Selection and ordering data

Motor	Planetary gearbox single-stage			Available gear ratio i =				Motor speed, max. S3-60 %	Output torque, max. S3-60 %	Radial output shaft loading, max.[1]	Axial output shaft loading, max.[1]
Type	Type	Torsional backlash	Gearbox weight, approx.	4	5	7	10	n_{G1} (n_1)	M_{G2} (T_{2B})	F_r (F_{2Rmax})	F_a (F_{2Amax})
		arcmin	kg (lb)					rpm	Nm (lb_f-ft)	N (lb_f)	N (lb_f)
1FT6021	SP 060S-MF1	≤ 4	1.9 (4.2)	–	–	–	✔	6000	40 (29.5)	2700 (606)	2400 (540)
1FT6024				✔	✔	✔	✔		(32 for i = 10)		
1FT6031				✔	✔	✔	✔				
1FT6034				✔	✔	✔	–				
1FT6034	SP 075S-MF1	≤ 4	3.9 (8.6)	–	–	–	✔	6000	110 (81.1)	4000 (899)	3350 (753)
1FT6041				✔	✔	✔	✔		(90 for i = 10)		
1FT6044				✔	✔	✔	✔				
1FT6061	SP 100S-MF1	≤ 3	7.7 (17.0)	✔	✔	✔	✔	4500	300 (221)	6300 (1416)	5650 (1270)
1FT6062				✔	✔	✔	✔		(225 for i = 10)		
1FT6064				✔	✔	✔	✔				
1FT6081	SP 140S-MF1	≤ 3	17.2 (37.9)	✔	✔	✔	✔	4000	600 (442)	9450 (2124)	9870 (2218)
1FT6082				✔	✔	✔	✔		(480 for i = 10)		
1FT6084				✔	✔	✔	✔				
1FT6086				✔	✔	✔	–				
1FT6086	SP 180S-MF1	≤ 3	34 (75.0)	–	–	–	✔	3500	1100 (810)	14700 (3304)	14150 (3181)
1FT6102				✔	✔	✔	✔		(880 for i = 10)		
1FT6105				✔	✔	✔	–				
1FT6108				✔	✔	✔	–				
1FT6105	SP 210S-MF1	≤ 3	56 (123)	–	–	–	✔	2500	2500 (1844)	21000 (4721)	30000 (6744)
1FT6108				–	–	–	✔		(2400 for i = 7 1900 for i = 10)		
1FT6132				✔	✔	✔	✔				
1FT6134				✔	✔	✔	–				
1FT6136				✔	✔	✔	–				
1FT6134	SP 240S-MF1	≤ 3	83 (183)	–	–	–	✔	2200	4500 (3319)	30000 (6744)	33000 (7418)
1FT6136				–	–	–	✔		(4300 for i = 7 3400 for i = 10)		
Order codes • Gear shaft with fitted key • Gear shaft without fitted key				**J02** **J22**	**J03** **J23**	**J05** **J25**	**J09** **J29**				

Ordering data **1FT6 . . . -. . . 71-.. ■ 1-Z J..**

G without holding brake
H with holding brake

Order No. of the motor with identifier **-Z** and order code for mounting the planetary gearbox assigned to the motor
Preconditions for mounting planetary gearbox SP+:
Plain motor shaft extension/shaft and flange accuracy tolerance N and vibration magnitude grade A/IP65 degree of protection[2]

✔ Possible
– Not possible

1) In reference to the output shaft center.

2) IP64 degree of protection with 1FT602.: **1FT602.-6AK71-.. ■ 0-Z J..** (**G** / **H**)

Selection and ordering data

Motor	Planetary gearbox two-stage			Available gear ratio i =					Motor speed, max. S3-60 %	Output torque, max. S3-60 %	Radial output shaft loading, max.[1]	Axial output shaft loading, max.[1]
Type	Type	Torsional backlash	Gearbox weight, approx.	16	20	28	40	50	n_{G1} (n_1)	M_{G2} (T_{2B})	F_r (F_{2Rmax})	F_a (F_{2Amax})
		arcmin	kg (lb)						rpm	Nm (lb$_f$-ft)	N (lb$_f$)	N (lb$_f$)
1FT6021	SP 060S-MF2	≤ 6	2 (4.4)	✔	✔	✔	✔	✔	6000	40 (29.5)	2700 (607)	2400 (540)
1FT6024				✔	✔	✔	✔	–				
1FT6031				✔	✔	✔	–	–				
1FT6024	SP 075S-MF2	≤ 6	3.6 (7.9)	–	–	–	–	✔	6000	110 (81.1)	4000 (899)	3350 (753)
1FT6031				–	–	–	✔	✔				
1FT6034				✔	✔	✔	–	–				
1FT6041				✔	✔	–	–	–				
1FT6034	SP 100S-MF2	≤ 5	7.9 (17.4)	–	–	–	✔	✔	4500	300 (221)	6300 (1416)	5650 (1270)
1FT6041				–	–	✔	✔	✔				
1FT6044				✔	✔	✔	–	–				
1FT6061				✔	✔	✔	✔	–				
1FT6062				✔	✔	✔	–	–				
1FT6064				✔	–	–	–	–				
1FT6044	SP 140S-MF2	≤ 5	17 (37.5)	–	–	–	✔	✔	4000	600 (442)	9450 (2124)	9870 (2219)
1FT6061				–	–	–	–	✔				
1FT6062				–	–	–	✔	✔				
1FT6064				–	✔	✔	–	–				
1FT6081				✔	✔	✔	✔	–				
1FT6082				✔	✔	–	–	–				
1FT6084				✔	–	–	–	–				
1FT6064	SP 180S-MF2	≤ 5	36.4 (80.3)	–	–	–	✔	✔	4000	1100 (811)	14700 (3305)	14150 (3181)
1FT6081				–	–	–	–	✔				
1FT6082				–	–	✔	✔	–				
1FT6084				–	✔	✔	–	–				
1FT6086				✔	✔	–	–	–				
1FT6102				✔	✔	–	–	–				
1FT6082	SP 210S-MF2	≤ 5	55.0 (121)	–	–	–	–	✔	3500	2400 (1770) (2500 for i = 20)	21000 (4721)	30000 (6744)
1FT6105				✔	–	–	–	–				
1FT6084	SP 240S-MF2	≤ 5	80.6 (178)	–	–	–	✔	✔	3500	4500 (3319) (4000 for i = 40 4300 for i = 50)	30000 (6744)	30000 (6744)
1FT6086				–	–	✔	✔	✔				
1FT6102				–	–	✔	✔	✔				
1FT6105				–	✔	✔	–	–				
1FT6108				✔	✔	–	–	–				
1FT6132				✔	✔	–	–	–				
1FT6134				✔	–	–	–	–				
1FT6136				✔	–	–	–	–				
Order codes • Gear shaft with fitted key • Gear shaft without fitted key				**J12 J32**	**J13 J33**	**J15 J35**	**J16 J36**	**J17 J37**				

Ordering data **1FT6...-...71-..■ 1-Z J..**

G without holding brake
H with holding brake

Order No. of the motor with identifier **-Z** and order code for mounting the planetary gearbox assigned to the motor
Preconditions for mounting planetary gearbox SP+:
Plain motor shaft extension/shaft and flange accuracy tolerance N and vibration magnitude grade A/IP65 degree of protection[2]

✔ Possible
– Not possible

1) In reference to the output shaft center.

2) IP64 degree of protection with 1FT602.: **1FT602.-6AK71-..■ 0-Z J..**
G
H