I AM THE NEW GENERATION

Temposonics® R-Series V

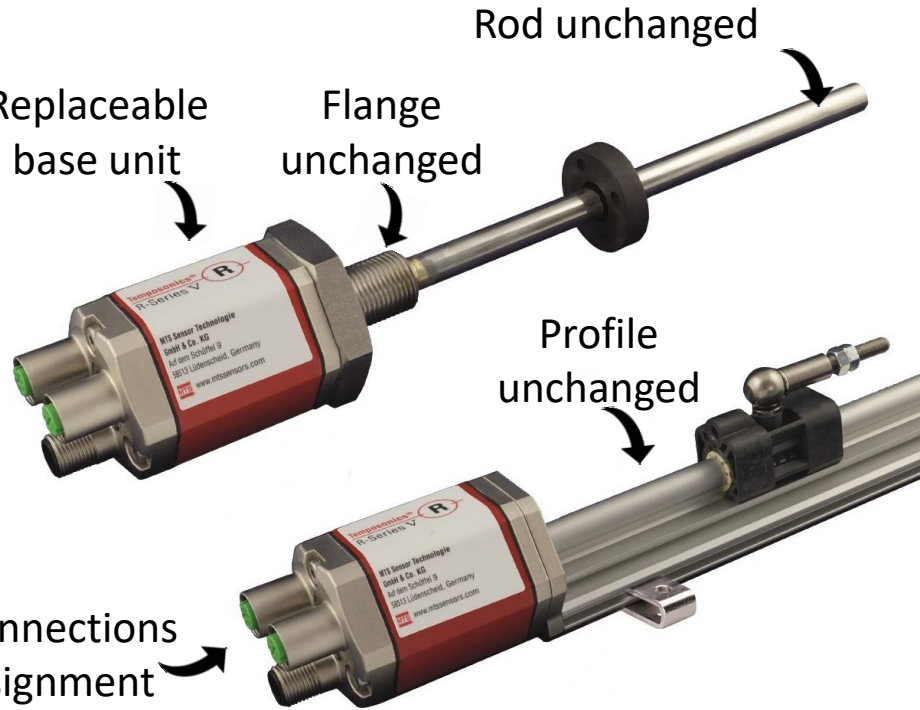
Solving challenges with the new generation

May 2020

I AM BACKWARD COMPATIPLE

R-Series V sensors are backward compatible:

- Proven mechanical designs
- Proven electrical connections



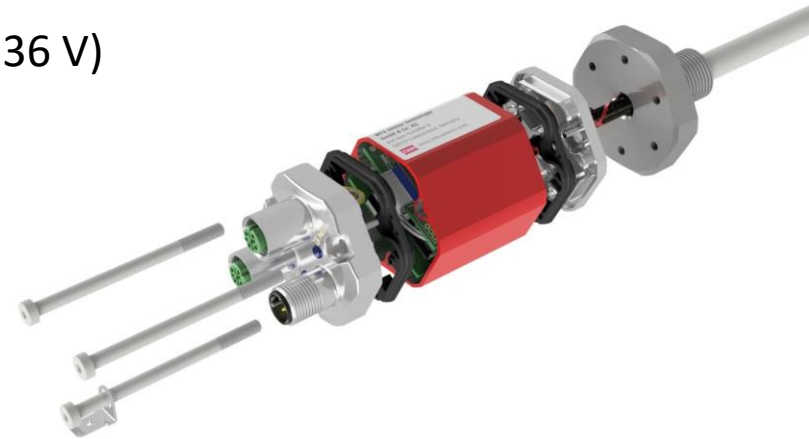
Benefit from the advanced features of R-Series V, as no adjustments are required for integration.

I AM RELIABLE IN YOUR APPLICATION

R-Series V sensors are more robust than ever:

- Increased shock resistance: 150 g / 11 ms
- Increased vibration resistance : 30 g
- Operating voltage: 12…30 VDC ± 20 % (9.6…36 V)
- Operating temperature: -40…+85 °C

Ensures even in harsh environment the high quality of your application!



I AM MORE POWERFUL

Outputs on R-Series V:

- EtherCAT®
- EtherNet/IP™
- POWERLINK
- PROFINET RT / IRT
- Analog
- SSI

I AM MORE POWERFUL

R-Series V EtherCAT:

- EtherCAT with Distributed Clock
- Minimum resolution 0.5 µm
- Simultaneous measurement of up to 30 position magnets
- Smaller sensor electronics housing
- Additional status information via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V EtherCAT

Output	EtherCAT with Distributed Clock (Cycle time: **100 µs** for up to **10 magnets** / **250 µs** for up to **30 magnets**)
Stroke Length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	**0.5**…100 µm
Operating Temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)
Smaller sensor electronics housing	**58 mm** + flange and connector
Measured value	Position, velocity and **acceleration** for up to **30 magnets simultaneously**

I AM MORE POWERFUL

R-Series V EtherNet/IP™:

- EtherNet/IP™ with CIP Sync (**C**ommon **I**ndustrial **P**rotocol) and DLR (**D**evice **L**evel **R**ing)
- Minimum resolution 1 µm
- Simultaneous measurement of up to 20 position magnets
- Smaller sensor electronics housing
- Additional status information via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V EtherNet/IP™

Output	EtherNet/IP™ with **CIP Sync** and **DLR**
Stroke length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	1…100 µm
Operating temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)
Smaller sensor electronics housing	**58 mm** + flange and connector
Measured value	Position and velocity of up to **20 magnets simultaneously**

I AM MORE POWERFUL

R-Series V POWERLINK:

- Measurement synchronous to the master clock
- Minimum resolution 0.5 µm
- Simultaneous measurement of up to 30 position magnets
- Smaller sensor electronics housing
- Additional status information via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V POWERLINK

Output	POWERLINK V2
Stroke length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	**0.5**…100 µm
Operating temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)
Length of sensor electronics housing	**58 mm** + flange and connector
Measured value	Position and velocity of up to **30 magnets simultaneously**

I AM MORE POWERFUL

R-Series V PROFINET:

- PROFINET RT (**R**eal **T**ime) and IRT (**I**sochronous **R**eal **T**ime)
- Minimum resolution 0.5 µm
- Simultaneous measurement of up to 30 position magnets
- Smaller sensor electronics housing
- Additional sensor information via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V PROFINET

Output	PROFINET RT/ PROFINET **IRT** Version 2.3
Stroke length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	**0.5**…100 µm
Operating temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)
Length of sensor electronics housing	**58 mm** + flange and connector
Measured value	Position and velocity of up to **30 magnets simultaneously**

I AM MORE POWERLFUL

R-Series V Analog:

- Position resolution 16 bit (internal resolution 0.1 µm)
- Tri color status LED for improved diagnosis
- Additional status information and adjustment on site via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V Analog

Output	Voltage: 0…10 V/10…0 V/-10…+10 V/+10…-10 V Current: 4(0)…20 mA/20…4(0) mA
Stroke length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	16 bit **(internal resolution 0.1 µm)**
Operating temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)

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R-Series V SSI:

- Minimum resolution 0.1 µm
- Tri color status LED for improved diagnosis
- Additional status information and adjustment on site via TempoLink smart assistant

The high precision of the position measurement improves the performance of your application.

Improvements of R-Series V SSI

Output	SSI
Stroke length	Rod version: 25…7620 mm Profile version: 25…**6350** mm
Resolution	**0.1**…100 µm
Operating temperature	-40…+**85 °C**
Shock test	**150 g** / 11 ms
Vibration test	**30 g** / 10…2000 Hz (excluding resonant frequencies)
Operating voltage	**12…30 VDC** ± 20 % (9.6…36 VDC)

KEEP EVERYTHING UNDER CONTROL

TempoLink smart assistant for all sensors of R-Series V:

- Supporting the setup of R-Series V in your application
- Providing additional status information for diagnostics such as
  - Internal temperature of the sensor
  - Total distance travelled by the position magnet
- Displaying the user interface on your smartphone, tablet or computer via the integrated Wi-Fi access point

Temposonics® R-Series V
Solving challenges with the new generation

- More reliable in harsh environment and unexpected impairments for continued quality of your application
- More powerful for improved performance of your application
- Ready for Industry 4.0 with additional status information for better understanding of your application

Solving current and future challenges with R-Series V!

Change over to R-Series V now!