

# Electric Cylinders EC Series

**EC Series**    **Motor Type\***    **Motor Options**    **Drive Ratio**    **Screw Lead**    **Stroke Length**    **Cylinder Mounting**    **Rod Ends**    **Options**    **Cable Option**  
**EC2** – **AKM23D** – **BNR** – **10** – **05B** – **300** – **MP2** – **FT1M** (**-**) – **CO**

## EC Series

EC1  
EC2  
EC3  
EC4  
EC5

## Motor Type\*

CTP12 = CTP12xLF10MMA00 stepper motor  
AKM11B = AKM11B-ANCxx-00 brushless servo  
AKM13C = AKM13C-ANCxx-00 brushless servo  
AKM23D = AKM23D-EFxxx-00 brushless servo  
AKM23C = AKM23C-EFxxx-00 brushless servo  
AKM42G = AKM42G-EKxxx-00 brushless servo  
AKM42E = AKM42E-EKxxx-00 brushless servo  
AKM52G = AKM52G-EKxxx-00 brushless servo  
AKM52L = AKM52L-EKxxx-00 brushless servo

## Motor Options

**B** ■ ■ = Rotatable IP65 connectors  
**C** ■ ■ = 0.5 m shielded cables w/ IP65 connectors  
**C** ■ ■ = Rotatable IP65 connectors  
**N** ■ = No brake  
**2** ■ = 24 Vdc power-off holding brake  
**R** = Resolver  
**2** = 2048 LPR incremental comm. encoder  
**C** = Smart Feedback Device (SFD)  
**■** ■ ■ = Omit field for CTP12

## Drive Ratio

10 = 1.0:1 drive belt/pulley (EC1 – helical)  
15 = 1.5:1 drive belt/pulley  
20 = 2.0:1 drive belt/pulley (EC1 – helical)  
40 = 4.0:1 helical gears  
50 = 5.0:1 helical gears  
70 = 7.1:1 helical gears  
100 = 10.0:1 helical gears  
10L = 1.0:1 inline coupling (direct 1:1 coupling is the only ratio available for inline models)

## Screw Lead

03B = 0.125 in/rev ballscrew  
05B = 5 mm/rev ballscrew  
10B = 10 mm/rev ballscrew  
16B = 16 mm/rev ballscrew  
25B = 25 mm/rev ballscrew  
32B = 32 mm/rev ballscrew  
04A = 4 mm/rev lead screw

## Available

EC1  
EC1  
EC1  
EC2, EC3  
EC2, EC3  
EC3, EC4, EC5  
EC3, EC4, EC5  
EC4, EC5  
EC4, EC5

## Available

AKM2  
AKM1, AKM2  
AKM4, AKM5  
AKM1, AKM2, AKM4, AKM5  
AKM2, AKM4, AKM5  
AKM1, AKM2, AKM4, AKM5  
AKM1, AKM2, AKM4, AKM5  
AKM1, AKM2, AKM4, AKM5  
CTP12

## Available

All  
EC2, EC3, EC4, EC5  
Not valid for EC3-AKM42  
EC1 only  
EC2, EC3, EC4, EC5  
EC3 only  
EC2, EC4, EC5  
All

## Available

EC1  
EC2, EC3  
EC3, EC4, EC5  
EC2, EC3  
EC4  
EC5  
EC2, EC3

## Stroke Length\*\*

## Available

All  
All  
All  
All  
EC2, EC3, EC4, EC5  
EC2, EC3, EC4, EC5  
EC2, EC3, EC4, EC5  
EC2, EC3, EC4, EC5  
EC3, EC4, EC5  
EC4, EC5  
EC4, EC5

## Cylinder Mounting

MF1 = Front rectangular flange  
MF1E = Front rectangular flange (English)  
MF1M = Front rectangular flange (metric)  
MF2 = Rear rectangular flange  
MF2E = Rear rectangular flange (English)  
MF2M = Rear rectangular flange (metric)  
MF3 = Front & rear rectangular flange  
MF3E = Front & rear rectangular flange  
MF3M = Front & rear rectangular flange  
MP2 = Rear double clevis without pivot base  
MP3 = Rear double clevis with pivot base  
MS1 = Side end angle  
MS2 = Side lugs  
**MS6M = Side tapped holes (metric)**  
MS6E = Side tapped holes (English)  
MT4 = Trunnion

## Available

## Rod Ends

FC2 = Clevis (includes MT1M)  
FS2 = Spherical joint (includes FT1M)  
FT1M = Female thread (metric)  
FT1E = Female thread (English)  
**MT1M = Male thread (metric)**  
MT1E = Male thread (English)

## Available

All  
All  
All  
EC2, EC3, EC4, EC5  
**All**  
EC2, EC3, EC4, EC5

## Options\*\*\*

**(add multiple in the following sequence, omit if no options required)**

BA24 = 24 Vdc brake on actuator (EC1 only, not available with 10L ratio or MS1 mounting options)  
BS24 = 24 Vdc brake on ballscrew (not available with EC1 or 10L ratio, or with MF2(x), MF3(x), MS1, MP2(x), MP3(x) mounting options)  
BS115 = 115 Vac brake on ballscrew (not available with EC1 or 10L ratio, or with MF2(x), MF3(x), MS1, MP2(x), MP3(x) mounting options)  
PB = Protective boot\*  
L = Linear potentiometer (only valid through 600 mm stroke, standard lengths)

## Cable

**CO = No cable supplied, motor includes connectors.**  
**Default for all AKM servomotors; select Kollmorgen cables based on motor/drive pairing.**

\* Refer to Alternate AKM servomotor and electric cylinder systems table on page 72. Contact customer support for AKM combinations outside of those listed.

\*\* For custom lengths round up to next standard incremental plus add standard cut fee.

\*\*\* Contact customer support for non-standard pricing and lead times.

Note: Options shown in bold blue text are considered standard.