

commutators

- 1** *pressed*
- 5** *pressed with a sleeve*
- 8** *pressed with strengthening rings*
- 10** *pressed with a sleeve and strengthening rings*
- 12** *pressed with a sleeve, strengthening rings and slots*
- 13** *vented*
- 14** *screwed*

slip ring heads

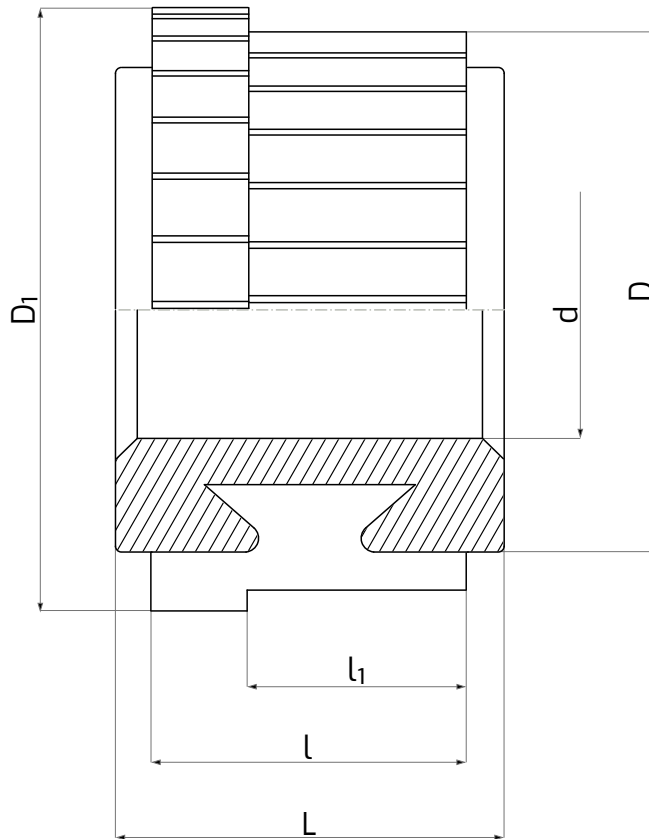
- 15** *pressed*
- 16** *pressed with a sleeve*

pressed commutators



reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
600200	K2	57	0.096	11 000	36	39	11.5	25	18	14.5
600300/M	K3/M	45	0.140	9 000	45	-	13	24	20	-
600500	K5	45	0.090	15 000	36.2	39	11.5	25	18	14.5
601000*	K10	32	0.230	4 300	46	48	16	33	24	19
601100*	K11	39	0.030	22 500	25	31	7.5	17	13	9
601200/M	K12/M	30	0.459	2 700	49.5	-	16	46	38	-
601400/M	K14/M	29	0.273	10 000	51	58	15.7	31.5	23	16.5
601700*	K17	48	0.285	5 000	48	51	15	38	31.5	26.5
602100	K21	81	1.250	2 200	100	107	28	46	40	32.5
602300/M	K23/M	27	2.750	3 900	113	-	40	71	64	-

* specific arrangements required

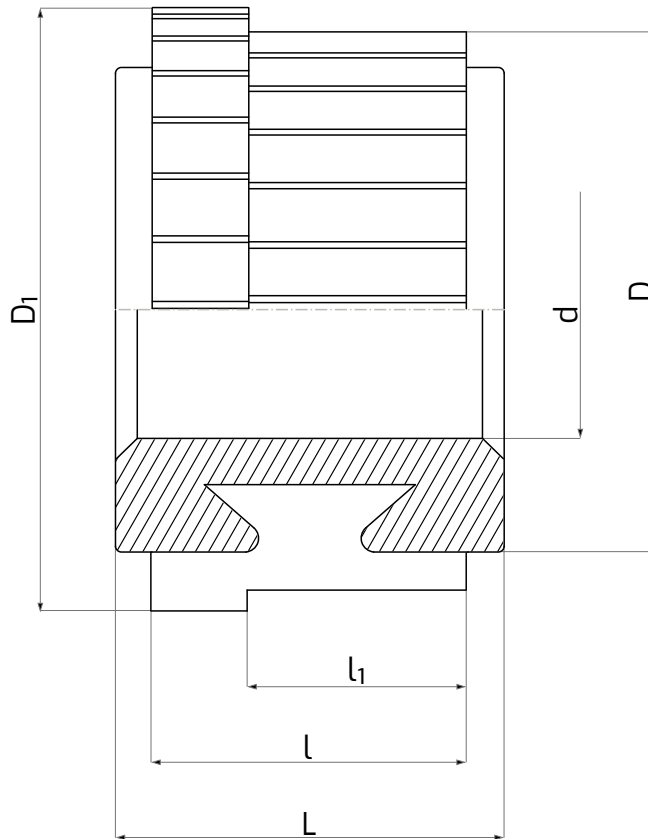


pressed commutators



reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
602400	K24	37	1.370	6 000	84	89	23	55	43	35
602800	K28	24	0.055	6 500	32	-	11	17.5	15.5	-
602900*	K29	57	0.813	4 500	66	-	15	49.3	45	-
603700	K37	22	0.032	9 000	26	28	10	17	14.4	11
603900/M	K39/M	54	0.400	4 200	60	-	20	32	26	-
604400/A	K44/A	22	0.040	9 000	28	-	6	17	14.4	-
605100	K51	29	0.213	6 000	42.5	55	16	28.2	25.2	20
605400/M	K54/M	32	0.051	6 500	29	-	11	22	18	-
607400	K74	24	0.0135	33 000	20.2	-	7	14.5	10.6	-
6011200	K112	41	0.116	6 000	37	41	17	29.2	24	20

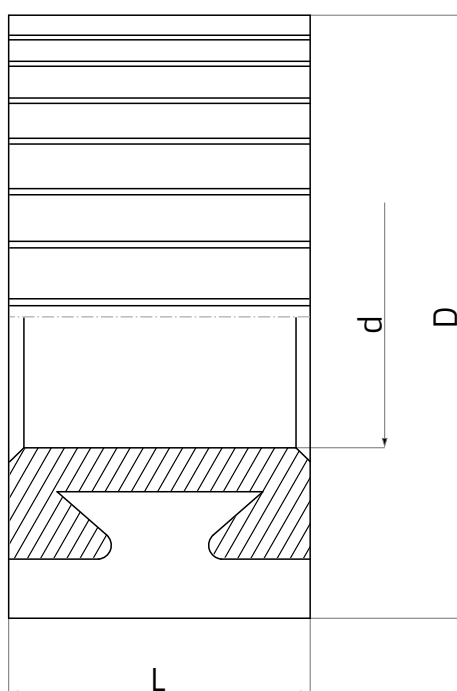
* specific arrangements required



pressed commutators



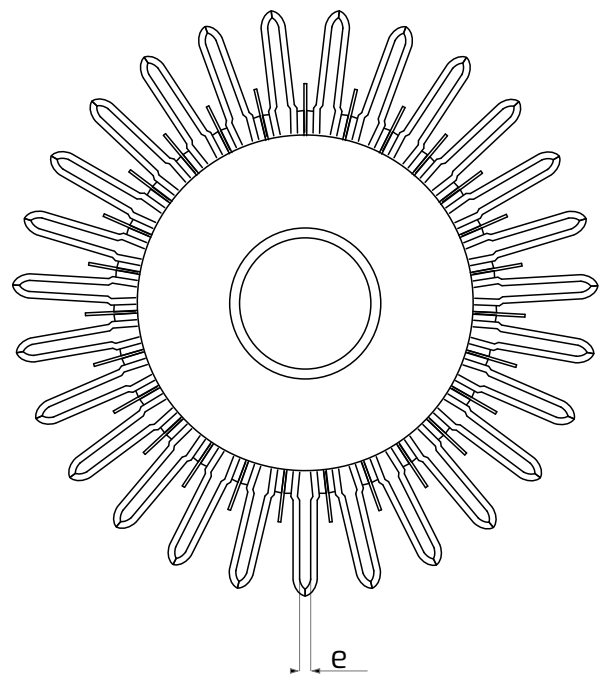
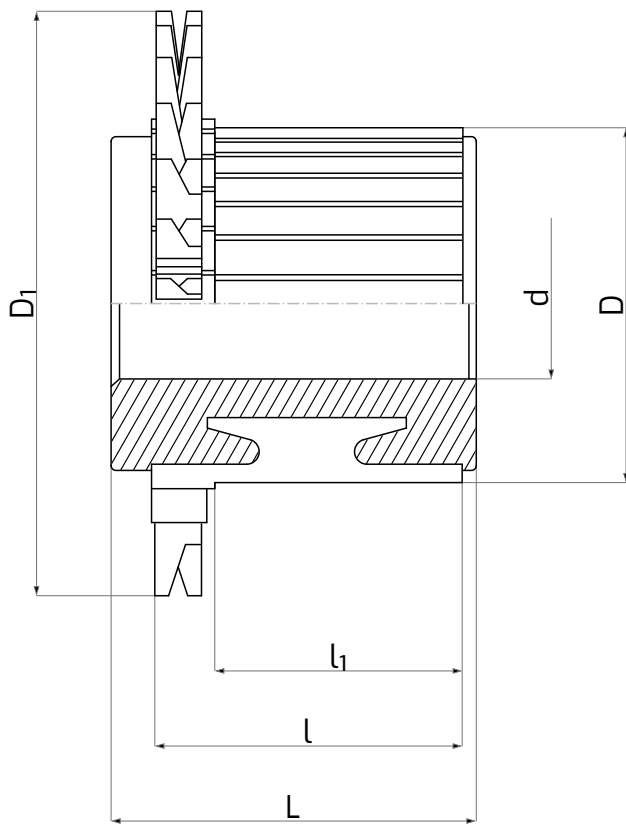
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
609000	K90	33	0.037	4 800	40	-	22	10	-	-
609100	K91	33	0.034	4 800	40	-	26	10	-	-



pressed commutators



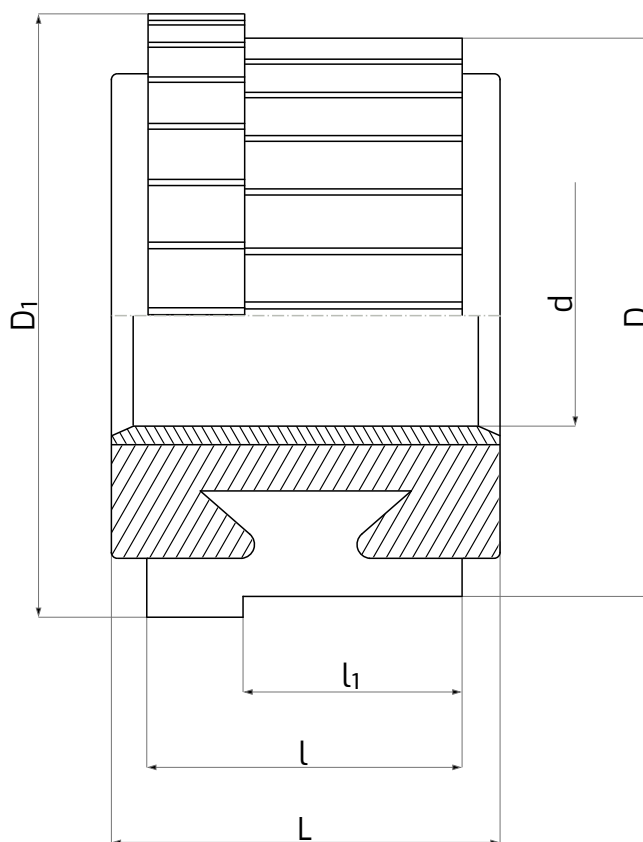
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)						
					D	D ₁	d	L	l	l ₁	e
6011000	K110	27	0.300	4 500	45.5	73	17	45.9	39	31	3.2
6011100	K111	33	0.300	4 500	45.5	73	17	45.9	39	31	2.2



pressed commutators with a sleeve



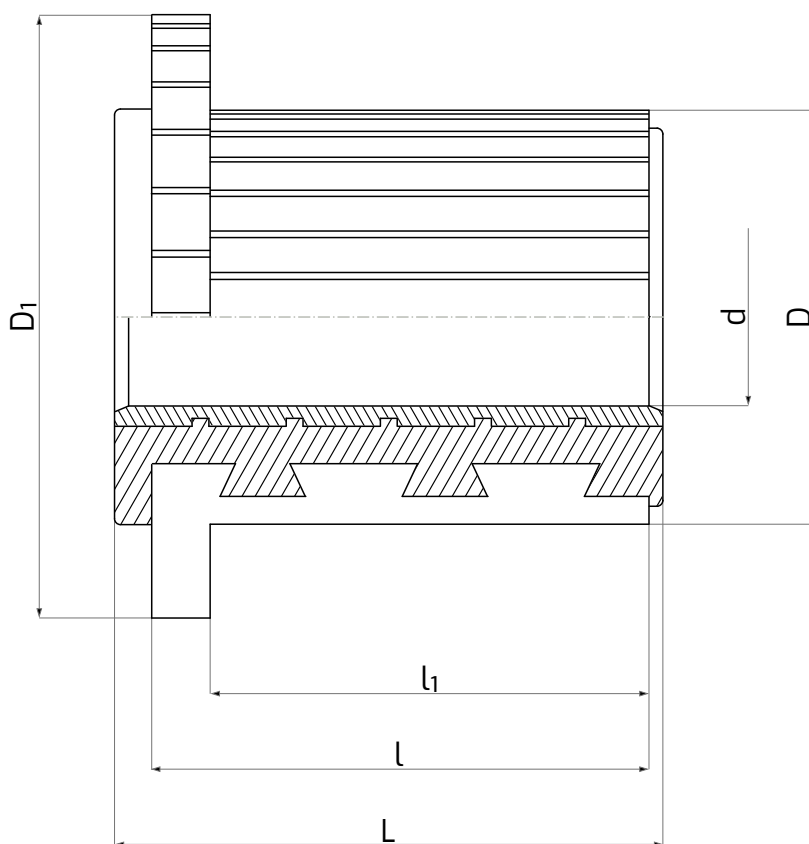
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
603000	K30	63	0.802	3 600	73	95	28	36.5	30.5	22
607300/M	K73/M	24	0.014	17 000	19.15	-	6.58	14.5	10.6	-



pressed commutator with a sleeve



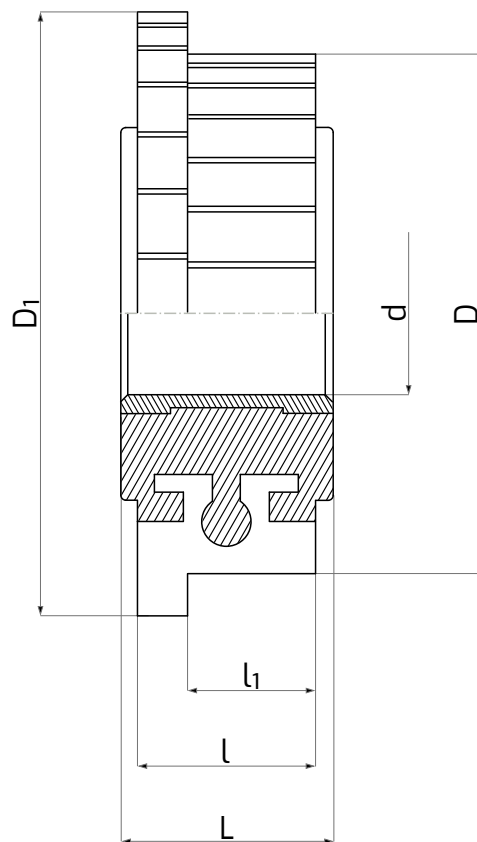
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
605200	K52	37	0.824	6 000	57	72	22	61.5	56.5	50.5



pressed commutator with a sleeve



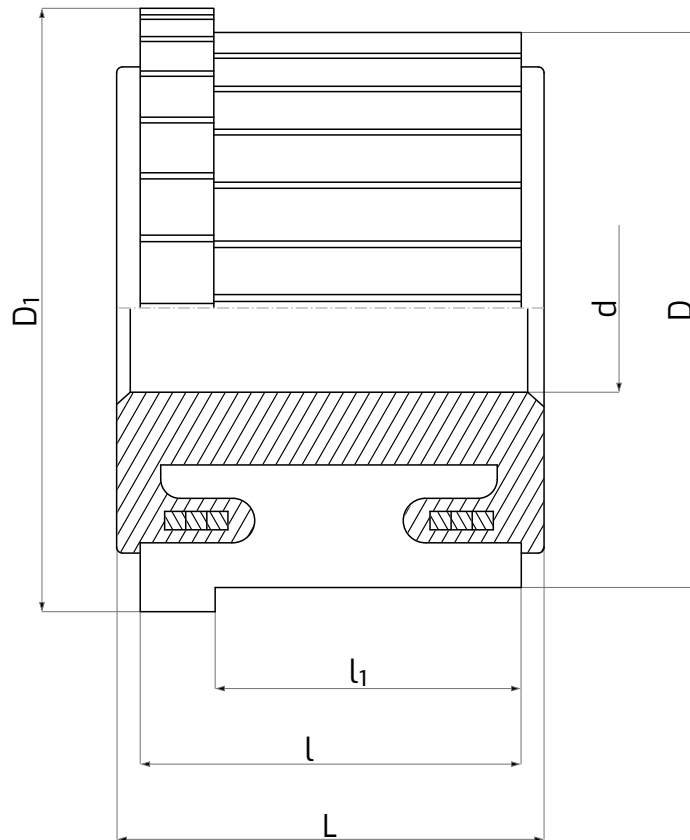
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
605300	K53	53	0.070	6 000	89	106	28	36.5	30.5	22



pressed commutators with strengthening rings

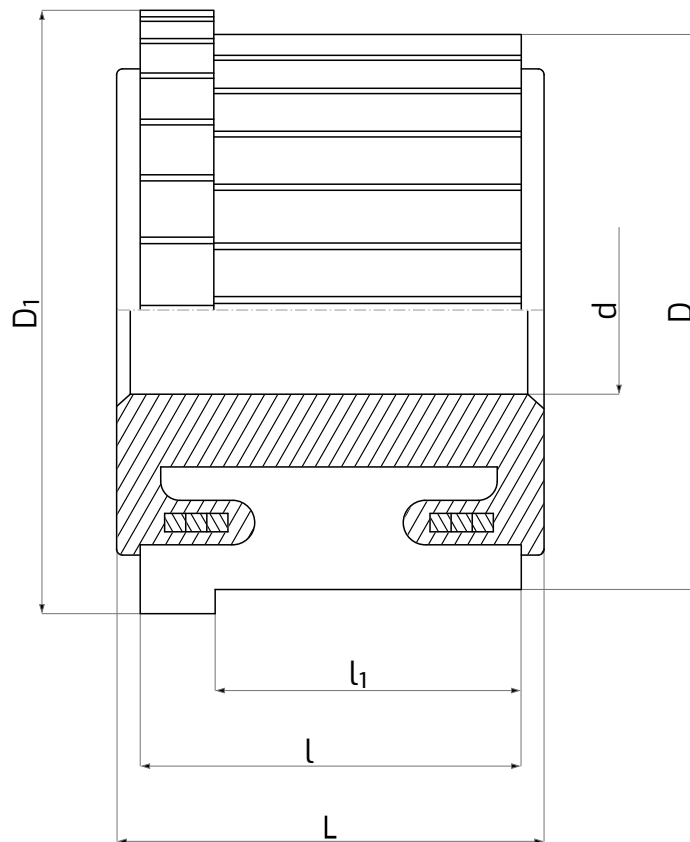


reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
600100	K1	24	0.080	5 000	35	-	12	24	20	-
600100/I	K1/I	24	0.085	3 000	32.6	35	12	24	20	17.5
600900	K9	36	0.040	25 000	32	-	9	16	15	-
601500	K15	24	0.040	35 000	25	-	9.5	19	17	-
603600	K36	24	0.038	35 000	23.5	25	9.5	19	17	14
603800	K38	12	0.043	35 000	28	-	12	20	16	-
605000	K50	26	0.053	25 000	31	31.6	10	19	18	14.5
605900	K59	24	0.043	35 000	28	-	10	20	16	-
605900/I	K59/I	24	0.043	35 000	28	-	9.5	20	16	-





reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
607700	K77	24	0.028	40 000	25	-	10	16.8	14	-
607700/I	K77/I	24	0.028	40 000	25	-	9.5	16.8	14	-
607700/II	K77/II	24	0.028	40 000	25	-	9	16.8	14	-
607800	K78	24	0.027	38 000	26	-	9.5	14	14	-
607800/I	K78/I	24	0.025	38 000	26	-	12	14	14	-
609500	K95	26	0.065	25 000	31	31.6	12	19	18	14.5
6010200	K102	12	0.032	35 000	23.5	25	9.5	19	17	14
6010400	K104	24	0.095	30 000	33	-	12	22	20	-
6010500	K105	24	0.040	30 000	30	33	12	22	20	17

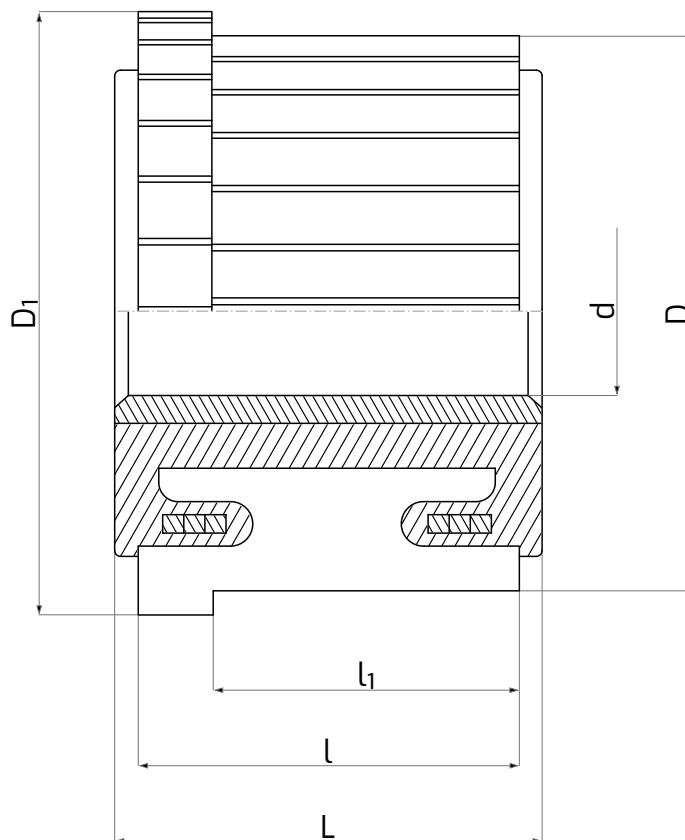


pressed commutators with strengthening rings and a sleeve



reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
604100	K41	36	0.116	30 000	36	40	14	29.2	24	20
604100/I	K41/I	36	0.116	25 000	40	-	14	29.2	24	-
604700	K47	39	0.120	30 000	36	40	14	29.2	24	20
604800	K48	28	0.066	36 000	30	32.6	12	20	18	14,5
604800/I	K48/I	28	0.066	36 000	30	32.6	9	20	18	14,5
604800/II*	K48/II	28	0.066	36 000	30	32.6	12	20	18	14,5
604800/III	K48/III	28	0.066	35 000	32	-	12	20	16	-

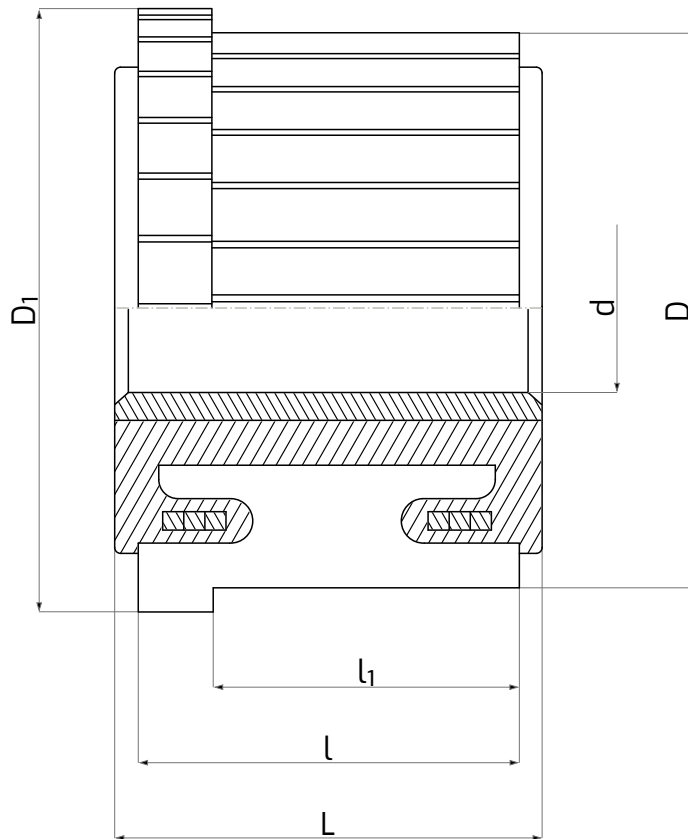
* wearable mica insulation



pressed commutators with strengthening rings and a sleeve



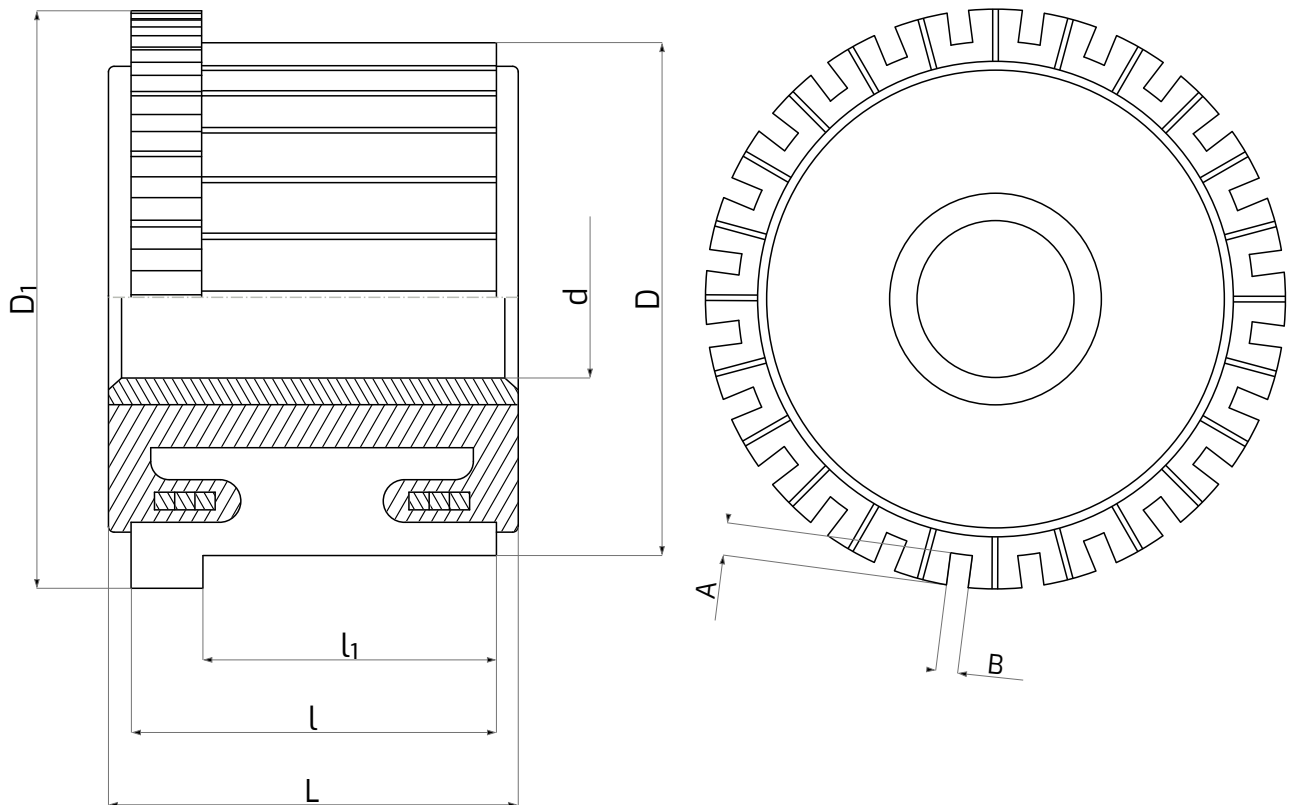
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
608200	K82	24	0.046	38.000	28	-	10	20	16	-
608400	K84	26	0.090	36 000	32.6	35	11	24	20	15.5
608600	K86	32	0.116	35 000	35.7	39	14	29.2	24	20
608600/I	K86/I	32	0.116	35 000	37	39	14	29.2	24	20
6010300	K103	30	0.120	6 000	36.5	40	14	29.2	24	18
6010600	K106	22	0.040	30 000	28	-	10	20	16	-
6011300	K113	28	0.116	35.000	35.7	39	14	29.2	24	20
6011300/I	K113/I	28	0.116	35.000	39	-	14	29.2	24	-



pressed commutators with strengthening rings, a sleeve and slots



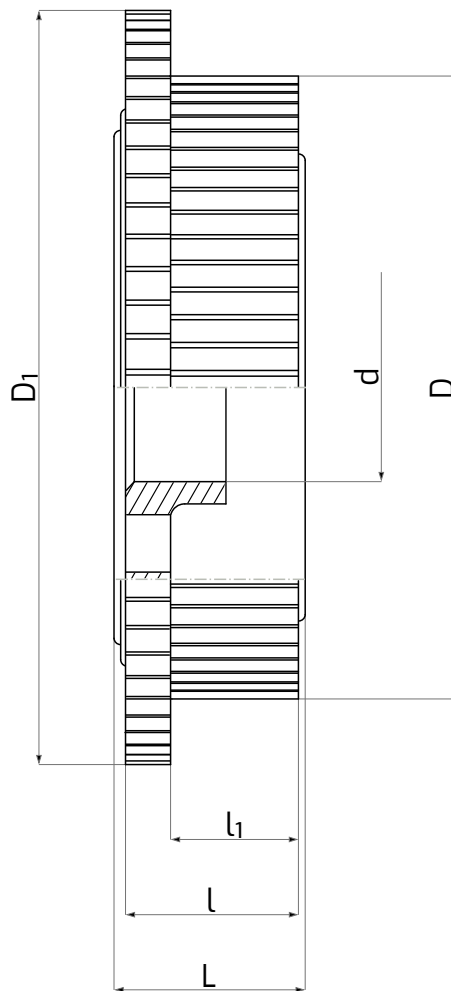
reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)							
					D	D ₁	d	L	l	l ₁	A	B
601900	K19	24	0.041	30 000	28.5	-	11.5	20	16	-	1.5	0.6
604800/M	K48/M	28	0.058	36 000	30	32.6	12	20	18	14.5	2	0.75
608200/M	K82/M	24	0.046	38 000	28	-	10	20	16	-	2	6.5
608600/M	K86/M	32	0.110	35 000	35.7	39	14	29.2	24	20	2.2	0.92
603500	K35	32	0.131	35 000	35.7	39	13	33.7	24	20	2.2	1



vented commutator



reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
609200	K92	108	1.100	4 800	104	123	28.5	32.6	27	20.7
609300	K93	109	1.111	4 800	104	123	28.5	32.6	27	20.7

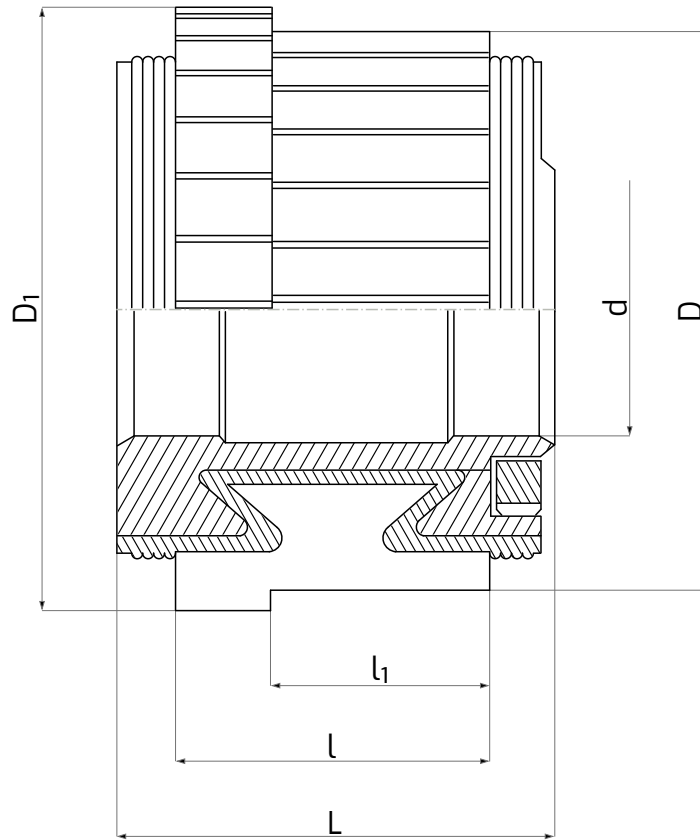


screwed commutator



reference no	type	number of segments	mass (kg)	RPM max	dimensions (mm)					
					D	D ₁	d	L	l	l ₁
610700*	K7	81	2.180	7 000	72	83.5	22	49.5	35	29.5

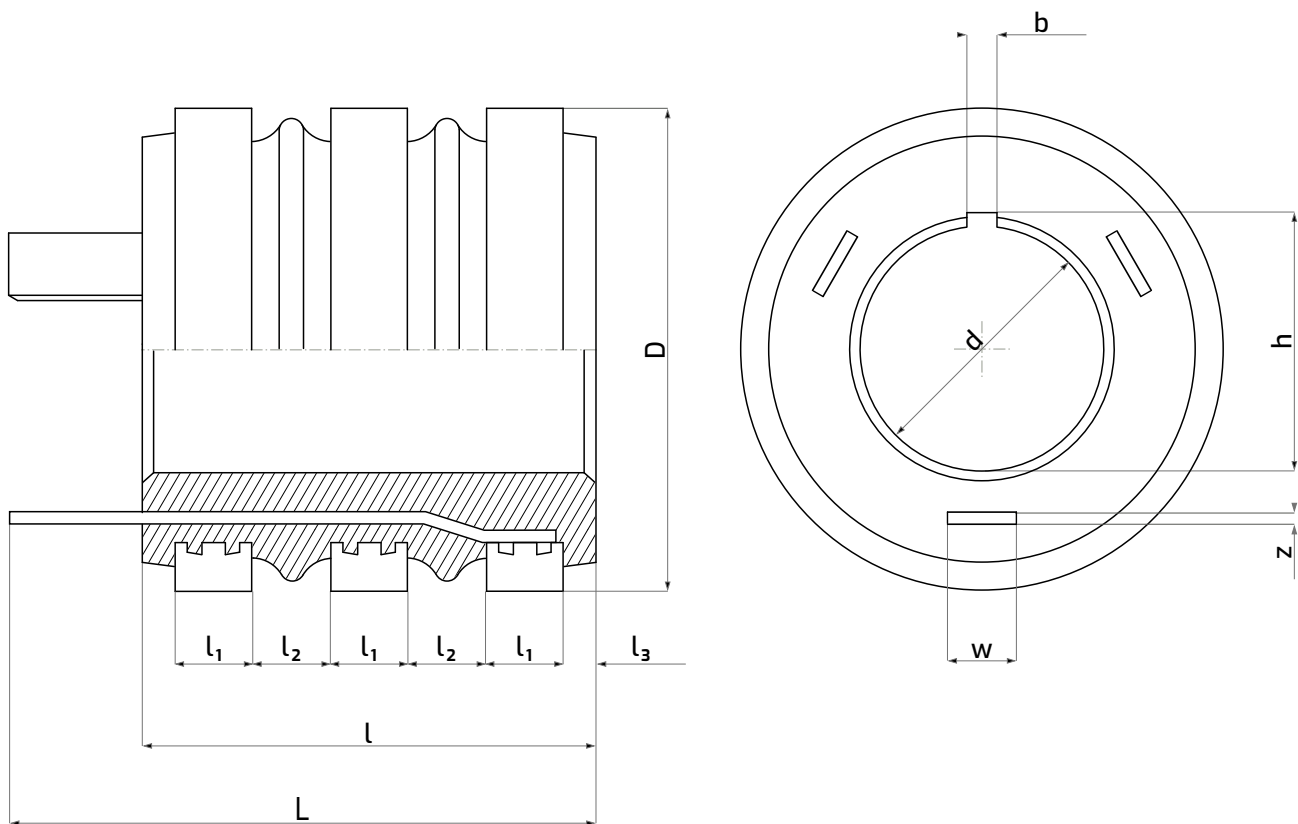
* specific arrangements required



pressed slip ring heads



reference no	mass (kg)	RPM max	dimensions (mm)										
			D	d	h	b	L	l	l ₁	l ₂	l ₃	w	z
700100	0.510	3 000	72.8	36	-	-	86	61	10	10	5.5	10	2
700200	0.880	3 000	80.8	42	-	-	101.5	76	13	13	5.5	10	2
700300	1.310	3 000	100.8	52	-	-	101.5	76	13	13	5.5	10	2
700400	1.200	3 000	100.8	56	-	-	101.5	76	13	13	5.5	10	2
700500	0.620	4 000	82	48	50.3	6	85	69	12	11	5.5	10	2
700600	0.760	4 000	102	63	65.3	6	97	77	14	12	6.5	15	2

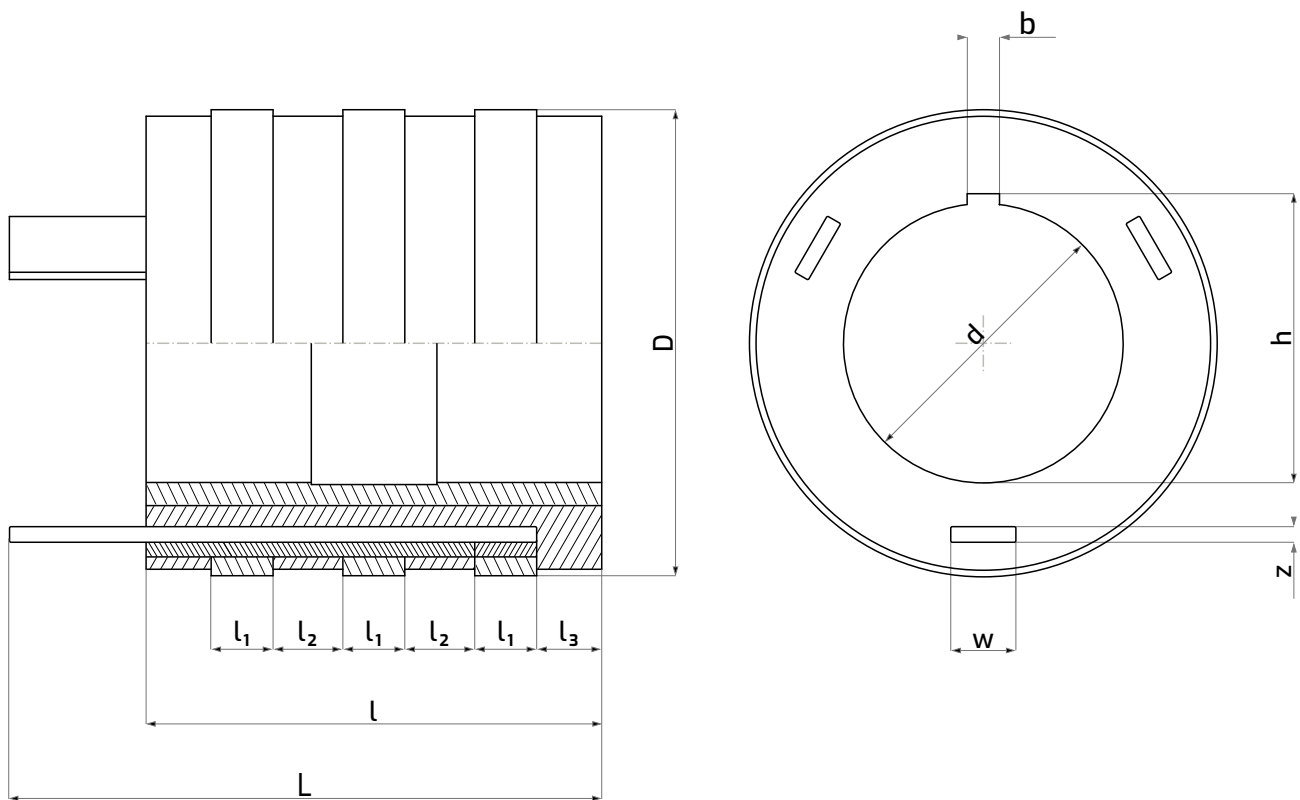


pressed slip ring heads with a sleeve



reference no	mass (kg)	RPM max	dimensions (mm)										
			D	d	h	b	L	l	l ₁	l ₂	l ₃	w	z
712100/M	5.6	3 000	142	85	88.3	10	180	140	19	21.5	20	20	5
712200/M	9.4	3 000	182	85	88.3	10	174	134	19	15	24	20	8
712300/M	9.2	3 000	171.5	100	103.3	10	215	151	25	26	12	*	*
712400/M	18.9	3 000	211	100	103.3	10	205	131	25	16	12	*	*

* arrangements required



pressed slip ring heads with a sleeve



reference no	mass (kg)	RPM max	dimensions (mm)									
			D	d	h	b	L	l	l ₁	l ₂	l ₃	M
712500/M	6.3	4 000	162	85	88.5	10	172	112	18	14	8	M8
712600/M	12.1	4 000	188	100	103.7	10	210	138	26	15	11	M10

