

MT-AISI 12

3.2585

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

Standard designation

Material No.	3.2585
AWS/ASME SFA-5.10	ER 4047
EN ISO 18273	S Al 4047A (AISI12(A))

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			I1
Thermal treatment			untreated
Test temperature		[°C]	+20°C
0,2%-yield strength	R _{p0,2}	MPa	100
Tensile strength	R _m	MPa	200
Elongation	A ₅	[%]	5

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

	Al	Si	Mn
Basis		11,0-13,0	0,05

Application notes

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

Gas types applicable TIG

I1

Gas types applicable MIG

I1

Approvals

DB, CE

TIG rod diameters available, unit weights

Diameter [mm]	Length [mm]	kgs per box
1,60	1000	10,0
2,00	1000	10,0
2,40	1000	10,0
3,20	1000	10,0
4,00	1000	10,0
5,00	1000	10,0

MIG welding wire

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

Welding positions MIG acc.to EN ISO 6947

PA, PB

Welding positions TIG acc.to EN ISO 6947

PA, PB

Current/Polarity TIG

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Current/Polarity MIG

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MT-AISI 12

3.2585

Special-coated electrode for welding aluminium silicon cast alloys.
Weld metal: Aluminium silicon alloy.

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Standard designation

Material No.	3.2585
AWS/ASME SFA-5.3	E 4047

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]
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Thermal treatment Test temperature	[°C]	untreated +20°C
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Tensile strength R _m	MPa	200
Elongation A ₅	[%]	5

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

Al	Si	Mn
Basis	12	0,2

Redrying

1h at +120°C.

Diameters, welding current, unit weights

Diameter [mm]	Length [mm]	Current [A]	Average weight kg/1000 pcs.	Pieces per box	Kg per box
2,50	350	40 - 70	9,0	222	2,0
3,25	350	60 - 90	13,3	150	2,0
4,00	350	80 - 120	20,1	100	2,0

Welding positions acc.to EN ISO 6947

PA, PB, PC, PF

Current/Polarity

= +