

Servomotors

Dimensional drawings

1FT7 Compact motors with/without DRIVE-CLiQ Natural cooling

4

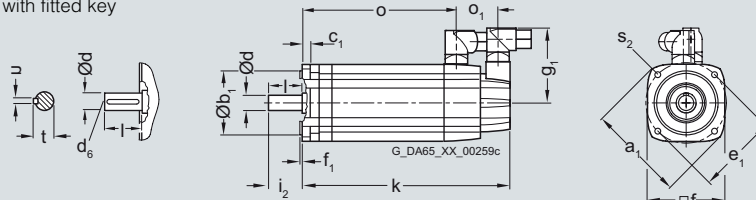
Dimensional drawings

For motor		Dimensions in mm (inches)											Flange 1 (1FT6-compatible)			
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₁ -	o ₁ -	s ₂ S	i ₂ -	without brake		with brake	
													k LB	o -	k LB	o -
1FT7 Compact, type of construction IM B5, natural cooling, with connector, with/without brake																
36	1FT7034		90 (3.54)	60 (2.36)	8 (0.31)	75 (2.95)	72 (2.83)	3 (0.12)	80 (3.15)	48 (1.89)	6.5 (0.26)	30 (1.18)	195 (7.68)	133 (5.24)	222 (8.74)	160 (6.30)
	1FT7036												243 (9.57)	181 (7.13)	270 (10.63)	208 (8.19)
48	1FT7042		120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	93 (3.66)	53 (2.09)	6.5 (0.26)	40 (1.57)	169 (6.65)	102 (4.02)	201 (7.91)	134 (5.28)
	1FT7044												219 (8.62)	152 (5.98)	251 (9.88)	184 (7.24)
	1FT7046												259 (10.20)	192 (7.56)	291 (11.46)	224 (8.82)
63	1FT7062		155 (6.10)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	108 (4.25)	53 (2.09)	9 (0.35)	50 (1.97)	173 (6.81)	106 (4.17)	208 (8.19)	141 (5.55)
	1FT7064												205 (8.07)	137 (5.39)	240 (9.45)	173 (6.81)
	1FT7066												236 (9.29)	169 (6.65)	272 (10.71)	204 (8.03)
	1FT7068												284 (11.18)	216 (8.50)	319 (12.56)	252 (9.92)

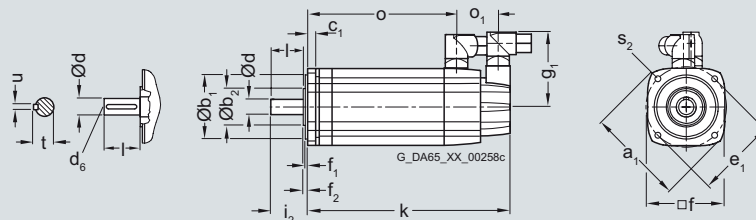
Shaft height	Type	DIN IEC	Flange 0				Shaft extension DE							
			b ₂ -	f ₂ -	i ₂ -	k LB	o -	k LB	o -	d D	d ₆ -	l E	t GA	u F
36	1FT7034		36 (1.42)	5.5 (0.22)	36.5 (1.44)	189 (7.44)	127 (5.00)	216 (8.50)	154 (6.06)	14 (0.55)	M5	30 (1.18)	16 (0.63)	5 (0.20)
	1FT7036					237 (9.33)	175 (6.89)	264 (10.39)	202 (7.95)					
48	1FT7042		46 (1.81)	5.5 (0.22)	46 (1.81)	163 (6.42)	96 (3.78)	195 (7.68)	128 (5.04)	19 (0.75)	M6	40 (1.57)	21.5 (0.85)	6 (0.24)
	1FT7044					213 (8.39)	146 (5.75)	245 (9.65)	178 (7.01)					
	1FT7046					253 (9.96)	186 (7.32)	285 (11.22)	218 (8.58)					
63	1FT7062		51 (2.01)	6 (0.24)	56.5 (2.22)	167 (6.57)	99 (3.90)	202 (7.95)	135 (5.31)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
	1FT7064					198 (7.80)	131 (5.16)	233 (9.17)	166 (6.54)					
	1FT7066					230 (9.06)	162 (6.38)	265 (10.43)	198 (7.80)					
	1FT7068					277 (10.91)	210 (8.27)	312 (12.28)	245 (9.65)					

Flange 1
(1FT6-compatible)
1FT703
1FT704
1FT706

Shaft design
with fitted key



Flange 0
1FT703
1FT704
1FT706



Servomotors

Dimensional drawings

1FT7 Compact motors with/without DRIVE-CLiQ Natural cooling

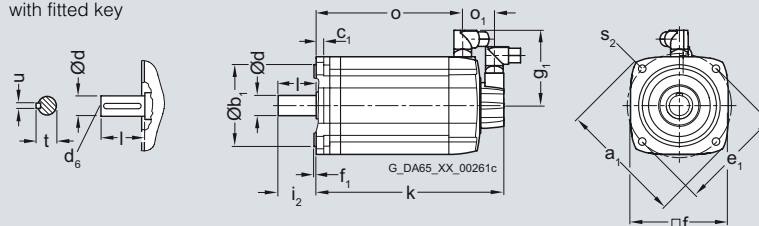
Dimensional drawings

For motor		Dimensions in mm (inches)																
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector				Flange 1 (1FT6-compatible)					
									Size 1		Size 1.5		without brake		with brake			
									g ₁ –	g ₁ –	o ₁ –	s ₂ S	i ₂ –	k LB	o –	k LB	o –	
1FT7 Compact, type of construction IM B5, natural cooling, with connector, with/without brake																		
80	1FT7082		195 (7.68)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	119 (4.69)	141 (5.55)	51 (2.01)	11 (0.43)	58 (2.28)	196 (7.72)	130 (5.12)	248 (9.76)	183 (7.20)	
	1FT7084													247 (9.72)	182 (7.17)	299 (11.77)	234 (9.21)	
	1FT7086													299 (11.77)	234 (9.21)	351 (13.82)	286 (11.26)	
100	1FT7102		245 (9.65)	180 (7.09)	13 (0.51)	215 (8.46)	196 (7.72)	4 (0.16)	–	161 (6.34)	56 (2.20)	14 (0.55)	80 (3.15)	221 (8.70)	151 (5.94)	273 (10.75)	203 (7.99)	
	1FT7105													307 (12.09)	238 (9.37)	360 (14.17)	290 (11.42)	
	1FT7108													377 (14.84)	307 (12.09)	429 (16.89)	359 (14.13)	

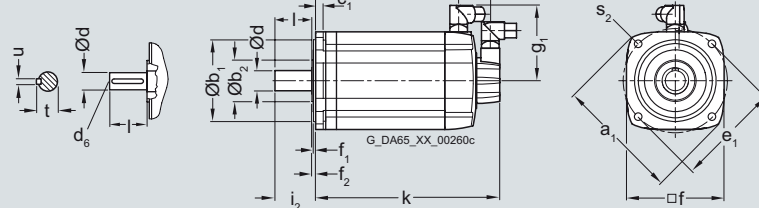
Shaft height	Type	DIN IEC	Flange 0			Shaft extension DE				d D	d ₆ –	l E	t GA	u F
			b ₂ –	f ₂ –	i ₂ –	without brake		with brake						
						k LB	o –	k LB	o –					
80	1FT7082		66 (2.60)	6 (0.24)	64.5 (2.54)	189 (7.44)	124 (4.88)	241 (9.49)	176 (6.93)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FT7084					241 (9.49)	175 (6.89)	293 (11.54)	228 (8.98)					
	1FT7086					292 (11.50)	227 (8.94)	345 (13.58)	279 (10.98)					
100	1FT7102		81 (3.19)	6.5 (0.26)	87 (3.43)	214 (8.43)	144 (5.67)	266 (10.47)	196 (7.72)	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FT7105					301 (11.85)	231 (9.09)	353 (13.90)	283 (11.14)					
	1FT7108					370 (14.57)	300 (11.81)	422 (16.61)	352 (13.86)					

Flange 1
(1FT6-compatible)
1FT708
1FT710

Shaft design
with fitted key



Flange 0
1FT708
1FT710



Dimensional drawings

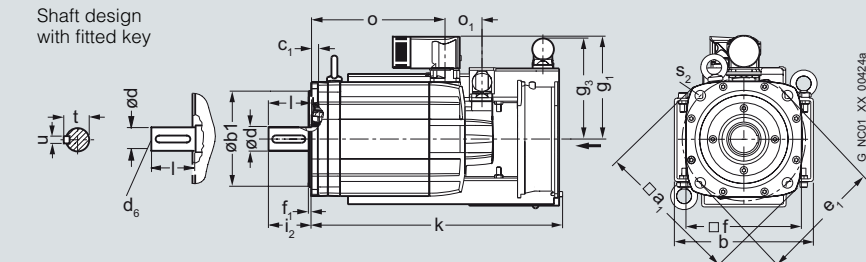
For motor Dimensions in mm (inches)

Shaft height	Type	DIN IEC	a ₁ P	b	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector			Fan				
										Size 1.5	Size 3	g ₃	g ₁	g ₁	h H	h ₁	h ₂
1FT7 Compact, type of construction IM B5, forced ventilation, with connector, with/without brake																	
80	1FT7084		194 (7.64)	186 (7.32)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	139 (5.47)	-	137.5 (5.41)	27 (1.06)	177 (6.97)	186.5 (7.34)	50 (1.97)	11 (0.43)
	1FT7086																
100	1FT7105		245 (9.65)	224 (8.82)	180 (7.09)	13 (0.51)	215 (8.46)	196 (7.72)	4 (0.16)	159 (6.26)	187 (7.36)	151 (5.94)	27 (1.06)	220 (8.66)	222 (8.74)	55 (2.17)	14 (0.55)
	1FT7108																

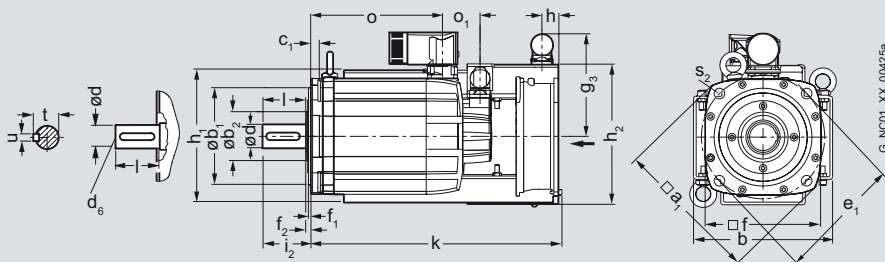
Shaft height	Type	DIN IEC	Flange 1 (1FT6-compatible)				Flange 0				Shaft extension DE								
			i ₂	k LB	o	o	k LB	o	b ₂	f ₂	i ₂	k LB	o	k LB	o	d D	d ₆	l E	t GA
80	1FT7084		58 (2.28)	342 (13.46)	182 (7.17)	394 (15.51)	234 (9.21)	66 (2.60)	6 (0.24)	64.5 (2.54)	335.5 (13.21)	175 (6.89)	387.5 (15.26)	228 (8.98)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FT7086			393.5 (15.49)	234 (9.21)	446 (17.56)	286 (11.26)				387 (15.24)	227 (8.94)	439.5 (17.30)	279 (10.98)					
100	1FT7105		80 (3.15)	403.5 (15.89)	238 (9.37)	455.5 (17.93)	290 (11.42)	81 (3.19)	6.5 (0.26)	87 (3.43)	396.5 (15.61)	231 (9.09)	448.5 (17.66)	283 (11.14)	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FT7108			473 (18.62)	307 (12.09)	525 (20.57)	359 (14.13)				466 (18.35)	300 (11.81)	518 (20.39)	352 (13.86)					

Flange 1
(1FT6-compatible)
1FT708
1FT710

Shaft design
with fitted key



Flange 0
1FT708
1FT710



Servomotors

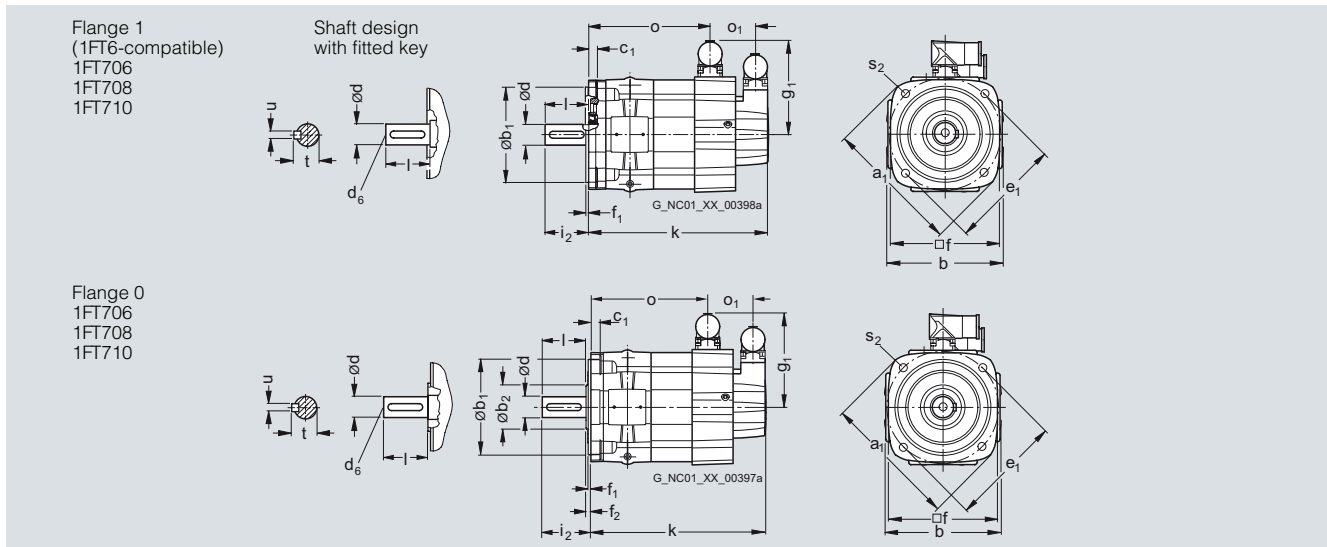
Dimensional drawings

1FT7 Compact motors with/without DRIVE-CLiQ Water cooling

Dimensional drawings

For motor		Dimensions in mm (inches)																
Shaft height	Type	DIN IEC	a ₁ P	b	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector Size 1			Connector Size 1.5			Connector Size 3		
										g ₁	g ₁	g ₁	o ₁	o ₁	o ₁	s ₂	s ₂	s ₂
1FT7 Compact, type of construction IM B5, water cooling, with connector, with/without brake																		
63	1FT7062 1FT7064 1FT7066 1FT7068		155 (6.10)	135 (5.31)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	108 (4.25)	-	-	52 (2.05)	-	-	9 (0.35)		
80	1FT7082 1FT7084 1FT7086		195 (7.68)	165 (6.50)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	-	140 (5.51)	-	-	50 (1.97)	-	11 (0.43)		
100	1FT7102 1FT7105 1FT7108		245 (9.65)	206 (8.11)	180 (7.09)	13 (0.51)	215 (8.46)	196 (7.72)	4 (0.16)	-	160 (6.30)	-	-	55 (2.17)	-	14 (0.55)		
												187 (7.36)			72 (2.83)			

Shaft height	Type	DIN IEC	Flange 1 (1FT6-compatible) without/with brake						Flange 0 without/with brake						Shaft extension DE							
			i ₂	k LB	o	o	o	b ₂	f ₂	i ₂	k LB	Connector Size 1			Connector Size 1.5			d D	d ₆	l E	t GA	u F
												o	o	o	o	o	o					
63	1FT7062 1FT7064 1FT7066 1FT7068		50 (1.97)	208 (8.19)	141 (5.55)	-	-	51 (2.01)	6 (0.24)	56.5 (2.22)	202 (7.95)	135 (5.31)	-	-	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)			
80	1FT7082 1FT7084 1FT7086		58 (2.28)	248 (9.76)	183 (7.20)	-	66 (2.60)	6 (0.24)	64.5 (2.54)	241 (9.49)	-	176 (6.93)	-	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)				
100	1FT7102 1FT7105 1FT7108		80 (3.15)	273 (10.75)	203 (7.99)	-	81 (3.19)	6.5 (0.26)	87 (3.43)	266 (10.47)	-	196 (7.72)	-	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)				



1FT7 High Dynamic motors with/without DRIVE-CLiQ – Forced ventilation

Dimensional drawings

For motor Dimensions in mm (inches)

Shaft height	Type	DIN IEC	a ₁ P	b A	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector Size 1.5		Fan				
										g ₁ –	g ₃ –	h H	h ₁ –	h ₂ –	o ₁ –	s ₂ S

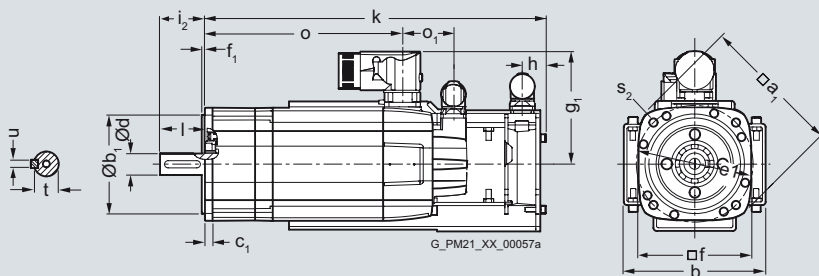
1FT7 High Dynamic, forced ventilation, with connector, with/without brake

63	1FT7065		155 (6.10)	158 (6.22)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	125 (4.92)	101.5 (4.00)	26 (1.02)	143 (5.63)	135 (5.31)	57 (2.24)	9 (0.35)				
	1FT7067																			

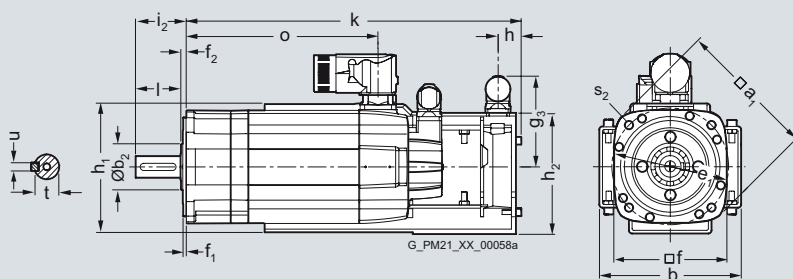
Shaft height	Type	DIN IEC	Flange 1 (1FT6-compatible)				Flange 0				without brake		with brake		Shaft extension DE				
			i ₂ LB	k LB	o –	o LB	k LB	o –	b ₂ –	f ₂ –	i ₂ –	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA

63	1FT7065		50 (1.97)	380 (14.96)	220 (8.66)	380 (14.96)	220 (8.66)	51 (2.01)	6 (0.24)	56.5 (2.22)	373.5 (14.70)	214 (8.43)	373.5 (14.70)	214 (8.43)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
	1FT7067			420 (16.54)	260 (10.24)	420 (16.54)	260 (10.24)				413.5 (16.28)	254 (10.00)	413.5 (16.28)	254 (10.00)					

Flange 1 (1FT6-compatible)
1FT706



Flange 0
1FT706



Servomotors

Dimensional drawings

1FT7 High Dynamic motors with/without DRIVE-CLiQ – Forced ventilation

Dimensional drawings

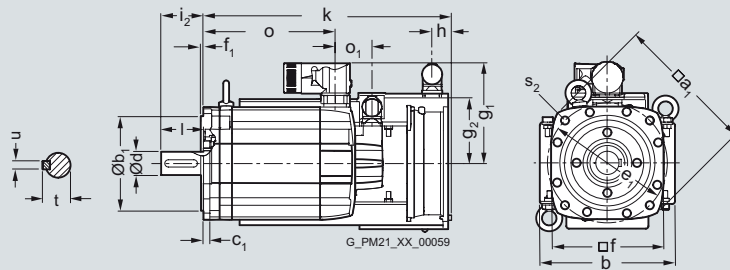
For motor Dimensions in mm (inches)

Shaft height	Type	DIN IEC	a ₁ P	b A	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector Size		Fan					
										1	3	g ₁	g ₁	g ₃	h H	h ₁	h ₂
1FT7 High Dynamic, forced ventilation, with connector, with/without brake																	
80	1FT7085		194 (7.64)	186 (7.32)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	139 (5.47)	166.5 (6.56)	137.5 (5.41)	27 (1.06)	177 (6.97)	186.5 (7.34)	50 (1.97)	11 (0.43)
	1FT7087										166.5 (6.56)						

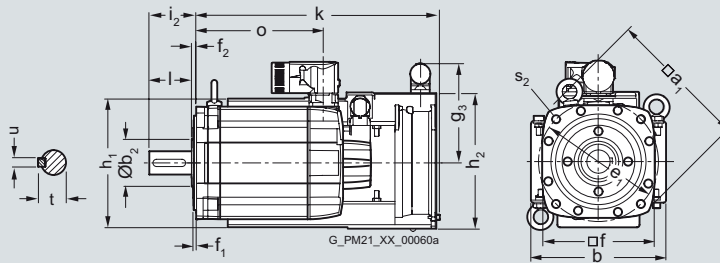
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Shaft height	Type	DIN IEC	Flange 1 (1FT6-compatible)				Flange 0				Shaft extension DE								
			without brake		with brake		without brake		with brake		d D	d ₆	l E	t GA	u F				
			i ₂ LB	o LB	k LB	o LB	b ₂	f ₂	i ₂	k LB	o LB	k LB	o LB						
80	1FT7085		58 (2.28)	414 (16.30)	254 (10.00)	414 (16.30)	254 (10.00)	66 (2.60)	6 (0.24)	64.5 (2.54)	407.5 (16.04)	247 (9.72)	407.5 (16.04)	247 (9.72)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FT7087			474 (18.66)	314 (12.36)	474 (18.66)	314 (12.36)				467.5 (18.41)	307 (12.09)	467.5 (18.41)	307 (12.09)					

Flange 1 (1FT6-compatible)
1FT708



Flange 0
1FT708



1FT7 High Dynamic motors with/without DRIVE-CLiQ – Water cooling

Dimensional drawings

For motor		Dimensions in mm (inches)											
Shaft height	Type	DIN IEC	a ₁ P	b A	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	Connector Size		o ₁	s ₂ S
										1.5	3		
1FT7 High Dynamic, water cooling, with connector, with/without brake													
63	1FT7065 1FT7067		155 (6.10)	135 (5.31)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	132.5 (5.22)	–	57 (2.24)	9 (0.35)
80	1FT7085 1FT7087		194 (7.64)	165 (6.50)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	140.5 (5.53)	168.5 (6.63)	50 (1.97)	11 (0.43)

Shaft height	Type	DIN IEC	Flange 1 (1FT6-compatible)					Flange 0					Shaft extension DE						
			i ₂	k LB	o	k LB	o	b ₂	f ₂	i ₂	k LB	o	k LB	o	d D	d ₆	l E	t GA	u F
63	1FT7065 1FT7067		50 (1.97)	292 (11.50)	220 (8.66)	292 (11.50)	220 (8.66)	51 (2.01)	6 (0.24)	56.5 (2.22)	285.5 (11.24)	214 (8.43)	285.5 (11.24)	214 (8.43)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
80	1FT7085 1FT7087		58 (2.28)	319 (12.56)	254 (10.00)	319 (12.56)	254 (10.00)	66 (2.60)	6 (0.24)	64.5 (2.54)	312.5 (12.30)	247 (9.72)	312.5 (12.30)	247 (9.72)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)

