

MT-Al 99,5

3.0259

Aluminium MIG/TIG wire for welding pure aluminium.

Standard designation

DIN 1732	SG Al 99,5
Material No.	3.0259
B. S. 2901, part 4	similar to 1050

Main base metals

Pure aluminium
e.g. Al 99,5 (3.0255), Al 99 (3.0205)

Physical properties (typical values)

El.conductivity at 20°C [S · m/mm²]	Thermal conductivity at 20°C [W/(m · K)]	Linear thermal expansions coefficient (20-100°C) [1/K]
34 - 36	210 - 230	23,5 · 10 ⁻⁶

Mechanical properties of all – weld – metal (typical values)

Welding process Gas shield	[°C]	TIG welding argon untreated +20°C	MIG welding argon untreated +20°C
0,2%-yield strength R _{p0,2}	[N/mm ²]	30	30
Tensile strength R _m	[N/mm ²]	80	80
Elongation A ₅	[%]	35	35

Average chemical composition of all-weld-metal (%)

AI	other
basic	0,5

Application notes

The weld seam area has to be clean and free from oxide film. On larger work pieces and for wall thickness exceeding 15 mm preheat the welding groove area to 150°C.

Gas types applicable (TIG and MIG)

Welding argon

TIG rod diameters, unit weights

Diameter [mm]	Length [mm]	Kg per box
1,6	1000	10
2,0	1000	10
2,4	1000	10
3,2	1000	10
4,0	1000	10
5,0	1000	10

MIG welding wire

Diameter 0,8mm 1,0mm 1,2mm 1,6mm 2,4 mm

TIG ~

MIG = +