

New!

F3 Greater Variety Series Small Diameter Output Shaft Type

(concentric hollow shaft/concentric solid shaft)

●Varieties

Capacity: 0.2kW – 1.5kW
Reduction ratio: 1/5 – 1/30

●Features

Broader mounting selection range

(1) Compact

Approximately 5% shorter
Approximately 10% lighter

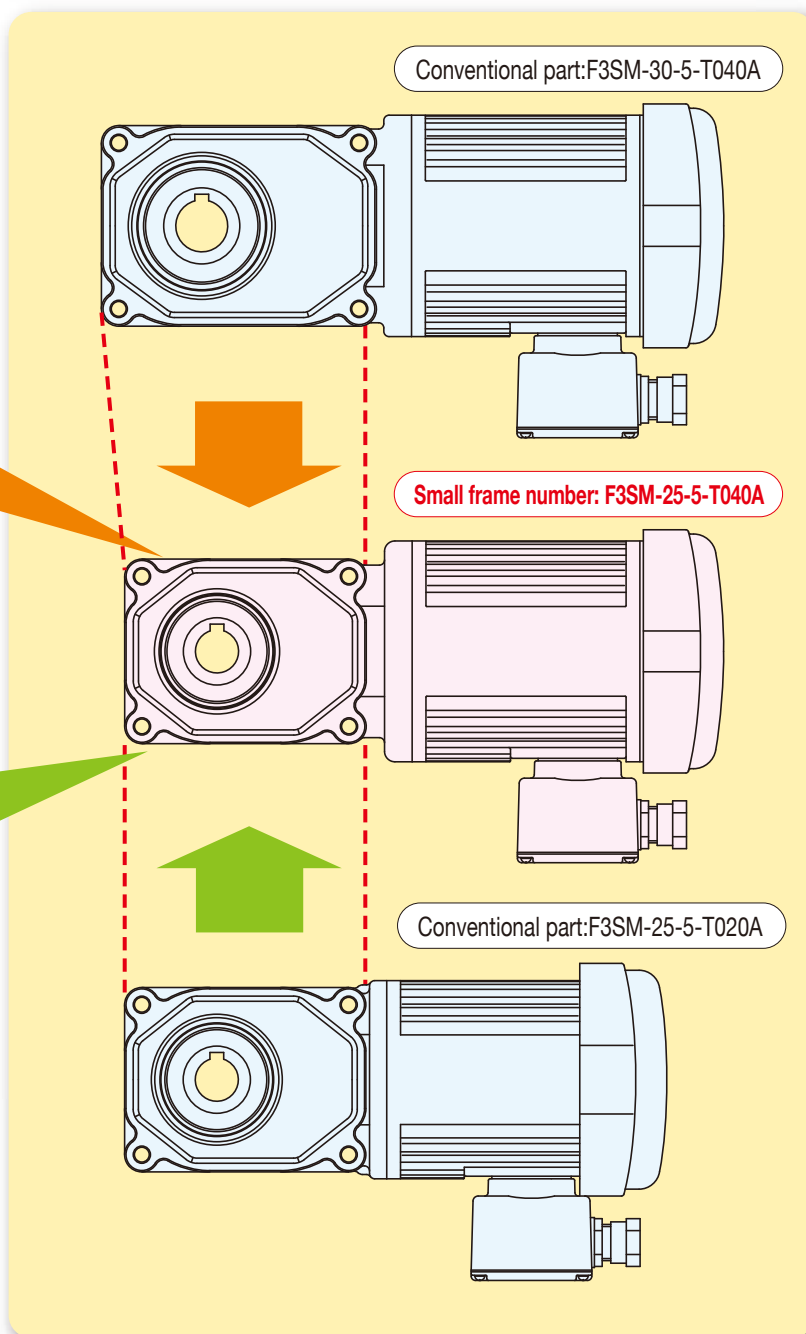
The reducer has become more compact: it's shorter in length and takes up less space.

(2) Improved mounting freedom

Able to increase capacity with the same mounting dimensions of conventional types
(* Requires setting formula)

For example, the 0.2kW gearmotor and 0.4kW gearmotor reducers have the same size, so even if required capacity changes the mounting dimensions remain the same.

●Rapid delivery





F3 SERIES Small Diameter Output Shaft Type

concentric hollow shaft
concentric solid shaft

Model and Type Designation

The F3 series small diameter output shaft type gearmotors are classified by codes as shown below. Specify these codes in your inquiry and order.

Type	Frame Number	Shaft Arrangement	Reduction Ratio Motor	Capacity	Voltage	Terminal Box
F3 S B	25		10	T040	W	A
F3 F M	28	T	30	075		
①	②	③	④	⑤	⑥	⑦



① Series Name	F3 : F3 Series (Concentric Hollow Shaft/Concentric Solid Shaft)		
② Classification by Mount Form	S : Hollow Shaft Type		
	F : Solid Shaft Type		
③ Classification by Motor Type	M : With Motor		
	B : With Brake-Motor		
	J : With Manual Brake Release Device (Option)		
	W : With Waterproof Motor		
	V : With Waterproof Brake-Motor		
	G : With Outdoor Motor		
	H : With Outdoor Brake-Motor		
	[Blank] : No Motor (dual-shaft reducer)		
④ Frame Number and Diameter of Output Shaft	Output Shaft Diameter (bore diameter in the case of Hollow Shaft, outer diameter in the case of Solid Shaft)		
⑤ Shaft Arrangement for Solid Shaft	Concentric Hollow Shaft		
	Concentric Solid Shaft		
⑥ Reduction Ratio	5:1 / 5 30:1 / 30		
⑦ Motor Type and Capacity	T020 : 3-phase 0.2kW		
	T040 : 3-phase 0.4kW		
	075 : 3-phase 0.75kW		
	150 : 3-phase 1.5kW		
	200 : 1-phase 200W		
	400 : 1-phase 400W		
⑧ Voltage	[Blank] : Standard voltage 3-phase 200V/50Hz, 200V/60Hz, 220V/60Hz 1-phase 100/50Hz, 100V/60Hz		
	W : Double voltage 3-phase 380V/50Hz, 400V/50Hz, 400V/60Hz, 440V/60Hz 1-phase 200V/50Hz, 200V/60Hz (1-phase double voltage requires a custom order)		
⑨ Terminal Box	A : A type terminal box: standard with 0.4 kW or less		
	Z : Z type terminal box (contains rectifier): 0.4kW or less with brake (option)		
	[Blank] : Steel plate terminal box: standard 0.75kW or more		
	E : E type terminal box: waterproof/outdoor type standard for models of all capacities		

(Note) 1. The above table only describes the F3 series small diameter output shaft type. The whole F3 series lineup of variations covers motor capacities 0.1kW to 2.2kW and reduction ratios of 1/5 to 1/1500. For more details, refer to the GTR MIDI SERIES (0.1kW – 2.2kW) Catalog.
2. For more details regarding options or custom specifications, refer to the GTR MIDI SERIES (0.1kW – 2.2kW) Catalog or contact one of our sales offices.



Standard Model Lineup

Model	Motor Capacity	Frame Number	Reduction Ratio							
Gearmotor	3-phase 0.2kW 1-phase 200W	20 (18)	1/5	1/7.5	1/10	1/12.5	1/15	1/20	1/25	1/30
Gearmotor with Brake										
Waterproof/Outdoor Gearmotor	3-phase 0.4kW 1-phase 400W	25 (22)	1/5	1/7.5	1/10	1/12.5	1/15	1/20	1/25	1/30
Waterproof/Outdoor Gearmotor with Brake										
Gearmotor with Manual Brake Release (option)	3-phase 0.75kW	30 (28)	1/5	1/7.5	1/10	1/12.5	1/15	1/20	1/25	1/30
Reducer (dual-shaft model)										
S Type Reducer (model able to attach to indicated motor)	3-phase 1.5kW	35 (32)	1/5	1/7.5	1/10	1/12.5	1/15	1/20	1/25	1/30

(Note) 1. Frame numbers in parentheses are solid shaft frame numbers.

2. Solid shaft types include a code (L, R, or T) indicating the output shaft arrangement. Refer to model/type designation for details.

3. Solid shaft is unavailable, and only hollow shaft is available for 1-phase motors, waterproof/outdoor types, dual-shaft type reducers, and S type reducers.

4. Brakes are unavailable for 1.5kW waterproof/outdoor types.

F3 Series Small Diameter Output Shaft Performance Table

Motor Capacity	Frame No.	Reduction Ratio	Actual Reduction Ratio (Fraction)	Output Shaft Rotation Speed (rpm)		Output Shaft Allowable Torque N·m		Output Shaft Allowable O.H.L. (Hollow Shaft)	Output Shaft Allowable O.H.L. (Solid Shaft)	Input Shaft Allowable O.H.L. (dual-shaft type reducer)
				50Hz	60Hz	50Hz	60Hz	N	N	N
3-phase 0.2kW 1-phase 200W	20 (18)	1/ 5	1/ 5	300	360	5.5	4.6	980	880	245
		1/ 7.5	2/ 15	200	240	8.3	7	1080	980	
		1/10	1/ 10	150	180	11	9.2	1180	1080	
		1/12.5	2/ 25	120	144	14	12	1270	1180	
		1/15	1/ 15	100	120	17	14	1320	1230	
		1/20	1/ 20	75	90	23	19	1470	1370	
		1/25	1/ 25	60	72	27	24	1570	1470	
3-phase 0.4kW 1-phase 400W	25 (22)	1/30	2/ 59	50	60	33	27	1670	1570	294
		1/ 5	1/ 5	300	360	11	9.2	1230	1270	
		1/ 7.5	2/ 15	200	240	17	14	1370	1420	
		1/10	1/ 10	150	180	23	19	1520	1520	
		1/12.5	19/235	120	144	27	24	1620	1620	
		1/15	1/ 15	100	120	33	27	1720	1720	
		1/20	1/ 20	75	90	44	37	1860	1910	
3-phase 0.75kW	30 (28)	1/25	1/ 25	60	72	55	46	2010	2060	392
		1/30	1/ 30	50	60	67	55	2110	2160	
		1/ 5	1/ 5	300	360	21	18	1520	1470	
		1/ 7.5	2/ 15	200	240	31	25	1760	1670	
		1/10	1/ 10	150	180	41	34	1910	1810	
		1/12.5	19/235	120	144	52	43	2060	1960	
		1/15	1/ 15	100	120	63	52	2160	2060	
3-phase 1.5kW	35 (32)	1/20	1/ 20	75	90	83	70	2400	2300	392
		1/25	1/ 25	60	72	104	86	2550	2450	
		1/30	1/ 30	50	60	124	104	2650	2600	
		1/ 5	1/ 5	300	360	41	34	1960	1760	
		1/ 7.5	2/ 15	200	240	63	52	2250	2010	
		1/10	1/ 10	150	180	83	70	2450	2210	
		1/12.5	19/235	120	144	104	86	2600	2350	
		1/15	1/ 15	100	120	124	104	2740	2500	
		1/20	1/ 20	75	90	166	138	2990	2700	
		1/25	1/ 25	60	72	208	173	3190	2890	
		1/30	1/ 30	50	60	249	208	3280	3040	

(Note) 1. Frame numbers in parentheses are solid shaft frame numbers.

2. The allowable O.H.L. for output hollow shaft are the values measured at a position 20 mm from the edge of output shaft.

3. The allowable O.H.L. for output solid shaft are the values measured at the center the edge of output shaft.

4. Solid shaft is unavailable, and only hollow shaft is available for 1-phase motors, waterproof/outdoor types, dual-shaft type reducers, and S type reducers.

5. The allowable O.H.L. for input shaft only apply to dual-shaft reducers.

6. The above table only describes the F3 series small diameter output shaft type. The whole F3 series lineup of variations covers motor capacities 0.1kW to 2.2kW and reduction ratios of 1/5 to 1/1500. For more details, refer to the GTR MIDI SERIES (0.1kW – 2.2kW) Catalog.

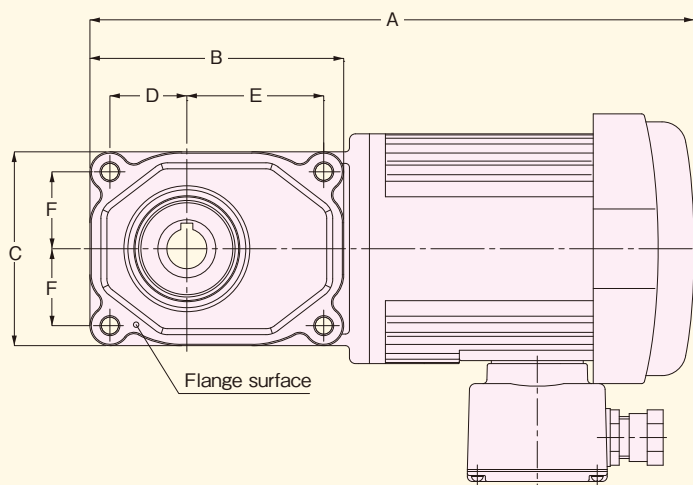




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Outer Dimension Diagrams (Example)



Capacity	Frame Number	A	B	C	D	E	F
0.2 kW	20 (18)	302.5 (319.5)	127	97	38.5	68.5	38.5
0.4 kW	25 (22)	347.5 (367)	140	107	43.5	76.5	43.5
0.75kW	30 (28)	389.5 (396.5)	159	116	48	91	48
1.5 kW	35 (32)	461.5 (483)	185	136	56	105	56

- (Note) 1. Frame numbers in parentheses are solid shaft frame numbers.
2. The A dimension value in parentheses is the dimension with a brake-motor.
3. The A dimension differs from the above values for 1-phase, and waterproof/outdoor types.
Contact one of our sales offices for more details.

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