

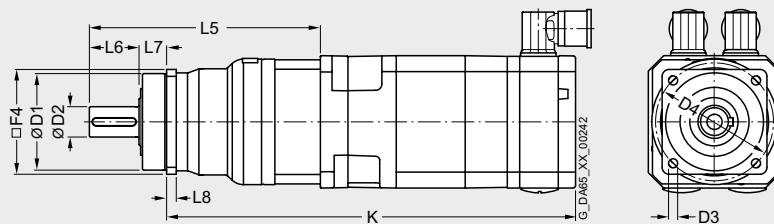
Synchronous motors

Dimension drawings

1FT6 motors without/with DRIVE-CLiQ with SP+ planetary gearbox, single-stage

For motor		Dimensions in mm (in)										Encoder system:			
		Planetary gearbox										Resolver		Incremental encoder Absolute encoder	
Shaft height	Type	F4	Type	D1	D2	D3	D4	L5	L6	L7	L8	Without brake K	With brake K	Without brake K	With brake K
1FT6 with SP+ planetary gearbox, single-stage, type IM B5, natural cooling, with connector, without/with brake															
28	1FT6021	62 (2.44)	SP060S-MF1	60 (2.36)	16 (0.63)	5.5 (0.22)	68 (2.68)	138 (5.44)	28 (1.10)	20 (0.79)	6 (0.24)	283 (11.15)	308 (12.14)	283 (11.15)	308 (12.14)
	1FT6024											323 (12.73)	348 (13.71)	323 (12.73)	348 (13.71)
36	1FT6031	62 (2.44)	SP060S-MF1	60 (2.36)	16 (0.63)	5.5 (0.22)	68 (2.68)	142 (5.59)	28 (1.10)	20 (0.79)	6 (0.24)	274 (10.80)	294 (11.58)	314 (12.37)	334 (13.16)
	1FT6034											314 (12.37)	334 (13.16)	354 (13.95)	374 (14.74)
	1FT6034	76 (2.99)		SP075S-MF1	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	164 (6.46)	36 (1.42)	20 (0.79)	7 (0.28)	328 (12.92)	348 (13.71)	368 (14.50)
48	1FT6041	76 (2.99)	SP075S-MF1	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	168 (6.62)	36 (1.42)	20 (0.79)	7 (0.28)	297 (11.70)	332 (13.08)	340 (13.40)	375 (14.78)
	1FT6044											347 (13.67)	382 (15.05)	390 (15.37)	425 (16.75)
63	1FT6061	101 (3.98)	SP100S-MF1	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	217 (8.55)	58 (2.29)	30 (1.18)	10 (0.39)	327 (12.88)	357 (14.07)	357 (14.07)	387 (15.25)
	1FT6062											352 (13.87)	382 (15.05)	382 (15.05)	412 (16.23)
	1FT6064											402 (15.84)	432 (17.02)	432 (17.02)	462 (18.20)
80	1FT6081	141 (5.56)	SP140S-MF1	130 (5.12)	40 (1.58)	11 (0.43)	165 (6.50)	283 (11.15)	82 (3.23)	30 (1.18)	12 (0.47)	392 (15.44)	419 (16.51)	392 (15.44)	419 (16.51)
	1FT6082											417 (16.43)	444 (17.49)	417 (16.43)	444 (17.49)
	1FT6084											467 (18.40)	513 (20.21)	467 (18.40)	513 (20.21)
	1FT6086											517 (20.37)	563 (22.18)	517 (20.37)	563 (22.18)
	1FT6086	182 (7.17)		SP180S-MF1	160 (6.30)	55 (2.17)	13.5 (0.53)	215 (8.47)	310 (12.21)	82 (3.23)	30 (1.18)	15 (0.59)	544 (21.43)	590 (23.25)	544 (21.43)

1FT602
1FT603
1FT604
1FT606
1FT608



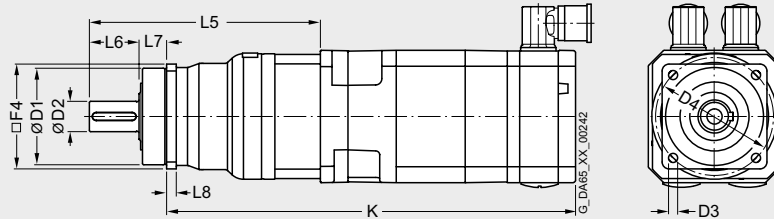
Synchronous motors

Dimension drawings

1FT6 motors without/with DRIVE-CLiQ with SP+ planetary gearbox, single-stage

For motor		Dimensions in mm (in)										Encoder system:			
Shaft height	Type	F4	Planetary gearbox Type	D1	D2	D3	D4	L5	L6	L7	L8	Resolver		Incremental encoder Absolute encoder	
												Without brake K	With brake K	Without brake K	With brake K
1FT6 with SP+ planetary gearbox, single-stage, type IM B5, natural cooling, with connector, without/with brake															
100	1FT6102	182 (7.17)	SP180S-MF1	160 (6.30)	55 (2.17)	13.5 (0.53)	215 (8.47)	310 (12.21)	82 (3.23)	30 (1.18)	15 (0.59)	493 (19.42)	539 (21.24)	493 (19.42)	539 (21.24)
	1FT6105											568 (22.38)	614 (24.19)	568 (22.38)	614 (24.19)
	1FT6105	212 (8.35)	SP210-MF1	180 (7.09)	75 (2.96)	17 (0.67)	250 (9.85)	350 (13.79)	105 (4.14)	38 (1.50)	17 (0.67)	577 (22.73)	623 (24.55)	577 (22.73)	623 (24.55)
	1FT6108	182 (7.17)	SP180S-MF1	160 (6.30)	55 (2.17)	13.5 (0.53)	215 (8.47)	310 (12.21)	82 (3.23)	30 (1.18)	15 (0.59)	668 (26.32)	714 (28.13)	668 (26.32)	714 (28.13)
	1FT6108	212 (8.35)	SP210-MF1	180 (7.09)	75 (2.96)	17 (0.67)	250 (9.85)	350 (13.79)	105 (4.14)	38 (1.50)	17 (0.67)	677 (26.67)	723 (28.49)	677 (26.67)	723 (28.49)
	1FT6132	212 (8.35)	SP210-MF1	180 (7.09)	75 (2.96)	17 (0.67)	250 (9.85)	350 (13.79)	105 (4.14)	38 (1.50)	17 (0.67)	630 (24.82)	680 (26.79)	630 (24.82)	680 (26.79)
132	1FT6134											680 (26.79)	730 (28.76)	680 (26.79)	730 (28.76)
	1FT6134	242 (9.53)	SP240-MF1	200 (7.88)	85 (3.35)	17 (0.67)	290 (11.43)	436 (17.18)	130 (5.12)	40 (1.58)	20 (0.79)	739 (29.12)	789 (31.09)	739 (29.12)	789 (31.09)
	1FT6136	212 (8.35)	SP210-MF1	180 (7.09)	75 (2.96)	17 (0.67)	250 (9.85)	350 (13.79)	105 (4.14)	38 (1.50)	17 (0.67)	730 (28.76)	780 (30.73)	730 (28.76)	780 (30.73)
	1FT6136	242 (9.53)	SP240-MF1	200 (7.88)	85 (3.35)	17 (0.67)	290 (11.43)	436 (17.18)	130 (5.12)	40 (1.58)	20 (0.79)	789 (31.09)	839 (33.06)	789 (31.09)	839 (33.06)

1FT610
1FT613



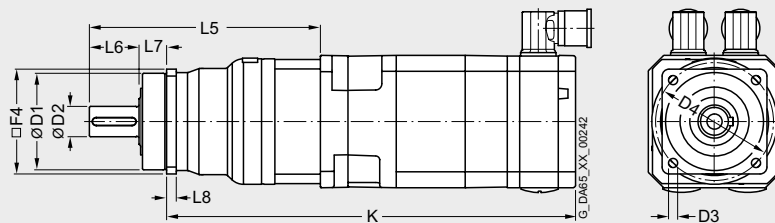
Synchronous motors

Dimension drawings

1FT6 motors without/with DRIVE-CLiQ with SP+ planetary gearbox, two-stage

For motor		Dimensions in mm (in)										Encoder system: Resolver		Incremental encoder Absolute encoder	
Shaft height	Type	F4	Planetary gearbox Type	D1	D2	D3	D4	L5	L6	L7	L8	Without brake K	With brake K	Without brake K	With brake K
1FT6 with SP+ planetary gearbox, two-stage, type IM B5, natural cooling, with connector, without/with brake															
28	1FT6021	62 (2.44)	SP060S-MF2	60 (2.36)	16 (0.63)	5.5 (0.22)	68 (2.68)	156 (6.15)	28 (1.10)	20 (0.79)	6 (0.24)	301 (11.86)	326 (12.84)	301 (11.86)	326 (12.84)
	1FT6021	76 (2.99)	SP075S-MF2	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	175 (6.90)	36 (1.42)	20 (0.79)	7 (0.28)	312 (12.29)	337 (13.28)	312 (12.29)	337 (13.28)
	1FT6024	62 (2.44)	SP060S-MF2	60 (2.36)	16 (0.63)	5.5 (0.22)	68 (2.68)	156 (6.15)	28 (1.10)	20 (0.79)	6 (0.24)	341 (13.44)	366 (14.42)	341 (13.44)	366 (14.42)
	1FT6024	76 (2.99)	SP075S-MF2	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	175 (6.90)	36 (1.42)	20 (0.79)	7 (0.28)	352 (13.87)	377 (14.85)	352 (13.87)	377 (14.85)
	1FT6024	101 (3.98)	SP100S-MF2	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	230 (9.06)	58 (2.29)	30 (1.18)	10 (0.39)	375 (14.78)	400 (15.76)	375 (14.78)	400 (15.76)
	36	1FT6031	62 (2.44)	SP060S-MF2	60 (2.36)	16 (0.63)	5.5 (0.22)	68 (2.68)	164 (6.46)	28 (1.10)	20 (0.79)	6 (0.24)	296 (11.66)	316 (12.45)	336 (13.24)
1FT6031		76 (2.99)	SP075S-MF2	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	179 (7.05)	36 (1.42)	20 (0.79)	7 (0.28)	303 (11.94)	323 (12.73)	343 (13.51)	363 (14.30)
1FT6031		101 (3.98)	SP100S-MF2	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	230 (9.06)	58 (2.29)	30 (1.18)	10 (0.39)	322 (12.69)	342 (13.47)	362 (14.26)	382 (15.05)
1FT6034		76 (2.99)	SP075S-MF2	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	179 (7.05)	36 (1.42)	20 (0.79)	7 (0.28)	343 (13.51)	363 (14.30)	383 (15.09)	403 (15.88)
1FT6034		101 (3.98)	SP100S-MF2	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	230 (9.06)	58 (2.29)	30 (1.18)	10 (0.39)	362 (14.26)	382 (15.05)	402 (15.84)	422 (16.63)
1FT6034		141 (5.56)	SP140S-MF2	130 (5.12)	40 (1.58)	11 (0.43)	165 (6.50)	298 (11.74)	82 (3.23)	30 (1.18)	12 (0.47)	406 (16.00)	426 (16.78)	446 (17.57)	466 (18.36)
48	1FT6041	76 (2.99)	SP075S-MF2	70 (2.76)	22 (0.87)	6.6 (0.26)	85 (3.35)	192 (7.56)	36 (1.42)	20 (0.79)	7 (0.28)	321 (12.65)	356 (14.03)	364 (14.34)	399 (15.72)
	1FT6041	101 (3.98)	SP100S-MF2	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	234 (9.22)	58 (2.29)	30 (1.18)	10 (0.39)	331 (13.04)	366 (14.42)	374 (14.74)	409 (16.11)
	1FT6041	141 (5.56)	SP140S-MF2	130 (5.12)	40 (1.58)	11 (0.43)	165 (6.50)	298 (11.74)	82 (3.23)	30 (1.18)	12 (0.47)	371 (14.62)	406 (16.00)	414 (16.31)	449 (17.69)
	1FT6044	101 (3.98)	SP100S-MF2	90 (3.55)	32 (1.26)	9 (0.35)	120 (4.73)	234 (9.22)	58 (2.29)	30 (1.18)	10 (0.39)	381 (15.01)	416 (16.39)	424 (16.71)	459 (18.08)
	1FT6044	141 (5.56)	SP140S-MF2	130 (5.12)	40 (1.58)	11 (0.43)	165 (6.50)	298 (11.74)	82 (3.23)	30 (1.18)	12 (0.47)	421 (16.59)	456 (17.97)	464 (18.28)	499 (19.66)
	1FT6044	182 (7.17)	SP180S-MF2	160 (6.30)	55 (2.17)	13.5 (0.53)	215 (8.47)	346 (13.63)	82 (3.23)	30 (1.18)	15 (0.59)	469 (18.48)	504 (19.86)	512 (20.17)	547 (21.55)

1FT602
1FT603
1FT604



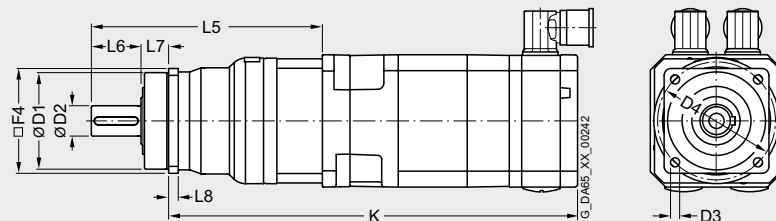
Synchronous motors

Dimension drawings

1FT6 motors without/with DRIVE-CLiQ with SP+ planetary gearbox, two-stage

For motor		Dimensions in mm (in)										Encoder system:			
Shaft height	Type	F4	Planetary gearbox Type	D1	D2	D3	D4	L5	L6	L7	L8	Resolver		Incremental encoder Absolute encoder	
												Without brake K	With brake K	Without brake K	With brake K
1FT6 with SP+ planetary gearbox, two-stage, type IM B5, natural cooling, with connector, without/with brake															
63	1FT6061	101	SP100S-MF2	90	32	9	120	252	58	30	10	362	392	392	422
		(3.98)		(3.55)	(1.26)	(0.35)	(4.73)	(9.93)	(2.29)	(1.18)	(0.39)	(14.26)	(15.44)	(15.44)	(16.63)
	1FT6061	141	SP140S-MF2	130	40	11	165	305	82	30	12	391	421	421	451
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(12.02)	(3.23)	(1.18)	(0.47)	(15.41)	(16.59)	(16.59)	(17.77)
	1FT6061	182	SP180S-MF2	160	55	13.5	215	346	82	30	15	432	462	462	492
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.63)	(3.23)	(1.18)	(0.59)	(17.02)	(18.20)	(18.20)	(19.38)
	1FT6062	101	SP100S-MF2	90	32	9	120	252	58	30	10	387	417	417	447
		(3.98)		(3.55)	(1.26)	(0.35)	(4.73)	(9.93)	(2.29)	(1.18)	(0.39)	(15.25)	(16.43)	(16.43)	(17.61)
	1FT6062	141	SP140S-MF2	130	40	11	165	305	82	30	12	416	446	446	476
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(12.02)	(3.23)	(1.18)	(0.47)	(16.39)	(17.57)	(17.57)	(18.75)
	1FT6064	101	SP100S-MF2	90	32	9	120	252	58	30	10	437	467	467	497
		(3.98)		(3.55)	(1.26)	(0.35)	(4.73)	(9.93)	(2.29)	(1.18)	(0.39)	(17.22)	(18.40)	(18.40)	(19.58)
80	1FT6081	141	SP140S-MF2	130	40	11	165	332	82	30	12	441	468	441	468
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(13.08)	(3.23)	(1.18)	(0.47)	(17.38)	(18.44)	(17.38)	(18.44)
	1FT6081	182	SP180S-MF2	160	55	13.5	215	355	82	30	15	464	491	464	491
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.99)	(3.23)	(1.18)	(0.59)	(18.28)	(19.35)	(18.28)	(19.35)
	1FT6081	212	SP210-MF2	180	75	17	250	397	105	38	17	475	502	475	502
		(8.35)		(7.09)	(2.96)	(0.67)	(9.85)	(15.64)	(4.14)	(1.50)	(0.67)	(18.72)	(19.78)	(18.72)	(19.78)
	1FT6082	141	SP140S-MF2	130	40	11	165	332	82	30	12	466	493	466	493
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(13.08)	(3.23)	(1.18)	(0.47)	(18.36)	(19.42)	(18.36)	(19.42)
	1FT6082	182	SP180S-MF2	160	55	13.5	215	355	82	30	15	489	516	489	516
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.99)	(3.23)	(1.18)	(0.59)	(19.27)	(20.33)	(19.27)	(20.33)
	1FT6082	212	SP210-MF2	180	75	17	250	397	105	38	17	500	527	500	527
		(8.35)		(7.09)	(2.96)	(0.67)	(9.85)	(15.64)	(4.14)	(1.50)	(0.67)	(19.70)	(20.76)	(19.70)	(20.76)
	1FT6084	141	SP140S-MF2	130	40	11	165	332	82	30	12	516	562	516	562
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(13.08)	(3.23)	(1.18)	(0.47)	(20.33)	(22.14)	(20.33)	(22.14)
	1FT6084	182	SP180S-MF2	160	55	13.5	215	355	82	30	15	539	585	539	585
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.99)	(3.23)	(1.18)	(0.59)	(21.24)	(23.05)	(21.24)	(23.05)
	1FT6084	242	SP240-MF2	200	85	17	290	454	130	40	20	580	626	580	626
		(9.53)		(7.88)	(3.35)	(0.67)	(11.43)	(17.89)	(5.12)	(1.58)	(0.79)	(22.85)	(24.66)	(22.85)	(24.66)
	1FT6086	141	SP140S-MF2	130	40	11	165	332	82	30	12	566	612	566	612
		(5.56)		(5.12)	(1.58)	(0.43)	(6.50)	(13.08)	(3.23)	(1.18)	(0.47)	(22.30)	(24.11)	(22.30)	(24.11)
	1FT6086	182	SP180S-MF2	160	55	13.5	215	355	82	30	15	589	635	589	635
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.99)	(3.23)	(1.18)	(0.59)	(23.21)	(25.02)	(23.21)	(25.02)

1FT606
1FT608



Synchronous motors

Dimension drawings

1FT6 motors without/with DRIVE-CLiQ with SP+ planetary gearbox, two-stage

For motor

Dimensions in mm (in)

Shaft height	Type	F4	Planetary gearbox Type	D1	D2	D3	D4	L5	L6	L7	L8	Encoder system:			
												Resolver		Incremental encoder Absolute encoder	
												Without brake K	With brake K	Without brake K	With brake K
1FT6 with SP+ planetary gearbox, two-stage, type IM B5, natural cooling, with connector, without/with brake															
100	1FT6102	182	SP180S-MF2	160	55	13.5	215	355	82	30	15	538	584	538	584
		(7.17)		(6.30)	(2.17)	(0.53)	(8.47)	(13.99)	(3.23)	(1.18)	(0.59)	(21.20)	(23.01)	(21.20)	(23.01)
	1FT6102	242	SP240-MF2	200	85	17	290	454	130	40	20	579	625	579	625
		(9.53)		(7.88)	(3.35)	(0.67)	(11.43)	(17.89)	(5.12)	(1.58)	(0.79)	(22.81)	(24.63)	(22.81)	(24.63)
	1FT6105	212	SP210-MF2	180	75	17	250	397	105	38	17	624	670	624	670
		(8.35)		(7.09)	(2.96)	(0.67)	(9.85)	(15.64)	(4.14)	(1.50)	(0.67)	(24.59)	(26.40)	(24.59)	(26.40)
132	1FT6105	242	SP240-MF2	200	85	17	290	454	130	40	20	654	700	654	700
		(9.53)		(7.88)	(3.35)	(0.67)	(11.43)	(17.89)	(5.12)	(1.58)	(0.79)	(25.77)	(27.58)	(25.77)	(27.58)
	1FT6108	242	SP240-MF2	200	85	17	290	454	130	40	20	754	800	754	800
		(9.53)		(7.88)	(3.35)	(0.67)	(11.43)	(17.89)	(5.12)	(1.58)	(0.79)	(29.71)	(31.52)	(29.71)	(31.52)
	1FT6132	212	SP210-MF2	180	75	17	250	397	105	38	170	677	727	677	727
		(8.35)		(7.09)	(2.96)	(0.67)	(9.85)	(15.64)	(4.14)	(1.50)	(6.70)	(26.67)	(28.64)	(26.67)	(28.64)
	1FT6134	242	SP240-MF2	200	85	17	290	454	130	40	20	757	807	757	807
		(9.53)		(7.88)	(3.35)	(0.67)	(11.43)	(17.89)	(5.12)	(1.58)	(0.79)	(29.83)	(31.80)	(29.83)	(31.80)
	1FT6136											807	857	807	857
												(31.80)	(33.77)	(31.80)	(33.77)

1FT610
1FT613

