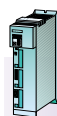


Compact and
chassis units



Compact
PLUS units

SIMOVER MASTERDRIVES Motion Control

Dimension drawings

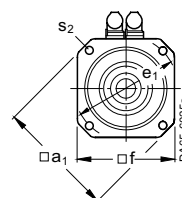
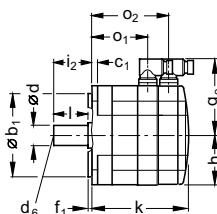
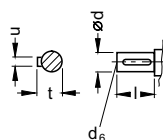
1FK7 CT synchronous servomotors

For motor		Dimension in mm (inches)											Resolver					
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ —	h H	i ₂ —	s ₂ S	without brake			with brake		
													k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —
1FK7 CT (compact), type of construction IM B5, non-ventilated, with angled plug, with/without brake																		
28	1FK7022-5	—	40 (1.57)	7 (0.28)	63 (2.48)	55 (2.17)	2.5 (0.1)	69.5 (2.74)	27.5 (1.08)	20 (0.79)	5.8 (0.23)	150 (5.91)	75.5 (2.97)	125 (4.92)	178 (7.01)	104.5 (4.11)	154 (6.06)	
36	1FK7032-5	93 (3.66)	60 (2.36)	8 (0.31)	75 (2.95)	72 (2.83)	3 (0.12)	78 (3.07)	36 (1.42)	30 (1.18)	6.5 (0.26)	150 (5.91)	75.5 (2.97)	125 (4.92)	179 (7.05)	104.5 (4.11)	154 (6.06)	
48	1FK7040-5	120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	90 (3.54)	48 (1.89)	40 (1.57)	7 (0.28)	135 (5.31)	74 (2.91)	107 (4.21)	164 (6.46)	74 (2.91)	136 (5.35)	
	1FK7042-5	120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	90 (3.54)	48 (1.89)	40 (1.57)	7 (0.28)	162 (6.38)	101 (3.98)	134 (5.28)	191 (7.52)	101 (3.98)	163 (6.42)	
63	1FK7060-5	155 (6.1)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	105 (4.13)	63 (2.48)	50 (1.97)	9 (0.35)	157 (6.18)	93 (3.66)	125 (4.92)	200 (7.87)	93 (3.66)	168 (6.61)	
	1FK7063-5	155 (6.1)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	105 (4.13)	63 (2.48)	50 (1.97)	9 (0.35)	202 (7.95)	138 (5.43)	170 (6.69)	245 (9.65)	138 (5.43)	213 (8.39)	

(continued)		Basic absolute-value encoder (EnDat) (from size 48 on) sin/cos incremental encoder 1 V _{pp}						Absolute-value encoder (EnDat)										
		without brake			with brake			without brake			with brake							
		k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	d D	d ₆ —	l E	t GA	u F
28	1FK7022-5	182 (7.17)	85 (3.35)	134.5 (5.3)	210 (8.27)	113 (4.45)	162.5 (6.4)	182 (7.17)	85 (3.35)	134.5 (5.3)	210 (8.27)	113 (4.45)	162.5 (6.4)	9 (0.35)	M3	20 (0.79)	10.2 (0.4)	3 (0.12)
36	1FK7032-5	182 (7.17)	85 (3.35)	134.5 (5.3)	211 (8.31)	114 (4.49)	163.5 (6.44)	182 (7.17)	85 (3.35)	134.5 (5.3)	211 (8.31)	114 (4.49)	163.5 (6.44)	14 (0.55)	M5	30 (1.18)	16 (0.63)	5 (0.2)
48	1FK7040-5	155 (6.1)	64 (2.52)	106 (4.17)	184 (7.24)	73 (2.87)	135 (5.31)	164 (6.46)	65 (2.56)	107 (4.21)	193 (7.6)	74 (2.91)	136 (5.35)	19 (0.75)	M6	40 (1.57)	21.5 (0.85)	6 (0.24)
	1FK7042-5	183 (7.2)	92 (3.62)	134 (5.28)	212 (8.35)	101 (3.98)	163 (6.42)	191 (7.52)	92 (3.62)	134 (5.28)	220 (8.66)	101 (3.98)	163 (6.42)	19 (0.75)	M6	40 (1.57)	21.5 (0.85)	6 (0.24)
63	1FK7060-5	180 (7.09)	93 (3.66)	125 (4.92)	223 (8.78)	93 (3.66)	168 (6.61)	188 (7.4)	93 (3.66)	125 (4.92)	231 (9.09)	93 (3.66)	168 (6.61)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
	1FK7063-5	225 (8.86)	138 (5.43)	140 (5.51)	268 (10.55)	138 (5.43)	213 (8.39)	233 (9.17)	138 (5.43)	170 (6.69)	276 (10.87)	138 (5.43)	213 (8.39)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)

1FK702.-5
1FK703.-5
1FK704.-5
1FK706.-5

Shaft
with featherkey

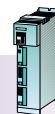


SIMOVER MASTERDRIVES Motion Control

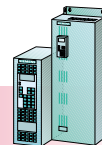
Dimension drawings

1FK7 CT synchronous servomotors

Compact
PLUS units



Compact and
chassis units

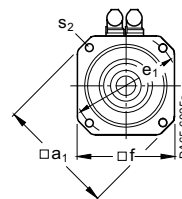
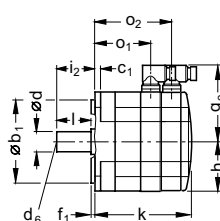
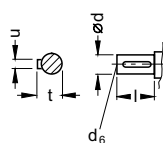


For motor		Dimension in mm (inches)											Resolver						
Size	Type	DIN IEC												without brake			with brake		
			a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ –	h H	i ₂ –	s ₂ S	k LB	o ₁ –	o ₂ –	k LB	o ₁ –	o ₂ –	
1FK7 CT (compact), type of construction IM B5, non-ventilated, with angled plug, with/without brake																			
80	1FK7080-5		186 (7.32)	130 (5.12)	13 (0.51)	165 (6.5)	155 (6.1)	3.5 (0.14)	119.5 (4.7)	77.5 (3.05)	58 (2.28)	11 (0.43)	156 (6.14)	91 (3.58)	124 (4.88)	184 (7.24)	91 (3.58)	152 (5.98)	
	1FK7083-5		186 (7.32)	130 (5.12)	13 (0.51)	165 (6.5)	155 (6.1)	3.5 (0.14)	119.5 (4.7)	77.5 (3.05)	58 (2.28)	11 (0.43)	194 (7.64)	129 (5.08)	162 (6.38)	245 (9.65)	152 (5.98)	213 (8.39)	
100	1FK7100-5		240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	138 (5.43)	96 (3.78)	80 (3.15)	14 (0.55)	185 (7.28)	113 (4.45)	153 (6.02)	204 (8.03)	113 (4.45)	172 (6.77)	
	1FK7101-5		240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	160 (6.3)	96 (3.78)	80 (3.15)	14 (0.55)	211 (8.31)	139 (5.47)	179 (7.05)	240 (9.45)	139 (5.47)	208 (8.19)	
	1FK7103-5		240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	160 (6.3)	96 (3.78)	80 (3.15)	14 (0.55)	237 (9.33)	165 (6.5)	205 (8.07)	266 (10.47)	165 (6.5)	234 (9.21)	

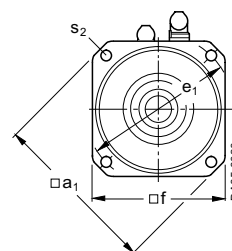
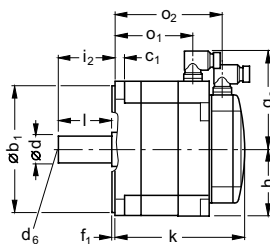
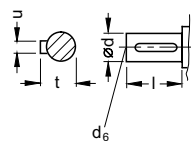
(continued)		Basic absolute-value encoder (EnDat) (from size 48 on) sin/cos incremental encoder 1 V _{pp}						Absolute-value encoder (EnDat)										
		without brake			with brake			without brake			with brake							
		k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	k LB	o ₁ —	o ₂ —	d D	d ₆ —	l E	t GA	u F
80	1FK7080-5	179 (7.05)	91 (3.58)	124 (4.88)	206 (8.11)	91 (3.58)	151 (5.94)	187 (7.36)	91 (3.58)	124 (4.88)	215 (8.46)	91 (3.58)	152 (5.98)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FK7083-5	217 (8.54)	129 (5.08)	162 (6.38)	268 (10.55)	153 (6.02)	213 (8.39)	225 (8.86)	129 (5.08)	162 (6.38)	276 (10.87)	152 (5.98)	213 (8.39)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
100	1FK7100-5	208 (8.19)	113 (4.45)	153 (6.02)	227 (8.94)	113 (4.45)	172 (6.77)	216 (8.5)	113 (4.45)	153 (6.02)	235 (9.25)	113 (4.45)	172 (6.77)	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FK7101-5	234 (9.21)	139 (5.47)	179 (7.05)	263 (10.35)	139 (5.47)	208 (8.19)	242 (9.53)	139 (5.47)	179 (7.05)	271 (10.67)	139 (5.47)	208 (8.19)	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FK7103-5	260 (10.24)	165 (6.5)	205 (8.07)	289 (11.38)	165 (6.5)	234 (9.21)	268 (10.55)	165 (6.5)	205 (8.07)	297 (11.69)	165 (6.5)	234 (9.21)	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)

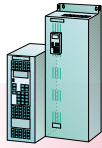
1FK708.-5

Shaft
with featherkey

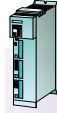


1FK7100-5
1FK7101-5
1FK7103-5





Compact and chassis units



Compact PLUS units

SIMOVER MASTERDRIVES Motion Control

Dimension drawings

1FK7 HD synchronous servomotors

For motor		Dimension in mm (inches)											Resolver		
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ —	h H	i ₂ —	o ₁ —	without brake/with brake		
													s ₂ S	k LB	
1FK7 HD (High Dynamic), type of construction IM B5, non-ventilated, with angled plug, with/without brake															
36	1FK7033-7	92 (3.62)	60 (2.36)	8 (0.31)	75 (2.95)	72 (2.83)	3 (0.12)	78 (3.07)	36 (1.42)	30 (1.18)	114.5 (4.51)	164/164 (6.46/6.46)	6.5 (0.26)	171.5/192.5 (6.75/7.58)	
48	1FK7043-7	120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	90 (3.54)	48 (1.89)	40 (1.57)	135 (5.31)	177/200 (6.97/7.87)	7 (0.28)	191.5/220.5 (7.54/8.68)	
	1FK7044-7										161 (6.34)	202/225 (7.95/8.86)		216.5/245.5 (8.52/9.67)	
63	1FK7061-7	155 (6.10)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	105 (4.13)	63 (2.48)	50 (1.97)	123 (4.84)	166/184 (6.54/7.24)	9 (0.35)	186.5/228.5 (7.34/9)	
	1FK7064-7										187 (7.36)	230/248 (9.06/9.76)		250.5/292.5 (9.86/11.52)	
80	1FK7082-7	186 (7.32)	130 (5.12)	13 (0.51)	165 (6.5)	155 (6.1)	3.5 (0.14)	119.5 (4.7)	77.5 (3.05)	58 (2.28)	142.5 (5.61)	186/228 (7.32/8.98)	11 (0.43)	210.5/253 (8.29/10)	
	1FK7085-7							132.5 (5.22)			192.5 (7.58)	236/278 (9.29/10.94)		260.5/303 (10.26/11.93)	

(continued)		sin/cos incremental encoder 1 V _{pp}		Absolute-value encoder (EnDat)		D-end of shaft			
		DIN IEC	k LB	k LB		d D	d ₆ —	l E	t GA u F
36	1FK7033-7		196.5/217 (7.74/8.54)	—/—		14 (0.55)	M5	30 (1.18)	16 (0.63) 5 (0.2)
48	1FK7043-7		212/241 (8.35/9.49)	220.5/249.5 (8.68/9.82)		19 (0.75)	M6	40 (1.57)	21.5 (0.85) 6 (0.24)
	1FK7044-7		237/266 (9.33/10.47)	245.5/274.5 (9.67/10.81)					
63	1FK7061-7		209.5/251.5 (8.25/9.9)	218/260 (8.58/10.24)		24 (0.94)	M8	50 (1.97)	27 (1.06) 8 (0.31)
	1FK7064-7		273.5/315.5 (10.77/12.42)	282/324 (11.1/12.76)					
80	1FK7082-7		233.5/276 (9.19/10.87)	242/284.5 (9.53/11.2)		32 (1.26)	M12	58 (2.28)	35 (1.38) 10 (0.39)
	1FK7085-7		283.5/326 (11.16/12.83)	292/334.5 (11.5/13.17)					

Shaft with featherkey

