FMS Web Guiding / Web Guide Controller

BKS 309.EIP Web Guide Controller with EtherNet/IP Interface

- **Integrated EtherNet/IP Field Bus:**
  Provides interconnectivity to higher-level control systems

- **Fast data rate with cycle times down to 2 ms:**
  Ideal for applications in automated assembly and production lines

- **Clearly arranged operating panel with two-line LCD display:**
  Easy to setup and operate

- **3 housing/mounting types:**
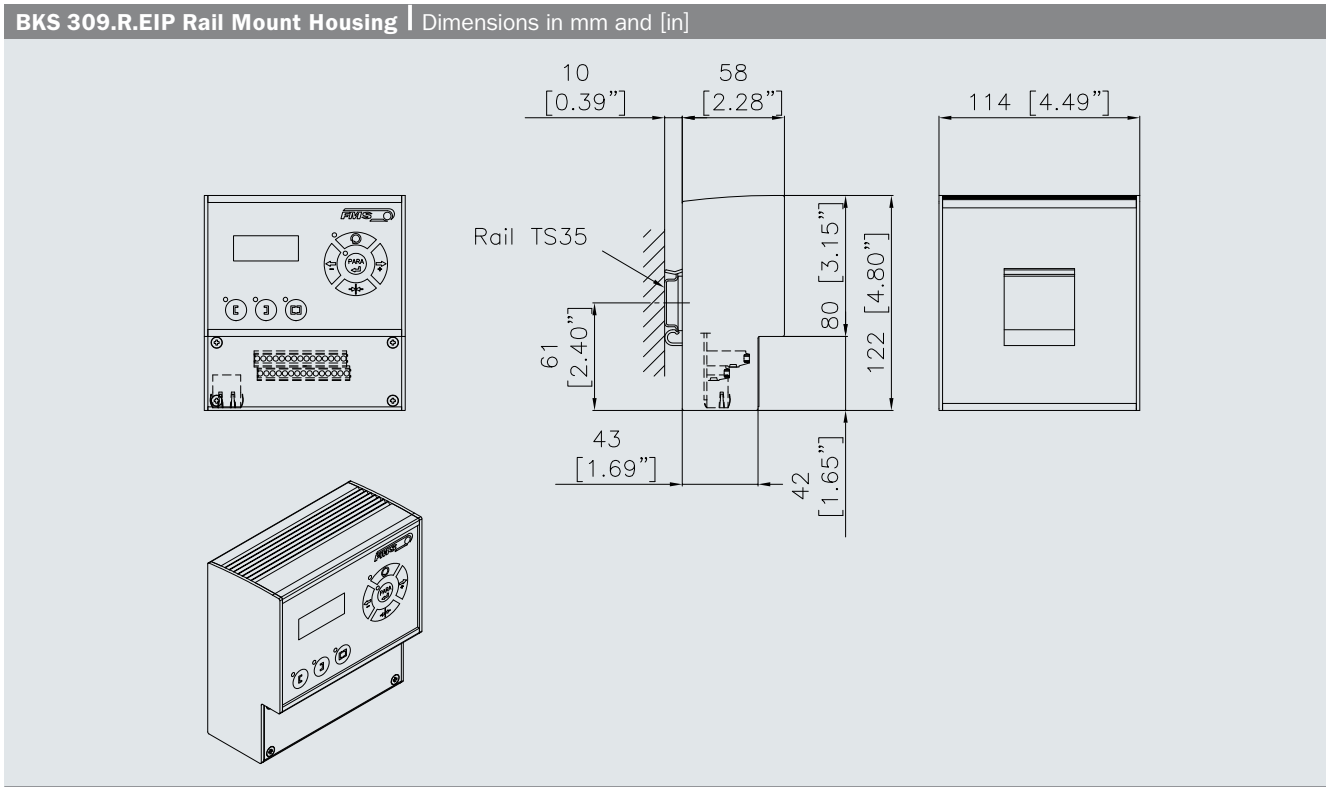 DIN Rail, Wall Mount (IP 65), and Panel Mount

BKS 309.EIP

The BKS 309.EIP web guide controllers are an innovative enhancement of the successful BKS 309 series.
An outstanding feature of this product is its integrated EtherNet/IP bus. This interface provides interconnectivity of the web guide to higher-level control systems.
The BKS 309 series is characterized by its versatility and ease of installation. The controllers are compatible with the whole FMS product range of steering frames, actuators and material sensors. The BKS 309.EIP is perfect for all types of web converting machinery processing paper, plastic foils, metal foils and other materials.
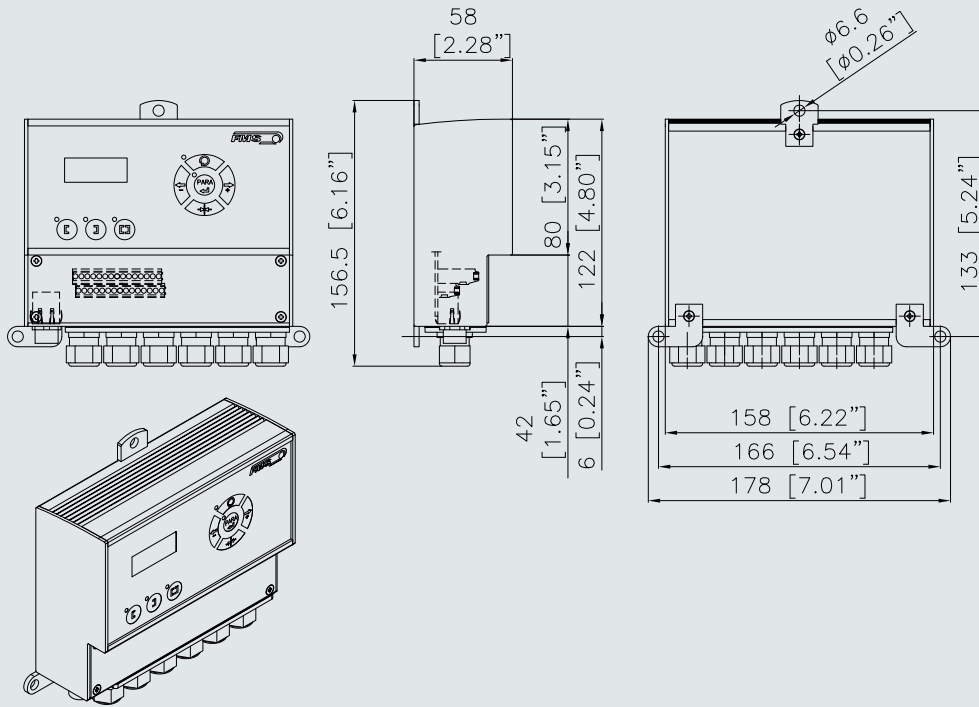
Functional Description

The BKS 309.EIP electronic units are design to control stepper motor equipped web guides. They feature the most advanced control algorithms for edge-, line- and center-guiding. The EtherNet/IP bus with its 2 ms cycle time provides precise control even at high machine speeds. Configuration and parameter setting can either be performed over the front panel, via a web browser or the bus. Thanks to its enhanced performance and flexibility this electronics solves even the most demanding control tasks.

SWISSMADE+

BKS 309.EIP Technical Data	
Cycle Time	1 ms
Drive of Steering Frame	Stepper motor, ball screw spindle
Dead Band	0...2 mm, setting in 0.01 mm steps
Reference Position	± 5 mm, setting in 0.1 mm steps
Control Mode	Edge left, edge right, centre guiding, line guiding, chase & follow (option)
Bus Interfaces	EtherNet/IP (CIP Common Industrial Protocol, Standard IEC61158)
Configuration Interface	Ethernet via Web-Browser Ethernet Explorer 7 or higher
Operation Panel	3 buttons and 5-key wind-rose
Analogue Inputs	2 inputs 0...10 V (sensors), 1 potentiometer input 0...10 V (FMS-winderGLIDE)
Digital Inputs	4 inputs at 24 VDC galvanically isolated
Relay Outputs	2 contacts max. DC: 220 V / 2 A / 60 W; AC: 250 V / 2 A / 62.5 VA
Power Supply	24 VDC (18...30 V)
Temperature Range	0°...55 °C
Housings	Rail mount, wall mount and panel mount
Protection Class	IP 40 or IP 65 for wall mount version

BKS 309.R.EIP Rail Mount Housing Dimensions in mm and [in]
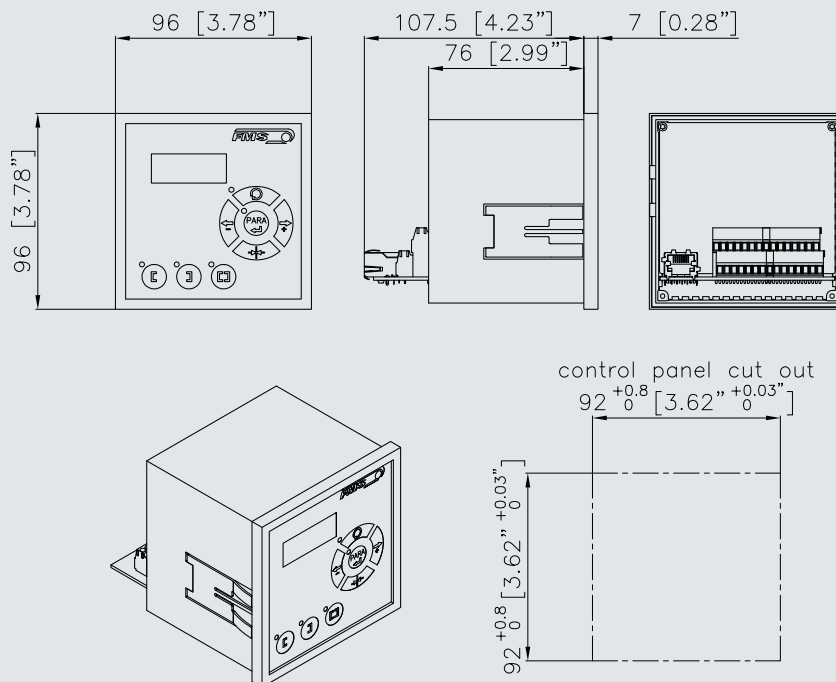

Wiring is realised via cable terminals; Ethernet connection: RJ-45 connector.

BKS 309.W.EIP Wall Mount Housing │ Dimensions in mm and [in]

58 [2.28"]

ϕ6.6 [ϕ0.26"]

156.5 [6.16"]

80 [3.15"]

122 [4.80"]

133 [5.24"]

42 [1.65"]

6 [0.24"]

158 [6.22"]

166 [6.54"]

178 [7.01"]

With PG-Gland cable connector; Ethernet: M12 4-Pol D-coded connector (IP 65).

BKS 309.S.EIP Panel Mount Housing │ Dimensions in mm and [in]

96 [3.78"]

107.5 [4.23"]

7 [0.28"]

76 [2.99"]

96 [3.78"]

control panel cut out

$92\,^{+0.8}_{0}$ [$3.62"\,^{+0.03"}_{0}$]

$92\,^{+0.8}_{0}$ [$3.62"\,^{+0.03"}_{0}$]

Wiring is realised via cable terminals; Ethernet connection: RJ-45 connector.

Other Web Guiding Products:

FMS offers a wide range of material sensors, steering frames and accessories working in conjunction with the web guide controllers. Thanks to this large product portfolio FMS' web guiding systems can be used in manifold applications and solves even the most demanding control tasks.

FMS Web Guiding | Sensors

Ultrasonic edge sensors	Optical edge sensors	Optical line sensors	Motorized sensor adjustment

FMS offers sensors with different measuring principals such as ultrasonic or optical systems for the accurate detection of the web position. They are available in several sizes to accommodate a wide range of correction requirements. The web guide sensors can be used with a basic manual adjustment or with an automatic motorized traversing

FMS Web Guiding | Steering Frames / Actuators

Series BKS 015	Series BKS 020	Series winderGLIDE D3

FMS steering frames are used in dedicated web processing machines such as label printing, slitting, coating, rewinding, surface treating, and packaging lines. They excel by its compact and robust design. A powerful stepper motor with a ball screw spindle adjusts the steering frame free of play and very precisely. The rollers are manufactured and balanced to high standards. The web guide controller is integrated in the steering frame or can be mounted externally.