



CORDAFLEX(SMK)-V
(N)SHTÖU
Spreader Reeling Cable



Technical Data

	Type	CORDAFLEX (SMK)-V
	Type designation	(N)SHTÖU-J/-O
	Approvals/ standards	DIN VDE 0250, Part 814; GOST R
	Application	Flexible reeling cable for very high stresses and vertical reeling operation (spreader application).
Electrical parameters	Rated voltage	U ₀ /U = 0.6/1 kV
	Maximum permissible operating voltage in AC systems	U ₀ /U = 0.7/1.2 kV
	Maximum permissible operating voltage in DC systems	U ₀ /U = 0.9/1.8 kV
	AC test voltage	3.5 kV, 5 min
	Current-carrying capacity	According to DIN VDE 0298, Part 4
	Bus compatibility	with special elements: ASI-Bus, Profibus, CAN-Bus, Industrial Ethernet alternativ: Fibre optics for transmitting all bus protocols
Thermal parameters	Ambient temperature - Fully flexible operation - Fixed installation	-35°C to +80°C -50°C to +80°C
	Maximum permissible operating temperature of the conductor	90°C
	Short-circuit temperature of the conductor	200°C
Mechanical parameters	Tensile load	increased tensile load through additional support elements (see chart)
	Torsional stresses	+/- 50°/m
	Minimum bending radii	According to DIN VDE 0298, Part 3
	Minimum distance with S-type directional changes	20xD
	Hoist (vertical reeling)	Up to 240 m/min. It is recommended to consult the manufacturer at speeds beyond 240 m/min.
	Additional tests	Reversed bending test, roller bending test, torsional stress test
Chemical parameters	Resistance to oil	DIN VDE 0473, Part 811-2-1, Para. 10
	Weather resistance	Unrestricted use outdoors and indoors, resistant to ozone, UV and moisture
	Water compatibility	Given and verified in long-term tests



Design features

Type	CORDAFLEX (SMK)-V
Conductor	Electrolytic copper tinned, very finely stranded class FS
Insulation	special compound provides very high stability, best insulation resistance and excellent gliding characteristic
Shield for individually shielded cores and twisted and shielded pairs	Braid screen made of tinned copper wires Transfer impedance optimized at 30 MHz Surface covered: at least 60%: for shielded cores at least 80%: for twisted pairs
Core identification	Best identification as a result of black colored insulation with light printed numbers, earth-conductor green-yellow colored
Core arrangement	Laid-up in a maximum of 3 layers
Support element	Central Aramide support element to increase the loading capability, the kN value designates the breaking load of the support element
Sheath system	- PROTOFIRM: inner sheath high grade special compound based on PCP, color: yellow - Anti-torsion braid Reinforced braid made of polyester threads, in a vulcanized bond between the sheath. Resulting in a high strength of the sheath system. - PROTOFIRM special: outer sheath high grade special compound with best performance against abrasion and top tear resistant characteristics; based on PCP, color: yellow
Marking	CORDAFLEX (SMK)-V (N)SHTÖU-J/-O (number of cores)x(cross-section)

Selection and ordering data

Number of cores and nominal cross-section	Order No.	Main conductor diameter	Overall diameter of cable Min. value	Overall diameter of cable Max. value	Approx. net weight for 1000 m	Maximum permissible tensile force
* stock items		[mm]	[mm]	[mm]	[kg/km]	[N]

CORDAFLEX (SMK)-V (N)SHTÖU control cables

49x1 (20kN) *	5DH3 291	1,3	26,6	29,6	1260	3200
24x2,5 (20kN) *	5DH3 295	2,0	26,2	29,2	1340	3600
30x2,5 (20kN) *	5DH3 296	2,0	29,4	32,4	1680	4100
44x2,5 (20kN) *	5DH3 298	2,0	34,1	37,1	2280	5100
56x2,5 (20kN) *	5DH3 290	2,0	40,1	43,1	3030	6000

CORDAFLEX (SMK)-V (N)SHTÖU composite control cables

42x12 AWG+3LWL (20 kN)	5DH3 282	2,0	38,7	41,7	2940	4950
45x2,5+(4x0,5)C	5DH3 286	2,0	42,9	45,9	2830	5175

Special core design on request!