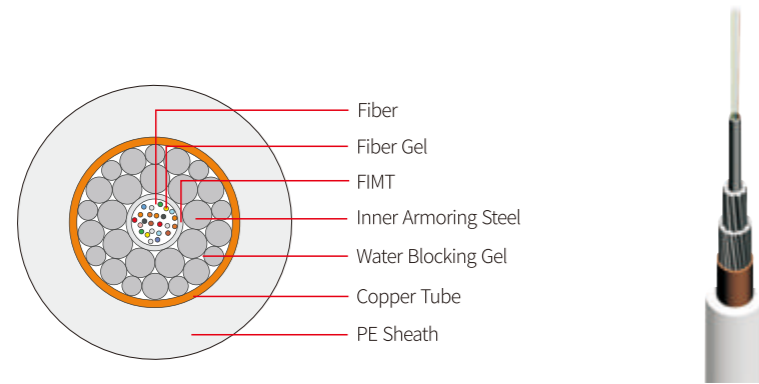


## HOUC-1 LW

### Unrepeated Submarine Optical Fiber Cable



#### Technical data

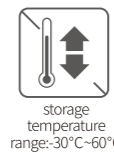
Fiber	G652D or G654
Fiber count	1-24 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	2.30
PE	Nature Color HDPE

#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply an electrical tone for cable tracking and fault location.

#### Applications

Suitable for large capacity optical transmission systems with maximum 5000 meters water depth.

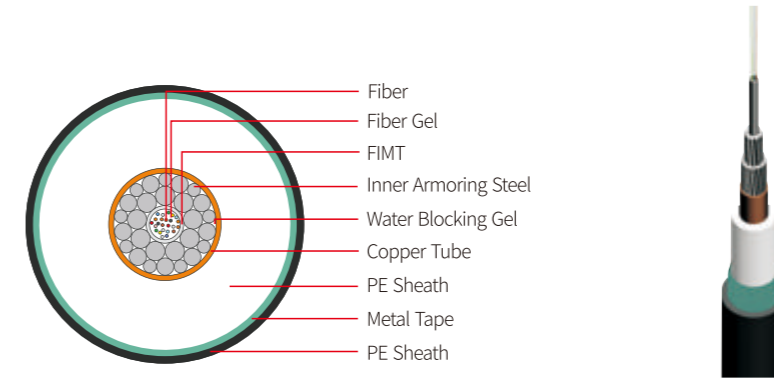


Type		HOUC-1 LW
Nominal OD(mm)		13.6
Nominal Weight (kg/km)	In air	444
	In water	295
CBL(kN)		65
NTTS(kN)		50
NOTS(kN)		30
NPTS(kN)		20
No Load Min Bend Radius(m)		1.0
Crush(kN)		15
Impact(N.m)		60
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HOUC-1 LWP

### Unrepeated Submarine Optical Fiber Cable



#### Technical data

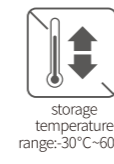
Fiber	G652D or G654
Fiber count	1-24 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	2.30
PE	Nature Color HDPE
Tape	Corrugated Steel Tape
PE	Black HDPE

#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply an electrical tone for cable tracking and fault location.

#### Applications

Suitable for large capacity optical transmission systems with maximum 4000 meters water depth.

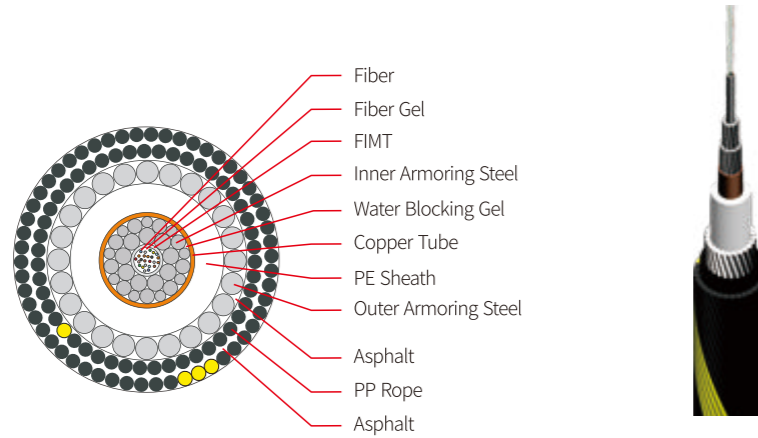


Type		HOUC-1 LWP
Nominal OD(mm)		18.1
Nominal Weight (kg/km)	In air	617
	In water	353
CBL(kN)		65
NTTS(kN)		50
NOTS(kN)		30
NPTS(kN)		20
No Load Min Bend Radius(m)		1.0
Crush(kN)		15
Impact(N.m)		60
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HOUC - 1 SAL

### Unrepeated Submarine Optical Fiber Cable



#### Technical data

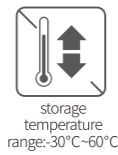
Fiber	G652D or G654
Fiber count	1-24 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	2.30
PE	Nature Color HDPE
Outer Armor	Galvanised Steel Wire (GSW)
Outer Sheath	PP Rope

#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply an electrical tone for cable tracking, depth of burial measurement and fault location.
- Single layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

#### Applications

Suitable for large capacity optical transmission systems with maximum 2000 meters water depth.

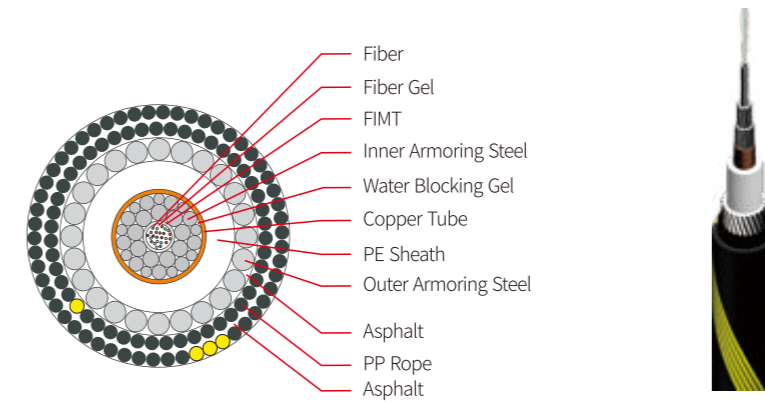


Type		HOUC-1 SAL
Nominal OD(mm)		24.6
Nominal Weight (kg/km)	In air	1150
	In water	709
CBL(kN)		140
NTTS(kN)		100
NOTS(kN)		65
NPTS(kN)		50
No Load Min Bend Radius(m)		1.0
Crush(kN)		35
Impact(N.m)		200
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HOUC - 1 SA

### Unrepeated Submarine Optical Fiber Cable



#### Technical data

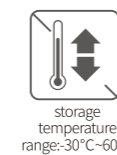
Fiber	G652D or G654
Fiber count	1-24 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	2.30
PE	Nature Color HDPE
Outer Armor	Galvanised Steel Wire (GSW)
Outer Sheath	PP Rope

#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply an electrical tone for cable tracking, depth of burial measurement and fault location.
- Single layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

#### Applications

Suitable for large capacity optical transmission systems with maximum 2000 meters water depth.

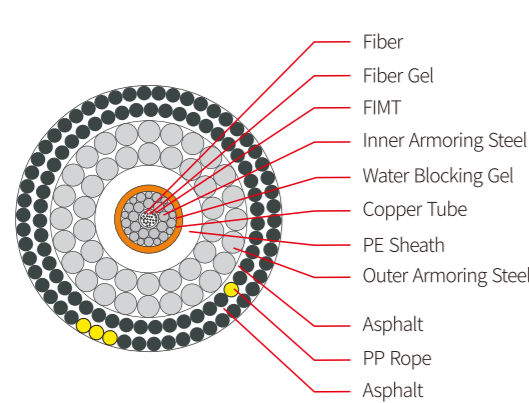


Type		HOUC-1 SA
Nominal OD(mm)		26.2
Nominal Weight (kg/km)	In air	1443
	In water	940
CBL(kN)		190
NTTS(kN)		150
NOTS(kN)		100
NPTS(kN)		75
No Load Min Bend Radius(m)		1.0
Crush(kN)		35
Impact(N.m)		250
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HOUC - 1 DA

### Unrepeated Submarine Optical Fiber Cable

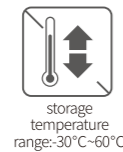


#### Technical data

Fiber	G652D or G654
Fiber count	1-24 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	2.30
PE	Nature Color HDPE
Outer Armor	Galvanised Steel Wire (GSW)
Outer Sheath	PP Rope

#### Applications

Suitable for large capacity optical transmission systems with maximum 600 meters water depth.



#### Features

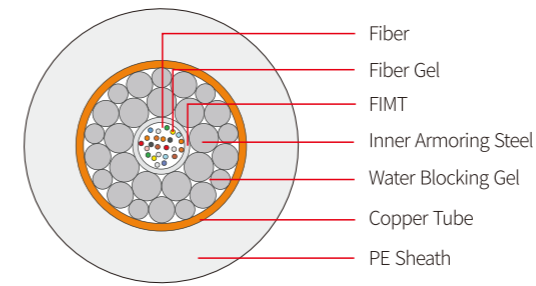
- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply an electrical tone for cable tracking, depth of burial measurement and fault location.
- Double layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

Type		HOUC-1 DA
Nominal OD(mm)		31.6
Nominal Weight (kg/km)	In air	2594
	In water	1850
CBL(kN)		340
NTTS(kN)		240
NOTS(kN)		160
NPTS(kN)		120
No Load Min Bend Radius(m)		1.0
Crush(kN)		40
Impact(N.m)		300
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HORC - 1 LW

### Repeated Submarine Optical Fiber Cable

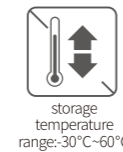
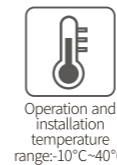


#### Technical data

Fiber	G652D or G654
Fiber count	1-16 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	1.36
PE	Nature Color HDPE
withstand voltage	15kV

#### Applications

Suitable for long distance repeated optical transmission systems upto maximum 8000 meters water depth.The cable has to be integrated with subsea repeaters.



#### Features

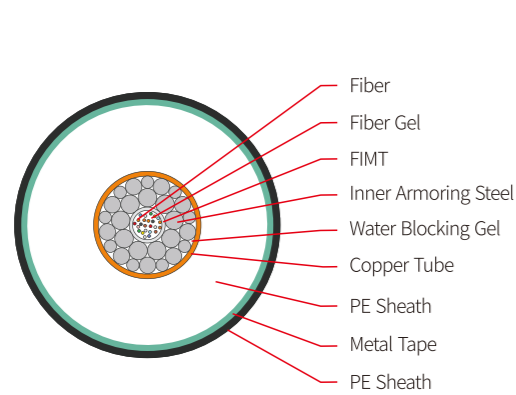
- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and shtrengthes the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply power for subsea repeaters and as an electrical tone for cable tracking, depth of burial measurement and fault location.

Type		HORC-1 LW
Nominal OD(mm)		18.0
Nominal Weight (kg/km)	In air	589
	In water	328
CBL(kN)		65
NTTS(kN)		50
NOTS(kN)		30
NPTS(kN)		20
No Load Min Bend Radius(m)		1.0
Crush(kN)		15
Impact(N.m)		100
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.0

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HORC - 1 LWP

### Repeated Submarine Optical Fiber Cable



#### Technical data

Fiber	G652D or G654
Fiber count	1-16 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	1.36
PE	Nature Color HDPE
Tape	Corrugated Steel Tape
PE	Black HDPE
withstand voltage	15kV

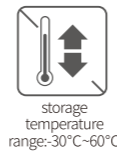
#### Applications

Suitable for long distance repeated optical transmission systems with maximum 7000 meters water depth.

The cable has to be integrated with subsea repeaters.

#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and strengthens the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply power for subsea repeaters and as an electrical tone for cable tracking, depth of burial measurement and fault location.

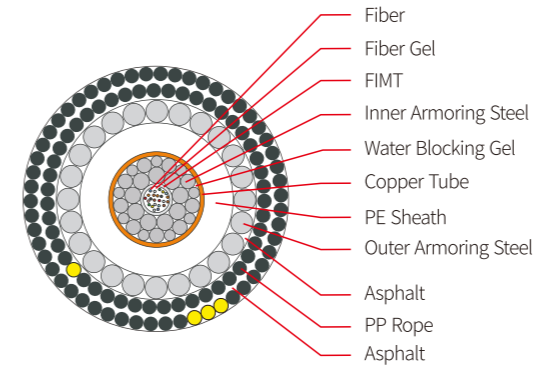


Type		HORC-1 LWP
Nominal OD(mm)		22.5
Nominal Weight (kg/km)	In air	809
	In water	401
CBL(kN)		65
NTTS(kN)		50
NOTS(kN)		30
NPTS(kN)		20
No Load Min Bend Radius(m)		1.0
Crush(kN)		15
Impact(N.m)		100
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.0

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HORC - 1 SAL

### Repeated Submarine Optical Fiber Cable

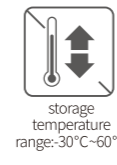


#### Technical data

Fiber	G652D or G654
Fiber count	1-16 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	1.36
PE	Nature Color HDPE
Outer Armor	Galvanised Steel wire(GSW)
Outer Sheath	PP Rope
withstand voltage	15kV

#### Applications

Suitable for long distance repeated optical transmission systems with maximum 2000 meters water depth.



#### Features

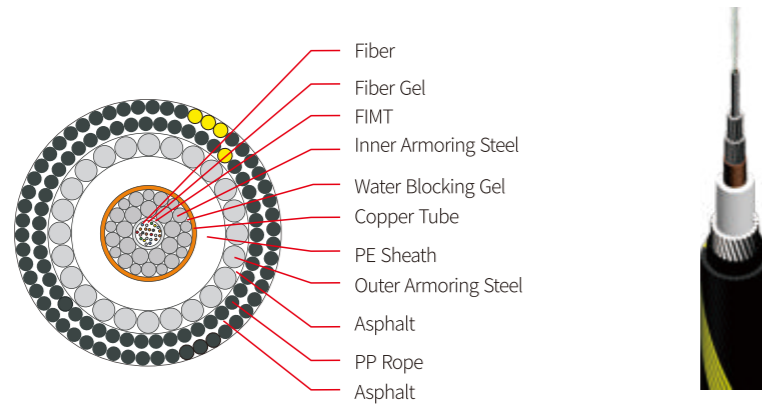
- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and strengthens the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply power for subsea repeaters and as an electrical tone for cable tracking, depth of burial measurement and fault location.
- Single layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

Type		HORC-1 SAL
Nominal OD(mm)		29.4
Nominal Weight (kg/km)	In air	1852
	In water	1155
CBL(kN)		200
NTTS(kN)		150
NOTS(kN)		100
NPTS(kN)		75
No Load Min Bend Radius(m)		1.0
Crush(kN)		35
Impact(N.m)		200
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.0

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HORC - 1 SA

### Repeated Submarine Optical Fiber Cable

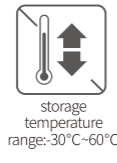


#### Technical data

Fiber	G652D or G654
Fiber count	1-16 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	1.36
PE	Nature Color HDPE
Outer Armor	Galvanised Steel wire(GSW)
Outer Sheath	PP Rope
withstand voltage	15kV

#### Applications

Suitable for long distance repeated optical transmission systems with maximum 2000 meters water depth.



#### Features

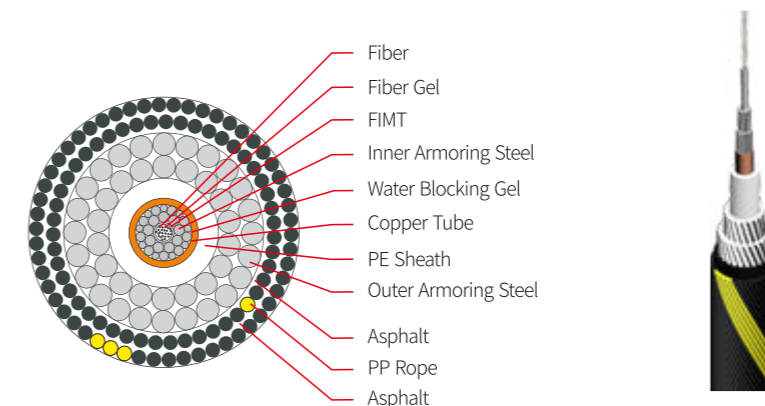
- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and strengthens the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armor consists of two layers of high strength steel wires surrounded by water blocking compound.
- The copper conductor can be used to apply power for subsea repeaters and as an electrical tone for cable tracking, depth of burial measurement and fault location.
- Single layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

Type		HORC-1 SA
Nominal OD(mm)		31.6
Nominal Weight (kg/km)	In air	2355
	In water	1561
CBL(kN)		275
NTTS(kN)		210
NOTS(kN)		140
NPTS(kN)		100
No Load Min Bend Radius(m)		1.0
Crush(kN)		40
Impact(N.m)		300
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.5

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.

## HORC - 1 DA

### Repeated Submarine Optical Fiber Cable

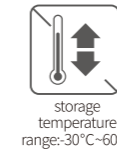


#### Technical data

Fiber	G652D or G654
Fiber count	1-16 cores
Inner Armor	Phosphated Steel Wire(PSW)
copper tube resistance	1.36
PE	Nature Color HDPE
Outer Armor	Galvanised Steel wire(GSW)
Outer Sheath	PP Rope
withstand voltage	15kV

#### Applications

Suitable for long distance repeated optical transmission systems with maximum 600 meters water depth.



#### Features

- the stainless tube which embrace the fiber inside protects against water and hydrogen ingress, and strengthens the mechanical ability. In the stainless tube, fiber gel is injected which protect the fiber against water and hydrogen ingress in case of the cable broken, meanwhile, the gel keeps the fiber slack length evenly.
- The inner armour consists of two layers of high strength steel wire surrounded by compound.
- The copper conductor can be used to apply power for subsea repeaters and as an electrical tone for cable tracking, depth of burial measurement and fault location.
- Double layers of GSW can be stranded around the LW cable core, which increase the cable tensile strength, improve the abrasion ability, and enhance the crush and impact resistance.
- Asphalt is added onto the armor, yarn and sheath.

Type		HORC-1 DA
Nominal OD(mm)		39.2
Nominal Weight (kg/km)	In air	4530
	In water	3293
CBL(kN)		560
NTTS(kN)		420
NOTS(kN)		280
NPTS(kN)		200
No Load Min Bend Radius(m)		1.0
Crush(kN)		50
Impact(N.m)		400
Operating Temp.(°C)		-10 to +40
Storage Temp.(°C)		-30 to +60
DC Resistance(Ω/km)		<1.0

The min bend radius can be adjusted depending on the time duration over which the cable bend is sustained.