



WIND TURBINE FIBRE OPTIC CABLE

IEC 60794 wind turbine reference

8 orderable sizes

STANDARD <b>IEC 60794 wind turbine reference</b>	VOLTAGE CLASS <b>Optical data link</b>	TEMPERATURE CLASS <b>-40 °C to +70 °C optical route guide</b>
CONDUCTOR <b>OS2, OM3</b>	INSULATION / JACKET <b>LSZH, PE or oil-resistant turbine data jacket</b>	

Construction

- 1  **Optical fibres** – Colour-coded singlemode/multimode fibres
- 2  **Loose tube** – Gel-filled buffer tube
- 3  **Strength member** – Central FRP / steel rod
- 4  **Aramid yarn** – Water-blocking + aramid strength
- 5  **Armour** – Corrugated steel tape (CST)
- 6  **Sheath** – LSZH, PE or oil-resistant turbine data jacket

Size selection — all available cross-sections

Cable reference	Motion duty	Cable function	Voltage class	Element design	Conductor / element size	Conductor construction	Screen / protection	Jacket	Torsion rating	Temperature class	OD guide	Weight guide
Wind turbine fibre optic control cable 4 fibre OS2	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	4 fibre	OS2	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	13.2 mm	227 kg/km
Wind turbine fibre optic control cable 4 fibre OM3	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	4 fibre	OM3	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	13.8 mm	303 kg/km
Wind turbine fibre optic control cable 8 fibre OS2	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	8 fibre	OS2	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	14.6 mm	379 kg/km
Wind turbine fibre optic control cable 8 fibre OM3	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	8 fibre	OM3	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	15.2 mm	531 kg/km
Wind turbine fibre optic control cable 12 fibre OS2	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	12 fibre	OS2	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	15.7 mm	531 kg/km
Wind turbine fibre optic control cable 12 fibre OM3	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	12 fibre	OM3	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	16.3 mm	759 kg/km

Cable reference	Motion duty	Cable function	Voltage class	Element design	Conductor / element size	Conductor construction	Screen / protection	Jacket	Torsion rating	Temperature class	OD guide	Weight guide
Wind turbine fibre optic control cable 24 fibre OS2	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	24 fibre	OS2	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	18.1 mm	987 kg/km
Wind turbine fibre optic control cable 24 fibre OM3	Wind turbine data, monitoring and tower backbone route	Optical SCADA, monitoring and communication link	Optical data link	24 fibre	OM3	Single-mode or multimode optical fibre element	Aramid yarn strength member and optional steel tape protection	LSZH, PE or oil-resistant turbine data jacket	Fixed tower/nacelle route with service-loop allowance	-40 °C to +70 °C optical route guide	18.8 mm	1443 kg/km