

Technical data sheet

011121MBA

**Coated SMAW Electrode
WA GAMMA 625-E****CLASSIFICATION**

ASME II C SFA 5.11 / AWS A 5.11: ENiCrMo-3
 EN ISO 14172: E-Ni6625 (NiCr22Mo9Nb)
 UNS base material: W86112

DESCRIPTION

- Basic coated electrode giving a 625-type alloy deposit
- Joining and cladding of Ni base alloys of corresponding types
- Service temperatures from -196°C to +1100°C
- Complements Welding Alloys cored wire GAMMA 625

APPLICATIONS

- Dissimilar joints between Ni base alloys or to low alloy or stainless steels
- Joining of super-austenitic stainless steels
- Joining of steels exposed to low temperatures: CrNi (Mo,N) austenitic steels and 5-9% Ni steels

Base materials

UNS	Alloy	DIN	Material N°
K81340	9%Ni	X8Ni9	1.5662
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08904	904L	X1NiCrMoCuN25 20 5	1.4539
N08926	254SMO	X1NiCrMoCuN25 20 6	1.4529

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Si	Mn	Cr	Nb	Fe	Mo	Ni
<0.04	0.40	0.60	22.0	3.40	3.00	9.00	Bal.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2[MPa]	A5 [%]	CVN [J]
>760	>450	>30	+20°C: >70

OPERATING CONDITIONS

Electrode ØxL [mm]	2,5x300	3,2x350	4,0x350	5,0x450
Current [A]	50-70	70-100	90-120	140-160
= +				

Re-drying: 1 h at 250-300°C. Joints to weld must be clean, exempt from grease, cracks.

Guide electrodes with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique (weaving width max. 2 times core wire diameter).

Nickel base alloys are welded without preheating and an interpass temperature <150°C.

WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PF, PE
 ASME IX: 1G, 2G, 2F, 3G, 4G

PACKAGING

Electrode ØxL [mm]	2,5x300	3,2x350	4,0x350	5,0x450
Weight/box [kg]	4	5	5	6,5

Other packaging and other sizes: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.