

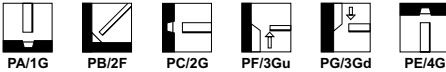
CLASSIFICATION

AWS A5.1	E 6012	A-Nr	1
ISO 2560-A	E 38 0 RC 11	F-Nr	2
		9606 FM	1

GENERAL DESCRIPTION

All position rutile electrode with excellent vertical down welding properties  
 Shipbuilding repairs  
 Excellent on painted or rustcovered steel  
 Recommended for bridging wide gaps  
 Weldable in all positions with one current setting

WELDING POSITIONS (ISO/ASME)



CURRENT TYPE

AC / DC -

APPROVALS

ABS	BV	DNV	GL	LR	RMRS	TÜV
2	2	2	2	2	2	+

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si
0.12	0.5	0.6

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	Yield strength [N/mm <sup>2</sup> ]	Tensile strength [N/mm <sup>2</sup> ]	Elongation [%]	Impact ISO-V(J) 0°C
Required: AWS A5.1 ISO 2560-A	min. 330 min. 380	min. 430 470-600	min. 17 min. 20	not required min. 47
Typical values AW	470	550	23	56

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2,5	3,2	4,0	5,0
	Length (mm)	350	350	350	350
Carton + PE foil	Pieces / unit	145	180	120	80
	Net weight/unit (kg)	2.8	5.0	5.0	5.2

Identification Imprint: 6012 / SUPRA

Tip Color: none

Supra® rev. C-EN24-01/02/16

Supra®

## EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
<b>General structural steels</b>	
EN 10025	S185, S235, S275
<b>Ship plates</b>	
ASTM A 131	Grade A, B, D
<b>Fine grained steels</b>	
EN 10025 part 3	S275
EN 10025 part 4	S275

## CALCULATION DATA

Sizes Diam. x length [mm]	Current range [A]	Current type	Arc time	Energy	Dep. rate	Weight/ 1000 pcs [kg]	Electrodes/ kg weldmetal	kg electrodes/ kg weldmetal
			- per electrode at max. current - [S]*	E[kJ]	H[kg/h]		B	1/N
2.5x350	70-90	AC	47	109	0.8	175	90	1.58
3.2x350	95-130	AC	64	175	1.1	276	53	1.45
4.0x350	130-170	AC	66	330	1.4	411	39	1.61
5.0x350	170-250	AC	77	534	1.8	63.6	26	1.63

\*Stub end 35mm

## WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter [mm]	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3G up	PG/3G down	PE/4G
2.5	85A	115A	80A	80A	80A	80A
3.2	115A	115A	120A	120A	120A	120A
4.0	155A	170A	155A	160A	180A	155A
5.0	190A	220A			240A	190A

## REMARKS / APPLICATION ADVICE

Weldable in all positions with one current setting