

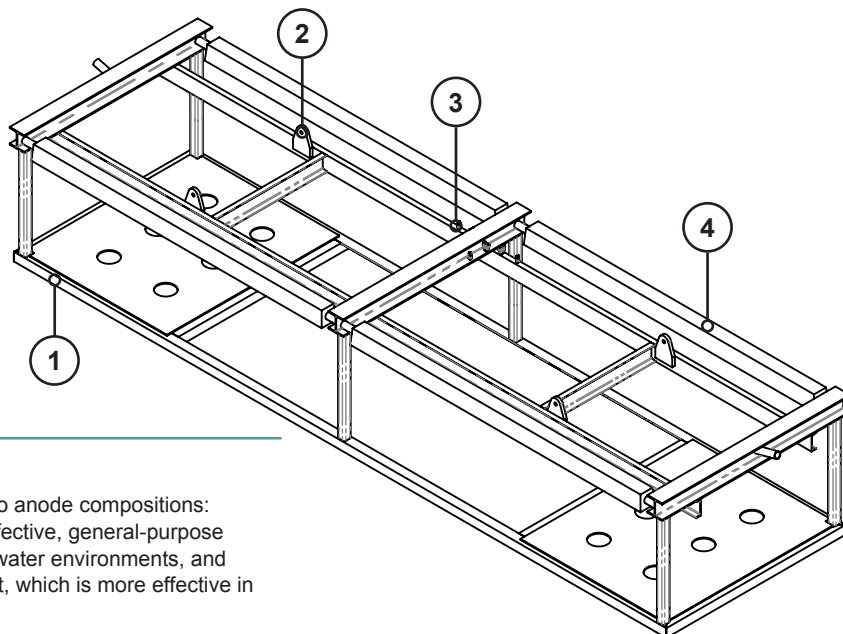
# DEEPWATER

## RETROPOD™ LOW PROFILE

### General

RetroPod LP is a retrofit sacrificial anode system designed to maximize current output with reduced installation time. The optimized shape increases stability, reduces mutual interference between anodes and increases ease of handling offshore.

**Note: This configuration is not recommended for use in water depths less than 35 ft [ 10.7 m ].**



### Anode composition / electrical properties

#### Description

RetroPod LP is available with two anode compositions: Deep10 alloy, designed as an effective, general-purpose offshore alloy for use in tropical water environments, and Deep7 alloy with low iron content, which is more effective in cold, deep water.

Composition (%)	Deep7	Deep10
Iron (Fe)	0.07 max.	0.10 max.
Silicon (Si)	0.10 max.	0.10 max.
Copper (Cu)	0.003 max.	0.006 max.
Zinc (Zn)	4.75 - 5.25	3.00 - 6.00
Indium (In)	0.015 - 0.025	0.010 - 0.020
Titanium (Ti)	0.025 max.	0.025 max.
Cadmium (Cd)	Part of others	Part of others
Others (each)	0.02 max.	0.02 max.
Aluminium (Al)	Remainder	Remainder
Open circuit potential (sw)	(-) 1.08 V vs Ag/AgCl	(-) 1.08 V vs Ag/AgCl
Closed circuit potential (sw)(1)	(-) 1.05 V vs Ag/AgCl	(-) 1.05 V vs Ag/AgCl
Seawater capacity @ 25°C (2)	1100 Ahr/lb [ 2420 Ahr/kg ]	1100 Ahr/lb [ 2420 Ahr/kg ]
Seawater capacity @ 5°C	1100 Ahr/lb [ 2420 Ahr/kg ]	Variable
Seabed Mud Capacity @ 25°C	950 Ahr/lb [ 2090 Ahr/kg ]	950 Ahr/lb [ 2090 Ahr/kg ]
Seabed Mud Capacity @ 5°C	950 Ahr/lb [ 2090 Ahr/kg ]	Variable (3)

1. Recommended number to use when designing CP systems.

2. Recommended number to use when designing CP systems for offshore pipelines using bracelet or sub-bottom anode systems.

3. Activation can be a problem with chemistries at extremes of specification in cold water.

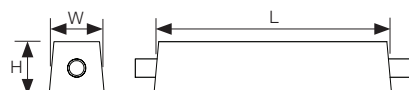
### Overall weights and dimensions\*

	(When using 325 lb anodes)
Dimensions (W x D x H)	282" x 50" x 78" [ 7163 x 1270 x 1982 mm ]
Weight (Air)	4225 lb [ 1920 kg ]
Weight (Water)	3347 lb [ 1518 kg ]

\*Excluding RetroClamp and connection cable

### Anodes (Item 4)

Deepwater currently offers 325 lb anodes on the RetroPod LP.



Net weight	325 lb [ 148 kg ]
Gross weight	410 lb [ 186 kg ]
Dimensions (L x W x H)	120" x 5.5" x 5.9" [ 3048 x 140 x 150 mm ]
Core	2" Sch 80 pipe
Quantity	4

### Frame (Item 1)

**Steel grade** ASTM A53 [ ASTM A106 ]  
ASTMA36 [ EN 10025 S355 ]

**Welding** All welding conducted in accordance with Steel Structural Welding Code – AWS D1/ D1.1M:2006 [ EEMUA 158 ]

**Lifting (Item 2)** 1.125" [ 28.5 mm ] Padeye

### Connection details

**RetroPod LP** 2 x Ø 1/2" [ M12 ] Stud-welded to frame (Item 3)

**Structure** RetroClamp (See RetroClamp technical datasheet). Quantity as per requirements, typically 1 per RetroPod.

**Cable** 4/0 AWG [ ~107 mm<sup>2</sup> ], EPDM insulated, heavy-duty flexible cable  
2 per RetroClamp  
5/8" wire rope clips