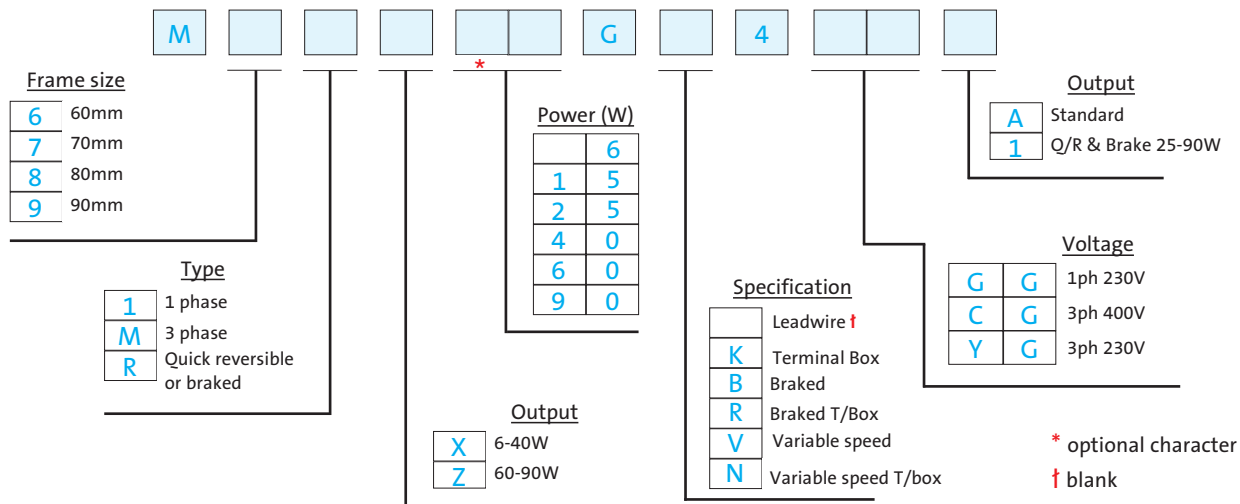
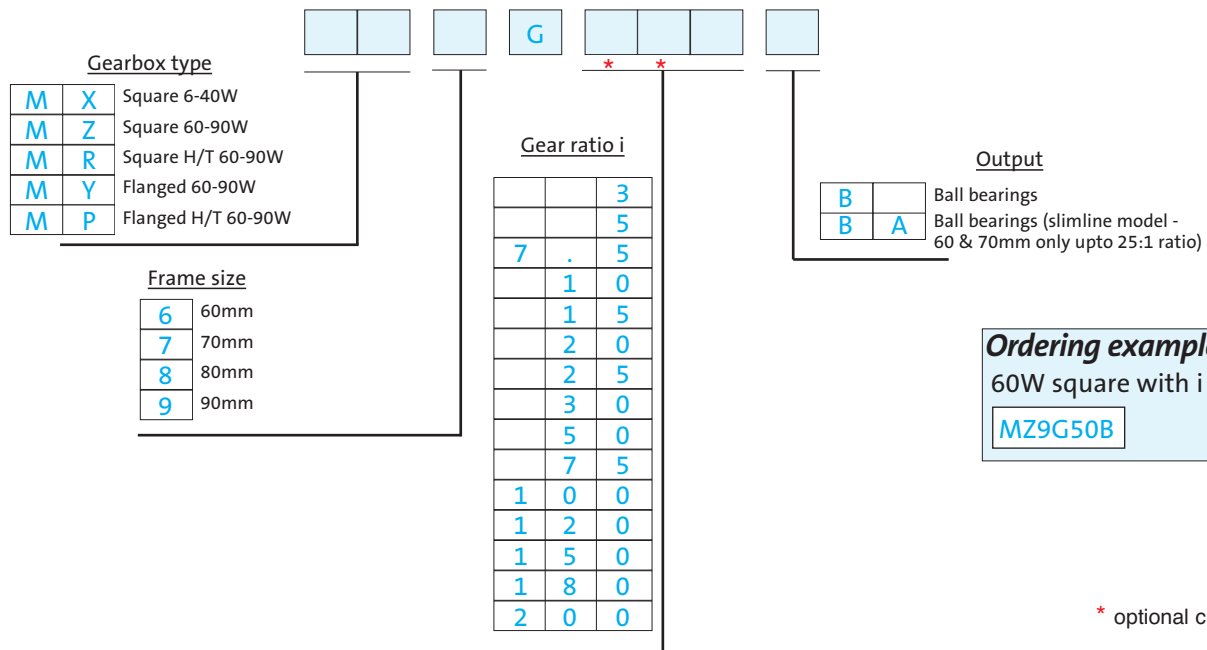


Motor



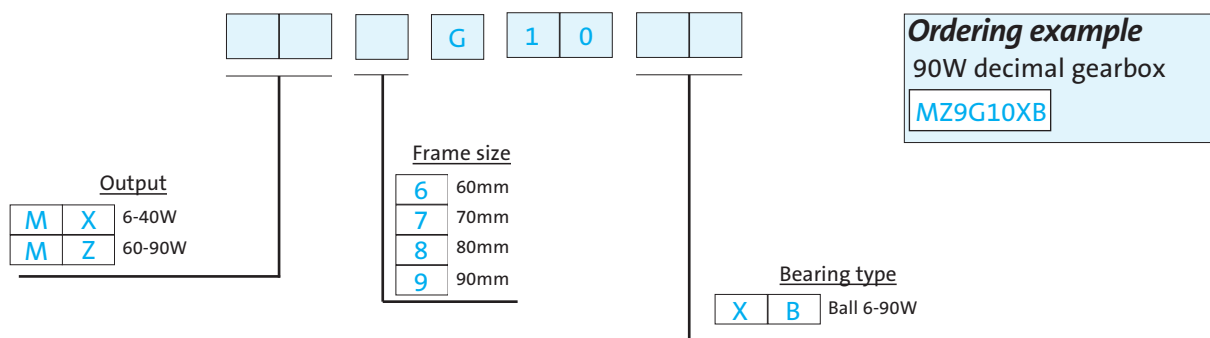
Ordering example
25W 1 phase 230V brake motor with terminal box.
M8RX25GR4GG1

Gearbox



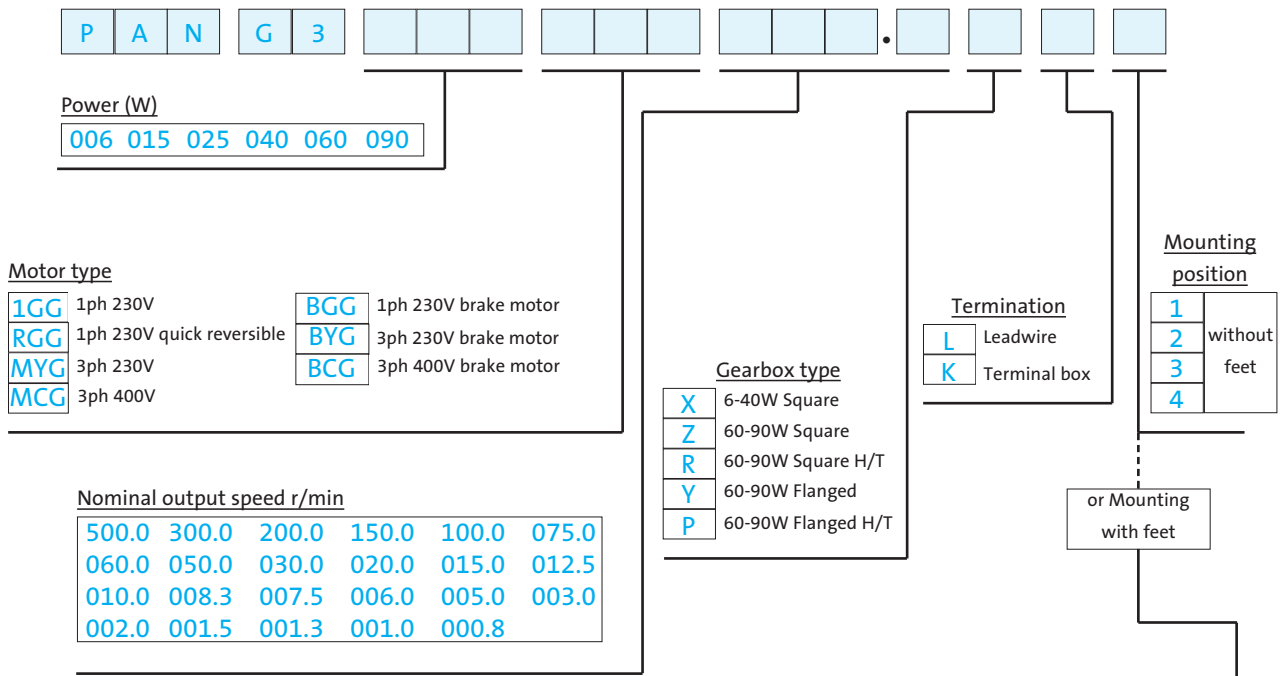
Ordering example
60W square with i = 50
MZ9G50B

Decimal Gearbox (additional requirement for speeds 7.5 r/min and below)



Ordering example
90W decimal gearbox
MZ9G10XB

Panasonic assembly part number coding

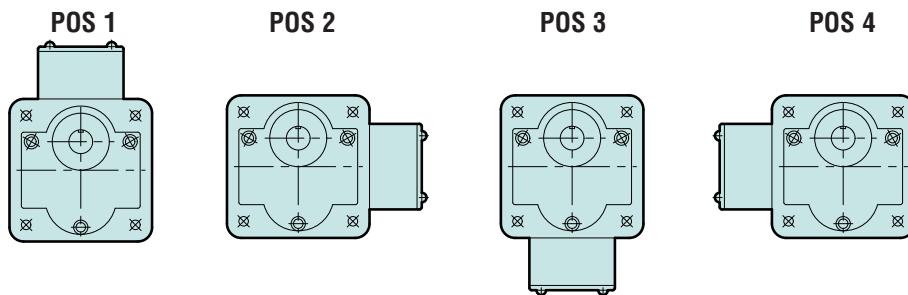


Ordering example
60W 230V 3 phase motor, 7.5r/min, square gearbox, mounting position 1, foot position 2.
PAN G3 060 MYG 007.5 ZKB

Mounting position 1	Mounting position 2	Mounting position 3	Mounting position 4
A Foot pos 1	E Foot pos 1	I Foot pos 1	M Foot pos 1
B Foot pos 2	F Foot pos 2	J Foot pos 2	N Foot pos 2
C Foot pos 3	G Foot pos 3	K Foot pos 3	O Foot pos 3
D Foot pos 4	H Foot pos 4	L Foot pos 4	P Foot pos 4

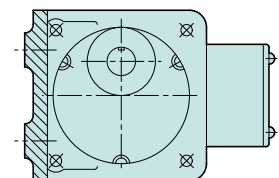
Terminal box/lead wire positions

The terminal box position is described when viewed from the output shaft end of the geared motor. Unless specified when ordering, the standard terminal box position 1 will be supplied.



Example

Foot position 2

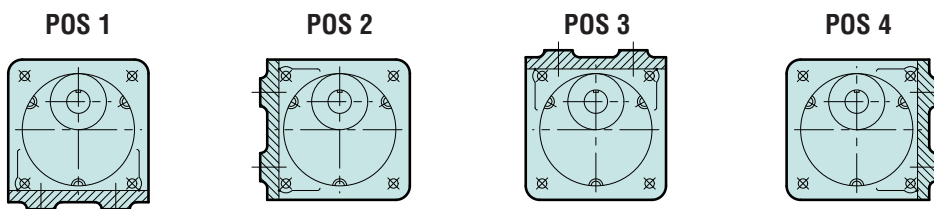


Terminal box position 2

Foot positions

The foot position is described when viewed from the output shaft end of the geared motor.

Unless specified when ordering, the standard foot position 1 will be supplied.



Motor insulation class B

	Model	Weight (kg)	Voltage (V)	Freq (Hz)	Output Power (W)	Rated Current (A)	Rated Input Power (W)	Rated Speed (r/min)	Rated Torque (Nm)	Starting Current (Na)
Standard 1 phase 230V	M61X6G4GGA	0.67	230	50	6	0.11	23	1250	0.046	0.15
	M71X15G4GGA	1.10	230	50	15	0.16	36	1300	0.11	0.28
	M81X25GK4GGA	1.50	230	50	25	0.28	59	1250	0.19	0.48
	M91X40GK4GGA	2.40	230	50	40	0.37	79	1275	0.3	0.72
	M91Z60GK4GGA	2.70	230	50	60	0.61	129	1300	0.44	1.10
	M91Z90GK4GGA	3.20	230	50	90	0.89	185	1250	0.69	1.50
Quick Reversible 1 phase 230V	M6RX6G4GGA	0.67	230	50	6	0.12	26	1300	0.044	0.15
	M7RX15G4GGA	1.10	230	50	15	0.18	40	1275	0.11	0.28
	M8RX25GK4GG1	1.80	230	50	25	0.28	62	1275	0.19	0.49
	M9RX40GK4GG1	2.80	230	50	40	0.40	92	1300	0.33	0.74
	M9RZ60GK4GG1	3.00	230	50	60	0.66	145	1275	0.45	1.10
	M9RZ90GK4GG1	3.30	230	50	90	0.92	202	1250	0.69	1.60
Brake 1 phase 230V	M6RX6GB4GGA	0.85	230	50	6	0.12	26	1300	0.044	0.16
	M7RX15GB4GGA	1.10	230	50	15	0.17	38	1300	0.11	0.28
	M8RX25GR4GG1	1.80	230	50	25	0.27	59	1275	0.19	0.48
	M9RX40GR4GG1	2.80	230	50	40	0.36	84	1350	0.28	0.76
	M9RZ60GR4GG1	3.10	230	50	60	0.62	135	1300	0.44	1.25
	M9RZ90GR4GG1	3.70	230	50	90	0.89	192	1275	0.67	1.60
3 phase 230V	M8MX25GK4YGA	1.80	230	50	25	0.23	49	1320	0.16	0.64
	M9MX40GK4YGA	2.80	230	50	40	0.28	66	1340	0.27	0.91
	M9MZ60GK4YGA	3.00	230	50	60	0.40	98	1320	0.41	1.30
	M9MZ90GK4YGA	3.30	230	50	90	0.56	137	1320	0.61	2.00
3 phase 400V	M8MX25GK4CGA	1.80	400	50	25	0.12	52	1325	0.18	0.32
	M9MX40GK4CGA	2.80	400	50	40	0.15	66	1350	0.28	0.47
	M9MZ60GK4CGA	3.00	400	50	60	0.22	103	1325	0.43	0.65
	M9MZ90GK4CGA	3.30	400	50	90	0.31	144	1350	0.64	1.00
3 phase 230V braked	M8MX25GR4YG1	1.80	230	50	25	0.29	56	1375	0.17	0.67
	M9MX40GR4YG1	2.80	230	50	40	0.33	69	1400	0.27	1.00
	M9MZ60GR4YG1	3.10	230	50	60	0.47	98	1400	0.41	1.40
	M9MZ90GR4YG1	3.70	230	50	90	0.70	145	1400	0.62	2.10

	Starting torque (Nm)	Capacitor (uF/V)	Rating (IP)	Duty	Insulation Class	Approval	Thermal Switch	Brake Current (A)	Brake input Power (W)	Brake holding Torque (Nm)
Standard 1 phase 230V	0.05	0.6 450	20	S1	B	UL/cUL/CE/CCC	No	n/a	n/a	n/a
	0.11	1.2 450	20	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.16	1.5 450	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.28	2.5 450	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.53	4.5 450	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.68	6.0 450	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
Quick Reversible 1 phase 230V	0.06	0.8 450	20	S2*	B	UL/cUL/CE/CCC	No	n/a	n/a	n/a
	0.09	1.3 450	20	S1*	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.19	2.0 450	44	S1*	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.29	3.5 450	44	S2	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.57	5.0 450	44	S2*	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.79	7.0 450	44	S2	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
Brake 1 phase 230V	0.07	0.8 450	20	S2*	B	UL/cUL/CE/CCC	No	0.02	4	0.05
	0.11	1.3 450	20	S2*	B	UL/cUL/CE/CCC	Yes	0.03	6	0.08
	0.21	2.0 450	44	S2*	B	UL/cUL/CE/CCC	Yes	0.03	6	0.10
	0.43	3.5 450	44	S2*	B	UL/cUL/CE/CCC	Yes	0.05	9	0.20
	0.62	5.0 450	44	S2*	B	UL/cUL/CE/CCC	Yes	0.05	10	0.39
	0.83	7.0 450	44	S2	B	UL/cUL/CE/CCC	Yes	0.05	10	0.39
3 phase 230V	0.50	n/a	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.63	n/a	20	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.87	n/a	20	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	1.40	n/a	20	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
3 phase 400V	0.56	n/a	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	0.74	n/a	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	1.00	n/a	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
	1.60	n/a	54	S1	B	UL/cUL/CE/CCC	Yes	n/a	n/a	n/a
3 phase 230V braked	0.74	n/a	44	S1	B	UL/cUL/CE/CCC	Yes	0.03	6	0.1
	1.00	n/a	44	S1	B	UL/cUL/CE/CCC	Yes	0.05	7	0.2
	1.50	n/a	44	S1	B	UL/cUL/CE/CCC	Yes	0.05	7	0.39
	2.30	n/a	44	S1	B	UL/cUL/CE/CCC	Yes	0.05	7	0.39

* Duty rating becomes S1 when combined with Panasonic gearbox.

				Max output torque (Nm)											
Size	Power (W)	Type	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
60mm	6	MX6GxxxB		0.1	0.12	0.16	0.19	0.25	0.29	0.33	0.4	0.49	0.59	0.66	0.79
70mm	15	MX7GxxxB		0.24	0.28	0.39	0.47	0.59	0.71	0.80	0.98	1.18	1.37	1.57	1.86
80mm	25	MX8GxxxB		0.39	0.47	0.66	0.78	0.98	1.18	1.27	1.57	1.96	2.35	2.55	3.14
90mm	40	MX9GxxxB		0.66	0.78	1.1	1.3	1.6	1.9	2.3	2.7	3.2	3.9	4.4	5.3
	60	MZ9GxxxB MY9GxxxB		0.98	1.18	1.57	1.96	2.35	2.94	3.14	3.92	4.70	5.59	6.27	10.9
	60	MR9GxxxB MP9GxxxB	High torque Gearboxes available for high ratios only												
	90	MZ9GxxxB MY9GxxxB		1.37	1.67	2.25	2.74	3.43	4.12	4.51	5.68	6.76	8.04	9.02	7.55
	90	MR9GxxxB MP9GxxxB	High torque Gearboxes available for high ratios only												

				Max output torque (Nm)											
Size	Power (W)	Type	Ratio	30	36	50	60	75	90	100	120	150	180	200	
60mm	6	MX6GxxxB		0.95	1.18	1.57	1.86	2.25	2.45	2.45	2.45	2.45	2.45	2.45	
70mm	15	MX7GxxxB		2.25	2.74	3.82	4.61	4.90	4.90	4.90	4.90	4.90	4.90	4.90	
80mm	25	MX8GxxxB		3.82	4.61	6.37	7.64	7.84	7.84	7.84	7.84	7.84	7.84	7.84	
90mm	40	MX9GxxxB		6.4	7.9	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	
	60	MZ9GxxxB MY9GxxxB		13	15.7	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	
	60	MR9GxxxB MP9GxxxB		-	-	15.2	18.2	22.1	26.5	29.4	29.4	29.4	29.4	29.4	
	90	MZ9GxxxB MY9GxxxB		9.11	11	15.2	17.8	19.6	19.6	19.6	19.6	19.6	19.6	19.6	
	90	MR9GxxxB MP9GxxxB		-	-	21.2	25.5	29.4	29.4	29.4	29.4	29.4	29.4	29.4	

Values in red are limited by gearbox torque capacity

Gearbox efficiency

	Size	Type	Weight kg	Ratio																							
				3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200	
Ball Bearings	60mm	MX6GxxxB	0.34	81%												75%								-			
	70mm	MX7GxxxB	0.54	81%												75%								-			
	80mm	MX8GxxxB	0.60	81%												75%								-			
	90mm	MX9GxxxB	1.2	81%												75%								70%			
		MZ9GxxxB	1.5	81%												75%								70%			
		MY9GxxxB	1.5	81%												75%								70%			
		MR9GxxxB MP9GxxxB	1.7 1.7	-												70%								70%			
Decimal Gearboxes	60mm	MX6G10XB	0.23	81%																							
	70mm	MX7G10XB	0.35	81%																							
	80mm	MX8G10XB	0.39	81%																							
	90mm	MX9G10XB	0.53	81%																							
		MZ9G10XB	0.65	81%																							