

MT-AISI 12

3.2585

Aluminium-silicon-alloyed MIG/WIG wire for welding AISi-alloys.

Standard designation

DIN 1732	SG AISi 12
Material No.	3.2585
AWS/ASME SFA-5.10	similar to. ER 4047
B.S.2901, part 4	similar to. 4047 A
EN ISO 18273	S Al 4047 (AISi12)

Main base metals

Aluminium cast alloys containing 12 % Si max.
e.g. G-AISI 10 Mg(3.2381), G-AISI 12 (3.2581)

Physical properties

El. conductivity at 20°C [S · m/mm ²]	Thermal conductivity at 20°C [W/(m · K)]	Linear thermal expansion coefficient (20 - 100°C) [1/K]
17 - 27	150 - 170	20 · 10 ⁻⁶

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

Gas shield Thermal treatment Test temperature		[°C]	welding argon untreated +20°C
0,2%-yield strength R _{p0,2}		[N/mm ²]	100
Tensile strength R _m		[N/mm ²]	200
Elongation A ₅		[%]	5

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

Al	Si	Mn
Basis	12	0,2

Application notes

Preheat to 150°C any larger work piece or sections thicker than 15 mm.

Gas types applicable

Welding argon

Approvals

DB, UDT

TIG rod diameters available, unit weights

Diameter [mm]	Length [mm]	kgs 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 = +