

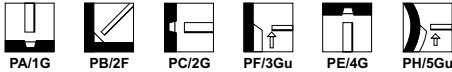
CLASSIFICATION

AWS A5.5	E9018-G-H4R	A-Nr	10
ISO 18275-A	E 55 4 1NiMo B 3 2 H5	F-Nr	4
		9606 FM	2

GENERAL DESCRIPTION

Basic all position extremely low hydrogen electrode [HDM < 2 ml/100g]
 For high strength steel grades (UTS 640-735 N/mm²), root passes in HY 100 steel
 Good impact values down to -40°C DC welding preferred
 115 - 120% recovery
 Also available in vacuum sealed Sahara ReadyPack® (SRP)

WELDING POSITIONS (ISO/ASME)



CURRENT TYPE

AC / DC +/-

APPROVALS

DNV TÜV

4Y50H5 +

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

C	Mn	Si	P	S	Ni	Mo	HDM
0.06	1.2	0.4	0.014	0.009	1.0	0.4	2 ml/100 g

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation [%]	Impact ISO-V(J)		
					-20°C	-40°C	-46°C
Required: AWS A5.5		min. 530	min. 620	min. 17	not required		
ISO 18275-A		min. 550	610-780	min. 18	min. 47		
Typical values	AW	600	655	24	90		
	SR:15h/580°C	550	640	24	90		
							60
							50

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0	4.0	5.0
	Length (mm)	350	350	350	450	450
Carton + PE foil	Pieces / unit	110	120	85	-	55
	Net weight/unit (kg)	2.5	4.6	4.6	-	5.8
SRP	Pieces / unit	64	50	28	28	23
	Net weight/unit (kg)	1.5	2.0	1.5	2.0	2.4

Identification Imprint: 9018-G / CONARC 70G Tip Color: light green

Conarc® 70G: rev. C-EN24-01/02/16

Conarc® 70G

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
Boiler & pressure vessel steels (Reactor steels incl. Q & T steels)	
DIN	20MnMoNi5-5, 22NiMoCr3-7 15NiCuMoNb5-6-4 G5-18NiMoCr3-7
ASTM	A508CL2, A508CL3 A533CL1Gr.B / C A533CL2Gr.B / C
Creep resistant steels	
	15NiCuMoNb-5 (WB36) 1.6368 17MnMoV6-4(WB35) 1.5403
Pipe material	
EN 10208-2	L480, L550
API 5LX	X65, X70 (X80 root run)
Fine grained steels	
EN 10025 part 6	S460, S500, S550 Root runs and fillet welds in S620 and S690

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)			
2.5x350	60-100	DC+	67	121	0.7	19.5	75	1.47
3.2x350	80-130	DC+	70	234	1.3	37.5	41	1.56
4.0x350	120-180	DC+	74	343	1.7	55.4	29	1.59
5.0x450	160-240	DC+	106	573	2.5	106.4	14	1.43

*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	75A	80A	85A	75A	75A
3.2	130A	120A	135A	120A	115A	120A
4.0	155A	145A	160A	145A	140A	140A
5.0	225A	220A	210A			

REMARKS / APPLICATION ADVICE

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