

Ezi-SERVO[®]

Closed Loop Stepping System

Brake Integrated Step Motor

- Non-excitation Electromagnetic Brake
- Automatic Braking during Power Cutoff
- High Friction Torque
- Short Braking Time
- Long Life & Durable

BK





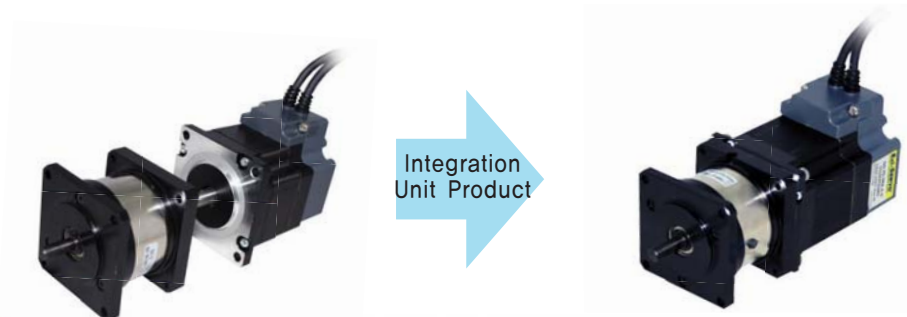
Ezi-SERVO[®] BK

Closed Loop Stepping System

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Ezi-SERVO BK Series Specification

Ezi-SERVO BK Series, Fastech's new unit product, maximizes User's operational convenience with integration between Ezi-SERVO Series of stepping motor and non-excitation electromagnetic brake that has big friction of brake torque and rapid brake timing.



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Ezi-SERVO-BK Series Advantages

■ Apply non-excitation electromagnetic brake

Different from excitation type of brake that only generates braking-power by electromagnetic-power when power supplies at brake and loses brake-power when power cutoff, Ezi-SERVO-BK Series adopts non-excitation electromagnetic brake that immediately generate friction of brake torque by inner spring's binding post-tensioning force once power cutoff. So Ezi-SERVO BK Series enables complete stopping of stepping motor and can forestall risks with brake's mechanical braking-power under emergency situation as like sudden blackout in machine operation.

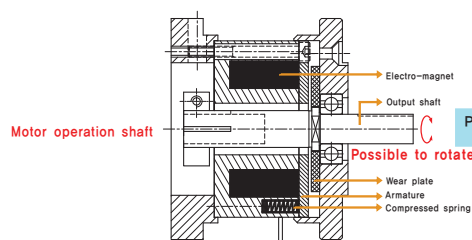
■ Automatic Braking during power cutoff or blackout

Ezi-SERVO BK Series, Unit product, integrated between high performance of non-excitation electromagnetic brake and step motor that enables immediate braking to keep holding point and prevent falling under power cutoff or blackout during operation so user can be flexible in responding to sudden situation.

■ Rapid Brake Timing

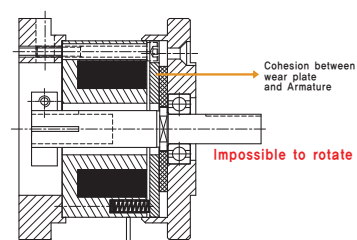
Ezi-SERVO BK Series, non-excitation electromagnetic brake, enables rapid braking because loaded spring closed brake can quicken rising of brake torque.

■ Turn on electric current



(Output shaft can be rotated because wear plate can be separate from Armature by electromagnetic force)

■ Power cutoff or blackout



(Impossible to rotate because compressed spring power let wear plate stick to Armature and brakes output shaft.)

■ Long Durability

Brake integrated into Ezi-SERVO-BK Series applies long durability of brake wear plate (Brake Lining) so it guarantees high durability and long life cycle.

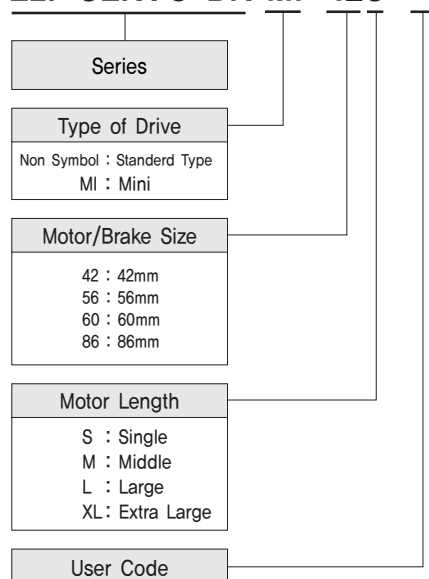
● Ezi-SERVO-BK Series Line-up

Series	Composition	Motor/Brake Size			
		42mm	56mm	60mm	86mm
Ezi-SERVO ST Series	Ezi-SERVO Motor + Electromagnetic Brake + Ezi-SERVO ST Driver				
Ezi-SERVO PR Series	Ezi-SERVO Motor + Electromagnetic Brake + Ezi-SERVO PR Controller/Driver				
Ezi-SERVO BT Series	Ezi-SERVO Motor + Electromagnetic Brake + Ezi-SERVO BT Driver				—
Ezi-SERVO ALL Series	Ezi-SERVO Motor + Electromagnetic Brake + Ezi-SERVO ALL Controller/Driver				—

● Ezi-SERVO BK Series Part Number

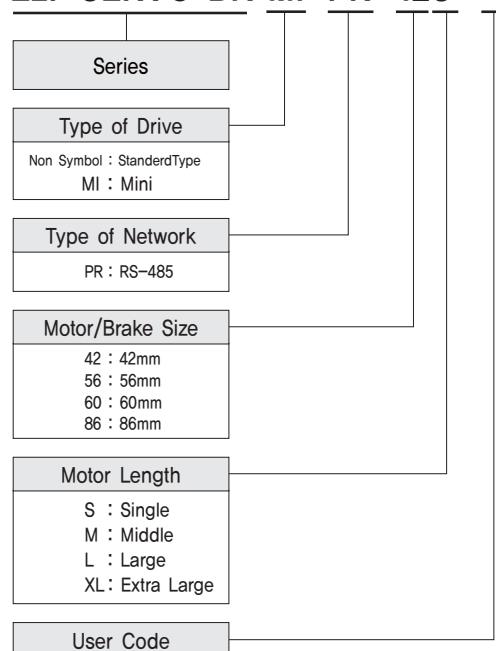
◆ Ezi-SERVO ST Series

Ezi-SERVO BK MI-42S-□



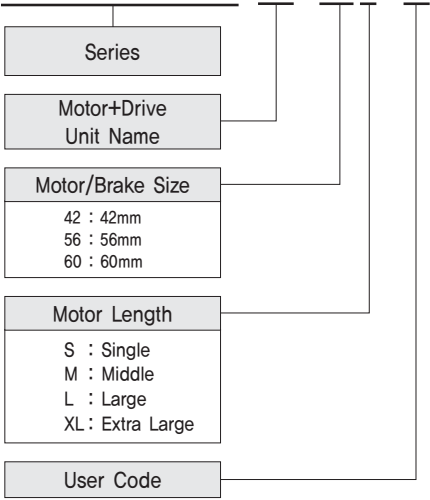
◆ Ezi-SERVO Plus R Series

Ezi-SERVO BK MI-PR-42S-□



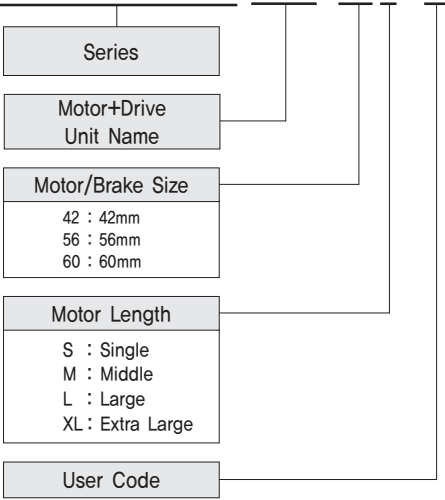
◆ Ezi-SERVO BT Series

Ezi-SERVO BK BT-60S-□



◆ Ezi-SERVO ALL Series

Ezi-SERVO BK ALL-60S-□



● Type of Ezi-SERVO BK Series

Please see all type of Ezi-SERVO-BK Series already released as follows.

	Part Number	Combination Drive	Brake Size
Ezi-SERVO ST	Ezi-SERVO BK-42S	EzS-PD-42S	42mm
	Ezi-SERVO BK-42M	EzS-PD-42M	
	Ezi-SERVO BK-42L	EzS-PD-42L	
	Ezi-SERVO BK-42XL	EzS-PD-42XL	
	Ezi-SERVO BK MI-42S	EzS-PD-MI-42S	
	Ezi-SERVO BK MI-42M	EzS-PD-MI-42M	
	Ezi-SERVO BK MI-42L	EzS-PD-MI-42L	
	Ezi-SERVO BK MI-42XL	EzS-PD-MI-42XL	
	Ezi-SERVO BK-56S	EzS-PD-56S	56mm
	Ezi-SERVO BK-56M	EzS-PD-56M	
	Ezi-SERVO BK-56L	EzS-PD-56L	
	Ezi-SERVO BK-60S	EzS-PD-60S	60mm
	Ezi-SERVO BK-60M	EzS-PD-60M	
	Ezi-SERVO BK-60L	EzS-PD-60L	
	Ezi-SERVO BK-86M	EzS-PD-86M	86mm
	Ezi-SERVO BK-86L	EzS-PD-86L	
	Ezi-SERVO BK-86XL	EzS-PD-86XL	
Ezi-SERVO Plus-R	Ezi-SERVO BK PR-42S	EzS-NDR-42S	42mm
	Ezi-SERVO BK PR-42M	EzS-NDR-42M	
	Ezi-SERVO BK PR-42L	EzS-NDR-42L	
	Ezi-SERVO BK PR-42XL	EzS-NDR-42XL	
	Ezi-SERVO BK MI-PR-42S	EzS-NDR-MI-42S	
	Ezi-SERVO BK MI-PR-42M	EzS-NDR-MI-42M	
	Ezi-SERVO BK MI-PR-42L	EzS-NDR-MI-42L	
	Ezi-SERVO BK MI-PR-42XL	EzS-NDR-MI-42XL	
	Ezi-SERVO BK PR-56S	EzS-NDR-56S	56mm
	Ezi-SERVO BK PR-56M	EzS-NDR-56M	
	Ezi-SERVO BK PR-56L	EzS-NDR-56L	
	Ezi-SERVO BK PR-60S	EzS-NDR-60S	60mm
	Ezi-SERVO BK PR-60M	EzS-NDR-60M	
	Ezi-SERVO BK PR-60L	EzS-NDR-60L	
	Ezi-SERVO BK PR-86M	EzS-NDR-86M	86mm
	Ezi-SERVO BK PR-86L	EzS-NDR-86L	
	Ezi-SERVO BK PR-86XL	EzS-NDR-86XL	
Ezi-SERVO BT	Ezi-SERVO BK BT-42S	Drive Integrated	42mm
	Ezi-SERVO BK BT-42M	Drive Integrated	
	Ezi-SERVO BK BT-42L	Drive Integrated	
	Ezi-SERVO BK BT-42XL	Drive Integrated	
	Ezi-SERVO BK BT-56S	Drive Integrated	56mm
	Ezi-SERVO BK BT-56M	Drive Integrated	
	Ezi-SERVO BK BT-56L	Drive Integrated	
	Ezi-SERVO BK BT-60S	Drive Integrated	60mm
	Ezi-SERVO BK BT-60M	Drive Integrated	
	Ezi-SERVO BK BT-60L	Drive Integrated	
Ezi-SERVO ALL	Ezi-SERVO BK ALL-42S	Drive Integrated	42mm
	Ezi-SERVO BK ALL-42M	Drive Integrated	
	Ezi-SERVO BK ALL-42L	Drive Integrated	
	Ezi-SERVO BK ALL-42XL	Drive Integrated	
	Ezi-SERVO BK ALL-56S	Drive Integrated	56mm
	Ezi-SERVO BK ALL-56M	Drive Integrated	
	Ezi-SERVO BK ALL-56L	Drive Integrated	
	Ezi-SERVO BK ALL-60S	Drive Integrated	60mm
	Ezi-SERVO BK ALL-60M	Drive Integrated	
	Ezi-SERVO BK ALL-60L	Drive Integrated	

● Ezi-SERVO-BK Series Specification and Drawing

◆ Ezi-SERVO-ST Series Specification

Unit Part Number	Motor						Electromagnetic Brake					Unit
	Size (mm)	Length L (mm)	Inertia Moment (g · cm ²)	Rated Current (A/Phase)	Voltage (V)	Hold-ing Torque (N · m)	Form	Input Voltage (V)	Rated Current (A)	Power Consumption (W)	Friction Torque (N · m)	Weight (Kg)
Ezi-SERVO BK-42S	42	33	35	1,2	3,36	0,32	Non-excitation Type	24VDC ±10%	0,3A ±10%	8,2	0,2	510
Ezi-SERVO BK-42M		39	54		4,32	0,44						570
Ezi-SERVO BK-42L		47	77		4,56	0,5						640
Ezi-SERVO BK-42XL		59	114		7,2	0,8						770
Ezi-SERVO BK MI-42S		33	35		3,36	0,32						510
Ezi-SERVO BK MI-42M		39	54		4,32	0,44						570
Ezi-SERVO BK MI-42L		47	77		4,56	0,5						640
Ezi-SERVO BK MI-42XL		59	114		7,2	0,8						770
Ezi-SERVO BK-56S	56	46	120	3	1,56	0,64			0,3A ±10%	7,5	0,7	1030
Ezi-SERVO BK-56M		54	200		1,62	1						1190
Ezi-SERVO BK-56L		80	480		2,7	2						1630
Ezi-SERVO BK-60S	60	46	140	4	1,52	0,88			0,3A ±10%	7,5	0,7	1150
Ezi-SERVO BK-60M		56	320		1,56	1,28						1350
Ezi-SERVO BK-60L		90	800		2,6	2,4						1960
Ezi-SERVO BK-86M	86	79	1400	6	2,4	4			0,43A ±10%	10,5	2,5	3600
Ezi-SERVO BK-86L		117	2700		3,6	7,5						5100
Ezi-SERVO BK-86XL		155	4000		4,38	9						6600

* Electromagnetic brake will not be using for braking but for holding position when power-off.

* Weight is total sum of motor and electromagnetic brake integrated.

◆ Ezi-SERVO Plus-R Series Specification

Unit Part Number	Motor						Electromagnetic Brake					Unit
	Size (mm)	Length L (mm)	Inertia Moment (g · cm ²)	Rated Current (A/Phase)	Voltage (V)	Hold-ing Torque (N · m)	Form	Input Voltage (V)	Rated Current (A)	Power Consumption (W)	Friction Torque (N · m)	Weight (Kg)
Ezi-SERVO BK PR-42S	42	33	35	1,2	3,36	0,32	Non-excitation Type	24VDC ±10%	0,3A ±10%	8,2	0,2	500
Ezi-SERVO BK PR-42M		39	54		4,32	0,44						570
Ezi-SERVO BK PR-42L		47	77		4,56	0,5						640
Ezi-SERVO BK PR-42XL		59	114		7,2	0,8						770
Ezi-SERVO BK MI-PR-42S		33	35		3,36	0,32						500
Ezi-SERVO BK MI-PR-42M		39	54		4,32	0,44						570
Ezi-SERVO BK MI-PR-42L		47	77		4,56	0,5						640
Ezi-SERVO BK MI-PR-42XL		59	114		7,2	0,8						770
Ezi-SERVO BK PR-56S	56	46	120	3	1,56	0,64			0,3A ±10%	7,5	0,7	1030
Ezi-SERVO BK PR-56M		54	200		1,62	1						1190
Ezi-SERVO BK PR-56L		80	480		2,7	2						1630
Ezi-SERVO BK PR-60S	60	46	140	4	1,52	0,88			0,3A ±10%	7,5	0,7	1150
Ezi-SERVO BK PR-60M		56	320		1,56	1,28						1350
Ezi-SERVO BK PR-60L		90	800		2,6	2,4						1960
Ezi-SERVO BK PR-86M	86	79	1400	6	2,4	4			0,43A ±10%	10,5	2,5	3600
Ezi-SERVO BK PR-86L		117	2700		3,6	7,5						5100
Ezi-SERVO BK PR-86XL		155	4000		4,38	9						6600

* Electromagnetic brake will not be using for braking but for holding position when power-off.

* Weight is total sum of motor and electromagnetic brake integrated.

◆ Ezi-SERVO ST Series Drawings (42mm)

Ezi-SERVO ST Series Unit Part Number		Length L (mm)	Motor Part Number
Ezi-SERVO BK-42S	Ezi-SERVO BK MI-42S	33	EzM-42S
Ezi-SERVO BK-42M	Ezi-SERVO BK MI-42M	39	EzM-42M
Ezi-SERVO BK-42L	Ezi-SERVO BK MI-42L	47	EzM-42L
Ezi-SERVO BK-42XL	Ezi-SERVO BK MI-42XL	59	EzM-42XL

* Ezi-SERVO BK MI-42S/M/L/XL only can be operated by 24VDC Motor input voltage.

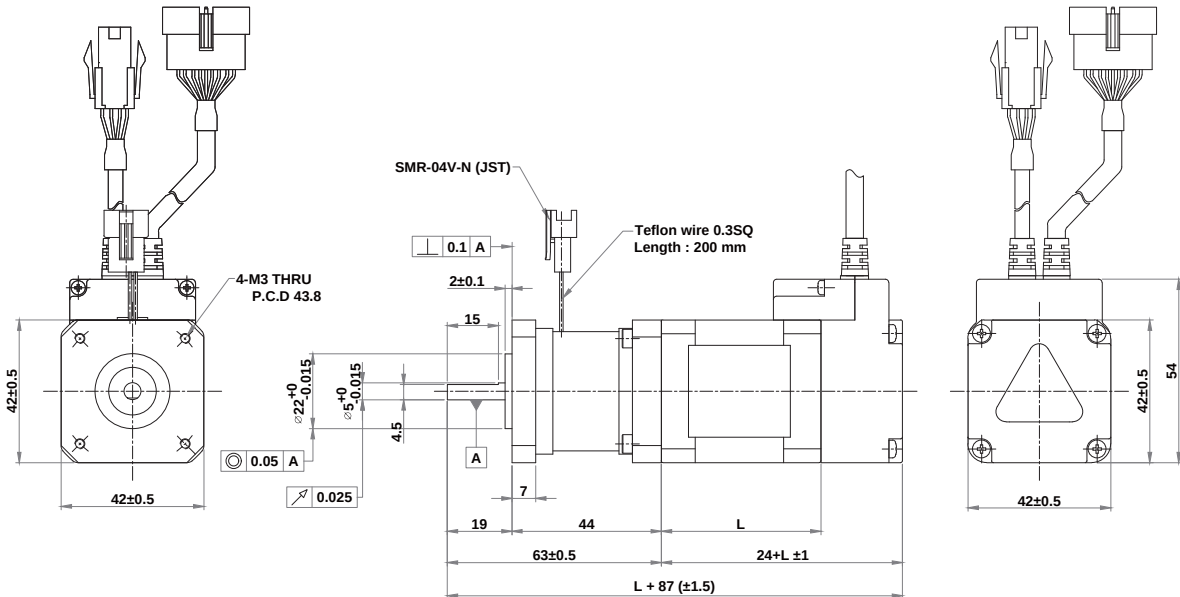
* Ezi-SERVO BK 42S/M/L/XL can be operated by 24VDC and also 40VDC Motor input voltage.

◆ Ezi-SERVO Plus R Series Drawings (42mm)

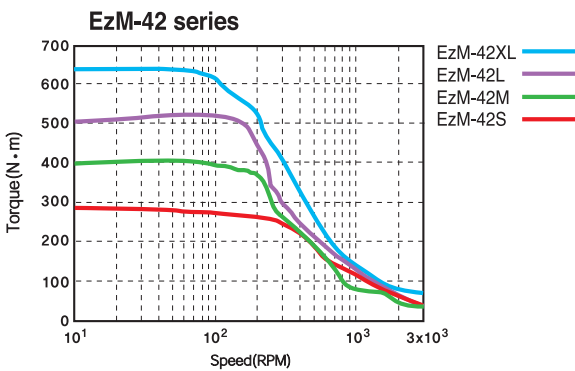
Ezi-SERVO Plus R Series Unit Part Number		Length L (mm)	Motor Part Number
Ezi-SERVO BK PR-42S	Ezi-SERVO BK MI-PR-42S	33	EzM-42S
Ezi-SERVO BK PR-42M	Ezi-SERVO BK MI-PR-42M	39	EzM-42M
Ezi-SERVO BK PR-42L	Ezi-SERVO BK MI-PR-42L	47	EzM-42L
Ezi-SERVO BK PR-42XL	Ezi-SERVO BK MI-PR-42XL	59	EzM-42XL

* Ezi-SERVO BK MI-42S/M/L/XL only can be operated by 24VDC Motor input voltage.

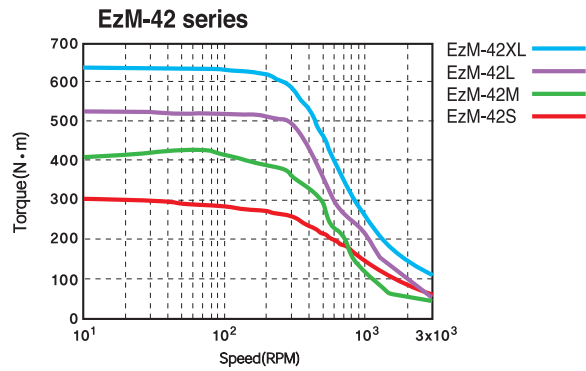
* Ezi-SERVO BK 42S/M/L/XL can be operated by 24VDC and also 40VDC Motor input voltage.



◆ Ezi-SERVO ST & Plus R Series Speed-Torque Curve (Motor Size 42mm)



※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO



※ Measured Condition : Motor Voltage = 40VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO

◆ Ezi-SERVO ST Series Drawings (56mm)

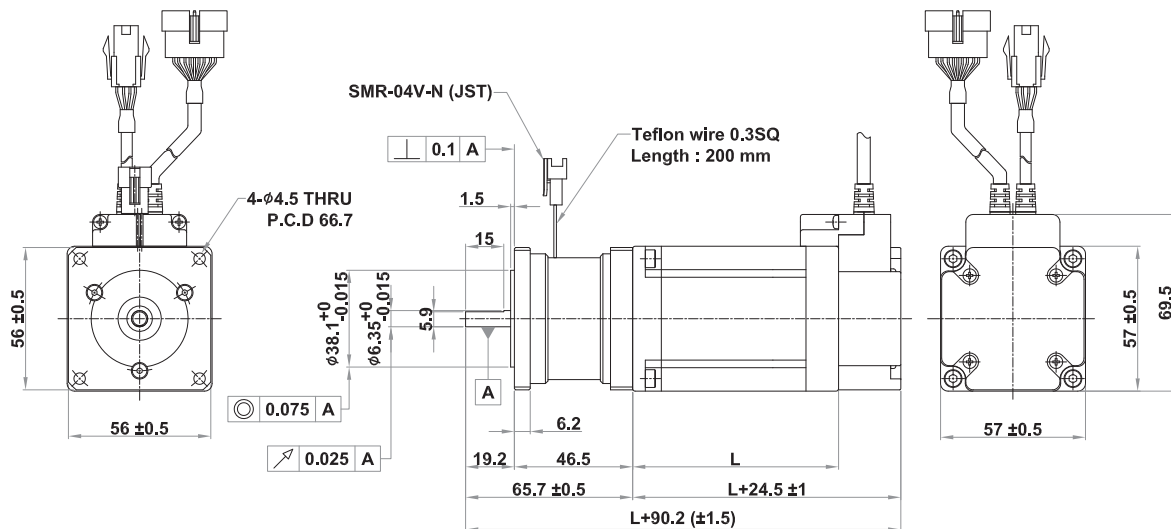
Ezi-SERVO ST Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK-56S	46	EzM-56S
Ezi-SERVO BK-56M	54	EzM-56M
Ezi-SERVO BK-56L	80	EzM-56L

* Ezi-SERVO BK-56S/M/L can be operated by 24VDC and also 40VDC Motor input voltage.

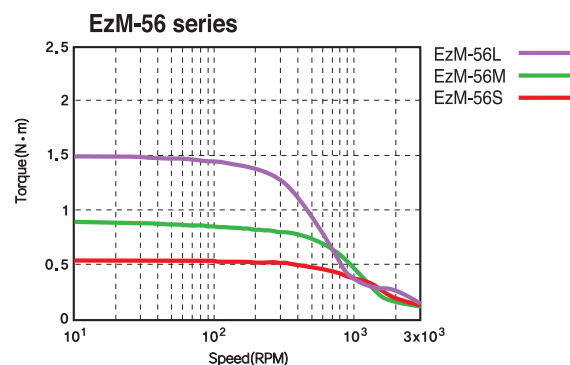
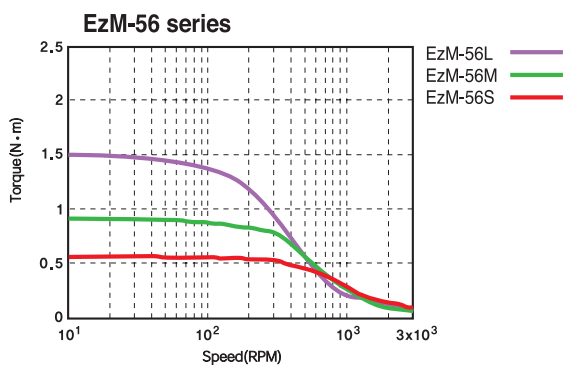
◆ Ezi-SERVO Plus R Series Drawings (56mm)

Ezi-SERVO Plus R Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK PR-56S	46	EzM-56S
Ezi-SERVO BK PR-56M	54	EzM-56M
Ezi-SERVO BK PR-56L	80	EzM-56L

* Ezi-SERVO BK PR-56S/M/L can be operated by 24VDC and also 40VDC Motor input voltage.



◆ Ezi-SERVO ST & Plus R Series Speed-Torque Curve (Motor Size 56mm)



◆ Ezi-SERVO ST Series Drawings (60mm)

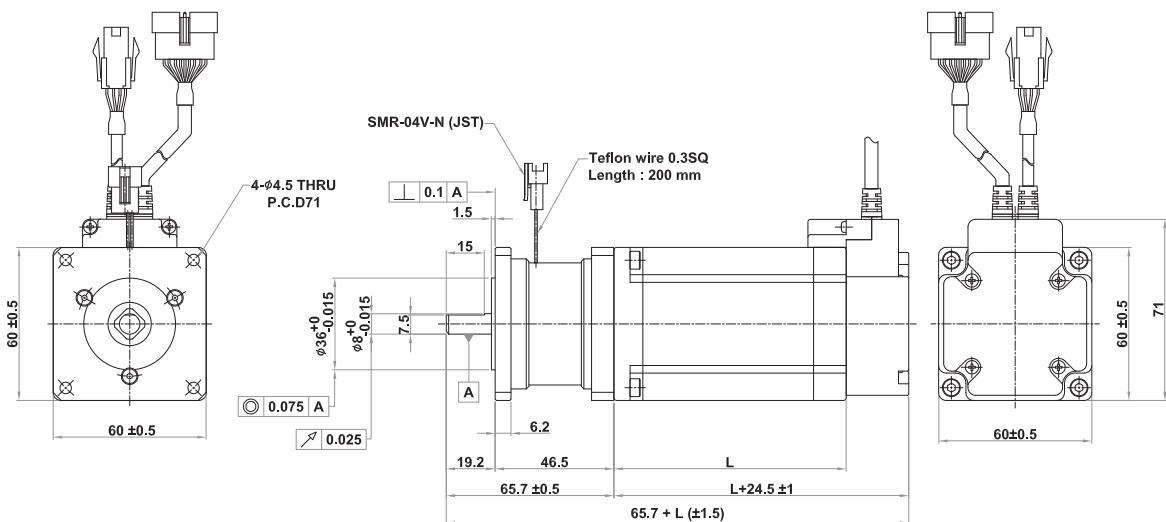
Ezi-SERVO ST Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK-60S	46	EzM-60S
Ezi-SERVO BK-60M	56	EzM-60M
Ezi-SERVO BK-60L	90	EzM-60L

* Ezi-SERVO BK-60S/M/L only can be operated by 24VDC Motor input voltage.

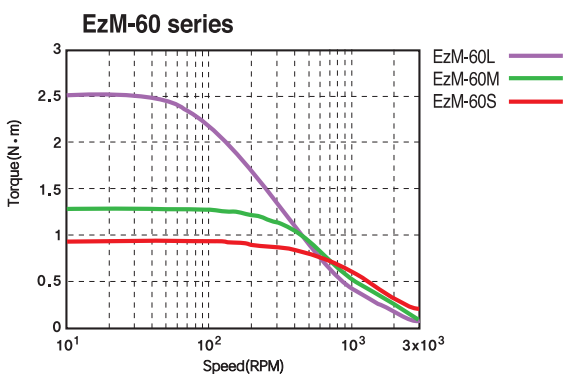
◆ Ezi-SERVO Plus R Series Drawings (60mm)

Ezi-SERVO Plus R Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK PR-60S	46	EzM-60S
Ezi-SERVO BK PR-60M	56	EzM-60M
Ezi-SERVO BK PR-60L	90	EzM-60L

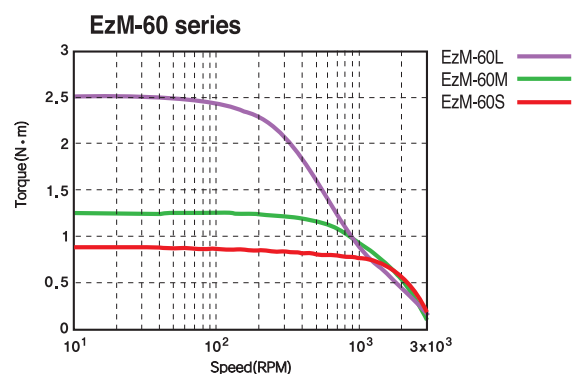
* Ezi-SERVO BK PR-60S/M/L can be operated by 24VDC and also 40VDC Motor input voltage.



◆ Ezi-SERVO ST & Plus R Series Speed-Torque Curve (Motor Size 60mm)



※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO



※ Measured Condition : Motor Voltage = 40VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO

Ezi-SERVO ST Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK-86M	79	EzM-86M
Ezi-SERVO BK-86L	117	EzM-86L
Ezi-SERVO BK-86XL	155	EzM-86XL

◆ Ezi-SERVO Plus R Series Drawings (86mm)

Ezi-SERVO Plus R Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK PR-86M	79	EzM-86M
Ezi-SERVO BK PR-86L	117	EzM-86L
Ezi-SERVO BK PR-86XL	155	EzM-86XL

Technical drawing of the SMR-04V-N (JST) connector assembly, showing front, side, and rear views with dimensions and tolerances.

Front View Dimensions:

- Overall width: 86 ± 0.5
- Overall height: 86 ± 0.5
- Pin pitch (P.C.D.): 12.5 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 25 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 25 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015

Side View Dimensions:

- Overall width: 95 ± 0.5
- Overall height: 123 ± 1.5
- Pin spacing: 36.6 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 58.4 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 25 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015

Rear View Dimensions:

- Overall width: 86 ± 0.5
- Overall height: 86 ± 0.5
- Pin pitch (P.C.D.): 12.5 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 25 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015
- Pin diameter: 0.076 ± 0.005
- Pin length: 1.6 ± 0.1
- Pin spacing: 25 ± 0.015
- Pin diameter: 0.1 ± 0.005
- Pin length: 13 ± 0.015
- Pin diameter: 0.05 ± 0.005
- Pin length: 9.4 ± 0.015

Notes:

- SMR-04V-N (JST)
- Teflon wire 0.3SQ Length : 200 mm
- 4- $\phi 6.5$ THRU P.C.D. 12.5 ± 0.015

EzM-86 series

Torque(N·m)

Speed(RPM)

EzM-86XL
EzM-86L
EzM-86M

Speed (RPM)	EzM-86XL Torque (N·m)	EzM-86L Torque (N·m)	EzM-86M Torque (N·m)
10 ¹	8.5	7.0	3.5
10 ²	8.0	6.5	3.2
10 ³	3.5	3.0	2.0
3x10 ³	0.5	1.0	0.5

FASTECH Ezi-SERVO BK

◆ Ezi-SERVO BT Series Specification

Unit Part Number	Motor						Electromagnetic Brake					Unit
	Size (mm)	Length L (mm)	Inertia Moment (g · cm ²)	Rated Current (A/Phase)	Voltage (V)	Holding Torque (N · m)	Form	Input Voltage (V)	Rated Current (A)	Power Consumption (W)	Friction Torque (N · m)	Weight (Kg)
Ezi-SERVO BK BT-42S	42	33	35	1,2	3,36	0,32	Non-excitation Type	24VDC ±10%	0,3A ±10%	8,2	0,2	590
Ezi-SERVO BK BT-42M		39	54		4,32	0,44						650
Ezi-SERVO BK BT-42L		47	77		4,56	0,5						720
Ezi-SERVO BK BT-42XL		59	114		7,2	0,8						850
Ezi-SERVO BK BT-56S	56	46	120	3	1,56	0,64				7,5	0,7	1120
Ezi-SERVO BK BT-56M		54	200		1,62	1						1280
Ezi-SERVO BK BT-56L		80	480		2,7	2						1720
Ezi-SERVO BK BT-60S	60	46	140	4	1,52	0,88				7,5	0,7	1230
Ezi-SERVO BK BT-60M		56	320		1,56	1,28						1420
Ezi-SERVO BK BT-60L		90	800		2,6	2,4						2040

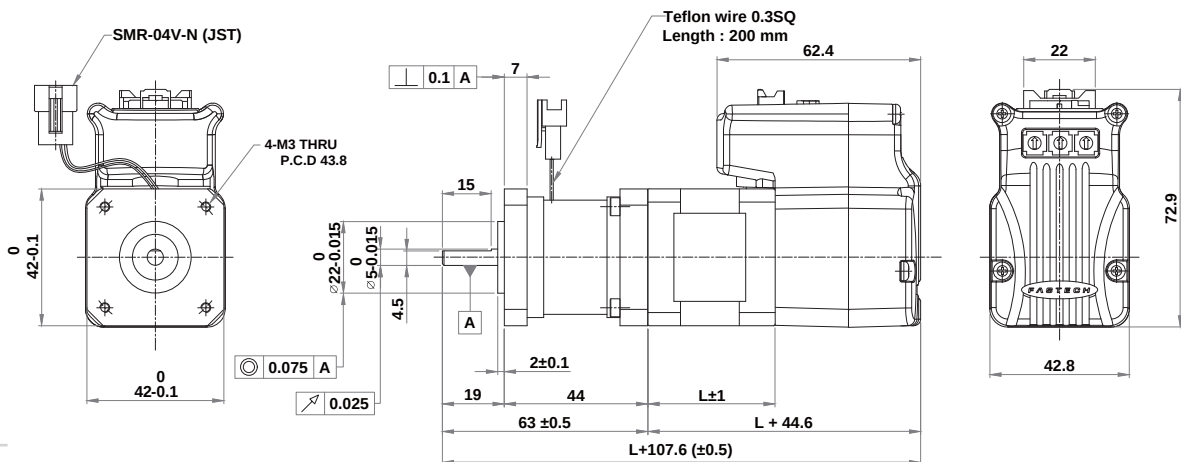
* Electromagnetic brake will not be using for braking but for holding position when power-off.

* Weight is total sum of motor and electromagnetic brake integrated.

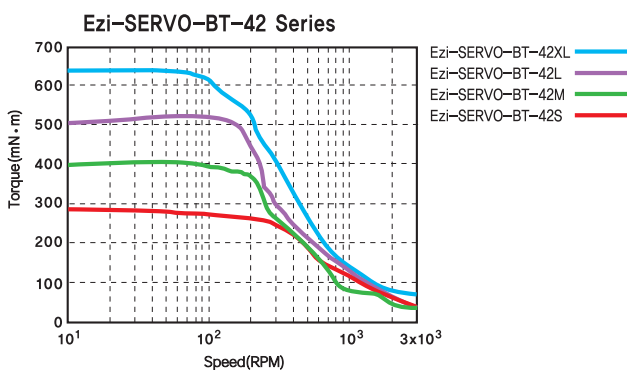
◆ Ezi-SERVO BT Series Drawings (42mm)

Ezi-SERVO BT Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK BT-42S	33	Ezi-SERVO BT-42S
Ezi-SERVO BK BT-42M	39	Ezi-SERVO BT-42M
Ezi-SERVO BK BT-42L	47	Ezi-SERVO BT-42L
Ezi-SERVO BK BT-42XL	59	Ezi-SERVO BT-42XL

* Ezi-SERVO BK-60S/M/L only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO BT Speed-Torque Curve (Motor Size 42mm)

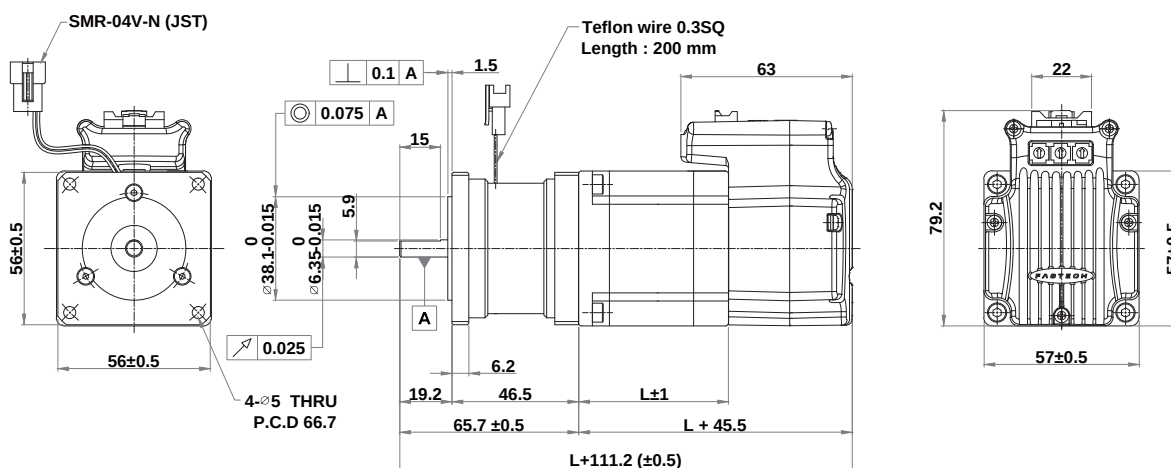


※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO BT

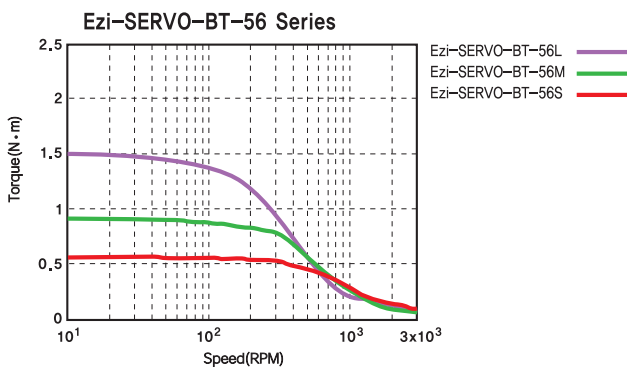
◆ Ezi-SERVO BT Series Drawings (56mm)

Ezi-SERVO BT Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK BT-56S	46	Ezi-SERVO BT-56S
Ezi-SERVO BK BT-56M	54	Ezi-SERVO BT-56M
Ezi-SERVO BK BT-56L	80	Ezi-SERVO BT-56L

* Ezi-SERVO BK BT-56S/M/L only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO BT Speed-Torque Curve (Motor Size 56mm)

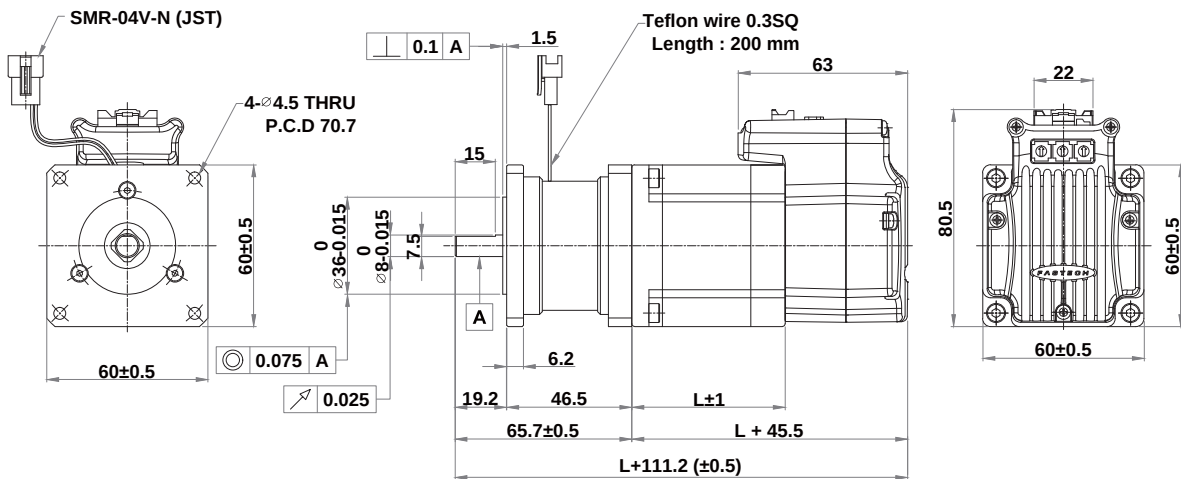


※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO BT

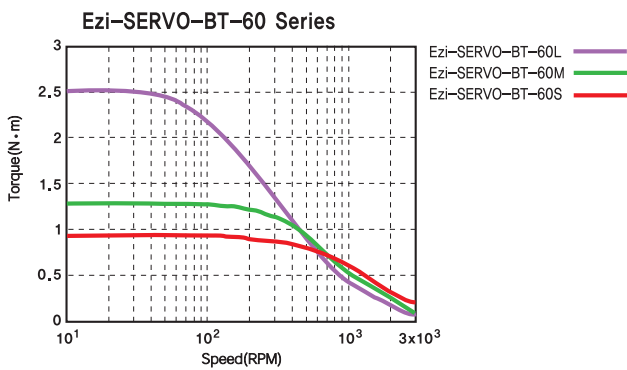
◆ Ezi-SERVO BT Series Drawings (60mm)

Ezi-SERVO BT Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK BT-60S	46	Ezi-SERVO BT-60S
Ezi-SERVO BK BT-60M	54	Ezi-SERVO BT-60M
Ezi-SERVO BK BT-60L	80	Ezi-SERVO BT-60L

* Ezi-SERVO BK BT-60S/M/L only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO BT Speed-Torque Curve (Motor Size 60mm)



※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO BT

◆ Ezi-SERVO ALL Series Specification

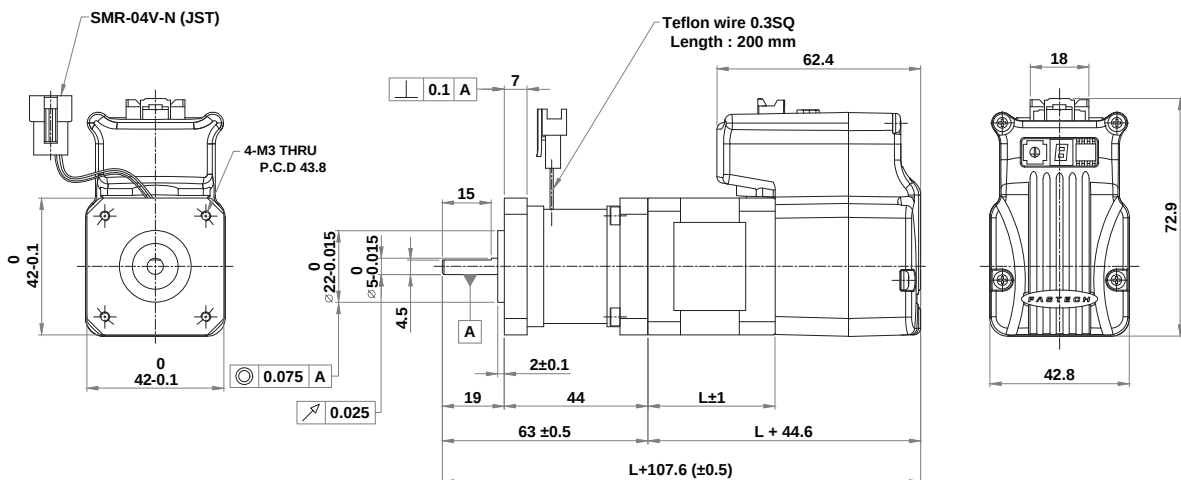
Unit Part Number	Motor						Electromagnetic Brake					Unit
	Size (mm)	Length L (mm)	Inertia Moment (g · cm ²)	Rated Current (A/Phase)	Voltage (V)	Holding Torque (N · m)	Form	Input Voltage (V)	Rated Current (A)	Power Consumption (W)	Friction Torque (N · m)	Weight (Kg)
Ezi-SERVO BK ALL-42S	42	33	35	1,2	3,36	0,32	Non-excitation Type	24VDC ±10%	0,3A ±10%	8,2	0,2	580
Ezi-SERVO BK ALL-42M		39	54		4,32	0,44						650
Ezi-SERVO BK ALL-42L		47	77		4,56	0,5						720
Ezi-SERVO BK ALL-42XL		59	114		7,2	0,8						850
Ezi-SERVO BK ALL-56S	56	46	120	3	1,56	0,64				7,5	0,7	1120
Ezi-SERVO BK ALL-56M		54	200		1,62	1						1280
Ezi-SERVO BK ALL-56L		80	480		2,7	2						1720
Ezi-SERVO BK ALL-60S	60	46	140	4	1,52	0,88				7,5	0,7	1230
Ezi-SERVO BK ALL-60M		56	320		1,56	1,28						1420
Ezi-SERVO BK ALL-60L		90	800		2,6	2,4						2040

* Electromagnetic brake will not be using for braking but for holding position when power-off.
 * Weight is total sum of motor and electromagnetic brake integrated.

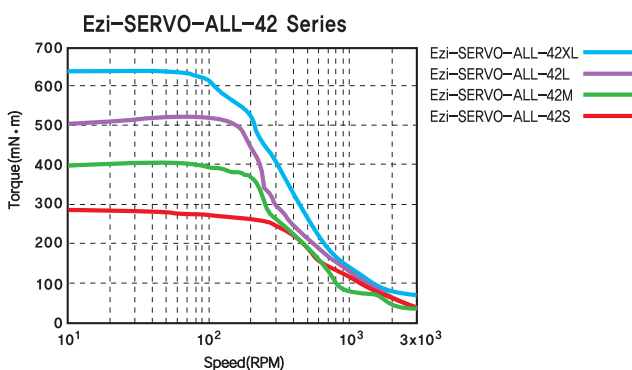
◆ Ezi-SERVO ALL Series Drawings (42mm)

Ezi-SERVO ALL Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK ALL-42S	33	Ezi-SERVO ALL-42S
Ezi-SERVO BK ALL-42M	39	Ezi-SERVO ALL-42M
Ezi-SERVO BK ALL-42L	47	Ezi-SERVO ALL-42L
Ezi-SERVO BK ALL-42XL	59	Ezi-SERVO ALL-42XL

* Ezi-SERVO BK ALL-42S/M/L/X only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO ALL Speed-Torque Curve (Motor Size 42mm)

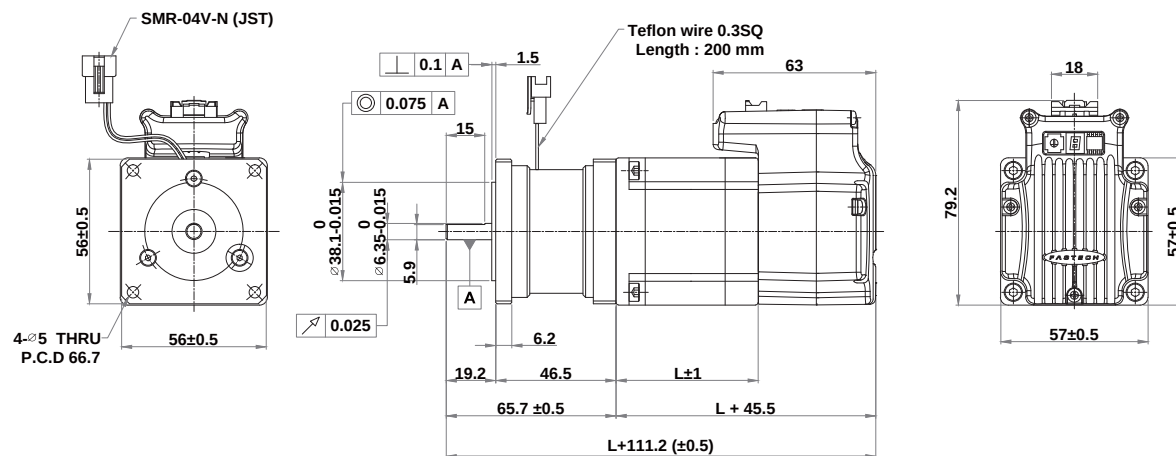


※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO ALL

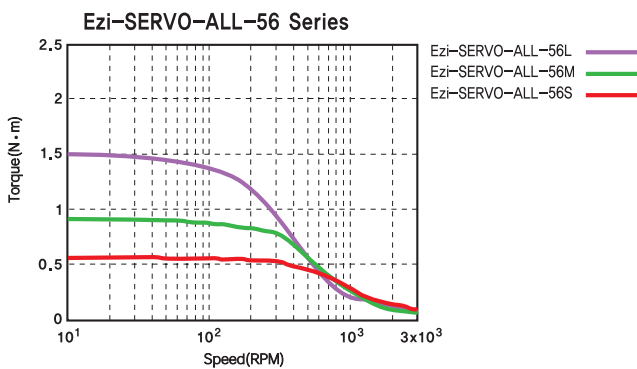
◆ Ezi-SERVO ALL Series Drawings (56mm)

Ezi-SERVO ALL Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK ALL-56S	46	Ezi-SERVO ALL-56S
Ezi-SERVO BK ALL-56M	54	Ezi-SERVO ALL-56M
Ezi-SERVO BK ALL-56L	80	Ezi-SERVO ALL-56L

* Ezi-SERVO BK ALL-56S/M/L only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO ALL Speed-Torque Curve (Motor Size 56mm)

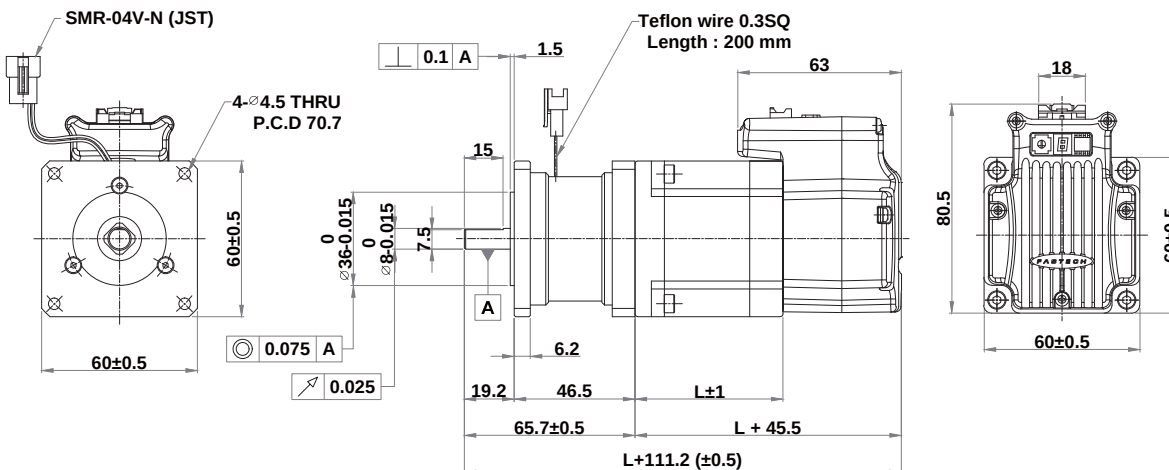


※ Measured Condition : Motor Voltage = 24VDC
 Motor Current = Rated Current
 (Refer to Motor Specification)
 Drive = Ezi-SERVO ALL

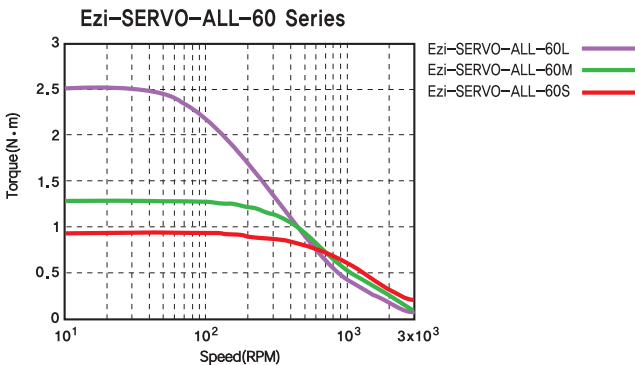
◆ Ezi-SERVO ALL Series Drawings (60mm)

Ezi-SERVO ALL Series Unit Part Number	Length L (mm)	Motor Part Number
Ezi-SERVO BK ALL-60S	46	Ezi-SERVO ALL-60S
Ezi-SERVO BK ALL-60M	54	Ezi-SERVO ALL-60M
Ezi-SERVO BK ALL-60L	80	Ezi-SERVO ALL-60L

* Ezi-SERVO BK ALL-60S/M/L only can be operated by 24VDC Motor input voltage.



◆ Ezi-SERVO ALL Speed-Torque Curve (Motor Size 60mm)



※ Measured Condition : Motor Voltage = 24VDC
Motor Current = Rated Current
(Refer to Motor Specification)
Drive = Ezi-SERVO ALL

● Ezi-SERVO BK Series Permissible Overhung Load and Thrust Load

Unit Part Number				Permissible Overhung Load (N)				Permissible Thrust Load(N)
Ezi-SERVO ST Series	Ezi-SERVO PR Series	Ezi-SERVO BT Series	Ezi-SERVO ALL Series	Distance from the end of motor shaft (mm)				
				3	8	13	18	
Ezi-SERVO BK-42S	Ezi-SERVO BK PR-42S	Ezi-SERVO BK BT-42S	Ezi-SERVO BK ALL-42S	22	26	33	46	Must be lower than Unit's weight
Ezi-SERVO BK-42M	Ezi-SERVO BK PR-42M	Ezi-SERVO BK BT-42M	Ezi-SERVO BK ALL-42M					
Ezi-SERVO BK-42L	Ezi-SERVO BK PR-42L	Ezi-SERVO BK BT-42L	Ezi-SERVO BK ALL-42L					
Ezi-SERVO BK-42XL	Ezi-SERVO BK PR-42XL	Ezi-SERVO BK BT-42XL	Ezi-SERVO BK ALL-42XL					
Ezi-SERVO BK MI-42S	Ezi-SERVO BK MI-PR-42S	—	—					
Ezi-SERVO BK MI-42M	Ezi-SERVO BK MI-PR-42M	—	—					
Ezi-SERVO BK MI-42L	Ezi-SERVO BK MI-PR-42L	—	—					
Ezi-SERVO BK MI-42XL	Ezi-SERVO BK MI-PR-42XL	—	—					
Ezi-SERVO BK-56S	Ezi-SERVO BK PR-56S	Ezi-SERVO BK BT-56S	Ezi-SERVO BK ALL-56S	52	65	85	123	
Ezi-SERVO BK-56M	Ezi-SERVO BK PR-56M	Ezi-SERVO BK BT-56M	Ezi-SERVO BK ALL-56M					
Ezi-SERVO BK-56L	Ezi-SERVO BK PR-56L	Ezi-SERVO BK BT-56L	Ezi-SERVO BK ALL-56L					
Ezi-SERVO BK-60S	Ezi-SERVO BK PR-60S	Ezi-SERVO BK BT-60S	Ezi-SERVO BK ALL-60S	70	87	114	165	
Ezi-SERVO BK-60M	Ezi-SERVO BK PR-60M	Ezi-SERVO BK BT-60S	Ezi-SERVO BK ALL-60M					
Ezi-SERVO BK-60L	Ezi-SERVO BK PR-60L	Ezi-SERVO BK BT-60S	Ezi-SERVO BK ALL-60L					
Ezi-SERVO BK-86M	Ezi-SERVO BK PR-86M	—	—	270	300	350	400	
Ezi-SERVO BK-86L	Ezi-SERVO BK PR-86L	—	—					
Ezi-SERVO BK-86XL	Ezi-SERVO BK PR-86XL	—	—					

● Drive Specification and Size

Please refer to the individual catalogue (Ezi-SERVO ST, Ezi-SERVO Plus R, Ezi-SERVO-BT and Ezi-SERVO-ALL) to check drive specification and size of Ezi-SERVO ST/PR/BT/ALL of Ezi-SERVO BK Series

● System Configuration and Setting/Operation

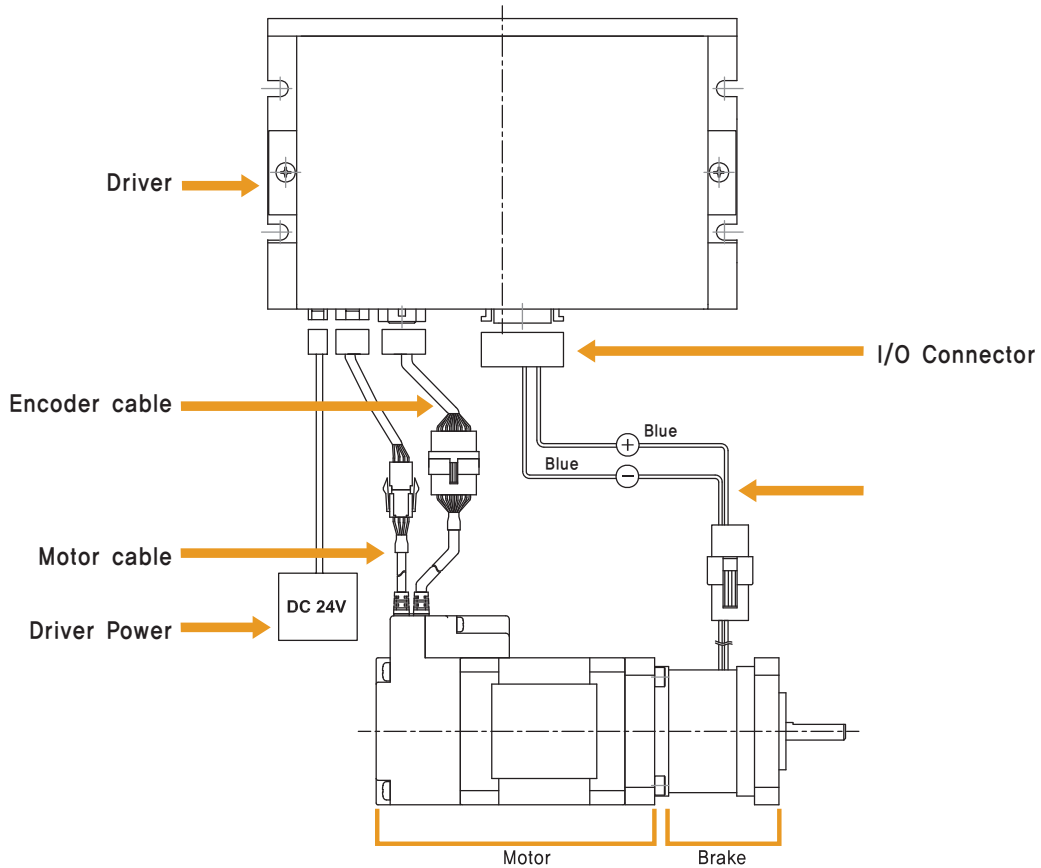
Please refer to the individual catalogue (Ezi-SERVO ST, Ezi-SERVO Plus R, Ezi-SERVO-BT and Ezi-SERVO-ALL) to check Series' system configuration, setting and operation of Ezi-SERVO ST/PR/BT/ALL of Ezi-SERVO BK Series

● External Wiring Diagram

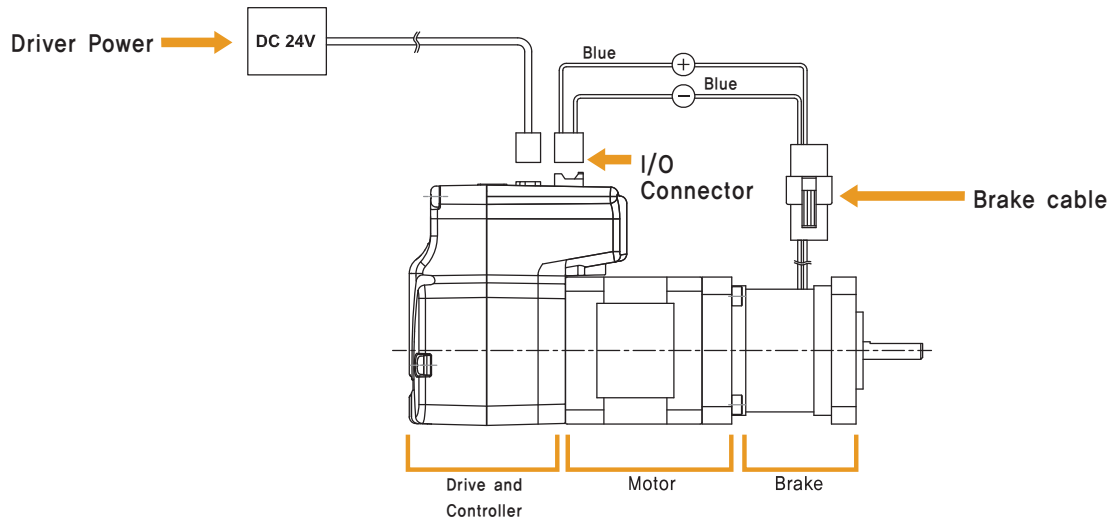
Please refer to the individual catalogue (Ezi-SERVO ST, Ezi-SERVO Plus R, Ezi-SERVO-BT and Ezi-SERVO-ALL) to check Series' external wiring diagram of Ezi-SERVO ST/PR/BT/ALL of Ezi-SERVO BK Series

● Interface between Power and Ezi-SERVO BK Series of electromagnetic Brake

◆ Ezi-SERVO-ST and Plus R Series

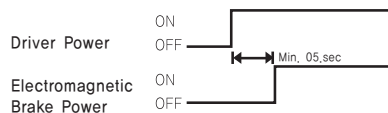


◆ Ezi-SERVO-BT & ALL Series



Electromagnetic Brake Operation Timing Chart

Please release electromagnetic brake at least 0.5 sec later power input to the drive. If not, work can be falling



- Please use Cable at least thicker than AWG24 (0.2mm²) when connect electromagnetic brake and power.
- Electromagnetic Brake is non-polar so there is no polarity in Brake Cable
- Over input voltage can induce high temperature of electromagnetic brake and motor so it can be main reason of failure
- Reversely too low input voltage will cause non-operation of electromagnetic brake.



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