



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-11179

This is to certify that the
Electric Power Cable

with type designation(s)

Polyrad XT-125, Type P, TP..PCP, TP(I/S)..PCP, TT(I/S)..PCP 0,6/1 kV, Polyrad XT-125, Type P, TP(OS)..PCP, TP(I/S-OS)..PCP, TT(I/S-OS)..PCP 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
Control.

Type	Voltage class (kV)	Temp. class (°C)
Polyrad XT-125, Type P, TP..PCP, TP(I/S)..PCP, TT(I/S)..PCP 0,6/1 kV	0,6/1	95
Polyrad XT-125, Type P, TP(OS)..PCP, TP(I/S-OS)..PCP, TT(I/S-OS)..PCP 0,6/1 kV	0,6/1	95

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



This Certificate is valid until
2015-06-30

Marit Laumann

Marit Laumann
Head of Section

DNV local office:
New York

Ivar Bull

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-11179
 File No.: 827.10
 Job Id.: 262.1-004504-2

Product description

Type:

POLYRAD XT-125, Type P, TP..PCP, TP(I/S)..PCP, TT(I/S)..PCP 0,6/1 kV
 POLYRAD XT-125, Type P, TP(OS)..PCP, TP(I/S-OS)..PCP, TT(I/S-OS)..PCP 0,6/1 kV

Conductors:	Tinned stranded copper
Insulation:	XLPO(Cross-linked Polyethylene) (Type P)
Screen:	Aluminium/Mylar tape w/ tinned copper drain wire or a tinned Copper wire braid. (I/S and O/S only)
Filler:	Flame Retardant, Non-hygroscopic Polypropylene (as needed)
Inner Sheath:	Chlorosulfonated Polyethylene (Type CP)

TP..PCP

TP(OS)..PCP

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
1 x 2 x 0,62	20	8,48	0,334
2 x 2 x 0,62	20	11,58	0,456
4 x 2 x 0,62	20	13,31	0,524
7 x 2 x 0,62	20	15,75	0,62
10 x 2 x 0,62	20	19,89	0,783
1 x 2 x 0,96	18	8,99	0,354
2 x 2 x 0,96	18	12,40	0,488
4 x 2 x 0,96	18	14,27	0,562
7 x 2 x 0,96	18	16,97	0,668
10 x 2 x 0,96	18	22,53	0,887
1 x 2 x 1,22	16	9,35	0,368

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
2 x 2 x 1,22	16	12,98	0,511
3 x 2 x 1,22	16	13,69	0,539
4 x 2 x 1,22	16	14,96	0,589
5 x 2 x 1,22	16	16,41	0,646
7 x 2 x 1,22	16	17,81	0,701
8 x 2 x 1,22	16	19,33	0,761
10 x 2 x 1,22	16	23,67	0,932
12 x 2 x 1,22	16	24,41	0,961
14 x 2 x 1,22	16	25,65	1,010
24 x 2 x 1,22	16	33,32	1,312

TP(I/S)..PCP

TP(I/S-OS)..PCP

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
1 x 2 x 0,62	20	8,51	0,335
2 x 2 x 0,62	20	12,83	0,505
3 x 2 x 0,62	20	14,10	0,555
4 x 2 x 0,62	20	14,86	0,585
7 x 2 x 0,62	20	17,65	0,695
10 x x 0,62	20	23,24	0,915
19 x x 0,62	20	27,94	1,100
25 x x 0,62	20	33,27	1,310
1 x 2 x 0,96	18	8,89	0,350
2 x 2 x 0,96	18	13,72	0,540
3 x 2 x 0,96	18	14,73	0,580
4 x 2 x 0,96	18	16,00	0,630
5 x 2 x 0,96	18	17,40	0,685
6 x 2 x 0,96	18	19,05	0,750
7 x 2 x 0,96	18	19,05	0,750
8 x 2 x 0,96	18	20,32	0,800
10 x 2 x 0,96	18	24,89	0,980
12 x 2 x 0,96	18	25,27	0,995
14 x 2 x 0,96	18	27,56	1,085
16 x 2 x 0,96	18	28,96	1,140
20 x 2 x 0,96	18	32,26	1,270

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
24 x 2 x 0,96	18	36,07	1,420
1 x 2 x 1,22	16	9,14	0,360
2 x 2 x 1,22	16	14,22	0,560
3 x 2 x 1,22	16	15,11	0,595
4 x 2 x 1,22	16	16,38	0,645
5 x 2 x 1,22	16	18,16	0,715
6 x 2 x 1,22	16	19,68	0,775
7 x 2 x 1,22	16	20,73	0,816
8 x 2 x 1,22	16	22,48	0,885
10 x 2 x 1,22	16	26,16	1,030
12 x 2 x 1,22	16	27,05	1,065
14 x 2 x 1,22	16	28,45	1,120
15 x 2 x 1,22	16	29,34	1,155
16 x 2 x 1,22	16	30,35	1,195
20 x 2 x 1,22	16	33,78	1,330
22 x 2 x 1,22	16	35,43	1,395
24 x 2 x 1,22	16	37,46	1,475
1 x 2 x 1,94	14	10,03	0,395
2 x 2 x 1,94	14	15,75	0,620
3 x 2 x 1,94	14	16,38	0,645
4 x 2 x 1,94	14	18,54	0,730



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Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
5 x 2 x 1,94	14	20,45	0,805
6 x 2 x 1,94	14	22,73	0,895
7 x 2 x 1,94	14	22,73	0,895
12 x 2 x 1,94	14	30,61	1,205
20 x 2 x 1,94	14	33,65	1,325

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
30 x 2 x 1,94	14	46,74	1,840
1 x 2 x 3,08	12	11,05	0,435
10 x 2 x 3,08	12	33,15	1,305
12 x 2 x 3,08	12	34,16	1,345
1 x 2 x 5,52	10	12,57	0,495

TT(I/S)..PCP TT(I/S-OS)..PCP

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
1 x 3 x 0,96	18	9,27	0,365
2 x 3 x 0,96	18	13,72	0,540
3 x 3 x 0,96	18	15,87	0,625
4 x 3 x 0,96	18	17,27	0,680
5 x 3 x 0,96	18	18,92	0,745
6 x 3 x 0,96	18	20,70	0,815
7 x 3 x 0,96	18	20,70	0,815
1 x 3 x 1,22	16	9,65	0,380
2 x 3 x 1,22	16	14,73	0,580
3 x 3 x 1,22	16	16,64	0,655

Number of cores x conductor cross- section		Overall diameter	
mm ²	AWG/ MCM	mm	inches
4 x 3 x 1,22	16	18,16	0,715
5 x 3 x 1,22	16	19,94	0,785
6 x 3 x 1,22	16	24,13	0,950
7 x 3 x 1,22	16	24,13	0,950
8 x 3 x 1,22	16	26,67	1,050
12 x 3 x 1,22	16	31,88	1,255
16 x 3 x 1,22	16	35,31	1,390

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, TP..PCP or TP (I/S)..PCP or TT (I/S)..PCP or TP(OS)..PCP or TP(I/S-OS)..PCP or TT(I/S-OS)..PCP size, 0,6/1 kV

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)
- 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 Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE