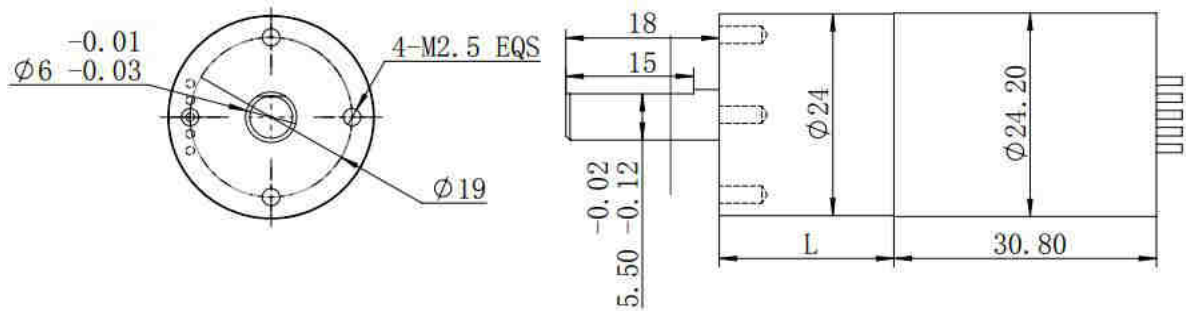


**TT24-BL2430 BLDC Planetary Gear Motor**



- Micro BLDC planetary gear motor with low speed and big torque
- Permissible max. loading:1N.m
- Brushless DC motor, with built-in hall induction driver
- Large starting force, stable and reliable operation, easy control
- Low power consumption, low noise, long service life
- Suitable to small diameter, low noise and big torque application

**Dimensions:**



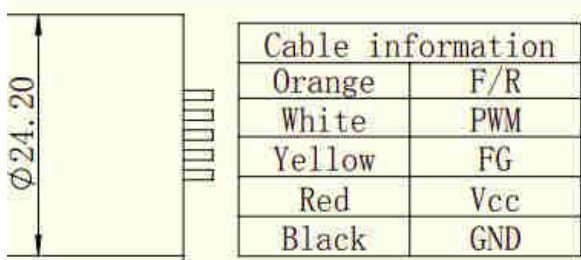
**Motor Technical data**

Motor Model	Rated Voltage	No-load speed	No-load current	Rated torque	Rated speed	Rated current	Rated power	Stall torque	Stall current
	VDC	RPM	mA	mN.m	RPM	mA	W	mN.m	A
BL2430-1260	12	6000	90	5	4800	330	2.3	27	1.4
BL2430-2460	24	6000	50	5	4800	180	2.3	27	0.75

**Gear Motor Technical data**

Voltage	Reduction Ratio	Gearbox Length L(mm)								
		4	5	16	20	25	64	80	100	125
12V	Number of gear stages	1	1	2	2	2	3	3	3	3
	Gearbox Length L(mm)	20.5	20.5	26.2	26.2	26.2	32	32	32	32
	No-load speed (RPM)	1500	1200	375	300	240	94	75	60	48
	Rated speed (RPM)	1200	960	300	240	192	75	60	48	38
	Rated torque (mN.m)	18	22	64	80	100	224	280	350	438
	Rated torque (mN.m)	18	22	64	80	100	224	280	350	438
24V	Number of gear stages	1	1	2	2	2	3	3	3	3
	Gearbox Length L(mm)	20.5	20.5	26.2	26.2	26.2	32	32	32	32
	No-load speed (RPM)	1500	1200	375	300	240	94	75	60	48
	Rated speed (RPM)	1200	960	300	240	192	75	60	48	38
	Rated torque (mN.m)	18	22	64	80	100	224	280	350	438
	Rated torque (mN.m)	18	22	64	80	100	224	280	350	438

**Wire diagram:**



1. Vcc connects positive wire, GND connects negative wire.
2. F/R is signal wire for differentiating CW and CCW.
3. FG is speed feedback signal, motor output 2 pulses per revolution.
4. PWM wire, connect GND or 0~0.5V full speed, 0.5~4.5V speed control, 4.5~5V stopping.

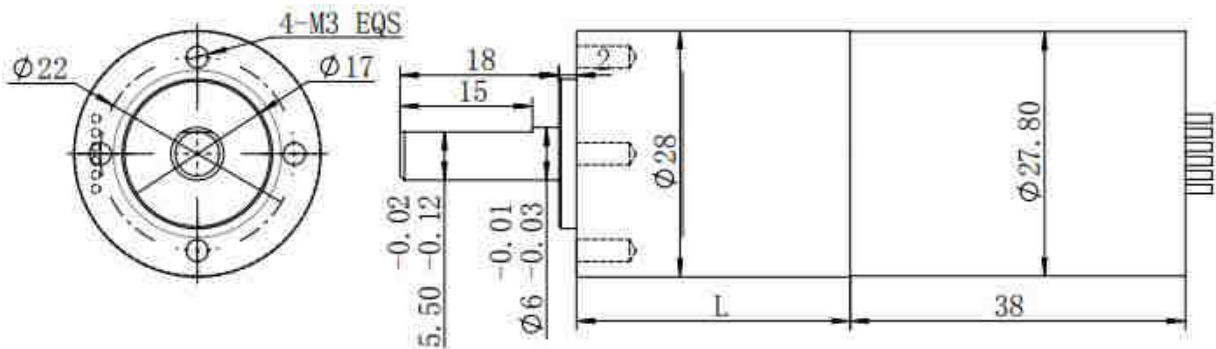
**Caution:** For it is brushless motor, the wires can't be connected wrong, otherwise it will be burnt.

**TT28-BL2838 BLDC Planetary Gear Motor**



- Micro BLDC planetary gear motor with low speed and big torque
- Permissible max. loading:2.0N.m
- Brushless DC motor, with built-in hall induction driver
- Large starting force, stable and reliable operation, easy control
- Low power consumption, low noise, long service life
- Suitable to small diameter, low noise and big torque application

**Dimensions:**



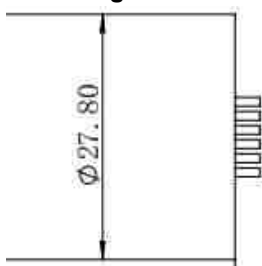
**Motor Technical data**

Motor Model	Rated Voltage	No-load speed	No-load current	Rated torque	Rated speed	Rated current	Rated power	Stall torque	Stall current
	VDC	RPM	mA	mN.m	RPM	mA	W	mN.m	A
BL2838-2460	24	6000	115	12	4700	420	5.7	120	1.8

**Gear Motor Technical data**

24V	<b>Reduction Ratio</b>	4	5	16	20	25	64	80	100	125
	<b>Number of gear stages</b>	1	1	2	2	2	3	3	3	3
	<b>Gearbox Length L(mm)</b>	23.3	23.3	29	29	29	34.7	34.7	34.7	34.7
	<b>No-load speed (RPM)</b>	1500	1200	375	300	240	94	75	60	48
	<b>Rated speed (RPM)</b>	1175	940	294	235	188	73	59	47	38
	<b>Rated torque (N.m)</b>	0.04	0.05	0.16	0.19	0.24	0.56	0.70	0.88	1.10
	<b>Reduction Ratio</b>	256	320	400	500	625				
	<b>Number of gear stages</b>	4	4	4	4	4				
	<b>Gearbox Length L(mm)</b>	40.4	40.4	40.4	40.4	40.4				
	<b>No-load speed (RPM)</b>	23	19	15	12	10				
<b>Rated speed (RPM)</b>	18	15	12	9	8					
<b>Rated torque(N.m)</b>	2.00	2.00	2.00	2.00	2.00					

**Wire diagram:**



Cable information	
Red	VCC
Black	GND
Yellow	F/R
Green	FG
Blue	PWM
White	BRAKE

1. Vcc connects positive wire.
2. GND connects negative wire.
3. F/R is signal wire for differentiating CW and CCW.
4. FG is speed feedback signal, motor output 6 pulses per revolution.
5. PWM wire, connect GND or 0~0.5V full speed, 0.5~4.5V speed control, 4.5~5V stopping.
6. Brake wire is effective when connected to GND.

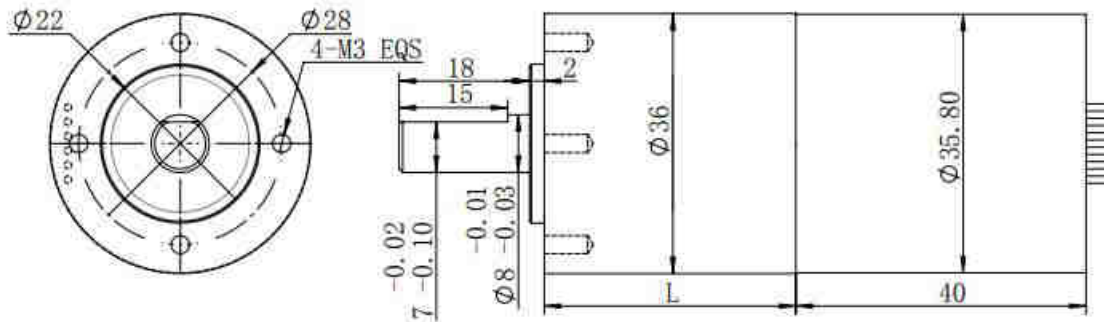
**Caution:** For it is brushless motor, the wires can't be connected wrong, otherwise it will be burnt.

**TT36-BL3640 BLDC Planetary Gear Motor**



- Micro BLDC planetary gear motor with low speed and big torque
- Permissible max. loading:3N.m
- Brushless DC motor, with built-in hall induction driver
- Large starting force, stable and reliable operation, easy control
- Low power consumption, low noise, long service life
- Suitable to small diameter, low noise and big torque application

**Dimensions:**



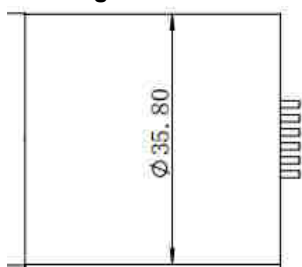
**Motor Technical data**

Motor Model	Rated Voltage	No-load speed	No-load current	Rated torque	Rated speed	Rated current	Rated power	Stall torque	Stall current
	VDC	RPM	mA	mN.m	RPM	mA	W	mN.m	A
BL3640-1240	12	4000	130	15	3200	650	5	75	2.7

**Gear Motor Technical data**

12V	<b>Reduction Ratio</b>	3.7	5.2	14	19	27	50	71	100	139
	<b>Number of gear stages</b>	1	1	2	2	2	3	3	3	3
	<b>Gearbox Length L(mm)</b>	26.5	26.5	32.7	32.7	32.7	38.9	38.9	38.9	38.9
	<b>No-load speed (RPM)</b>	1081	769	286	211	148	80	56	40	29
	<b>Rated speed (RPM)</b>	865	615	229	168	119	64	45	32	23
	<b>Rated torque (N.m)</b>	0.05	0.07	0.17	0.23	0.33	0.55	0.78	1.10	1.52
	<b>Reduction Ratio</b>	189	263	369	516	721				
	<b>Number of gear stages</b>	4	4	4	4	4				
	<b>Gearbox Length L(mm)</b>	45.1	45.1	45.1	45.1	45.1				
	<b>No-load speed (RPM)</b>	21	15	11	8	6				
	<b>Rated speed (RPM)</b>	17	12	9	6	4				
	<b>Rated torque(N.m)</b>	2.07	2.88	3.00	3.00	3.00				

**Wire diagram:**



Cable information	
Red	VCC
Black	GND
Blue	F/R
Green	FG
White	PWN
Brown	BRAKE

1. Vcc connects positive wire.
2. GND connects negative wire.
3. F/R is signal wire for differentiating CW and CCW.
4. FG is speed feedback signal, motor output 6 pulses per revolution.
5. PWM wire, connect GND or 0~0.5V full speed, 0.5~4.5V speed control, 4.5~5V stopping.
6. Brake wire is effective when connected to GND.

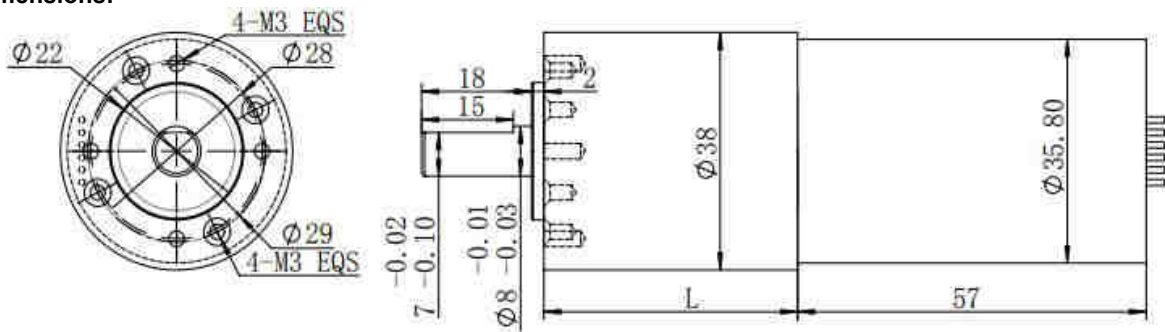
**Caution:** For it is brushless motor, the wires can't be connected wrong, otherwise it will be burnt.

**TT38-BL3657 BLDC Planetary Gear Motor**



- Micro BLDC planetary gear motor with low speed and big torque
- Permissible max. loading: 6N.m
- Brushless DC motor, with built-in hall induction driver
- Large starting force, stable and reliable operation, easy control
- Low power consumption, low noise, long service life
- Suitable to small diameter, low noise and big torque application

**Dimensions:**



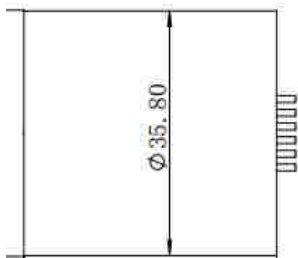
**Motor Technical data**

Motor Model	Rated Voltage	No-load speed	No-load current	Rated torque	Rated speed	Rated current	Rated power	Stall torque	Stall current
	VDC	RPM	mA	mN.m	RPM	mA	W	mN.m	A
BL3657-2460	24	6000	150	30	5000	880	15	215	5.5

**Gear Motor Technical data**

24V	<b>Reduction Ratio</b>	4	6	16	24	36	64	96	144	216
	<b>Number of gear stages</b>	1	1	2	2	2	3	3	3	3
	<b>Gearbox Length L(mm)</b>	30	30	39.5	39.5	39.5	49.2	49.2	49.2	49.2
	<b>No-load speed (RPM)</b>	1500	1000	375	250	167	94	63	42	28
	<b>Rated speed (RPM)</b>	1250	833	313	208	139	78	52	35	23
	<b>Rated torque (N.m)</b>	0.11	0.16	0.39	0.58	0.87	1.40	2.10	3.15	4.73
	<b>Reduction Ratio</b>	256	384	576	864	1296				
	<b>Number of gear stages</b>	4	4	4	4	4				
	<b>Gearbox Length L(mm)</b>	58.7	58.7	58.7	58.7	58.7				
	<b>No-load speed (RPM)</b>	23	16	10	7	5				
<b>Rated speed (RPM)</b>	20	13	9	6	4					
<b>Rated torque(N.m)</b>	5.00	6.00	6.00	6.00	6.00					

**Wire diagram:**



Cable information	
Red	VCC
Black	GND
Blue	F/R
Green	FG
White	PWN
Brown	BRAKE

1. Vcc connects positive wire.
2. GND connects negative wire.
3. F/R is signal wire for differentiating CW and CCW.
4. FG is speed feedback signal, motor output 6 pulses per revolution.
5. PWM wire, connect GND or 0~0.5V full speed, 0.5~4.5V speed control, 4.5~5V stopping.
6. Brake wire is effective when connected to GND.

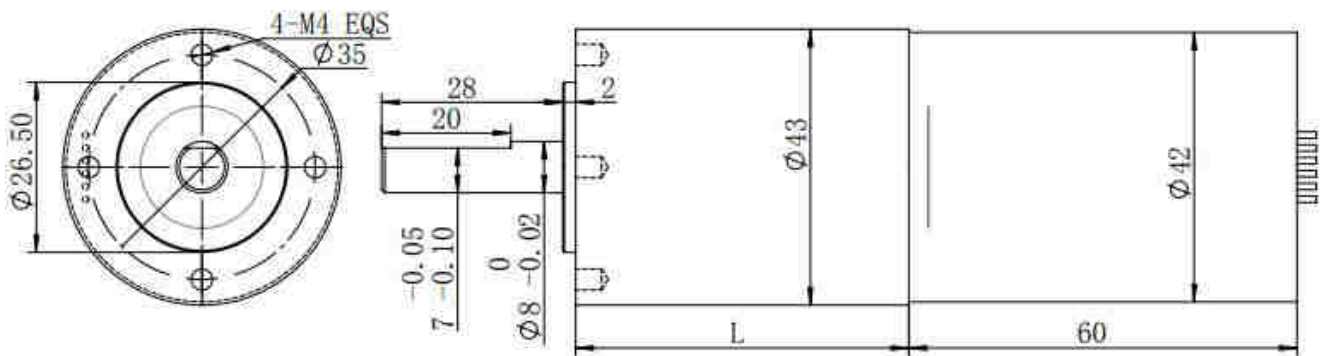
**Caution:** For it is brushless motor, the wires can't be connected wrong, otherwise it will be burnt.

**TT43-BL4260 BLDC Planetary Gear Motor**



- Micro BLDC planetary gear motor with low speed and big torque
- Permissible max. loading: 12N.m
- Brushless DC motor, with built-in hall induction driver
- Large starting force, stable and reliable operation, easy control
- Low power consumption, low noise, long service life
- Suitable to small diameter, low noise and big torque application

**Dimensions:**



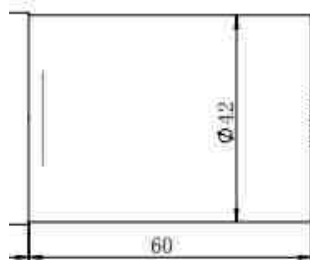
**Motor Technical data**

Motor Model	Rated Voltage	No-load speed	No-load current	Rated torque	Rated speed	Rated current	Rated power	Stall torque	Stall current
	VDC	RPM	mA	mN.m	RPM	A	W	mN.m	A
BL4260-2460	24	6000	190	50	5000	1.4	15	370	9.5

**Gear Motor Technical data**

24V	Reduction Ratio	3.6	5.3	13	19	28.5	47	69	102	151
	Number of gear stages	1	1	2	2	2	3	3	3	3
	Gearbox Length L(mm)	37.6	37.6	49.5	49.5	49.5	60	60	60	60
	No-load speed (RPM)	1667	1132	462	316	211	128	87	59	40
	Rated speed (RPM)	1389	943	385	263	175	106	72	49	33
	Rated torque (N.m)	0.16	0.24	0.53	0.77	1.15	1.72	2.52	3.72	5.51
	Reduction Ratio	198.5	249	347	435	545	644	807		
	Number of gear stages	4	4	4	4	4	4	4		
	Gearbox Length L(mm)	70.5	70.5	70.5	70.5	70.5	70.5	70.5		
	No-load speed (RPM)	30	24	17	14	11	9	7		
Rated speed (RPM)	25	20	14	11	9	8	6			
Rated torque(N.m)	6.45	8.10	6.00	11.28	12.00	12.00	12.00			

**Wire diagram:**



Cable information	
Red	VCC
Black	GND
Blue	F/R
Green	FG
White	PWM
Brown	BRAKE

1. Vcc connects positive wire.
2. GND connects negative wire.
3. F/R is signal wire for differentiating CW and CCW.
4. FG is speed feedback signal, motor output 6 pulses per revolution.
5. PWM wire, connect GND or 0~0.5V full speed, 0.5~4.5V speed control, 4.5~5V stopping.
6. Brake wire is effective when connected to GND.

**Caution:** For it is brushless motor, the wires can't be connected wrong, otherwise it will be burnt.