

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Cleats

with type designation(s)

Cyclone II, Cyclone III, Conqueror, Sovereign, Patriot, Sapphire

Issued to

**CMP Products Limited
Northumberland, United Kingdom**

is found to comply with

DNV GL rules for classification – Ships and offshore units

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-03-20**.

Issued at **Høvik** on **2016-03-21**

DNV GL local station: **Newcastle-upon-Tyne**

Approval Engineer: **Marta Alonso Pontes**

for **DNV GL**

**Marit Laumann
Head of Section**

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.

Product description

Cyclone II and Cyclone III: Cable cleat for single and trefoil formation.

Classification	According to IEC 61914: 2009
Material	Metallic (316L Stainless steel)
Max and min temperature	-50°C to +60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Needle flame test	120s
Resistance to UV light	Passed

Cyclone II Part No.	Cyclone III Part No.	Cable diameter (mm)	
		Single	Trefoil
2CYC024034	3CYC024034	36-50	24-34
2CYC030041	3CYC030041	45-60	30-41
2CYC037047	3CYC037047	55-69	37-47
2CYC043054	3CYC043054	64-80	43-54
2CYC050060	3CYC050060	75-88	50-60
2CYC056067	3CYC056067	83-99	56-67
2CYC063073	3CYC063073	94-108	63-73
2CYC069080	3CYC069080	103-118	69-80
2CYC072085	3CYC072085		72-85
2CYC082095	3CYC082095		82-95
2CYC092105	3CYC092105		92-105
2CYC102115	3CYC102115		102-115
2CYC112125	3CYC112125		112-125
2CYC122135	3CYC122135		122-135
2CYC132145	3CYC132145		132-145

Conqueror: Cable cleat for trefoil formation

Classification	According to IEC 61914: 2009
Material	Metallic (316L Stainless steel)
Max and min temperature	-50°C to +60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Needle flame test	120s
Resistance to UV light	Passed

Part No.	Cable diameter (mm)
RTSS019023	19-23
RTSS023032	23-32
RTSS030039	30-39
RTSS037046	37-46

Part No.	Cable diameter (mm)
RTSS044053	44-53
RTSS051060	51-60
RTSS058067	58-67
RTSS065074	65-74

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Part No.	Cable diameter (mm)
RTSS072081	72-81
RTSS079088	79-88
RTSS086095	86-95
RTSS093102	93-102

Part No.	Cable diameter (mm)
RTSS100109	100-109
RTSS107116	107-116
RTSS114123	114-123
RTSS121130	121-130

Sovereign: Cable cleat for trefoil formation

Classification	According to IEC 61914: 2009
Material	Metallic (316L Stainless steel)
Max and min temperature	-50°C to +60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Needle flame test	120s
Resistance to UV light	Passed

Part No.	Cable diameter (mm)
HDSS019023	19-23
HDSS023028	23-28
HDSS027032	27-32
HDSS030035	30-35
HDSS033038	33-38
HDSS036042	36-42
HDSS040046	40-46
HDSS044050	44-50
HDSS048055	48-55
HDSS051058	51-58
HDSS055062	55-62
HDSS059066	59-66

Part No.	Cable diameter (mm)
HDSS063070	63-70
HDSS067074	67-74
HDSS071078	71-78
HDSS074082	74-82
HDSS077085	77-85
HDSS082088	82-88
HDSS088096	88-96
HDSS096103	96-103
HDSS103111	103-111
HDSS111119	111-119
HDSS119128	119-128

Patriot: Cable cleat for trefoil formation

Classification	According to IEC 61914: 2009
Material	Metallic (316L Stainless steel)
Max and min temperature	-50°C to +60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Needle flame test	120s
Resistance to UV light	Passed

Part No.	Cable diameter (mm)
SDSS019024	19-24

Part No.	Cable diameter (mm)
SDSS023028	23-28

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Part No.	Cable diameter (mm)
SDSS027032	27-32
SDSS030035	30-35
SDSS033038	33-38
SDSS036042	36-42
SDSS040046	40-46
SDSS044050	44-50
SDSS048055	48-55
SDSS051058	51-58
SDSS055062	55-62
SDSS059066	59-66
SDSS063070	63-70

Part No.	Cable diameter (mm)
SDSS067074	67-74
SDSS071078	71-78
SDSS074082	74-82
SDSS077085	77-85
SDSS082088	82-88
SDSS088096	88-96
SDSS096103	96-103
SDSS103111	103-111
SDSS111119	111-119
SDSS119128	119-128

Sapphire: Cable cleat for single formation

Classification	According to IEC 61914: 2009
Material	Metallic (316L Stainless steel)
Max and min temperature	-50°C to +60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Needle flame test	120s
Resistance to UV light	Passed

Part No.	Cable diameter (mm)
SHDSS032038	32-38
SHDSS038046	38-46
SHDSS046051	46-51
SHDSS051058	51-58
SHDSS058070	58-70
SHDSS070083	70-83
SHDSS083097	83-97
SHDSS096109	96-109
SHDSS106120	106-120
SHDSS120135	120-135
SHDSS135150	135-150

Application/Limitation

The manufacturer's instructions shall be followed

Type Approval documentation

Datasheets and test reports in documents referred to in Approval letters:
 MCANO381/PONT/262.1-016742-J-17 dated 2015-08-04
 MCANO381/PONT/262.1-016742-J-25 dated 2015-09-10
 MCANO381/PONT/262.1-016742-J-29 dated 2015-10-06
 MCANO381/PONT/262.1-016742-J-42 dated 2016-03-18

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Tests carried out

Type tests according to IEC 61914:2009

Marking of product

Manufacturer name – Type designation – Product identification

Periodical assessment

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

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine tests (RT) checked (if not available tests according to 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE