

## Halogen free flame retardant or/and mud resistant LV power cable



### RFOU/TFOU

**NEK TS 606 Type:**  
 P1---Non mud resistant  
 P1/P8---Mud resistant

**Rated voltage**  
 0.6/1(1.2)kV---P1, P1/P8

**Operating temperature:90℃**

### Standards applied

- NEK TS 606 – Design
- IEC 60092-353 – Design
- IEC 60228 Class2 – Conductor
- IEC 60092-360 – Insulation、 Sheath
- IEC 60332-1 – Flame Retardant
- IEC 60332-3-22 – Flame Retardant
- IEC 60754 – Halogen Free
- IEC 61034 – Low Smoke





### Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.




### Construction

Components	Code	Material/Description
Conductor		Stranded tinned annealed copper (STC), IEC 60228 Class 2
Insulation	R	EPR, IEC 60092-360
	T	XLPE, IEC 60092-360
Inner covering	F	Halogen-free flame retardant compound
Armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free flame retardant or/and mud resistant thermoset compound (SHF2 or SHF Mud)
Outer sheath color		Black





RFOU 0.6/1kV----P1, P1/P8

No. of cores& Cross section mm <sup>2</sup>	Overall diameter		Approx. weight kg/km	Current ratings at 45°C A	Demonstration	
	Nom.	±				
	mm					
1 x 1	8.8	0.5	105	18	 Example Type: RFOU P1/P8 Size: 1x95mm	
1 x 1.5	9.1	0.5	115	23		
1 x 2.5	9.5	0.5	132	30		
1 x 4	10.1	0.6	156	40		
1 x 6	10.6	0.6	183	52		
1 x 10	11.8	0.6	244	72		
1 x 16	12.8	0.7	316	96		
1 x 25	15.2	0.8	477	127		
1 x 35	16.5	0.9	595	157		
1 x 50	18.3	1.0	759	196		
1 x 70	20.4	1.1	1001	242		
1 x 95	23.2	1.1	1333	293		
1 x 120	25.2	1.3	1623	339		
1 x 150	27.2	1.3	1938	389		
1 x 185	29.8	1.3	2379	444		
1 x 240	33.5	1.5	3056	522		
1 x 300	37.0	1.7	3823	601		
2 x 1	12.5	0.7	209	15		 Example Type: RFOU P1/P8 Size: 2x70mm
2 x 1.5	13.1	0.7	234	20		
2 x 2.5	14.6	0.8	313	26		
2 x 4	15.8	0.8	378	34		
2 x 6	17.0	0.9	454	44		
2 x 10	19.0	1.0	598	61		
2 x 16	21.5	1.1	799	82		
2 x 25	25.5	1.3	1153	108		
2 x 35	28.3	1.3	1463	133		
2 x 50	31.9	1.5	1892	167		
2 x 70	36.9	1.7	2623	206	 Example Type: RFOU P1/P8 Size: 2x50+1x25mm	
2 x 95	42.3	1.9	3495	249		
2 x 120	45.7	2.1	4195	288		
2x1+E	13.1	0.7	212	13		
2x1.5+E	13.7	0.7	277	16		
2x2.5+E	15.3	0.8	327	21		
2x4+E	16.6	0.9	405	28		
2x6+E	17.8	0.9	530	36		
2x10+E	20.3	1.1	723	50		
2x16+E	22.9	1.1	982	67		
3 x 1	13.1	0.7	212	13	 Example Type: RFOU P1/P8 Size: 3x120mm	
3 x 1.5	13.7	0.7	277	16		
3 x 2.5	15.3	0.8	327	21		
3 x 4	16.6	0.9	405	28		
3 x 6	17.8	0.9	530	36		
3 x 10	20.3	1.1	723	50		
3 x 16	22.9	1.1	982	67		
3 x 25	26.9	1.3	1417	89		
3 x 35	30.1	1.5	1844	110		
3 x 50	34.2	1.5	2397	137		
3 x 70	39.3	1.7	3314	169		
3 x 95	45.1	2.1	4440	205		
3 x 120	48.9	2.1	5385	237		
3 x 150	54.1	2.3	6563	272		
3 x 185	59.4	2.5	8063	311		

RFOU 0.6/1kV----P1, P1/P8

No. of cores& Cross section mm <sup>2</sup>	Overall diameter		Approx. weight kg/km	Current ratings at 45 °C A	Demonstration
	Nom.	±			
mm					
3x1+E	14.7	0.8	306	13	 <p>Example Type: RFOU P1/P8 Size: 3x50+1x25mm<sup>2</sup></p>
3x1.5+E	15.4	0.8	347	16	
3x2.5+E	16.4	0.9	415	21	
3x4+E	18.0	0.9	523	28	 <p>Example Type: RFOU P1/P8 Size: 4x70mm<sup>2</sup></p>
3x6+E	19.2	1.0	644	36	
3x10+E	22.1	1.1	898	50	
3x16+E	25.2	1.3	1225	67	
4 x 1	14.7	0.8	306	13	
4 x 1.5	15.4	0.8	347	16	
4 x 2.5	16.4	0.9	415	21	
4 x 4	18.0	0.9	523	28	
4 x 6	19.2	1.0	644	36	
4 x 10	22.1	1.1	898	50	
4 x 16	25.2	1.3	1225	67	 <p>Example Type: RFOU P1/P8 Size: 19x2.5mm<sup>2</sup></p>
4 x 25	29.7	1.3	1781	89	
4 x 35	33.4	1.5	2325	110	
4 x 50	38.3	1.7	3137	137	
4 x 70	43.3	1.9	4190	169	
4 x 95	49.8	2.1	5651	205	
4 x 120	54.3	2.3	6897	237	
4 x 150	59.7	2.5	8377	272	
5 x 1	15.6	0.8	321	11	
7 x 1	16.6	0.9	387	9	
10 x 1	20.5	1.1	519	8	
12 x 1	21.3	1.1	578	8	
14 x 1	22.1	1.1	645	7	
16 x 1	23.3	1.1	705	7	
19 x 1	24.5	1.1	797	7	
24 x 1	28.3	1.3	990	6	
27 x 1	28.8	1.3	1061	6	
30 x 1	29.9	1.3	1154	6	
33 x 1	31.1	1.5	1249	6	
37 x 1	32.1	1.5	1351	5	
5 x 1.5	16.4	0.9	364	13	
7 x 1.5	17.7	0.9	443	12	
10 x 1.5	21.9	1.1	608	11	
12 x 1.5	22.7	1.1	681	10	
14 x 1.5	23.7	1.1	750	10	
16 x 1.5	24.9	1.1	846	9	
19 x 1.5	26.2	1.3	945	9	
24 x 1.5	30.3	1.5	1191	8	
27 x 1.5	31.1	1.5	1281	8	
30 x 1.5	32.1	1.5	1378	7	
33 x 1.5	33.3	1.5	1509	7	
37 x 1.5	34.6	1.5	1637	7	
5 x 2.5	17.7	0.9	449	18	
7 x 2.5	18.9	1.0	545	16	
10 x 2.5	23.7	1.1	763	14	
12 x 2.5	24.6	1.1	863	13	
14 x 2.5	25.8	1.3	968	12	
16 x 2.5	27.0	1.3	1067	12	
19 x 2.5	28.4	1.3	1216	11	
24 x 2.5	33.1	1.5	1547	10	
27 x 2.5	33.9	1.5	1672	10	
30 x 2.5	35.0	1.5	1808	10	
33 x 2.5	36.7	1.7	2066	9	
37 x 2.5	38.4	1.7	2263	9	

TFOU 0.6/1kV----P1, P1/P8

No. of cores& Cross section	Overall diameter		Approx. weight	Current ratings at 45°C	Demonstration
	Nom.	±			
mm <sup>2</sup>	mm		kg/km	A	
1 x 1	8.0	0.5	90	18	 Example Type: TFOU P1/P8 Size: 1x95mm <sup>2</sup>
1 x 1.5	8.3	0.5	100	23	
1 x 2.5	8.9	0.5	120	30	
1 x 4	9.5	0.5	143	40	
1 x 6	10.0	0.5	169	52	
1 x 10	11.0	0.6	223	72	
1 x 16	12.2	0.7	299	96	
1 x 25	14.6	0.8	455	127	
1 x 35	15.9	0.8	570	157	
1 x 50	17.5	0.9	722	196	
1 x 70	19.8	1.0	968	242	
1 x 95	21.9	1.1	1259	293	
1 x 120	24.1	1.1	1552	339	
1 x 150	26.3	1.3	1869	389	
1 x 185	28.8	1.3	2291	444	
1 x 240	32.1	1.5	2925	522	
1 x 300	35.4	1.7	3608	601	
2 x 1	11.1	0.6	177	15	 Example Type: TFOU P1/P8 Size: 2x70mm <sup>2</sup>
2 x 1.5	11.9	0.6	200	20	
2 x 2.5	12.7	0.7	239	26	
2 x 4	14.6	0.8	336	34	
2 x 6	15.6	0.8	402	44	
2 x 10	17.8	0.9	548	61	
2 x 16	20.1	1.1	734	82	
2 x 25	24.1	1.1	1073	108	
2 x 35	26.9	1.3	1375	133	
2 x 50	30.1	1.5	1778	167	
2 x 70	34.7	1.5	2407	206	
2 x 95	39.7	1.7	3253	249	
2 x 120	43.7	1.9	4013	288	
2x1+E	11.9	0.6	180	13	
2x1.5+E	12.5	0.7	206	16	
2x2.5+E	13.4	0.7	252	21	
2x4+E	15.4	0.8	356	28	
2x6+E	16.5	0.9	468	36	
2x10+E	18.8	1.0	653	50	
2x16+E	21.5	1.1	903	67	
3 x 1	11.9	0.6	180	13	 Example Type: TFOU P1/P8 Size: 2x50+1x25mm <sup>2</sup>
3 x 1.5	12.5	0.7	206	16	
3 x 2.5	13.4	0.7	252	21	
3 x 4	15.4	0.8	356	28	
3 x 6	16.5	0.9	468	36	
3 x 10	18.8	1.0	653	50	
3 x 16	21.5	1.1	903	67	
3 x 25	25.7	1.3	1332	89	
3 x 35	28.8	1.3	1722	110	
3 x 50	32.2	1.5	2226	137	
3 x 70	37.9	1.7	3167	169	
3 x 95	42.6	1.9	4169	205	
3 x 120	46.9	2.1	5135	237	
3 x 150	51.8	2.3	6251	272	
3 x 185	57.4	2.5	7760	311	
					 Example Type: TFOU P1/P8 Size: 3x120mm <sup>2</sup>

TFOU 0.6/1kV----P1, P1/P8

No. of cores& Cross section mm <sup>2</sup>	Overall diameter		Approx. weight kg/km	Current ratings at 45°C A	Demonstration
	Nom.	±			
3 x1+E	12.5	0.7	222	13	Example Type: TFOU P1/P8 Size: 3x50+1x25mm <sup>2</sup>
3x1.5+E	13.2	0.7	256	16	
3x2.5+E	14.9	0.8	359	21	
3x4+E	16.4	0.9	451	28	Example Type: TFOU P1/P8 Size: 4x70mm <sup>2</sup>
3x6+E	17.8	0.9	567	36	
3x10+E	20.5	1.1	802	50	
3x16+E	23.3	1.1	1117	67	
4 x 1	12.5	0.7	222	13	
4 x 1.5	13.2	0.7	256	16	
4 x 2.5	14.9	0.8	359	21	
4 x 4	16.4	0.9	451	28	
4 x 6	17.8	0.9	567	36	
4 x 10	20.5	1.1	802	50	
4 x 16	23.3	1.1	1117	67	
4 x 25	28.0	1.3	1659	89	
4 x 35	31.6	1.5	2172	110	
4 x 50	35.7	1.7	2848	137	
4 x 70	41.8	1.9	4023	169	
4 x 95	46.6	2.1	5290	205	
4 x 120	51.8	2.3	6550	237	
4 x 150	57.2	2.5	8011	272	
5 x 1	13.3	0.7	233	11	Example Type: TFOU P1/P8 Size: 19x2.5mm <sup>2</sup>
7 x 1	14.8	0.8	313	9	
10 x 1	17.8	0.9	416	8	
12 x 1	18.3	1.0	451	8	
14 x 1	19.0	1.0	492	7	
16 x 1	20.1	1.1	546	7	
19 x 1	20.9	1.1	603	7	
24 x 1	24.3	1.1	762	6	
27 x 1	24.7	1.1	824	6	
30 x 1	25.7	1.3	881	6	
33 x 1	26.5	1.3	941	6	
37 x 1	27.3	1.3	1014	5	
5 x 1.5	14.8	0.8	310	13	
7 x 1.5	15.7	0.8	364	12	
10 x 1.5	19.0	1.0	488	11	
12 x 1.5	19.5	1.0	545	10	
14 x 1.5	20.6	1.1	598	10	
16 x 1.5	21.7	1.1	663	9	
19 x 1.5	22.8	1.1	749	9	
24 x 1.5	26.3	1.3	931	8	
27 x 1.5	26.8	1.3	998	8	
30 x 1.5	27.6	1.3	1085	7	
33 x 1.5	28.7	1.3	1161	7	
37 x 1.5	29.6	1.3	1256	7	
5 x 2.5	15.9	0.8	383	18	
7 x 2.5	17.1	0.9	468	16	
10 x 2.5	21.1	1.1	644	14	
12 x 2.5	21.7	1.1	714	13	
14 x 2.5	22.8	1.1	800	12	
16 x 2.5	23.8	1.1	881	12	
19 x 2.5	25.0	1.1	1013	11	
24 x 2.5	28.9	1.3	1248	10	
27 x 2.5	29.4	1.3	1347	10	
30 x 2.5	30.6	1.5	1483	10	
33 x 2.5	31.8	1.5	1596	9	
37 x 2.5	33.0	1.5	1767	9	