

### Specifications

Specification	PBAAR28-G01-040	PBAAR28-G02-040	PBAAR42-G02-050	PBAAR42-G05-050
Motor Frame Size (mm)	28 (NEMA 11)		42 (NEMA 17)	
Drive Screw Type	Precision Ball Screw			
Screw Lead	1mm	2mm	2mm	5mm
Travel	40mm		50mm	
Repeatability	±0.005mm			
Lost Motion	0.010mm			
Maximum Speed	20mm/sec	40mm/sec		100mm/sec
Accel/Decel Time	Min. 0.2 sec			
Thrust Force	50N	25N	80N	30N
Mass	270g		660g	
Operating Temperature	0 ~ 40°C (no condensation)			

Motor Specification	PBAAR28-G01-040	PBAAR28-G02-040	PBAAR42-G02-050	PBAAR42-G05-050
Driving Method	2-phase bi-polar			
Rated Voltage	3.8V (DC)		2.5V (DC)	
Rated Current	0.67A/phase		1.2A/phase	
Winding Resistance	5.6Ω		2.1Ω	
Insulation Class	Class B (130°C)			

#### Precautions:

- Radial load is not applicable on AR (captive) type
- Specifications above are reference value measured in vertical position at virgin condition
- Sensor is not built-in with standard design

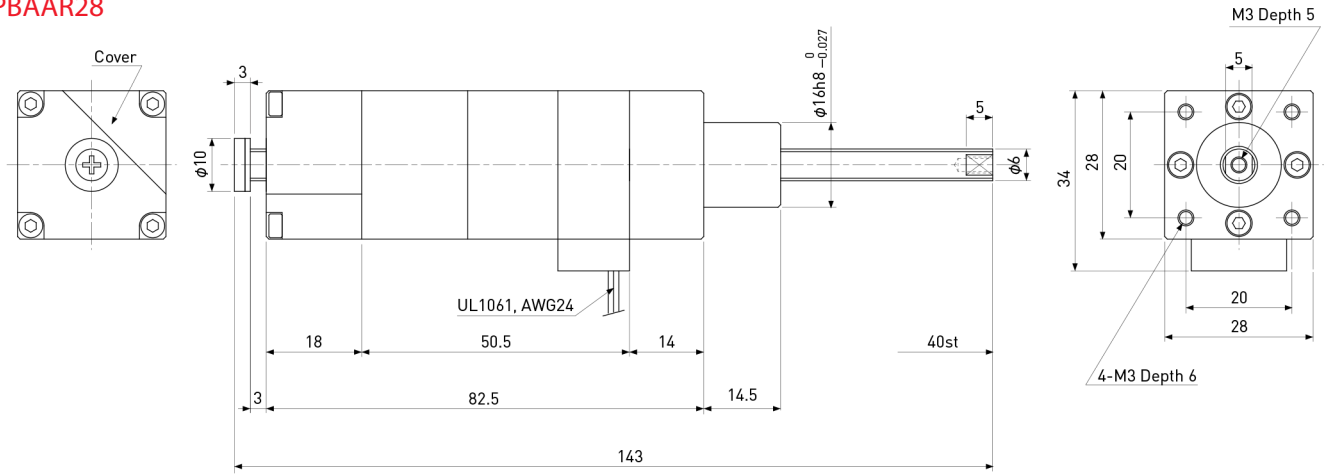
### Part Numbering

PBA AR 28 G 01 040  
1 2 3 4 5 6

- 1: Series Designation (PBA)
- 2: Cylinder type  
CL: Non-Captive Type  
AR: Captive Type
- 3: Motor frame size (mm)
- 4: Drive screw type  
G: Precision Ball Screw

- 5: Screw Lead  
01: 1mm  
02: 2mm  
05: 5mm
- 6: Travel, mm  
040: 40mm  
050: 50mm

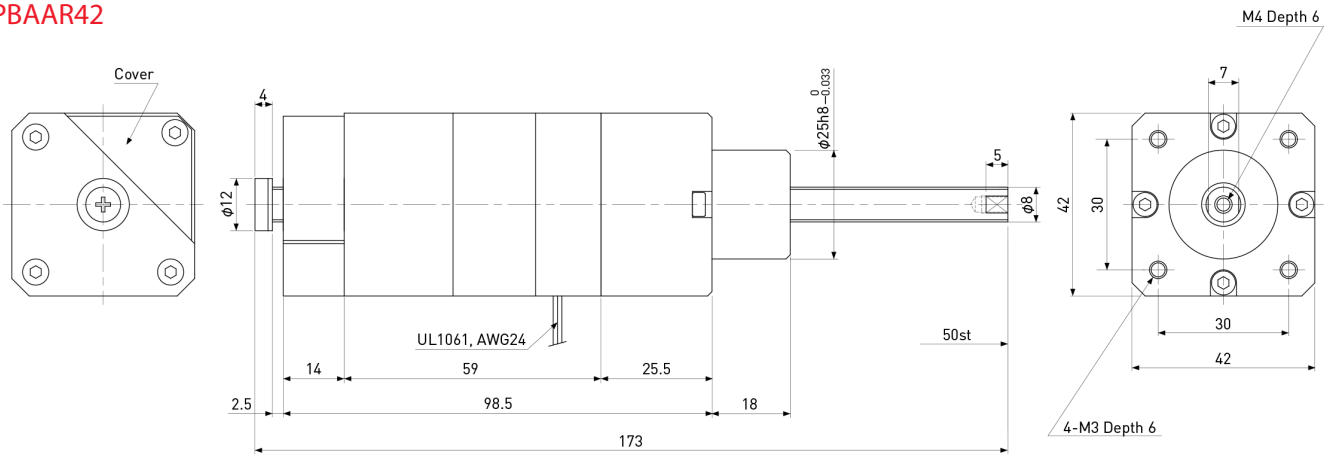
## PBAAR28



Motor lead wire (310mm)

A	Black
$\bar{A}$	Green
B	Red
$\bar{B}$	Blue

## PBAAR42



Motor lead wire (310mm)

A	Black
$\bar{A}$	Green
B	Red
$\bar{B}$	Blue