BT (British Telecom) coaxial cables

These coaxial (coax) cables are designed to meet British Telecom standards. BT2002 & BT2003 types are primarily used for digital telephone & data links.

Black sheathed cables are suitable for internal or external use, white sheathed cables are suitable for internal use only. RBS cables are suitable for direct burial applications & LSZH cables provide increased safety in the case of fire.

Construction

solid or stranded plain copper conductors

core insulation (dielectric) material varies

tinned or plain copper wire braid screen/s

sheath material & colour varies

Technical

insulation materials:	PE = solid polyethylene
(dielectric)	PEC = polyethylene-cellular
	FPE = foam polyethylene
screen materials:	PCWB = plain copper wire braid
	TCWB = tinned copper wire braid
sheath materials:	PVC = polyvinylchloride (black or white)
	LSZH = low smoke zero halogen (black or white)
	RBS = raydex bonded style (green)
impedance:	75 Ohms (+/- 3 Ω)
temperature range:	dependent on type, please check if critical
standards:	construction generally according to British Telecom CW1229

Cable Type & Sheath Material (1 core unless stated)	Conductor Stranding (mm)	Insulation Material (dielectric)	Screen Type & Quantity	Cable Overall	
				Diameter (mm)	Weight (kg/km)
BT2001 PVC	7/0.20	PEC	1x PCWB	4.6	31
BT2002 PVC	7/0.20	PEC	2x PCWB	5.1	51
BT2002 LSZH	7/0.20	PEC	2x PCWB	5.1	51
BT2002 RBS	7/0.20	PEC	2x PCWB	5.2	53

Note: the most common constructions are shown here but materials, conductor sizes and screen types may differ dependent on individual manufacturer specifications.

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Cable Type & Sheath Material (1 core unless stated)	Conductor Stranding (mm)	Insulation Material (dialectric)	Screen Type & Quantity	Cable Overall	
				Diameter (mm)	Weight (kg/km)
BT2003 PVC	1/0.61	PE	2x PCWB	6.7	79
BT2003 LSZH	1/0.61	PE	2x PCWB	6.7	79
BT2003 RBS	1/0.61	PE	2x PCWB	6.9	83
BT3002 PVC	1/0.31	PE	2x TCWB	3.5	24
BT3002 LSZH	1/0.31	PE	2x TCWB	3.5	24
BT3002 8 Core PVC	1/0.31	PE	2x TCWB	16.0	290
BT3002 16 Core PVC	1/0.31	PE	2x TCWB	19.5	392
BT5000 PVC	1/0.96	FPE	2x TCWB	47.2	68

Note: the most common constructions are shown here but materials, conductor sizes and screen types may differ dependent on individual manufacturer specifications.

PVC or LSZH Properties: fairly tough & flexible materials resistant to a wide range of oils & chemicals. The primary difference between them is the levels of toxic chemicals produced in the case of a fire.

Standard polyvinylchloride (PVC) will emit around 28% HCL (hydrogen chloride) if burnt.

Low smoke zero halogen/halogen free (LSZH, LSOH, LSHF) guarantees max. 0.5% HCL emissions if burnt.

RBS Properties: this flexible, impact and abrasion resistant material is suitable for direct burial or ducted applications. RBS (raydex bonded style) sheath is an alternative to the Volex Radex patented form of bonded laminated sheath called “Radex Bonded Shield”.