

## CLASSIFICATION

<b>AWS A5.1</b>	E7018-1 H4R	<b>A-Nr</b>	1
<b>ISO 2560-A</b>	E 42 5 B 32 H5	<b>F-Nr</b>	4
		<b>9606 FM</b>	1

## GENERAL DESCRIPTION

Basic all position extremely low hydrogen electrode  
 115 - 120% recovery  
 AC/DC welding in all positions especially pipe  
 Excellent for site welding applications  
 Good pipe welding  
 Good impact values down to -50°C  
 Also available in vacuum sealed Sahara ReadyPack<sup>®</sup> (SRP)

## WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

## CURRENT TYPE

AC / DC +/-

## APPROVALS

<b>ABS</b>	<b>DB</b>	<b>DNV</b>	<b>LR</b>	<b>GL</b>	<b>RINA</b>	<b>RMRS</b>	<b>TÜV</b>
3H,3Y	3,3YH	3YH5	3,3YH5	3YH10	4YH5	3-3YH5	+

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

<b>C</b>	<b>Mn</b>	<b>Si</b>	<b>HDM</b>
0.05	1.3	0.4	2 ml/100 g

## 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)		
				-20°C	-46°C	-50°C
Required: AWS A5.1 ISO 2560-A	min. 400 min. 420	min. 490 500-640	min. 22 min. 20		min. 27	
Typical values	AW 490	575	28	200	130	min. 47 100

## PACKAGING AND AVAILABLE SIZES

	Diameter (mm) Length (mm)						
		2.5	3.2	3.2	4.0	4.0	5.0
<b>Carton + PE foil</b>	<b>Pieces / unit</b>	135	120	120	85	85	55
	<b>Net weight/unit (kg)</b>	2.8	4.4	5.8	4.7	5.9	6.0
<b>SRP</b>	<b>Pieces / unit</b>	69	50	50	28	28	23
	<b>Net weight/unit (kg)</b>	1.4	2.0	2.5	1.6	2.0	2.6

Identification Imprint: 7018-1V BASO G+

Tip Color: blue

Baso<sup>®</sup> G: rev. C-EN27-01/02/16

# Baso<sup>®</sup> G

## EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
<b>General structural steels</b>	
EN 10025	S185, S235, S275, S355
<b>Ship plates</b>	
ASTM A 131	Grade A, B, D, AH32 to EH40
<b>Cast steels</b>	
EN 10213-2	GP240R
<b>Pipe material</b>	
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
<b>Boiler &amp; pressure vessel steels</b>	
EN 10028-2	P235GH, P265GH, P295GH, P355GH
<b>Fine grained steels</b>	
EN 10025 part 3	S275, S355, S420
EN 10025 part 4	S275, S355, S420

## CALCULATION DATA

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time	Energy	Dep. rate	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
			- per electrode at max. current - [S]*	E[kJ]	H[kg/h]			
2.0x300	35-55	DC+	50	61	0.5	11.7	149	1.75
2.5x350	55-90	DC+	59	107	0.8	20.3	78	1.59
3.2x350	75-120	DC+	70	234	1.2	36.5	42	1.54
3.2x450	75-120	DC+	79	265	1.4	45.4	33	1.47
4.0x350	120-180	DC+	75	358	1.7	50.9	28	1.45
4.0x450	120-180	DC+	96	473	1.7	69.3	22	1.52
5.0x450	160-240	DC+	114	671	2.2	106.2	14	1.54

\*Stub end 35mm

## WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PF/5Gup
2.0						45A
2.5	80A	80A	85A	90A	80A	80A
3.2	145A	120A	150A	120A	115A	120A
4.0	160A	145A	170A	150A	145A	145A
5.0	220A	210A	215A	170A		

## REMARKS / APPLICATION ADVICE

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