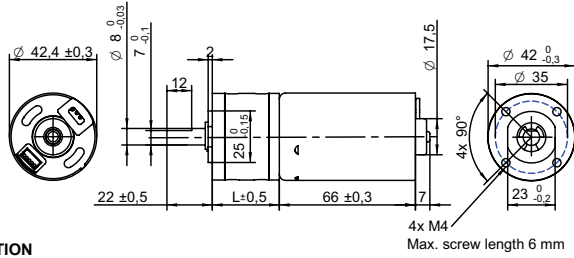


**DRAWING (mm)**  
**EXTERNAL DRIVER**



**PHOTO**

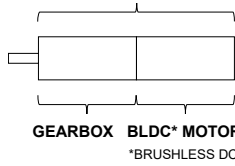


**MODEL NO. DESIGNATION**

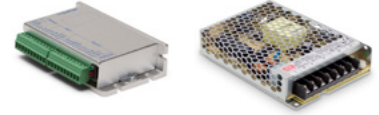


Example: PBT4266-24-4

**GEAR MOTOR**



**OPTIONS DRIVERS AND POWER SUPPLIES**

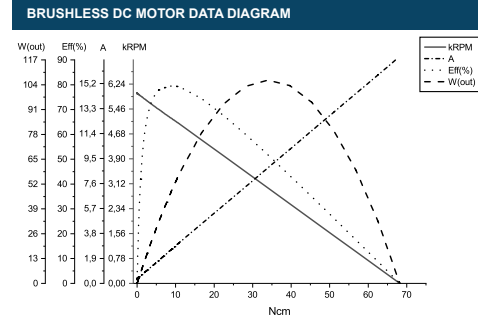


● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

GEAR MOTOR DATA													C												
Gear ratio		4:1	14:1	17:1	24:1	49:1	61:1	84:1	104:1	144:1	212:1	294:1	504:1	624:1	720:1	864:1	1062:1	1470:1	2500:1	3000:1	3600:1				
Nominal torque   ^ gearbox limit	Ncm	29 <sup>A</sup>	78 <sup>A</sup>	78 <sup>A</sup>	78 <sup>A</sup>	180 <sup>A</sup>	180 <sup>A</sup>	180 <sup>A</sup>	200 <sup>A</sup>	200 <sup>A</sup>	250 <sup>A</sup>	250 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>	290 <sup>A</sup>				
Nominal speed	rpm	1300	370	300	220	110	85	61	50	36	24	18	10	8	7	6	5	4	2	2	1				
Peak torque	Ncm	88	240	240	240	530	530	530	590	590	740	740	880	880	880	880	880	880	880	880	880				
Nominal power	W	39	34	34	34	29	29	29	29	29	24	24	24	24	24	24	20	20	20	20	20				
Gearbox efficiency	%	80	70	70	70	60	60	60	60	60	50	50	50	50	50	50	40	40	40	40	40				
Gearbox length   L	mm	32.5	39.2	39.2	39.2	45.9	45.9	45.9	45.9	45.9	52.6	52.6	52.6	52.6	52.6	52.6	59.6	59.6	59.6	59.6	59.6				
Weight	g	530	580	580	580	620	620	620	620	620	670	670	670	670	670	670	720	720	720	720	720				

GEAR MOTOR COMBINED DATA				C				GEARBOX SHAFT DATA				C				GEARBOX-SPECIFIC DATA				C			
Service life	hrs	5000		Radial play   thrust play	mm	≤ 0.05   ≤ 0.3		Material gear stage	Ratio 4:1 sintered steel		●		Material 14:1-24:1 ratio / stage	POM first + steel		●		Material > 24:1 ratio / stage	POM first + sintered steel + steel last				
Performance tolerances	%	± 15		Shaft axial load	N	29		Material > 24:1 ratio / stage	POM first + sintered steel + steel last				Direction of rotation	CCW or CW by reversed V polarity				Assembly front bell	mm	Maximum screw depth 6.0			
Operating temperature	°C	-10 to 60		Radial load	N	79		Press fit force max.	N	150		Backlash no load	°	≤ 3		Bearing type   shaft material	Ball bearing   SCM435		Motor pinion material   shape	Steel   straight		●	
IP rating		IP30		Compliance	RoHS and REACH		Label CE   UL	CE no   UL no		Manufacturing standard	ISO9001   ISO 14001   IATF 16949												

BRUSHLESS DC MOTOR DATA				C				BRUSHLESS DC MOTOR OTHER DATA				C				GEAR MOTOR RANGE STANDARD AVAILABILITY										
Brushless DC motor model:	Transmotec BT4266-24			Number of pole pairs	3			Nominal voltage	V	12   24		See separate data sheet		Nominal power	W	1.6 - 39		See separate data sheet		Diameter	mm	28 - 42		See separate data sheet		
Driver type	External			Number of phases	3			Max. winding temperature	°C	150			Commutator (hall) voltage	V	3.3-5			Motor insulation class	A							
No load speed	rpm	6000		Slot pole pairs	9S6P			No load current	mA	300		Rotor magnet	BNM-8			Start/Stall torque	mNm	91		Hall sensors and power harness length	mm	155 ± 10		●		
Nominal torque	mNm	91		Power harness end connector	A2502X-03P			●	Nominal current	A	2.6		Power harness	UL3132 20AWG 300V 150°C			●	Start/Stall current	A	17		Hall sensors harness end connector	KR1500 MX1.5mm			●
Max. efficiency	%	79		Hall sensors harness	UL10368 26AWG 300V 105°C			●	Terminal resistance	Ω	0.7		Housing material	SECD-0 1.4T			●	Terminal inductance	mH	0.5		Magnet material	Bonding NdFeB			●
Terminal inductance	mH	0.5		Rotor balancing grade	G6.3			●	Torque constant	mNm/A	40		CABLE AND PIN CONFIGURATION EXTERNAL DRIVER	C												
Torque constant	mNm/A	40		Phase	Cable color		Phase	Cable color		Power	Hall		U	Brown	HU	Green										
Speed constant	rpm/V	250		V	Grey		HV	Blue		V	HW		Yellow	+5V	Red											
Speed/ torque gradient	rpm/mNm	57		W	White		GND	Black		W	GND		Black													



**ACCESSORIES**  
Power supplies LRS V 3.3 - 48 See separate data sheet