



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 5087

Prepared by Mats Linde	Qualified by Tero Tolonen	Approved by Michael Spieß	Reg no EN006186	Cancelling EN005123	Reg date 2013-08-29	Page 1 (2)
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REASON FOR ISSUE

DNV deleted and comment to mechanical data added.

GENERAL

Continuous solid wire suitable for welding of aluminium alloys with up to 5 % Mg and alloys where a higher tensile strength is required. The alloying element Zr gives improved properties against hot cracking during solidification.

Shielding Gas: I1, I2, I3 (EN ISO 14175)

Alloy Type: AlMgMn

CLASSIFICATIONS Wire Electrode

SFA/AWS A5.10 ER5087
EN ISO 18273 S Al 5087 (AlMg4,5MnZr)

APPROVALS

CE EN 13479
DB 61.039.07
VdTÜV 05816

CHEMICAL COMPOSITION

	Wire/Strip (%)	
	Min	Max
Si		0.25
Mn	0.7	1.1
Cr	0.05	0.25
Cu		0.05
Al		
Ti		0.15
Zr	0.10	0.20
Zn		0.25
Fe		0.40
Be		0.0003
Mg	4.5	5.2
Other each		0.05
Others tot		0.15

MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal	
	As welded	Typ
Rp0.2 (MPa)		130
Rm (MPa)		280
A4-A5 (%)		30

Comments:

THIS INFORMATION IS BASED ON DATA DEVELOPED UNDER LABORATORY CONDITIONS AND IS DESIGNED AS A GUIDELINE ONLY. INDIVIDUAL CONDITIONS, WELDING EQUIPMENT AND ENVIRONMENT CAN AFFECT RESULTS.



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ECONOMICS & CURRENT DATA

Dimension (mm) Ø	Current (A)		W Nom	η Nom	H		Feed		U	
	Min	Max			Min	Max	Min	Max	Min	Max
1.0	90	210	16						15	26
1.2	140	260	19						20	29
1.6	190	350	25						25	30

W = Gas consumption (l / min)

η = Recovery, g weld metal / 100g wire (%)

H = Deposit rate (kg weld metal / hour arc time)

Feed = Feeding rate (m/min)

U = Arc voltage (V)

OTHER DATA

Preheating: is not required for welds in sections up to 20 mm but risk of porosity can be reduced by preheating sections over 10 mm. Preheating temperature is usually 150-200 °C.

Clean material is essential for a good weld quality. Remove oxide, dirt, oil, humidity etc. before welding. If brushing use a stainless steel wire brush.
