

**Conductoare din otel-aluminiu, conform SF 35/1999**  
**ACSR, Aluminium Conductors Steel reinforced, according to SF 35/1999**

Tip conductor	Sectiune			Otel		Aluminiu		Conductor		Forta de rupere nominala	Rezistenta electrica la 20 °C	Capacitatea de transport a curentului
	Aluminiu	Otel	Totala	Numar sarme	Diametru	Numar sarme	Diametru	Diametru	Masa			
Code	Cross sectional area			Steel		Aluminium		ACSR		Breaking Load	Resistance at 20 °C	Current carrying capacity
	AL.	ST.	ACSR	No. of wires	Diameter	No. of wires	Diameter	Diameter	Weight			
	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>		mm		mm	mm	kg			
16/2.5	15.27	2.54	17.8	1	1.80	6	1.80	5.40	61.7	5800	1.8793	145
25/4	23.86	3.98	27.8	1	2.25	6	2.25	6.75	96.4	8950	1.2028	192
35/6	34.35	5.73	40.1	1	2.70	6	2.70	8.10	138.8	12370	0.8353	243
50/8	48.25	8.04	56.3	1	3.20	6	3.20	9.60	195.0	16810	0.5946	302
70/11	68.05	11.34	79.4	1	3.80	6	3.80	11.40	275.0	23360	0.4217	376
70/12	66.16	11.56	77.7	7	1.45	26	1.80	11.55	272.6	25760	0.4364	371
95/15	90.05	14.97	105.0	7	1.65	26	2.10	13.35	365.6	33720	0.3206	451
127/7	127.2	7.07	134.3	1	3.00	18	3.00	15.00	405.4	29690	0.2264	556
120/21	122.6	20.91	143.5	7	1.95	26	2.45	15.65	501.8	45910	0.2356	551
95/55	96.51	56.30	152.8	7	3.20	12	3.20	16.00	706.4	77850	0.2992	492
150/25	148.8	24.25	173.1	7	2.10	26	2.70	17.10	600.5	53670	0.1940	623
185/32	183.8	31.67	215.4	7	2.40	26	3.00	19.20	754.9	67340	0.1571	717
160/95	163.3	97.03	260.4	19	2.55	52	2.00	20.75	1213.2	140840	0.1773	690
240/40	236.1	40.08	276.1	7	2.70	26	3.40	21.70	965.0	84640	0.1223	842
300/50	294.9	49.48	344.4	7	3.00	26	3.80	24.20	1200.9	103590	0.0979	973
300/69	305.3	68.98	374.3	19	2.15	30	3.60	25.15	1384.7	129560	0.0947	1000
450/75	445.3	75.55	520.9	19	2.25	63	3.00	29.25	1823.4	164090	0.0649	1264
450/97	449.1	97.03	546.2	19	2.55	68	2.90	30.15	2002.5	186970	0.0644	1281
680/85	678.6	85.95	764.5	19	2.40	54	4.00	36.00	2550.8	206560	0.0426	1662
973/228	973.9	227.83	1201.7	37	2.80	72	4.15	44.50	4481.3	415550	0.0297	2124

**A1F/S2A Conductoare din otel-aluminiu cu sârme profilate si otel de inalta rezistenta, cablate în straturi concentrice, conform SF 114-2007 - *Trapezoidal Wire Compact Concentric-Lay-Stranded Aluminum Conductors, Steel-Reinforced ACSR/TW, according to SF 114-2007***

Tip conductor	Sectiunea calculata		Numar sarme	Diametru conductor	Masa conductor negresat	Masa conductor gresat	Forta de rupere nominala	Rezistenta electrica la 20°C	Capacitatea de transport a curentului
Code	Cross Area		AI OL	Overall diameter	Weight	Weight	Breaking Load	Resistance at 20°C	Current carrying capacity
	A1/S2A mm <sup>2</sup>		No. of wires AI St	mm	not-lubricated mm	lubricated kg/km	N	Ohm/km	A
<b>Constructii normale :</b>									
16F/2.5	16.36	2.27	6 1	5.00	61	64	5905	1.8022	145
25F/4	24.97	3.63	6 1	6.00	93	98	8990	1.1810	192
35F/6	35.63	5.11	6 1	7.00	134	141	12410	0.8333	243
50F/8	51.31	7.07	6 1	8.50	191	201	17510	0.5787	302
70F/11	69.85	10.75	6 1	10.00	269	283	24505	0.4217	376
70F/12	66.56	11.34	12 4	10.50	271	275	26290	0.4323	371
95F/15	93.26	13.85	12 4	12.00	365	369	33720	0.3085	451
120F/21	122.12	18.85	15 4	14.00	484	490	45910	0.2356	551
150F/25	148.84	22.30	15 4	15.00	589	597	53670	0.1940	623
185F/32	183.79	29.08	22 7	17.00	735	745	67980	0.1571	717
240F/40	242.44	35.75	25 7	19.50	948	961	85240	0.1191	842
300F/50	299.22	44.66	25 7	21.50	1174	1193	106660	0.0965	973
450F/75	450.99	68.98	54 19	27.00	1787	1816	164700	0.0641	1264
680F/85	678.93	78.94	54 19	32.50	2467	2498	207550	0.0426	1662
<b>Constructii intarite :</b>									
95F/55	96.50	49.48	12 7	14.00	653	660	79250	0.2992	492
160F/95	164.22	89.57	15 19	19.00	1153	1165	140920	0.1770	690
170F/95	171.76	89.57	18 19	19.20	1176	1188	141860	0.1681	711
150F/150	144.76	134.30	18 19	20.00	1452	1477	195829	0.1988	667
300F/69	305.76	62.71	30 19	22.50	1336	1382	106660	0.0965	1000
450F/97	450.99	89.57	54 19	28.00	1939	1937	190460	0.0641	1281
550F/150	579.10	134.30	66 19	33.00	2656	2681	267440	0.0499	1525
973F/228	973.90	204.07	66 37	40.00	4301	4341	415550	0.0297	2124

**A1F/S2A Conductoare din otel-aluminiu, cu sarme profilate cu capacitate de transport a curentului marita, conform SF 114-2007 Trapezoidal Wire Compact Concentric-Lay-Stranded Aluminum Conductors, Steel-Reinforced ACSR/TW, with high current carrying capacity, according to SF 114-2007**

Tip conductor		Sectiunea calculata		Numar sarme	Diametru conductor	Masa conductor negresat	Masa conductor gresat	Fora de rupere nominala	Rezistenta electrica la 20°C	Capacitatea de transport a curentului
Code		A1F/S2A		AI OL	Overall diameter	Weight not-lubricated	Weight lubricated	Breaking Load	Resistance at 20°C	Current carrying capacity
		Cross Area		No. of wires	mm	mm	kg/km	N	Ohm/km	A
		mm <sup>2</sup>		Al St						
Constructii normale										
20F/2	16/2.5	20.30	2.27	6 1	5.40	73	74	6627	1.4132	168
30F/3	25/4	31.64	3.63	6 1	6.75	115	116	10134	0.9067	221
50F/5	35/6	45.69	5.11	6 1	8.10	165	166	14080	0.6279	280
70F/7	50/8	64.28	7.07	6 1	9.60	231	232	19334	0.4463	348
90F/10	70/11	89.87	10.75	6 1	11.40	330	331	26956	0.3192	432
90F/11	70/12	86.50	11.34	12 4	11.55	327	330	29297	0.3332	425
120F/15	95/15	117.47	13.85	12 4	13.35	432	436	37145	0.2454	516
150F/20	120/21	151.76	18.85	22 7	15.65	566	569	50185	0.1900	614
185F/25	150/25	182.15	21.99	22 7	17.10	674	678	58481	0.1583	690
230F/30	185/32	227.00	29.08	22 7	19.20	853	858	74248	0.1270	797
300F/35	240/40	292.56	35.75	25 7	21.70	1086	1092	92963	0.0985	938
360F/50	300/50	364.49	44.66	25 7	24.20	1354	1362	115483	0.0791	1082
510F/70	450/75	509.49	68.98	54 19	29.25	1952	1965	174020	0.0569	1350
800F/80	680/85	796.16	78.94	54 19	36.00	2825	2840	228428	0.0364	1798
Constructii intarite										
135F/50	95/55	135.27	49.48	12 7	16.00	760	768	84977	0.2131	583
205F/90	160/95	205.65	88.81	21 13	20.75	1263	1271	146990	0.1402	776
220F/90	170/95	221.88	88.81	21 13	21.25	1308	1316	149586	0.1299	812
215F/135	150/150	213.93	134.30	15 19	22.40	1643	1668	206132	0.1348	810
360F/60	300/69	366.73	59.69	25 19	25.15	1484	1495	136870	0.0790	1095
510F/85	450/97	511.88	85.95	54 19	30.15	2092	2108	194467	0.0566	1366
700F/135	550/150	696.24	134.30	66 19	35.20	2982	3007	284938	0.0416	1670
1100F/200	973/228	1091.89	196.44	66 37	44.50	4583	4621	426145	0.0267	2240

**Conductoare din otel-aluminiu AFLs, conform SF 114/2007 Standard de referinta PN IEC 62219 ACSR, Aluminium conductors steel reinforced, according to SF 114/2007 Reference standard PN IEC 62219**

Tip conductor		Sectiunea calculata		Numar sarme	Diametru conductor	Masa conductor negresat	Masa conductor gresat	Fora de rupere nominala	Rezistenta electrica la 20°C	Capacitatea de transport a curentului
Code		A1/S2A		AI OL	Overall diameter	Weight not-lubricated	Weight lubricated	Breaking Load	Resistance at 20°C	Current carrying capacity
		Cross Area		No. of wires	mm	mm	kg/km	N	Ohm/km	A
		mm <sup>2</sup>		Al St						
40F/18	AFLs-2.2 40	39.66/17.81		6 7	9.00	248	251	29670	0.7233	268
50F/30	AFLs-1.7 50	49.80/31.67		6 7	10.80	384	390	48500	0.5671	319
70F/7	AFLs-10 70	64.02/6.41		6 3	9.60	226	228	18630	0.4481	347
90F/9	AFLs-10 90	87.15/8.59		6 3	11.30	306	309	25190	0.3292	424
160F/16	AFLs-10 160	161.18/15.86		21 7	15.60	568	571	47530	0.1788	632
240F/24	AFLs-10 240	237.26/24.23		21 7	19.10	843	847	69700	0.1217	813
300F/30	AFLs-10 300	299.76/31.65		21 7	21.70	1074	1080	88470	0.0962	949
525F/50	AFLs-10 525	508.77/49.80		42 7	27.80	1799	1808	145140	0.0569	1330