

# OPTICAL PHASE CONDUCTOR (OPPC)

Optical Phase Conductor (OPPC) is used as an alternative telecommunications solution when there is no existing ground wire, meaning Optical Ground Wire (OPGW) is not a viable option. The basic construction is similar to conventional OPGW, only it is designed to simulate the mechanical and electrical characteristics of the phase wire it replaces. Unlike OPGW, where the cable is not carrying continuous current, OPPC is energised along high voltage power lines. Therefore it requires specially adapted splice boxes and insulators to accommodate the live line conditions.

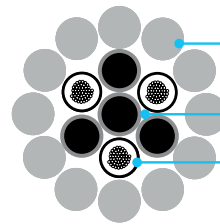
AFL can design a cable to accommodate your precise application. To do so, we need the properties of the phase conductor you are seeking to replace. With that, we can do the rest.



## FEATURES

- Engineered to match existing conductors
- Available in fibre counts up to 144
- Distribution or transmission – from 36 to 245 kV
- Suitable for any type of optical fibre, single-mode or multi-mode
- Designed to match electrical properties of conductor it replaces
- Uses standard fibre optic dead ends and suspension grips

## CABLE COMPONENTS



Aluminium alloy wire

Aluminium clad steel wire

Stainless steel tube with optical fibres




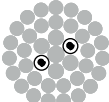

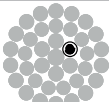
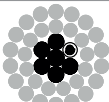
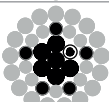
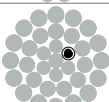
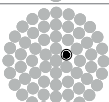
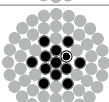
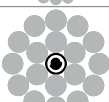
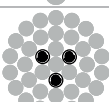
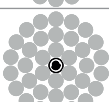


## OPPC HARDWARE

A full range of insulators and joint boxes are available to suit customer specifications. Please refer to the Accessories section of this catalogue

# OPTICAL PHASE CONDUCTOR

## TYPICAL DESIGNS

EQUIVALENT ACSR TO EN 50182	OPGW TYPE	MAXIMUM FIBRE COUNT	CROSS SECTION	DIAMETER (mm)	RTS (kN)	WEIGHT (kg/km)	CURRENT CAPACITY (A) (35-80°C, 0,6m/s)
70/12	ASLH-D(S)bb 1 x 24 SMF (AL1 / A20SA 66/15 - 8.1)	24		12.1	30.1	307	301
95/15	ASLH-D(S)bb 2 x 24 SMF (AL1 / A20SA 90/12 - 10.4)	60		13.9	29.5	370	357
120/20	ASLH-D(S)bb 1 x 48 SMF (AL1 / A20SA 114/25 - 13.8)	48		15.8	49.6	519	422
ASTER 228	ASLH-D(S)bbb 2 x 24 SMF (AL4 226 - 23.8)	72		20.2	73.6	676	561
PASTEL 228	ASLH-D(S)bbb 1 x 48 SMF (AL4 / ST6C 180/52 - 21.2)	48		20.2	121.6	930	502
ASTER 288	ASLH-D(S)bbb 1 x 48 SMF (AL4 288 - 30.3)	48		22.4	93.5	833	641
PASTEL 288	ASLH-D(S)bbb 1 x 48 SMF (AL4 / ST6C 237/51 - 27.2)	48		22.4	155.1	1097	581
PASTEL 412	ASLH-D(S)bbb 1 x 48 SMF (AL4 / A20SA 288/117 - 37.3)	64		26.5	224.3	1660	726
ASTER 366	ASLH-D(S)bbb 1 x 48 SMF (AL4 374 - 39.3)	48		25.5	118.2	1069	758
ASTER 570	ASLH-D(S)bbbb 1 x 48 SMF (AL4 578 - 60.8)	48		31.6	187.7	1650	988
PETUNIA 612	ASLH-D(S)bbbb 1 x 48 SMF (AL4 / A20SA 489/123 - 58.8)	64		32.5	309.1	2247	944
ELM	ASLH-D(S)bb 48 SMF (AL3 210 - 22.6)	60		19.3	61.8	628	544
Poplar	ASLH-D(S)bbb 3 x 32 SMF (AL5 240 - 25.9)	96		21.0	70.9	731	599
UPAS	ASLH-D(S)bbb 48 SMF (AL3 366 - 39.5)	48		25.2	108.1	1063	771