## Electric drive ESBF-...-40- -Part number: 8022585



## **Data sheet**

Stroke     30 mm800 mm       Piston rod thread     M12x1.25       Spindle diameter     16 mm       Torsional backlash at piston rod +/-     0.2 deg       Based on standard     ISO 15552       Mounting position     optional       Type of motor     Stepper motor       Servo motor     Stepper motor       Design     Electric cylinder with ball screw       Electric cylinder with ball screw spindle     Electric cylinder with lead screw spindle       Variants     Wetals with copper, zinc or nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.       Protection against torque/guide     With plain-bearing guide       Duty cycle     100%       Corrosion resistance class CRC     2 - Moderate corrosion stress 3 - high corrosion stress       LABS (PWIS) conformity     VDM2x3434 zone III       Suitability for the production of Li-ion batteries     Product corresponds to the internal product definition from Festo for use in battery production-led surfaces, printed circuit boards, cables, electrical plug connectors and coils       Cleanroom class     Class 7 according to ISO 14644-1       Storage temperature     20 °C60 °C       Suitable for use with food <td< th=""><th>Feature</th><th>Value</th></td<>	Feature	Value
Piton rod thread   M12x1.25     Spindle diameter   16 mm     Torsional backlash at piston rod +/-   0.2 deg     Based on standard   ISO 15552     Mounting position   optional     Type of motor   Stepper motor     Serion detection   Via proximity switch     Design   Electric cylinder with ball screw     Electric cylinder with lead screw spindle   Wetals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and colls.     Protection against torque/guide   With plain-bearing guide     Duty cycle   100%     Corrosion resistance class CRC   2 · Moderate corrosion stress     LABS (PWIS) conformity   VDMA24364 zone III     Suitability for the production of Li-ion batteries   Product corresponds to the internal product definition from Festo for use in battery production.Medias with more than 1% by mass of corper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and colls     Cleanroom class   Class 7 according to 150444-1     Storage temperature   -20 °C60 °C     Suitabile for use with food   See supplementary material information <td>Size</td> <td>40</td>	Size	40
Spindle diameter     16 mm       Torsional backlash at piston rod +/-     0.2 deg       Based on standard     ISO 15552       Mounting position     optional       Type of motor     Stepper motor       Servo motor     Servo motor       Position detection     Via proximity switch       Design     Electric cylinder with ball screw       Electric cylinder with lead screw spindle     Wetals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.       Protection against torque/guide     With plain-bearing guide       Duty cycle     100%       Corrosion resistance class CRC     2 - Moderate corrosion stress       LABS (PWIS) conformity     VDMA24364 zone III       Suitability for the production of Li-ion batteries     Product corresponds to the internal product definition from Festo for use in battery production. Metals with more than 1% by mass of copper, zinc on rickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils       Cleanroom class     Class 7 according to ISO 14644-1       Storage temperature     -20 °C60 °C       Suitabile for use with	Stroke	30 mm800 mm
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Based on standard   ISO 15552     Mounting position   optional     Type of motor   Stepper motor     Position detection   Via proximity switch     Design   Electric cylinder with ball screw     Electric cylinder with lead screw spindle     Variants   Metals with copper_zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel by mass as main constituent are excluded from use. Exceptions are nickel by mass as main constituent are excluded from use. Exceptions are nickel by mass as main constituent are excluded from use. Exceptions are nickel plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.     Protection against torque/guide   With plain-bearing guide     Duty cycle   100%     Corrosion resistance class CRC   2 · Moderate corrosion stress     So (PWIS) conformity   VDMA24364 zone III     Suitability for the production of Li-ion batteries   Product corresponds to the internal product definition from Festo for use in battery production. Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils     Cleanroom class   Class 7 according to ISO 14644-1     Storage temperature   -20 °C60 °C     Suitable for use with food   See supplementary material information	Spindle diameter	16 mm
Mounting position     optional       Type of motor     Stepper motor Servo motor       Position detection     Via proximity switch       Design     Electric cylinder with ball screw Electric cylinder with ball screw spindle       Variants     Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.       Protection against torque/guide     With plain-bearing guide       Duty cycle     100%       Corrosion resistance class CRC     2 - Moderate corrosion stress 3 - high corrosion stress       SUItability for the production of Li-ion batteries     Product corresponds to the internal product definition from Festo for use in battery production.Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils       Cleanroom class     Class 7 according to ISO 14644-1       Storage temperature     -20 °C60 °C       Suitable for use with food     See supplementary material information       Relative air humidity     0 - 95%       Degree of protection     IP40 IP65	Torsional backlash at piston rod +/-	0.2 deg
Type of motor     Stepper motor Servo motor       Position detection     Via proximity switch       Design     Electric cylinder with ball screw Electric cylinder with lead screw spindle       Variants     Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.       Protection against torque/guide     With plain-bearing guide       Duty cycle     100%       Corrosion resistance class CRC     2 · Moderate corrosion stress 3 · high corrosion stress       LABS (PWIS) conformity     VDMA24364 zone III       Suitability for the production of Li-ion batteries     Product corresponds to the internal product definition from Festo for use in battery production of Li-ion batteries       Cleanroom class     Class 7 according to ISO 14644-1       Storage temperature     -20 °C60 °C       Suitability for use with food     See supplementary material information       Relative air humidity     0 · 95%       Degree of protection     IP40 IP65	Based on standard	ISO 15552
Servo motorPosition detectionVia proximity switchDesignElectric cylinder with ball screw Electric cylinder with lead screw spindleVariantsMetals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.Protection against torque/guideWith plain-bearing guideDuty cycle100%Corrosion resistance class CRC2 · Moderate corrosion stress 3 · high corrosion stress 3 · high corrosion stressLABS (PWIS) conformityVDMA24364 zone IIISuitability for the production of Li-ion batteriesProduct corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coilsCleanroom classClass 7 according to ISO 14644-1Storage temperature-20 °C60 °CDegree of protectionIP40 IP65Ambient temperature0 °C60 °C	Mounting position	optional
DesignElectric cylinder with ball screw Electric cylinder with lead screw spindleVariantsMetals with copper, zinc or nickel in steel, chemically nickel- plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.Protection against torque/guideWith plain-bearing guideDuty cycle100%Corrosion resistance class CRC2 · Moderate corrosion stress 3 · high corrosion stressLABS (PWIS) conformityVDMA24364 zone IIISuitability for the production of Li-ion batteriesProduct corresponds to the internal product definition from Festo rouse in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coilsCleanroom classCleasr 7 according to ISO 14644-1Storage temperature Suitable for use with foodSee supplementary material informationRelative air humidity0 - 95%Degree of protectionIP40 IP65Ambient temperature0 °C60 °C	Type of motor	
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Degree of protection IP40 IP65   Ambient temperature 0 °C60 °C	Suitable for use with food	See supplementary material information
IP65   Ambient temperature 0 °C60 °C	Relative air humidity	0 - 95%
	Degree of protection	
Max. radial force at drive shaft 130 N	Ambient temperature	0 °C60 °C
	Max. radial force at drive shaft	130 N

**FESTO** 

Feature	Value
Max. feed force Fx	3000 N
Frictional torque independent of load	0.2 Nm
Type of mounting	Via female thread Or accessories
Interface code, actuator	D40
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy, smooth anodised
Material piston rod	High-alloy stainless steel
Material screws	Galvanised steel
Material spindle nut	Rolled steel
Material spindle	Rolled steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy