × 19.05	BL-16319	BL-26319	BL-36319	BG-16319	BG-26319	BG-36319

Compressed Knitted Wire Mesh Gasket



Compressed knitted wire mesh gasket is formed by die-compressing a certain amount of knitted wire mesh gasket that contains no joints or splices, featuring excellent EMI shielding effectiveness, adjustable density (14%–20%), good performance, low price and easy installation.

Although most common are rings, gaskets can also be produced in rectangular or special shapes with holes or mounting recesses, corner radii, and other custom features.



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