

CLASSIFICATION

AWS A5.1	E7016 H4R	A-Nr	1
ISO 2560-A	E 42 3 B 1 2 H5	F-Nr	4
		9606 FM	1

GENERAL DESCRIPTION

Basic very low hydrogen electrode (HDM< 5 ml/100g)
 Excellent for general purpose welding
 Will run on low open circuit voltage (min. OCV 55 V)
 Good side wall wetting
 Impact toughness down to -30°C
 Popular at welding schools

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PH/5Gu



PE/4G

CURRENT TYPE

AC / DC +/-

APPROVALS

ABS	BV	DNV	LR	GL	TÜV
3H,3Y	3,3YHH	3YH5	3,3YH5	3,3YH5	+

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

C	Mn	Si	HDM
0.08	1.0	0.5	4 ml/100 g

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)	
					-20°C	-29°/-30°C
Required: AWS A5.1		min. 400	min. 490	min. 22		min. 27
ISO 2560-A		min. 420	500-640	min. 20		min. 47
Typical values	AW	555	600	26	120	80

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0	5.0
	Length (mm)	350	350	350	450
Carton + PE foil	Pieces / unit	136	120	90	65
	Net weight/unit (kg)	2.5	4.3	4.8	6.3

Identification Imprint: 7016 / BASO 100

Tip Color: Light blue

Baso[®] 100: rev. C-EN26-01/02/16

Baso[®] 100

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
General structural steels	
EN 10025	S185, S235, S275, S355
Ship plates	
ASTM A 131	Grade A, B, D, AH32 to EH36
Cast steels	
EN 10213-2	GP240R
Pipe material	
EN 10208-1	L210, L240, L290, L360
EN 10208-2	L240, L290, L360, L415, L445
API 5LX	X42, X46, X52, X60
EN 10216-1	P235T1, P235T2, P275T1
EN 10217-1	P275T2, P355N
Boiler & pressure vessel steels	
EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steels	
EN 10025 part 3	S275, S355, S420
EN 10025 part 4	S275, S355, S420, S460

CALCULATION DATA

Sizes		Current type	Arc time - per electrode at max. current - (s)*	Energy E(kJ)	Dep. rate H(kg/h)	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
Diam. x length (mm)	Current range (A)							
2.5x350	55-80	AC	53	116	0.8	19.1	85	1.63
3.2x350	75-115	AC	62	229	1.2	36.1	50	1.81
4.0x350	120-160	AC	64	337	1.6	50.1	34	1.72
5.0x450	160-240	AC	91	578	2.4	96.7	16	1.58
5.0x450	160-240	DC+	93	591	2.6	96.7	15	1.44

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PH/5Gup
2.5	80A	80A	80A	90A	85A	85A
3.2	130A	125A	140A	120A	115A	120A
4.0	165A	160A	165A	150A	140A	
5.0	230A	220A	210A	200A		

REMARKS / APPLICATION ADVICE

Redry electrodes 2-4h 350 ±25°C after removal from cardboard boxes