

TROMMELFLEX (K) NSHTOEU

Low voltage reeling cable



Application

Flexible low voltage reeling cable for application under medium mechanical stresses.

Global data

Brand	TROMMELFLEX (K)
Type designation	NSHTOEU
Standard	DIN VDE 0250-814

Design features

Conductor	Tinned copper, flexible class 5 acc. to DIN EN 60228 / DIN VDE 0295
Insulation	Rubber compound type 3GI3 acc. to DIN VDE 0207-20
Core identification	Up to 5 cores: colored in accordance with DIN VDE 0293-308 From 6 cores: black with white numbers
Core arrangement	Central filler, plastic or textile, if necessary covered with rubber. Cores twisted at short length of lay
Inner sheath	Rubber compound type 5GM3 acc. to DIN VDE 0207-21
Reinforcement	Wide-meshed polyester braid, embedded in the sheath
Outer sheath	Extruded rubber compound type 5GM5 acc. to DIN VDE 0207-21. Abrasion and tear resistant, oil and flame resistant; Colour: black
Marking	White imprint: NSHTOEU-J (number of cores) x (cross-section) TROMMELFLEX(K) (meter marking)

Electrical parameters

Rated voltage	0.6/1 kV (600/1000V)
Max. permissible operating voltage AC	0.7/1.2 kV
Max. permissible operating voltage DC	0.9/1.8 kV
AC Test Voltage	2.5 kV (5 Min.)
Current Carrying Capacity description	Acc. to DIN VDE 0298-4

Chemical parameters

Resistance to fire	Acc. to IEC 60332-1 (EN 50265-2-1)
Resistance to oil	Acc. to EN 60811-404 - ASTM No. 2: 24h at 100 °C

Thermal parameters

Max. permissible temperature at conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Ambient temperature for fixed installation	min -40 °C ; max +80 °C
Ambient temperature in fully flexible operation	min -25 °C ; max +80 °C

Mechanical parameters

Max. tensile load on the conductor	15 N/mm ²
Torsional stress	± 50 °/m
Min. bending radius	Acc. to DIN VDE 0298 part 3
Travel speed	- Reeling operation: up to 120 m/min

Number of cores x cross section	Part number	Conductor diameter max. mm	Outer diameter min. mm	Outer diameter max. mm	Bending radius free moving min. mm	Weight (ca.) kg/km	Permissible tensile force max. N	Conductor resistance at 20°C max. Ω/km	Current carrying capacity (1) A	Short Circuit Current (conductor) kA
NSHTOEU-J Control cables										
7x1,5		1.5	16.2	17.5	105	380	158	13.7	23	0.18
12x1,5		1.5	20	21.4	128	550	270	13.7	23	0.18
18x1,5		1.5	22.4	23.8	143	730	405	13.7	23	0.18
24x1,5		1.5	25.4	27	162	950	540	13.7	23	0.18
30x1,5		1.5	27.8	29.4	176	1140	675	13.7	23	0.18
42x1,5		1.5	33.3	35.3	212	1560	945	13.7	23	0.18
7x2,5		2	18.5	19.7	118	510	263	8.21	30	0.31
12x2,5		2	22.7	24.0	145	740	450	8.21	30	0.31
18x2,5	20162064	2	25.8	27.4	164	1020	675	8.21	30	0.31
24x2,5		2	30.1	32.1	193	1410	900	8.21	30	0.31
30x2,5		2	31.9	33.9	203	1570	1125	8.21	30	0.31
NSHTOEU-J power cables, three core design										
3x50+3x25/3		9.6	41	45	270	2850	2250	0.39	202	6.1
3x70+3x35/3		11.1	43	47	282	3860	3150	0.28	250	8.54
3x95+3x50/3		12.6	48	52	312	4720	4275	0.21	301	11.59
3x120+3x70/3		13.7	50.5	55.5	333	5820	5400	0.16	352	14.64
3x150+3x70/3		16	57	62	372	6535	6750	0.13	404	18.3
3x185+3x95/3		17.7	63	68	408	8890	8325	0.11	461	22.57
3x240+3x95/3		20.2	71	76	456	12040	10800	0.08	540	29.28
NSHTOEU-J power cables, four core design										
4x1,5		1.5	12.2	13.4	80	210	90	13.7	23	0.18
4x2,5		2	15.3	16.5	99	320	150	8.21	30	0.31
4x4		2.5	17.0	18.3	110	430	240	5.09	41	0.49
4x6		3	18.4	19.6	118	530	360	3.39	53	0.73
4x10		4.1	22.8	24.2	145	840	600	1.95	74	1.22
4x16		5.7	27.5	29.1	175	1190	960	1.24	99	1.95
4x25		7.2	33.5	35.5	213	1940	1500	0.8	131	3.05
4x35		8.2	35.9	38.3	230	2220	2100	0.57	162	4.27
NSHTOEU-J power cables, five core design										
5x1,5		1.5	13.4	14.6	88	250	113	13.7	23	0.18
5x2,5	20160147	2	16.2	17.5	105	380	188	8.21	30	0.31
5x4		2.5	18.2	19.5	117	490	300	5.09	41	0.49
5x6		3	20.4	21.8	131	650	450	3.39	53	0.73
5x10		4.1	24.4	26	156	1190	750	1.95	74	1.22
5x16		5.7	29.4	31.4	188	1460	1200	1.24	99	1.95
5x25		7.2	36	38.4	230	2130	1875	0.8	131	3.05
5x35		8.2	40.1	42.6	256	2810	2625	0.57	162	4.27

(1) Nominal current carrying capacity for rubber cables laid on a surface, at 30°C ambient temperature (see also VDE 0298-4, Table 15). For articles without part number the values shown are approximate, and need to be confirmed in case of order.