



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-8259

This Certificate consists of 9 pages

This is to certify that the

High Voltage Cable

with type designation(s)

BOSTRIG MHV-5(LS)BS 1,8/3 kV, BOSTRIG MHV-8(LS)BS 3,6/6 kV, BOSTRIG MHV-8(LS)BS 6/10 kV, BOSTRIG MHV-15(LS)BS 8,7/15 kV, BOSTRIG MHV-15(LS)BS12/20 kV

Holder of certificate

Draka Marine, Oil & Gas International

Houston, TX 77032, 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

IEC 60092-354 (2003-06)

IEC 60502

IEC 60754-2 (1997-04)

IEC 60332-3-22 (2000-10)

IEC 60754-1 (1994-01)

IEC 61034-2 (2005-04)

Application

Type	Voltage (kV)	Temp. class (°C)
BOSTRIG MHV-5(LS)BS 1,8/3 kV	1,8/3	90
BOSTRIG MHV-8(LS)BS 3,6/6 kV	3,6/6	90
BOSTRIG MHV-8(LS)BS 6/10 kV	6/10	90
BOSTRIG MHV-15(LS)BS 8,7/15 kV	8,7/15	90
BOSTRIG MHV-15(LS)BS12/20 kV	12/20	90

Place and date

Høvik, 2007-02-15

for DET NORSKE VERITAS AS

Frode Berntsen

Head of Section



Local Office

DNV New York

This Certificate is valid until

2010-12-31

Erik Hoffmann

Surveyor *mlan*

Notice: 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.



Name and place of manufacturer

Draka Cableteq USA
North Dighton
MA 02764
USA

Product description

BOSTRIG MHV-5(LS)BS 1,8/3 kV
BOSTRIG MHV-8(LS)BS 3,6/6 kV
BOSTRIG MHV-8(LS)BS 6/10 kV
BOSTRIG MHV-15(LS)BS 8,7/15 kV
BOSTRIG MHV-15(LS)BS 12/20 kV

Construction:
Conductors: Tinned, rope stranded copper
Core insulation: EPR
Screening: Tinned copper wire braid
Inner sheath: SHF2
Metal covering: Bronze wire braid
Outer sheath: SHF2

BOSTRIG MHV-5(LS)BS 1,8/3 kV

mm ²	AWG/MCM	BIW Cable Type	IEEE Cable Type	Overall Diameter mm	Overall Diameter Inches
		Designation	Designation		
1 x 7,57	8	MHV-5(LS)BS-8	SELBS5KV-8	22,35	0,880
1 x 12,5	6	MHV-5(LS)BS-6	SELBS5KV-6	23,88	0,940
1 x 18,6	5	MHV-5(LS)BS-5	SELBS5KV-5	24,64	0,970
1 x 21,5	4	MHV-5(LS)BS-4	SELBS5KV-4	25,65	1,010
1 x 30,7	2	MHV-5(LS)BS-2	SELBS5KV-2	27,43	1,080
1 x 46,0	1	MHV-5(LS)BS-1	SELBS5KV-1	29,72	1,170
1 x 56,3	1/0	MHV-5(LS)BS-1/0	SELBS5KV-1/0	30,99	1,220
1 x 66,5	2/0	MHV-5(LS)BS-2/0	SELBS5KV-2/0	31,50	1,240
1 x 92,1	3/0	MHV-5(LS)BS-3/0	SELBS5KV-3/0	34,29	1,350
1 x 112,6	4/0	MHV-5(LS)BS-4/0	SELBS5KV-4/0	35,31	1,390
1 x 133,0	262	MHV-5(LS)BS-262	SELBS5KV-262	36,58	1,440
1 x 158,6	313	MHV-5(LS)BS-313	SELBS5KV-313	38,86	1,530
1 x 189,3	373	MHV-5(LS)BS-373	SELBS5KV-373	40,64	1,600
1 x 225,1	444	MHV-5(LS)BS-444	SELBS5KV-444	44,20	1,740
1 x 271,2	535	MHV-5(LS)BS-535	SELBS5KV-535	46,74	1,840
1 x 327,5	646	MHV-5(LS)BS-646	SELBS5KV-646	49,78	1,960
1 x 393,8	777	MHV-5(LS)BS-777	SELBS5KV-777	53,09	2,090
1 x 562,8	1111	MHV-5(LS)BS-1111	SELBS5KV-1111	59,44	2,340



mm ²	AWG/MCM	BIW Cable Type Designation	IEEE Cable Type Designation	Overall Diameter mm	Overall Diameter Inches
3 x 7,57	8	MHV3-5(LS)BS-8	TELBS5KV-8	38,61	1,520
3 x 12,5	6	MHV3-5(LS)BS-6	TELBS5KV-6	41,91	1,650
3 x 18,6	5	MHV3-5(LS)BS-5	TELBS5KV-5	45,72	1,800
3 x 21,5	4	MHV3-5(LS)BS-4	TELBS5KV-4	47,50	1,870
3 x 30,7	2	MHV3-5(LS)BS-2	TELBS5KV-2	51,56	2,030
3 x 46,0	1	MHV3-5(LS)BS-1	TELBS5KV-1	54,86	2,160
3 x 56,3	1/0	MHV3-5(LS)BS-1/0	TELBS5KV-1/0	57,91	2,280
3 x 66,5	2/0	MHV3-5(LS)BS-2/0	TELBS5KV-2/0	58,93	2,320
3 x 92,1	3/0	MHV3-5(LS)BS-3/0	TELBS5KV-3/0	65,02	2,560
3 x 112,6	4/0	MHV3-5(LS)BS-4/0	TELBS5KV-4/0	68,07	2,680
3 x 133,0	262	MHV3-5(LS)BS-262	TELBS5KV-262	72,64	2,860
3 x 158,6	313	MHV3-5(LS)BS-313	TELBS5KV-313	77,72	3,060
3 x 189,3	373	MHV3-5(LS)BS-373	TELBS5KV-373	81,79	3,220
3 x 225,1	444	MHV3-5(LS)BS-444	TELBS5KV-444	85,85	3,380
3 x 271,2	535	MHV3-5(LS)BS-535	TELBS5KV-535	91,19	3,590
3 x 327,5	646	MHV3-5(LS)BS-646	TELBS5KV-646	98,04	3,860
3 x 393,8	777	MHV3-5(LS)BS-777	TELBS5KV-777	103,38	4,070
3 x 562,8	1111	MHV3-5(LS)BS-1111	TELBS5KV-1111	118,36	4,660
4 x 7,57	8	MHV4-5(LS)BS-8	FELBS5KV-8	42,42	1,670
4 x 12,5	6	MHV4-5(LS)BS-6	FELBS5KV-6	47,75	1,880
4 x 18,6	5	MHV4-5(LS)BS-5	FELBS5KV-5	50,29	1,980
4 x 21,5	4	MHV4-5(LS)BS-4	FELBS5KV-4	52,83	2,080
4 x 30,7	2	MHV4-5(LS)BS-2	FELBS5KV-2	56,39	2,220
4 x 46,0	1	MHV4-5(LS)BS-1	FELBS5KV-1	60,20	2,370
4 x 56,3	1/0	MHV4-5(LS)BS-1/0	FELBS5KV-1/0	63,75	2,510
4 x 66,5	2/0	MHV4-5(LS)BS-2/0	FELBS5KV-2/0	64,77	2,550
4 x 92,1	3/0	MHV4-5(LS)BS-3/0	FELBS5KV-3/0	73,91	2,910
4 x 112,6	4/0	MHV4-5(LS)BS-4/0	FELBS5KV-4/0	77,22	3,040
4 x 133,0	262	MHV4-5(LS)BS-262	FELBS5KV-262	80,77	3,180
4 x 158,6	313	MHV4-5(LS)BS-313	FELBS5KV-313	86,36	3,400
4 x 189,3	373	MHV4-5(LS)BS-373	FELBS5KV-373	91,19	3,590
4 x 225,1	444	MHV4-5(LS)BS-444	FELBS5KV-444	95,50	3,760
4 x 271,2	535	MHV4-5(LS)BS-535	FELBS5KV-535	101,60	4,000
4 x 327,5	646	MHV4-5(LS)BS-646	FELBS5KV-646	109,22	4,300
4 x 393,8	777	MHV4-5(LS)BS-777	FELBS5KV-777	115,32	4,540
4 x 562,8	1111	MHV4-5(LS)BS-1111	FELBS5KV-1111	132,33	5,210



BOSTRIG MHV-8(LS)BS 3,6/6 kV

		BIW Cable Type Designation	Overall Diameter	Overall Diameter
mm ²	AWG/MCM		mm	Inches
1 x 12,5	6	MHV-8(LS)BS-6	25,15	0,990
1 x 18,6	5	MHV-8(LS)BS-5	26,16	1,030
1 x 21,5	4	MHV-8(LS)BS-4	26,92	1,060
1 x 30,7	2	MHV-8(LS)BS-2	29,46	1,160
1 x 46,0	1	MHV-8(LS)BS-1	30,99	1,220
1 x 56,3	1/0	MHV-8(LS)BS-1/0	32,26	1,270
1 x 66,5	2/0	MHV-8(LS)BS-2/0	32,77	1,290
1 x 92,1	3/0	MHV-8(LS)BS-3/0	35,31	1,390
1 x 112,6	4/0	MHV-8(LS)BS-4/0	36,58	1,440
1 x 133,0	262	MHV-8(LS)BS-262	37,85	1,490
1 x 158,6	313	MHV-8(LS)BS-313	40,13	1,580
1 x 189,3	373	MHV-8(LS)BS-373	41,91	1,650
1 x 225,1	444	MHV-8(LS)BS-444	45,21	1,780
1 x 271,2	535	MHV-8(LS)BS-535	47,75	1,880
1 x 327,5	646	MHV-8(LS)BS-646	51,56	2,030
1 x 393,8	777	MHV-8(LS)BS-777	54,10	2,130
1 x 562,8	1111	MHV-8(LS)BS-1111	60,20	2,370
3 x 12,5	6	MHV3-8(LS)BS-6	46,74	1,840
3 x 18,6	5	MHV3-8(LS)BS-5	48,77	1,920
3 x 21,5	4	MHV3-8(LS)BS-4	50,55	1,990
3 x 30,7	2	MHV3-8(LS)BS-2	54,36	2,140
3 x 46,0	1	MHV3-8(LS)BS-1	57,91	2,280
3 x 56,3	1/0	MHV3-8(LS)BS-1/0	60,96	2,400
3 x 66,5	2/0	MHV3-8(LS)BS-2/0	61,72	2,430
3 x 92,1	3/0	MHV3-8(LS)BS-3/0	67,82	2,670
3 x 112,6	4/0	MHV3-8(LS)BS-4/0	72,39	2,850
3 x 133,0	262	MHV3-8(LS)BS-262	75,44	2,970
3 x 158,6	313	MHV3-8(LS)BS-313	80,52	3,170
3 x 189,3	373	MHV3-8(LS)BS-373	84,33	3,320
3 x 225,1	444	MHV3-8(LS)BS-444	88,39	3,480
3 x 271,2	535	MHV3-8(LS)BS-535	93,98	3,700
3 x 327,5	646	MHV3-8(LS)BS-646	100,08	3,940
3 x 393,8	777	MHV3-8(LS)BS-777	105,16	4,140
3 x 562,8	1111	MHV3-8(LS)BS-1111	120,40	4,740
4 x 12,5	6	MHV4-8(LS)BS-6	52,32	2,060
4 x 18,6	5	MHV4-8(LS)BS-5	54,61	2,150
4 x 21,5	4	MHV4-8(LS)BS-4	56,39	2,220
4 x 30,7	2	MHV4-8(LS)BS-2	59,94	2,360
4 x 46,0	1	MHV4-8(LS)BS-1	64,26	2,530
4 x 56,3	1/0	MHV4-8(LS)BS-1/0	67,56	2,660
4 x 66,5	2/0	MHV4-8(LS)BS-2/0	68,58	2,700

