

Synchronous motors

Gearboxes

Series SP+ planetary gearbox, single-stage for 1FT6 motors

Technical specifications

Planetary gearbox with 1FT6 motor										
Single-stage Type	Gear ratio	Motor speed	Output torque	Moments of inertia of gearbox (referred to the drive)						
				Continuous duty S1 ¹⁾						
		n_{N1} rpm	M_{N2} (T_{2N}) Nm (lb _F -ft)	1FT602. J_1 kgcm ² (lb _F -in ²)	1FT603. J_1 kgcm ² (lb _F -in ²)	1FT604. J_1 kgcm ² (lb _F -in ²)	1FT606. J_1 kgcm ² (lb _F -in ²)	1FT608. J_1 kgcm ² (lb _F -in ²)	1FT610. J_1 kgcm ² (lb _F -in ²)	1FT613. J_1 kgcm ² (lb _F -in ²)
SP 060S-MF1	4	3300	26 (19.2)	0.15 (0.05)	0.22 (0.08)	–	–	–	–	–
	5	3300	26 (19.2)	0.12 (0.04)	0.20 (0.07)	–	–	–	–	–
	7	4000	26 (19.2)	0.10 (0.03)	0.18 (0.06)	–	–	–	–	–
	10	4000	17 (12.5)	0.09 (0.03)	0.17 (0.06)	–	–	–	–	–
SP 075S-MF1	4	2900	75 (55.3)	–	–	0.78 (0.27)	–	–	–	–
	5	2900	75 (55.3)	–	–	0.68 (0.23)	–	–	–	–
	7	3100	75 (55.3)	–	–	0.59 (0.20)	–	–	–	–
	10	3100	52 (38.3)	–	0.38 (0.13)	0.54 (0.19)	–	–	–	–
SP 100S-MF1	4	2500	180 (132)	–	–	–	3.04 (1.04)	–	–	–
	5	2500	175 (129)	–	–	–	2.61 (0.89)	–	–	–
	7	2800	170 (125)	–	–	–	2.29 (0.78)	–	–	–
	10	2800	120 (88.5)	–	–	–	2.07 (0.71)	–	–	–
SP 140S-MF1	4	2100	360 (266)	–	–	–	–	11.0 (3.67)	–	–
	5	2100	360 (266)	–	–	–	–	9.95 (3.40)	–	–
	7	2600	360 (266)	–	–	–	–	9.01 (3.08)	–	–
	10	2600	220 (162)	–	–	–	–	8.44 (2.88)	–	–
SP 180S-MF1	4	1500	750 (553)	–	–	–	–	–	33.9 (11.6)	–
	5	1500	750 (553)	–	–	–	–	–	27.9 (9.53)	–
	7	2300	750 (553)	–	–	–	–	–	22.2 (7.59)	–
	10	2300	750 (553)	–	–	–	–	19.2 (6.56)	19.2 (6.56)	–
SP 210S-MF1	4	1200	1500 (1106)	–	–	–	–	–	–	94.3 (32.2)
	5	1500	1500 (1106)	–	–	–	–	–	–	76.9 (26.3)
	7	1700	1400 (1033)	–	–	–	–	–	–	61.5 (21.0)
	10	2000	1000 (738)	–	–	–	–	–	53.1 (18.1)	53.1 (18.1)
SP 240S-MF1	10	1700	1300 (959)	–	–	–	–	–	–	70.8 (24.2)

¹⁾ The limit values in the table apply for S1 continuous duty (ON time > 60 % or > 20 min) for a maximum gearbox temperature of 90 °C (194 °F).

Synchronous motors

Gearboxes

Series SP+ planetary gearbox, two-stage for 1FT6 motors

Technical specifications

Planetary gearbox with 1FT6 motor										
Two-stage Type	Gear ratio	Motor speed	Output torque	Moments of inertia of gearbox (referred to the drive)						
		Continuous duty S1 ¹⁾		1FT602.	1FT603.	1FT604.	1FT606.	1FT608.	1FT610.	1FT613.
		n_{N1}	$M_{N2} (T_{2N})$	J_1	J_1	J_1	J_1	J_1	J_1	J_1
		rpm	Nm (lb _f -ft)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)	kgcm ² (lb _f -in ²)
SP 060S-MF2	16	4400	26 (19.2)	0.08 (0.03)	0.17 (0.06)	–	–	–	–	–
	20	4400	26 (19.2)	0.07 (0.02)	0.16 (0.06)	–	–	–	–	–
	28	4400	26 (19.2)	0.06 (0.02)	0.16 (0.06)	–	–	–	–	–
	40	4400	26 (19.2)	0.06 (0.02)	–	–	–	–	–	–
	50	4800	26 (19.2)	0.06 (0.02)	–	–	–	–	–	–
SP 075S-MF2	16	3500	75 (55.3)	–	0.23 (0.08)	0.55 (0.19)	–	–	–	–
	20	3500	75 (55.3)	–	0.20 (0.07)	0.53 (0.18)	–	–	–	–
	28	3500	75 (55.3)	–	0.18 (0.06)	0.50 (0.17)	–	–	–	–
	40	3500	75 (55.3)	–	0.17 (0.06)	–	–	–	–	–
	50	3800	75 (55.3)	0.10 (0.03)	0.16 (0.06)	–	–	–	–	–
SP 100S-MF2	16	3100	180 (133)	–	–	0.81 (0.28)	2.18 (0.75)	–	–	–
	20	3100	180 (133)	–	–	0.70 (0.24)	2.07 (0.71)	–	–	–
	28	3100	180 (133)	–	–	0.60 (0.21)	1.97 (0.67)	–	–	–
	40	3100	180 (133)	–	0.38 (0.13)	0.55 (0.19)	1.92 (0.66)	–	–	–
	50	3500	175 (129)	–	0.38 (0.13)	0.54 (0.19)	–	–	–	–
SP 140S-MF2	16	2900	360 (265)	–	–	–	–	10.3 (3.52)	–	–
	20	2900	360 (265)	–	–	–	2.71 (0.93)	9.77 (3.34)	–	–
	28	2900	360 (265)	–	–	–	2.34 (0.80)	9.41 (3.22)	–	–
	40	2900	360 (265)	–	–	1.40 (0.48)	2.10 (0.72)	9.16 (3.13)	–	–
	50	3200	360 (265)	–	–	1.39 (0.48)	2.08 (0.71)	–	–	–
SP 180S-MF2	16	2700	750 (553)	–	–	–	–	12.4 (4.24)	13.5 (4.61)	–
	20	2700	750 (553)	–	–	–	–	10.9 (3.73)	12.0 (4.10)	–
	28	2700	750 (553)	–	–	–	–	9.48 (3.24)	–	–
	40	2700	750 (553)	–	–	–	5.51 (1.88)	8.67 (2.96)	–	–
	50	2900	750 (553)	–	–	–	5.45 (1.86)	8.61 (2.94)	–	–
SP 210S-MF2	16	2500	1500 (1106)	–	–	–	–	–	34.5 (11.8)	–
	50	2500	1500 (1106)	–	–	–	–	28.3 (9.67)	–	–
SP 240S-MF2	16	2300	2500 (1844)	–	–	–	–	–	39.2 (13.4)	39.2 (13.4)
	20	2500	2500 (1844)	–	–	–	–	–	34.6 (11.8)	34.6 (11.8)
	28	2500	2500 (1844)	–	–	–	–	30.5 (10.4)	30.5 (10.4)	–
	40	2500	2500 (1844)	–	–	–	–	28.2 (9.64)	28.2 (9.64)	–
	50	2500	2500 (1844)	–	–	–	–	27.9 (9.53)	27.9 (9.53)	–

¹⁾ The limit values in the table apply for S1 continuous duty (ON time > 60 % or > 20 min) for a maximum gearbox temperature of 90 °C (194 °F).