



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **E-10286**

This is to certify that the
Conduit, Fitting, Cable Pipe, Box, Etc.

with type designation(s)
ECO

Manufactured by
TEAFLEX SPA
BIASSONO MB, Italy

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application
For use as support and protection of cables.
For indoor use, only.

Høvik, 2010-05-26
for **Det Norske Veritas AS**

This Certificate is valid until
2014-07-31

Marit Laumann
Head of Section

DNV local office:
Milan

Trond Sjøvåg
Surveyor

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.
If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

Product description

Conduits:

Protection and support system for cables and wires.
Corrugated tubing in black or grey colours made of Polyamid 6 free from halogen, phosphor and cadmium.

Classification of Conduits according to IEC61386-23(2008-02):

Item	Classification according to:	ECO
	Sizes Outer diameter (mm)	12 - 48
6.1.1	Resistance to compression	Very light (>125)
6.1.2	Resistance to impact	Medium (2J)
6.1.3	Resistance to bending	Flexible / Pliable
6.1.4	Tensile strength	Very light (>100N)
6.1.5	Suspended load capacity	None declared
6.2.1	Lower temperature range (Transport, installation and application not lower than)	-15 °C flexible -45 °C pliable
6.2.2	Upper temperature range (Transport, installation and application no more than)	+90 °C
6.3	According to electrical characteristics	Not tested
6.4	According to resistance to external influences:	IP67
6.5	According to resistance to flame propagation	Non-flame propagation

Connectors/Fittings:

Injection moulded fittings in various bodys such as straight, elbows, distributors and fixation clips and others made of Polyamide 6 modified. Trade Mark is JAW-FIT System.

Type	Enclosure rating	Remarks
JAW-FIT IP68	IP68	Polyamide 6 modified
JAW FIT IP66	IP66	Polyamide 6 modified

Application/Limitation

For use as support and protection of cables. May also be used as support and protection of single wires where this is accepted by DNV Rules, i.e. inside cabinets and in accommodation spaces when the system voltage is below 250V.
Not to be used through areas where water or gas tightness is required, nor through areas of different fire or hazardous zones.

For indoor use, only.

Type Approval documentation Tests carried out

Type tests in accordance with EN IEC 61386-1:2008.

Marking of product

ECO – Nominal with – Colour (Black or Grey)

Certificate Retention Survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.