

CLASSIFICATION

AWS A5.5	E9018M-H4	A-Nr	10
ISO 18275-A	E 55 4 Z B 32 H5	F-Nr	4
		9606 FM	2

GENERAL DESCRIPTION

Basic all position extremely low hydrogen electrode [HDM< 2 ml/100g]

For welding high strength steel grades (UTS 540-640 N/mm²)

Good impact values down to -51°C DC welding preferred

115 - 120% recovery

Also available in vacuum sealed Sahara ReadyPack® [SRP]

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G



PH/5Gu

CURRENT TYPE

AC / DC +/-

APPROVALS

ABS	BV	DNV	GL	LR	TÜV
3Y	4Y50	4Y50H5	4YH10	+	+

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

C	Mn	Si	P	S	Ni	Mo	HDM
0.06	1.0	0.4	0.015	0.010	1.6	0.3	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	-51°C
Required: AWS A5.5	540-620*	min. 620	min. 24			min. 27
ISO 18275-A	min. 550	610-780	min. 18		min. 47	
Typical values	AW	600	670	25	98	
	SR:1h/620°C	550	640	24	90	40

* Dia.2.5 mm max 655 N/mm²

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	Length (mm)	Carton + PE foil		SRP	
			Pieces / unit	Net weight/unit (kg)	Pieces / unit	Net weight/unit (kg)
	2.5	350	-	-	65	1.4
	3.2	350	-	-	50	2.0
	4.0	350	85	4.6	28	1.5
	5.0	450	55	5.8	23	2.6

Identification Imprint: 9018-M / CONARC 60G Tip Color: red

Conarc® 60G: rev. C-EN25-01/02/16

Conarc® 60G

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
General structural steels	
EN 10025	S355
Pipe material	
EN 10208-2	L360, L415, L445, L480
API 5LX	X52, X56, X60, X65, X70
EN 10216-1/EN10217-1	P235T1, P235T2, P275T1, P275T2, P355N
Fine grained steels	
EN 10025 part 4	S420M (L), S460M (L), S420N (L), S460N (L)
EN 10025 part 6	S460, S500
Weather resisting steels	
EN 10155	S235 J0W S235 J2W S355 J0W S355 J2W S355 K2G1W

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	60-100	DC+	63	114	0.7	23.5	77	1.80
3.2x350	80-130	DC+	69	231	1.3	38.3	40	1.52
4.0x350	120-180	DC+	72	324	1.7	55.8	30	1.66
5.0x450	160-240	DC+	119	760	2.2	105.2	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