

BKS 309 Series Digital Web Guiding Controller

Digital microprocessor controlled
High performance at fastest speeds

Plug & Play or utilize Ethernet connection
Easy to operate and provides flexible set-up

3 buttons and 5-key wind-rose operation
and two-line 8-character LCD
Easy to setup and operate

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



● BKS 309

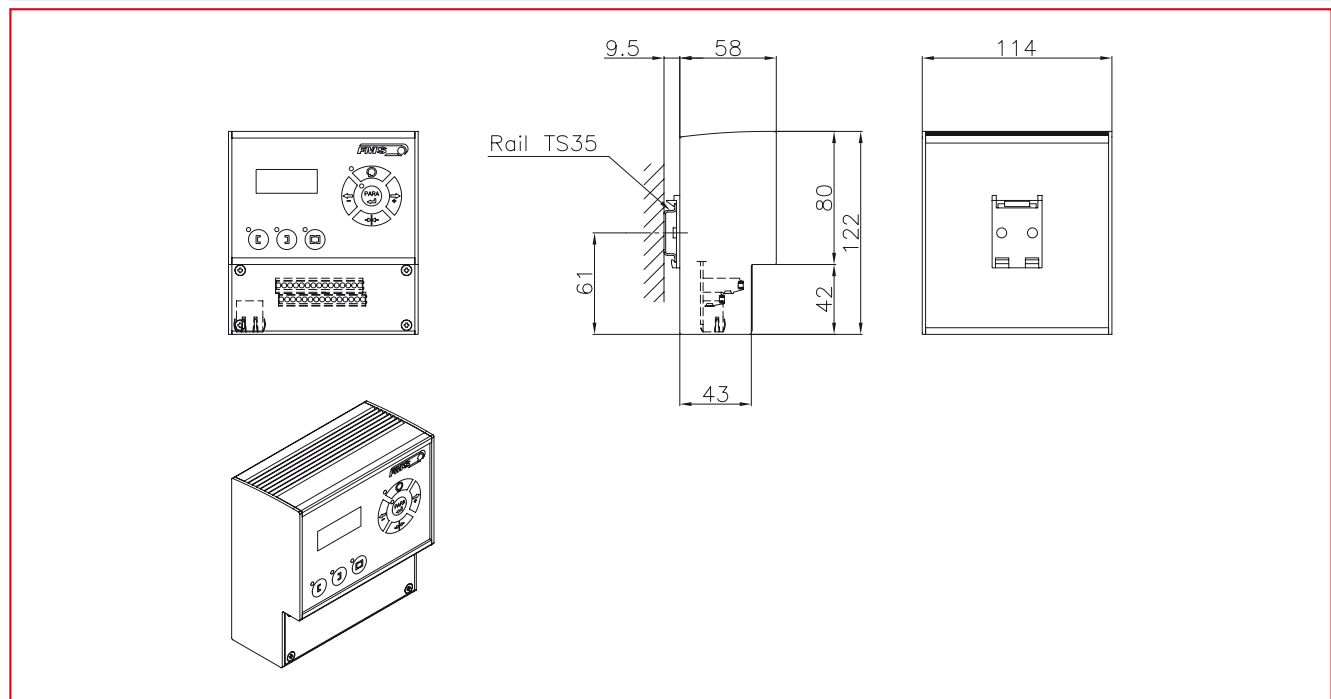
The micro-processor based web guide controllers BKS 309 are designed for ease of use and operation. They feature a three buttons and a five key wind-rose control panel with a two line LCD Display. The BKS 309 controllers work in combination with FMS steering frames of the series webMASTER, webDIRECTORS of the BKS 040 series and actuators of the winderGLIDE BKS.D.3 series. This versatile product is perfect for all types of processing including narrow web and wide materials at slow or high speed applications.

● Functional Description

The BKS 309 electronic units are design to control stepper motor equipped web guides. They provide the necessary supply voltage and control algorithm. The 1 ms cycle time provides precise control even at high machine speeds. Parameter setting can be performed via the front panel keys or through a Web Browser. The controller is then either connected to a network (Ethernet) or via a peer-to-peer configuration to a laptop or local PC. All parameters are stored in a fail-safe EEPROM.

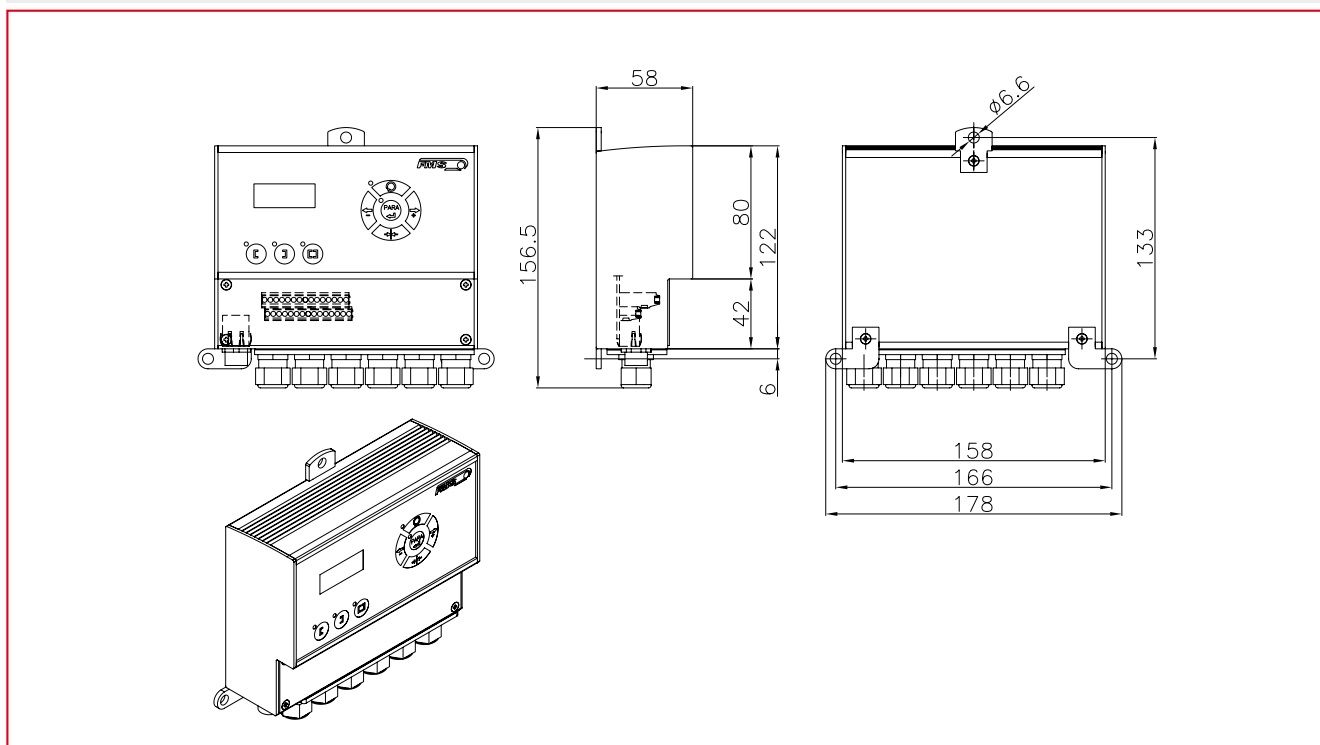
BKS 309 • Technical Data	
Cycle time	1 ms
Drive of steering frame	Stepper motor, power amplifier 24V integrated in motor housing
Dead band	0...2 mm, setting 0.01 mm steps
Reference position	±5 mm, setting in 0.1 mm steps
Control mode	Edge left, edge right, centre guiding, line guiding, chase & follow (option)
Interfaces	Ethernet via web browser Ethernet Explorer 7
Operation panel	3 buttons and 5-key wind-rose
Analogue Inputs	2 inputs 0...10 V (sensors), 1 potentiometer input 0...10 V (winderGLIDE)
Digital inputs	4 inputs at 24 VDC galvanically isolated
Relay outputs	2 contacts max. DC 220 V/2A/60 W; AC 250 V/2A/62.5 VA
Power supply	24 VDC (18...30 V), optional: 85 – 264VAC; max. 80 W
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 Rail Mount Housing • Dimensions in mm



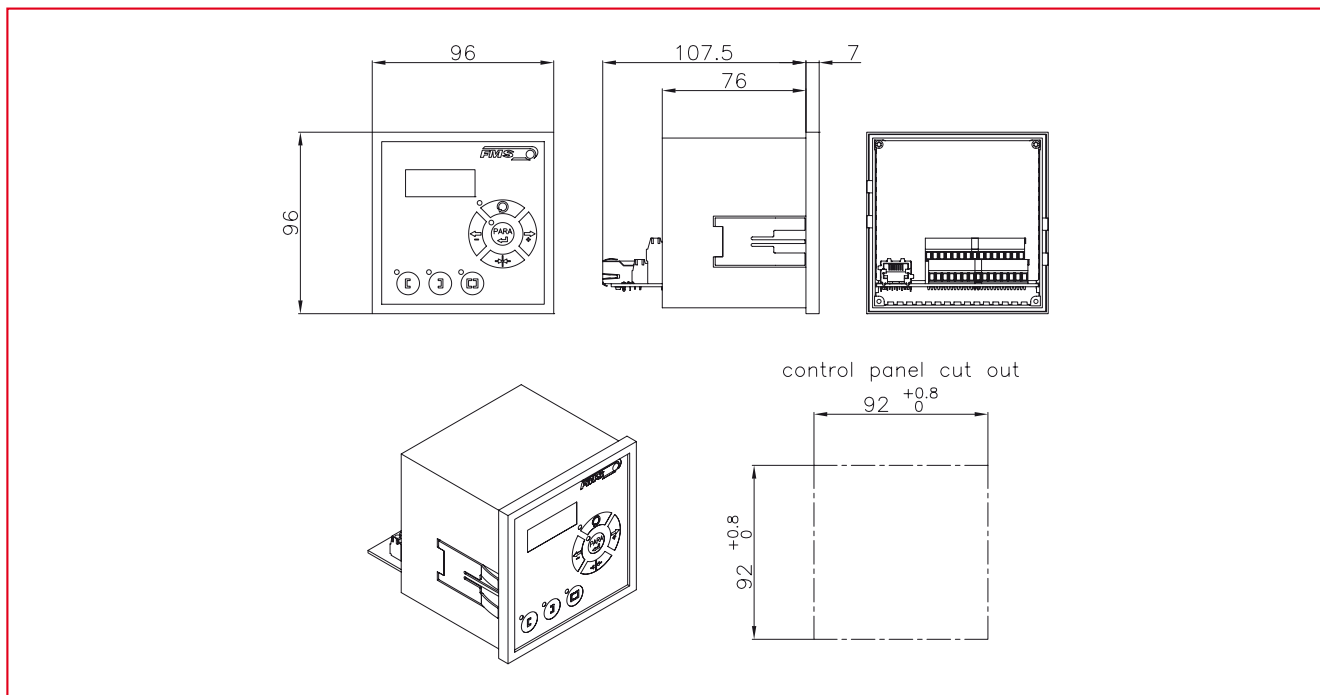
Wiring is realised via cable terminals.

BKS 309.W Wall Mount Housing • Dimensions in mm



With PG-Gland cable connector. Protection class IP 65.

BKS 309.S Panel Mount Housing • Dimensions in mm



Wiring is realised via cable terminals.

FMS' Product Portfolio and System Solutions



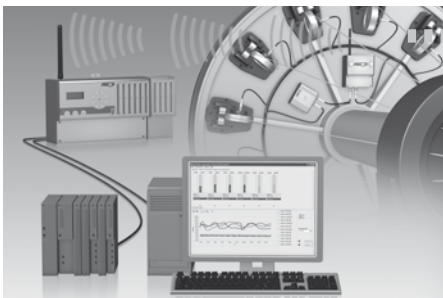
The product line **Force Sensors** provides products, solutions and related services that increase industrial productivity, energy efficiency and high quality output. Its force sensors, tension measuring rollers and pillow block based designs are of premium quality and ultra durable.



The product line **Electronics** facilitates tension monitoring, close loop tension control and web guiding systems. Key technologies include high-performance tension amplifiers and PID-controllers, as well as products to accurately and consistently control material position in continuously manufactured products.



The main focus of the **FMS Web Guiding business** is to provide customers with products and solutions for web detection and web positioning. Its steering frames, drives, controllers and material sensors provide an excellent coverage of the most important applications. The industries served include converting, printing, label processing and packaging.



RTM (Radio Transmitted Tension Monitoring) delivers system solutions across the cable production value chain. These innovative systems utilise force measuring rollers to capture the tension of individual wires or strands, and then securely transmit this data from the rotating to the static part of the machine. The systems are designed with fully compatible components. Production rates and product quality on rotating strand-handling machinery are significantly improved.



Special Application Fields facilitates solutions in **vacuum** applications or in potentially explosive atmospheres. A sophisticated range of interface options including systems such as **PROFINET, Ethernet/IP, Profibus** and **CAN-bus** provide quick and efficient integration of FMS products into the existing communication and control infrastructure of your company.

World Headquarters:

FMS Force Measuring Systems AG

Aspstrasse 6
8154 Oberglatt (Switzerland)
Phone + 41 44 852 80 80
Fax + 41 44 850 60 06
info@fms-technology.com

FMS USA, Inc.

2155 Stonington Avenue
Suite 119
Hoffman Estates, IL 60169
Phone + 1 847 519 4400
Fax + 1 847 519 4401
fmsusa@fms-technology.com

FMS UK

Highfield, Atch Lench Road
Church Lench
Evesham WR 11 4UG
Phone + 44 1386 871023
Fax + 44 1386 871021
fmsuk@fms-technology.com

FMS Italy

Via Baranzate 67
20026 Novate Milanese
Phone + 39 02 39487035
Fax + 39 02 39487035
fmsit@fms-technology.com