

High Efficiency Torque Motor

BL-TG 71...315

No Cooling

High Efficiency

Overload up to 200%



Applications

Extrusion

Injection moulding

Conveyor

Lift

Press

Flying saw

Rotary table

Energy generation

Winding

Mixers



Torque motors with thrust bearing for direct mounting at the extruder.



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Characteristics

Enclosure IP54 (TENV), cooling IC410

Enclosure IP54 (TENV), cooling IC416 (TEFC) or ICW will increase the torque at 30 - 100%

Very high efficiency in rated speed range 20 - 100%

Starting torque from 1,5 to 2,5 times

Total continuous rated torque from zero speed

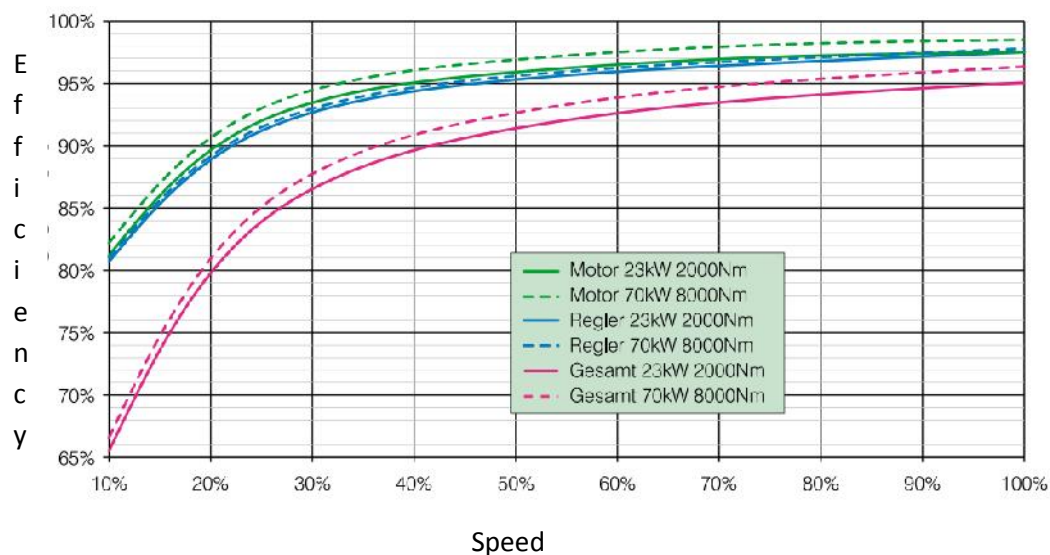
Low moment of inertia and high dynamic performance

Gearless direct mounting for extruders with thrust bearing – low maintenance

Flange or Foot-mounted

Motor works with and without feedback

Feedback Integrated inside the Motor



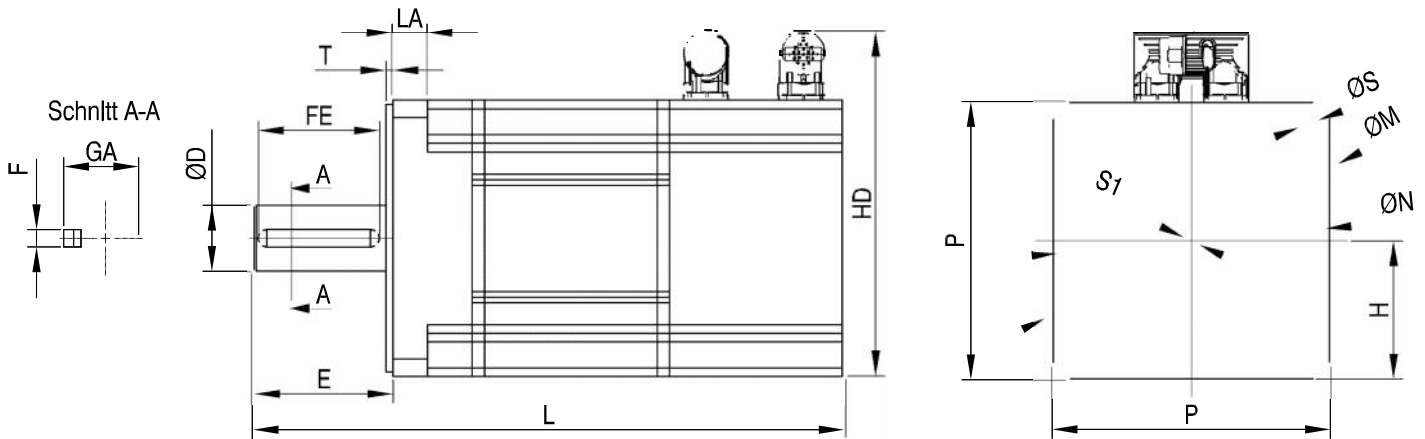
BL-TG 71...100

DC Buss Voltage: 560 VDC (400V Mains)										
Type	Poles	P [kW]	n [min ⁻¹]	M (Torque)		I (Current)		eta [%]	J [kgm ²]	W [kg]
				M _{/rated} [Nm]	M _{max} [Nm]	I _{/rated} [A]				
BL-TG 71A - 90	68	0,31	100	30	45	1,6	79	0,005	18	
		0,54	200	26	39	2,3	83			
		0,72	300	23	34,5	2,9	87			
		0,84	400	20	30	3,0	93			
BL-TG 71B - 130	68	0,46	100	44	66	2,4	81	0,007	23	
		0,82	200	39	58,5	3,8	83			
		1,10	300	35	52,5	4,6	88			
		1,30	400	31	46,5	4,8	93			
BL-TG 71C - 170	68	0,65	100	62	93	3,8	82	0,008	28	
		1,15	200	55	82,5	6,3	85			
		1,54	300	49	73,5	7,0	89			
		1,80	400	43	64,5	7,3	94			
BL-TG 80A - 100	68	0,55	100	53	79,5	2,9	80	0,009	33,3	
		0,92	200	44	66	4,0	81			
		1,10	300	35	52,5	3,9	82			
		1,09	400	26	39	3,1	84			
BL-TG 80B - 150	68	0,73	100	70	105	3,5	82	0,013	43,6	
		1,24	200	59	88,5	4,9	83			
		1,48	300	47	70,5	4,9	86			
		1,42	400	34	51	3,7	88			
BL-TG 80C - 200	68	0,94	100	90	135	4,3	82	0,017	54	
		1,63	200	78	117	6,3	83			
		1,95	300	62	93	6,3	86			
		1,88	400	45	67,5	4,9	88			
BL-TG 100A - 100	68	0,79	100	75	112,5	4,6	74	0,028	48,6	
		1,24	200	59	88,5	5,7	87			
		1,45	300	46	69,0	5,4	92			
		1,38	400	33	49,5	4,0	95			
BL-TG 100B - 140	68	0,97	100	93	139,5	5,1	80	0,038	60,4	
		1,55	200	74	111,0	6,7	90			
		1,79	300	57	85,5	6,3	93			
		1,68	400	40	60,0	4,4	96			
BL-TG 100C - 200	68	1,41	100	135	202,5	7,6	83	0,054	78,2	
		2,26	200	108	162,0	9,9	91			
		2,67	300	85	127,5	9,5	94			
		2,51	400	60	90,0	7,3	96			
BL-TG 100D - 240	68	1,57	100	150	225,0	7,6	85	0,064	90	
		2,51	200	120	180,0	10,4	89			
		2,92	300	93	139,5	9,4	95			
		2,81	400	67	100,5	7,4	96			
BL-TG 100E - 300	68	1,88	100	180	270,0	8,8	86	0,079	108	
		2,99	200	143	214,5	11,7	93			
		3,46	300	110	165,0	10,7	95			
		3,35	400	80	120,0	8,6	97			

The technical data relates to 400V

BL-TGW 71...100

IP 54 (TENV)
IC410



Typ / Type	Generelle Abmessungen / Universal Dimensions									Bauform / Mounting B5					
	ØD	E	F	GA	FE	L	H	HD	S1	P	ØN	T	LA	ØM	ØS
71A-90	28 j6	60	8	31	50	300	71	181	M10; 20	142x142	130 j6	3,5	15	165	4x Ø11
71B-130						340									
71C-170						380									
71A-90	38 k6	80	10	41	70	340	80	199	M12; 29	160x160	155 j6	4	20	190	4x Ø12
71B-130						390									
71C-170						440									
100A-100	48 k6	110	14	51,5	100	394	100	239,5	M16; 32	200x200	180 j6	4	20	230	4x Ø14,5
100B-140						434									
100C-200						494									
100D-240						534									
100E-300						594									

Alle Maße in mm / all dimensions in mm

From size 132 the motors are also available with thrust bearing for direct mounting on the extruder worm. The main dimensions of the motors are identical however with a customer-specific design at the front for the extruder mounting. (See Motor below)



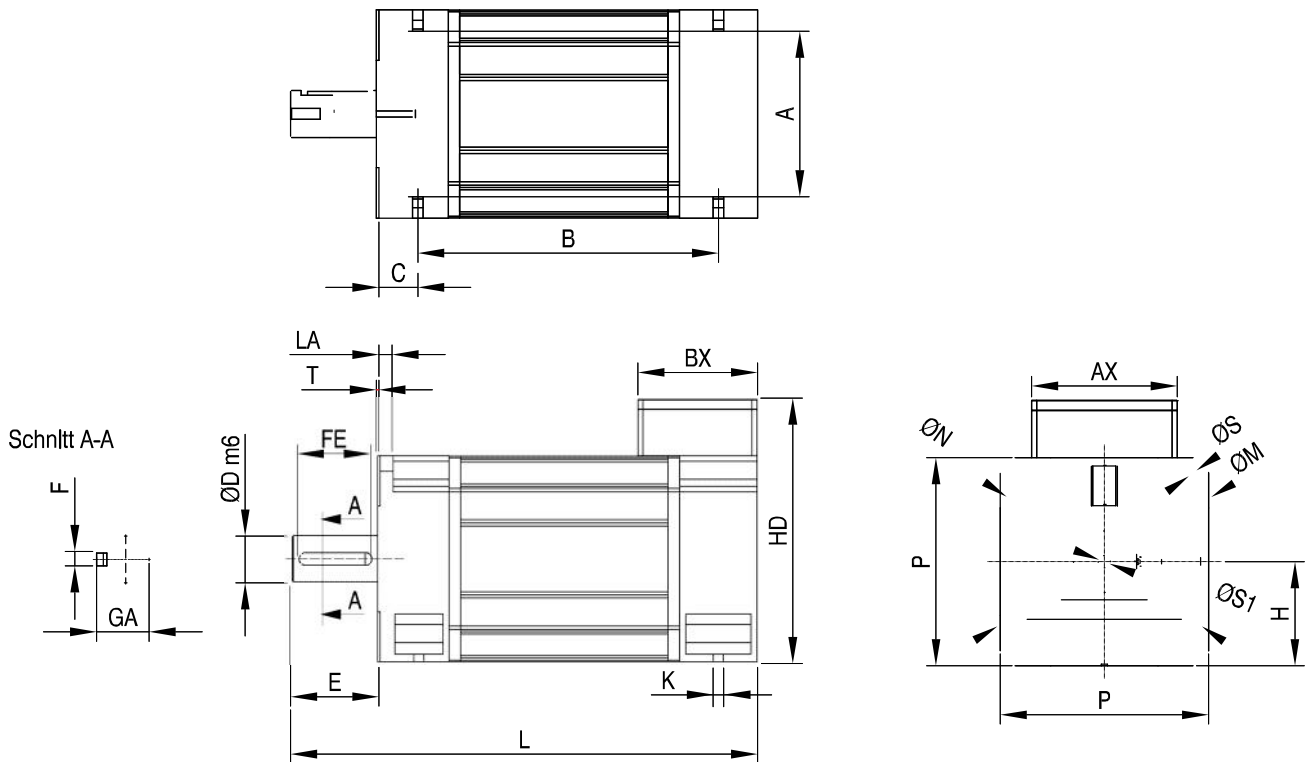
BL-TG 132...160

DC Buss Voltage: 560 VDC (400V Mains)										
Type	Poles	P [kW]	n [min ⁻¹]	M (Torque)		I (Current)		eta [%]	J [kgm ²]	W [kg]
				M _{rated} [Nm]	M _{max} [Nm]	I _{rated} [A]				
CPA-BL-TG 132A - 100	68	1,9	100	180	270	7,2	92	0,120	125	
		3,2	200	155	232,5	11,0	93			
		4,1	300	130	195	11,5	93			
		4,4	400	105	157,5	11,0	95			
CPA-BL-TG 132B - 140	68	2,6	100	245	367,5	10,0	93	0,164	145	
		4,4	200	210	315	13,4	94			
		5,5	300	175	262,5	14,9	94			
		5,9	400	140	210	13,4	95			
CPA-BL-TG 132C - 200	68	3,2	100	310	465	11,2	94	0,229	175	
		5,5	200	265	397,5	17,0	95			
		6,8	300	215	322,5	17,7	95			
		7,3	400	175	262,5	16,8	96			
CPA-BL-TG 132D - 240	68	3,8	100	365	547,5	12,0	94	0,273	195	
		6,5	200	310	465	17,9	95			
		8,0	300	255	382,5	19,6	95			
		8,4	400	200	300	18,4	96			
CPA-BL-TG 132E - 300	68	4,4	100	420	630	13,4	94	0,338	225	
		7,5	200	360	540	21,3	95			
		9,3	300	295	442,5	22,7	95			
		9,8	400	235	352,5	20,0	96			
CPA-BL-TG 160A - 100	68	2,1	70	285	427,5	8,4	90	0,231	148	
		2,6	100	250	375	9,6	92			
		3,4	150	215	322,5	11,1	92			
		4,2	200	200	300	12,9	93			
CPA-BL-TG 160B - 200	68	4,0	70	550	825	15,8	91	0,441	225	
		5,3	100	510	765	20,0	93			
		7,1	150	450	675	23,0	93			
		8,4	200	400	600	25,0	95			
CPA-BL-TG 160C - 300	68	6,0	70	820	1230	23,5	91	0,651	302	
		7,9	100	750	1125	29,0	93			
		10,2	150	650	975	32,0	93			
		11,5	200	550	825	31,0	95			
CPA-BL-TG 160D - 400	68	7,7	70	1050	1575	30,0	91	0,861	379	
		10,2	100	970	1455	36,0	93			
		13,0	150	830	1245	43,0	94			
		14,0	200	670	1005	38,5	96			

The technical data relates to 400V

BL-TGW 132...160

IP 54 (TENV)
IC410



Typ / Type	Generelle Abmessungen / Universal Dimensions											Bauform / Mounting B3/B5									
	øD	E	F	GA	FE	L	AX	BX	H	HD	S1	A	B	C	K	P	øN	T	LA	øM	øS
132A-100						474															
132B-140						514															
132C-200	65	140	18	69	125	574	130	100	132	314	M20; 45	216	315	56	14,5	264	250 j6	5	25	300	4x ø18,5
132D-240						614							355								
132E-300						674							415								
160A-100						492															
160B-200						592															
160C-300	75	140	20	79,5	125	692	220	120	160	400	M20; 43	254	427,5	60	14,5	320	300 j6	5	25	355	4x ø18,5
160D-400						792							527,5								

Alle Maße in mm / all dimensions in mm

From size 132 the motors are also available with thrust bearing for direct mounting on the extruder worm. The main dimensions of the motors are identical however with a customer-specific design at the front for the extruder mounting. (See Motor below)



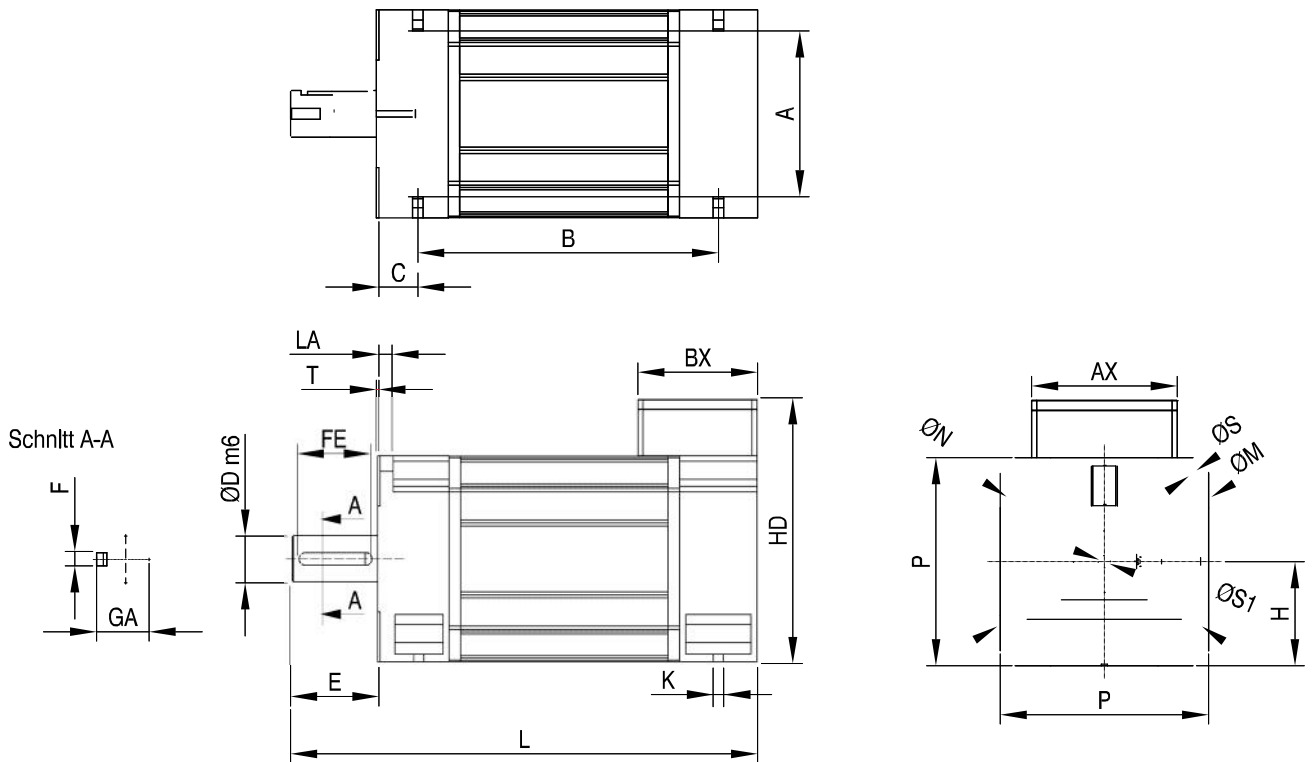
BL-TG 200...250

DC Buss Voltage: 560 VDC (400V Mains)										
Type	Poles	P [kW]	n [min ⁻¹]	M (Torque)		I (Current)		eta [%]	J [kgm ²]	W [kg]
				M _{rated} [Nm]	M _{max} [Nm]	I _{/rated} [A]				
CPA-BL-TG 200B - 300	92	11,0	70	1500	2250	42,0	93	1,431	512	
		13,1	100	1250	1875	43,0	94			
		16,5	150	1050	1575	46,0	95			
		17,2	200	820	1230	42,0	95			
CPA-BL-TG 200C - 400	92	14,7	70	2000	3000	53,0	94	1,893	622	
		17,8	100	1700	2550	56,0	95			
		22,8	150	1450	2175	66,0	96			
		23,0	200	1100	1650	25,0	96			
CPA-BL-TG 200D - 500	92	17,6	70	2400	3600	63,0	96	2,354	731	
		23,0	100	2200	3300	78,0	97			
		28,3	150	1800	2700	82,0	98			
		29,3	200	1400	2100	74,0	98			
CPA-BL-TG 200F - 600	92	21,3	70	2900	4350	74,0	96	2,816	840	
		28,3	100	2700	4050	103,0	97			
		34,6	150	2200	3300	97,0	98			
		36,6	200	1750	2625	89,0	98			
CPA-BL-TG 200J - 700	92	24,2	70	3300	5950	136	95	3,278	950	
		31,9	100	3000	5500	152	96			
		40,8	150	2600	4800	145	97			
		46,0	200	2200	4000	138	98			
CPA-BL-TG 200K - 800	92	25,6	70	3500	7500	122	96	3,739	1060	
		33,5	100	3200	6300	145	97			
		44,0	150	2800	5400	156	98			
		50,3	200	2400	4400	134	98			
CPA-BL-TG 250B - 300	92	16,0	70	2180	3600	45	93	-	-	
		20,2	100	1930	3185	68	94			
		26,3	150	1670	2755	83	95			
		30,6	200	1460	2410	78	95			
CPA-BL-TG 250C - 400	92	21,4	70	2900	4785	73	93	-	-	
		26,7	100	2550	4210	98	94			
		35,0	150	2220	3665	96	95			
		40,7	200	1940	3200	92	96			
CPA-BL-TG 250D - 500	92	26,7	70	3640	6005	126	93	-	-	
		33,6	100	3200	5280	152	94			
		43,0	150	2730	4505	161	95			
		50,9	200	2430	4010	150	96			
CPA-BL-TG 250F - 600	92	32,0	70	4360	6975	144	93	-	-	
		38,5	100	3670	5870	168	94			
		52,0	150	3300	5280	183	95			
		61,1	200	2930	4690	172	96			
CPA-BL-TG 250J - 700	92	37,4	70	5100	8100	154	97	-	-	
		47,1	100	4500	7200	175	96			
		61,3	150	3900	6400	196	97			
		71,2	200	3400	5700	185	97			
CPA-BL-TG 250K - 800	92	42,1	70	5740	9185	172	97	-	-	
		52,8	100	5040	8065	196	96			
		69,2	150	4400	7040	213	97			
		81,0	200	3860	6175	205	97			

The technical data relates to 400V

BL-TGW 200...250

IP 54 (TENV)
IC410



Typ / Type	Generelle Abmessungen / Universal Dimensions											Bauform / Mounting B3/B5										
	øD	E	F	GA	FE	L	AX	BX	H	HD	S1	A	B	C	K	P	øN	T	LA	øM	øS	
200B-300						797							477,5									
200C-400						897							577,5									
200D-500	90	170	25	95	140	997	280	230	200	509	M24; 55	318	677,5	74,5	20	400	450 j6	5	25	480	4x ø18,5	
200F-600						1097							777,5									
200J-700						1197							877,5									
250B-300						997							477,5									
250C-400						1007							605,5									
250D-500						1107							705,5									
250F-600	120	205	32	127	180	1207	280	230	250	600	M24; 57	406	805,5	99	24	500	550 j6	6	30	600	4x ø24	
250J-700						1307							905,5									
250K-800						1407							1005,5									

Alle Maße in mm / all dimensions in mm

From size 132 the motors are also available with thrust bearing for direct mounting on the extruder worm. The main dimensions of the motors are identical however with a customer-specific design at the front for the extruder mounting (See Motor below)



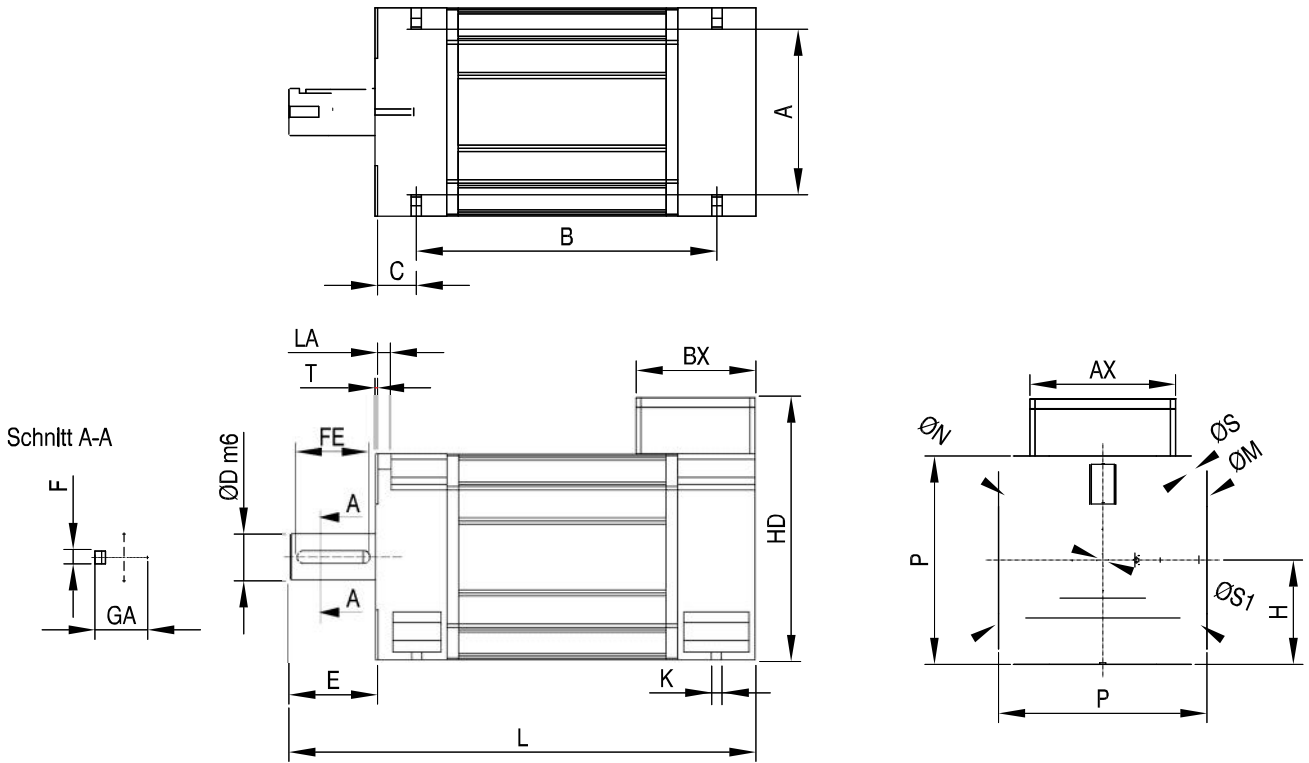
BL-TG 315

DC Buss Voltage: 560 VDC (400V Mains)									
Type	Poles	P [kW]	n [min ⁻¹]	M (Torque)		I (Current)		J [kgm ²]	W [kg]
				M _{rated} [Nm]	M _{max} [Nm]	I _{rated} [A]	eta [%]		
CPA-BL-TG 315C - 300	92	26,4	70	3600	6800	111	95	14,32	-
		34,6	100	3300	6400	124	96		
		47,2	150	3000	5800	152	97		
		58,6	200	2800	4800	148	97		
CPA-BL-TG 315E - 400	92	30,8	70	4200	7100	125	95	18,45	-
		41,9	100	4000	6800	136	96		
		55,0	150	3500	6000	141	97		
		62,9	200	3000	5200	135	97		
CPA-BL-TG 315F - 500	92	37,4	70	5100	8100	148	95	22,58	-
		50,3	100	4800	7400	159	96		
		62,8	150	4000	6500	165	97		
		71,2	200	3400	5800	141	97		
CPA-BL-TG 315G - 600	92	40,0	70	5450	8175	150	95	26,71	-
		59,0	100	5150	7725	162	96		
		68,0	150	4330	6495	170	97		
		75,0	200	3580	5370	161	97		
CPA-BL-TG 315J - 700	92	44,0	70	6000	9000	154	96	30,85	2500
		57,6	100	5500	8000	168	97		
		72,3	150	4600	7000	151	98		
		77,5	200	3700	6300	139	98		
CPA-BL-TG 315K - 800	92	48,5	70	6610	9915	175	96	34,99	-
		62,0	100	5920	8880	190	97		
		78,0	150	4970	7455	216	98		
		87,0	200	4150	6225	204	98		

The technical data relates to 400V

BL-TGW 315

IP 54 (TENV)
IC410



Typ / Type	Generelle Abmessungen / Universal Dimensions											Bauform / Mounting B3/B5										
	øD	E	F	GA	FE	L	AX	BX	H	HD	S1	A	B	C	K	P	øN	T	LA	øM	øS	
315C-300						997							547,5									
315E-400						1097							647,5									
315F-500						1197							747,5									
315G-600	120	250	32	127	220	1297	400	300	315	830	M24; 57	508	847,5	95	28	630	680	5	40	740	4x ø24	
315H-700						1397							947,5				js6					
315K-800						1497							1047,5									

Alle Maße in mm / all dimensions in mm

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