

Current carrying capacity of GKN Cables

General conditions

The following conditions apply for the given data

- **Continuous load**
load 100%, 24h
- **Industrial load**
load 100%, 10h and 60%, 14h
- **Emergency operation**
max. 8h/day and max. 100h/year
- **Laying in pipes and directly in the earth**
single-core cable: inner tube diameter min. 1,5 x outer cable diameter
multi-core cable: inner tube diameter min. 3 x outer cable diameter
laying depth: 1m
screenings grounded on both sides
- **Laying in air**
A cable system, individually laid and protected
against direct sunlight
Screenings grounded on both sides

BayEnergy® GKN 1 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
1×95 RM/35	206	263	230	295	312	244	356	459
1×150 RM/50	265	340	298	381	404	324	472	607
1×185 RM/61.6	305	390	340	437	462	378	550	708
1×240 RM/80	355	454	397	508	539	448	653	842
1×300 RM/100	400	514	448	575	610	514	749	968
1×400 RM/50	451	580	504	650	693	584	856	1109
1×400 RM/133	454	584	508	655	698	593	866	1122

*) Other types on request

BayEnergy® GKN 3 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×6 RE/6	38	49	43	55	58	41	58	74
3×10 RE/10	52	67	58	75	79	56	80	102
3×10 RM/10	52	67	58	75	79	56	80	102
3×16 RM/16	69	88	77	101	103	74	106	136
3×25 RM/25	89	115	100	132	135	99	141	181
3×50 RM/50	130	166	146	190	197	148	212	270
3×95 RM/95	197	251	220	281	297	231	331	422
3×150 RM/150	255	326	288	365	386	305	437	556
3×185 RM/185	292	373	327	418	442	353	503	639
3×240 RM/240	340	435	381	487	517	415	593	752

*) Other types on request

BayEnergy® GKN 5 conductor cable TN-S

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
4×6 RE/6	38	50	44	55	59	41	58	75
4×10 RE/10	52	67	59	75	79	56	80	103
4×16 RM/16	69	88	78	99	104	75	107	137
4×25 RM/25	90	115	101	129	137	100	144	183
4×50 RM/50	132	168	147	189	200	150	215	274
4×95 RM/95	200	255	223	285	302	234	336	426
4×150 RM/150	259	331	290	371	392	311	444	564

*) Other types on request

BayEnergy® GKN Flex 1 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
1×95 RF/35	206	263	230	295	312	244	356	459
1×150 RF/50	265	340	298	381	404	323	470	606
1×185 RF/61.6	305	390	340	437	462	378	550	708
1×240 RF/80	355	454	397	508	539	448	653	842
1×300 RF/100	400	514	448	575	610	514	749	968

*) Other types on request

BayEnergy® GKN Flex 3 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×2,5 RF/2,5	24	30	26	34	35	24	34	44
3×6 RF/6	38	49	43	55	58	41	58	74
3×10 RF/10	52	67	58	75	78	55	79	102
3×16 RF/16	69	87	77	98	103	74	107	136
3×25 RF/25	89	114	100	128	135	99	141	181
3×50 RF/50	130	166	146	186	197	148	212	270
3×95 RF/95	197	251	220	281	297	231	331	422
3×150 RF/150	255	326	285	365	386	305	437	556
3×185 RF/185	292	372	327	417	442	353	503	639
3×240 RF/240	339	434	379	485	515	415	593	752

*) Other types on request

BayEnergy® GKN Flex 5 conductor cable TN-S

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
4×2,5 RF/2,5	24	30	27	34	36	24	35	45
4×6 RF/6	38	50	44	55	59	41	58	75
4×10 RF/10	52	67	59	75	79	56	80	103
4×16 RF/16	69	88	78	99	104	75	108	137
4×25 RF/25	90	115	101	129	137	100	144	183
4×50 RF/50	132	168	148	189	200	151	216	276
4×95 RF/95	200	255	223	285	302	234	336	426
4×150 RF/150	259	331	290	370	391	310	443	563
4×185 RF/185	294	374	329	414	444	352	499	631
4×240 RF/240	342	437	383	489	519	414	589	746

*) Other types on request

BayEnergy® GKN Alsm 3 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×35 Alsm/25Cu	84	107	94	120	127	95	136	175
3×50 Alsm/35Cu	102	130	113	146	153	116	167	214
3×95 Alsm/50Cu	152	194	171	217	230	180	260	332
3×150 Alsm/95Cu	200	256	224	286	302	243	350	447
3×240 Alsm/150Cu	268	342	300	383	405	335	480	614
3×300 Alsm/185Cu	306	390	342	437	462	384	550	700

*) Other types on request

BayEnergy® GKN Alsm 5 conductor cable TN-S

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
4x35 Alsm/16Cu	87	111	97	124	131	100	145	184
4x50 Alsm/35Cu	104	133	116	148	157	122	175	224
4x95 Alsm/70Cu	157	201	176	224	237	190	275	350
4x150 Alsm/95Cu	205	262	230	293	310	255	366	467
4x240 Alsm/150Cu	276	350	308	393	415	348	498	633
4x300 Alsm/240Cu	313	399	350	446	472	401	574	730

*) Other types on request

BayEnergy® GKN Alsm Kombi EMV 5 conductor cable TN-S

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
Dimensions *)	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×150 Alsm + 1×150/35Cu	205	262	230	293	310	255	366	467

*) Other types on request

BayEnergy® GKN Alse 3 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×95 Alse/50Cu	152	193	170	217	229	178	257	329
3×150 Alse/150Cu	199	254	222	284	301	240	345	440
3×240 Alse/150Cu	265	339	297	379	401	329	472	601

*) Other types on request

BayEnergy® GKN Alrm 1 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
1×150 Alrm/35Cu	206	264	231	295	312	252	365	469
1×240 Alrm/50Cu	275	352	307	394	416	345	506	647
1×300 Alrm/61,5Cu	314	401	351	450	475	401	586	752
1×400 Alrm/80Cu	363	464	406	520	550	472	688	885
1×500 Alrm/100Cu	416	534	466	597	633	550	802	1035

*) Other types on request

BayEnergy® GKN Alrm 3 conductor cable

Current Carrying Capacity

GKN	Laying in pipes, directly in the earth					Laying in air		
	Continuous load		Industrial Load		Emergency operation	Continuous and industrial load	Continuous and industrial load	Emergency operation
	60 °C (A)	90°C (A)	60 °C (A)	90°C (A)	130 °C (A)	60 °C (A)	90°C (A)	130 °C (A)
3×95 Alrm/50Cu	151	194	169	216	228	177	254	322
3×150 Alrm/95Cu	198	253	221	282	298	236	338	430
3×240 Alrm/150Cu	265	338	297	378	399	323	462	586

*) Other types on request