

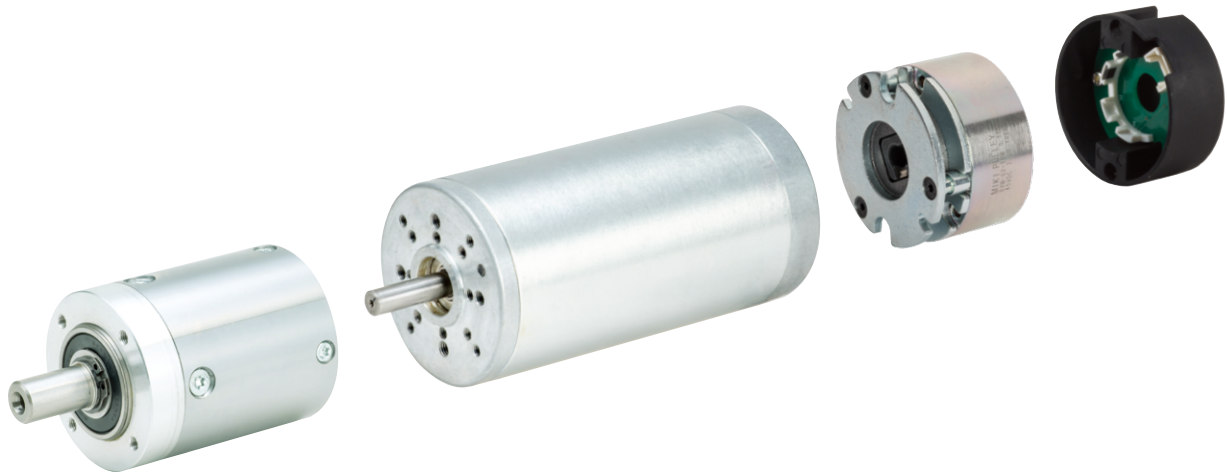


# XD & XPG SERIES GEARED MOTOR



# XD & XPG SERIES

## ■ XD & XPG SERIES

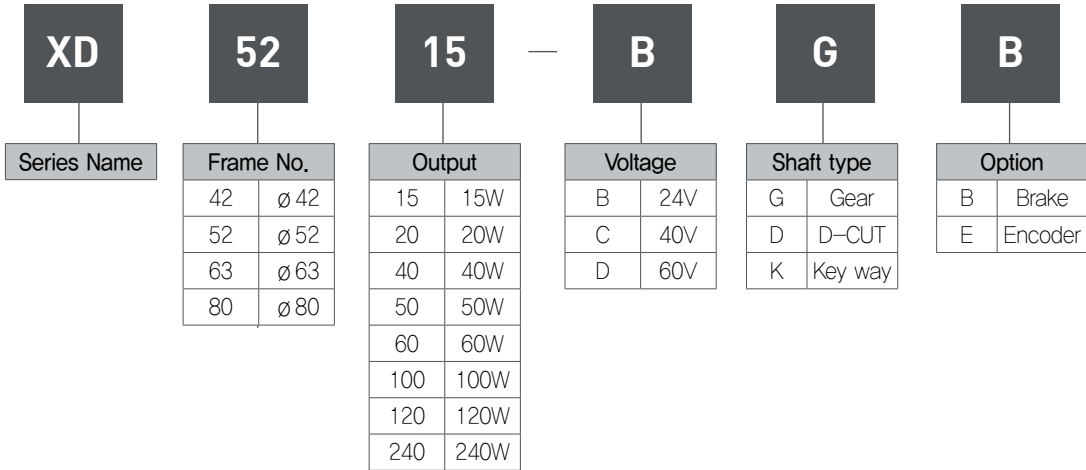


## ■ STANDARD FEATURE

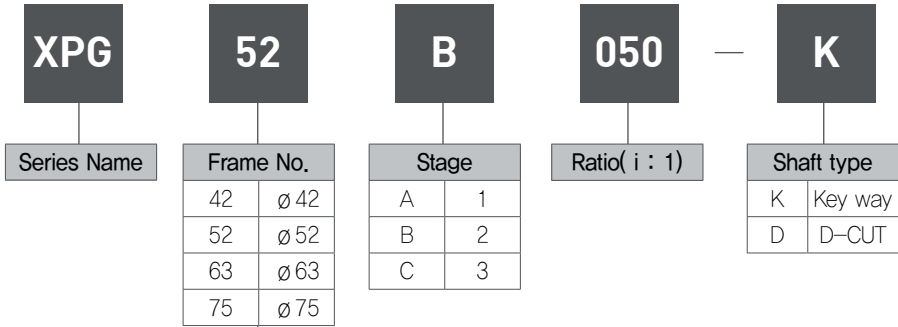
- Planetary DC Geared motor
  - Compact & Robust design
  - High efficiency
  - Low noise
- All ball bearing
- Protection class : IP40(standard), IP 54(special)
- Insulation class : B Class (130 °C)
- Special grease lubrication
- Ratio(i : 1) 3 to 710, other ratios on request
- Brake & Encoder can be added

## ■ CODING SYSTEM

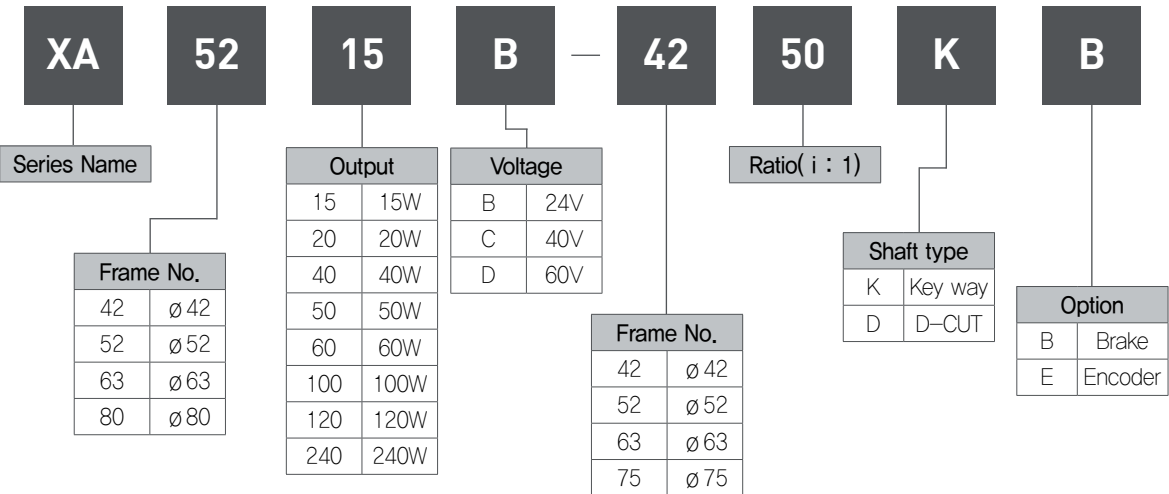
### ■ MOTOR



### ■ GEAR HEAD



### ■ MOTOR + GEAR HEAD



# XD & XPG SERIES

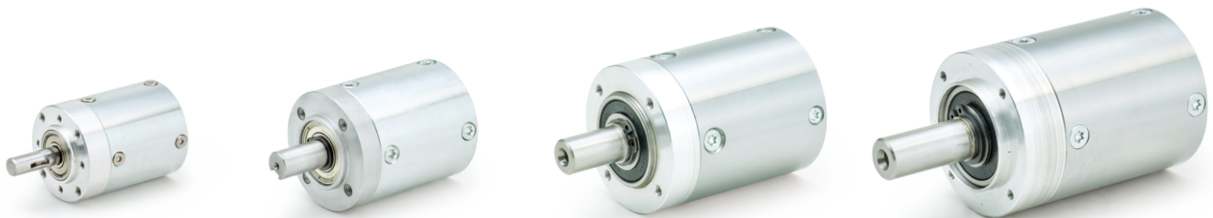
## ■ SPECIFICATION

### ■ MOTOR



Model	Voltage [Vdc]	Rated load				No load		Stall		
		Output [W]	Speed [r/min]	Current [A]	Torque [Nm]	Speed [r/min]	Current [A]	Torque [Nm]	Current [A]	
XD	42	24	15	3600	1.0	0.040	4200	0.15	0.210	4.5
		40	20	3150	1.3	0.060	3800	0.20	0.33	6.0
	52	24	40	3600	2.5	0.107	4200	0.30	0.510	10.0
		40	60	2900	3.2	0.198	3300	0.35	1.120	16.0
		60	50	3200	3.4	0.150	3650	0.40	1.008	18.0
	63	40	100	3300	5.2	0.290	3700	0.47	2.028	34.3
		60	120	2900	5.8	0.395	3200	0.50	3.100	46.0
		80	240	2800	7.0	0.750	3200	0.60	5.200	110.0

### ■ GEAR HEAD



Model	Ratio (i : 1)	Stage	Continuous torque Nm	Permissible load		Efficiency	Weight Kgf.	
				Axial	Radial			
XPG	42	1	3.5(*0.9)	150	250	0.9	0.26	
								4.5
								6.25
								8
	2	6	150	250	0.81	0.36		
							16	
							25	
							32	
							50	
	3	14	150	250	0.73	0.46		
							60	
							100	
							128	
							156	
							200	
512	150	250	0.73	0.46				
					256			
					312.5			
					400			
					512			

\* : plastic planet gears

## ■ SPECIFICATION

### ■ GEAR HEAD

Model	Ratio (i : 1)	Stage	Continuous torque Nm	Permissible load		Efficiency	Weight Kgf.	
				Axial	Radial			
XPG	52	1	4.5(*1.2)	500	350	0.9	0.58	
								4.5
								6.25
		2	8	500	350	0.81	0.7	
								8
								16
								25
								32
								50
		3	24	500	350	0.73	0.85	
								60
								100
								128
								156
200								
256								
312.5								
400								
512								

\* : plastic planet gears

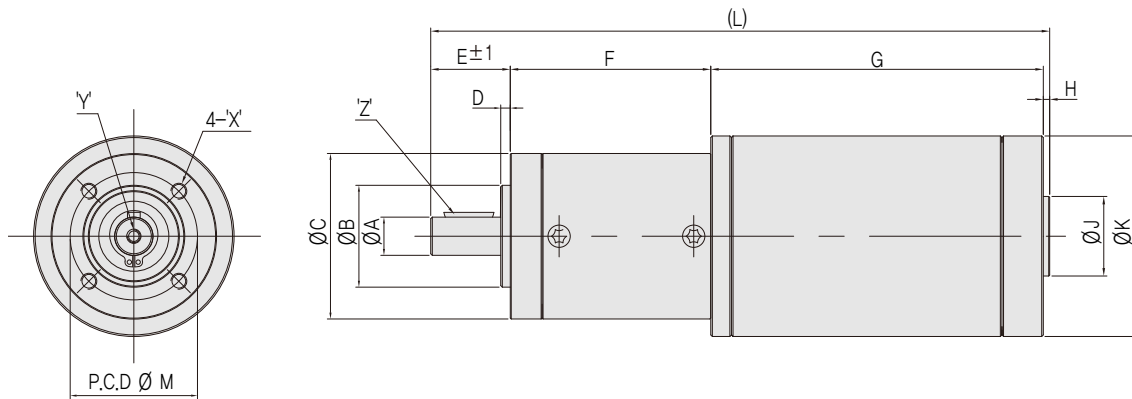
Model	Ratio (i : 1)	Stage	Continuous torque Nm	Permissible load		Efficiency	Weight Kgf.		
				Axial	Radial				
XPG	63	1	15(*5)	800	800	0.9	0.7		
								3	
								4	
		2	70	800	800	0.81	1.2		
								7	
								10	
								14.5	
								16.8	60.9
								29.4	70
		3	100	800	800	0.73	1.8		
								35	101.5
								42	—
								50	—
								70.6	250
84	304.5								
100	362.5								
147	426.3								
175	507.5								
210	710.5								

\* : plastic planet gears

Model	Ratio (i : 1)	Stage	Continuous torque Nm	Permissible load		Efficiency	Weight Kgf.		
				Axial	Radial				
XPG	75	1	25	1000	1000	0.9	1.5		
								4	
								5.5	
		2	120	1000	1000	0.81	2.5		
								7	
								10	
								14.5	
								16.8	42
								23.1	50
		3	160	1000	1000	0.73	3.6		
								27.5	60.9
								29.4	70
								35	101.5
								70.6	250
84	304.5								
100	362.5								
115.5	426.3								
147	507.5								
175	710.5								
210	—								

# XD & XPG SERIES

## ■ DIMENSIONS



ITEM	XPG42+XD42		XPG52+XD52		XPG63+XD63		XPG75+XD80	
A	ø 8 g6		ø 12 g6		Ø 15 g6		ø 19 g6	
B	ø 25 h7		Ø 32 h7		Ø 40 h7		Ø 50 h7	
C	Ø 42		Ø 52		Ø 63		Ø 75	
D	2		3		2.5		5	
E	25		25		32		49	
F	1 stage	40.8	47.5	62.5	80.2			
	2 stage	52.6	63	83	106			
	3 stage	64.4	78	105	133.2			
M	Ø 32 or 36		Ø 40		Ø 52		Ø 65	
X	M3 or M4, DP 8		M5, DP 8		M5, DP 10		M6, DP 16	
Y	-		-		-		M6, DP 18	
Z	Woodruff key 2x3.7		Woodruff key 4x6.5		Parallel key 5x5x20		Parallel key 6x6x28	
G	15W	70	40W	95	50W	95	120W	135
	20W	85	60W	125	100/120W	125	240W	175
H	2		2.5		2		3	
J	Ø 22		Ø 25		Ø 25		Ø 32	
K	Ø 42		Ø 52		Ø 63		Ø 80	
L	1 stage	111/126	143/173	158/188	215/255			
	2 stage	123/138	158/188	178/208	241/281			
	3 stage	134/149	173/203	200/230	268/308			

## ■ OPTIONS

### ■ Encoder

Magnet Encoder Modules



Optical Encoder Modules



Model		Magnet Encoder Modules			Optical Encoder Modules		
		SEC 6-2	SEC 6-6	SEC 6-12	SEC 5-100	SEC 5-200	SEC 5-500
Resolution	[ppr]	2	6	12	100	200	500
Diameter	[mm]	Ø42					
Pull-up resistor		Yes					
Output signal		2 square-wave signals of phase 90°					
Operating voltage	[Vdc]	12 (5 ~ 24)					
Operating temperature	[°C]	-40 ~ 85					

### ■ Electric brake(Power-off type)



Model		#01	#02	#03	#04
Diameter	[mm]	37	47	56	65
Operating voltage	[Vdc]	12 & 24			
Braking torque	[Nm]	0.24	0.50	1.00	2.00
Turn on time	[s]	0.010	0.010	0.035	0.040
Turn off time	[s]	0.010	0.010	0.020	0.025

※ This power-on brake is only available on request



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