

Product Data Sheet

Shield™ II

General Information

The Shield™II fixing for Aquasign® subsea markers offers additional protection from potential damage such as ROV and diver intervention. The basis of the range is to encase the Aquasign® marker in a polycarbonate frame. The design has been independently pressure tested to 700Bar (10150psi) without any noticeable deterioration.



Our standard specification is bolted, however for grated surfaces we recommend attaching the frames using cable ties. The Shield™ II design is fully customisable.

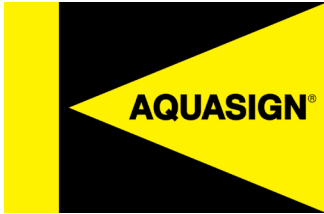
Mechanical Properties

Polycarbonate Properties

Characteristic	Parameter	Value	Unit	DIN/EN/ISO
Tensile Strength at Yield	50mm/min	60	Mpa	527
Tensile Strength at Break	50mm/min	70	Mpa	527
Tensile Strain at Yield	50mm/min	6	%	527
Tensile Strain at Break	50mm/min	120	%	527
Flexural Strength at Yield	2mm/min	90	Mpa	178
Modulus of Elasticity (Flexural Test)	2mm/min	2300	Mpa	178
Izod Impact Strength 23°C	Notched	65	kJ/m ²	180/4A
Izod Impact Strength -30°C	Notched	10	kJ/m ²	180/4A
Impact Strength (Charpy)	Notched	35	kJ/m ²	179/1C
Hardness	H35/30 95	95	Mpa	2039/1

Electrical Properties

Characteristic	Parameter	Value	Unit	DIN/EN/ISO
Volume Resistivity	-	10E15	Ohm.cm	60093
Relative Permittivity	50/60Hz	2.7	-	60250
Relative Permittivity	1Mhz	2.7	-	60250
Dissipation Factor	50/60Hz	0.001	-	60250
Dissipation Factor	1Mhz	0.01	-	60250



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Thermal Properties

Characteristic	Parameter	Value	Unit	DIN/EN/ISO
Vicat Softening Temperature	B/120	145	°C	306
HDT/Ae, 1.8 MPa edgew	120*1*04/sp=100	127	°C	75
Thermal Conductivity	-	0.2	W/m.°C	8302
Coeff. Of lin. Therm. Exp. Extr	23-80°C	700 E-05	1/°C	11359-2
Ball Pressure Test	125 +2 °C	Passes	-	60695-10-2
Relative Thermal Index	Electrical Prop.	130	°C	746B
Relative Thermal Index	Mechanical Prop. (with impact)	125	°C	746B
Relative Thermal Index	Mechanical Prop. (without impact)	125	°C	746B

Other Properties

Characteristic	Parameter	Value	Unit	DIN/EN/ISO
Water Absorption	50%RH/23°C	0.15	%	62
Water Absorption	Saturation/23°C	2.7	-	62
Light Transmission	3mm	-	119	D495
Temperature Range	- 51°C to + 132°C			

Product Application

Download our Shield™ II Installation Procedure / Video on www.aquasign.com.

Availability

Shield™ II markers are made to order with a general turn-around of 20 working days from receipt of Purchase Order.