### ORIENTED WIRES OWS-SERIES Soft solid silicone



**Oriented monel or aluminium metal wires** in silicone are a good solution for achieving environmental sealing as well as EMC shielding in a single gasket.

Soft solid silicone rubber is suitable for applications with low closure forces and where greater compressibility is required. It meets the performance of oriented wires in silicone sponge but offers improved environmental sealing qualities.

A soft solid fluorosilicone version is available for use in environments where fuels, oils, hydraulic fluids and other contaminants are present.

- Fluorosilicone version on request
- Wide variety of options (die-cut gaskets / sheet material up to 225mm wide by 1000mm long / strip material in continuous lengths)
- Excellent shielding performance due to a wire density up to 100 wires / cm²













#### PRODUCT SPECIFICATIONS

PROPERTY		VALUE / TOLERANCE		TEST METHOD		
Basic rubber material		Soft solid silicone Soft solid fluorosilicone		-		
Available metal wires		Monel Aluminium		BS 3075 NA13 – QQ-N-281-B BS EN 537 PT3 – Alloy 5056		
Available sheet widths		2,4 – 225 mm		-		
Available thicknesses		0,8 – 3,2mm		-		
Maximum sheet length		1.000 mm		-		
Wire density		100 wires/cm²		-		
Temperature range	Soft solid silicone Soft solid fluorosilicone	-60 − 200 °C -55 − 200 °C		-		
Recommended compression		15 – 25 %		-		

#### ORIENTED WIRES IN SOLID SILICONE OWS-SERIES Soft solid silicone



#### **BUILDING AN ITEM NUMBER**

Length (mm)

Width (mm)

Thickness (mm)

Aluminium wires

Soft solid silicone

Soft solid fluorosilicone

Monel wires

Oriented Wires in Silicone

хх

хх

хх

MO

ΑL

SSS

FSSS

# OWS-LxWxT-XX-YYYY

#### Standard options

#### **EXAMPLE**

#### OWS-100x100x0,8-MO-FSSS

Oriented wires in silicone; length: 100 mm; width: 100 mm; thickness: 0,8 mm; monel wires; soft solid fluorosilicone

#### REQUIRED CLOSING FORCE (N/cm<sup>2)</sup>

COMPRESSION	10 %	15 %	20 %	25 %
T = 1,6 mm	25	40	45	50
T = 2,4 mm	37	39	41	50
T = 3,2 mm	27	32	36	40

#### **TOLERANCES**

- Linear: ± 0,8 mm
- Hole Centers: ± 0,4 mm
- Thickness: ± 0,13 mm

## ///EMC Shielding Materials ORIENTED WIRES IN SOLID SILICONE OWS-SERIES Soft solid silicone



#### SHIELDING EFFECTIVENESS (dB)

	20MHz	60MHz	100MHz	400MHz	800MHz	1GHz	2GHz	4GHz	6GHz	10GHz
MO-SSS	94	99	109	105	109	107	112	95	89	84
MO-FSSS	94	99	109	105	109	107	112	95	89	84
AL-SSS	94	100	111	110	116	111	112	101	90	88
AL-FSSS	94	100	111	110	116	111	112	101	90	88

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