

# Rubber insulated wire NSGAFÖU acc. to VDE 0250 T. 602



<b>conductor material:</b>	tinned copper
<b>conductor construction:</b>	fine stranded, class 5
<b>insulation:</b>	rubber (EPR) 3GI3, halogen-free
<b>sheathing material:</b>	rubber (CR) 5GM5
<b>flame retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>ozone resistant:</b>	yes
<b>maximum temperature at conductor:</b>	90 °C
<b>max. operating temperature, fixed:</b>	-40 - +80 °C
<b>temperature, moved/during installation:</b>	-25 - +80 °C

	<i>NSGAFÖU 1,8/3 kV</i>	<i>NSGAFÖU 3,6/6 kV</i>
<b>nominal voltage U<sub>0</sub>:</b>	1,8 kV	3,6 kV
<b>nominal voltage U:</b>	3 kV	6 kV
<b>test voltage:</b>	6 kV	11 kV

**Application:** This wire is designed for application in dry rooms, busses and railborn vehicles. If used in distribution or switching appliances the wire is considered to be short circuit proof. It is resistant against most oils and grease.



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

Table: Technical characteristics NSGAFÖU 1,8/3 kV

p/n	part name	D <sub>I</sub> [mm]	R <sub>I</sub> [Ω/km]	I <sub>bl</sub> [A]	R <sub>bb</sub> [mm]	R <sub>bv</sub> [mm]	D <sub>A</sub> [mm]	F <sub>ZV</sub> [N]	Cu [kg/km]	G [kg/km]
050194	NSGAFÖEU 01X1,5 1,8/3 kV SW	1,8	13,7	30	27,5	22	5,5	23	14,4	60
050178	NSGAFÖEU 01X2,5 1,8/3 kV SW	2,4	8,21	41	29,5	23,6	6,2	38	24	70
050159	NSGAFÖEU 01X4 1,8/3 kV SW	3	5,09	55	32	25,6	6,7	60	38	90
050165	NSGAFÖEU 01X6 1,8/3 kV SW	3,9	3,39	70	35	28	7,2	90	58	120
050172	NSGAFÖEU 01X10 1,8/3 kV SW	5,1	1,95	98	42	33,6	8,7	150	96	180
050183	NSGAFÖEU 01X16 1,8/3 kV SW	6,3	1,24	132	46	36,8	10	240	154	250
050184	NSGAFÖEU 01X25 1,8/3 kV SW	7,8	0,795	176	57,5	46	12	375	240	390
050163	NSGAFÖEU 01X35 1,8/3 kV SW	9,2	0,565	218	64	51,2	13	525	336	470

p/n	part name	D <sub>I</sub> [mm]	R <sub>I</sub> [Ω/km]	I <sub>bl</sub> [A]	R <sub>bb</sub> [mm]	R <sub>bv</sub> [mm]	D <sub>A</sub> [mm]	F <sub>zv</sub> [N]	Cu [kg/km]	G [kg/km]
050164	NSGAFOEU 01X50 1,8/3 kV SW	11	0,393	276	71,5	57,2	15	750	480	625
050182	NSGAFOEU 01X70 1,8/3 kV SW	13,1	0,277	347	80	64	17	1050	672	880
050208	NSGAFOEU 01X95 1,8/3 kV SW	15,1	0,21	416	91	72,8	19,5	1425	912	1190
050244	NSGAFOEU 01X120 1,8/3 kV SW	17	0,164	488	99,5	79,6	21	1800	1152	1430
050241	NSGAFOEU 01X150 1,8/3 kV SW	19	0,132	566	109	87,2	23	2250	1440	1750
050245	NSGAFOEU 01X185 1,8/3 kV SW	21	0,108	644	119	95,2	26	2775	1776	2160
050246	NSGAFOEU 01X240 1,8/3 kV SW	24	0,0817	775	133,5	106,8	28	3600	2304	2640
050247	NSGAFOEU 01X300 1,8/3 kV SW	27	0,0654	898	190	152	31	4500	2880	3178
050471	NSGAFOEU 01X400 1,8/3 kV SW	31	0,0486	1060	202	162	40,5	6000	3840	4200
050472	NSGAFOEU 01X500 1,8/3 kV SW	35	0,0384	1250	210	168	42	7500	4800	5500

I<sub>bl</sub> - current rating for installation in free air with distance to wall and next cable > D acc. to VDE 0298-4 table 15 col. 2.

Table: Technical characteristics NSGAFÖU 3,6/6 kV

p/n	part name	D <sub>I</sub> [mm]	R <sub>I</sub> [Ω/km]	I <sub>bl</sub> [A]	R <sub>bb</sub> [mm]	R <sub>bv</sub> [mm]	D <sub>A</sub> [mm]	F <sub>zv</sub> [N]	Cu [kg/km]	G [kg/km]
051081	NSGAFOEU 01X150 3,6/6 kV RT	19	0,132	546	305	183	30,5	2250	1440	1690
050856	NSGAFOEU 01X185 3,6/6 kV RT	21	0,108	622	331	199	33,1	2775	1776	2225

I<sub>bl</sub> - current rating for installation in free air with distance to wall and next cable > D acc. to VDE 0298-4 table 15 col. 2.

DI	diameter of conductor
RI	conductor resistance
I <sub>bl</sub>	ampacity (in air) (30°C)
R <sub>bb</sub>	bending radius, moved application
R <sub>bv</sub>	bending radius, fixed installation
DA	outer diameter
F <sub>zv</sub>	tensile strength (during installation)
Cu	copper weight (ger)
G	weight