

## Classification

AWS A5.1-91 : E7018 H8  
 EN 499-94 : E 42 3 B 32 H10

## General description

**Suitable for all joints but especially for fillet welds**  
**Very easy to use in all positions**  
**Touch technique can be employed**  
**Good slag removal with little or no spatter**

## Welding positions



ISO/ASME PA/1G PB/2F PC/2G PF/3G up PE/4G

## Current type

AC / DC electr. +/-

## Approvals

## Chemical composition (w%), typical, all weld metal

C	Mn	Si
0.07	1.1	0.3

## Mechanical properties, 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	-29°C	-30°C
As welded							
Required:	AWS	min. 399	min. 482	min. 22	min. 27		
	EN	min. 420	500-640	min. 20	min. 47		
Typical values		550	580	27	100	90	

## Packaging, available sizes and identification

Diameter(mm)	2.5	3.2	4.0	5.0	6.0
Length(mm)	350	450	450	450	450
Unit:					
Pieces / unit (nominal)	180	126	90	60	44
Net weight/unit (kg)	4.3	6.0	6.0	6.1	6.2

Identification Imprint: Hyrod 7018/7018 Tip colour: none

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance.

Fumes: Consult information on Welding Safety Sheet, available upon request

MDE Hyrod 7018

## Materials to be welded

General structural steel	EN 10025	S185, S235, S275, S355
Ship plates		Grade A, B, C, D, A(H)32 to D (H) 36.
Cast steel	EN 10213-2	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240, L290, L360, L445
	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1, P235T2, P275T1
	EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	EN 10113-2	S275, S275, S355, S420
	EN 10113-3	S275, S355, S420

## Calculation data

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time - per electrode (s)*	Energy E(kJ)	Dep.rate at max. current H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ kg weldmetal 1/N
2.5 x 350	65 - 95	AC	50	132	0.9	24	83	1.92
3.2 x 450	90 - 130	AC	75	253	1.2	48	40	1.89
4.0 x 450	130 - 190	AC	84	356	1.7	68	25	1.67
5.0 x 450	175 - 235	AC	91	524	2.7	103	14	1.43
6.0 x 450	240 - 290	AC	109	748	3.0	143	11	1.59

\* stub end = 35 mm

## Welding parameters, optimum fill passes

Welding position Diameter(mm)	1G Current (A)	2F	2G	3G up	4G
2.5	85	80	80	70	80
3.2	115	115	110	95	110
4.0	160	150	150	130	140
5.0	200	190	190	175	180
6.0	270	260			

## Remarks

## Application advice