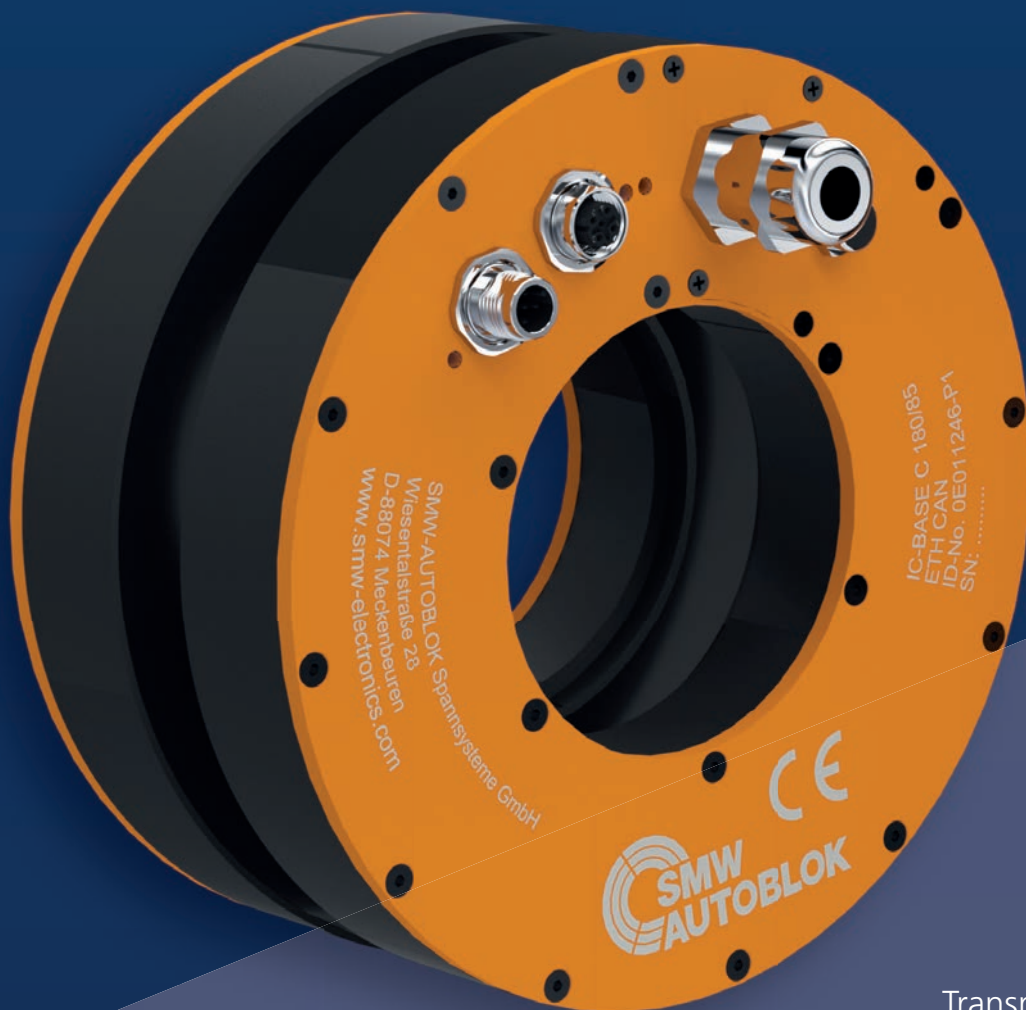


JUNE 2022 AVAILABLE FROM STOCK

INDUCTIVE COUPLER SYSTEM

F180 ETHERNET

**CONTACT FREE TRANSMISSION
OF ENERGY AND SIGNALS**



+ FAST & SAFE COMMUNICATION

Ethernet
High energy transmission

+ FLEXIBLE

Transmission of energy and signals
Large transmission distances
Dynamic Pairing

Inductive coupler F180 Ethernet

Axial coupler

Contact free transmission of energy and signals



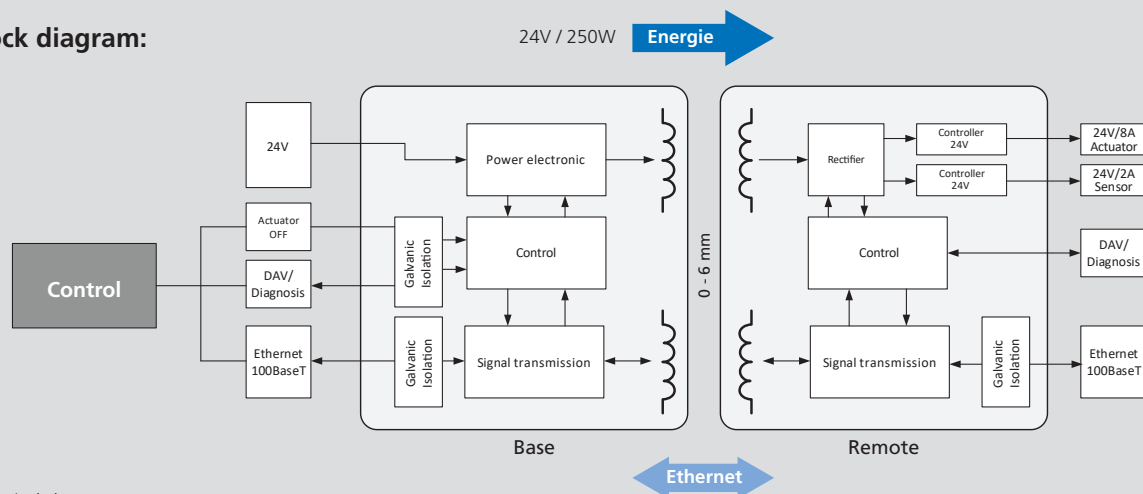
Application/customer benefits

- Contact free, safe transmission of energy and signals between moving / rotating and stationary components
- Application examples: Packaging machines, special machines, Automation, Machine Tools, Printing Machines
- Substitution of slip ring / connector
- Dynamic Pairing
- Wear and maintenance free
- Protective functions: temperature monitoring, foreign object detection, reverse polarity protection
- Multi-level LED with good visibility

Technical features

- Diameter 180 mm / Inner diameter 85 mm
- Supply voltage 24V
- Transmission distance 0 - 6 mm
- Transmission of energy 24V / 250W
- Signal transmission Ethernet 100 Base-T
- Transmission bandwidth Ethernet < 4 Mbit/s
- Protection class: IP 67

Block diagram:



Subject to technical changes.
For more detailed information please ask our customer service.

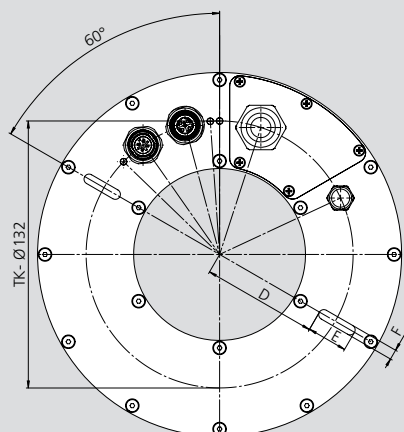
Inductive coupler F180 Ethernet

SMW-electronics Type	Base	Remote
Id. No.	0E011246-P2	0E011247-P2
Operating temperature (body surface)	-20°C ... +50°C	-20°C ... +50°C
Stocking temperature	-20°C ... +60°C	-20°C ... +60°C
Transmission distance	0 mm ... 6 mm	0 mm ... 6 mm (4 mm recommended)
Operating voltage	24V ± 10%	-
Output voltage (Actuator supply)	-	24V DC / 8 A
Output voltage (Sensor supply)	-	24V DC / 2 A
Signal transmission	Ethernet 100 Base-T	Ethernet 100 Base-T
Transmission bandwidth	4 Mbit/s	4 Mbit/s
LED function display	3 LEDs 2-coloured	3 LEDs 2-coloured
Current consumption (base)	max 8 A	-
Overload protection / short-circuit protection	✓	✓
Residual ripple	-	< 50 mV
Reverse polarity protection	✓	-
Data valid output	max. 100 mA	-
Ready for Operation	< 1 s	< 1 s

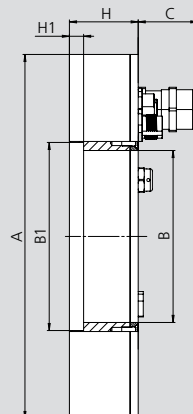
- Stationary unit - Base
- Mobile unit - Remote

Axial coupler

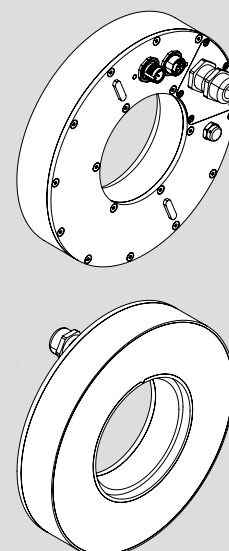
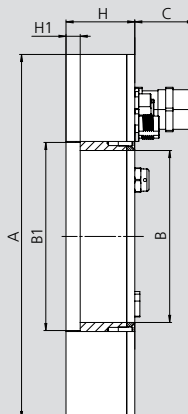
Base / Remote:



Base:



Remote:



Subject to technical changes.
For more detailed information please ask our customer service.

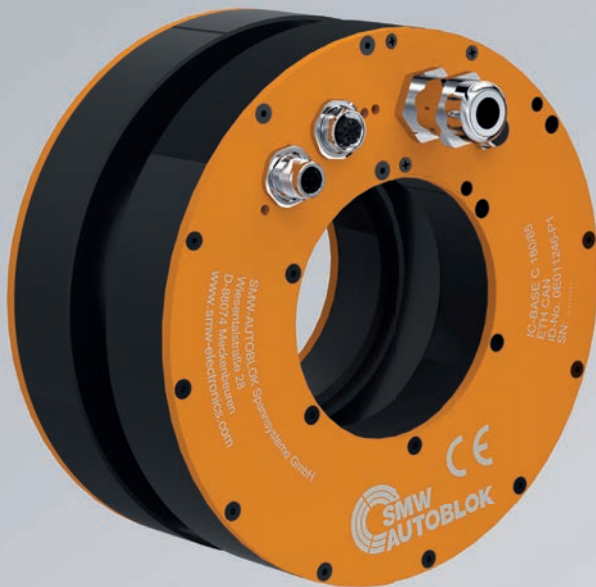
Inductive coupler F180 Ethernet

SMW-electronics Type		Base	Remote
Id. No.		0E011246-P2	0E011247-P2
A	mm	180	180
B	mm	85	85
B1	mm	93	93
C	mm	29.5	29.5
D	mm	57	57
E	mm	20	20
F	mm	5	5
H	mm	34	34
H1	mm	7	7
α	degree	60	60
Housing material		Aluminium, GFK	Aluminium, GFK
Protection class		IP 67	IP 67

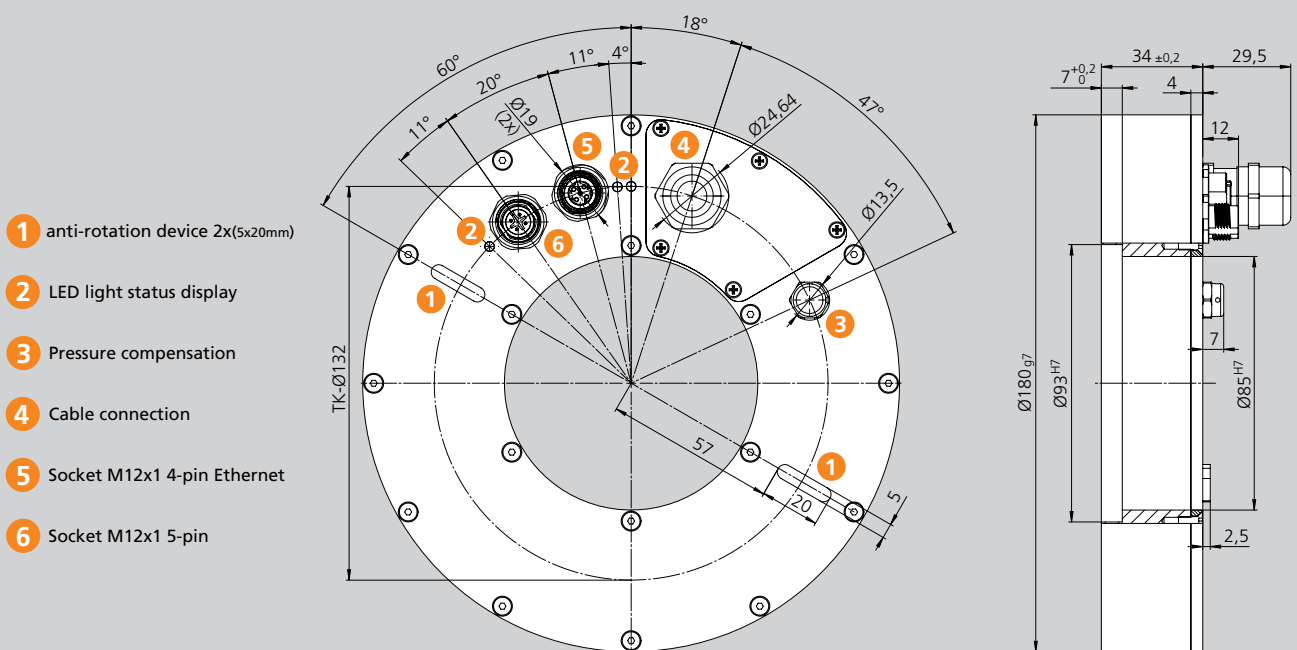
Function Base	
LED Power	
Color	Yellow / red
Function	Off » Unit not supplied with voltage (or undervoltage)
	On (yellow) » Voltage ok and mobile unit has been detected
	2Hz yellow 50 / 50% » Operating temperature in critical range
	1Hz yellow 25 / 75% » Voltage ok but no mobile unit detected
	1Hz red / yellow » Incompatible mobile unit detected
	2Hz red » Foreign element detected
	5Hz red » Internal error
LED Signal transmission Ethernet	
Color	Green / red
Function	Off » No mobile unit detected
	On / green » Signal transmission ready
	1Hz green » Data packets are being transmitted
	3Hz green » 50% of the transmission bandwidth used (10s)
	8Hz red » Data packets were discarded (in the last 10s)
	On / red » Error in data transmission (internal error)
LED Energy transmission	
Color	Yellow / red
Function	Off » No mobile unit detected
	On (yellow) » Unit coupled, voltage output ok
	1Hz red / yellow » Short circuit at voltage output sensor
	3Hz red / yellow » Short circuit at voltage output actuator
	3Hz red » Short circuit at both voltage outputs
	5Hz red » Internal error

Function Remote	
LED Actuator	
Color	Yellow / red
Function	Off » Unit not paired
	On (yellow) » Unit paired, voltage output actuator ok
	Flashes 2Hz red » Unit paired but short circuit on actuator
	Flashes 5Hz red » Internal error
LED Sensor supply	
Color	Green / red
Function	Off » Unit not paired
	On (green) » Unit paired, voltage output sensor (24V) ok
	Flashes 2Hz red » Unit paired but short circuit on sensor (24V)
	Flashes 5Hz red » Internal error
LED Signal transmission Ethernet	
Color	Green / red
Function	Off » No mobile unit detected
	On / green » Signal transmission ready
	Flashes 1Hz green » Data packets are being transmitted
	Flashes 3Hz green » 50% of the transmission bandwidth used (10s)
	Flashes 8Hz red » Data packets were discarded (in the last 10s)
	On / red » Error in data transmission (internal error)

Mounting options



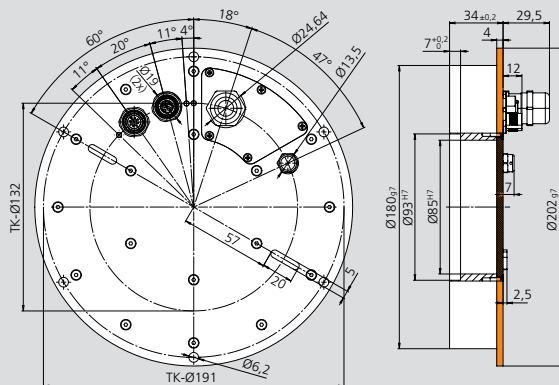
Standard features



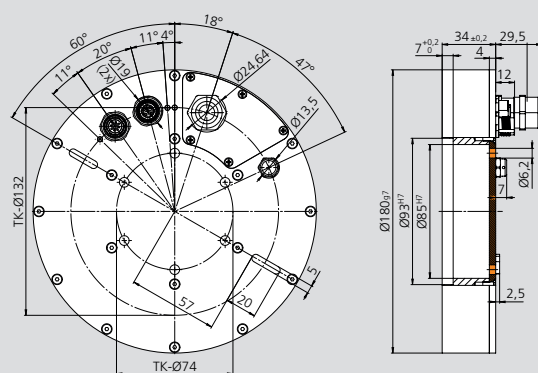
Standard mounting options for the F180

The perfect solution for every application

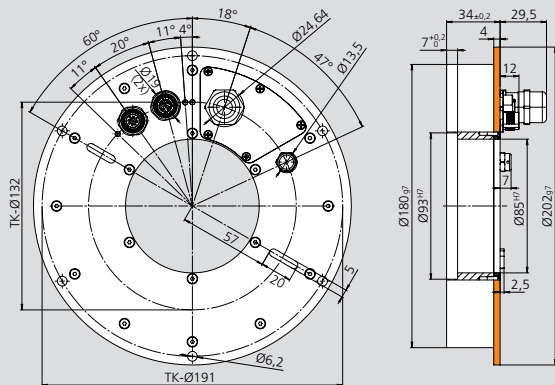
Mounting option 1: External flange cover without through-hole



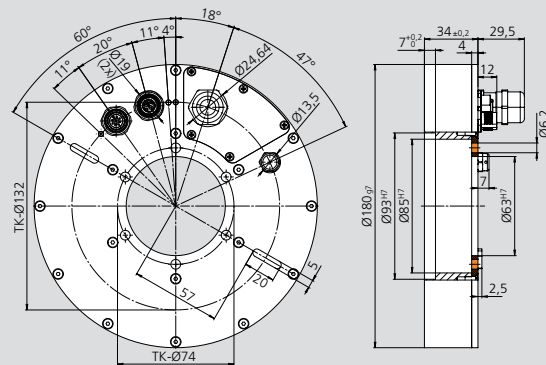
Mounting option 2: Internal flange cover without through-hole



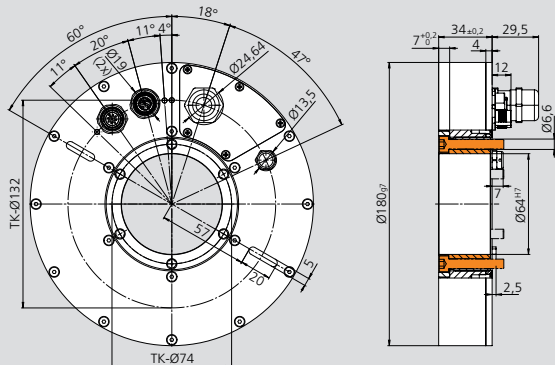
Mounting option 3: External flange cover with through-hole



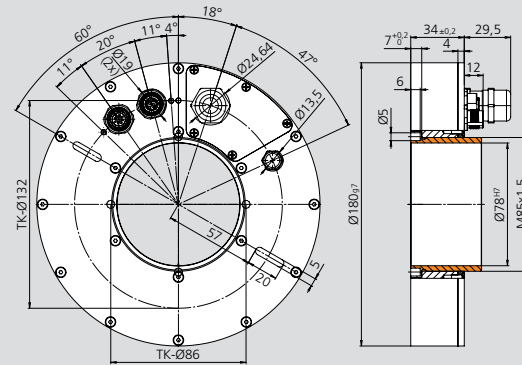
Mounting option 4: Internal flange cover with through-hole



Mounting option 5: Standard + flange ring with through-hole



Mounting option 6: Standard + threaded sleeve with through-hole



Customized mounting options on request

Notes

SMW-electronics - Wireless Technology



SMW-Autoblok has evolved from a conventional producer of workholding devices to a high-tech manufacturer by combination of mechanics, electronics and software.

The combination of all our competences for SMART products and the creation of further and forward-looking synergies launched the new business unit SMW-electronics.

The innovative product range of SMW-electronics includes:

- Contactless inductive systems for the transmission of energy and signals
- Smart sensoric and measuring systems
- Mechatronic clamping system
- Software
- Individual customized adaption

www.smw-electronics.com

Visit our new website and convince yourself by our innovative product range!

We offer solutions among others for industries like machine tools, automation and robotics, electric drive technology, automotive, intralogistic, industrial equipment and agricultural equipment, packaging industry, energy (oil, gas, wind), aerospace and medical technology.

Your personal contact for any question:

Phone: +49 (0)7542 405-156

E-Mail: info@smw-electronics.de

Address: Wiesentalstraße 28, 88074 Meckenbeuren

We are always at your disposal by telephone, e-mail and video conference.

Follow us



**Germany**

SMW-AUTOBLOK Spannsysteme GmbH
Postfach 1151 • D-88070 Meckenbeuren
Wiesentalstraße 28 • D-88074 Meckenbeuren
Tel.: +49 (0) 7542 - 405 - 0
Vertrieb Inland ► vertrieb@smw-autoblok.de
Fax: +49 (0) 7542 - 3886
Sales International ► sales@smw-autoblok.de
Fax: +49 (0) 7542 - 405 - 181

**Italy**

AUTOBLOK s.p.a.
Via Duca D'Aosta n.24
Fraz. Novaretto
I-10040 Caprie - Torino
Tel. +39 011 - 9638411
Tel. +39 011 - 9632020
Fax +39 011 - 9632288
E-mail ► info@smwautoblok.it

**U.S.A.**

SMW-AUTOBLOK Corporation
285 Egidi Drive - Wheeling, IL 60090
Tel. +1 847 - 215 - 0591
Fax +1 847 - 215 - 0594
E-mail ► autoblok@smwautoblok.com

**France**

SMW-AUTOBLOK
17, Avenue des Frères Montgolfier - Z.I. Mi-Plaine
F-69680 Chassieu
Tel. +33 (0) 4 - 727 - 918 18
Fax +33 (0) 4 - 727 - 918 19
E-mail ► autoblok@smwautoblok.fr

**Japan**

SMW-AUTOBLOK Japan Inc.
1-56 Hira, Nishi-Ku
461-Nagoya
Tel. +81 (0) 52 - 504 - 0203
Fax +81 (0) 52 - 504 - 0205
E-mail ► japan@smwautoblok.co.jp

**Great Britain**

SMW-Autoblok Telbrook Ltd.
7 Wilford Industrial Estate
Ruddington Lane, Wilford
GB-Nottingham, NG11 7EP
Tel. +44 (0) 115 - 982 1133
E-mail ► info@smw-autoblok-telbrook.co.uk

**China**

SMW-AUTOBLOK (Shanghai) Work Holding Co.,Ltd.
Building 6, No.72, JinWen Road, KongGang
Industrial Zone, ZhuQiao Town, Pudong District
201323, Shanghai P.R. China
Tel. +86 21 - 5810 - 6396
Fax +86 21 - 5810 - 6395
E-mail ► china@smwautoblok.cn

**Spain**

SMW-AUTOBLOK IBERICA, S.L.
Ursalto 4 – Pab. 9-10 Pol. 27
20014 Donostia - San Sebastián (Gipuzkoa)
Tel.: +34 943 - 225 079
Fax: +34 943 - 225 074
E-mail ► info@smwautoblok.es

**Mexico**

SMW-AUTOBLOK Mexico, S.A. de C.V.
Acceso III No. 16 Int.9,
Condominio Quadrum
Industrial Benito Juarez
Querétaro, Qro. C.P. 76120
Tel. +52 (442) 209 - 5118
Fax +52 (442) 209 - 5121
E-mail ► smwmex@smwautoblok.mx

**Russia**

SMW-AUTOBLOK Russia
B.Tulskaya str., 10, bld.3, off. 323,
115191 Moscow (Russia)
Tel. +7 495 -231-1011
Fax +7 495 -231-1011
E-mail ► info@smw-autoblok.ru

**India**

SMW-AUTOBLOK Workholding Pvt. Ltd.,
Plot No. 4, Weikfield Industrial Estate,
Gat No. 1251, Sanaswadi, Tal - Shirur,
Dist – Pune, 412 208
Tel. +91 2137 - 616 974
Fax +91 2137 - 616 972
E-mail ► info@smwautoblok.in

**Taiwan**

AUTOBLOK Company Ltd.
No.6, Shuyi Rd., South Dist.,
Taichung, Taiwan
Tel. +886 4-226 10826
Fax +886 4-226 12109
E-mail ► taiwan@smwautoblok.tw

**Turkey**

SMW AUTOBLOK Makina San. Ve Tic. Ltd. Şti.
Yenişehir Mah, Osmanlı Blv, Volume Kurtköy Ofis
No:9, Kat:1, D:4, PK: 34912, Pendik, İstanbul
Tel. +90 216 629 - 2019
E-mail ► info@smwautoblok.com.tr

**Czech Republic / Slovakia**

SMW-AUTOBLOK s.r.o.
Merhautova 20
CZ - 613 00 Brno
Tel. +420 513 034 157
Fax +420 513 034 158
E-mail ► info@smw-autoblok.cz

**Sweden / Norway**

SMW-Autoblok Scandinavia AB
Kasernvägen 2
SE - 281 35 Hässleholm
Tel. +46 (0) 761 420 111
E-mail ► info@smw-autoblok.se

**Poland**

SMW-AUTOBLOK Poland Sp. z o.o.
Ul Ligocka 103 - Building 8
40-568 Katowice
Tel. +48 (0) 664 673 428
E-mail ► info@smwautoblok.pl

**Korea**

SMW-AUTOBLOK KOREA CO., LTD.
1108 ho, Baeksang Startower 1st,
65, Digital-ro 9-gil, Geumcheon-gu
Seoul, ROK-08511, Korea
Tel. +82 2 6267 9505
Fax +82 2 6267 9507
E-mail ► info-korea@smw-autoblok.net