



CABLE STRUCTURE

CONDUCTOR & INSULATION

Power Cores

| | |
|------------|---|
| Conductor | Tinned copper conductor DIN VDE 0295 class 5. |
| Insulation | Based on 3G13 - EPR rubber and semi conductive rubber compound. |

CONTROL CORES + MONITORING PE CORE(S)

| | |
|------------|---|
| Conductor | Tinned copper conductor DIN VDE 0295 class 5. |
| Insulation | 3G13 type EPR compound and semi conductive rubber compound. |

Lay Up

Three power cores laid-up, with double concentric control cores and monitoring core in the outer interstices. If there are 3 control cores, the monitoring core is concentrically wrapped over insulation of control cores

Inner Sheath

GM1b type EPR compound

Screen / Armour

Flexible - pliable armour in helix of tinned copper and galvanised steel wires

Outer Sheath

Heavy duty elastomer 5GMS type rubber compound. Yellow or Red.

PRODUCTION AND TEST STANDARDS

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|-----------------------------|--|
| Construction | DIN VDE 0250-812 |
| General Requirements | DIN VDE 0250-1 |
| Guide to Use | DIN VDE 0298-3 |
| Electrical Tests | DIN VDE 0472-501, 503, 508 |
| Non-Electrical Tests | DIN VDE 0472-401, 402, 602, 303, 615 |
| Under Fire Conditions Tests | DIN VDE 0472-803, 804 |
| Flame Retardant | VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 |
| Oil Resistant | HD/EN/IEC 60811-2-1, DIN VDE 0473-811-2-1 |

OPERATING CHARACTERISTICS

| | |
|---------------------------------------|-----------------------------------|
| Rated Voltage | 0,6/1 kV |
| Max. Permissible Operating Voltage AC | 0,7/1,2 kV |
| Max. Permissible Operating Voltage DC | 0,9/1,8 kV |
| AC Test Voltage | 3 kV |
| AC Test Voltage (For Control Cores) | 2 kV |
| Min Bending Radius | Acc. to DIN VDE 0298 part 3 |
| Min. Distance With S-Type | |
| Directional Changes | 20 x D |
| Current Carrying Capacity | According to DIN VDE 0298, Part 4 |
| Working Temperature | |
| Fixed | -40°C ... +80°C |
| Mobile | -25°C ... +80°C |
| Max. Tensile Load of cable | 15 N/mm ² |



Ozone Resistant



Cold Resistant



Tear Resistant



UV Resistant



Weather Resistant



Moisture Resistant



Ex-Proof

Application

It is used for connection of mobile machines with very high mechanical load, especially in mines for coal cutting and loading machines as well as for supplying appliances and devices and auxiliary electrical circuits Concentric phase monitoring screen and overall concentric earth conductor facilitate in connection with a suitable monitoring equipment monitoring of the cable from standpoint of insulation faults and damages that are caused by external effects.

| Cross Section (mm ²) | Overall Diameter Min - Max (mm) | Approximate weight (kg / km) |
|---|---------------------------------------|------------------------------------|
| 3 x 16/16 KON + (2x1,5 St+1,5 ÜL) | 35.0 - 38.0 | 2150 |
| 3 x 25/16 KON + (2x1,5 St+1,5 ÜL) | 41.0 - 46.0 | 3000 |
| 3 x 35/16 KON + (2x1,5 St+1,5 ÜL) | 42.0 - 47.0 | 3400 |
| 3 x 70/35 KON + (2x1,5 St+1,5 ÜL) | 46.0 - 51.0 | 4300 |
| 3 x 70/35 KON + (2x1,5 St+1,5 ÜL) | 52.0 - 56.0 | 5600 |
| 3 x 95/50 KON + (2x1,5 St+1,5 ÜL) | 58.0 - 62.0 | 7100 |
| 3 x 25/16 KON + 3 x (1,5 ST KON/1,5 ÜL KON) | 42.0 - 46.0 | 3130 |
| 3 x 35/16 KON + 3 x (1,5 ST KON/1,5 ÜL KON) | 43.0 - 47.0 | 3610 |
| 3 x 50/35 KON + 3 x (1,5 ST KON/1,5 ÜL KON) | 49.0 - 53.0 | 4580 |
| 3 x 70/35 KON + 3 x (1,5 ST KON/1,5 ÜL KON) | 52.0 - 56.0 | 5920 |
| 3 x 95/50 KON + 3 x (1,5 ST KON/1,5 ÜL KON) | 60.0 - 64.0 | 7400 |