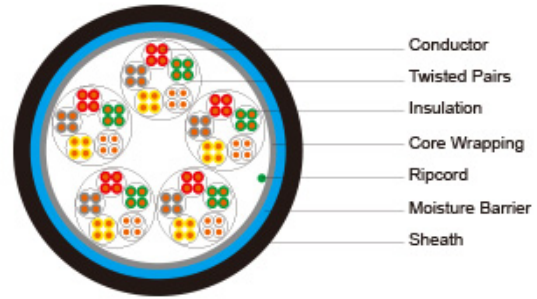


Foam Skin Insulated & LAP Sheathed Air Core/Jelly Filled Cables to DIN VDE 0816



<b>Application</b>	The cables are designed for use as connection between central offices. The cables are suitable for installation in ducts, direct burial in the ground and also for aerial installation with integral suspension strand. Jelly filled option is for subscriber's cables installed underground or along the edge of pavement. An armoured option is offered for direct burial installations. A figure-8 self support option is offered for aerial installation.	
<b>Standards</b>	VDE 0816	
<b>Construction</b>		
<b>Conductors:</b>	Solid annealed bare copper 0.6 and 0.8mm as per class 1 of VDE 0295/IEC 60228	
<b>Insulation:</b>	Foam Skin which is a composite polyethylene insulation made of an inner cellular layer and an outer solid skin 2Y11 type as per VDE 0207-2	
<b>Twisted Pairs:</b>	Insulated conductors are twisted into pairs with varying lay length to minimize crosstalk	
<b>Cabling Element:</b>	Star Quads	
<b>Cable Core Assembly:</b>	4 Cores are twisted into star quad. 5 star quads are stranded into a basic unit. 5 or 10 basic units each are stranded into one main unit. The star quads are grouped in units and stranded in layers to form the cable core. Standard make up is per VDE 0816 in the Cable Make Up Diagram	
<b>Core Wrapping:</b>	One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap. These tapes furnish thermal, mechanical as well as high dielectric protection between shielding and individual conductors	
<b>Moisture Barrier:</b>	A layer of aluminium tape (0.2mm) coated with PE-copolymer on one or both sides is applied longitudinally with overlap over the cable core to provide 100% electrical shielding coverage and ensure a barrier against water vapor	
<b>Sheath:</b>	Black low density polyethylene type 2YM2 as per VDE 0207-3, being able to withstand exposure to sunlight, temperature variations, ground chemicals and other environmental contaminants Ripcord may be provided for slitting the sheath longitudinally to facilitate its removal	
<b>Ripcord:</b>	Ripcord may be provided for slitting the sheath longitudinally to facilitate its removal	
<b>Spare Pairs (optional):</b>	<b>Pairs</b>	Spare pairs may be incorporated for 200 and larger pair cables
<b>Continuity (optional):</b>	<b>Wire</b>	Tinned copper drain wire may be longitudinally laid to ensure electrical continuity of the screen
<b>Optional Construction</b>		

<b>Jelly Filled Cable</b>	The cable core interstices are filled with petroleum jelly to avoid longitudinal water penetration within the cable. The water resistant filling compound is applied to the air space between non-hygroscopic tape and shield, shield and sheath within the cable core
<b>Armoured Cable:</b>	Steel Wire Armour or Corrugated steel tape armour is applied over an optional inner polyethylene sheath. For steel tape version, the 0.15mm thick steel tape is coated with a copolymer and applied with an overlap. An outer polyethylene sheath is applied over the armour

**Type Codes**

<b>A-</b>	Outdoor Cable
<b>02YS</b>	Foam Skin insulation
<b>F</b>	Continuous core filling
<b>(L)2Y</b>	Laminated sheath(copolymer-coated aluminium tape laminated to PE outer sheath)
<b>SR</b>	Corrugated steel tape
<b>b</b>	Armouring
<b>T</b>	Messenger of galvanized steel wires
<b>StIII</b>	Star quad in local cables
<b>Bd</b>	Unit-type stranding

**Electrical Properties**

<b>Nominal Conductor Diameter</b>	mm	0.6	0.8	
<b>Conductor Gauge Size</b>	AWG	-	20	
<b>Conductor Size</b>	mm <sup>2</sup>	0.283	0.5	
<b>Maximum Average Conductor Resistance @20°C</b>	Ω/km	63	34.6	
<b>Minimum Insulation Resistance @500V DC</b>	MΩ.km	5000	5000	
<b>Maximum Mutual Capacitance @800Hz</b>	<b>100% of all values</b>	nF/km	42	42
	<b>95% of all values</b>	nF/km	40	40
<b>Capacitance Unbalance @800Hz pair-to-pair</b>				
<b>K1</b>	<b>100% of values max</b>	pF/500m	800	800
	<b>98% of values max</b>	pF/500m	400	400

<b>K9-12</b>	<b>100% of values max</b>	pF/500m	300	300
	<b>90% of values max</b>	pF/500m	100	100
<b>Maximum Conductor Loop Resistance @20°C</b>		Ω/km	130	73.2
<b>Impedance @0.8KHz</b>		Ω	664	500
<b>Maximum Average</b>	<b>Attenuation @0.8KHz</b>	dB/km	0.91	0.68
<b>Dielectric Strength 50Hz</b>				
<b>Conductor to Conductor (2mins)</b>		V AC	500	500
<b>Conductor to Screen (2mins)</b>		V AC	2000	2000
<b>Maximum Operating Voltage Peak Value</b>		V	225	225
<b>Nominal Insulation Thickness (Air Core)</b>		mm	0.25	0.3
<b>(Jelly Filled)</b>		mm	0.36	0.44
<b>Nominal Insulated Conductor Diameter (Air Core)</b>		mm	1.1	1.4
<b>(Jelly Filled)</b>		mm	1.32	1.68

**Mechanical and Thermal Properties**

**Temperature range during operation (fixed state):** -30°C – +70°C

**Temperature range during installation (mobile state):** -20°C – +50°C

**Minimum bending radius:** 10 x Overall Diameter (unarmoured cables);15 x Overall Diameter (armoured cables)

**Colour Code**

Standard colour code is per VDE 0816 given in Colour Code Chart

**Dimensions And Weight**

Foam Skin Insulated and LAP Sheathed Air Core Cable

VDE CODE: A-02YS(L)2Y...x2x0.6/0.8mm StIII Bd

Cable Code	Number	Nominal Insulation	Nominal Sheath	Nominal Overall	Nominal
	of	Thickness	Thickness	Diameter	Weight
	Pairs	mm	mm	mm	kg/km
0.6mm Conductor, 1.1mm Insulated Wire					
TP816A-02YS(L)2Y-StIII-Bd-50P06	50	0.25	1.8	22	565
TP816A-02YS(L)2Y-StIII-Bd-100P06	100	0.25	2	28	960

TP816A-02YS(L)2Y-StIII-Bd-200P06	200	0.25	2.2	37.5	1785
TP816A-02YS(L)2Y-StIII-Bd-300P06	300	0.25	2.2	44.5	2545
TP816A-02YS(L)2Y-StIII-Bd-400P06	400	0.25	2.6	51	3370
TP816A-02YS(L)2Y-StIII-Bd-600P06	600	0.25	3	61.5	4855
TP816A-02YS(L)2Y-StIII-Bd-800P06	800	0.25	3.4	70	6315
TP816A-02YS(L)2Y-StIII-Bd-1000P06	1000	0.25	3.4	76.5	7850
TP816A-02YS(L)2Y-StIII-Bd-1200P06	1200	0.25	3.8	83	9390
0.8mm Conductor, 1.4mm Insulated Wire					
TP816A-02YS(L)2Y-StIII-Bd-50P08	50	0.3	1.8	25	840
TP816A-02YS(L)2Y-StIII-Bd-100P08	100	0.3	2	33	1500
TP816A-02YS(L)2Y-StIII-Bd-150P08	150	0.3	2.2	39.5	2165
TP816A-02YS(L)2Y-StIII-Bd-200P08	200	0.3	2.2	45.5	2825
TP816A-02YS(L)2Y-StIII-Bd-300P08	300	0.3	2.6	55	4145
TP816A-02YS(L)2Y-StIII-Bd-400P08	400	0.3	3	63	5475
TP816A-02YS(L)2Y-StIII-Bd-500P08	500	0.3	3.4	69.5	6750
TP816A-02YS(L)2Y-StIII-Bd-600P08	600	0.3	3.4	76	8090
TP816A-02YS(L)2Y-StIII-Bd-750P08	750	0.3	3.8	84.5	10065