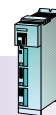


SIMOVERT MASTERDRIVES Motion Control

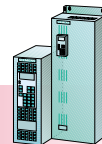
Dimension drawings

1FT6 synchronous servomotors

Compact
PLUS units



Compact and
chassis units

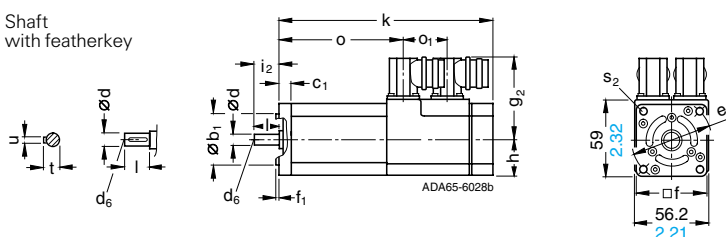


For motor		Dimension in mm (inches)														Resolver without brake		with brake	
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ –	h H	i ₂ –	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁ –	k LB	o –	k LB	o –
Type of construction IM B5, non-ventilated, with plug, with/without brake																			
28	1FT6021	–		40 (1.57)	10 (0.39)	63 (2.48)	55 (2.17)	2.5 (0.1)	63 (2.48)	28 (1.1)	20 (0.79)	–	5.8 (0.23)	–	34.5 (1.36)	193 (7.6)	122 (4.8)	218 (8.58)	147 (5.79)
	1FT6024	–														233 (9.17)	162 (6.38)	258 (10.16)	187 (7.36)
36	1FT6031		92 (3.62)	60 (2.36)	8 (0.31)	75 (2.95)	72 (2.83)	3 (0.12)	77 (3.03)	36 (1.42)	30 (1.18)	–	6 (0.24)	–	–	180 (7.09)	151 (5.94)	200 (7.87)	171 (6.73)
	1FT6034															220 (8.66)	191 (7.52)	240 (9.45)	211 (8.31)

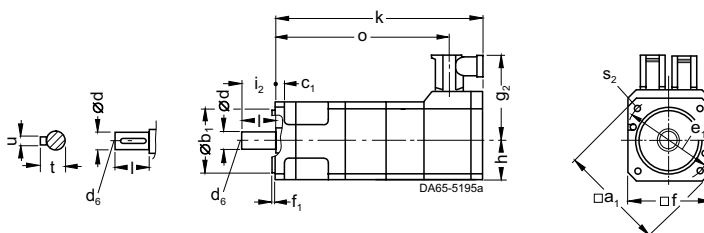
(continued)		sin/cos incremental encoder 1 V _{pp}				D-end of shaft				
		without brake		with brake						
	DIN IEC	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA	u F
28	1FT6021	193 (7.6)	122 (4.8)	218 (8.58)	147 (5.79)	9 (0.35)	M3	20 (0.79)	10.2 (0.4)	3 (0.12)
	1FT6024	233 (9.17)	162 (6.38)	258 (10.16)	187 (7.36)					
36	1FT6031	220 (8.66)	151 (5.94)	240 (9.45)	171 (6.73)	14 (0.55)	M5	30 (1.18)	16 (0.63)	5 (0.2)
	1FT6034	260 (10.24)	191 (7.52)	280 (11.02)	211 (8.31)					

1FT602 .

Shaft
with featherkey

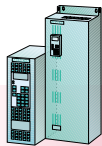


1FT603 .

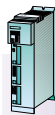


Dimension in mm
Dimension in inches

- 1) IM B5.
- 2) IM B14.



Compact and
chassis units



Compact
PLUS units

SIMOVERT MASTERDRIVES Motion Control

Dimension drawings

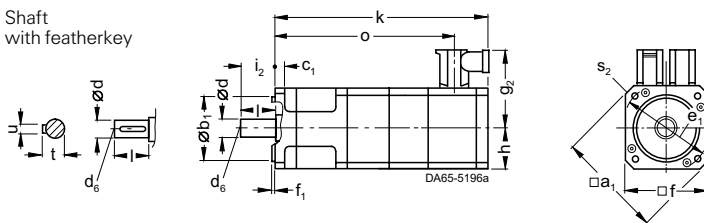
1FT6 synchronous servomotors

For motor		Dimension in mm (inches)														Resolver without brake		with brake	
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 –	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁	k LB	o –	k LB	o –
Type of construction IM B5, non-ventilated, with plug, with/without brake																			
48	1FT6041		120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	81 (3.19)	48 (1.89)	40 (1.57)	–	7 (0.28)	–	–	187 (7.36)	157 (6.18)	222 (8.74)	192 (7.56)
	1FT6044															237 (9.33)	207 (8.15)	272 (10.71)	242 (9.53)
63	1FT6061		146 (5.75)	110 (4.33)	10 (0.39)	130 (5.12)	116 (4.57)	3.5 (0.14)	91 (3.58)	58 (2.28)	50 (1.97)	–	9 (0.35)	M8	–	198 (7.8)	172 (6.77)	228 (8.98)	202 (7.95)
	1FT6062															223 (8.78)	197 (7.76)	253 (9.96)	227 (8.94)
	1FT6064															273 (10.75)	247 (9.72)	303 (11.93)	277 (10.91)

(continued)		sin/cos incremental encoder 1 V _{pp}				D-end of shaft				
		without brake		with brake						
	DIN IEC	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA	u F
48	1FT6041	228 (8.98)	157 (6.18)	263 (10.35)	192 (7.56)	19 (0.75)	M6	40 (1.57)	21.5 (0.85)	6 (0.24)
	1FT6044	278 (10.94)	207 (8.15)	313 (12.32)	242 (9.53)					
63	1FT6061	228 (8.98)	172 (6.77)	258 (10.16)	202 (7.95)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
	1FT6062	253 (9.96)	197 (7.76)	283 (11.14)	227 (8.94)					
	1FT6064	303 (11.93)	247 (9.72)	333 (13.11)	277 (10.91)					

1FT604 .
1FT606 .

Shaft
with featherkey



1) IM B5.

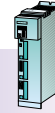
2) IM B14.

SIMOVERT MASTERDRIVES Motion Control

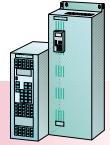
Dimension drawings

1FT6 synchronous servomotors

Compact PLUS units



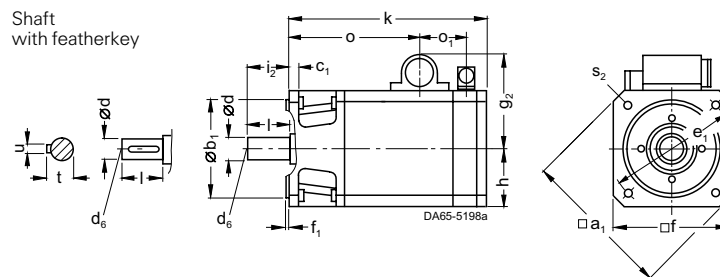
Compact and chassis units



For motor		Dimension in mm (inches)														Resolver without brake		with brake	
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 –	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁	k LB	o –	k LB	o –
Type of construction IM B5, non-ventilated, with plug, with/without brake																			
80	1FT6081		194 (7.64)	130 (5.12)	12 (0.47)	165 (6.5)	155 (6.1)	3.5 (0.14)	127.5 (5.02)	77.5 (3.05)	58 (2.28)	–	11 (0.43)	M10	76 (2.99)	221 (8.7)	113 (4.45)	248 (9.76)	140 (5.51)
	1FT6082															246 (9.69)	138 (5.43)	273 (10.75)	165 (6.5)
	1FT6084															296 (11.65)	188 (7.4)	342 (13.46)	234 (9.21)
	1FT6086															346 (13.62)	238 (9.37)	392 (15.43)	284 (11.18)

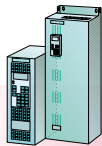
(continued)		sin/cos incremental encoder 1 V _{pp}				D-end of shaft					
		without brake		with brake							
		DIN IEC	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA	u F
80	1FT6081		221 (8.7)	113 (4.45)	248 (9.76)	140 (5.51)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FT6082		246 (9.69)	138 (5.43)	273 (10.75)	165 (6.5)					
	1FT6084		296 (11.65)	188 (7.4)	342 (13.46)	234 (9.21)					
	1FT6086		346 (13.62)	238 (9.37)	392 (15.43)	284 (11.18)					

1FT608 .



1) IM B5.

2) IM B14.



Compact and
chassis units



Compact
PLUS units

SIMOVER MASTERDRIVES Motion Control

Dimension drawings

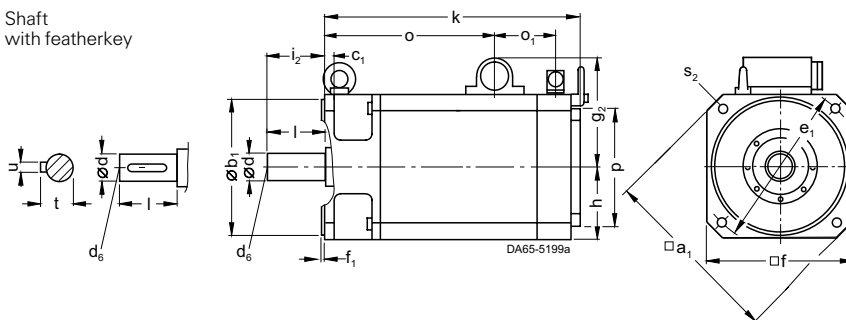
1FT6 synchronous servomotors

For motor		Dimension in mm (inches)														Resolver without brake		with brake	
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 –	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁	k LB	o –	k LB	o –
Type of construction IM B5, non-ventilated, with plug, with/without brake																			
100	1FT6102		240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	146 (5.75)	96 (3.78)	80 (3.15)	155 (6.1)	14 (0.55)	M12	76 (2.99)	295 (11.61)	186 (7.32)	341 (13.43)	232 (9.13)
	1FT6105															370 (14.57)	261 (10.28)	416 (16.38)	307 (12.09)
	1FT6108															470 (18.5)	361 (14.21)	516 (20.31)	407 (16.02)
132	1FT6132		–	250 (9.84)	18 (0.71)	300 (11.81)	260 (10.24)	5 (0.2)	172.5 (6.79)	132 (5.2)	82 (3.23)	245 (9.65)	18 (0.71)	–	66 (2.6)	423 (16.65)	288 (11.34)	473 (18.62)	338 (13.31)
	1FT6134															473 (18.62)	338 (13.31)	523 (20.59)	388 (15.28)
	1FT6136															523 (20.59)	388 (15.28)	573 (22.56)	438 (17.24)

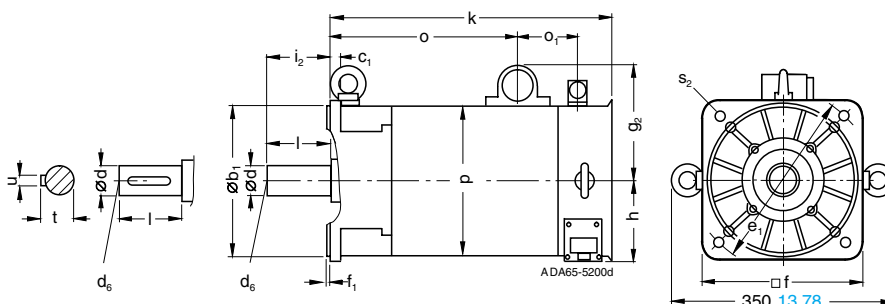
(continued)		sin/cos incremental encoder 1 V _{pp}				D-end of shaft					
		without brake		with brake							
		DIN IEC	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA	u F
100	1FT6102		295 (11.61)	186 (7.32)	341 (13.43)	232 (9.13)	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FT6105		370 (14.57)	261 (10.28)	416 (16.38)	307 (12.09)					
	1FT6108		470 (18.5)	361 (14.21)	516 (20.31)	407 (16.02)					
132	1FT6132		423 (16.65)	288 (11.34)	473 (18.62)	338 (13.31)	48 (1.89)	M16	82 (3.23)	51.5 (2.03)	14 (0.55)
	1FT6134		473 (18.62)	338 (13.31)	523 (20.59)	388 (15.28)					
	1FT6136		523 (20.59)	388 (15.28)	573 (22.56)	438 (17.24)					

1FT610 .

Shaft
with featherkey



1FT613 .



Dimension in mm
Dimension in inches

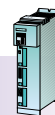
- 1) IM B5.
- 2) IM B14.

SIMOVERT MASTERDRIVES Motion Control

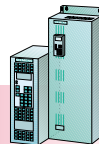
Dimension drawings

1FT6 synchronous servomotors

Compact
PLUS units



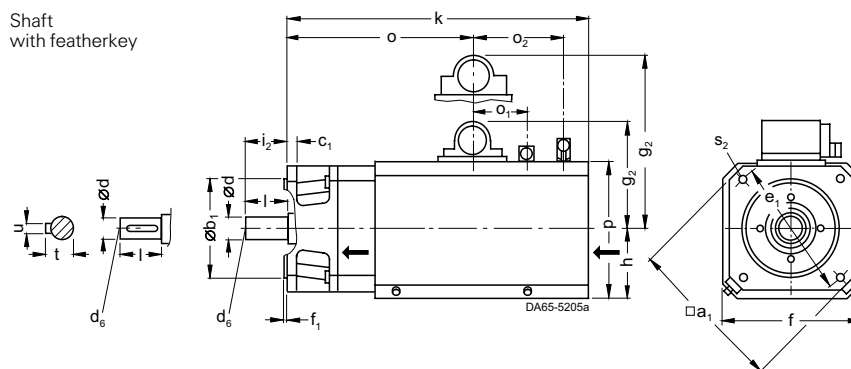
Compact and
chassis units



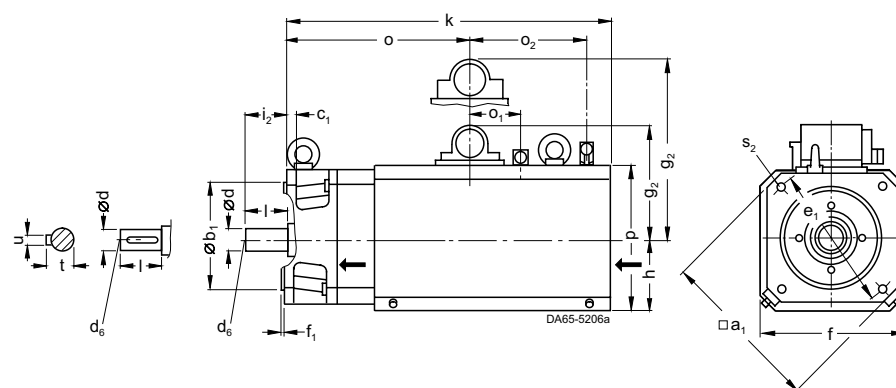
For motor		Dimension in mm (inches)														Plug Size 1.5 3	
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ —	g ₂ —	h H	i ₂ —	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁ —	o ₂ —
Type of construction IM B5, blower-ventilated, with plug, with/without brake																	
80	1FT6084		194 (7.64)	130 (5.12)	12 (0.47)	165 (6.5)	185 (7.28)	3.5 (0.14)	139.5 (5.49)	153.5 (6.04)	92.5 (3.64)	58 (2.28)	175 (6.89)	11 (0.43)	M10	76 (2.99)	169 (6.65)
	1FT6086																
100	1FT6105		240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	221 (8.7)	4 (0.16)	158 (6.22)	172 (6.77)	110.5 (4.35)	80 (3.15)	212 (8.35)	14 (0.55)	M12	76.5 (3.01)	170 (6.69)
	1FT6108																

(continued)		Resolver/sin/cos incremental encoder 1 V _{pp} without brake with brake				D-end of shaft					
		DIN IEC	k LB	o —	k LB	o —	d D	d ₆ —	l E	t GA	u F
80	1FT6084		399 (15.71)	188 (7.4)	445 (17.52)	234 (9.21)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
	1FT6086		449 (17.68)	238 (9.37)	495 (19.49)	284 (11.18)					
100	1FT6105		473 (18.62)	261 (10.28)	519 (20.43)	307 (12.09)	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)
	1FT6108		573 (22.56)	361 (14.21)	619 (24.37)	407 (16.02)					

1FT608 .

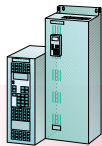


1FT610 .



1) IM B5.

2) IM B14.



Compact and
chassis units



Compact
PLUS units

SIMOVERT MASTERDRIVES Motion Control

Dimension drawings

1FT6 synchronous servomotors

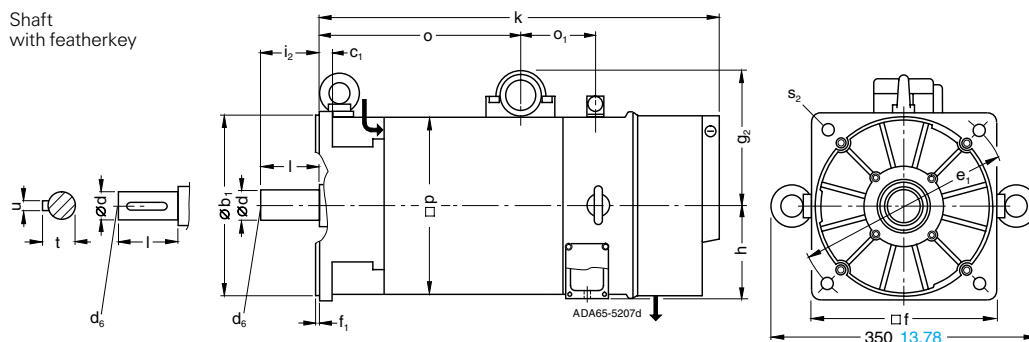
For motor		Dimension in mm (inches)														Plug Size 1.5 3	
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	g ₂ —	g ₂ —	h H	i ₂ —	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o ₁ —	o ₂ —

Type of construction IM B5, blower-ventilated, with plug, with/without brake

132	1FT6132		250 (9.84)	18 (0.71)	18 (0.71)	300 (11.81)	260 (10.24)	5 (0.2)	—	186.5 (7.34)	132 (5.2)	82 (3.23)	245 (9.65)	18 (0.71)	—	66 (2.6)	—
	1FT6134																
	1FT6136																

(continued)		Resolver/sin/cos incremental encoder 1 V _{pp}				D-end of shaft					
		without brake		with brake							
		DIN IEC	k LB	o –	k LB	o –	d D	d ₆ –	l E	t GA	u F
132	1FT6132		541 (21.3)	288 (11.34)	591 (23.27)	338 (13.31)	48 (1.89)	M16	82 (3.23)	51.5 (2.03)	14 (0.55)
	1FT6134		591 (23.27)	338 (13.31)	641 (25.24)	388 (15.28)					
	1FT6136		641 (25.24)	388 (15.28)	691 (27.2)	438 (17.24)					

1FT613.



Dimension in mm
Dimension in inches

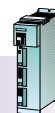
- 1) IM B5.
- 2) IM B14.

SIMOVERT MASTERDRIVES Motion Control

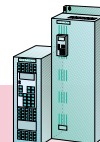
Dimension drawings

1FT6 synchronous servomotors

Compact
PLUS units



Compact and
chassis units



For motor		Dimension in mm (inches)								Plug Size							
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	1	1.5	3	h H	i ₂ —	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o —
									g ₂ —	g ₂ —	g ₂ —						

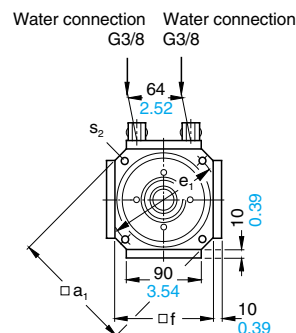
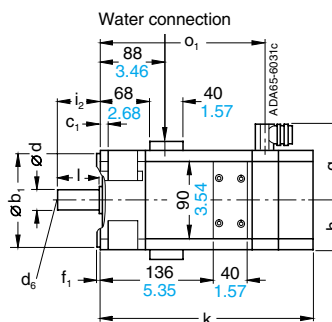
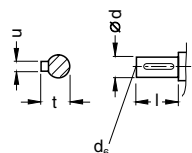
Type of construction IM B5, water-cooled, with plug, with/without brake

63	1FT6062	146 (5.75)	110 (4.33)	10 (0.39)	130 (5.12)	116 (4.57)	3.5 (0.14)	99 (10.8)	—	—	—	58 (2.28)	50 (1.97)	—	9 (0.35)	M8	—
	1FT6064																
80	1FT6084	194 (7.64)	130 (5.12)	12 (0.47)	165 (6.5)	155 (6.1)	3.5 (0.14)	—	139.5 (5.49)	153.5 (6.04)	77.5 (3.05)	58 (2.28)	—	—	11 (0.43)	M10	76 (2.99)
	1FT6086																

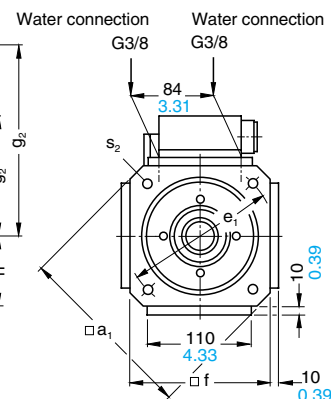
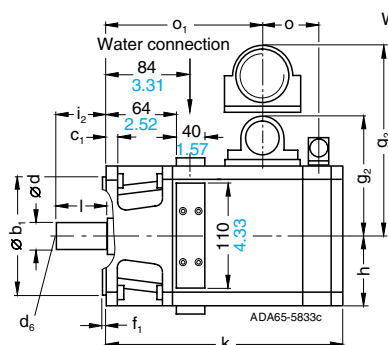
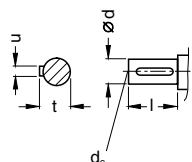
(continued)		Resolver/sin/cos incremental encoder 1 V _{pp}				Re- solver	sin/cos incremental encoder 1 V _{pp}	D-end of shaft									
		without brake		with brake		with/without brake											
DIN IEC		k LB	o ₁ —	k LB	o ₁ —	k LB	k LB	o ₁ —	d D	d ₆ —	l E	t GA	u F				
63	1FT6062	—	—	—	—	253 (9.96)	283 (11.14)	227 (8.94)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)				
	1FT6064					303 (11.93)	333 (13.11)	277 (10.91)									
80	1FT6084	296 (11.65)	188 (7.4)	342 (13.46)	234 (9.21)	—	—	—	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)				
	1FT6086	346 (13.62)	238 (9.37)	392 (15.43)	284 (11.18)	—	—	—									

1FT606 .

Shaft
with featherkey



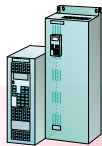
1FT608 .



Dimension in mm
Dimension in inches

1) IM B5.

2) IM B14.



Compact and
chassis units



Compact
PLUS units

SIMOVERT MASTERDRIVES Motion Control

Dimension drawings

1FT6 synchronous servomotors

For motor		Dimension in mm (inches)														Plug Size	
Size	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	1			h H	i ₂ —	p HD	s ₂ ¹⁾ S	s ₂ ²⁾ S	o —
									g ₂ —	1.5	3						

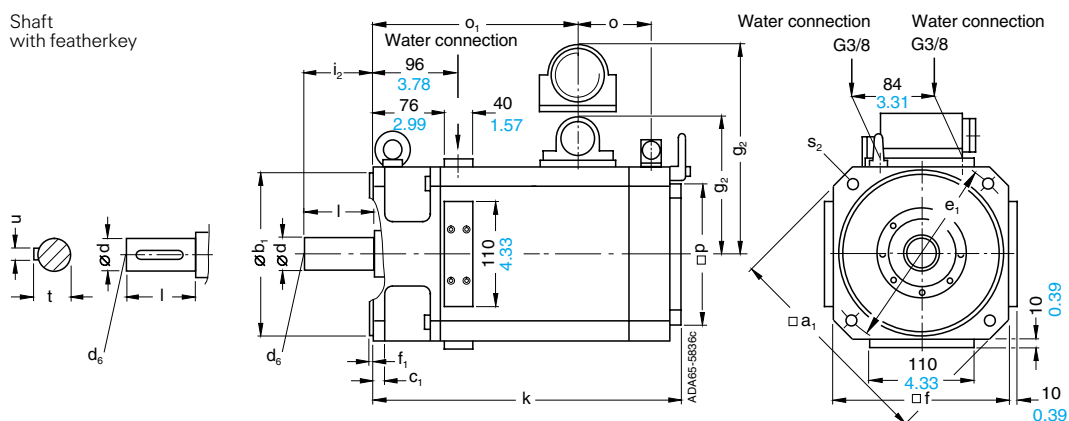
Type of construction IM B5, water-cooled, with plug, with/without brake

100	1FT6105	240 (9.45)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	—	158 (6.22)	172 (6.77)	96 (3.78)	80 (3.15)	155 (6.1)	14 (0.55)	M12	76 (2.99)
	1FT6108															

(continued)		Resolver/sin/cos incremental encoder 1 V _{pp}				Re- solver			sin/cos incremental encoder 1 V _{pp}			D-end of shaft			
		without brake		with brake		with/without brake									
Size	Type	DIN IEC	k LB	o ₁ —	k LB	o ₁ —	k LB	k LB	o ₁ —	d D	d ₆ —	l E	t GA	u F	
100	1FT6105		370 (14.57)	261 (10.28)	416 (16.38)	307 (12.09)	—	—	—	38 (1.5)	M12	80 (3.15)	41 (1.61)	10 (0.39)	
	1FT6108		470 (18.5)	361 (14.21)	516 (20.31)	407 (16.02)	—	—	—						

1FT610 .

Shaft
with featherkey



Dimension in mm
Dimension in inches

1) IM B5.

2) IM B14.