

PROTOMONT Mine Hoist Cables for Underground Hoists



BUS_075.tif

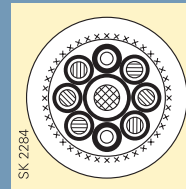
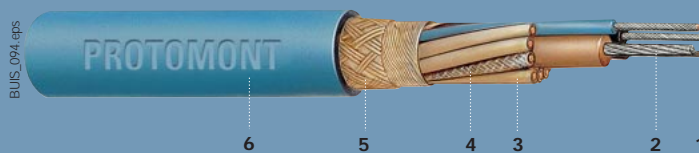
BUS_17a.tif



Selection and dimensioning criteria			Refer to Section 4 for further details →	
	Type	PROTOMONT	Page	4/2
	Type designation	NTMTWÖU	Page	4/3
	Approvals/standards	DIN VDE 0250, Part 813, MSHA P-189-3	Page	4/4
	Application (refer also to DIN VDE 0298, Part 3)	Used as suspended cable for intrinsically safe control of user-operated mine hoists (lifts) with telephonic connection in underground mines. PROTOMONT rubber-sheathed flexible cables can be operated as self-supported cables of length up to 200 m with a safety factor of 5.	Page	4/6
Electrical parameters	Rated voltage	$U_0/U = 0.6/1$ kV	Pages to	4/14
	Maximum permissible operating voltage in AC systems	0.7/1.2 kV		4/17
	Maximum permissible operating voltage in DC systems	0.9/1.8 kV		
	AC test voltage	4 kV		
	Current-carrying capacity	According to DIN VDE 0298, Part 4		
Thermal parameters	Ambient temperature		Pages to	4/18
	<ul style="list-style-type: none"> ● Fully flexible operation - 25 °C to + 80 °C ● Fixed installation - 40 °C to + 80 °C 			4/19
	Maximum permissible operating temperature of the conductor	+ 90 °C		
	Short-circuit temperature of the conductor	200 °C		
Mechanical parameters	Tensile load	Up to 15 N/mm ² Suspension length max. 200 m with a safety factor of 5	Page	4/20
	Minimum bending radii	DIN VDE 0298, Part 3	Page	4/22
	Travel speed	Max. 1.5 m/s	Page	4/23
Chemical parameters	Resistance to oil	Given to DIN VDE 0473, Part 811-2-1, Para. 10	Page	4/28
	Behaviour in case of fire	Given to DIN VDE 0482, Part 265-2-1, Para. 10		
	Weather resistance	Unrestricted use outdoors and indoors, resistant to ozone and moisture		

PROTOMONT Mine Hoist Cables for Underground Hoists

- 1 Conductor
- 2 Steel support element
- 3 Insulation
- 4 Shielded telephone-type pilot
- 5 Anti-torsion braid
- 6 Outer sheath



Design features

Refer to Section 4 for further details →

Type	PROTOMONT	Page	4/2
Conductor (refer also to DIN VDE 0295)	Finely stranded copper conductor, tinned, Class 5	Page	4/29
Insulation (refer also to DIN VDE 0207, Part 20)	PROTOLON, basic material EPR, compound type: 3GI3	Page	4/32
Core identification	Coloured, colours: black, blue, brown		
Core arrangement	Concentrically laid-up around a central steel support element		
Anti-torsion braid	Textile braid	Page	4/39
Outer sheath (refer also to DIN VDE 0207, Part 21)	PROTOFIRM, basic material PCP, compound type: 5GM5, colour blue	Page	4/32
Marking	(Year of manufacture) <VDE> PROTOMONT NTMTWÖU (number of cores) x (cross-section)	Page	4/40

Selection and ordering data

Number of cores and nominal cross-section mm ²	Order No.	Conductor diameter (Max. value) mm	Overall diameter of cable (guidance value)		Max. free suspension length m	Conductor resistance at 20 °C Ω/km	Current-carrying capacity at 30 °C A	Permissible short-circuit current (1s) kA	Approx. net weight for 1000 m kg
			(Min. value) mm	(Max. value) mm					
NTMTWÖU									
8 x 2.5ST + 2 x 1FM(C)	5DM3 002	2.6	21.0	24.0	200	8.21	30.0	0.305	760
8 x 2.5ST + 10 x (2x1FM)C	5DM3 005	2.6	34.0	37.5	200	8.21	30.0	0.305	1450
14 x 2.5ST + 6 x 1FM(C)	5DM3 001	2.6	27.0	31.0	200	8.21	30.0	0.305	1200
18 x 2.5ST + 6 x 1FM(C)	5DM3 004	2.6	38.0	42.0	200	8.21	30.0	0.305	1800