

16

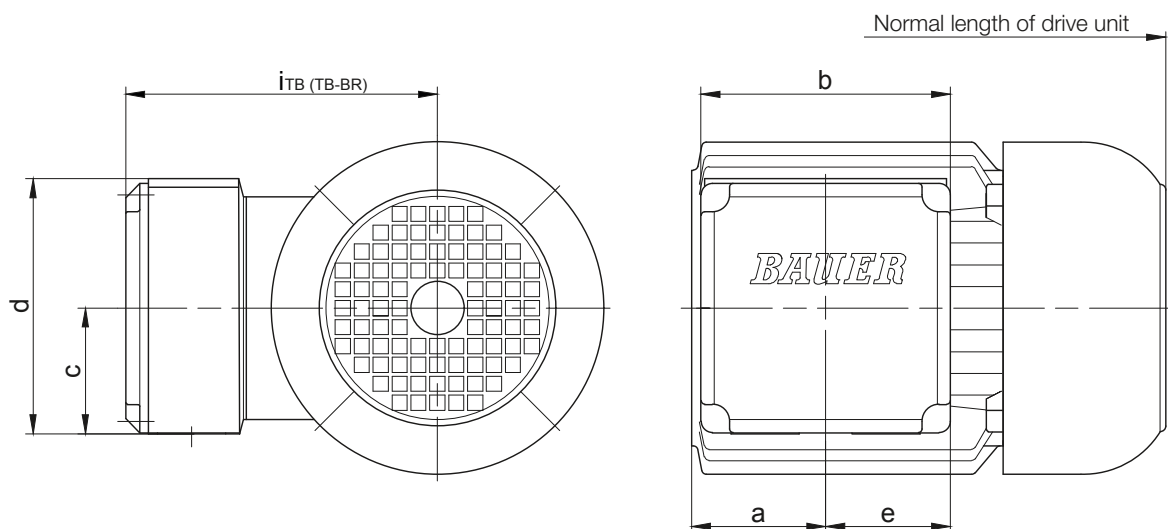
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Energy Efficient Geared Motors

AC Line Operated / North America

Standard terminal box



Motor	Dimensions						Code	Cableentry	
	a	b	c	d	e	i _{TB(TB-BR)}		Major (M)	Minor (N)
D04..	1.18	3.54	1.87	3.74	1.77	4.41	TB112..	M=NPT=1/2"	N=2xM20x1.5
D..05..	2.24	3.54	1.87	3.74	1.77	4.61	TB112..	M=NPT=1/2"	N=2xM20x1.5
D..06..	1.77	3.54	1.87	3.74	1.77	4.65	TB112..	M=NPT=1/2"	N=2xM20x1.5
D..07..	1.77	3.54	1.87	3.74	1.77	4.65	TB112..	M=NPT=1/2"	N=2xM20x1.5
D..08..	1.61	3.54	1.87	3.74	1.77	5.32	TB112..	M=NPT=1/2"	N=2xM20x1.5
D..09..	2.44	5.20	2.60	5.32	2.82	6.46	TB212..	M=NPT=3/4"	N=2xM25x1.5
D..11..	2.44	5.20	2.60	5.32	2.82	7.13	TB212..	M=NPT=3/4"	N=2xM25x1.5
D..13..	3.07	6.14	3.07	6.22	3.29	8.50	TB312..	M=NPT=1"	N=2xM25x1.5
D..16..	2.91	6.14	3.07	6.22	3.29	9.53	TB312..	M=NPT=1"	N=2xM25x1.5
D..18..	3.70	7.87	3.94	7.91	4.15	11.30	TB412..	M=NPT=1 1/2"	N=2xM25x1.5
Motor with Brake	Dimensions						Code	Cableentry	
	a	b	c	d	e	i _{TB(TB-BR)}		Major (M)	Minor (N)
D04..	1.18	3.54	1.87	3.74	2.68	5.18	TBR112..	M=NPT=1/2"	N=2xM20x1.5
from D..05..	see standard motor								
Dimensions in inch									

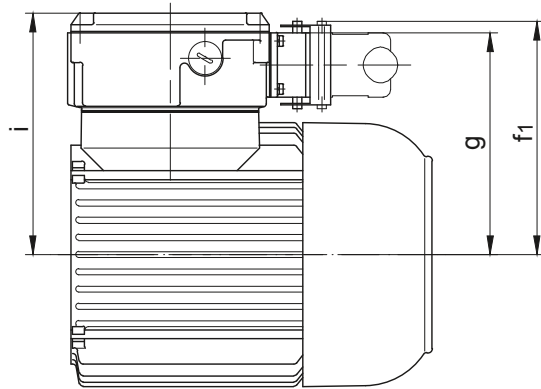
The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor-mounted components

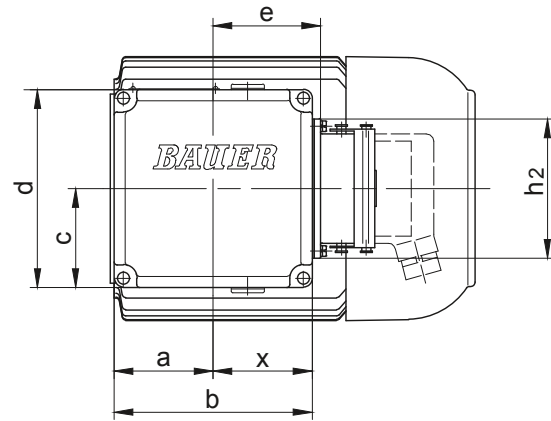
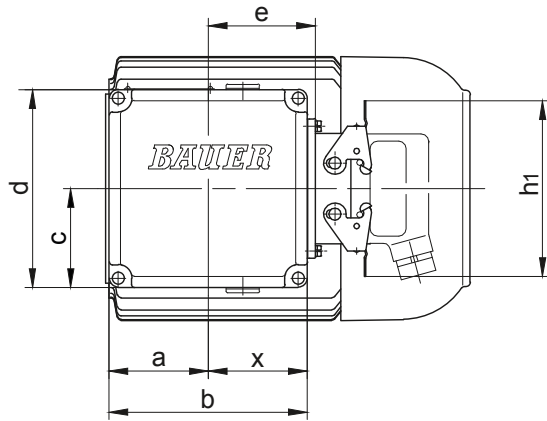
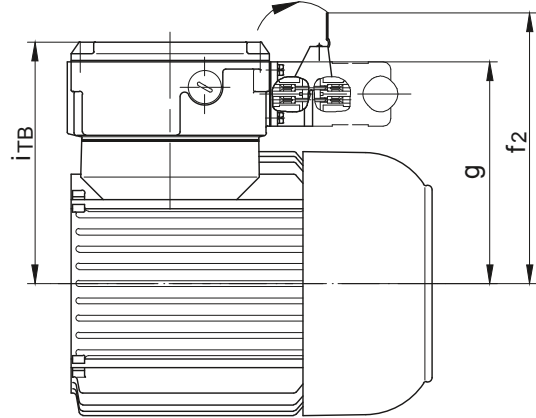
Dimensional Drawings Imperial

Terminal box for plug-connector

Standard design (two brackets)



Optional for DESINA (one bracket)



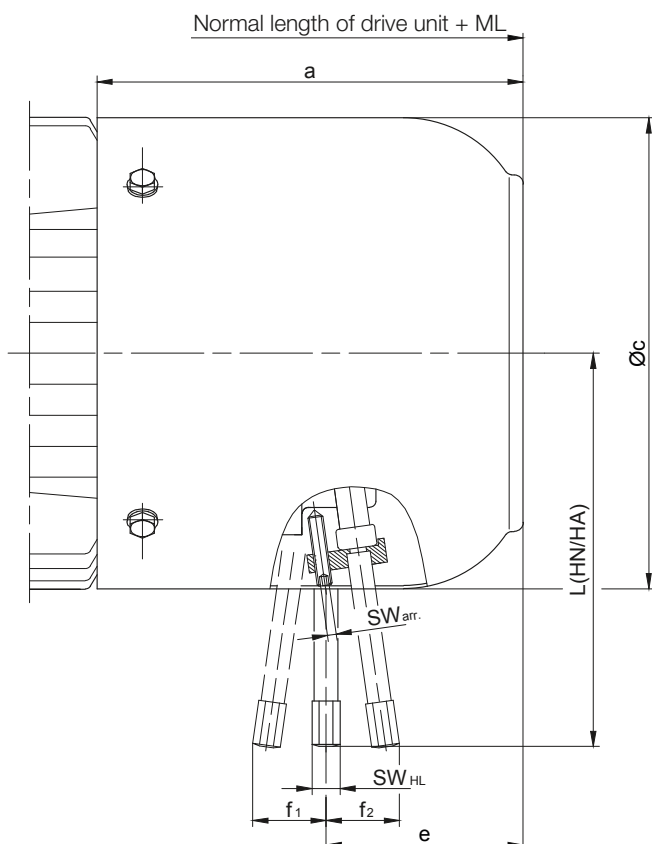
Fan cover geometry for D..16 and D..18, see dimensional drawing: terminal box as standard version

Motor	Size Terminal box	a	b	c	d	e	f ₁	f ₂	g	h ₁	h ₂	i _{TB}	x
D..04..	TBS1	1.18	3.54	2.07	4.17	1.93	4.67	5.79	4.37	4.61	3.66	4.90	1.81
D..05..	TBS1	2.24	3.54	2.07	4.17	1.93	4.86	5.98	4.57	4.61	3.66	5.10	1.81
D..06..	TBS1	1.77	3.54	2.07	4.17	1.93	4.94	6.06	4.65	4.61	3.66	5.18	1.81
D..07..	TBS1	1.77	3.54	2.07	4.17	1.93	4.94	6.06	4.65	4.61	3.66	5.18	1.81
D..08..	TBS1	1.77	3.54	2.07	4.17	1.93	5.65	6.77	5.35	4.61	3.66	5.89	1.81
D..09..	TBS2	2.44	5.20	2.60	5.32	2.82	6.24	7.36	6.22	4.61	3.66	6.46	2.70
D..11..	TBS2	2.44	5.20	2.60	5.32	2.82	6.91	7.52	6.54	4.61	3.66	7.13	2.70
D..13..	TBS3	3.07	6.14	3.07	6.22	3.29	7.83	8.96	7.54	4.61	3.66	8.50	3.13
D..16..	TBS3	2.91	6.14	3.07	6.22	3.29	8.86	9.98	8.86	4.61	3.66	9.53	3.13
D..18..	TBS4	3.70	7.87	3.94	7.91	4.15	10.12	11.77	10.12	4.61	3.66	11.30	3.96
D..20L	TBS4	3.70	7.87	3.94	7.91	4.15	10.79	11.77	10.49	4.61	3.66	11.95	3.96
D..22S	TBS4	3.70	7.87	3.94	7.91	4.15	10.79	11.77	10.49	4.61	3.66	11.95	3.96
D..22M													

Dimensions in inch

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Standard brake



Motor	Brake	ML (inch) Additional length with brake	a	Øc	e	Dimensions (inch)					Add.weight
						f ₁	f ₂	L(HA/HN)	SW _{HL}	SW _{arr.}	lbs
D..04..	E003	1.71	3.82	4.35	2.30	0.81	0.94	3.78/4.01	0.43	0.43	2.20
D..05..		1.65	4.02	4.84	2.36						
D..06..					2.30						
D..07..	E003/E004										
D..08..	ES(X)010	2.60	5.55	6.14	2.68	-	1.14	5.20	0.32	0.10	5.73
D..09..	ES(X)010	3.66	6.81	6.93	3.90	-	1.14	5.20	0.32	0.10	5.95
	ES(X)027				3.58	-	1.40	6.38			9.26
D..11..	ES(X)027	3.86	7.68	8.58	4.06	-	1.40	6.38	0.32	0.10	9.92
	ES(X)040				3.94	-	1.46	6.77			13.89
	ES(X)070				3.78	-	1.36	7.48	0.47	0.16	18.74
D..13..	ES(X)040	4.37	8.86	10.16	4.92	-	1.61	7.95	0.47	0.16	14.33
	ES(X)070				4.76	-	1.50	8.86			18.74
	ES(X)125				4.57	-	1.77	8.78			27.56
D..16..	ES(X)125	5.67	11.42	12.20	5.83	-	1.91	9.61	0.47	0.16	29.76
	ES(X)200				5.55	-	1.97	10.08			41.89
	ES(X)300				4.41	-					48.50
D..18..	ES(X)250	5.91	13.35	13.70	6.02	-	2.30	11.26	0.47	0.16	61.73
	ZS(X)500				4.84	-			0.75	0.20	66.14
D..20L	ES(X)250	5.02	15.71	14.29	7.20	1.93	-	11.26	0.75	0.20	60.63
	ZS(X)500				6.00			12.32			
	ZS(X)800				5.87						
D..22S	ES(X)250	5.02	15.71	14.29	7.20	1.93	-	11.26	0.75	0.20	61.07
	ZS(X)500				6.00			12.32			
	ZS(X)800				5.87						
D..22M	ES(X)250	5.02	15.71	14.29	7.20	1.93	-	11.26	0.75	0.20	135.58
	ZS(X)500				6.00			12.32			
	ZS(X)800				5.87						

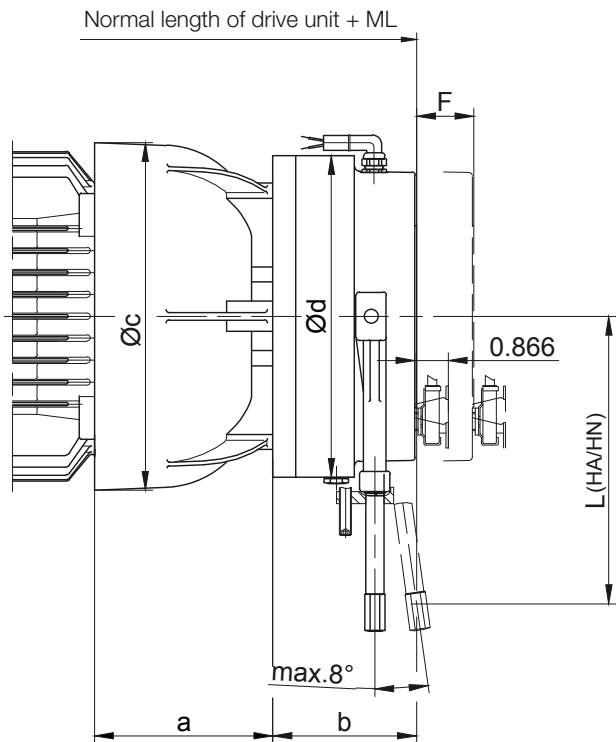
HA = manual release lockable
HN = manual release not lockable

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor-mounted components

Dimensional Drawings Imperial

“Heavy-Duty” - brake

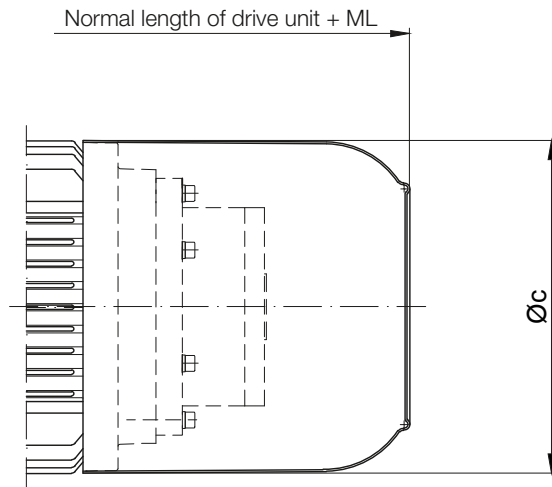


Motor	Brake	Additional length with brake (inch)		Dimensions (inch)					Additional weight lbs
		ML Standard	ML Microswitch	a	b	c	Ød	L (HA/HN)	
D..08..	EH(X)010	2.953	4.803	3.287	2.461	6.535	4.724	5.197	9.25
D..08..	EH(X)027	3.110	3.976	3.287	2.618	6.535	5.709	6.378	12.13
D..09..	EH(X)027	3.445	5.236	4.016	2.776	7.520	5.705	6.378	14.50
D..09..	EH(X)040	3.543	4.409	4.016	2.874	7.520	6.614	6.772	18.30
D..11..	EH(X)070	4.134	6.181	4.724	3.346	9.094	7.402	7.4161	36.35
D..11..	EH(X)125	4.488	5.354	4.724	3.740	9.094	8.386	8.209	42.99
D..13..	EH(X)200	5.039	5.906	5.512	4.173	10.807	9.646	8.701	64.59
D..16..	EH(X)400	5.551	6.417	6.102	4.882	12.835	12.756	12.323	123.02
D..18..		5.984	6.850	7.205		14.409			134.48

HA = manual release lockable
HN = manual release not lockable

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Motor with back stop

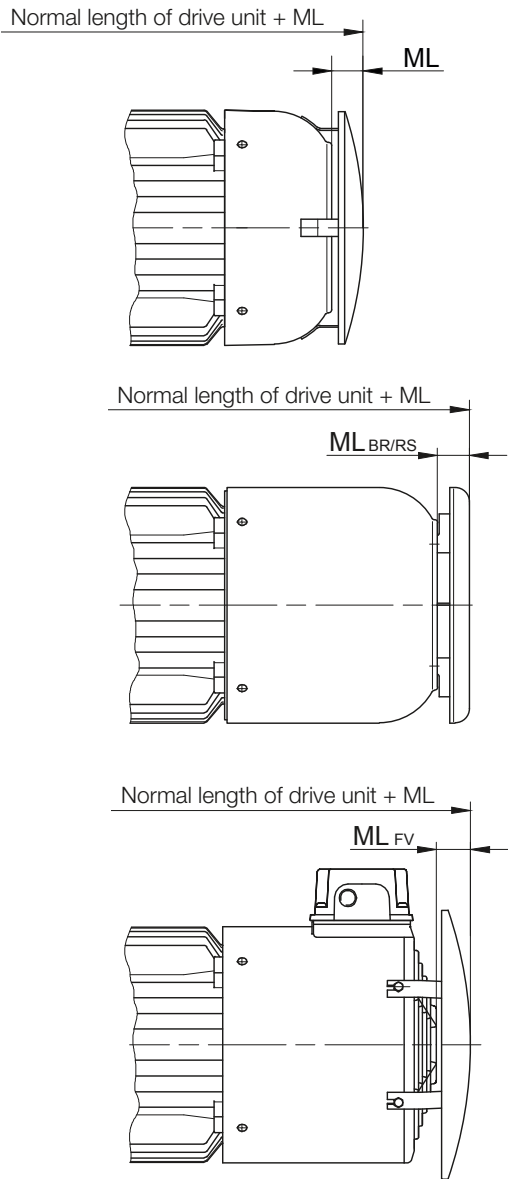


Motor	ML (inch) Additional length with backstop	Dimensions (inch) c	Additional weight lbs
D..08..	2.60	6.14	14.33
D..09..	3.66	7.13	14.33
D..11..	3.86	8.98	17.64
D..13..	4.37	10.16	29.76
D..16..	5.67	12.21	35.27
D..18..	5.91	13.70	37.48
D..20L	-	14.29	20.94
D..22S			
D..22M			

Motor-mounted components

Dimensional Drawings Imperial

Motor with protective hood

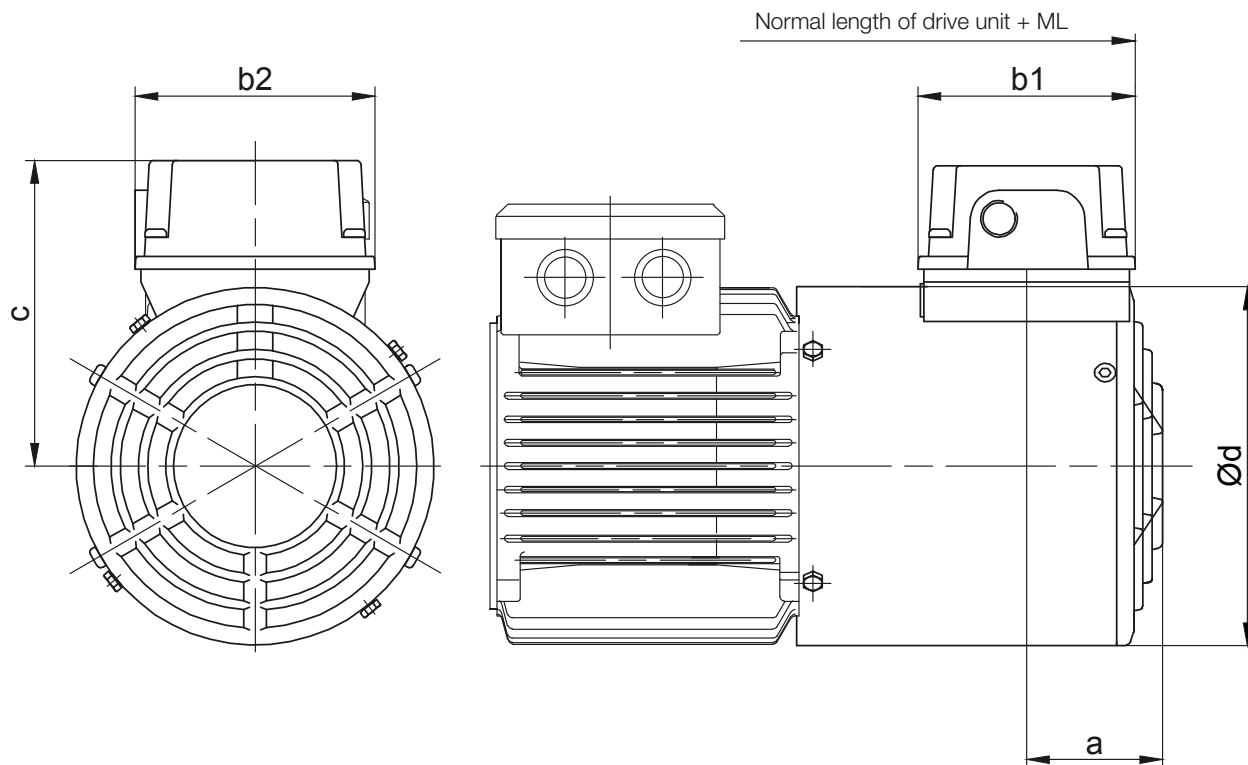


Fan cover geometry for D..16 - D..22, see dimensional drawing: terminal box as standard version

Motor	ML (inch)				Additional weight
	Additional length with attached protective cover				
	ML	ML _{BR}	ML _{RS}	ML _{FV}	lbs
D..04..	0.63	-	-	-	0.33
D..05..	0.71	-	-	-	0.33
D..06..	0.71	-	-	-	0.33
D..07..	0.71	-	-	-	0.33
D..08..	0.57	0.96	0.96	1.57	0.44
D..09..	0.87	0.96	0.96	1.18	0.66
D..11..	1.14	1.16	1.16	1.30	0.88
D..13..	1.18	1.16	1.16	0.98	1.32
D..16..	1.20	1.36	1.36	1.26	3.97
D..18..	1.20	1.36	1.36	1.26	12.13
D..20L	1.22	1.22	1.22	1.22	14.11
D..22S	1.22	1.22	1.22	1.22	14.11
D..22M	1.22	1.22	1.22	1.22	14.11

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with independent fan



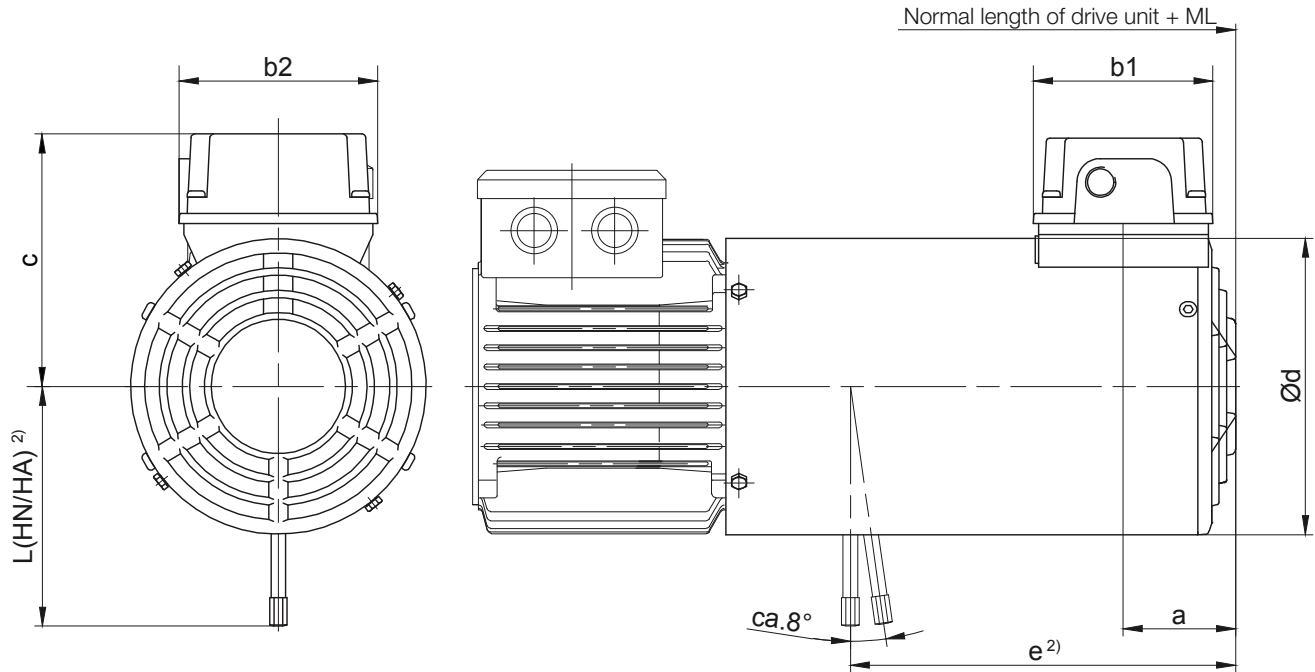
Drive Motor	Fan Motor	kW	r/min	400 V A	ML (inch) Additional length with forced cooling fan	Dimensions (inch)					Additional weight ~lbs
						a	b1	b2	c	d	
D..08..	FV D08	0.019	2670	0.029	3.62	2.74	4.21	4.13	5.28	6.18	4.85
D..09..	FV D09	0.046	2820	0.106	3.82	2.74	4.21	4.13	5.63	6.97	5.95
D..11..	FV D11	0.051	2660	0.110	3.82	3.13	4.21	4.13	6.40	8.62	7.05
D..13..	FV D13	0.073	2820	0.169	4.69	3.10	4.21	4.13	6.46	10.16	10.14
D..16*	FV D16	0.154	2760	0.347	5.67	3.10	4.21	4.13	7.28	12.24	14.11
D..18*	FV D18	0.154	2760	0.347	11.93	3.10	4.21	4.13	8.31	13.70	18.52

* with bayonet joint

Motor-mounted components

Dimensional Drawings Imperial

Motor with brake and independent fan



Motor	Brake	ML (inch) ¹⁾ Additional length with brake and forced ventilation	Dimensions (inch)							Additional weight ~lbs
			a	b1	b2	c	Ød	e ²⁾	L(HA/HN) ²⁾	
D..08..	ES(X)010	7.95	2.32	4.21	4.13	5.28	6.18	8.03	5.20	11.02
D..09..	ES(X)010	8.43	2.74	4.21	4.13	5.63	6.97	8.66	5.20	12.13
	ES(X)027							8.35	6.38	16.53
D..11*	ES(X)027	8.70	2.74	4.21	4.13	6.40	8.62	8.90	6.38	17.64
	ES(X)040							8.78	6.77	22.05
	ES(X)070							8.58	7.24	26.46
D..13*	ES(X)040	9.33	3.13	4.21	4.13	6.46	10.16	10.00	7.95	25.35
	ES(X)070							9.84	8.86	29.76
	ES(X)125							9.65	8.78	38.58
D..16*	ES(X)125	11.57	3.10	4.21	4.13	7.28	12.24	11.73	9.61	42.99
	ES(X)200							11.46	10.08	55.11
	ES(X)300							10.32		59.52
D..18*	ES(X)250	11.93	3.10	4.21	4.13	8.31	13.70	12.09	11.26	81.57
	ES(X)500							10.91		84.88

* with bayonet joint

¹⁾The additional length is for normal motor unit without brake.

Other dimensions see the appropriate normal dimensioned sketch.

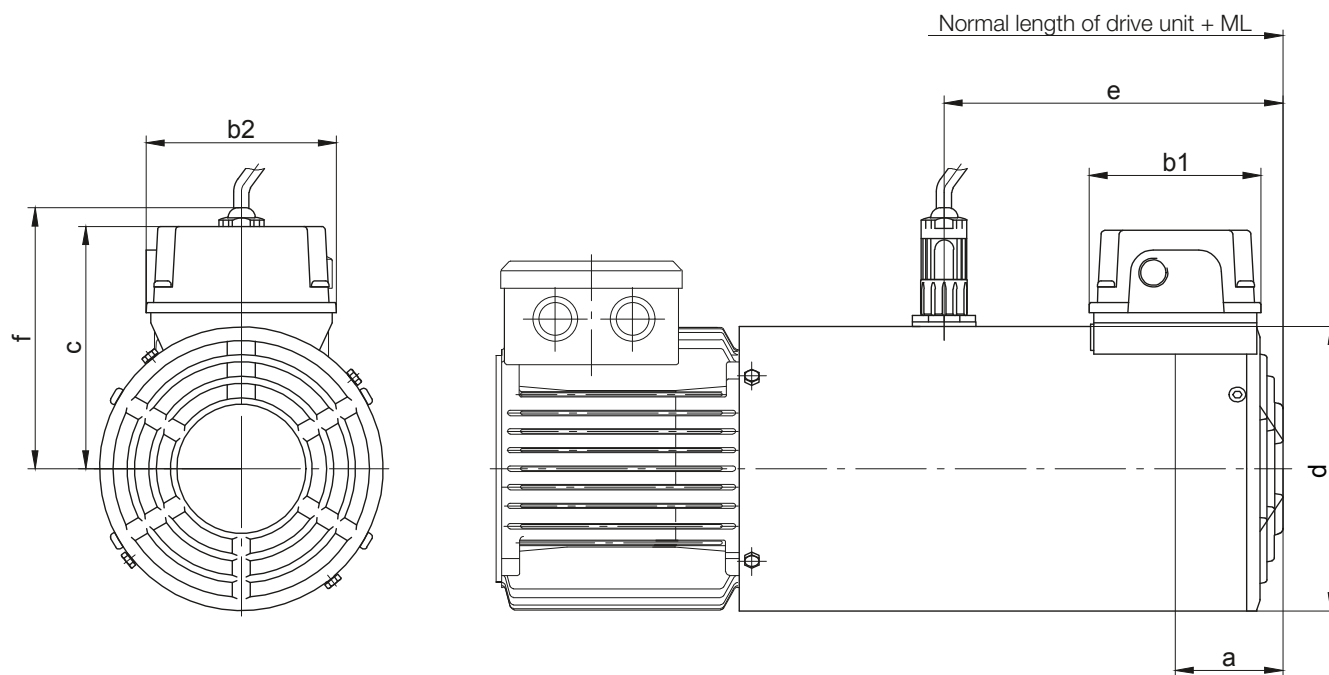
²⁾Brake release on request

HA = manual release lockable

HN = manual release not lockable

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with encoder with built-on independent fan



Motor	ML (inch) ¹⁾ Additional length with encoder and forced ventilation	Dimensions (inch)							Additional weight ~lbs
		a	b1	b2	c	d	e	f	
D..08..	7.95	2.32	4.21	4.13	5.28	6.18	7.36	5.67	5.73
D..09..	8.43	2.74	4.21	4.13	5.63	6.97	7.56	6.04	7.28
D..11*	8.70	2.74	4.21	4.13	6.40	8.58	7.56	-	8.82
D..13*	9.45	3.13	4.21	4.13	6.46	10.16	8.54	-	12.57
D..16*	11.57	3.10	4.21	4.13	7.28	12.24	9.92	-	17.72
D..18*	11.93	3.10	4.21	4.13	8.31	13.70	10.51	-	24.03

* with bayonet joint

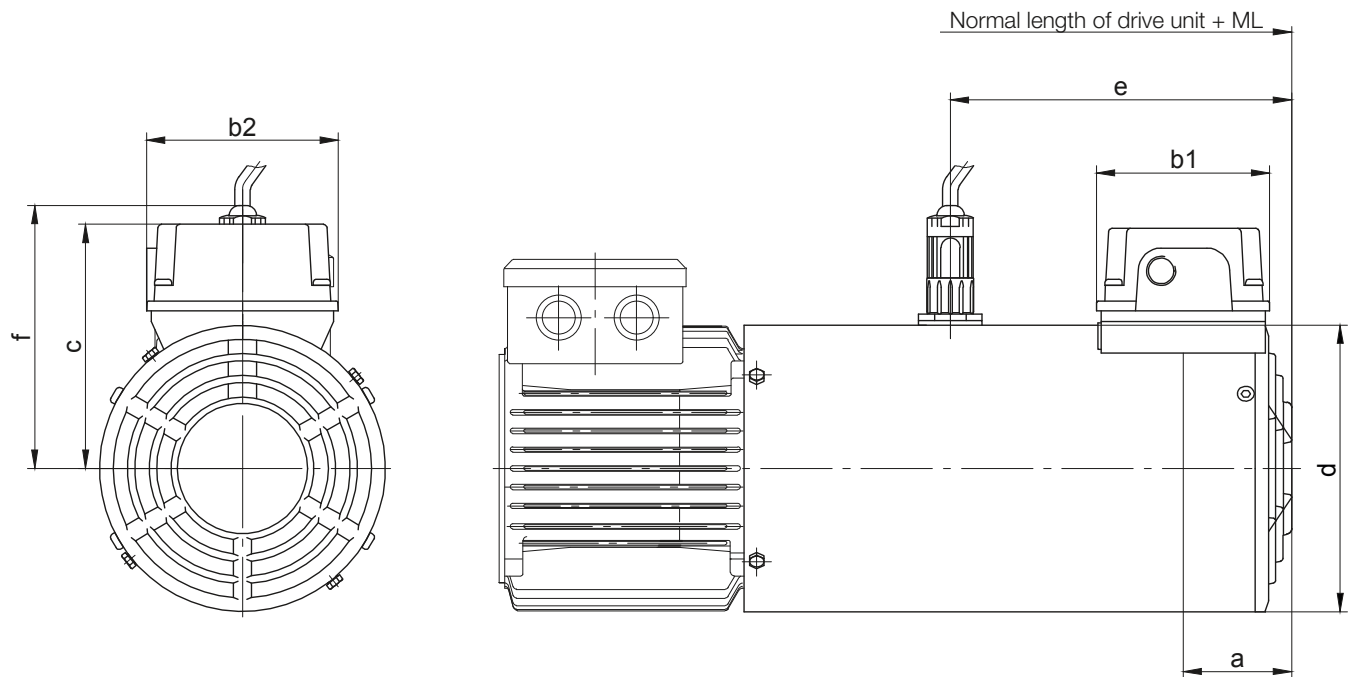
¹⁾ The additional length is for normal motor unit without brake.

Other dimensions see the appropriate normal dimensioned sketch.

Motor-mounted components

Dimensional Drawings Imperial

Motor with brake and encoder with built-on independent fan



Motor	Brake	ML (inch) ¹⁾ Additional length with brake, encoder and forced ventilation	Dimensions (inch)									Additional weight ~lbs
			a	b1	b2	c	Ød	e2)	g	h	L(HA/HN) ²⁾	
D..08..	ES(X)010	7.95	2.32	4.21	4.13	5.28	6.18	8.03	5.91	5.91	5.20	6.0
D..09..	ES(X)010	8.43	2.74	4.21	4.13	5.63	6.97	8.66	6.30	6.30	5.20	6.5
	ES(X)027							8.35	6.30		6.38	18.74
D..11*	ES(X)027	8.70	2.74	4.21	4.13	6.40	8.62	8.90	6.10	6.89	6.38	19.84
	ES(X)040							8.78	6.10		6.77	25.35
	ES(X)070							8.58	6.10		7.24	29.76
D..13*	ES(X)040	9.45	3.13	4.21	4.13	6.46	10.16	10.00	6.89	7.66	7.95	28.66
	ES(X)070							9.84	6.89		8.86	33.07
	ES(X)125							9.65	6.89		8.78	41.89
D..16*	ES(X)125	11.57	3.10	4.21	4.13	7.28	12.24	11.73	7.68	8.70	9.61	46.30
	ES(X)200							11.46	7.68		10.08	59.52
	ES(X)300							10.32	7.68			63.93
D..18*	ES(X)250	11.93	3.10	4.21	4.13	8.31	13.70	8.15	8.35	9.43	11.26	85.98
	ES(X)500							10.91	8.35			89.29

* with bayonet joint

¹⁾ The additional length is for normal motor unit without brake.

Other dimensions see the appropriate normal dimensioned sketch.

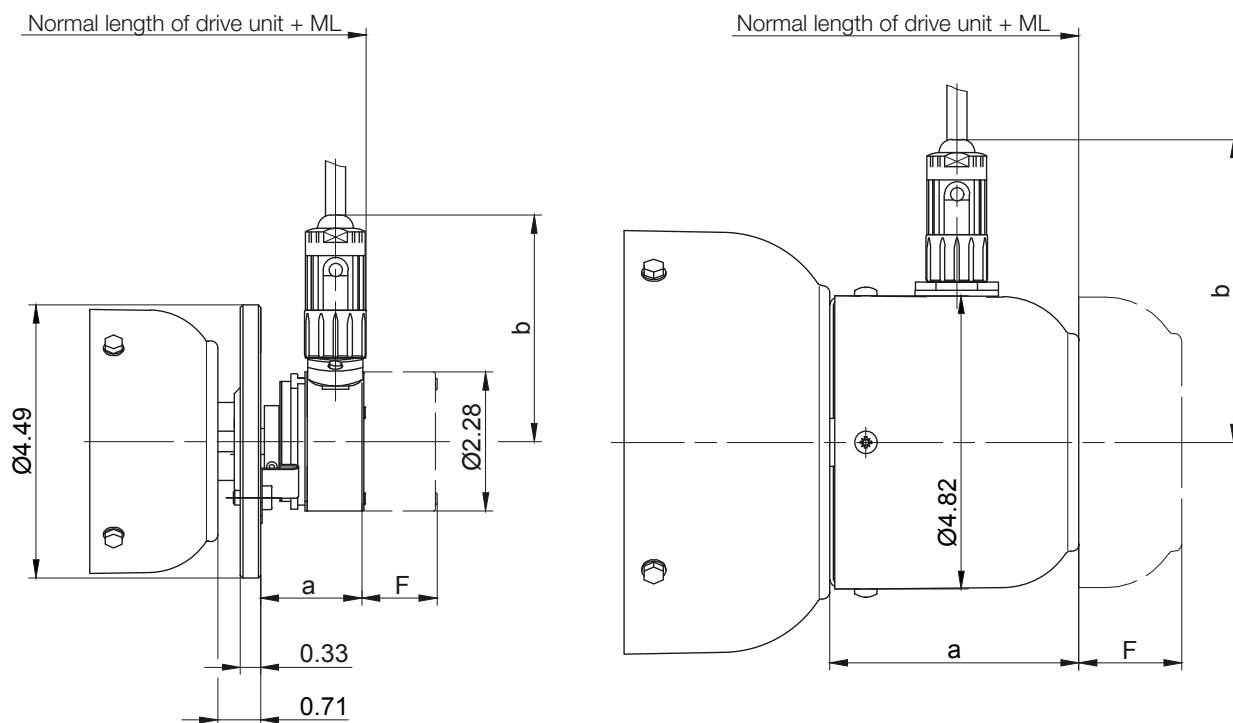
²⁾ Brake release on request

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Motor with encoder



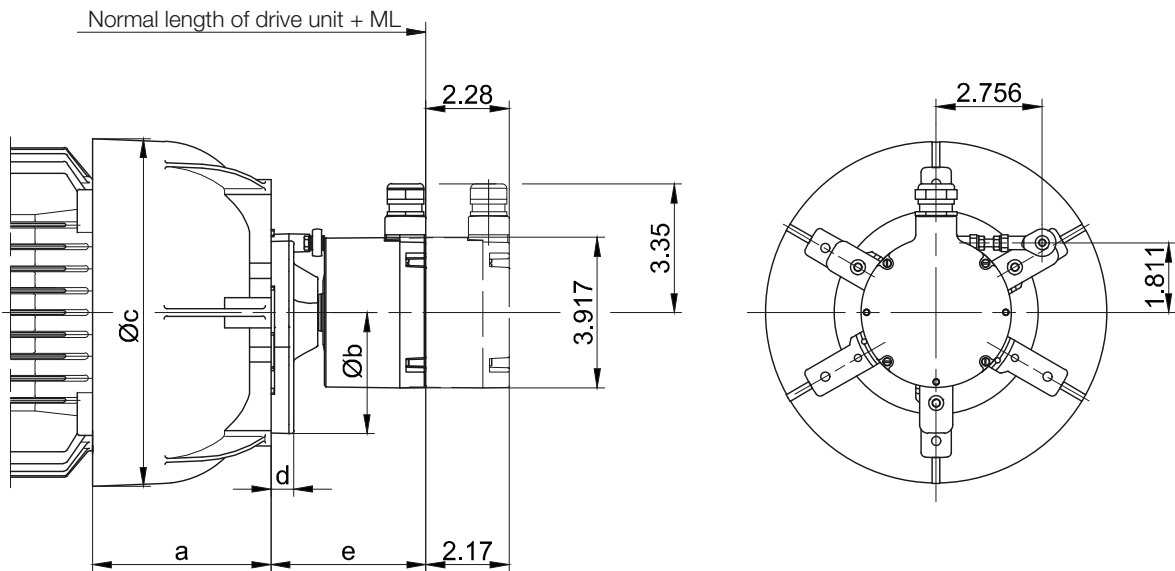
Fan cover geometry for D..16 - D..22, see dimensional drawing: terminal box as standard version

Motor	ML(inch) Additional length with encoder	Dimensions (inch)				Additional weight	Free space for removing encoder „F“	
		Incremental encoder		Absolute encoder			Incremental encoder	Absolute encoder
		a	c	a	b			
D..04..	2.46	1.71	3.74	2.74	4.31	1.54	1.18	2.17
D..05..	4.06	3.88	5.00	3.88	5.00	1.98	2.48	3.46
D..06..								
D..07..								
D..08..	4.23	4.23		1.76	1.61	2.60		
D..09..	4.09	4.09			1.69	2.68		
D..11..								
D..13..								
D..16..								
D..18..	4.33	4.17		4.17	2.65			
D..20L								
D..22S								
D..22M								

Motor-mounted components

Dimensional Drawings Imperial

Motor with “heavy duty” encoder



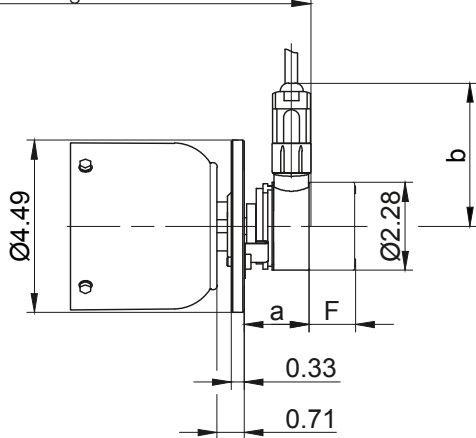
Motor	ML (inch)	Dimensions (inch)					Additional weight lbs
	Additional length with encoder	a	b	c	d	e	
D..08..	4.488	3.287	6.299	6.535	0.591	4.035	4.41
D..09..	4.665	4.016		7.520			
D..11..	4.783	4.724		9.094			
D..13..	4.547	5.512	7.283	10.807	0.669	3.720	18.96
D..16..	4.469	6.102		12.835			
D..18..	4.823	7.205		14.409			

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with brake and encoder

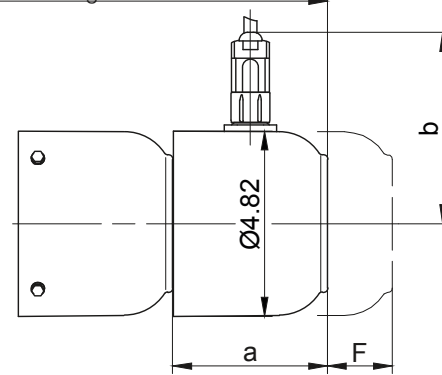
D..04..

Normal length of drive unit + ML



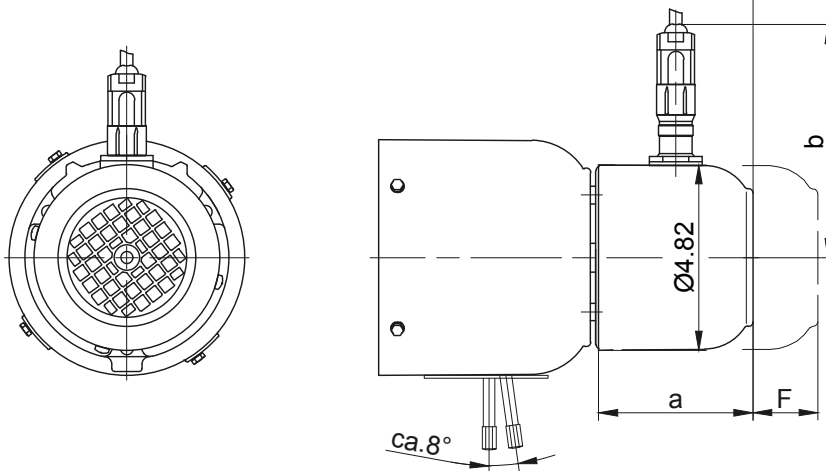
D..05..-D..07..

Normal length of drive unit + ML



D..08-D..22

Normal length of drive unit + ML



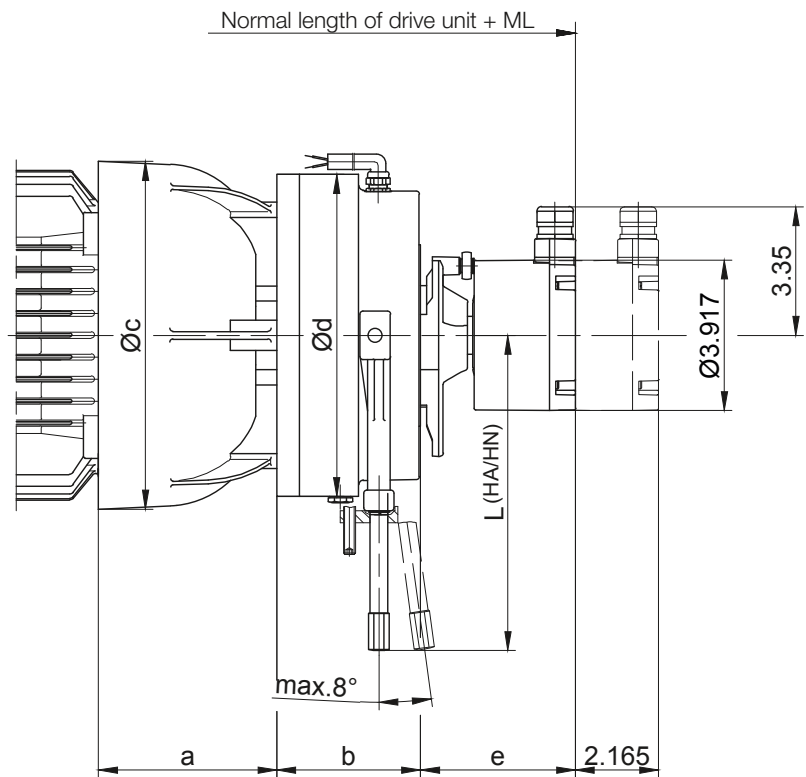
Motor	Brake	ML (inch) Additional length with brake and encoder	Dimensions (inch)				Additional weight lbs	Free space for removing encoder „F“	
			Incremental encoder		Absolute encoder			Incremental encoder	Absolute encoder
			a	c	a	b			
D..04..	E003	4.15	1.71	3.74	2.74	4.31	1.54	1.18	2.17
D..05..		5.71	4.02	5.00	4.02	5.00	1.98	2.48	3.46
D..06..									
D..07..	E003/E004								
D..08..	ES(X).. D..09.. ES(X).. D..11.. ES(X).. D..13.. ES(X).. D..16.. ES(X)..ZS(X) D..18.. ES(X)..ZS(X) D..20L ES(X)..ZS(X) D..22S ES(X)..ZS(X) D..22M ES(X)..ZS(X)	6.83	4.02	5.00	4.02	5.00	1.76	1.93	2.91
D..09..	7.76								
D..11..	7.87								
D..13..	ES(X).. D..16.. ES(X)..ZS(X) D..18.. ES(X)..ZS(X) D..20L ES(X)..ZS(X) D..22S ES(X)..ZS(X) D..22M ES(X)..ZS(X)	8.35	4.10	5.00	4.02	5.00	1.76	1.93	2.91
D..16..	9.76								
D..18..	9.74								
D..20L	ES(X)..ZS(X)	9.76	4.17				2.65		
D..22S	ES(X)..ZS(X)								
D..22M	ES(X)..ZS(X)								

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor-mounted components

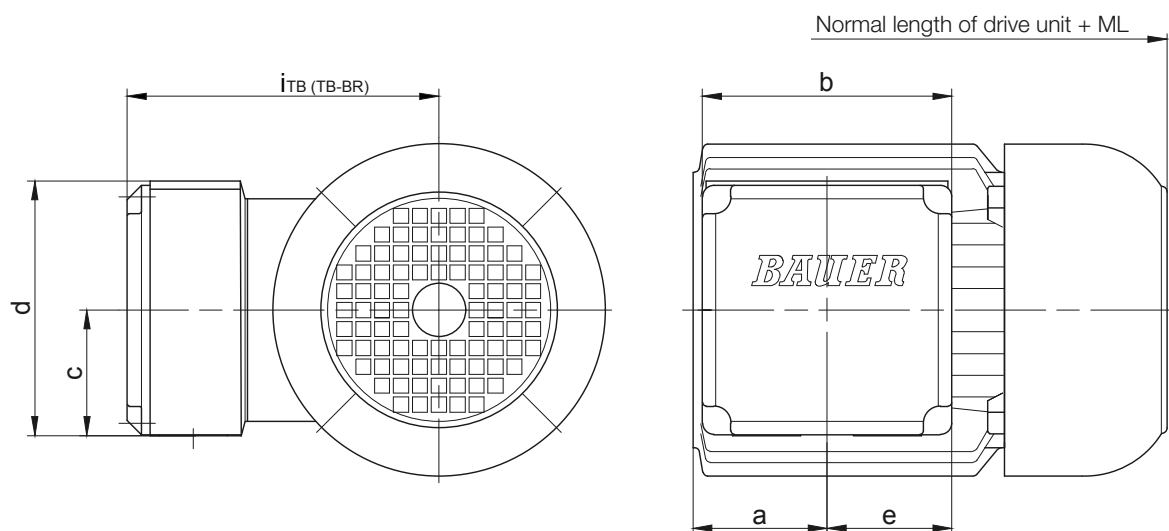
Dimensional Drawings Imperial

Motor with “heavy duty” brake and encoder



Motor	Brake	ML (inch) Additional length with brake and encoder	Dimensions (inch)						Additional weight lbs
			a	b	c	Ød	e	L (HA/HN)	
D..08..	EH(X)027	7.106	3.287	2.618	6.535	5.709	4.035	6.378	15.65
D..09..	EH(X)040	7.539	4.016	2.874	7.520	6.614		6.772	22.05
D..11..	EH(X)125	8.524	4.724	3.740	9.094	8.386		8.209	47.18
D..13..	EH(X)200	10.197	5.512	4.173	10.807	9.646	3.720	8.701	70.55
D..16..	EH(X)400	9.567	6.102	4.882	12.835	12.756		12.323	127.87
D..18..		10.000	7.205		14.409				134.48
HA = manual release lockable HN = manual release not lockable									

Standard terminal box



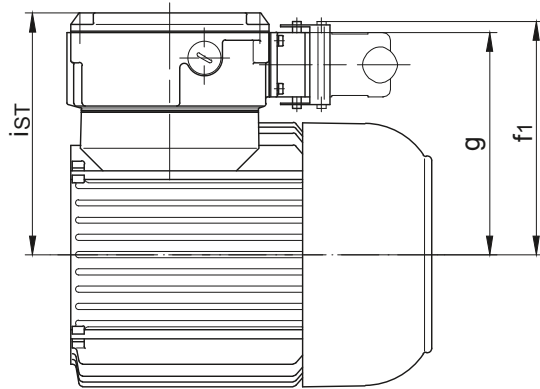
Motor	Dimensions						Code	Cableentry	
	a	b	c	d	e	i _{TB(TB-BR)}		Major (M)	Minor (N)
D04..	30	90	47.5	95	45	112	TB112..	M=NPT_1/2"	N=2xM20x1.5
D..05..	57	90	47.5	95	45	117	TB112..	M=NPT_1/2"	N=2xM20x1.5
D..06..	45	90	47.5	95	45	118	TB112..	M=NPT_1/2"	N=2xM20x1.5
D..07..	45	90	47.5	95	45	118	TB112..	M=NPT_1/2"	N=2xM20x1.5
D..08..	41	90	47.5	95	45	135	TB112..	M=NPT_1/2"	N=2xM20x1.5
D..09..	62	132	66	135	71.5	164	TB212..	M=NPT_3/4"	M=2xM25x1.5
D..11..	62	132	66	135	71.5	181	TB212..	M=NPT_3/4"	M=2xM25x1.5
D..13..	78	156	78	158	83.5	216	TB312..	M=NPT_1"	M=2xM25x1.5
D..16..	74	156	78	158	83.5	242	TB312..	M=NPT_1"	M=2xM25x1.5
D..18..	94	200	100	201	105.5	287	TB412..	M=NPT_1 1/2"	M=2xM25x1.5
Motor with Brake	Dimensions						Code	Cableentry	
	a	b	c	d	e	i _{TB(TB-BR)}		Major (M)	Minor (N)
D04..	30	90	47.5	95	68	131.5	TBR122..	M=2xM20x1.5	-
from D..05..	see standard motor								
Dimensions in millimetres (mm)									

Motor-mounted components

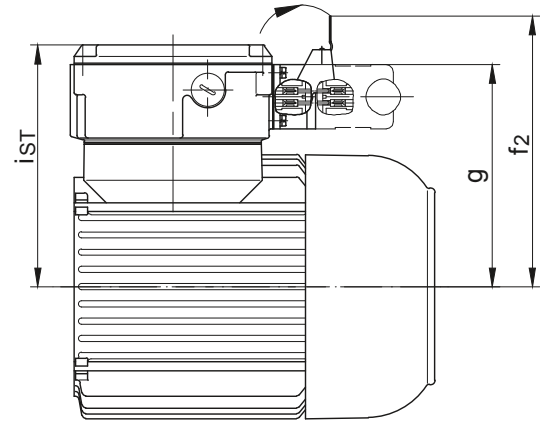
Dimensional Drawings Metric

Terminal box for plug-connector

Standard design (two brackets)



Optional for DESINA (one bracket)



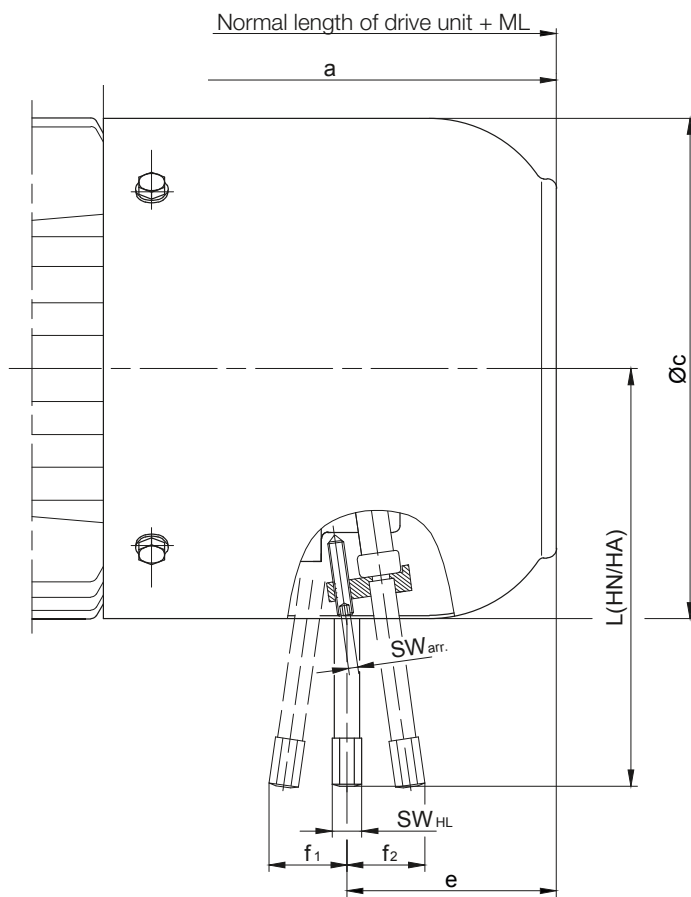
Fan cover geometry for D..16 - D..22, see dimensional drawing: terminal box as standard version

Motor	Size Terminal box	a	b	c	d	e	f ₁	f ₂	g	h ₁	h ₂	i _{ST}	x
D..04..	TBS1	30	90	52.5	106	49	118.5	147	111	117	93	124.5	46
D..05	TBS1	57	90	52.5	106	49	123.5	152	116	117	93	129.5	46
D..06	TBS1	45	90	52.5	106	49	125.5	154	118	117	93	131.5	46
D..07	TBS1	45	90	52.5	106	49	125.5	154	118	117	93	131.5	46
D..08	TBS1	45	90	52.5	106	49	143.5	172	136	117	93	149.5	46
D..09	TBS2	62	132	66	135	71.5	158.5	187	158	117	93	164	68.5
D..11	TBS2	62	132	66	135	71.5	175.5	191	166	117	93	181	68.5
D..13	TBS3	78	156	78	158	83.5	199	227.5	191.5	117	93	216	79.5
D..16	TBS3	74	156	78	158	83.5	225	253.5	225	117	93	242	79.5
D..18	TBS4	94	200	100	201	105.5	257	299	257	117	93	287	100.5
D..20L	TBS4	94	200	100	201	105.5	274	299	266.5	117	93	303.5	100.5
D..22S	TBS4	94	200	100	201	105.5	274	299	266.5	117	93	303.5	100.5
D..22M													

Dimensions in millimetres (mm)

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Standard brake



Motor	Brake	ML (mm) Additional length with brake	a	Øc	e	Dimensions (mm)					Additional weight
						f ₁	f ₂	L(HA/HN)	SW _{HL}	SW _{arr.}	kg
D..04..	E003	43.5	97	110.5	58.5	20.5	24	96/102	11	11	1.0
D..05..		42	102	123	60						
D..06..					58.5						
D..07..	E003/E004										
D..08..	ES(X)010	66	141	156	68	-	29	132	8	2.5	2.6
D..09..	ES(X)010	93	173	176	99	-	29	132	8	2.5	2.7
	ES(X)027				91	-	35.5	162			4.2
D..11..	ES(X)027	98	195	218	103	-	35.5	162	8	2.5	4.5
	ES(X)040				100	-	37	172			6.3
	ES(X)070				96	-	34.5	190			12
D..13..	ES(X)040	111	225	258	125	-	41	202	12	4	6.5
	ES(X)070				121	-	38	225			8.5
	ES(X)125				116	-	45	223			12.5
D..16..	ES(X)125	144	290	310	148	-	48.5	244	12	4	13.5
	ES(X)200				141	-	50	256			19
	ES(X)300				112	-					22
D..18..	ES(X)250	150	339	348	153	-	58.5	286	12	4	28
	ZS(X)500				123	-			19	5	30
D..20L	ES(X)250	127.5	399	363	183	49	-	286	19	5	27.5
	ZS(X)500				152.5			313			
	ZS(X)800				149						
D..22S	ES(X)250	127.5	399	363	183	49	-	286	19	5	27.7
	ZS(X)500				152.5			313			
	ZS(X)800				149						
D..22M	ES(X)250	127.5	399	363	183	49	-	286	19	5	61.5
	ZS(X)500				152.5			313			
	ZS(X)800				149						

HA = manual release lockable

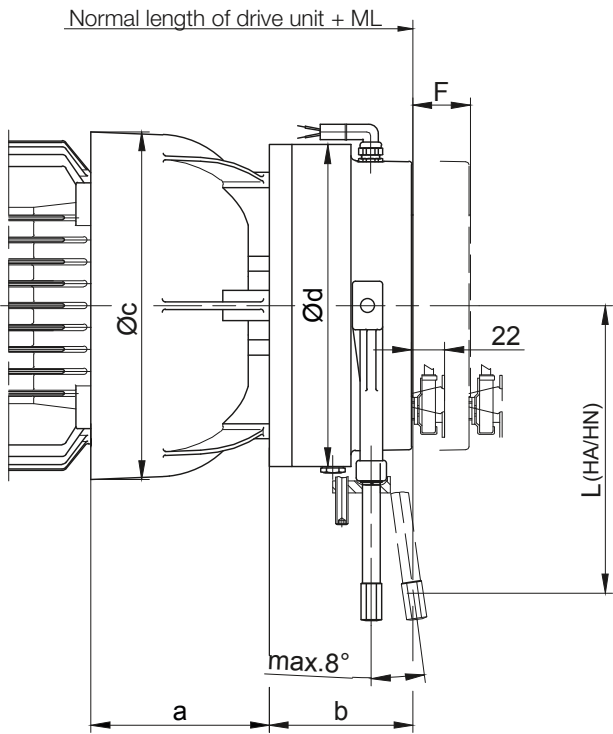
HN = manual release not lockable

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor-mounted components

Dimensional Drawings Metric

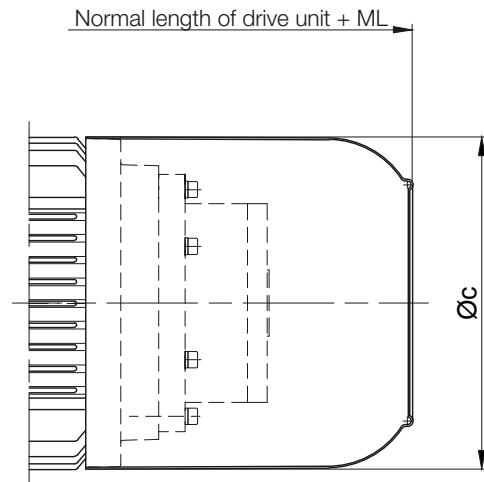
“Heavy-Duty” - brake



Motor	Brake	Additional length with brake (mm)		Dimensions (mm)					Additional weight kg
		ML Standard	ML Microswitch	a	b	c	$\varnothing d$	L (HA/HN)	
D..08..	EH(X)010	74	96	83.5	62.5	166	120	132	4.2
D..08..	EH(X)027	79	101	83.5	66.5	166	145	162	5.5
D..09..	EH(X)027	82.5	104.5	102	70.5	191	145		7.6
D..09..	EH(X)040	90	112	102	73	191	168	172	8.3
D..11..	EH(X)070	104	126	120	85	231	188	189.5	15.2
D..11..	EH(X)125	114	136	120	95	231	213	208.5	19.5
D..13..	EH(X)200	128	150	140	106	274.5	245	221	29.3
D..16..	EH(X)400	141	163	155	124	326	324	313	55.8
D..18..		152	174	183		366			61

HA = manual release lockable
HN = manual release not lockable

Motor with back stop

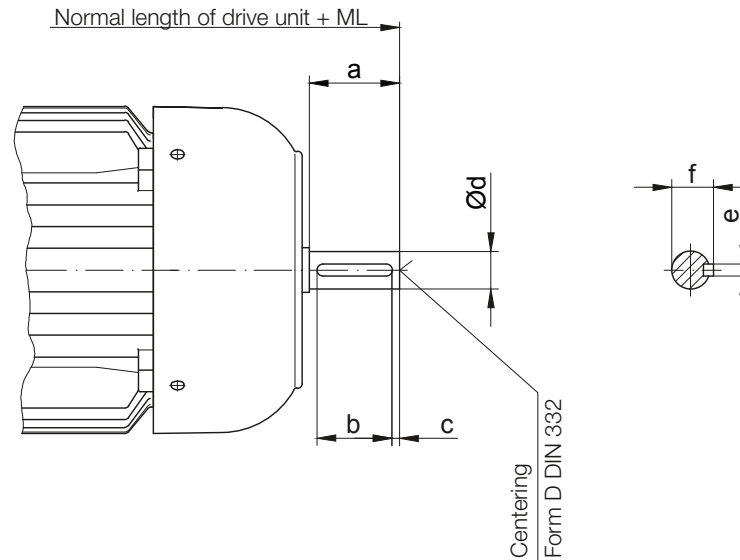


Motor	ML (mm) Additional length with backstop	Dimensions (mm) c	Additional weight kg
D..08..	66	156	6.5
D..09..	93	181	6.5
D..11..	98	228	8
D..13..	111	258	13.5
D..16..	144	310	16
D..18..	150	348	17
D..20L	-	363	9.5
D..22S			
D..22M			

Motor-mounted components

Dimensional Drawings Metric

Motor with second shaft end

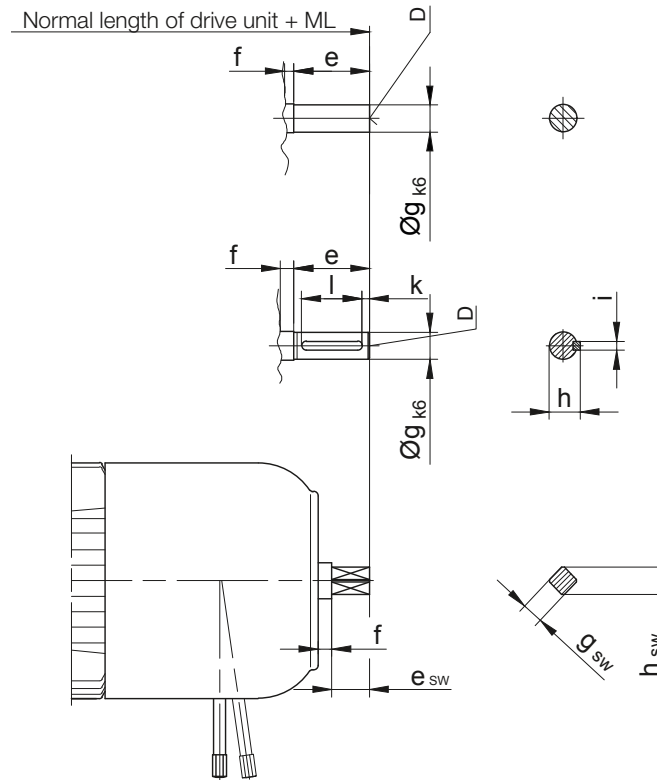


Motor	ML (mm) Additional length with second shaft end	Dimensions (mm)						Centering DIN 332
		a	b	c	d	e	f	
D..04..	20	15	-	-	8 _{g6}	-	-	-
D..05..	25	20	-	-	10 _{k6}	-	-	-
D..06..	25	20	-	-	10 _{k6}	-	-	-
D..07..	25.5	20	-	-	10 _{k6}	-	-	-
D..08..	45	40	30	5	16 _{k6}	5	18	D5
D..09..	55	50	40	5	20 _{k6}	6	22.5	D5
D..11..	65	60	50	5	25 _{k6}	8	28	D8
D..13..	85	80	60	10	35 _{k6}	10	38	D12
D..16..	115	110	90	10	40 _{k6}	12	43	D16
D..18..	115	110	90	10	45 _{k6}	14	48.5	D16
D..20L	115	110	90	10	45 _{k6}	14	48.5	D16
D..22S	115	110	90	10	45 _{k6}	14	48.5	D16
D..22M								

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Dimensional Drawings Metric

Motor with brake and second shaft end



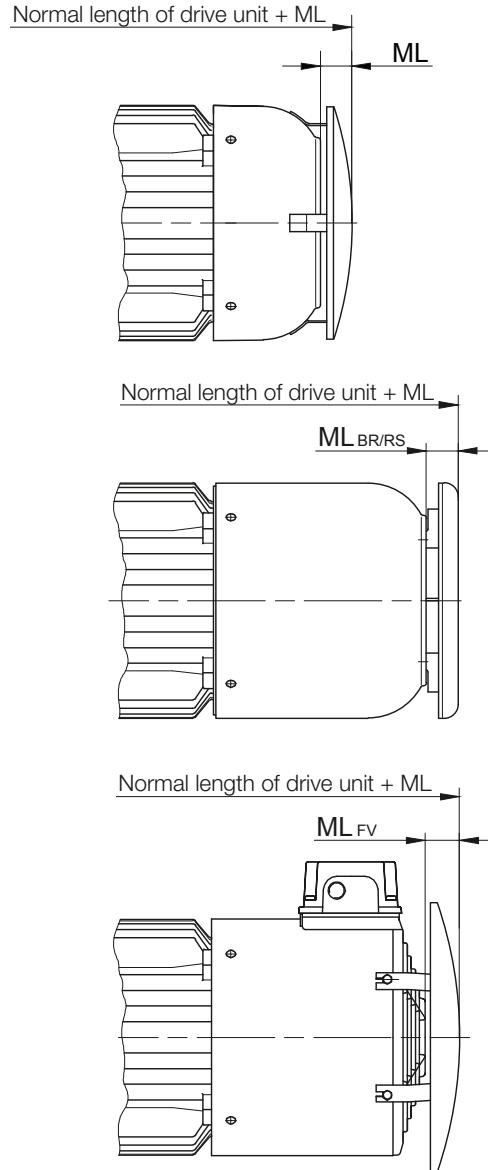
Motor	Brake	Additional length (mm)		Dimensions (mm)										Centering DIN 332	SW		
		ML	ML _{SW}	e	e _{SW}	f	g	g _{SW}	h	h _{SW}	i	k	l				
D..04..	E003	63	-	15	-	5	8	-	-	-	-	-	-	-	-		
D..05..																	
D..06..																	
D..07..	E003/E004																
D..08..	ES(X).. 	121	96*	50	25*	5	18	SW14*	20.5	18*	6	5	40	D6	D4*		
D..09..		98	123*														
D..11..		153.5*	128				50*	25	20*	SW14	22.5*	18	6*	5*	40*	D6*	D4*
D..13..		176*	156														
D..16..	ES(X)../ZS(X).. 	208.5*	188.5	60*	40	4.5	28*	SW22	31*	28	8*	5*	50*	D10*	D10		
D..18..		359*	194.5			5											
D..20L	ES(X)../ZS(X).. 	127.5*	172.5	60*	40	5	28*	SW22	31*	28	8*	5*	50*	D10*	D10		
D..22S																	
D..22M																	
* special design with manual release																	

* special design with manual release

Motor-mounted components

Dimensional Drawings Metric

Motor with protective hood

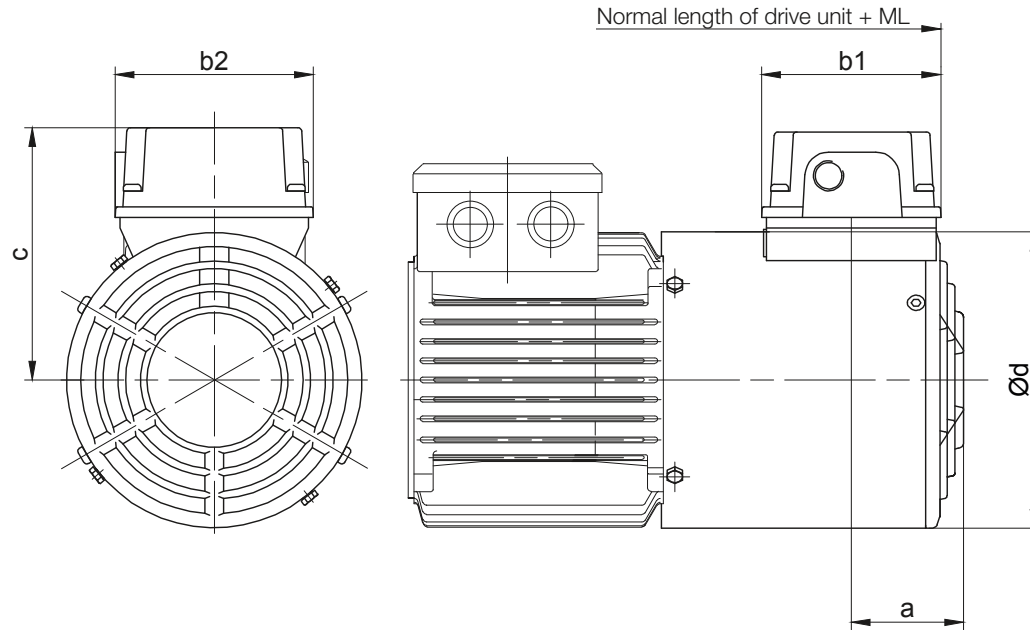


Fan cover geometry for D..16 - D..22, see dimensional drawing: terminal box as standard version

Motor	ML (mm)				Additional weight
	Additional length with attached protective cover				
	ML	ML _{BR}	ML _{RS}	ML _{FV}	kg
D..04..	16	-	-	-	0.15
D..05..	18				0.15
D..06..	18	-	-	-	0.15
D..07..	18	-	-	-	0.15
D..08..	14.5	24.5	24.5	40	0.20
D..09..	22	24.5	24.5	30	0.30
D..11..	29	29.5	29.5	33	0.40
D..13..	30	29.5	29.5	25	0.6
D..16..	30.5	34.5	34.5	32	1.8
D..18..	30.5	34.5	34.5	32	5.5
D..20L	31	31	31	31	6.4
D..22S	31	31	31	31	6.4
D..22M	31	31	31	31	6.4

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with independent fan



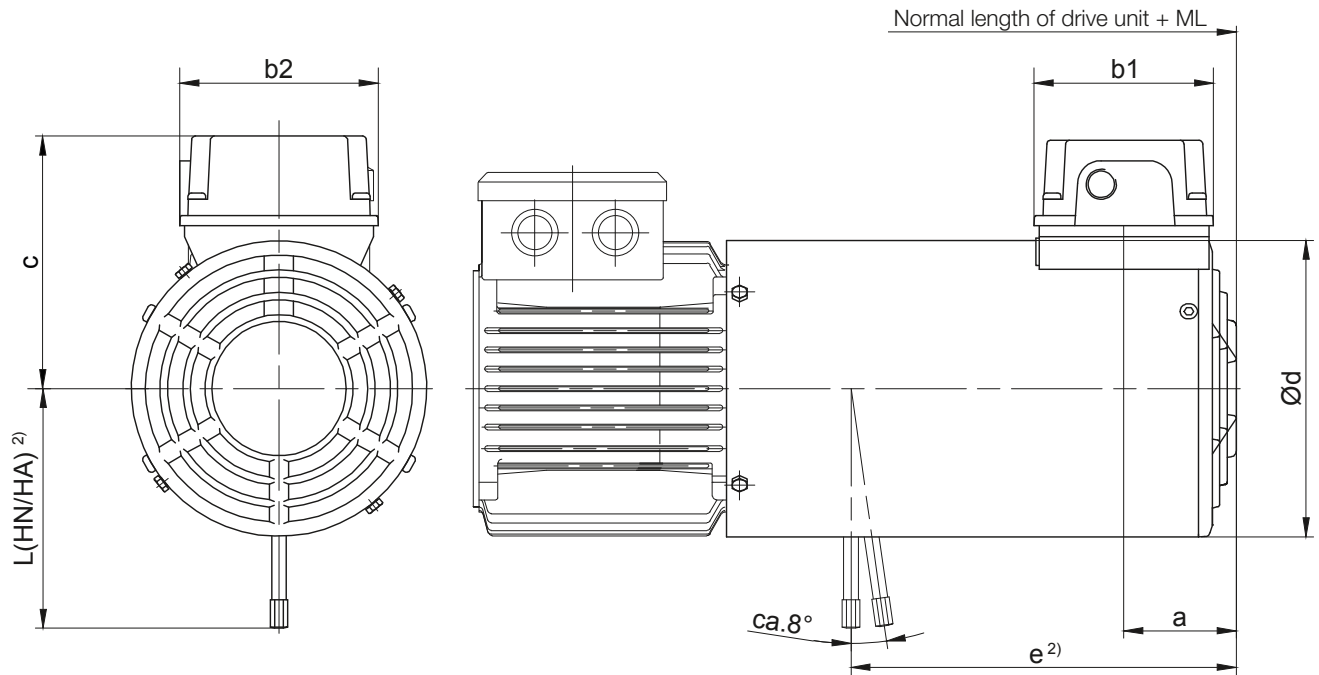
Drive Motor	Fan Motor			400 V A	ML (mm) Additional length with forced cooling fan	Dimensions (mm)					Additional weight ~kg
		kW	r/min			a	b1	b2	c	d	
D..08..	FV D08	0.019	2670	0.029	92	69.5	107	105	134	157	2.2
D..09..	FV D09	0.046	2820	0.106	97	69.5	107	105	143	177	2.7
D..11..	FV D11	0.051	2660	0.110	97	79.5	107	105	162.5	219	3.2
D..13..	FV D13	0.073	2820	0.169	119	78.8	107	105	164	258	4.6
D..16*	FV D16	0.154	2760	0.347	144	78.8	107	105	185	311	6.4
D..18*	FV D18	0.154	2760	0.347	303	78.8	107	105	211	348	8.4

* with bayonet joint

Motor-mounted components

Dimensional Drawings Metric

Motor with brake and independent fan



Motor	Bremse	ML (mm) ¹⁾ Mehrlänge mit Bremse und Fremdlüfter	Maße (mm)							Mehrgewicht ~kg
			a	b1	b2	c	Ød	e ²⁾	L(HA/HN) ²⁾	
D..08..	ES(X)010	202	59	107	105	134	157	204	132	5.0
D..09..	ES(X)010	214	69.5	107	105	143	177	220	132	5.5
	ES(X)027							212	162	7.5
D..11*	ES(X)027	221	69.5	107	105	162.5	219	226	162	8.0
	ES(X)040							223	172	10
	ES(X)070							218	184	12
D..13*	ES(X)040	237	79.5	107	105	164	164	254	202	11.5
	ES(X)070							250	225	13.5
	ES(X)125							245	223	17.5
	ES(X)125							298	244	19.5
D..16*	ES(X)200	294	78.8	107	105	185	311	291	256	25
	ES(X)300							262	256	27
	ES(X)250							307	286	37
D..18*	ES(X)500	303	78.8	107	105	211	348	277	286	38.5

* mit Bajonetverschluss

¹⁾Die Mehrlänge bezieht sich auf das normale Motorteil ohne Bremse.

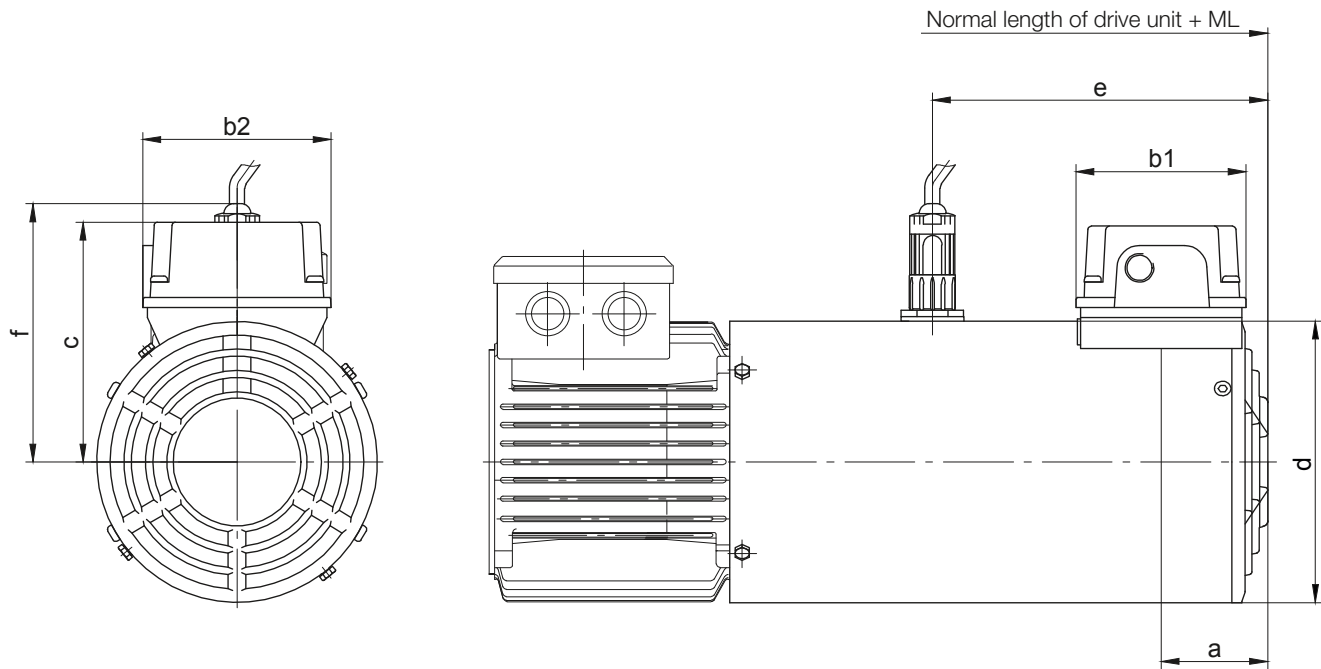
Übrige Maße siehe jeweiliges Standard-Maßbild.

²⁾Handlüftung auf Anfrage

HA = Handlüftung arretierbar

HN = Handlüftung nicht arretierbar

Motor with encoder with built-on independent fan



Motor	ML (mm) ¹⁾ Additional length with encoder and forced ventilation	Dimensions (mm)							Additional weight ~kg
		a	b1	b2	c	d	e	f	
D..08..	202	59	107	105	134	157	187	144	2.6
D..09..	214	69.5	107	105	143	177	192	153.5	3.3
D..11*	221	69.5	107	105	162.5	218	192	-	4.0
D..13*	240	79.5	107	105	164	258	217	-	5.7
D..16*	294	78.8	107	105	185	311	252	-	7.9
D..18*	303	78.8	107	105	211	348	267	-	10.9

* with bayonet joint

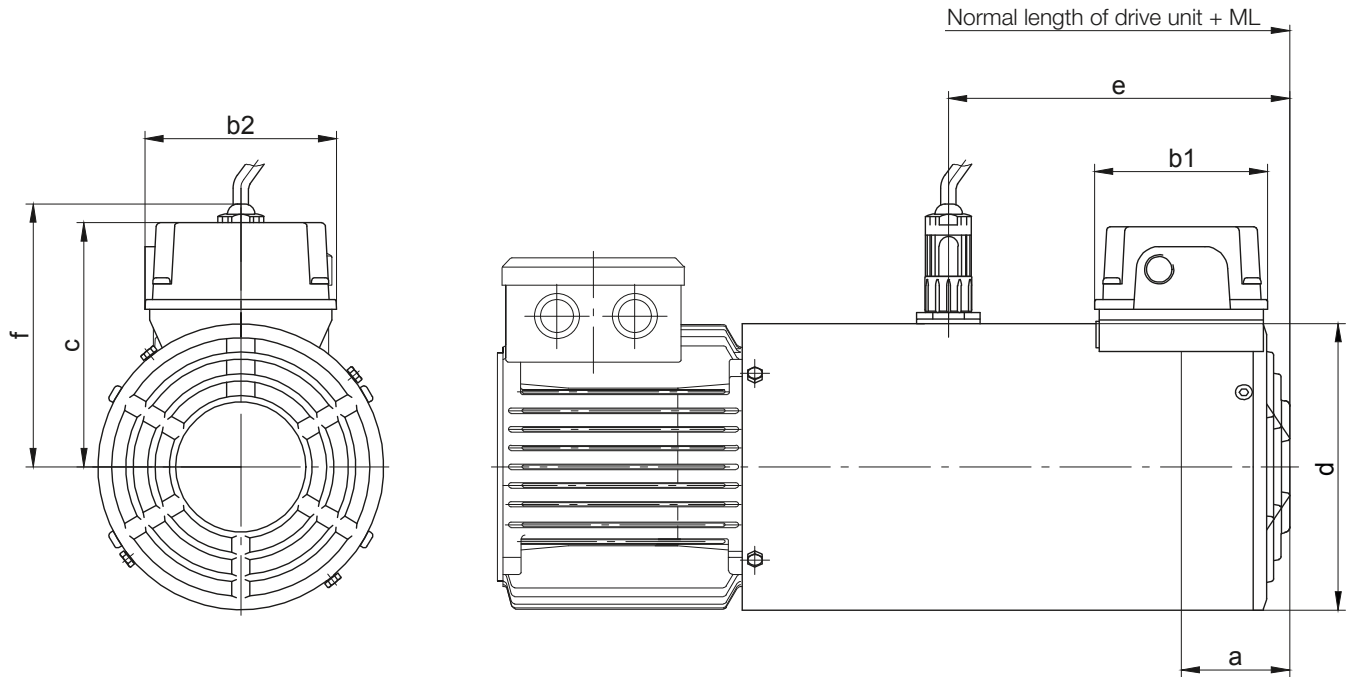
¹⁾ The additional length is for normal motor unit without brake.

Other dimensions see the appropriate normal dimensioned sketch.

Motor-mounted components

Dimensional Drawings Metric

Motor with brake and encoder with built-on independent fan



Motor	Brake	ML (mm) ¹⁾ Additional length with brake, encoder and forced ventilation	Dimensions (mm)									Additional weight ~kg
			a	b1	b2	c	Ød	e ²⁾	g	h	L(HA/HN) ²⁾	
D..08..	ES(X)010	202	59	107	105	134	157	204	150	150	132	6.0
D..09..	ES(X)010	214	69.5	107	105	143	177	220	160	160	132	6.5
	ES(X)027							212	160		162	8.5
D..11*	ES(X)027	221	69.5	107	105	162.5	219	226	155	175	162	9.0
	ES(X)040							223	155		172	11.5
	ES(X)070							218	155		184	13.5
D..13*	ES(X)040	240	79.5	107	105	164	258	254	175	194.5	202	13
	ES(X)070							250	175		225	15
	ES(X)125							245	175		223	19
	ES(X)125							298	195		244	21
D..16*	ES(X)200	294	78.8	107	105	185	311	291	195	221	256	27
	ES(X)300							262	195			29
	ES(X)250							207	212		286	39
D..18*	ES(X)500	303	78.8	107	105	211	348	277	212	239.5		40.5

* with bayonet joint

¹⁾ The additional length is for normal motor unit without brake.

Other dimensions see the appropriate normal dimensioned sketch.

²⁾ Brake release on request

HA = manual release lockable

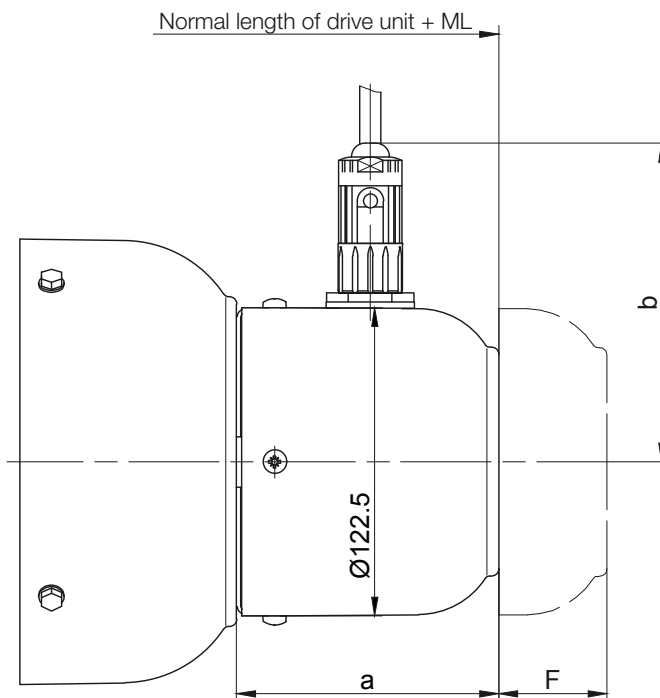
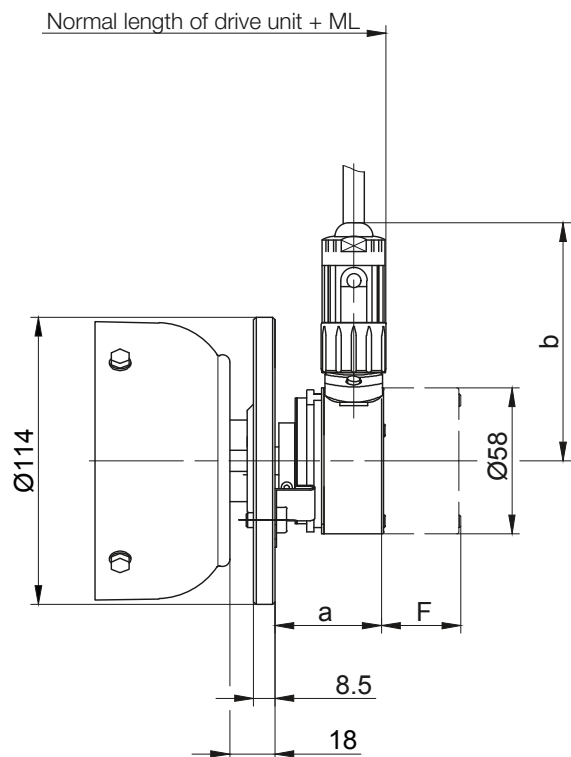
HN = manual release not lockable

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with encoder

D..04..

D..05..-D..22..



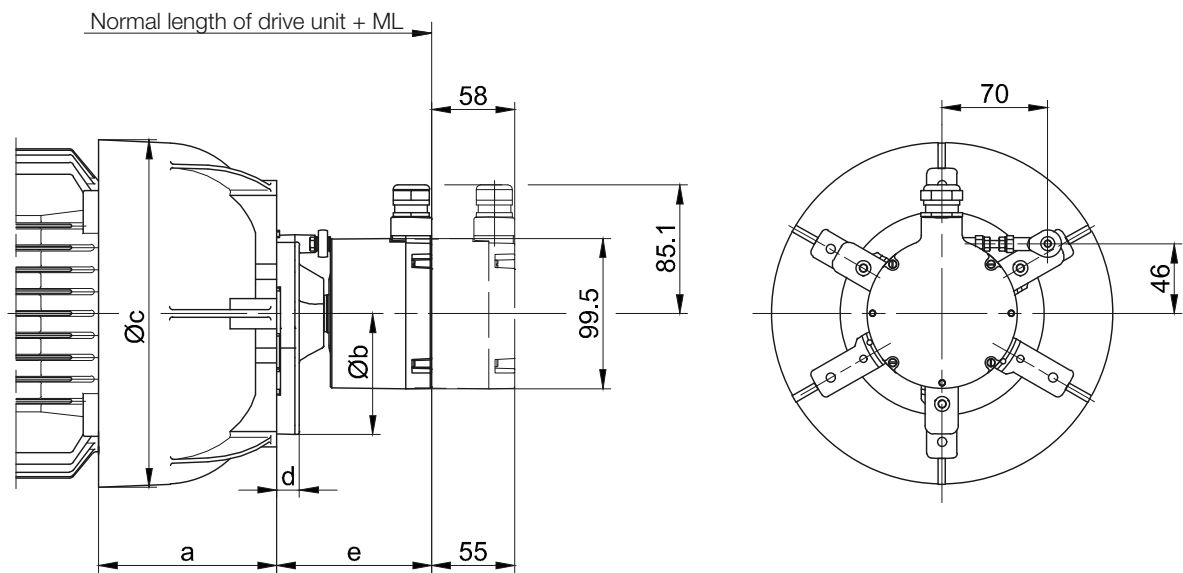
Fan cover geometry for D..16 - D..22, see dimensional drawing: terminal box as standard version

Motor	ML (mm) Additional length with encoder	Dimensions (mm)				Additional weight kg	Free space for removing encoder „F“	
		Incremental encoder		Absolute encoder			Incremental encoder	Absolute encoder
		a	c	a	b			
D..04..	62.5	43.5	95	69.5	109.5	0.7	30	55
D..05..	103	98.5	127	98.5	127	0.9	63	88
D..06..				107.5				
D..07..								
D..08..	107.5	107.5		0.8		41	66	
D..09..	104	104				43	68	
D..11..								
D..13..								
D..16..	110	106	106		1.2			
D..18..								
D..20L								
D..22S	106	106	106	1.2				
D..22M								

Motor-mounted components

Dimensional Drawings Metric

Motor with “heavy duty” encoder



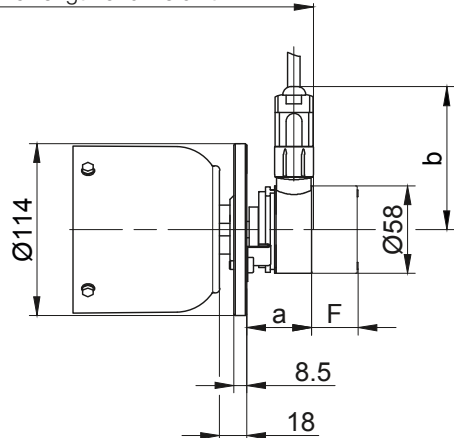
Motor	ML (mm) Additional length with encoder	Dimensions (mm)					Additional weight kg
		a	b	c	d	e	
D..08..	114	83.5	160	166	15	102.5	2
D..09..	118.5	102		191			
D..11..	121.5	120		231			
D..13..	115.5	140	185	274.5	17	94.5	8.6
D..16..	113.5	155		326			9.6
D..18..	122.5	183		366			11.5

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor with brake and encoder

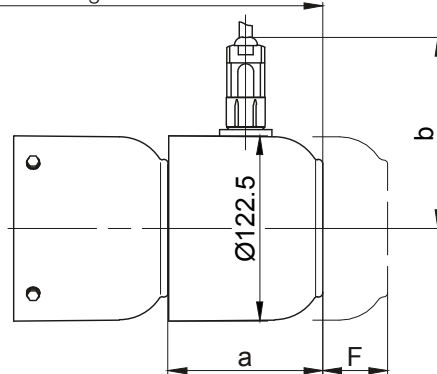
D..04..

Normal length of drive unit + ML



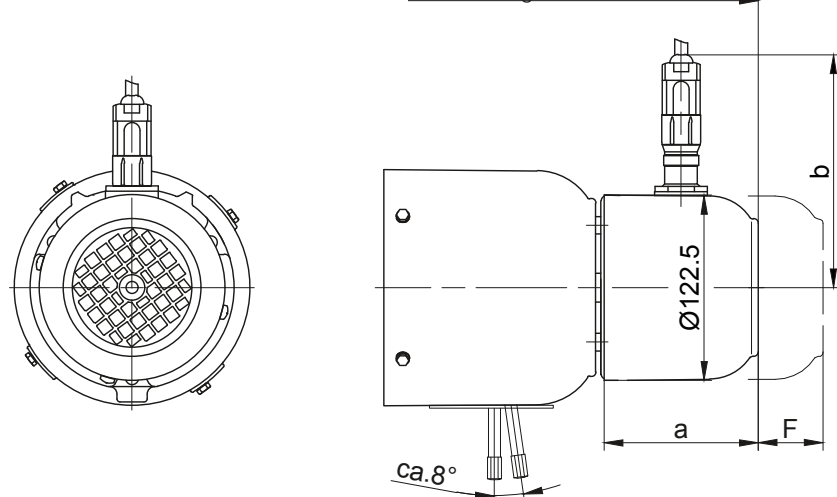
D..05..-D..22..

Normal length of drive unit + ML



D..08-D..22

Normal length of drive unit + ML



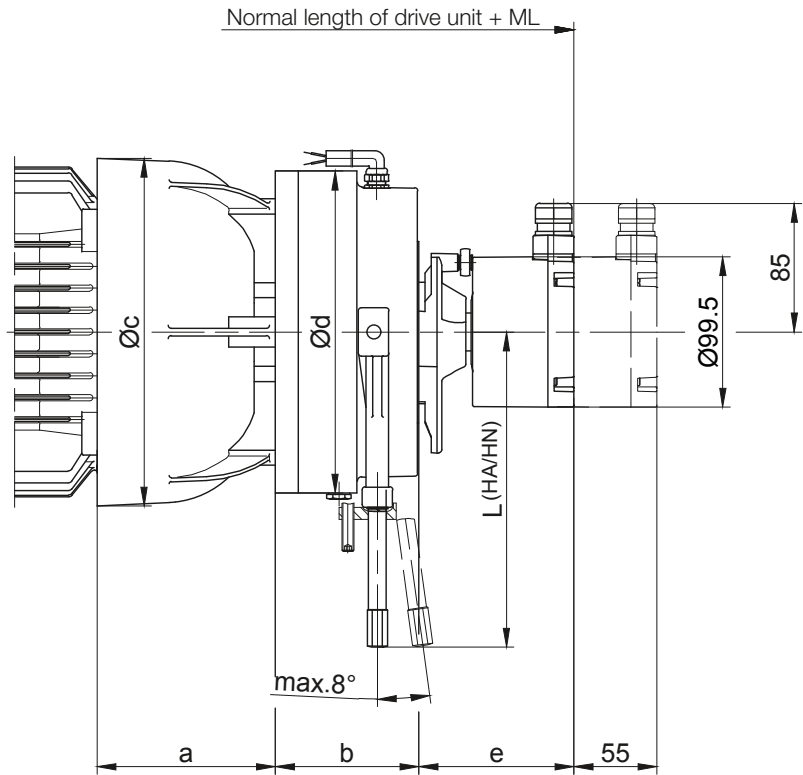
Motor	Brake	ML (mm)	Dimensions (mm)				Additional weight	Free space for removing encoder „F“	
		Additional length with brake and encoder	Incremental encoder		Absolute encoder			Incremental encoder	Absolute encoder
			a	c	a	b			
D..04..	E003	105.5	43.5	95	69.5	109.5	0.7	30	55
D..05..		145	102	127	102	127	0.9	63	88
D..06..									
D..07..	E003/E004								
D..08..	ES(X)..								
D..09..	ES(X)..								
D..11..	ES(X)..								
D..13..	ES(X)..	200							
D..16..	ES(X)..ZS(X)	212							
D..18..	ES(X)..ZS(X)	248	104				49	74	
D..20L	ES(X)..ZS(X)	247.5							
D..22S	ES(X)..ZS(X)	233.5	106						1.2
D..22M	ES(X)..ZS(X)								

The actual gearbox design can vary from the geometry shown. Generate drive specific 3D and 2D geometries under www.BauerCat.com.

Motor-mounted components

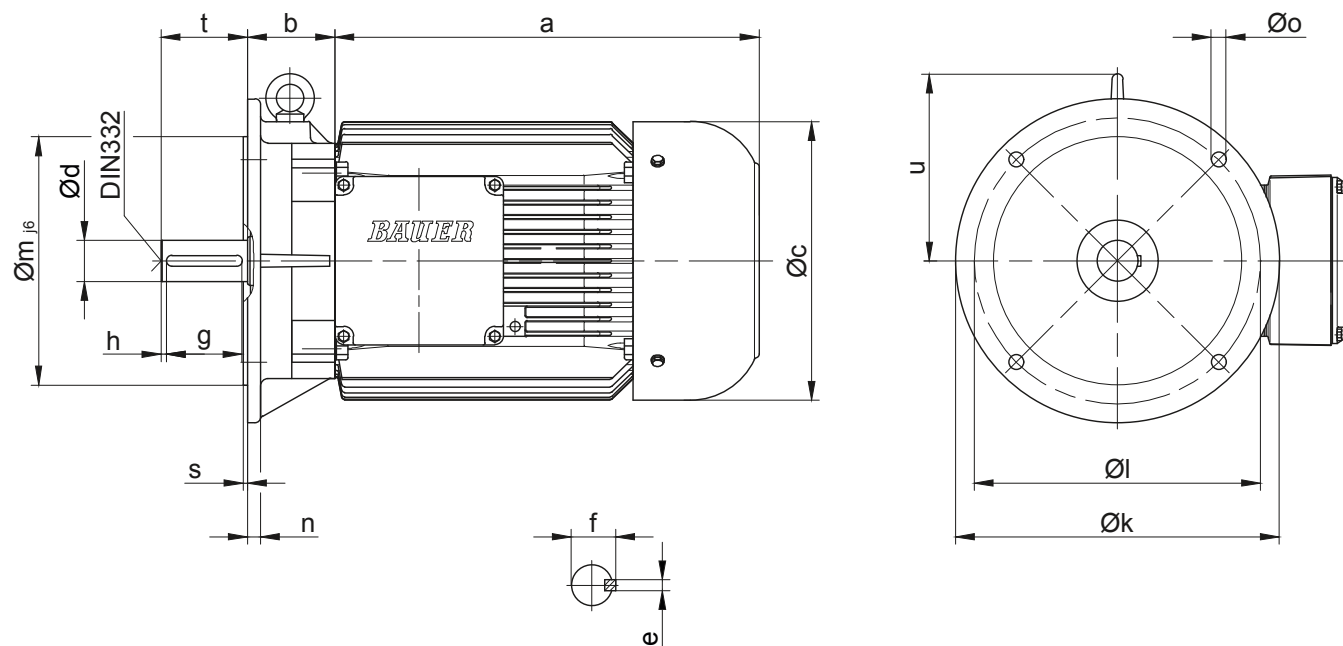
Dimensional Drawings Metric

Motor with “heavy duty” brake and encoder



Motor	Brake	ML (mm) Additional length with brake and encoder	Dimensions (mm)						Additional weight kg
			a	b	c	Ød	e	L (HA/HN)	
D..08..	EH(X)027	180.5	83.5	66.5	166	145	102.5	162	7.1
D..09..	EH(X)040	191.5	102	73	191	168		172	10
D..11..	EH(X)125	216.5	120	95	231	213		208.5	21.4
D..13..	EH(X)200	259	140	106	274.5	245	94.5	221	32
D..16..	EH(X)400	243	155	124	326	324		313	58
D..18..		254	183		366				61
HA = manual release lockable HN = manual release not lockable									

Motor in IEC design



Fan cover geometry for D..16 - D..18, see dimensional drawing: terminal box as standard version

Motor	Dimensions (mm)																Centering DIN 332
	a	b	c	d	e	f	g	h	k	l	m	n	o	s	t	u	
D..06..	170	45	123	11 _{j6}	4	12.5	18	2.5	140	115	95	9	10	2.75	23	-	D4
D..07..	190	45	123	11 _{j6}	4	12.5	18	2.5	140	115	95	9	10	2.75	23	-	D4
D..08..	200	49	156	19 _{j6}	6	21.5	35	2.5	200	165	130	10	12	3.5	40	-	D4
D..09..	251	66	176	24 _{j6}	8	27	40	5	200	165	130	10	12	3.5	50	128.5	D6
D..11..	319	75	218	28 _{j6}	8	31	50	5	250	215	180	11	14.5	4	60	145.5	D10
D..13..	393	81	266	38 _{k6}	10	41	70	5	300	265	230	12	14	4	80	173	D12
D..16..	454.5	98.5	310	42 _{k6}	12	45	90	10	350	300	230	13	18.5	5	110	215.5	D16
D..18..	542	128.5	348	48 _{k6}	14	51.5	100	5	350	300	250	15	18.5	5	110	218	D16

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