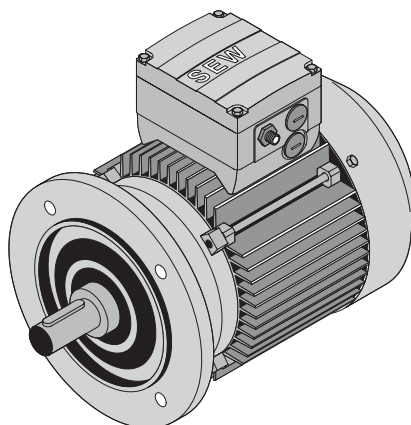
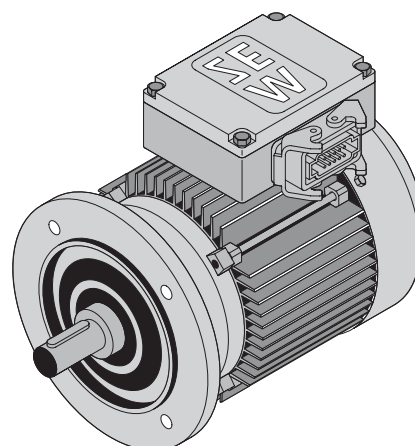


18 AC motors

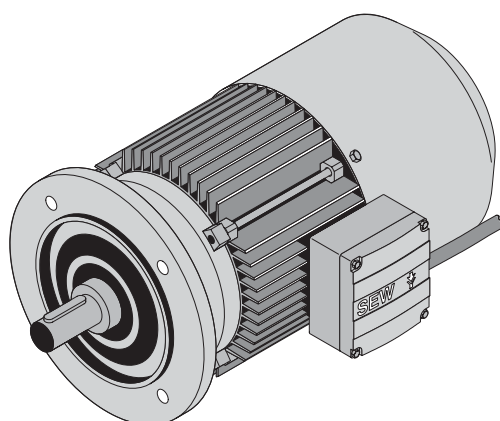
18.1 Examples of different types



DFT, DFV../MSW



DFT, DFV../AMA1

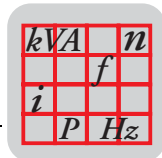


DFR/BR/IS, DFT, DFV../BM(G)/IS

05429AXX



See the Gearmotors Catalog for detailed project planning notes.



18.2 Technical data AC motors

3000 1/min - S1

Motor type	P_N M_N	n_N	I_N 380-415 V (400 V)	$\cos\varphi$	ϵ_{FF3}	$\eta_{75\%}$ $\eta_{100\%}$	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot}		Z_0 BG ³⁾ BGE ⁴⁾	M_{Bmax}	m	
	[kW] [Nm]	[1/min]	[A]			[%]			1) 2)		[1/h]	[Nm]	1	2
DFR63S2	0.18 0.63	2720	0.46 (0.45)	0.88	-	-	4.2	2.4 2.2	3.6	4.8	5000 -	1.6	6.2	8.0
DFR63M2	0.25 0.9	2660	0.66 (0.65)	0.86	-	-	3.5	2.2 1.9	3.6	4.8	4500 -	2.4	6.2	8.0
DFR63L2	0.37 1.3	2650	1.0 (0.92)	0.87	-	-	3.5	2.1 1.9	4.4	5.6	4000 -	3.2	6.7	8.5
DT71D2	0.55 1.9	2700	1.75 (1.65)	0.78	-	-	3.2	2.2 1.9	4.6	5.5	2700 4600	5	7.0	9.9
DT80K2	0.75 2.7	2700	2.35 (2.0)	0.86	-	-	3.7	2.0 1.8	6.6	7.5	2100 5800	10	9.9	12.7
DT80N2	1.1 3.9	2700	2.7 (2.65)	0.84	EFF3	74.4 72.6	4.0	2.0 1.8	8.7	9.6	1800 3600	10	11.5	14.3
DT90S2	1.5 5.3	2800	3.95 (3.8)	0.82	EFF3	71.4 71.7	4.2	2.3 2.1	25	31	1300 2700	20	16	26
DT90L2	2.2 7.5	2810	5.8 (5.1)	0.82	EFF3	74.1 74.3	4.8	2.5 2.2	34	40	1150 2700	20	18	28
DV100M2	3 10.2	2800	6.4 (5.9)	0.94	EFF3	81.0 78.6	5.0	2.0 1.8	53	59	700 1800	40	27	37
DV112M2	4 13.3	2860	8.2 (8.1)	0.88	EFF3	83.4 82.4	5.6	2.3 1.8	98	110	- 700	55	38	50
DV132S2	5.5 18.2	2880	10.9 (10.5)	0.88	EFF3	85.7 85.0	6.6	2.5 2.2	146	158	- 540	75	48	60
DV132M2	7.5 24.7	2900	15.2 (15.2)	0.86	EFF3	85.5 86.2	6.8	2.6 1.8	280	330	- 540	100	66	90
DV132ML2	9.2 30.4	2890	19 (18.1)	0.87	EFF3	86.0 86.5	7.2	2.8 1.8	330	380	- 450	150	75	100
DV160M2	11 36.2	2900	21.5 (21)	0.88	EFF3	87.5 88.0	7.7	2.7 1.7	398	448	- 390	150	84	109
DV160L2 ⁵⁾	15 48.9	2930	34 (32)	0.80	EFF3	84.4 85.7	6.0	2.7 1.4	925	1060	-	200	124	166
DV180M2 ⁵⁾	18.5 60.7	2930	38.0 (37.0)	0.85	EFF3	85.5 85.3	6.1	2.6 1.5	1120	1255	-	300	167	188
DV180L2 ⁵⁾	22 72.2	2930	45 (44.0)	0.85	EFF3	85.3 85.2	6.4	2.8 1.4	1290	1425	-	300	158	200

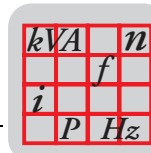
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Type with brake: For standstill only; operational braking not possible. Contact SEW-EURODRIVE concerning emergency braking.



1500 1/min - S1

Motor type	P_N M_N	n_N	I_N 380-415 V (400 V)	$\cos\phi$	$\epsilon_{FF} 2$	$\eta_{75\%}$ $\eta_{100\%}$	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot}		Z_0 BG ³⁾ BGE ⁴⁾	M_{Bmax}	m	
	[kW] [Nm]	[1/min]	[A]			[%]			1) 2)	[10 ⁻⁴ kgm ²]	[1/h]	[Nm]	1	2
DFR63S4	0.12 0.83	1380	0.39 (0.39)	0.69	-	-	3.3	2.4 2.2	3.6	4.8	10000 -	2.4	6.1	7.6
DFR63M4	0.18 1.3	1320	0.55 (0.55)	0.78	-	-	2.9	1.8 1.7	3.6	4.8	10000 -	3.2	6.1	7.6
DFR63L4	0.25 1.8	1300	0.73 (0.68)	0.81	-	-	2.8	1.8 1.7	4.4	5.6	10000 -	3.2	6.7	8.2
DT71D4	0.37 2.6	1380	1.24 (1.15)	0.76	-	-	3.0	1.8 1.7	4.6	5.5	6000 9500	5	7.0	9.9
DT80K4	0.55 3.9	1360	1.75 (1.75)	0.72	-	-	3.4	2.1 1.8	6.6	7.5	4100 11000	10	9.9	12.7
DT80N4	0.75 5.2	1380	2.15 (2.1)	0.73	-	-	3.8	2.2 2.0	8.7	9.6	5200 14000	10	11.5	14.3
DT90S4	1.1 7.5	1400	2.8 (2.8)	0.77	$\epsilon_{FF} 2$	77.5 76.5	4.3	2.0 1.9	25	31	2500 6300	20	16	26
DT90L4	1.5 10.2	1410	3.7 (3.55)	0.78	$\epsilon_{FF} 2$	80.2 79.0	5.3	2.6 2.3	34	40	3000 7600	20	18	28
DV100M4	2.2 15	1410	4.9 (4.7)	0.83	$\epsilon_{FF} 2$	82.8 82.0	5.9	2.7 2.3	53	59	1800 8500	40	27	37
DV100L4	3 20.5	1400	6.5 (6.3)	0.83	$\epsilon_{FF} 2$	84.5 83.0	5.6	2.7 2.2	65	71	1800 7600	40	30	40
DV112M4	4 26.9	1420	8.7 (8.7)	0.84	$\epsilon_{FF} 2$	85.9 84.2	5.4	2.4 2.1	98	110	- 3800	55	38	50
DV132S4	5.5 36.7	1430	11.4 (11.0)	0.85	$\epsilon_{FF} 2$	87.6 85.7	6.0	2.7 2.4	146	158	- 3000	75	48	60
DV132M4	7.5 50.1	1430	15.5 (15.5)	0.85	$\epsilon_{FF} 2$	89.5 87.5	6.2	2.1 2.0	280	330	- 1700	100	66	90
DV132ML4	9.2 61	1440	18.7 (18.1)	0.84	$\epsilon_{FF} 2$	89.6 88.0	6.0	2.5 2.0	330	380	- 1200	150	75	100
DV160M4	11 72.9	1440	22.5 (22.5)	0.83	$\epsilon_{FF} 2$	88.9 88.5	6.0	2.5 2.3	398	448	- 1200	150	84	109
DV160L4	15 98.1	1460	31.0 (29.5)	0.82	$\epsilon_{FF} 2$	90.3 90.0	5.5	2.4 1.8	925	1060	- 1000	200	124	166
DV180M4	18.5 121	1465	38.5 (37)	0.80	$\epsilon_{FF} 2$	90.8 90.0	5.9	2.6 2.0	1120	1255 1350 ⁵⁾	- 1300	300 300 ⁶⁾	147	188 192 ⁶⁾
DV180L4	22 143	1465	46 (42.5)	0.82	$\epsilon_{FF} 2$	91.4 90.5	6.0	2.7 2.0	1290	1425 1520 ⁶⁾	- 650	300 300 ⁶⁾	158	200 204 ⁶⁾
DV200L4	30 195	1470	57 (55)	0.86	$\epsilon_{FF} 2$	91.8 91.5	6.5	2.8 2.0	2340	2475 2570 ⁶⁾	- 600	300 600 ⁶⁾	244	295 299 ⁶⁾
DV225S4	37 240	1470	70 (67)	0.87	$\epsilon_{FF} 2$	93.2 92.5	6.5	2.8 2.0	3010	3145 3240 ⁶⁾	- 360	300 600 ⁶⁾	296	347 351 ⁶⁾
DV225M4	45 292	1470	86 (83)	0.85	$\epsilon_{FF} 2$	93.8 93.0	7.3	3.3 2.0	3570	3705 3800 ⁶⁾	- 300	300 600 ⁶⁾	325	377 381 ⁶⁾

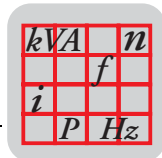
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Double disc brake



1000 1/min - S1

Motor type	P_N	M_N	n_N	I_N	$\cos\varphi$	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot}		Z_0	M_{Bmax}	m	
	[kW]	[Nm]	[1/min]	380-415 V (400 V) [A]				1) [10 ⁻⁴ kgm ²]	2)	BG ³⁾ BGE ⁴⁾ [1/h]	[Nm]	1 [kg]	2
DFR63S6	0.09	0.95	900	0.42 (0.38)	0.64	2.2	1.8 1.6	5.4	6.6	20000 -	2.5	6.0	7.5
DFR63M6	0.12	1.2	900	0.62 (0.58)	0.65	2.1	1.8 1.7	5.4	6.6	20000 -	3.2	6.0	7.5
DFR63L6	0.18	2	870	0.81 (0.78)	0.70	2.2	1.6 1.5	6.8	8.0	20000 -	3.2	6.6	8.1
DT71D6	0.25	2.7	880	0.9 (0.85)	0.72	2.7	1.6 1.6	8.3	9.2	8500 18000	5	7.0	9.9
DT80K6	0.37	3.9	900	1.44 (1.29)	0.68	3.0	1.9 1.9	10.3	11.2	5800 16000	10	9.9	12.7
DT80N6	0.55	5.8	900	1.78 (1.7)	0.73	3.0	1.8 1.7	14.1	15	7500 18000	10	11.5	14.3
DT90S6	0.75	8	900	2.4 (2.35)	0.70	3.1	2.0 1.9	25	31	4000 10000	20	16	26
DT90L6	1.1	11.4	920	3.35 (3.3)	0.69	3.5	2.2 2.1	34	40	3500 8500	20	18	28
DV100M6	1.5	15.6	920	4.1 (4.05)	0.70	4.0	2.3 2.0	53	59	2400 7200	40	27	37
DV112M6	2.2	22.3	940	5.6 (5.5)	0.77	4.6	1.8 2.0	98	110	- 4500	55	38	50
DV132S6	3	30.4	940	8.1 (7.6)	0.75	4.6	2.2 2.2	146	158	- 3600	75	48	60
DV132M6	4	39.8	960	10.0 (10.0)	0.70	5.9	2.1 2.1	430	480	- 2900	100	66	90
DV132ML6	5.5	54.7	960	13.8 (12.9)	0.70	5.7	2.1 2.0	524	574	- 2700	150	75	100
DV160M6	7.5	74.6	960	17.8 (16.7)	0.76	5.0	1.8 1.6	650	700	- 1800	150	84	109
DV160L6	11	109	960	23.5 (22)	0.77	6.5	2.2 1.7	1340	1475	- 1500	200	130	172
DV180L6	15	148	970	32 (31.5)	0.83	6.5	2.2 1.6	2010	2145 2240 ⁵⁾	- 1200	300 300 ⁵⁾	164	205 209 ⁵⁾
DV200LS6	18.5	182	970	38 (37)	0.80	5.0	2.2 1.7	2990	3125 3220 ⁵⁾	- 900	300 600 ⁵⁾	220	271 275 ⁵⁾
DV200L6	22	217	970	46 (43.5)	0.80	4.7	2.2 1.7	3490	3625 3720 ⁵⁾	- 700	300 600 ⁵⁾	244	295 299 ⁵⁾

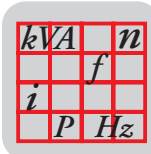
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Double disc brake



750 1/min - S1

Motor type	P_N	M_N	n_N	I_N 400 V	$\cos\varphi$	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot}		Z_0 BG ³⁾ BGE ⁴⁾	M_{Bmax}	m	
	[kW]	[Nm]	[1/min]	[A]				1) [10 ⁻⁴ kgm ²]	2)	[1/h]	[Nm]	1 [kg]	2
DT71D8	0.15	2.2	650	0.69	0.72	2.2	1.4 1.4	8.3	9.2	10000 21000	5	7.0	9.9
DT80N8	0.25	3.5	680	1.24	0.55	2.6	1.9 1.9	14.1	15	6000 17000	10	11.5	14.3
DT90S8	0.37	5.2	680	1.55	0.62	2.5	1.4 1.4	25	31	4600 11000	20	16	26
DT90L8	0.55	7.7	680	2.3	0.60	2.5	1.5 1.5	34	40	3900 9500	20	18	28
DV100M8	0.75	10.3	690	2.9	0.59	2.6	2.1 2.0	53	59	3300 8700	40	27	37
DV100L8	1.1	15.6	670	4.1	0.60	2.8	1.9 1.7	65	71	2800 8100	40	30	40
DV112M8	1.5	20.4	700	5.1	0.62	3.4	1.7 1.6	98	110	- 5500	55	38	50
DV132S8	2.2	30	700	7.1	0.62	3.4	1.9 1.9	146	158	- 4100	75	48	60
DV132M8	3	39.7	720	9.0	0.65	4.0	1.8 2.0	430	480	- 3200	100	66	90
DV132ML8	4	53	720	12.4	0.67	4.2	1.8 1.6	524	574	- 2700	150	75	100
DV160M8	5.5	74	710	15.8	0.65	4.5	1.8 1.5	650	700	- 2300	150	84	109
DV160L8	7.5	99.4	720	19	0.73	5.2	1.8 1.7	1340	1475	- 1600	200	130	172
DV180L8	11	145	720	25.5	0.72	5.2	2.0 1.8	2010	2145 2240 ⁵⁾	- 1300	300 300 ⁵⁾	164	205 209 ⁵⁾
DV200L8	15	198	720	33.5	0.74	3.8	2.0 1.8	3490	3625 3720 ⁵⁾	- 900	300 600 ⁵⁾	244	295 299 ⁵⁾

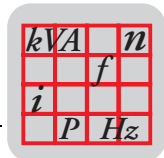
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Double disc brake



1500/3000 1/min - S1

Motor type	P _N [kW]	n _N [1/min]	I _N 400 V [A]	cosφ	I _A /I _N	M _A /M _N	M _H /M _N	J _{Mot} ²⁾		Z ₀		M _{Bmax} [Nm]	m	
								1) [10 ⁻⁴ kgm ²]	2) [10 ⁻⁴ kgm ²]	BG ³⁾ [1/h]	BGE ⁴⁾ [1/h]		1 [kg]	2 [kg]
DFR63M4/2	0.15 0.20	1370 2710	0.55 0.53	0.74 0.85	2.8 3.6	1.7 1.9	1.7 1.8	3.6	4.8	8000 3600	-	1.6	5.9	7.7
DFR63L4/2	0.20 0.28	1370 2710	0.67 0.67	0.72 0.90	2.9 3.8	1.7 1.8	1.6 1.7	4.4	5.6	8000 3200	-	2.4	6.6	8.4
DT71D4/2	0.25 0.37	1400 2720	1.05 1.00	0.71 0.88	3.0 3.5	1.5 1.6	1.7 1.6	4.6	5.5	4800 2000	7500 2700	5	7.0	9.9
DT80K4/2	0.4 0.63	1380 2700	1.24 1.52	0.75 0.93	3.0 3.5	1.6 1.5	1.7 1.5	6.6	7.5	3000 1700	5400 2200	10	9.9	12.7
DT80N4/2	0.55 0.88	1380 2700	1.81 2.05	0.71 0.91	3.2 3.6	1.8 1.7	1.9 1.6	8.7	9.6	2500 1800	5000 4300	10	11.5	14.3
DT90S4/2	0.88 1.3	1420 2820	2.45 3.35	0.76 0.85	4.3 4.2	2.1 1.9	2.0 1.8	25	31	2300 1000	4500 2000	20	16	26
DT90L4/2	1.1 1.8	1430 2780	2.95 4.25	0.75 0.90	5.3 4.6	2.3 2.0	2.4 2.0	34	40	2000 900	4100 1400	20	18	28
DV100M4/2	1.5 2.2	1430 2840	3.35 4.3	0.8 0.93	6.4 6.4	2.5 2.2	2.4 1.8	53	58	1000 600	3500 900	40	27	37
DV100L4/2	2.5 3.0	1400 2840	5.4 5.6	0.84 0.93	5.0 6.7	2.2 2.5	1.9 2.0	65	71	1200 700	2400 1000	40	30	40
DV112M4/2	3.3 4.0	1420 2860	7.2 8.7	0.82 0.83	5.0 5.0	1.8 2.1	1.9 1.8	98	110	-	1800 700	55	38	50
DV132S4/2	4.4 5.5	1420 2860	8.9 11.8	0.85 0.85	5.0 4.4	2.1 2.4	1.9 1.8	146	158	-	900 500	75	48	60
DV132M4/2	6.0 7.5	1450 2900	11.8 15.5	0.86 0.86	6.9 6.9	2.1 1.9	1.8 1.5	280	330	-	1300 450	100	66	90
DV132ML4/2	7.5 10.0	1450 2900	15 20.5	0.85 0.86	7.0 6.6	2.3 2.1	2.0 1.8	330	380	-	1100 350	150	75	100
DV160L4/2 ⁵⁾	12.0 14.0	1460 2930	24.5 29	0.81 0.83	5.4 5.7	2.4 2.2	1.6 1.1	925	1060	-	1000 250	200	124	166
DV180M4/2 ⁵⁾	16.0 18.5	1460 2940	33 37	0.81 0.85	5.6 7.6	2.4 2.4	1.7 1.4	1120	1255 1350 ⁶⁾	-	900 180	300 300 ⁶⁾	147	188 192 ⁶⁾
DV180L4/2 ⁵⁾	18.5 23.0	1465 2940	38 47	0.80 0.83	5.8 7.2	2.7 2.6	1.7 1.2	1290	1425 1520 ⁶⁾	-	800 150	300 300 ⁶⁾	158	200 204 ⁶⁾
DV200L4/2 ⁵⁾	26 33	1470 2940	47.5 63	0.87 0.91	7.3 7.3	3.4 3.0	2.6 2.0	2340	2475 2570 ⁶⁾	-	350 70	300 600 ⁶⁾	244	295 299 ⁶⁾
DV225S4/2 ⁵⁾	30 38	1470 2950	56 73	0.86 0.90	6.8 8.2	3.0 3.0	2.5 2.0	3010	3145 3240 ⁶⁾	-	270 55	300 600 ⁶⁾	296	347 351 ⁶⁾
DV225M4/2 ⁵⁾	35 45	1475 2950	64 84	0.86 0.90	6.8 8.3	3.2 3.2	2.5 2.0	3570	3705 3800 ⁶⁾	-	180 45	300 600 ⁶⁾	325	377 381 ⁶⁾

1) Without brake

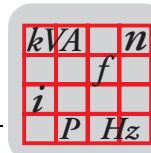
2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Do not brake from 2-pole speed. Contact SEW-EURODRIVE concerning emergency braking.

6) Double disc brake



1000/3000 1/min - S3 - 40/60 % cdf (SDT/SDV: 40/100 % cdf)

Motor type	P _N [kW]	n _N [1/min]	I _N 400 V [A]	cosφ	I _A /I _N	M _A /M _N	M _H /M _N	J _{Mot} ²⁾		Z ₀		M _{Bmax} [Nm]	m	
								1) [10 ⁻⁴ kgm ²]	2) [10 ⁻⁴ kgm ²]	BG ³⁾ [1/h]	BGE ⁴⁾ [1/h]		1 [kg]	2 [kg]
DT71D6/2	0.08 0.25	890 2730	0.43 0.83	0.7 0.82	2.0 3.0	1.5 2.3	1.6 2.0	4.6	5.5	10000 7000	18000 9000	2.5	7.2	10.8
DT80K6/2	0.13 0.4	890 2780	0.67 1.32	0.66 0.76	2.0 3.6	1.5 2.6	1.6 2.0	6.6	7.5	10000 7000	18000 9000	5	10.5	14.1
DT80N6/2	0.2 0.6	890 2790	0.93 1.78	0.68 0.78	2.0 3.9	1.5 2.5	1.6 2.1	8.7	9.6	10000 4000	15000 5000	5	11.8	15.4
SDT90S6/2	0.3 0.9	820 2580	1.55 2.70	0.72 0.85	2.0 2.9	1.7 2.3	1.6 2.0	25	30	12000 2500	18000 3500	10	16	25
SDT90L6/2	0.4 1.3	840 2580	1.55 3.55	0.70 0.87	2.3 3.5	1.7 2.3	1.6 2.0	34	39	9000 2400	17000 3300	10	19	28
SDT100LS6/2	0.6 1.8	860 2640	2.50 4.90	0.66 0.84	2.2 3.5	1.8 2.4	1.7 2.1	43	48	8000 2000	15000 3000	20	23	32
SDT100L6/2	0.8 2.4	850 2650	2.75 5.5	0.66 0.85	2.5 3.8	1.7 2.5	1.7 2.2	53	58	8000 2000	15000 3000	20	27	37
SDV112M6/2	1.0 3.0	910 2700	3.6 6.7	0.65 0.87	2.8 4.1	1.7 2.3	1.7 2.0	98	110	-	5000 1600	30	38	50
SDV132S6/2	1.3 4.0	920 2700	4.95 8.6	0.60 0.90	2.8 4.4	1.8 2.2	1.8 2.0	146	158	-	4500 1500	37	48	60
DV132M6/2	1.6 4.8	950 2870	3.95 9.9	0.74 0.88	4.8 6.3	2.4 2.7	2.4 1.7	280	330	-	3600 560	50	65	89
DV132ML6/2	2.0 6.0	950 2900	5.2 13.2	0.72 0.86	4.8 5.0	2.3 2.3	2.2 1.6	330	380	-	3000 470	75	75	96
DV160M6/2	2.5 7.5	950 2900	6.4 15.2	0.72 0.90	5.0 6.0	2.5 2.3	2.4 1.5	398	448	-	2400 300	75	85	106
DV160L6/2 ⁵⁾	3.7 11	960 2920	9.4 29.5	0.53 0.68	4.2 5.6	2.2 3.0	1.9 2.0	925	1060	-	1400 220	100	123	159
DV180M6/2 ⁵⁾	4.2 13	960 2940	10.5 32	0.75 0.70	4.5 6.5	2.1 3.2	1.9 2.3	1120	1255 1350 ⁶⁾	-	1300 190	150 150 ⁶⁾	143	179 183 ⁶⁾
DV180L6/2 ⁵⁾	5.5 16	965 2950	13.5 45.0	0.71 0.63	4.5 6.3	2.4 3.6	2.1 2.6	1290	1425 1520 ⁶⁾	-	1000 160	300 300 ⁶⁾	162	198 202 ⁶⁾
DV200L6/2 ⁵⁾	7.5 22	960 2930	19.0 45.0	0.70 0.86	4.7 6.9	2.8 3.0	2.1 2.2	2340	2475 2570 ⁶⁾	-	750 130	300 600 ⁶⁾	248	295 299 ⁶⁾

1) Without brake

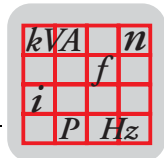
2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Do not brake from 2-pole speed. Contact SEW-EURODRIVE concerning emergency braking.

6) Double disc brake



750/3000 1/min - S3 - 40/60 % cdf (SDT/SDV: 40/100 % cdf)

Motor type	P_N	n_N	I_N	$\cos\varphi$	I_A/I_N	M_A/M_N	M_H/M_N	J_{Mot}		Z_0		M_{Bmax}	m	
	[kW]	[1/min]	400 V [A]					1) [10 ⁻⁴ kgm ²]	2) [10 ⁻⁴ kgm ²]	BG ³⁾ [1/h]	BGE ⁴⁾ [1/h]	[Nm]	1 [kg]	2 [kg]
DT71D8/2	0.06 0.25	675 2670	0.45 0.70	0.66 0.89	1.9 3.1	1.4 2.0	1.4 1.8	4.4	5.3	20000 7000	27000 9000	2.5	7.2	10.8
DT80K8/2	0.1 0.4	660 2730	0.80 1.15	0.62 0.85	1.5 3.4	1.7 1.8	1.6 1.7	6.6	7.5	15000 7000	20000 9000	5	10.5	14.1
DT80N8/2	0.15 0.6	660 2710	1.00 1.70	0.60 0.89	1.6 3.7	1.6 2.1	1.6 2.1	8.7	9.6	5000 4000	6300 5000	5	11.8	15.4
SDT90S8/2	0.22 0.9	650 2680	1.61 2.55	0.61 0.82	1.7 3.3	1.7 2.5	1.6 2.3	25	30.4	15000 2500	20000 3500	10	16	25
SDT90L8/2	0.3 1.3	630 2680	1.75 3.35	0.64 0.84	2.0 4.2	1.7 2.7	1.6 2.4	34	39.4	15000 2500	20000 3300	10	18	27
SDT100LS8/2	0.45 1.8	630 2680	2.40 4.20	0.62 0.89	2.0 4.0	1.7 2.4	1.6 2.2	42.7	48.1	7000 1800	9000 2600	20	23	32
SDT100L8/2	0.6 2.4	630 2700	3.05 5.3	0.60 0.90	2.0 4.5	1.8 2.6	1.7 2.2	53	58.4	4500 1800	9000 2600	20	27	37
SDV112M8/2	0.8 3.0	680 2730	3.95 6.9	0.55 0.84	2.2 4.0	1.4 2.0	1.6 1.8	98	110.2	-	8000 1200	30	38	50
SDV132S8/2	1.0 4.0	690 2730	5.2 8.6	0.54 0.90	2.6 4.5	1.4 2.0	1.6 1.8	146	158	-	6000 1200	37	48	60
DV132M8/2	1.2 4.8	710 2850	4.55 10	0.57 0.88	3.5 6.3	1.9 2.7	1.9 1.7	280	330	-	3600 550	50	65	89
DV132ML8/2	1.5 6.0	710 2900	5.5 13.2	0.57 0.86	3.3 5.0	2.0 2.3	1.9 1.6	330	380	-	3400 470	75	75	96
DV160M8/2	1.9 7.5	710 2900	7.1 15.2	0.56 0.85	3.5 5.2	1.8 2.0	1.7 1.5	398	448	-	2600 300	75	85	106
DV160L8/2 ⁵⁾	2.8 11	725 2920	10.5 29.5	0.53 0.68	3.4 5.6	2.2 3.0	1.9 2.0	925	1060	-	1800 220	100	123	159
DV180M8/2 ⁵⁾	3.3 13	725 2940	12.1 32	0.52 0.70	3.5 6.5	2.4 3.2	2.1 2.3	1120	1255 1350 ⁶⁾	-	1500 190	150 150 ⁶⁾	143	179 192 ⁶⁾
DV180L8/2 ⁵⁾	4 16	720 2950	13.5 45.0	0.58 0.63	3.2 6.3	1.9 3.6	1.6 2.6	1290	1425 1520 ⁶⁾	-	1300 160	150 150 ⁶⁾	154	190 192 ⁶⁾
DV200L8/2 ⁵⁾	5 20	730 2930	15.8 42	0.57 0.86	4.0 7.5	3.0 3.5	2.5 2.5	2340	2475 2570 ⁶⁾	-	450 160	150 300 ⁶⁾	250	292 296 ⁶⁾
DV225S8/2 ⁵⁷⁾	6 24	730 2930	19 47.5	0.56 0.90	4.2 8.0	3.3 3.3	3.0 2.2	3010	3145 3240 ⁶⁾	-	360 77	150 300 ⁶⁾	298	340 355 ⁶⁾
DV225M8/2 ⁵⁷⁾	7.5 30	730 2940	24 61	0.56 0.90	4.6 9.5	3.3 3.5	3.0 2.1	3570	3705 3800 ⁶⁾	-	270 60	150 300 ⁶⁾	319	361 365 ⁶⁾

1) Without brake

2) With brake

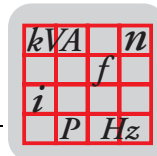
3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Do not brake from 2-pole speed. Contact SEW-EURODRIVE concerning emergency braking.

6) Double disc brake

7) Only available in Δ / Δ



500/3000 1/min - S3 - 40/60 % cdf

Motor type	P_N	n_N	I_N	$\cos\varphi$	I_A/I_N	M_A/M_N	M_H/M_N	J_{Mot}		Z_0		M_{Bmax}	m	
	[kW]	[1/min]	400 V [A]					1) [10 ⁻⁴ kgm ²]	2) [10 ⁻⁴ kgm ²]	BG ³⁾ [1/h]	BGE ⁴⁾ [1/h]	[Nm]	1 [kg]	2 [kg]
DT90S12/2	0.11 0.7	390 2650	0.95 1.75	0.69 0.93	1.4 3.6	1.6 2.1	1.5 2.0	25	31	8000 1900	12000 2900	10	16	25
DT90L12/2	0.15 0.9	380 2700	1.21 2.10	0.70 0.93	1.4 4.1	1.6 2.3	1.7 2.0	34	40	6000 1600	10000 2400	10	18	27
DV100M12/2	0.2 1.2	405 2740	1.55 2.50	0.59 0.95	1.5 5.0	1.9 2.8	1.6 2.2	53	59	5000 1300	8100 2000	20	27	37
DV100L12/2	0.25 1.6	400 2800	1.65 3.1	0.60 0.95	1.6 6.1	1.9 3.0	1.7 2.4	65	71	4000 1300	6300 2000	20	30	40
DV112M12/2	0.33 2.0	430 2760	2.0 4.3	0.59 0.95	1.8 4.9	1.6 2.4	1.5 2.1	98	110	-	5400 1400	30	38	50
DV132S12/2	0.5 3.0	420 2860	2.3 6.0	0.58 0.92	2.0 6.2	1.7 2.8	1.6 2.3	146	158	-	4500 900	37	48	60
DV132M12/2	0.7 4.0	450 2890	3.9 8.7	0.50 0.87	2.2 6.4	1.8 2.3	1.7 1.6	280	330	-	2700 700	50	65	89
DV132ML12/2	0.85 5.0	460 2880	4.75 9.7	0.50 0.93	2.4 6.5	1.8 2.3	1.6 1.5	330	380	-	2500 580	75	75	96
DV160M12/2	1.2 7.0	440 2880	5.9 13.8	0.57 0.90	2.0 6.5	1.6 2.4	1.5 1.7	398	448	-	2500 450	75	106	106
DV160L12/2 ⁵⁾	1.4 8.5	465 2910	7.2 20	0.48 0.75	2.0 5.5	1.6 2.5	1.5 1.6	925	1060	-	1100 220	100	120	156
DV180M12/2 ⁵⁾	2.0 12	460 2900	10.0 24.5	0.48 0.88	2.0 5.2	1.6 2.3	1.5 1.4	1120	1255 1350 ⁶⁾	-	840 200	150 150 ⁶⁾	142	179 183 ⁶⁾
DV180L12/2 ⁵⁾	2.3 13.5	460 2940	12.7 27	0.45 0.87	2.0 5.5	1.8 2.7	1.6 1.5	1290	1425 1520 ⁶⁾	-	600 180	150 150 ⁶⁾	154	198 202 ⁶⁾
DV200L12/2 ⁵⁾	3.5 20	475 2930	15.8 43	0.48 0.85	2.3 7.5	2.0 3.0	1.7 2.2	2340	2475 2570 ⁶⁾	-	750 130	150 300 ⁶⁾	250	295 299 ⁶⁾

1) Without brake

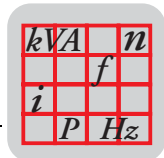
2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Do not brake from 2-pole speed. Contact SEW-EURODRIVE concerning emergency braking.

6) Double disc brake



1000/1500 1/min - S1

Motor type	P _N [kW]	n _N [1/min]	I _N 400 V [A]	cosφ	I _A /I _N	M _A /M _N	M _H /M _N	J _{Mot} 1) 2) [10 ⁻⁴ kgm ²]		Z ₀ BG ³⁾ BGE ⁴⁾ [1/h] [1/h]		M _{Bmax} [Nm]	m 1 2 [kg]	
DT71D6/4	0.11 0.15	900 1420	0.62 0.74	0.76 0.70	2.1 2.6	1.5 1.5	1.7 1.7	4.4	5.3	16000 10000	18000 13000	2.5	7.0	10.6
DT80K6/4	0.13 0.22	920 1440	0.64 1.14	0.67 0.61	2.3 3.0	1.8 1.9	1.9 2.0	6.6	7.5	13000 9000	16000 10000	5	10.5	14.1
DT80N6/4	0.18 0.3	920 1440	0.91 1.44	0.68 0.62	2.5 3.0	1.9 1.9	1.9 2.0	8.7	9.6	10000 8000	14000 8500	5	11.8	15.4
DT90S6/4	0.33 0.55	940 1440	1.24 1.67	0.75 0.75	2.8 4.0	1.5 1.5	1.7 1.9	25	31	8500 4000	9000 5600	10	16.4	25.4
DT90L6/4	0.48 0.75	940 1440	1.67 2.0	0.70 0.78	3.2 4.3	1.5 1.5	1.8 1.9	34	40	8000 2400	8100 3600	10	19	28
DV100M6/4	0.8 1.1	940 1440	2.3 2.7	0.72 0.79	3.9 5.3	1.8 1.7	1.8 1.8	53	59	7500 2000	7600 2800	20	27	37
DV100L6/4	1.1 1.5	940 1440	3.3 3.5	0.70 0.80	3.7 5.5	1.9 1.9	1.8 1.8	65	71	7000 1900	7200 2600	20	30	40
DV112M6/4	1.3 2.0	950 1460	3.6 5.1	0.73 0.80	4.3 5.0	1.7 1.5	2.0 2.0	98.0	110.2	-	4700 1900	30	38	50
DV132S6/4	2.0 3.0	950 1460	5.4 7.9	0.75 0.75	4.0 5.5	1.7 2.0	2.0 2.0	146	158	-	3800 1500	37	48	60
DV132M6/4	2.8 4.4	970 1470	7.0 10.4	0.72 0.75	4.7 6.6	1.7 1.9	2.0 1.7	280	330	-	2500 1700	50	66	90
DV132ML6/4	3.7 5.2	970 1470	8.8 11	0.77 0.80	4.6 7.0	1.7 1.9	2.0 1.8	330	380	-	2000 1300	75	76	97
DV160M6/4	4.8 6.6	970 1460	11.4 13.5	0.76 0.84	5.0 6.7	1.7 1.9	2.0 2.0	398	448	-	1500 1000	75	85	106
DV160L6/4	6.0 9.2	970 1455	15.2 19	0.70 0.83	4.3 5.1	2.1 2.1	1.9 1.7	925	1060	-	1100 550	100	123	159
DV180L6/4	9.2 14	960 1460	22.5 33.5	0.73 0.73	4.0 6.1	2.6 2.8	1.5 2.0	1290	1425 1520 ⁵⁾	-	700 550	150 150 ⁵⁾	162	198 202 ⁵⁾
DV200L6/4	16 22	980 1470	31 40.5	0.85 0.90	4.6 5.4	2.2 2.2	2.0 2.0	3490	3625 3720 ⁵⁾	-	500 350	150 300 ⁵⁾	232	274 278 ⁵⁾
DV225S6/4	18.5 26	970 1440	37 47.5	0.82 0.87	5.0 5.0	2.2 2.0	2.0 1.5	4487	4622 4717 ⁵⁾	-	270 180	150 300 ⁵⁾	308	350 354 ⁵⁾
DV225M6/4	22 30	970 1470	42 53	0.85 0.90	5.4 5.8	2.5 2.2	2.0 1.8	5318	5453 5448 ⁵⁾	-	200 150	150 300 ⁵⁾	330	372 376 ⁵⁾

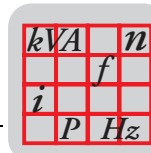
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Double disc brake



750/1500 1/min - S1

Motor type	P _N [kW]	n _N [1/min]	I _N 400 V [A]	cosφ	I _A /I _N	M _A /M _N	M _H /M _N	J _{Mot}		Z ₀		M _{Bmax} [Nm]	m	
								1) [10 ⁻⁴ kgm ²]	2) [10 ⁻⁴ kgm ²]	BG ³⁾ [1/h]	BGE ⁴⁾ [1/h]		1 [kg]	2 [kg]
DT71D8/4	0.10 0.18	650 1380	0.49 0.54	0.70 0.85	2.2 3.3	1.7 1.5	1.6 1.4	6.6	7.5	7000 4000	12000 7000	5	7.3	10.9
DT80K8/4	0.16 0.3	650 1380	0.76 0.86	0.68 0.83	1.9 3.0	1.5 1.5	1.5 1.5	10.3	11.2	6000 3500	11000 6000	10	10	13.6
DT80N8/4	0.22 0.4	670 1400	1.02 1.14	0.66 0.83	2.1 3.5	1.7 1.6	1.7 1.6	14.1	15	5500 3400	10000 6000	10	11.4	15
DT90S8/4	0.3 0.6	700 1400	1.7 1.7	0.58 0.84	2.5 4.3	1.7 1.6	1.7 1.5	25	30.4	3500 2800	9000 5000	20	16	25
DT90L8/4	0.44 0.88	700 1400	2.1 2.2	0.56 0.84	2.4 4.2	1.9 1.7	2.1 1.7	34	39.4	3200 2500	7200 4300	20	18	27
DV100M8/4	0.66 1.3	700 1420	2.55 2.85	0.57 0.84	3.2 5.0	2.0 1.9	1.9 1.7	53	59	2600 2000	5600 3600	40	27	37
DV100L8/4	0.9 1.8	690 1410	3.5 3.95	0.57 0.84	2.9 4.8	1.9 2.0	1.8 1.8	65	71	2500 1500	5000 2700	40	30	40
DV112M8/4	1.2 2.2	700 1440	4.25 4.75	0.58 0.86	3.4 5.8	1.9 1.9	1.8 1.3	98	110	-	4000 2000	55	38	50
DV132S8/4	1.8 3.3	700 1440	7.2 7.1	0.57 0.86	3.7 6.3	2.3 2.1	2.3 1.9	146	158	-	3100 1500	75	48	60
DV132M8/4	2.2 4.4	700 1410	7.0 8.9	0.60 0.88	3.9 5.7	2.2 2.2	2.2 2.0	280	330	-	3000 1500	100	66	90
DV132ML8/4	2.7 5.5	700 1400	8.3 10.9	0.62 0.84	3.6 5.3	2.3 2.2	2.2 2.0	330	380	-	2700 1400	150	75	96
DV160M8/4	3.8 7.5	720 1460	11.8 14.7	0.60 0.85	3.8 6.0	2.8 2.8	2.7 2.7	398	448	-	2000 1400	150	85	106
DV160L8/4	5.5 10	720 1460	18.1 20	0.55 0.83	3.1 5.7	1.7 2.3	1.8 1.8	925	1060	-	1600 1200	200	120	156
DV180L8/4	7.5 15	730 1470	26 30.5	0.51 0.81	3.5 6.0	2.5 2.5	2.2 2.2	1290	1425 1520 ⁵⁾	-	1100 1000	300 300 ⁵⁾	154	190 194 ⁵⁾
DV200LS8/4	12 20	730 1470	34.5 39.5	0.60 0.84	4.1 5.1	2.6 2.3	1.8 1.7	2990	3125 3220 ⁵⁾		1000 800	300 600 ⁵⁾	222	264 268 ⁵⁾
DV200L8/4	14 22	730 1470	34.5 40.5	0.66 0.88	4.8 6.4	2.9 2.6	2.3 2.5	3490	3625 3720 ⁵⁾	-	900 700	300 600 ⁵⁾	232	274 278 ⁵⁾
DV225S8/4	18.5 28	730 1470	44.5 51	0.70 0.90	4.3 5.8	2.5 2.3	2.0 2.0	4487	4622 4717 ⁵⁾	-	700 500	300 600 ⁵⁾	308	350 354 ⁵⁾
DV225M8/4	25 34	730 1470	57 62	0.72 0.88	3.8 6.0	2.2 2.5	1.7 1.9	5318	5453 5448 ⁵⁾	-	600 450	300 600 ⁵⁾	330	372 376 ⁵⁾

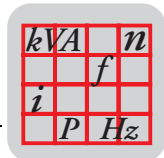
1) Without brake

2) With brake

3) Operation with BG brake control system

4) Operation with BGE brake control system

5) Double disc brake



18.3 Technical data on SEW brakes

The following table lists the technical data of SEW brakes. The type and number of brake springs determines the level of the braking torque. Maximum braking torque M_{Bmax} is installed as standard, unless specified otherwise in the order. Other brake spring combinations can result in reduced braking torque values M_{Bred} .

Brake Type	For motor size	M_{Bmax} [Nm]	Reduced braking torques M_{Bred} [Nm]							W [10 ⁶ J]	t_1 [10 ⁻³ s]	t_2		P_B [W]
												t_{2II} [10 ⁻³ s]	t_{2I} [10 ⁻³ s]	
BR03	DR63	3.2	2.4	1.6	0.8					200	25	3	30	24
BMG05	DT71/80	5.0	4	2.5	1.6	1.2				120	30 ¹⁾ 20	5	35	32
BMG1	DT80	10	7.5	6						120	50 ¹⁾ 20	8	40	36
BMG2	DT90/ DV100	20	16	10	6.6	5				260	70 ¹⁾ 30	12	80	40
BMG4	DV100	40	30	24						260	130 ¹⁾ 35	15	80	50
BMG8	DV112M	55	45	37	30	19	12.6	9.5		600	30	12	60	65
	DV132S	75	55	45	37	30	19	12.6	9.5	600	35	10	50	65
BM15	DV132M	100	75	50	35	25				1000	40	14	70	95
	DV132ML/ DV160M	150	125	100	75	50	35	25		1000	50	12	50	95
BM30	DV160L	200	150	125	100	75	50			1500	55	18	90	95
	DV180M/L	300	250	200	150	125	100	75	50	1500	60	16	80	95
BM31	DV200/225	300	250	200	150	125	100	75	50	1500	60	16	80	95
BM32 ²⁾	DV180M/L	300	250	200	150	100				1500	55	18	90	95
BM62 ²⁾	DV200/225	600	500	400	300	250	200	150	100	1500	60	16	80	95

1) for operation with the BGE/BME brake control system

2) Double disc brake

M_{Bmax} Maximum braking torque

M_{Bred} Reduced braking torque

W Braking work until service

t_1 Response time

t_{2I} Brake application time for cut-off in the AC circuit

t_{2II} Brake application time for cut-off in the DC and AC circuit

P_B Braking power

The response and application times are recommended values in relation to the maximum braking torque.

18.4 Dimension sheets for AC motors

Flange-mounted DFR63 - DFV112M

08 152 199

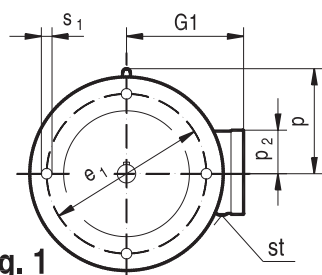
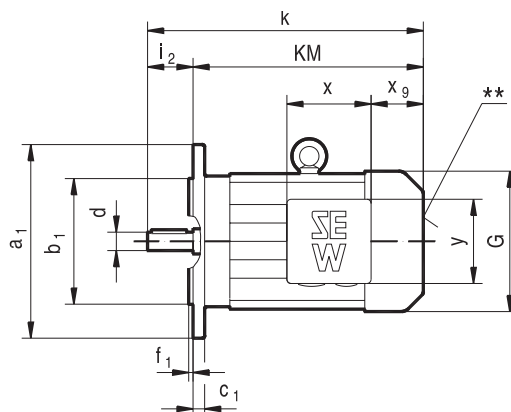
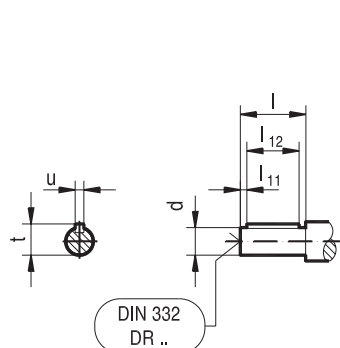


Fig. 1

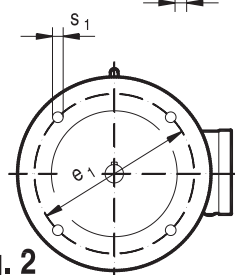


Fig. 2

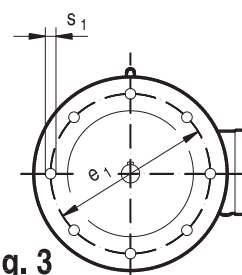


Fig. 3

** Keep the air inlet clear

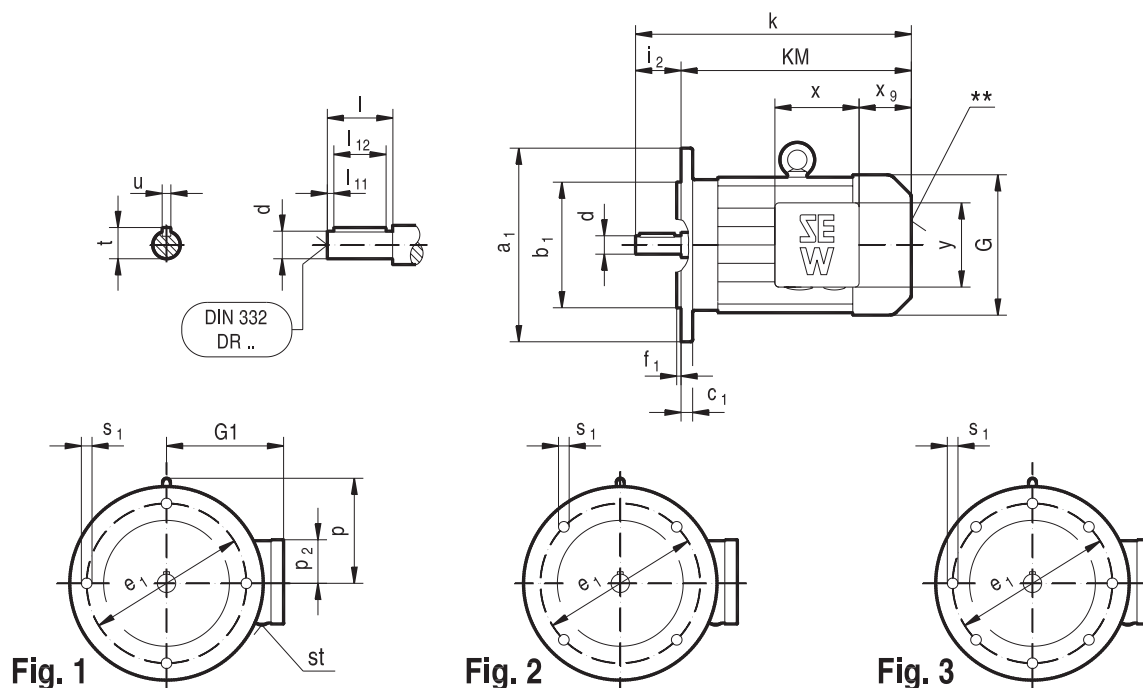
	DFR63..		DFT71D		DFT80..		DFT90..		DFV100M SDFT100..		DFV100L		DFV112M		
a ₁ ¹⁾ (P)	140	160	160	200	160	200	200	250	200	250	200	250	200	250	300
b ₁ (N)	95	110	110	130	110	130	130	180	130	180	130	180	130	180	230
c ₁ (LA)	9	10	10	12	10	12	12	15	12	15	12	15	12	15	16
e ₁ (M)	115	130	130	165	130	165	165	215	165	215	165	215	165	215	265
f ₁ (T)	3	3.5	3.5		3.5		3.5	4	3.5	4	3.5	4	3.5		4
Fig.	2		2		2		2	1	2		2		1	2	1
G (AC)	132		145		145		197		197		197			221	
G ₁ (AD)	105		122		122		154		166		166			179	
i ₂ (R+E)	23	30	30		40		50	66	60		60		63.5		60
k (LB+R+E)	210	217	232		292		323		371		401			409	
KM (LB)	187		202		252		273	257	311		341		345		349
p	-		-		-		-		-		-		-		147
p ₂	51		50		50		50		56		56			56	
s ₁ (S)	9		9	11	9	11	11	14	11	14	11	14	11		14
st	2xØ20.5 ²⁾ 2xØ16.5 ²⁾		1xM25x1.5 1xM16x1.5		1xM25x1.5 1xM16x1.5		1xM25x1.5 1xM16x1.5		1xM32x1.5 1xM16x1.5		1xM32x1.5 1xM16x1.5		1xM32x1.5 1xM16x1.5		
x _g	51		61		61		76		74		74			91	
x	100		87		87		87		106		106			106	
y	100		97		97		97		109		109			109	
d (D)	11	14	14		19		24		28		28			28	
l (E)	23	30	30		40		50		60		60			60	
l ₁₁ (E-EB-ED)	3.5	4	4		4		5		5		5			5	
l ₁₂ (EB)	16	22	22		32		40		50		50			50	
t (GA)	12.6	16	16		21.5		27		31		31			31	
u (F)	4	5	5		6		8		8		8			8	

1) Flange diameter a₁ (P): The preferred IEC range is printed in bold.

2) Knock-out for M20x1.5 and M16x1.5.

Flange-mounted DFV132S - DFV225

08 152 199



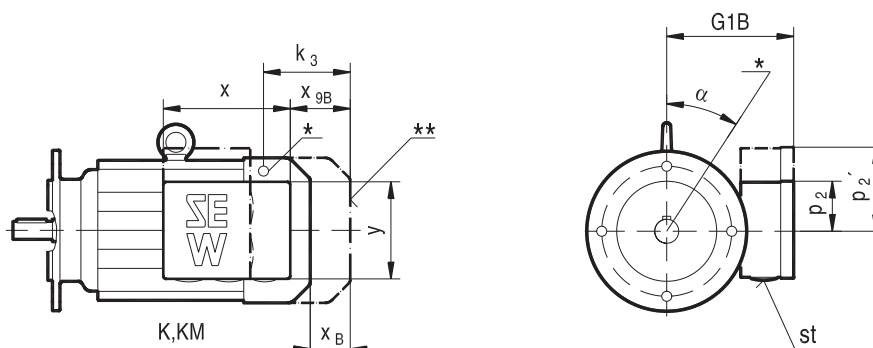
** Keep the air inlet clear

	DFV132S			DFV132M			DFV132ML		DFV160M			DFV160L			DFV180..			DFV200..		DFV225..
a ₁ ¹⁾ (P)	250	300	350	250	300	350	300	350	300	350	450	300	350	450	300	350	450	400	450	450
b ₁ (N)	180	230	250	180	230	250	230	250	230	250	350	230	250	350	230	250	350	300	350	350
c ₁ (LA)	15	16	18	15	16	18	16	18	16	18	22	16	18	22	16	18	22	20	22	22
e ₁ (M)	215	265	300	215	265	300	265	300	265	300	400	265	300	400	265	300	400	350	400	400
f ₁ (T)	4	4	5	4	4	5	4	5	4	5	5	4	5	5	4	5	5	5	5	5
Fig.	2	2	1	1	2	2	2		2	2	3	1	2	3	1	2	3	2	3	3
G (AC)	221			275			275		275			331			331			394		394
G ₁ (AD)	179			230			230		230			259			253			285		289
i ₂ (R+E)	80	99.5	75	80		80		110		131	104	110	125	104	110	125	110	118	140	
k (LB+R+E)	474			482			542		572			613			685			726		830
KM (LB)	394	374	407	402		462		462		441	509	503	488	581	575	560	616	608	690	
p	147			190			190		190			219			219			262		262
p ₂	56			76			76		76			76			76			76		76
s ₁ (S)	14	18	14		18	14	18	14	18		14	18		14	18		18		18	
st	1xM32x1.5 1xM16x1.5			2xM32x1.5 2xM16x1.5			2xM32x1.5 2xM16x1.5		2xM40x1.5 2xM16x1.5			2xM40x1.5 2xM16x1.5			2xM40x1.5 2xM16x1.5			2xM50x1.5 2xM16x1.5		2xM50x1.5 2xM16x1.5
x _g	91			59			59		59			83			208			236		278
x	106			182			182		182			182			182			182		182
y	109			152			152		152			152			152			152		152
d (D)	38			38			38		42			42			48			55		60
l (E)	80			80			80		110			110			110			110		140
l ₁₁ (E-EB-ED)	5			5			5		10			10			10			10		15
l ₁₂ (EB)	70			70			70		70			70			80			90		100
t (GA)	41			41			41		45			45			51.5			59		64
u (F)	10			10			10		12			12			14			16		18

1) Flange diameter a₁ (P): The preferred IEC range is printed in bold.

18.5 Additional lengths for brake motors

09 717 983



* Manual brake release can be pivoted through 90° together with the terminal box, with the exception of DFR63 and the foot-mounted versions of DT71D, DT90.., DV132M and DV160L.

** Keep the air inlet clear

	DFR63.. /BR03	D(F)T71D /BMG ²⁾	D(F)T80.. /BMG	D(F)T90.. /BMG ²⁾	SD(F)T100.. /BMG	D(F)V100.. /BMG	D(F)V112M /BMG	D(F)V132S /BMG	D(F)V132M /BM ²⁾
G1B	105	127	127	161	166	166	182	182	230
k ₃	39	59	59	69	69	69	97	97	112
p ₂	50	50	50	50	56	56	56	56	112
p ₂ ³⁾	-	84	84	84	86	86	86	86	106
st	2xØ20.5 ⁵⁾ 2xØ16.5 ⁵⁾	2xM25x1.5 1xM16x1.5	2xM25x1.5 1xM16x1.5	2xM25x1.5 1xM16x1.5	2xM32x1.5 1xM16x1.5	2xM32x1.5 1xM16x1.5	2xM32x1.5 1xM16x1.5	2xM32x1.5 1xM16x1.5	2xM32x1.5 2xM16x1.5
x _{9B}	106	86	86	121	125	125	131	131	171
x _B ⁶⁾	55	64	64	85	85	85	80	80	112
x	100	127	127	127	139	139	139	139	182
y	100	97	97	97	109	109	109	109	152
a	90°	33°	33°	33°	33°	33°	33°	33°	33°

	D(F)V132ML /BM	D(F)V160M /BM	D(F)V160L /BM ²⁾	D(F)V180.. /BM	D(F)V200.. /BM	D(F)V225.. /BM	D(F)V180.. /BM32	D(F)V200.. /BM62	D(F)V225.. /BM62
G1B	230	230	259	254	285	289	254	285	289
k ₃	112	112	160	160	172	172	133	143	143
p ₂	76	76	76	76	76	76	76	76	76
p ₂ ³⁾	106	106	106	106	106	106	106	106	106
st	2xM32x1.5 2xM16x1.5	2xM40x1.5 2xM16x1.5	2xM40x1.5 2xM16x1.5	2xM40x1.5 2xM16x1.5	2xM50x1.5 2xM16x1.5	2xM50x1.5 2xM16x1.5	2xM40x1.5 2xM16x1.5	2xM50x1.5 2xM16x1.5	2xM50x1.5 2xM16x1.5
x _{9B}	171	171	240	362	391	433	362	391	433
x _B ⁶⁾	112	112	156	156	156	156	156	156	156
x	182	182	182	182	182	182	182	182	182
y	152	152	152	152	152	152	152	152	152
a	33°	33°	33°	33°	33°	33°	33°	33°	33°

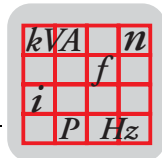
2) The fan guard is flat at the bottom in the foot-mounted versions of DT71D, DT90.., DV132M and DV160L.

3) Note dimension p₂' when turning the cable entry into position 1 or 3!

4) Knock-out for M20x1.5 and M12x1.5

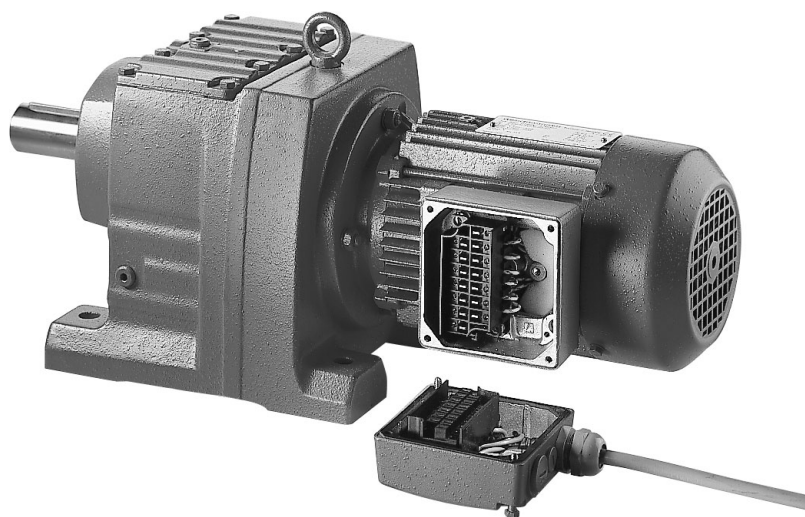
5) Knock-out for M20x1.5 and M16x1.5

6) Note the space required for removing the fan guard in the axial direction!



18.6 Technical data and dimensions of plug connectors

IS integrated plug connector



03075AXX

On request, AC (brake) motors DR63 and DT71 ... DV132S.. can be supplied with the integrated, 12-pole IS plug connector instead of the standard terminal box. The IS top part (mating connector) is included in the scope of delivery. IS is particularly compact and offers the following connection options:

- Motor, single speed or double pole-changing
- Brake
- Temperature monitoring (TF or TH)

As with the terminal box, the cable run with the integrated plug connector IS can be from four different directions offset at 90°.

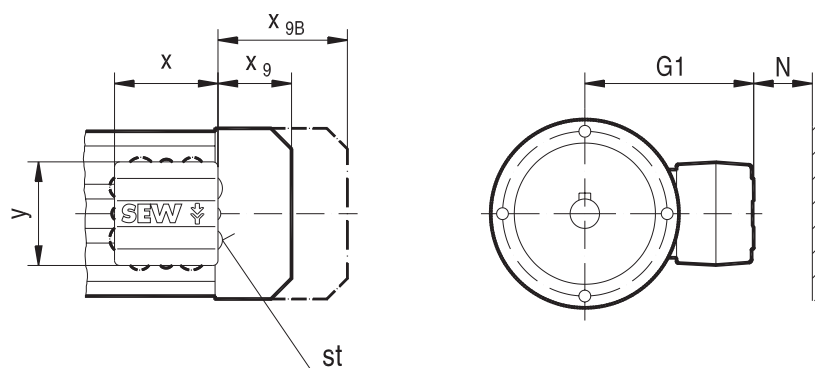
Technical data

IS size	1	2
For AC (brake) motors	DR63 ... DT90	DV100 ... DV132S
Number of contacts	12 + 2 × PE	
Contact connection	Screw connection	
Contact type	Blade / bushing	
Max. voltage / (CSA)	690 V _{AC} / (600 V _{AC})	
Max. contact load	16 A _{eff}	
Enclosure	Corresponding to motor protection type (IP54, IP55, optionally IP65)	
Ambient temperature	-45 °C ... +40 °C	



- IS requires a clearance of 30 mm for removing the connector.
- **For brake motors with IS size 1 only:** Only brake control systems BG1.2, BG2.4, BSR and BUR can be accommodated in the IS. Other brake control systems must be installed in the control cabinet.

IS dimensions

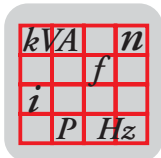


04391AXX

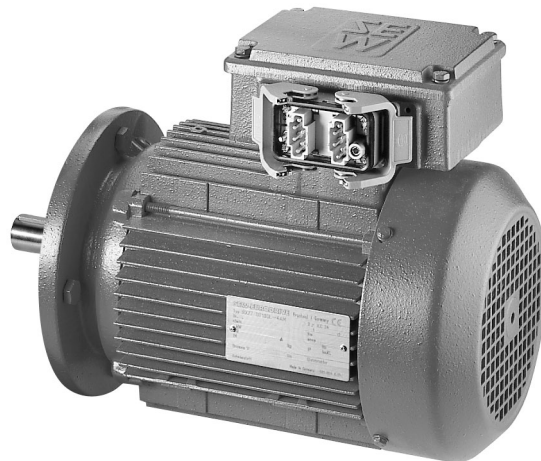
	DFR63..	D(F)T71D	D(F)T80..	D(F)T90..	D(F)V100..	D(F)V112M	D(F)V132S
G1 (AD)	119	149	149	185	185	199	199
x9	51	62	62	77	62	80	80
x9B¹⁾	106	126	126	162	146	160	160
x	100	100	100	100	116	116	116
y	100	100	100	100	116	116	116
N²⁾	30	30	30	30	30	30	30
st	1xM20x1.5 1xM16x1.5 1xM12x1.5	1xM20x1.5 1xM16x1.5 1xM12x1.5	1xM20x1.5 1xM16x1.5 1xM12x1.5	1xM20x1.5 1xM16x1.5 1xM12x1.5	1xM25x1.5 1xM20x1.5 1xM12x1.5	1xM25x1.5 1xM20x1.5 1xM12x1.5	1xM25x1.5 1xM20x1.5 1xM12x1.5

1) Brake motor

2) Space required for removing the plug



**Plug connectors
ASA1/ASD1 and
AMA1/AMD1**



03076AXX

The installed plug connector systems ASA1/ASD1 are based on the plug connector systems HAN 10ES and AMA1/AMD1 on HAN Modular made by Harting. The plugs are mounted on the side of the SEW terminal box. They are fastened onto the terminal box either using two clips as in the ASA1 and AMA1 or with one clip as in the ASD1 and AMD1.

Both systems are used for AC (brake) motors DT71 ... DV132S for ASA1/ASD1 and DT71 ... DV180 for AMA1/AMD1 with supply voltages up to 500 V_{AC}. The maximum contact current is 16 A. UL approval has been granted for ASA1/ASD1 and AMA1/AMD1 plug connectors. **The mating connectors (sleeve housing) with contact tubes are not included in the scope of delivery.**

ASA1/ASD1

The ten contacts of the ASA1 (twin clip transverse closure) and ASD1 plug connectors (single clip longitudinal closure) connect the motor winding (six contacts), the brake (two contacts only) and the thermal motor protection (two contacts). It is possible to connect both single speed motors and double pole-changing motors.

With brake motors, it is only possible to select the type with the brake control system in the terminal box. In this case, the disconnection in the DC circuit has to take place electronically using BSR or BUR.

The ASD1 type with single clip closure corresponds to the DESINA regulation issued by the Association of German Machine Tool Manufacturers (VDW).



AMA1 / AMD1

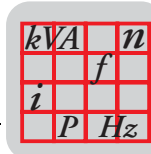
AMA1 (twin clip transverse closure) and AMD1 (single clip longitudinal closure) consist of plug connectors with two socket inserts having 6 or 3+6 contacts each. One socket insert is used for connecting the motor winding, the other for the thermal motor protection and the brake. It is possible to connect both single speed motors and double pole-changing motors.

With brake motors, the brake control system can be either located in the terminal box or in the control cabinet. All versions of the brake control system are possible without restrictions.

The following positions of the motor terminal box and the cable entry are not possible with ASA1/ASD1/AMA1/AMD1 plug connectors:

- Motor size DT71..
 - Cable entry position 1 is never possible.
 - Cable entry position X is not possible with the terminal box 180° position.
- Motor sizes DT80.. - DV132S
 - Cable entry position 1 is never possible.

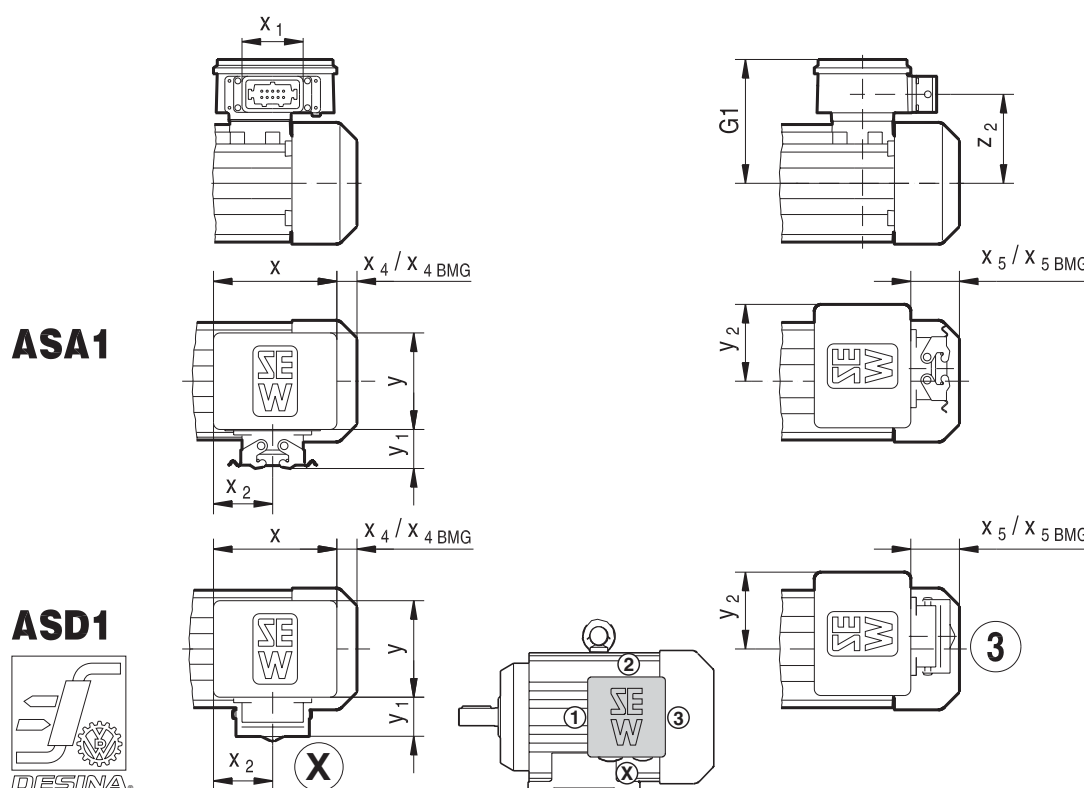




Technical data

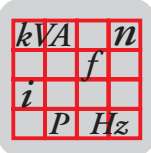
Plug connector	ASA1	ASD1	AMA1	AMD1	AMA1	AMD1
For motors	DT71 ... DV132S../BMG		DT71 ... DV132S../BMG		DV132M ... DV180L../BM	
Locking of mating connector	2-clip transverse	1-clip longitudinal	2-clip transverse	1-clip longitudinal	2-clip transverse	1-clip longitudinal
Basic connector system	Harting, HAN 10ES		Fa. Harting, HAN Modular			
Number of contacts	10 + 2 × PE		2 × 6 + 2 × PE		2 × 3 + 1 × 6 + 2 × PE	
Contact connection	Cage clamp springs		Crimp			
Contact type	Pin / socket					
Max. voltage / (CSA)	500 V _{AC} / (600 V _{AC})					
Max. contact load	10 × 16 A _{r.m.s.}		12 × 16 A _{r.m.s.}		3 × 40 A _{r.m.s.} + 6 × 16 A _{r.m.s.}	
Enclosure	Corresponding to motor protection type (IP54, IP55, optionally IP65)					
Ambient temperature	-40 °C ... +60 °C					

Dimensions of ASA1, ASD1

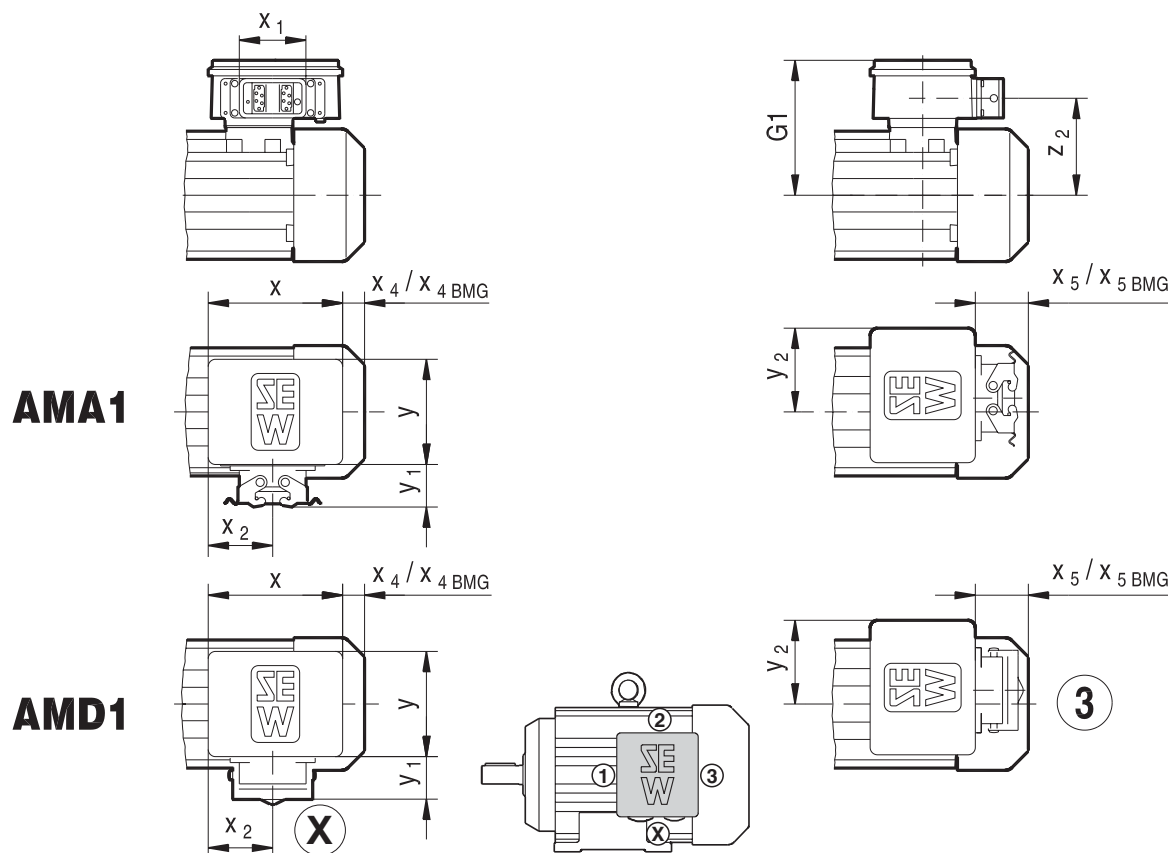


04392AXX

	D(F)T71D D(F)T80..	D(F)T90..	D(F)V100..	D(F)V112M D(F)V132S
G1 (AD)	149	182	182	195
x	147	147	167	167
x1	80	80	80	80
x2	71	71	85	85
x4	14	28	29	47
x4BMG	78	113	114	127
x5	48	62	64	82
x5BMG	112	147	149	164
y	115	115	123	123
y1	47	47	47	47
y2	92	92	97	97
z2	106	139	137	150



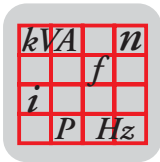
Dimensions of AMA1, AMD1



04393AXX

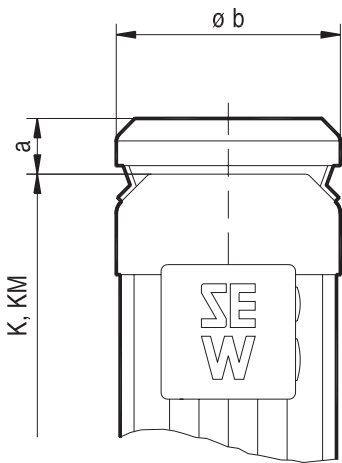
	D(F)T71D	D(F)T80..	D(F)T90..	D(F)V100..	D(F)V112M	D(F)V132S
G1 (AD)	149	149	182	182	195	195
x	147	147	147	167	167	167
x1	80	80	80	80	80	80
x2	71	71	71	85	85	85
x4	14	14	28	29	47	47
x4BMG	78	78	113	114	127	127
x5	48	48	62	64	82	82
x5BMG	112	112	147	149	164	164
y	115	115	115	123	123	123
y1	47	47	47	47	47	47
y2	92	92	92	97	97	97
z2	106	106	139	137	150	150

	D(F)V132M	D(F)V132ML	D(F)V160M	D(F)V160L	D(F)V180..
G1 (AD)	232	232	232	259	254
x	191	191	191	191	191
x1	80	80	80	80	80
x2	93	93	93	93	93
x4	55	55	55	79	204
x4BMG	167	167	167	235	360
x5	85	85	85	109	234
x5BMG	197	197	197	265	390
y	161	161	161	161	161
y1	47	47	47	47	47
y2	111	111	111	111	111
z2	183	183	183	210	205



18.7 Protection canopy C

Dimensions

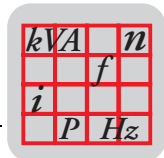


04403AXX

	DFR63	D(F)T71D - D(F)T80..	D(F)T90.. - D(F)V100..	D(F)V112M SD(F)T132S	D(F)V132M – D(F)V160M	D(F)V160L – D(F)V180L	D(F)V200 – D(F)V225..
a	30	36	34	36	37	40	47
Øb	145	145	192	223	311	311	415

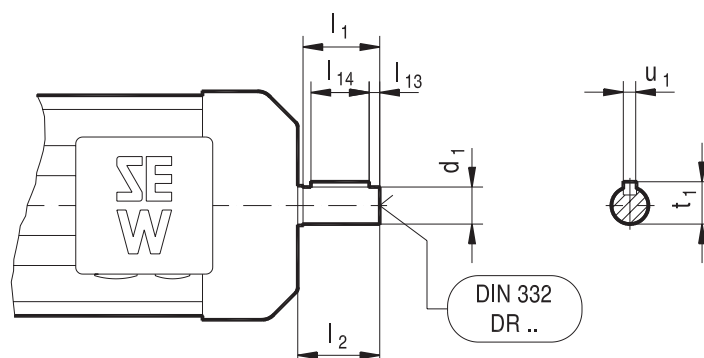


1/2 is greater than h in the foot-mounted versions DT71, DT90, DV132M and DV160L.



18.8 2nd shaft end

Dimensions



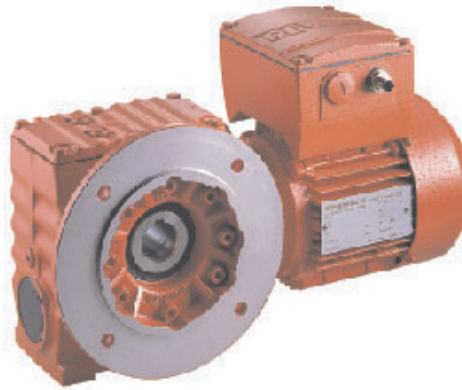
04405AXX

	DFR63	D(F)T71D	D(F)T80..	D(F)T90.. - D(F)V100..	D(F)V112M
d_1	11	11	14	19	24
l_1	23	23	30	40	50
l_2	27	25	31	42	55
l_{13}	3.5	1	4	4	5
l_{14}	16	20	22	32	40
t_1	12.5	12.5	16	21.5	27
u_1	4	4	5	6	8

	D(F)V132S	D(F)V132M/ML – D(F)V160M	D(F)V160L	D(F)V180..	D(F)V200 – 225..
d_1	28	38	42	48	55
l_1	60	80	110	110	110
l_2	65	85	115	115	115
l_{13}	5	5	10	10	10
l_{14}	50	70	70	80	90
t_1	31	41	45	51.5	59
u_1	8	10	12	14	16

18.9 MOVI-SWITCH®

MOVI-SWITCH® is the SEW gearmotor with integrated switching and protection function. Single speed SEW AC motors and AC brake motors in sizes DT71 to DV100 can be combined with all appropriate gear units in the SEW modular concept as part of the MOVI-SWITCH® range.



03098AXX

MOVI-SWITCH® is switched on and off without changing direction by means of a short circuit-proof star bridge switch. A thermal winding monitor (TF) is also integrated, which acts directly on the switch.

The mains and control connections are the same for motors with or without brake.

Advantages of MOVI-SWITCH®

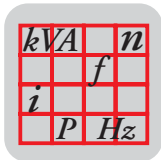
MOVI-SWITCH® offers the following advantages:

- The circuit breaker and protective functions are completely integrated, saving control cabinet space and cabling.
- Robust and compact, resulting in space-saving installation.
- Use MOVI-SWITCH® to operate motors in the voltage range $3 \times 380 \dots 500 \text{ V}$, 50 / 60 Hz.
- AC and AC brake motors with the same connection configuration, therefore simple installation.

Possible combinations

The following MOVI-SWITCH® AC motors and AC brake motors can be combined with all suitable variable speed gear unit types, mounting positions and versions in accordance with the selection tables for gearmotors.

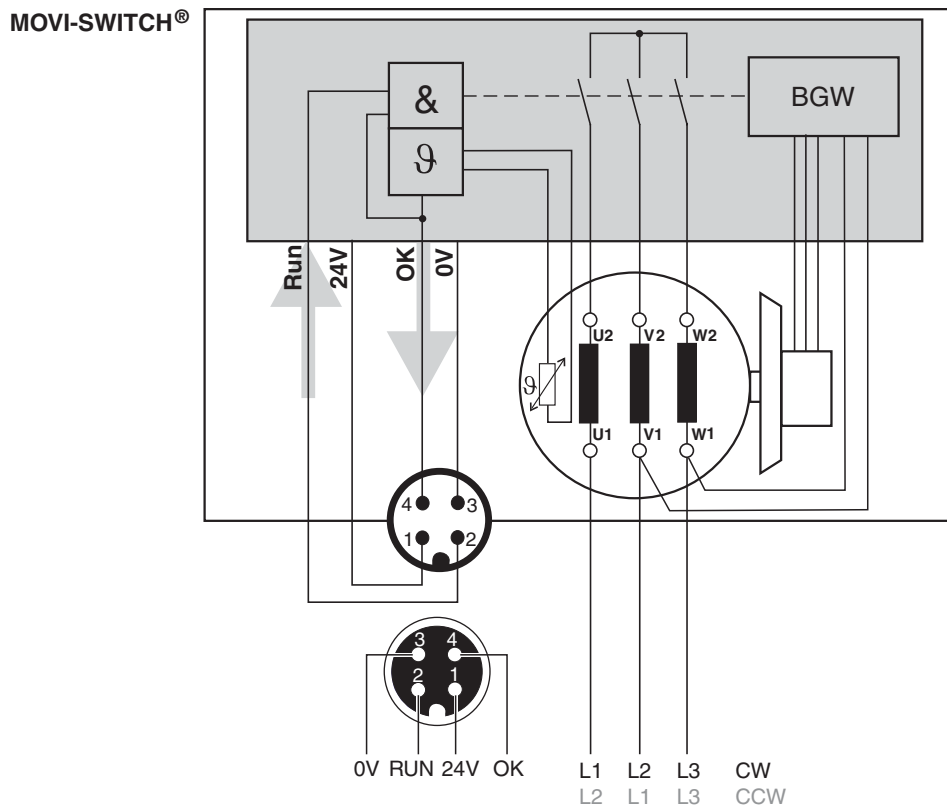
Motor size	Power [kW] with number of poles			
	2	4	6	8
DT71D.. (/BMG)/TF/MSW	0.55	0.37	0.25	0.15
DT80K.. (/BMG)/TF/MSW	0.75	0.55	0.37	-
DT80N.. (/BMG)/TF/MSW	1.1	0.75	0.55	0.25
DT90S.. (/BMG)/TF/MSW	1.5	1.1	0.75	0.37
DT90L.. (/BMG)/TF/MSW	2.2	1.5	1.1	0.55
DV100M.. (/BMG)/TF/MSW	3.0	2.2	1.5	0.75
DV100L.. (/BMG)/TF/MSW	-	3.0	-	1.1

**Technical data**

MOVI-SWITCH® features	Description
Motor voltage	3 × 380...500 V _{AC} , 50/60 Hz, motor winding only in Δ connection.
Brake voltage	= Motor voltage / $\sqrt{3}$ Alternative motor voltage
Control voltage	24 V _{DC} according to EN 61131-2
Switching function	On/off with star bridge switch. Short circuit-proof solid-state switch according to class B limit to EN 55011 and EN 55014.
Direction of rotation	CW or CCW, can only be changed externally.
Thermal motor protection	Integrated evaluation of positive temperature coefficient (PTC) thermistor TF, combined in logic operation with the enable signal.
Control	With control voltage 24 V _{DC} via M12 plug connector, identical for motors with and without brake.
Brake control	With integrated brake control system BGW as standard, therefore minimum brake reaction times.

Block diagram

The following diagram shows the operating principle of MOVI-SWITCH®.



03169CXX

Order information

Note the following points when ordering SEW AC (brake) motors or gearmotors with MOVI-SWITCH®:

- Voltage only for winding in W connection
- Only two brake voltages are possible, namely
 - motor voltage / $\sqrt{3}$ or
 - motor voltage.
- Preferred position of terminal box 270°, please contact SEW for other requirements.

MOVI-SWITCH® flange-mounted version

08 073 697

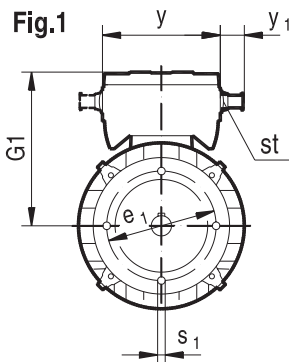
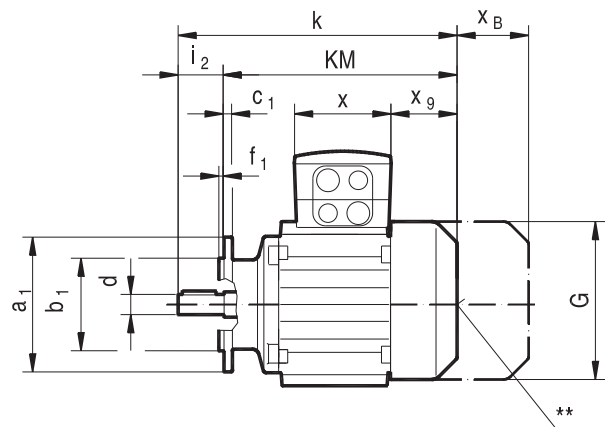
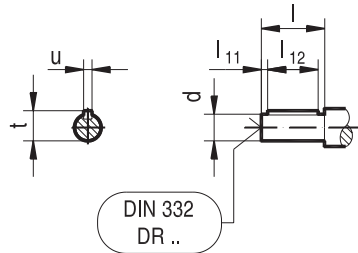
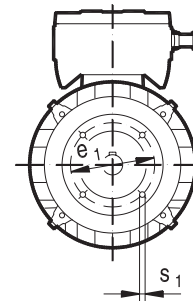
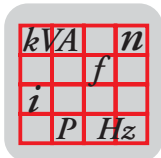


Fig.2



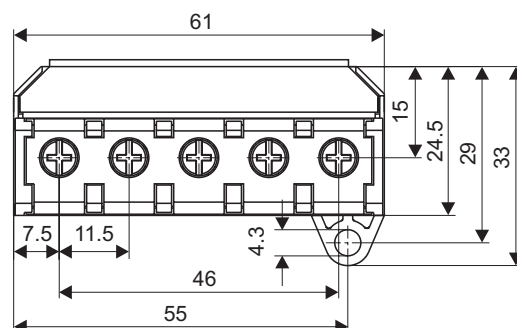
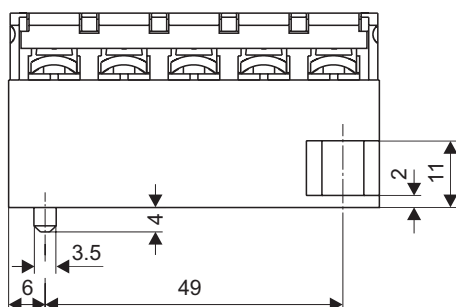
** Keep the air inlet clear

	DFT71D/MSW	DFT80../MSW	DFT90../MSW	DFV100M/MSW	DFV100L/MSW
a ₁ (P)	160	160	200	200	250
b ₁ (N)	110	110	130	130	180
c ₁ (LA)	10	10	12	12	15
e ₁ (M)	130	130	165	165	215
f ₁ (T)	3.5	3.5	3.5	4	3.5
Fig.	2	2	2	1	2
G (AC)	145	145	197	197	197
G ₁ (AD)	149	149	182	183	183
i ₂ (R+E)	30	40	50	66	60
k (LB+R+E)	232	292	323	371	401
KM (LB)	202	252	273	257	311
s ₁ (S)	9	11	11	14	11
st	2 x M25x1.5 1 x M16x1.5			2 x M25x1.5 2 x M16x1.5	
	2 x M25x1.5 1 x M12 plug. 4-pole			2 x M25x1.5 1 x M16x1.5, 1 x M12 plug. 4-pole	
x _B	64	64	85	85	85
x	115	115	115	147	147
y	140	140	140	175	175
x ₉	64	64	78.5	79	79
y ₁	25	25	25	25	25
d (D)	14	19	24	28	28
l (E)	30	40	50	60	60
l ₁₁ (E-EB-ED)	4	4	5	5	5
l ₁₂ (EB)	22	32	40	50	50
t (GA)	16	21.5	27	31	31
u (F)	5	6	8	8	8



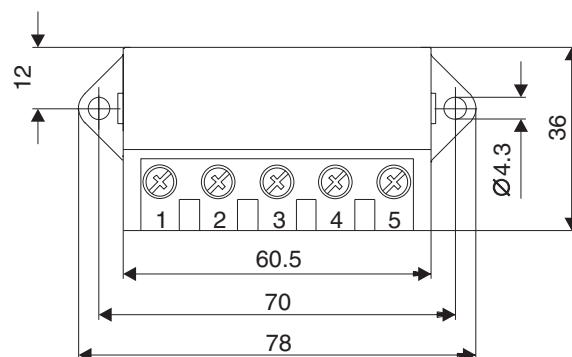
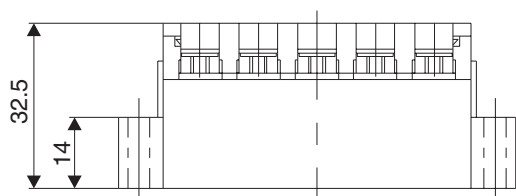
18.10 Dimensions of brake control systems

BG1.2, BG2.4



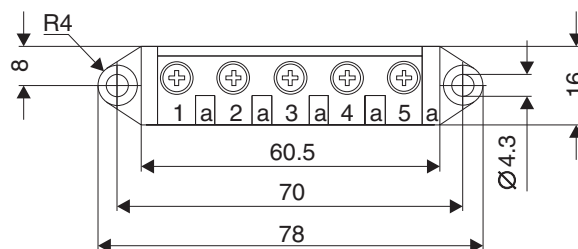
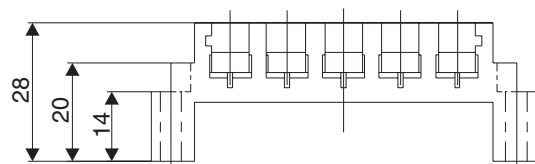
04750AXX

BG1.5, BG3, BGE, BS, BSG



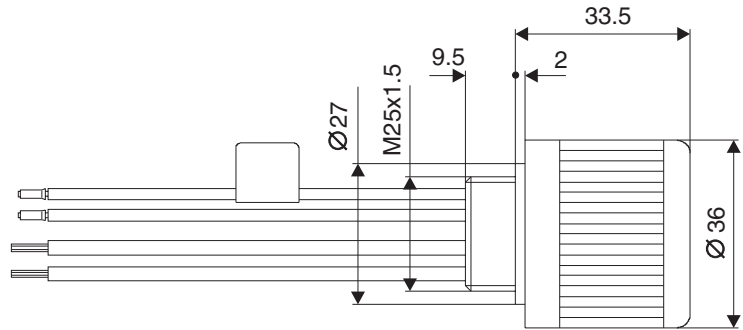
01621BXX

Auxiliary terminal strip



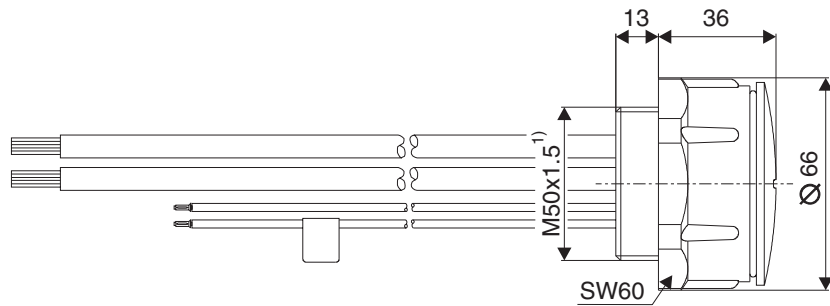
01622BXX

SR, UR



01644BXX

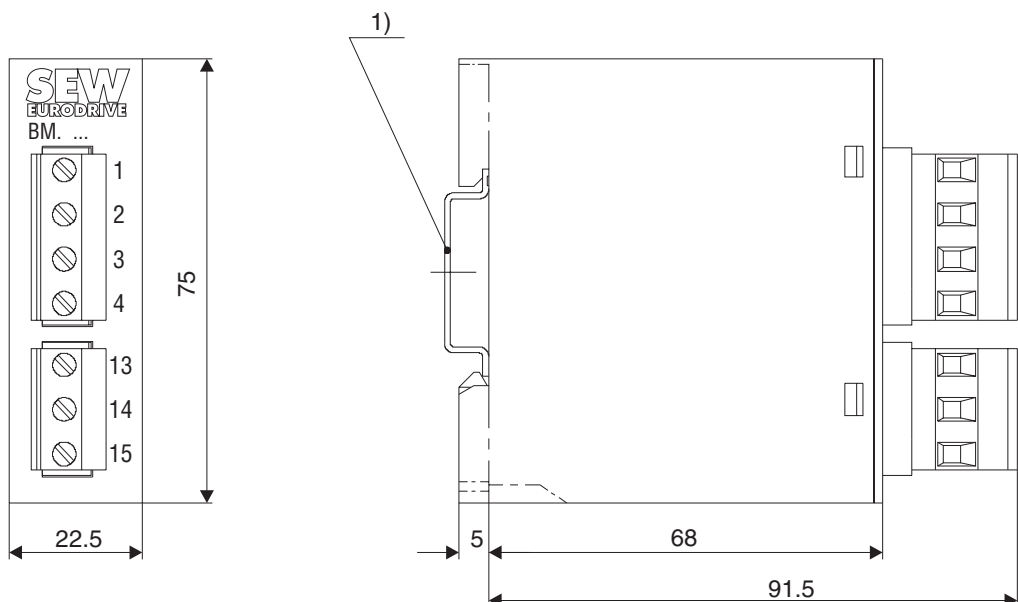
SR19



03332AXX

1) With reducing sleeve to M50x1.5

BMS, BME, BMH, BMP, BMK



01645BXX