

Engine
Chassis
Transmission
E-Mobility

FAG

FAG VELOMATIC

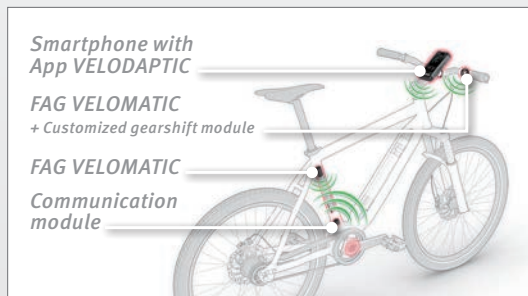
the automatic
gearshift system



SCHAEFFLER

MOBILITY FOR TOMORROW

The automatic bicycle gearshift system **FAG VELOMATIC**



Options	FAG VELOMATIC	FAG VELOMATIC + Customized gearshift module	FAG VELOMATIC + App VELODAPTIC
Initial operation of FAG VELOMATIC	✗	✗	✓
Fully automatic shifting	✓	✓	✓
Manual shifting in automatic mode	✗	✓	✓
Manual shifting	✗	✓	✓
Configuration of indiv. automatic programs	✗	✗	✓

Description

The **FAG VELOMATIC** is an automatic bicycle gearshift system with a flexible range of applications.

Functional advantages

- The **FAG VELOMATIC** always calculates and shifts to the optimum gear
- Individual changes to the system can be made using the App VELODAPTIC
- The actuator shifts from gear to gear in 0.2 seconds with a force of up to 100 N

Integration / installation

- No components are visible because the system is fitted e.g. in the seat tube or down tube

The **FAG VELOMATIC** is ideally supported by the App VELODAPTIC:

- Manual shifting requirement
- Replacement and setting of the Bowden cable
- Software updates for the gearshift actuator and communication module

FAG VELOMATIC Technical Data

Gearshift actuator

<i>Drive system</i>	Linear drive with position sensors
<i>Housing</i>	Aluminum with plastic cover
<i>Controlled variables</i>	Slope of terrain, wheel speed (must be available at the customer's end)
<i>Bowden cable</i>	Standard gear cable with barrel nipple
<i>Supply voltage</i>	24 V – 36 V
<i>Electricity consumption</i>	Monitoring < 10 mA/gearshift operation < 800 mA
<i>Shifting speed</i>	15 m/s with an accuracy of +/- 0,2 mm
<i>Tractive force</i>	100 N max.
<i>Connection</i>	2-pole Nano MQS
<i>Sensors</i>	Acceleration (→ inclination angle)
<i>Dimensions</i>	Length 202,5 mm / diameter 25 mm
<i>Compatibility</i>	Shimano: Nexus 7, Nexus 8, Alfine 8, Alfine 11 (others available)

<i>Protection class</i>	IP54
<i>Installation location</i>	Down tube or seat tube
<i>Features</i>	Three standard shifting programs, individually configurable starting gear

Communication module

<i>Communication interface</i>	BLE/ANT/CAN
<i>Baud rate</i>	250 kBd
<i>Supply voltage</i>	4.8 V – 7 V
<i>Dimensions</i>	(40 × 24,4 × 10) mm
<i>Connection</i>	USB Micro
<i>Protection class</i>	IP54
<i>Installation location</i>	Installation close to the control unit is recommended

Schaeffler Technologies AG & Co. KG

Georg-Schäfer-Straße 30

97421 Schweinfurt

Germany

Internet www.schaeffler-velosolutions.com

E-mail lev-bike-sport@schaeffler.com

In Germany:

Phone 0180 5003872

Fax 0180 5003873

From other countries:

Phone +49 9132 82-0

Fax +49 9132 82-4950

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