

BKS 600 Series Digital Web Guide Controller

From 1 to 2 channels

Control up to 2 web guides

Menu driven display in plain text

Easiest operation in 4 languages

2 ms cycle time

Precise control at high machine speeds

Power supply galvanically isolated

Shielded from electrical noise



● BKS 600 Series

The microprocessor equipped web guide controllers of the BKS 600 Series are designed for increasing demands of high machine speeds, ease of integration and simple operation. They can be combined with all the analogue sensors and steering frames of the FMS product range. If required, the correction value can also be used as an analogue output signal for controlling a hydraulic valve. The web guide controller of the BKS 600 Series are suitable for all types of web processing machines such as printing presses, coating machines and for the converting of paper, plastic, sheet metal, etc.

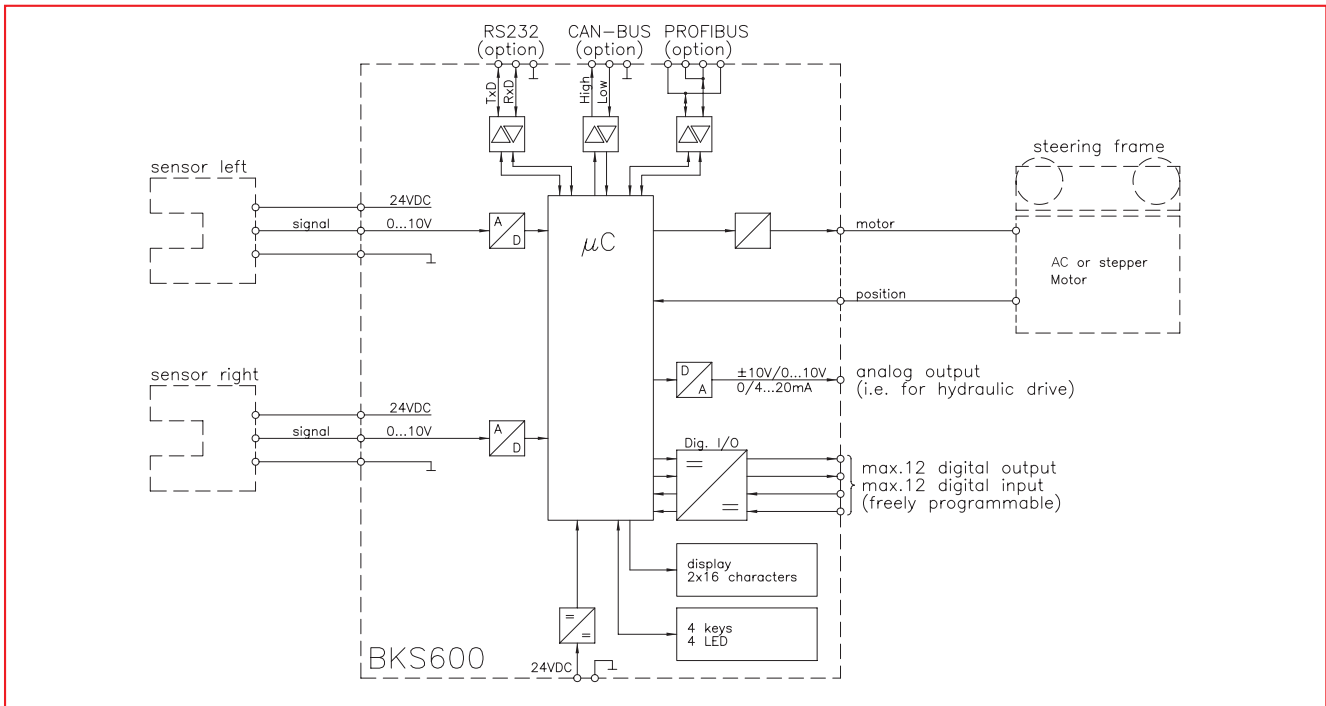
● Functional description

All information is in plain text (the following languages are selectable: German, English, French or Italian). All functions may be parameterized. The reference value for the web position can be set via keys or the interfaces. The functions may be remotely controlled through digital inputs and outputs.

The modular design allows the BKS 600 Series controller to be matched to customer specific requirements. It can handle up to two channels. This allows up to two steering frames to be controlled with one electronic unit. The cycle time of 2 ms provides precise control

at high machine speeds. The robust and compact aluminium housing is insensitive to external influences. Cable access is from below via cable glands to the screw terminals, which are arranged conveniently in the cover.

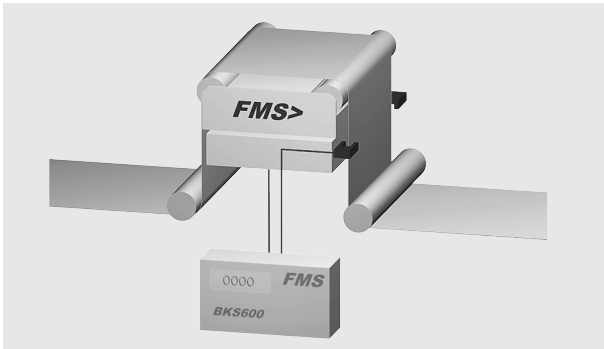
BKS 600 Series • Wiring diagram



BKS 600 Series • Technical data

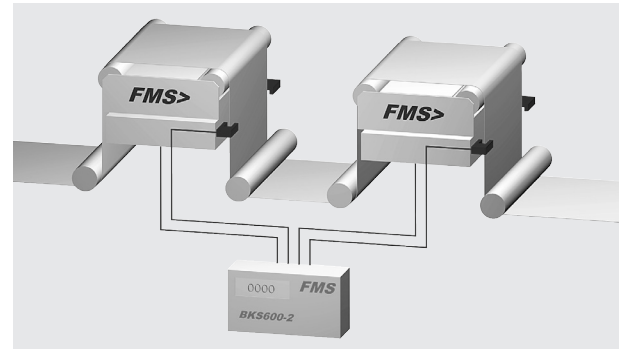
Type	BKS 600C	BKS 601C / BKS 602C	BKS 610C	BKS 611C
Usage	Control of 1 FMS-winderGLIDE 060	Control of 1 or 2 FMS-webMASTER, FMS-webDIRECTOR or FMS-winderGLIDE	Chase and follow system	Width measurement and width control
Number of steering frames	1	1/2	1/2	1
Sensors per steering frame	1...2	1...2	1...2	2
Mot. sensor adjustment ¹⁾	1...2	1...2	2	2
Control of steering frame	AC Motor	Stepper motor	Stepper motor	Stepper motor
Analogue output	± 10 V or 0/4...20 mA (12 Bit)	–	–	–
Sensor power supply	24 VDC			
Sensor signal input	0...10 V (14 Bit)			
Operation	4 keys, 4 LED, LCD display 2 x 16 characters 8 mm height			
Reference position	± 5 mm, adjustable in 0.1 mm steps			
Dead band	0...2 mm, adjustable in 0.1 mm steps			
Interfaces	RS 232 ¹⁾ , PROFIBUS [®] DP (EN 50170) ¹⁾ , CAN-Bus ¹⁾			
Digital inputs ²⁾	Freely programmable ³⁾ , 24 VDC via opto-coupler			
Digital outputs ²⁾	Freely programmable ⁴⁾ , open collector or 24 VDC			
Cycle time	2 ms			
Power supply	24 VDC (18...36 VDC) / max. 1.5 A			
Temperature range	– 10...60 °C			
Protection class	IP 54			

¹⁾ Options ²⁾ Galvanically isolated ³⁾ Select from: automatic, center position, reference –, reference +, start detection, sensor freerun, manual left, manual right ⁴⁾ Select from: automatic ok, edge missing, detection ok



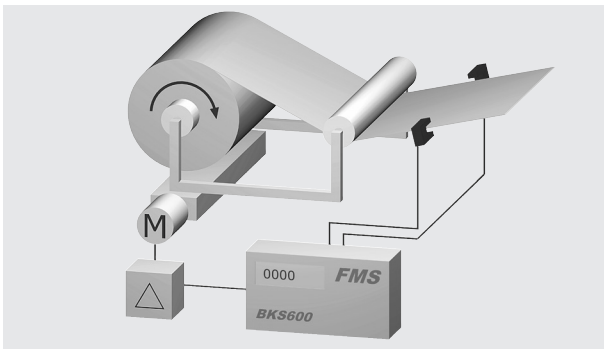
• FMS-webMASTER

The BKS 600 Series web guide controllers controls one steering frame. One or two analogue sensors transmit the edge position to the control unit. If the deviation from the reference position is greater than a given value (dead band), the steering frame is adjusted. With one sensor the edge is controlled; two sensors allow center guiding. With motorized sensor adjustment, the sensors automatically find the web edge.



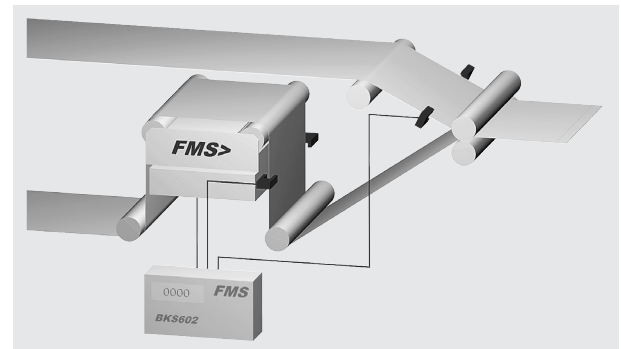
• FMS-webMASTER with 2 steering frames

The BKS 600 Series web guide controllers can independently control two steering frames.



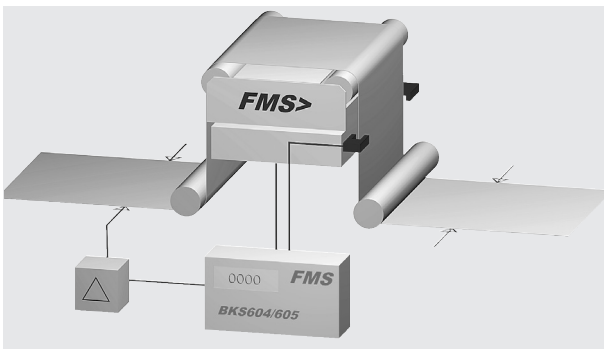
• FMS-winderGLIDE

The BKS 600 Series web guide controllers are equipped as standard with one analogue output per channel. Therefore actuators with analogue signals can be controlled. This configuration offers the same possibilities as when using steering frames with stepper motor drives.



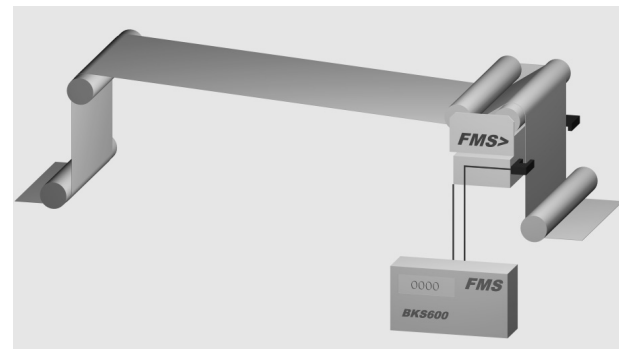
• Chase and follow system

The BKS 610 web guide controller measures the position of a first web (master) and guide a second web (slave) so that both webs exactly match each other. The master web and slave web can each be equipped with one or two sensors. Therefore, edge or center guiding is possible. With motorized sensor adjustment, the sensors automatically find the web edge.



• Width measurement and width control

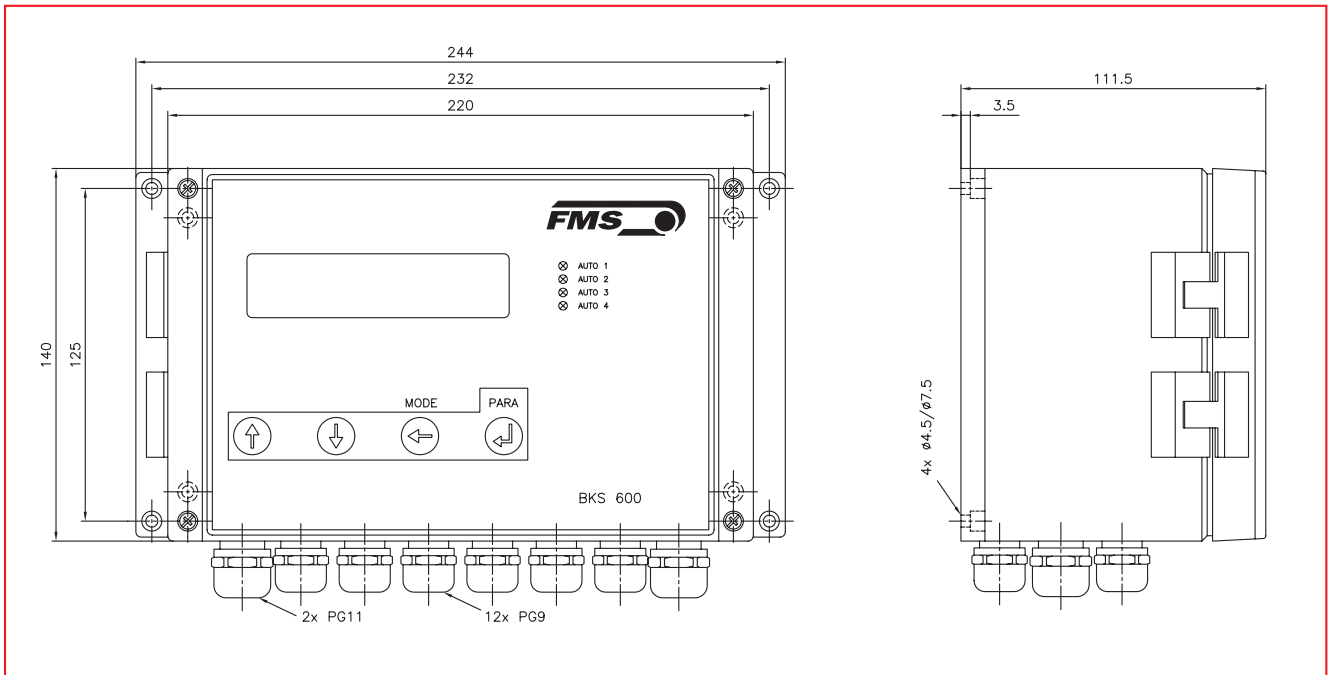
The BKS 611 web guide controller controls one steering frame. Two analog sensors transmit the left and right edge positions to the control unit giving a centre guide function. It controls the web position and also calculates the web width (width measurement). The output of the BKS 612 can be used to control the width of a blown film extruder for example (width control). The web width measurement/control can also be used without a steering frame.



• FMS-webDIRECTOR

The steering frame of the FMS-webDIRECTOR series have been specifically developed for use in machine which have long free spans. The BKS 600 Series web guide controllers can independently control up to two steering frames.

BKS 600 Series • Dimensions in mm



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