



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-11177

This is to certify that the  
**Electric Power Cable**

with type designation(s)  
**Polyrad XT-125, Type P, DPCP & TPCP & FPCP & QPCP 0,6/1 kV**

Manufactured by  
**General Cable**  
**WILLIMANTIC CT, United States**

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

IEEE 45 1998

Application  
**General power and lighting, control.**

**Voltage class (kV) 0,6/1**  
**Temp. class (°C) 95**

Høvik, 2011-06-22  
for Det Norske Veritas AS

**Marit Laumann**  
Head of Section



DNV local office:  
New York

This Certificate is valid until  
**2015-06-30**

**Ivar Bull**  
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.



Certificate No.: E-11177  
 File No.: 827.10  
 Job Id.: 262.1-004504-2

## Product description

Type: POLYRAD XT-125, Type P, DPCP, TPCP, FPCP and QPCP 0,6/1 kV

Conductors:	Tinned stranded copper
Insulation:	XLPO(Cross-linked Polyethylene) (Type P)
Filler:	Flame Retardant, Non-hygroscopic Polypropylene (as needed)
Outer Sheath:	Chlorosulfonated Polyethylene (Type CP)

Number of cores x conductor cross- section		Overall diameter	
mm <sup>2</sup>	AWG/ MCM	mm	inches
2 x 7,57	8	15,09	0,594
2 x 12,48	6	17,07	0,672
2 x 18,52	5	20,07	0,790
2 x 21,49	4	21,08	0,830
2 x 25,58	3	23,75	0,935
2 x 30,70	2	25,53	1,005
2 x 46,05	1	29,74	1,171
2 x 56,29	1/0	32,23	1,269
2 x 66,53	2/0	34,16	1,345
2 x 92,11	3/0	39,60	1,559
2 x 112,59	4/0	42,29	1,665
2 x 133,06	262	45,59	1,795
2 x 158,65	313	49,15	1,935
3 x 7,57	8	16,28	0,641
3 x 12,48	6	18,42	0,725
3 x 18,52	5	22,68	0,893
3 x 21,49	4	23,77	0,936
3 x 25,58	3	25,15	0,990
3 x 30,70	2	27,07	1,066
3 x 46,05	1	31,62	1,245
3 x 56,29	1/0	34,31	1,351
3 x 66,53	2/0	37,41	1,473
3 x 92,11	3/0	42,69	1,681
3 x 46,36	4/0	46,36	1,825
3 x 133,06	262	49,93	1,966
3 x 158,65	313	53,77	2,117
3 x 189,35	373	57,33	2,257
3 x 224,97	444	62,48	2,460
3 x 271,24	535	68,10	2,681
3 x 327,53	646	74,01	2,914

Number of cores x conductor cross- section		Overall diameter	
mm <sup>2</sup>	AWG/ MCM	mm	inches
3 x 394,06	777	79,22	3,119
4 x 7,57	8	17,76	0,699
4 x 12,48	6	20,14	0,793
4 x 18,52	5	24,77	0,975
4 x 21,49	4	26,00	1,024
4 x 25,58	3	27,53	1,084
4 x 30,70	2	29,67	1,168
4 x 46,05	1	34,75	1,368
4 x 56,29	1/0	37,75	1,486
4 x 66,53	2/0	41,60	1,638
4 x 92,11	3/0	47,69	1,877
4 x 112,59	4/0	50,93	2,005
4 x 133,06	262	54,91	2,162
4 x 158,65	313	59,20	2,331
4 x 189,35	373	63,17	2,487
4 x 224,97	444	68,83	2,710
4 x 271,24	535	74,96	2,951
4 x 327,53	646	83,53	3,288
5 x 7,57	8	19,47	0,766
5 x 12,48	6	23,16	0,912
5 x 18,52	5	27,20	1,071
5 x 21,49	4	28,57	1,125
5 x 25,58	3	30,29	1,193
5 x 30,70	2	32,69	1,287
5 x 46,05	1	38,38	1,511
5 x 56,29	1/0	43,27	1,703
5 x 66,53	2/0	45,87	1,806
5 x 92,11	3/0	52,60	2,071
5 x 112,59	4/0	56,24	2,214

## Application/Limitation

The requirements of SOLAS Amendments 1981 Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bunches of Cables or Wires) are fulfilled without any additional measures.

## Type Approval documentation

Data sheets: BR-782 dated 29.03.99  
 Test reports: ITS No: J97007096-001 dated 09.09.97

## Tests carried out

Type tests according to IEEE 45, IEC 60092-3 and IEC 60332-3 cat A.

## Marking of product

POLYRAD XT-125, Type P, DPCP or TPCP or FPCP or QPCP, size, 0,6/1 kV

## Certificate retention survey



Certificate No.: E-11177  
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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)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and TA Certificate.
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Survey to be performed at least every second year.

END OF CERTIFICATE