# HC-SERIES CABLE

**OCC** ®
OPTICAL CABLE CORPORATION

## High-density Indoor/Outdoor Fiber Optic Cable

The HC-Series cables, featuring OCC's unique tight-buffered fiber units, are the ideal solution for campus networks and indoor-outdoor installations. The HC-Series of cables combines the ruggedness of tight-buffers with high-fiber density, resulting in cables that have an outer diameter much smaller than conventional cables using buffer tubes. No other cable matches the mechanical and environmental performance while maintaining a small diameter and high-duct efficiency.

## Features & Benefits:

- Rugged tight-buffer fiber unit construction
- Cable materials are indoor/outdoor: UV-, fungus- and water-resistant
- The high-density breakout cables offer a > 20% reduction in diameter and a > 20% reduction in weight relative to conventional loose-tube cables, allowing for greater fiber density and cable packing within a duct
- UL Listed in accordance with NEC section 770.179(b) for use in vertical runs in building riser shafts or from floor to floor
- Core-Locked™ outer jacket design for installation survivability
- Helically stranded core for greater flexibility and mechanical protection of the optical fiber units
- Cable offers a cost savings by eliminating the need to splice outdoor cable to indoor cable at building entrance
- Cable can be terminated with 900µm fanout kit for LC construction
- Suitable for direct pulling with wire mesh grips
- Option available for direct termination of sub-units to MPO/MTP connectors

## Applications:

- Installation in underground duct for data transmission between nodes or hubs
- Can also be routed vertically inside buildings



## Applicable Standards:

Optical Cable Corporation indoor/outdoor tight-buffered fiber-unit fiber optic cables meet the functional requirements of the following standards:

- ICEA-S-104-696
- TIA-568
- ICEA-S-83-596
- TIA-598
- UL 1666

## Mechanical and Environmental Performance

| | INDOOR/OUTDOOR |
|---|---|
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to +85°C |
| Installation Temperature (cable temp.) | -20°C to +60°C |
| Flame Retardancy | UL Listed Type OFNR UL 1666 |
| Crush Resistance | 1,800 N/cm |
| Flex Resistance | 2,000 cycles |

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## CABLE CHARACTERISTICS:

HC-Series High-density Riser Cables (with 2.0mm fiber units)

| FIBER COUNT | DIAMETER MM (IN) | WEIGHT KG/KM (LBS/1,000') | TENSILE LOAD | | MINIMUM BEND RADIUS | |
|---|---|---|---|---|---|---|
| | | | INSTALLATION N (LBS) | OPERATIONAL N (LBS) | INSTALLATION CM (IN) | LONG-TERM CM (IN) |
| 24 | 7.6 (0.30) | 75 (50) | 2700 (600) | 600 (135) | 11.4 (4.5) | 7.6 (3.0) |
| 48 | 7.6 (0.30) | 75 (50) | 2700 (600) | 600 (135) | 11.4 (4.5) | 7.6 (3.0) |
| 72 | 9.0 (0.35) | 97 (65) | 2700 (600) | 600 (135) | 13.5 (5.3) | 9.0 (3.5) |
| 96 | 10.3 (0.40) | 116 (78) | 2700 (600) | 600 (135) | 15.5 (6.0) | 10.3 (4.0) |
| 120 | 11.4 (0.45) | 141 (95) | 3000 (670)** | 1000 (220) | 17.1 (6.8) | 11.4 (4.5) |
| 144 | 11.7 (0.46) | 152 (102) | 3000 (670)** | 1000 (220) | 17.6 (6.9) | 11.7 (4.6) |
| 168 | 11.7 (0.46) | 152 (102) | 4800 (1080)** | 1600 (360) | 17.6 (6.9) | 11.7 (4.6) |
| 192 | 12.9 (0.51) | 179 (120) | 4800 (1080)** | 1600 (360) | 19.4 (7.7) | 12.9 (5.1) |
| 216 | 12.9 (0.51) | 179 (120) | 4800 (1080)** | 1600 (360) | 19.4 (7.7) | 12.9 (5.1) |
| 288 | 15.0 (0.60) | 226 (152) | 5400 (1210)** | 1800 (400) | 22.8 (9.0) | 15.0 (6.0) |

*\*\* Installation loads in excess of 2,700N (600lbs) are not recommended.*
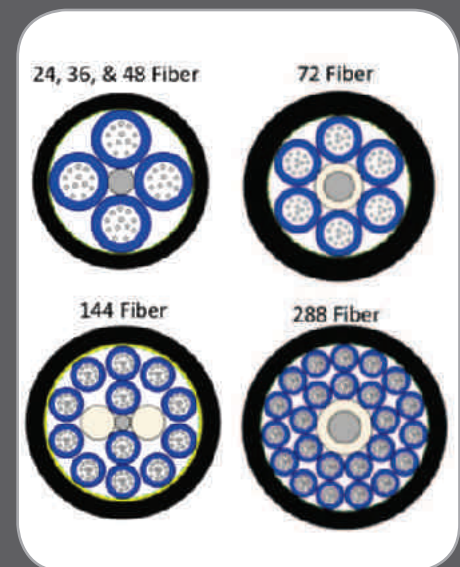
## Ordering Information

| H | C | | | | J | S | L | A | C | | R |
|---|---|---|---|---|---|---|---|---|---|---|---|

Digit No:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|

1 – 2    High Count Series with 12 fiber fiber units 2.0mm in diameter = **HC**

3 – 5    Fiber count: (See Cable Characteristics Chart)

6    Low Temperature Oil Resistant Indoor/Outdoor PVC = **J**

7 – 9    Fiber type: SLA – Others may be available in the future

10    Jacketed fiber unit = **C**

11    Jacket Color: Standard Jacket Color; Black = **K**

12    Rating Type: OFNR = **R**

**Example:** 12 fiber cable with 12 fiber units, 2.0mm in diameter using bend-tolerant single-mode fiber, Low Temperature Oil Resistant Indoor/outdoor PVC, black jacket riser rated printed in feet –

| H | C | 0 | 1 | 2 | J | S | L | A | C | K | R |
|---|---|---|---|---|---|---|---|---|---|---|---|

## Dimensional Drawing



24, 36, & 48 Fiber    72 Fiber    144 Fiber    288 Fiber

OCC® OPTICAL CABLE CORPORATION

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