

Dimensional Data

“V” Shaft Output with “F” Output Flange — All Sizes

* See Motor Mounting Plate Option, page 171 for details.

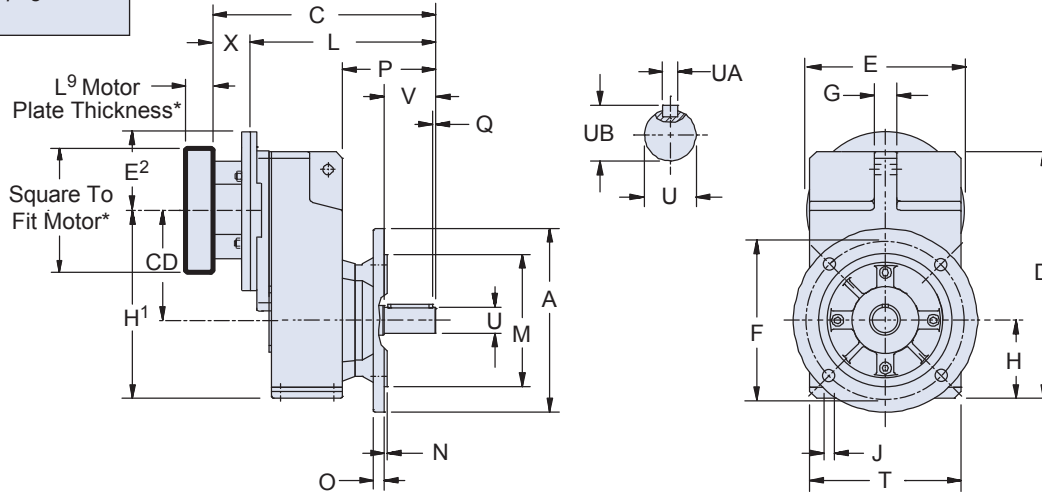


Table 1 Dimensions (mm)

Unit	CD	A	D	F	G	H	H ¹	J	M _{J6}	N	O	P	Q	T	V
F102	102	160	238	130	20	74	176	9	110	3.5	10	94.5	5	145	50
F202/F203	131	200	299	165	22	936	224	11	130	3.5	14	113	5	180	60
F302/F303	149.5	250	335.5	215	30	106	255.5	14	180	4	15	126.5	5	206	70
F402/F403	169 ¹⁾	250	370	215	30	116	285 ¹⁾	14	180	4	15	136.5	5	230	80
F602/F603	196	300	433	265	35	137	333	14	230	4	17	160.5	5	265	100

¹⁾ C.D. is 132 for F403 with MT20; H¹ is 248.

Table 2 “V” Shaft Output Dimensions

Unit	Standard Shaft - in			Optional Shaft* - mm		
	U _{h6}	UA	UB	U _{k6}	UA	UB
F102	1.000	1/4 x 1/4 x 1-9/16	1.11	25	A8x7x40	28
F202/F203	1.250	1/4 x 1/4 x 1-15/16	1.36	30	A8x7x50	33
F302/F303	1.375	5/16 x 5/16 x 2-5/16	1.51	35	A10x8x60	38
F402/F403	1.625	3/8 x 3/8 x 2-7/8	1.79	40	A12x8x70	43
F602/F603	2.125	1/2 x 1/2 x 3-5/32	2.35	50	A14x9x90	53.5

For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.

*Metric output available on request

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	219.5	179.5	233.5	103.5	—	—	—	—	38
F202	253	213	267	217	279	219	—	—	51
F203	290	250	—	—	—	—	—	—	64
F302	279.5	239.5	293.5	243.5	305.5	245.5	—	—	67
F303	316.5	276.5	336.5	286.5	—	—	—	—	73
F402	—	—	318.5	268.5	330.5	270.5	362.5	273.5	84
F403	341.5	301.5	361.5	311.5	—	—	—	—	91
F602	—	—	369.5	319.5	381.5	321.5	413.5	324.5	165
F603	—	—	412.5	362.5	—	—	—	—	177

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness ³⁾ L ⁹ Min.	E	E ²	X	Wt. lbs.
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.

F Series: OFFSET – Solid Shaft/Hollow Output

“W” Single Bushing with “G” Tapped Holes Around Output – All Sizes

Important: For ease of installation, a 1/32" x 45° chamfer (minimum) is recommended for the output shaft end.

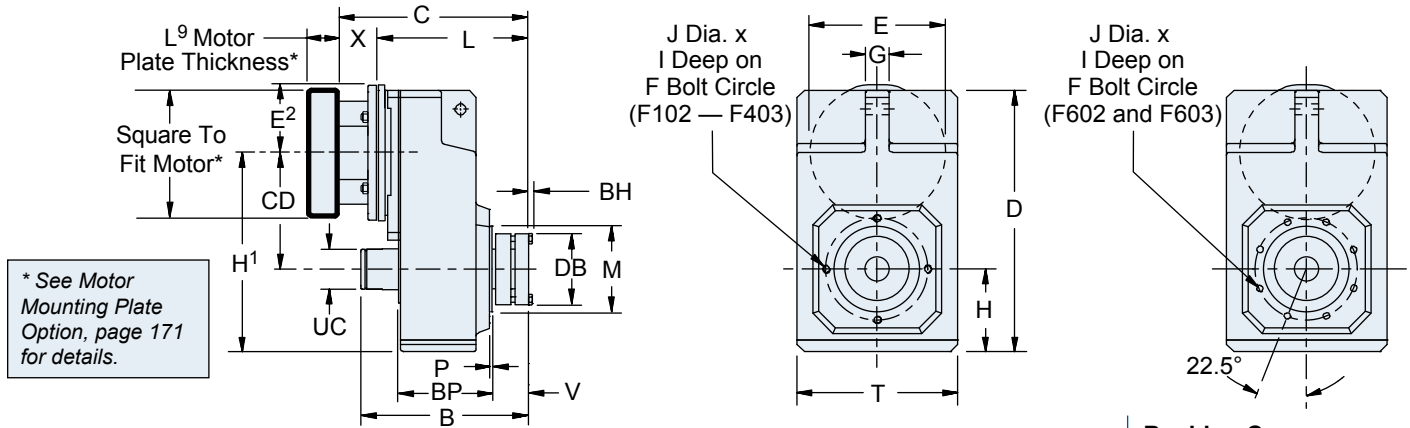


Table 1 Dimensions (mm)

Unit	CD	B	D	F	G	H	H ₁	I	J	M _{J6}	P	T	V	BH	BP	DB	UC	Bushing Capscrews	
																		No. – Size Metric	Tightening Torque – Nm
F1	102	162.5	238	90	20	74	176	13	M8x1.25	75	2.5	145	30	4	87	68	34.5	6 – M6x25	10
F2	131	184.5	299	115	22	93	224	13	M8x1.25	95	3	180	39	4	105	78	44.5	8 – M6x30	10
F3	149.5	202	335.5	130	30	106	255.5	16	M10x1.5	110	3.5	206	39	4	120	84	48	8 – M6x30	10
F4	169 ¹⁾	227	370	130	30	116	285 ¹⁾	16	M10x1.5	110	3.5	230	45	5	135	97	54.5	8 – M8x30	25
F6	196	260	433	165	35	137	333	16	M10x1.5	130	3.5	265	50	6	166	105	64.5	8 – M10x35	49

¹⁾ C.D. is 132 for F403 with MT20; H₁ is 248.

Table 2 “WF” Single Side Bushings* – Stock Bores Sizes

Unit	Metric								Inches							
	20	30	35	3/4	1	1-3/16	1-1/4	1-3/8	1-7/16	1-1/2	1-5/8	1-11/16	1-3/4	1-7/8	1-15/16	2
F1	WF1-20	—	—	WF1-075	—	—	—	—	—	—	—	—	—	—	—	—
F2	—	WF2-30	—	—	WF2-100	WF2-103	—	—	—	—	—	—	—	—	—	—
F3	—	WF3-30	WF3-35	—	WF3-100	WF3-103	WF3-104	WF3-106	WF3-107	WF3-108	—	—	—	—	—	—
F4	—	—	—	—	WF4-100	WF4-103	WF4-104	WF4-106	WF4-107	WF4-108	—	—	—	—	—	—
F6	—	—	—	—	—	—	—	—	WF5-107	WF5-108	WF5-110	WF5-111	WF5-112	WF5-114	WF5-115	WF5-200

*A complete bushing kit includes the locking ring assembly, tapered cone, support ring, and all hardware to mount the kit into the reducer. The bushing will accept a shaft with a tolerance of +0.000/-0.005.

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	170	130	184	134	—	—	—	—	38
F202	197	157	211	161	223	163	—	—	51
F203	234	194	—	—	—	—	—	—	64
F302	212	172	226	176	238	178	—	—	67
F303	249	209	269	219	—	—	—	—	73
F402	—	—	247	197	259	199	291	202	84
F403	270	230	290	240	—	—	—	—	91
F602	—	—	278	228	290	230	322	233	165
F603	—	—	321	271	—	—	—	—	177

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness L ⁹ Min. ³⁾	E	E ²	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.

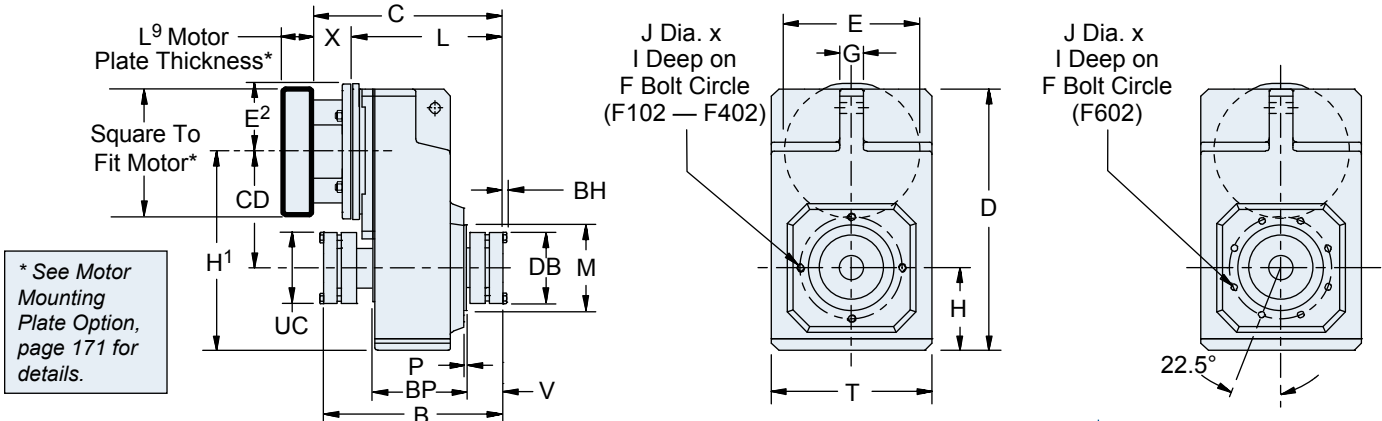
For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.



Dimensional Data

“W” Double Bushing with “G” Tapped Holes Around Output — Two Stage Units Only

Important: For ease of installation, a 1/32" x 45° chamfer (minimum) is recommended for the output shaft end. The double bushing cannot be mounted in sizes F203, F303, F403, or F603.



* See Motor Mounting Plate Option, page 171 for details.

Table 1 Dimensions (mm)

Unit	CD	B	D	F	G	H	H ₁	I	J	M _{J6}	P	T	V	BH	BP	DB	UC	Bushing Capscrews	
																		No. – Size Metric	Tightening Torque – Nm
F102	102	162.5	238	90	20	74	176	13	M8	75	2.5	145	30	4	87	68	34.5	6 – M6x25	10
F202	131	184.5	299	115	22	93	224	13	M8	95	3	180	39	4	105	78	44.5	8 – M6x30	10
F302	149.5	202	335.5	130	30	106	255.5	16	M10	110	3.5	206	39	4	120	84	48	8 – M6x30	10
F402	169	227	370	130	30	116	285	16	M10	110	3.5	230	45	5	135	97	54.5	8 – M8x30	25
F602	196	260	433	165	35	137	333	16	M10	130	3.5	265	50	6	166	105	64.5	8 – M10x35	49

Table 2 “WFN” Double Side Bushings* — Stock Bores Sizes

Unit	Metric								Inches								
	20	30	35	40	3/4	1	1-3/16	1-1/4	1-3/8	1-7/16	1-1/2	1-5/8	1-11/16	1-3/4	1-7/8	1-15/16	2
F102	WFN1-20	—	—	—	WFN1-075	—	—	—	—	—	—	—	—	—	—	—	—
F202	—	WFN2-30	—	—	—	WFN2-100	WFN2-103	—	—	—	—	—	—	—	—	—	—
F302	—	WFN3-30	WFN3-35	—	—	WFN3-100	WFN3-103	WFN3-104	WFN3-106	WFN3-107	WFN3-108	—	—	—	—	—	—
F402	—	—	—	WFN4-40	—	WFN4-100	WFN4-103	WFN4-104	WFN4-106	WFN4-107	WFN4-108	—	—	—	—	—	—
F602	—	—	—	WFN5-40	—	—	—	—	—	WFN5-107	WFN5-108	WFN5-110	WFN5-111	WFN5-112	WFN5-114	WFN5-115	WFN5-200

*A complete bushing kit includes the locking ring assembly, tapered cone, support ring, and all hardware to mount the kit into the reducer. The bushing will accept a shaft with a tolerance of +0.000/-0.005.

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	170	130	184	134	—	—	—	—	38
F202	197	157	211	161	223	163	—	—	51
F302	212	172	226	176	238	178	—	—	67
F402	—	—	247	197	259	199	291	202	84
F602	—	—	278	228	290	230	322	233	165

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness ³⁾ L ⁹ Min.	E	E ²	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.

For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.

F
OFFSET – Solid Shaft/Hollow Output

F Series: OFFSET – Solid Shaft/Hollow Output

“A” Hollow Output with “F” Output Flange — All Sizes

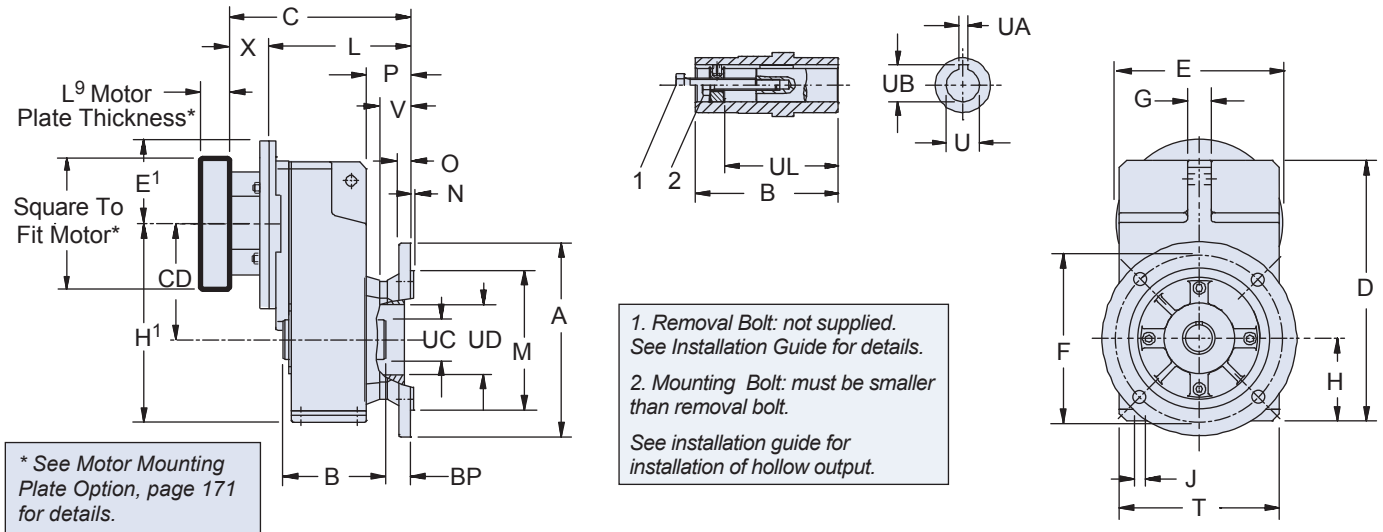


Table 1 Dimensions (mm)

Unit	CD	A	B	D	F	G	H	H ¹	J	M _{j6}	N	O	P	T	BP	UC	UD	UL
F102	102	160	95	238	130	20	74	176	9	110	3.5	10	44.5	145	25.5	35	52	73
F202/F203	131	200	115	299	165	22	936	224	11	130	3.5	14	53	180	30	45	65	92
F302/F303	149.5	250	130	335.5	215	30	106	255.5	14	180	4	15	56.5	206	31.5	50	72	103
F402/F403	169 ¹⁾	250	145	370	215	30	116	285 ¹⁾	14	180	4	15	56.5	230	31.5	55	72	114
F602/F603	196	300	180	433	265	35	137	333	14	230	4	17	60.5	265	29.5	70	80	143

¹⁾ C.D. is 132 for F403 with MT20; H¹ is 248.

Table 2 “A” Hollow Bore Dimensions

Unit	Standard Bore - in		Optional Bore* - mm			
	U _{g7}	UA	UB	U _{H7}	UA _{JS9}	UB
F102	0.750	0.187	0.84	20	6	22.8
F202/F203	1.000	0.250	1.12	25	8	28.3
F302/F303	1.250	0.250	1.37	30	8	33.3
F402/F403	1.500	0.375	1.67	40	12	43.3
F602/F603	2.000	0.500	2.23	50	14	53.8

*Metric output available on request

For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	173	133	187	137	—	—	—	—	38
F202	196.5	156.5	210.5	160.5	216.5	156.5	—	—	51
F203	233.5	193.5	—	—	—	—	—	—	64
F302	213.5	173.5	227.5	177.5	239.5	179.5	—	—	67
F303	250.5	210.5	270.5	220.5	—	—	—	—	73
F402	—	—	242.5	192.5	254.5	194.5	286.5	197.5	84
F403	265.5	225.5	285.5	235.5	—	—	—	—	91
F602	—	—	273.5	223.5	285.5	225.5	317.5	228.5	165
F603	—	—	316.5	266.5	—	—	—	—	177

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness ³⁾ L ⁹ Min.	E	E ²	X	Wt. lbs.
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.



Dimensional Data

“A” Hollow Output with “G” Tapped Holes Around Output — All Sizes

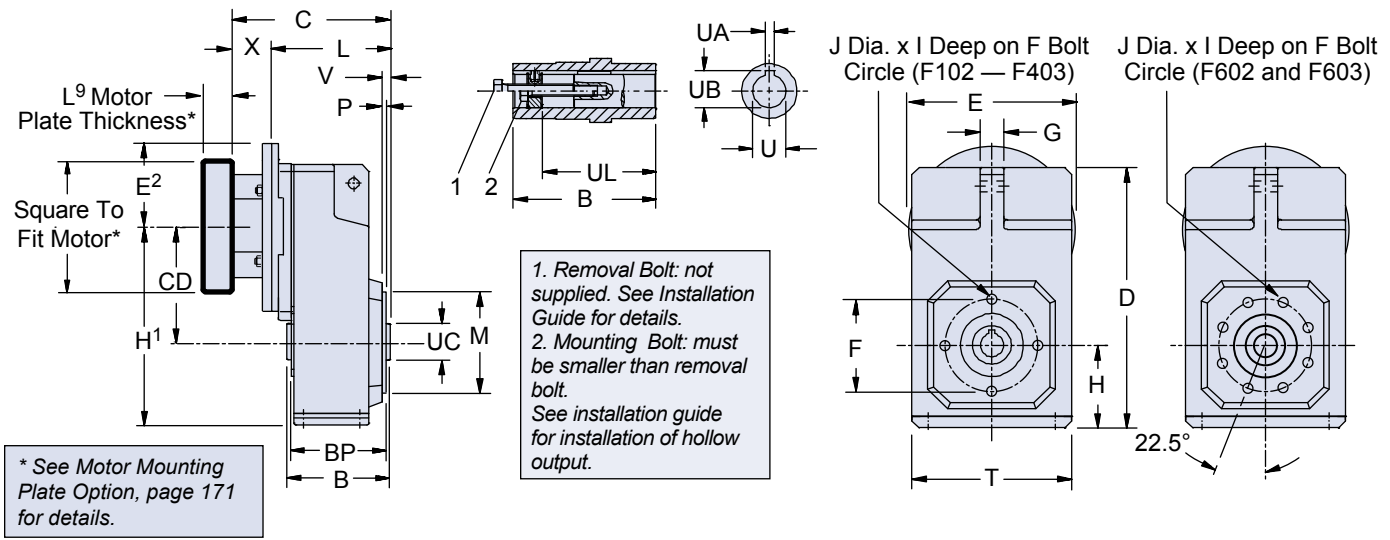


Table 1 “Dimensions (mm)

Unit	CD	B	D	F	G	H	H ¹	I	J	M _{j6}	P	T	V	BP	UC	UL
F102	102	95	238	85	20	74	176	13	4-M8	70	2.5	145	6.5	87	35	73
F202/F203	131	115	299	115	22	93	224	13	4-M8	95	3	180	8	105	45	92
F302/F303	149.5	130	335.5	130	30	106	255.5	16	4-M10	110	3.5	206	8.5	120	50	103
F402/F403	169 ¹⁾	145	370	130	30	116	285 ²⁾	16	4-M10	110	3.5	230	8.5	135	55	114
F602/F603	196	180	433	165	35	137	333	16	8-M10	130	3.5	265	10.5	166	70	143

¹⁾ C.D. is 132 and H¹ is 248 for F403 with MT20.

Table 2 “A” Hollow Bore Dimensions (mm)

Unit	Standard Bore - inches			Optional Bore* - mm		
	U _{g7}	UA	UB	U _{H7}	UA _{JS9}	UB
F102	0.750	0.187	0.84	20	6	22.8
F202/F203	1.000	0.250	1.12	25	8	28.3
F302/F303	1.250	0.250	1.37	30	8	33.3
F402/F403	1.500	0.375	1.67	40	12	43.3
F602/F603	2.000	0.500	2.23	50	14	53.8

*Metric output available on request.

For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	144	104	158	108	—	—	—	—	38
F202	163	123	177	127	189	129	—	—	51
F203	200	160	—	—	—	—	—	—	64
F302	178	138	192	142	204	144	—	—	67
F303	215	175	235	185	—	—	—	—	73
F402	—	—	207	157	219	159	251	162	84
F403	230	190	250	200	—	—	—	—	91
F602	—	—	240	190	252	192	284	195	165
F603	—	—	283	233	—	—	—	—	177

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness ³⁾ L ⁹ Min.	E	E ²	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

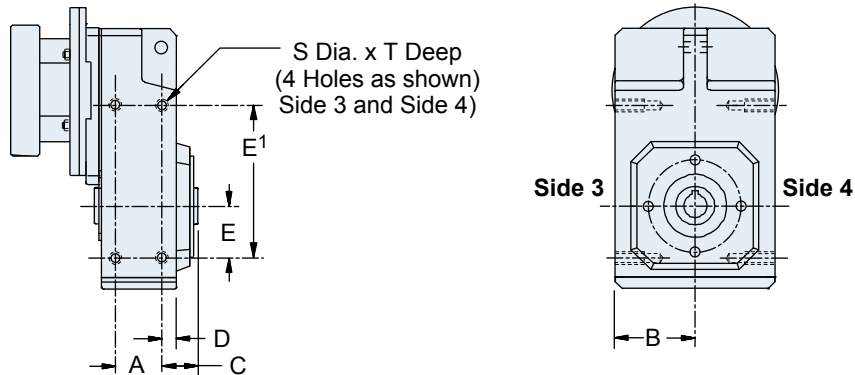
²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.

F
OFFSET – Solid Shaft/Hollow Output

F Series: OFFSET – Solid Shaft/Hollow Output

“A” Hollow Output with “NG” Foot Mounting — All Sizes



See Rubber Buffer
Option below for
mounting torque arms.

Table 1 Dimensions (mm)

Unit	A	B	C	D	E	E ¹	S	T
F102	50	71	29	10	40	140	M6	11
F202/F203	64	88	33.5	10.5	55	175	M8	13
F302/F303	72	102	37.5	12.5	60	200	M10	16
F402/F403	87	144	37.5	12.5	70	220	M10	16
F602/F603	108	131	46.5	15.5	85	270	M12	19

Rubber Buffer Option

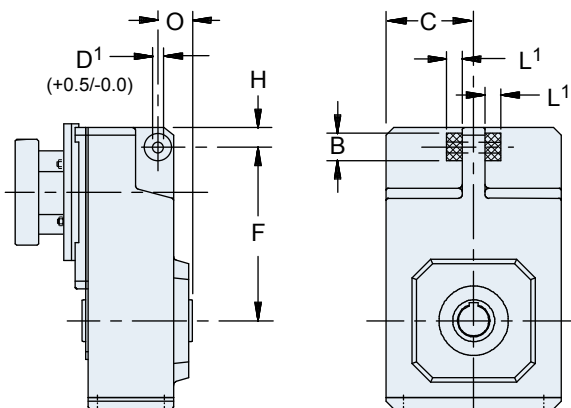


Table 2 “Rubber Buffer Dimensions (mm)

Unit	Part No.	B	C	F	H	D ¹	L ¹	O
F102	25192	30	72.5	150	14	11	15	35
F202/F203	25192	30	90	181	25	11	15	40
F302/F303	25193	40	103	205	24.5	12.5	20	45
F402/F403	25193	40	115	228	26	12.5	20	45
F602/F603	25194	60	137.5	270	26	21	30	55

Order two (2) rubber buffers for each unit.

Torque arms are not supplied by STOBER.



Dimensional Data

“S” Shrink Ring with “G” Tapped Holes Around Output — All Sizes

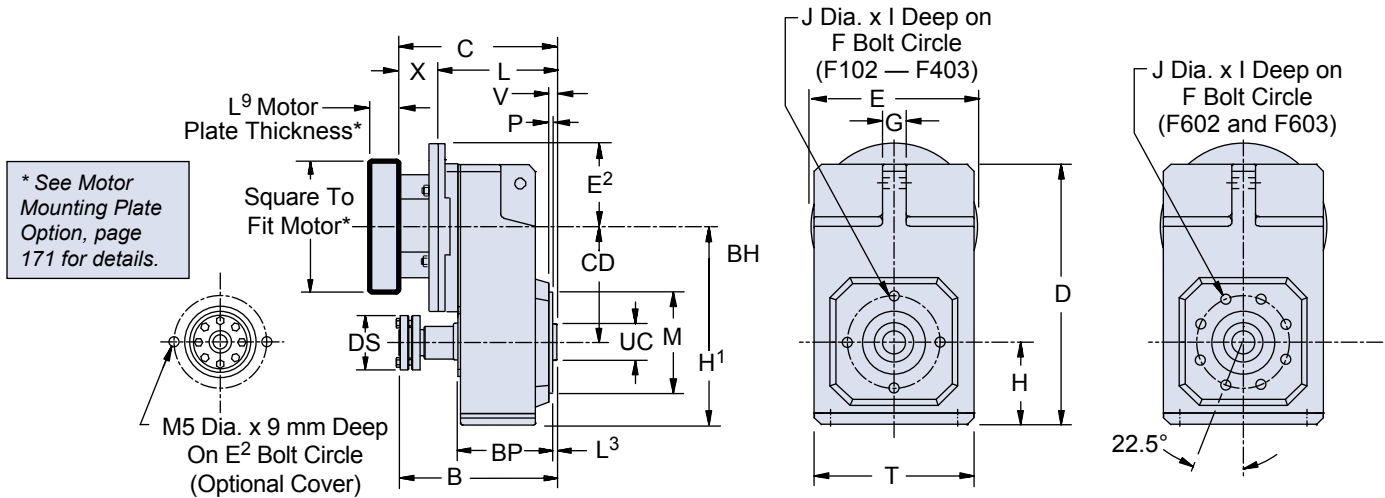


Table 1 Shaft Dimensions (mm)

Unit	d _{hg}	Bore		Shaft					
		d ¹ H7	d ¹ hg	d ³	d ⁴	m ²	m ³	m ⁴	m ⁵
F1	20	20	20	24	20.5	20	31	25	26
F2	25	25	25	30	25.5	20	37	25	32
F3	30	30	30	36	30.5	25	37	30	32
F4	40	40	40	50	40.5	40	45	45	40
F6	50	50	50	62	50.5	40	47	45	42

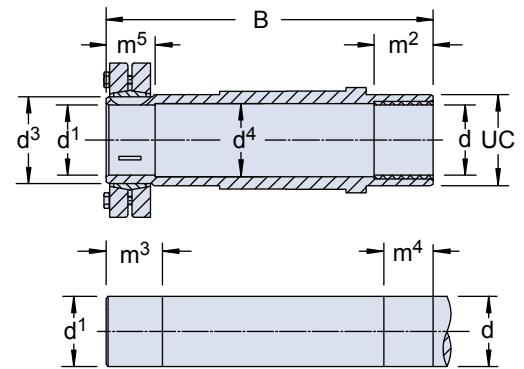


Table 2 Dimensions (mm)

Unit	CD	B	D	E ²	F	G	H	H ¹	I	J	M _{j6}	L ³	P	T	V	BP	DS	UC
F102	102	146	238	58	85	20	74	176	13	4-M8	70	4	2.5	145	6.5	87	50	35
F202/F203	131	175	299	72	115	22	93	224	13	4-M8	95	5	3	180	8	105	60	45
F302/F303	149.5	192	335.5	78	130	30	106	255.5	16	4-M10	110	5	3.5	206	8.5	120	72	50
F402/F403	169 ¹⁾	210	370	83	130	30	116	285 ²⁾	16	4-M10	110	5	3.5	230	8.5	135	90	55
F602/F603	196	248	433	102	165	35	137	333	16	8-M10	130	7	3.5	265	10.5	166	106	70

¹⁾ C.D. is 132 and H¹ is 248 for F403 with MT20.

Table 3 Dimensions (mm)

Unit	MT10		MT20		MT30		MT40		Approx. Wt. lbs.
	C	L	C	L	C	L	C	L	
F102	144	104	158	108	—	—	—	—	38
F202	163	123	177	127	189	129	—	—	51
F203	200	160	—	—	—	—	—	—	64
F302	178	138	192	142	204	144	—	—	67
F303	215	175	235	185	—	—	—	—	73
F402	—	—	207	157	219	159	251	162	84
F403	230	190	250	200	—	—	—	—	91
F602	—	—	240	190	252	192	284	195	165
F603	—	—	283	233	—	—	—	—	177

Table 4 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D ⁶ Max. ²⁾	Thickness ³⁾ L ⁹ Min.	E	E ²	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

²⁾ If an adapter bushing is required it will be supplied as a component of the motor mounting plate.

³⁾ Motor plate maximum thickness (L⁹) will vary with motor shaft length but will not be less than shown.

For approximate weight, add unit weight from Table 3 and adapter weight from Table 4.

F OFFSET – Solid Shaft/Hollow Output