ORIENTED WIRES IN SOLID SILICONE
OWS-SERIES 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.

Solid silicone rubber is suitable for applications which require higher compression forces, e.g. as access panels, connector gaskets etc.

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

- **Solid silicone as standard; solid fluorosilicone version on request**
- **Wide variety of options (die-cut gaskets / sheet material up to 225mm wide by 900mm long / strip material in continuous lengths)**
- **Available with self-adhesive backing; this is not recommended for fluorosilicone version**
- **Excellent shielding performance due to a wire density up to 140 wires / cm²**

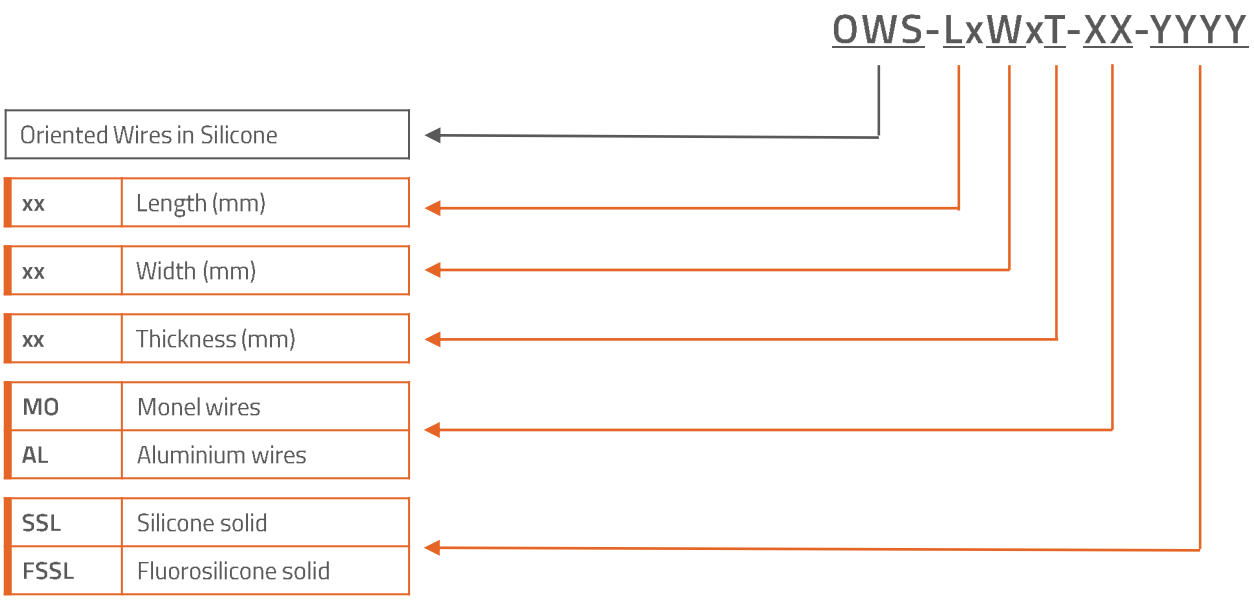
RoHS ✓ REACH ✓

PRODUCT SPECIFICATIONS

PROPERTY		VALUE / TOLERANCE	TEST METHOD
Basic rubber material		Solid silicone Solid fluorosilicone	ZZ-R-765 2b MIL-R-25988 G 50
Available metal wires		Monel Aluminium	BS 3075 NA13 – QQ-N-281-B BS EN 537 PT3 – Alloy 5056
Available sheet widths	Solid silicone Solid fluorosilicone	2,4 – 225 mm 2,4 – 150 mm	-
Available thicknesses		0,8 – 3,2 mm	-
Maximum sheet length		900 mm	-
Wire density		140 wires/cm²	-
Temperature range	Solid silicone Solid fluorosilicone	-60 – 200 °C -55 – 200 °C	-
Recommended compression		15 – 20 %	-
Tensile strength	Solid silicone	2,5 MPa	ASTM D412
Elongation	Solid silicone	250 %	ASTM D412
Colour	Solid silicone Solid fluorosilicone	Light grey Blue	-

ORIENTED WIRES IN SOLID SILICONE
OWS-SERIES Solid silicone

BUILDING AN ITEM NUMBER



Standard options

EXAMPLE | **OWS-100x100x0,8-MO-FSSL**
Oriented wires in silicone; length: 100 mm; width: 100 mm; thickness: 0,8 mm; monel wires; solid fluorosilicone

REQUIRED CLOSING FORCE (N/cm²)

COMPRESSION	10 %	15 %	20 %	25 %
T = 0,8 mm	45	60	90	120
T = 1,6 mm	60	85	120	160
T = 2,4 mm	80	120	140	170
T = 3,2 mm	90	120	140	170

TOLERANCES

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

ORIENTED WIRES IN SOLID SILICONE
OWS-SERIES Solid silicone

SHIELDING EFFECTIVENESS (dB)

	20MHz	60MHz	100MHz	400MHz	800MHz	1GHz	2GHz	4GHz	6GHz	10GHz
MO-SSL	94	100	111	112	116	111	106	98	91	84
MO-FSSL	94	100	111	112	116	111	106	98	91	84
AL-SSL	95	97	105	107	110	111	112	97	90	89
AL-FSSL	95	97	105	107	110	111	112	97	90	89

ORIENTED WIRES
OWS-SERIES Silicone sponge

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.

Silicone sponge rubber is suitable for applications which require lower compression forces, e.g. as access panels, connector gaskets etc.

- Silicone sponge as standard; fluorosilicone sponge version is not available
- Wide variety of options (die-cut gaskets / sheet material up to 114mm wide by 900mm long / strip material in continuous lengths)
- Available with self-adhesive backing
- Excellent shielding performance due to a wire density up to 100 wires / cm²

RoHS ✓ REACH ✓

PRODUCT SPECIFICATIONS

PROPERTY	VALUE / TOLERANCE	TEST METHOD
Basic rubber material	Silicone sponge	AMS 3195
Available metal wires	Monel Aluminium	BS 3075 NA13 – QQ-N-281-B BS EN 537 PT3 – Alloy 5056
Available sheet widths	2,4 – 114 mm	-
Available thicknesses	1,6 – 3,2mm	-
Maximum sheet length	900 mm	-
Wire density	100 wires/cm²	-
Temperature range	-60 – 200 °C	-
Recommended compression	15 – 25 %	-
Colour	Light grey	-

ORIENTED WIRES
OWS-SERIES Silicone sponge

BUILDING AN ITEM NUMBER

OWS-LxWxT-XX-YYYY

Oriented Wires in Silicone	
xx	Length (mm)
xx	Width (mm)
xx	Thickness (mm)
MO	Monel wires
AL	Aluminium wires
SSP	Silicone sponge

Standard options

EXAMPLE **OWS-100x100x0,8-MO-SSP**
Oriented wires in silicone; length: 100 mm; width: 100 mm; thickness: 0,8 mm; monel wires; silicone sponge

REQUIRED CLOSING FORCE (N/cm²)

COMPRESSION	10 %	15 %	20 %	25 %
T = 1,6 mm	50	50	55	60
T = 2,4 mm	50	50	50	50
T = 3,2 mm	40	40	40	45

TOLERANCES

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

SHIELDING EFFECTIVENESS (dB)

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

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**

RoHS ✓ REACH ✓

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 %	-
Colour	Soft solid silicone Soft solid fluorosilicone	Light grey Blue	-

ORIENTED WIRES IN SOLID SILICONE
OWS-SERIES Soft solid silicone

BUILDING AN ITEM NUMBER

OWS-LxWxT-XX-YYYY

Oriented Wires in Silicone	
xx	Length (mm)
xx	Width (mm)
xx	Thickness (mm)
MO	Monel wires
AL	Aluminium wires
SSS	Soft solid silicone
FSSS	Soft solid fluorosilicone

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/cm²)

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

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