

MX-L 335 compact

MECHATRONIC LONG STROKE GRIPPER

Mechatronic drive
Gripping force 2.500 N - 27.000 N
Position sensing and monitoring of the gripping force
Pre-positioning and sensitive gripping force adjustment



MX-L 335 compact

Mechatronic gripper

Mechatronic long stroke gripper

■ 2 finger parallel



Application/customer benefits

- Gripping force independent of gripping speed and stroke
- Mechatronic drive with gripping force retention
- Gripping force 2.500 N - 27.000 N
- Position sensing and monitoring of the gripping force
- OD clamping
- Pre-positioning and sensitive gripping force adjustment

Technical features

- Aluminum housing
- Sealed/Protection class: IP67
- Repeatability: 0,02 mm
- Recommended workpiece weight up to 135 kg
- Power supply: 24 V / 7,5 A
- Communication interface: Profinet
- Possibility of safe motion shutdown by means of STO Signals (optional)

Standard equipment

Gripper (without gripper fingers, centering sleeves and mounting bolts)

MX-L 335 compact



Use of AI products Benefits:

- Predictive maintenance
- Control and optimization of production processes
- Increasing quality
- Reduction of downtimes
- Optimization of process parameters

Lightweight housing

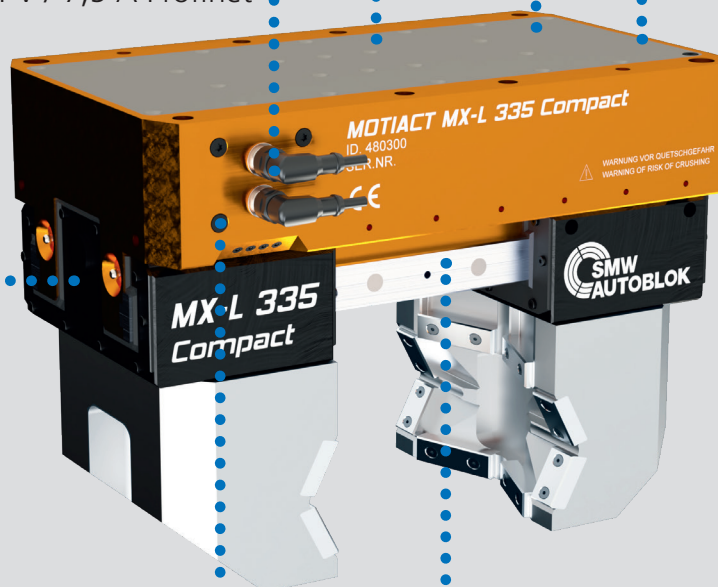
Connector:
1 x M12 D-codiert +
1x M12 L-codiert
Power:
24 V / 7,5 A Profinet

Optional adapter plates
for robot connection

Mechatronic drive

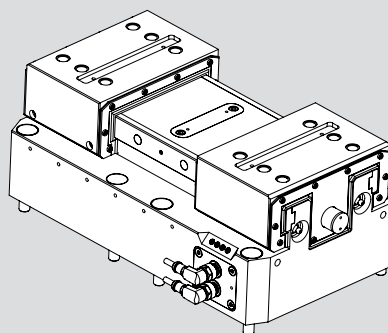
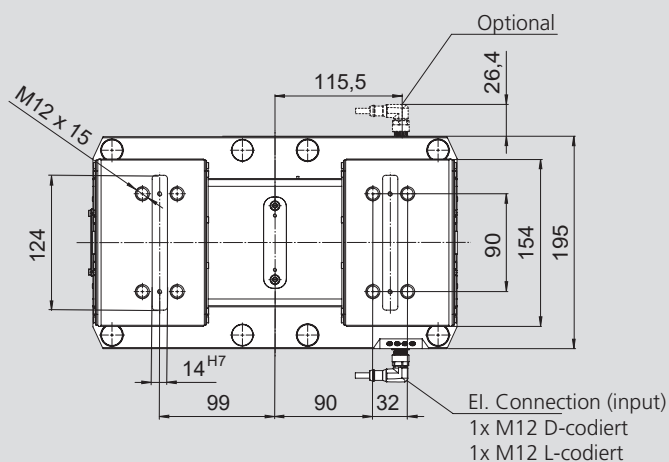
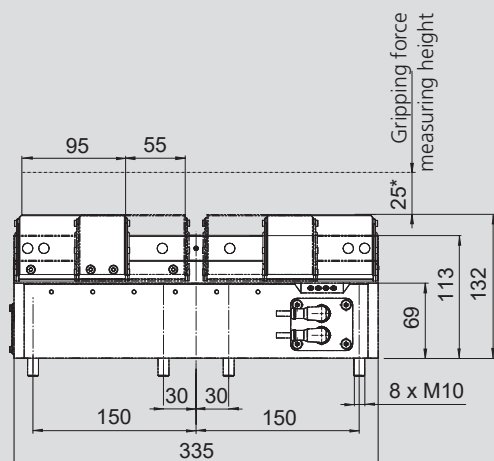
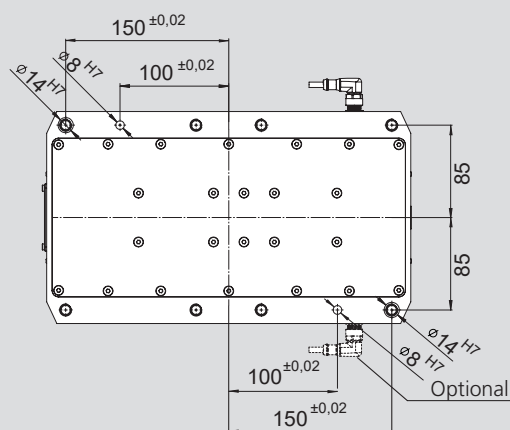
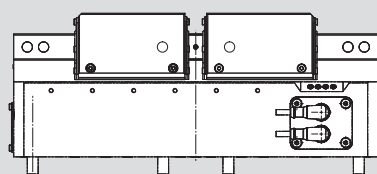
with gripping force retention,
motor brake, integrated
intelligence and sensors

Sealed



LED Status indication

Monitoring of the gripping position
and gripping force

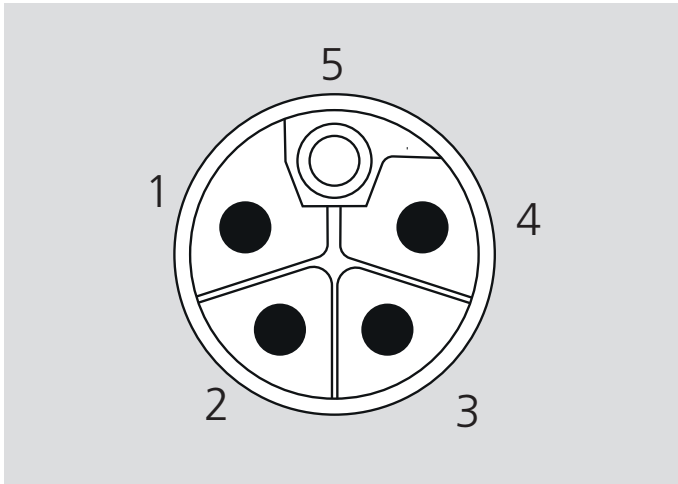


Subject to technical changes.
For more detailed information please ask our customer service.

*Gripping force is the arithmetic sum of the individual forces applied on each jaw at the specified distance.

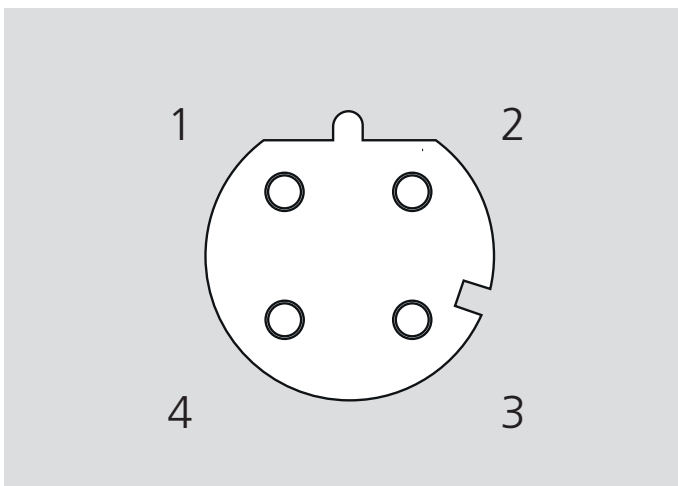
Type		MX-L 335 compact
Id. No.		PROFINET
Id. No.		480300
Gripping force (steplessly adjustable)	N	2.500 - 27.000
Stroke per jaw	mm	55
Repeatability	mm	0,02
Weight	kg	32
Recommended workpiece weight	kg	135
Travel speed per jaw	mm/s	5
Voltage (actuators)	V	24/48
Max. power consumption (actuators)	A	7,5
Voltage (sensors)	V	24 V ± 10%
Max. power consumption (sensors)	A	0,5 A
Communication interface		Profinet
STO signals (option)		2

Pin assignment M12 x 1 - 5 Pin L-coded Male



Power Interface		
Pin	Function	Description
1	US+	24V Power supply logic
2	UA+	24V/ 48V Power supply actuator
3	GND US-	Ground power supply logic
4	GND UA-	Ground power supply actuator
5	nc	-

Pin assignment M12 x 1 - 4 Pin D-coded Female



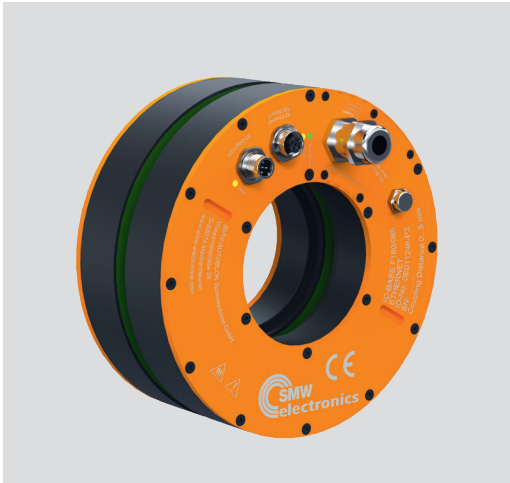
Ethernet/Profinet Interface		
Pin	Function	Description
1	Tx+	Ethernet/Profinet Tx+
2	Rx+	Ethernet/Profinet Rx+
3	Tx-	Ethernet/Profinet Tx-
4	Rx-	Ethernet/Profinet Rx-

Notes

A series of horizontal stripes in alternating shades of blue and light blue, creating a template for notes. The stripes are uniform in width and extend across the entire width of the page.

Axial coupler

■ Contact free transmission of energy and signals



Application/customer benefits

- Contact free transmission of energy and signals between moving / rotating and stationary components
- Application examples: Packaging machines, special machines, automation, machine tools, printing machines, robot applications (EOAT)
- Substitution of slip ring / connector
- Dynamic Pairing
- Wear and maintenance free
- Protective functions: Temperature monitoring, foreign object detection
- Status LED with good visibility

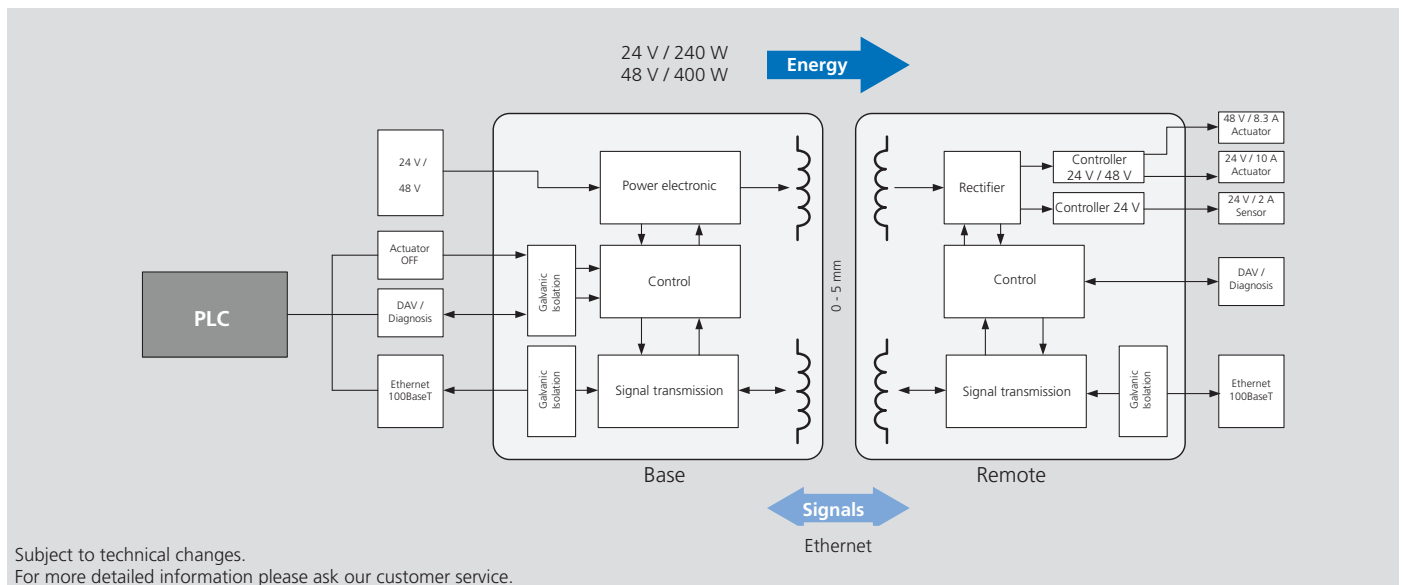
Technical features

- Diameter: 180 mm / Through hole: 85 mm
- Operating voltage: 24 V or 48 V
- Transmission distance: 0 - 5 mm at 24 V or 0 - 3 mm at 48 V
- Energy transmission: 24 V / 240 W or 48 V / 400 W (adjustable)
- Signal transmission: Ethernet 100 Base-T
- Transmission bandwidth < 5 MBit/s
- Connections: M12 Ethernet (D-coded), M12 Diagnosis (A-coded), terminal block (Energy)
- Protection class: IP67

Block diagram

Standard equipment

Inductive coupler base oder remote



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

Inductive coupling system F180 Ethernet

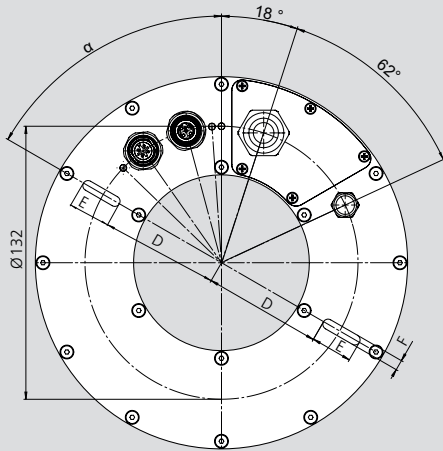
Type	Base	Remote
Id. No.	0E011246	0E011247
Operating temperature (body surface)	-20° C ... +60° C	
Stocking temperature	-20° C ... +60° C	
Transmission distance	0 mm ... 5 mm (24 V) 0 mm ... 3 mm (48 V)	
Operating voltage	24 V / 48 V	-
Output voltage (Actuator supply)*	-	24 V DC / 10 A 48 V DC / 8.3 A
Output voltage (Sensor supply)*	-	24 V DC / 4 A
Signal transmission	Ethernet 100 Base-T	
LED function display	3 LEDs 2-color	
Current consumption (base)	15 A (24 V) 12 A (48 V)	-
Overload protection / short-circuit protection	✓	✓
Reverse polarity protection	-	< 50 mV
Data valid output	max. 100 mA	-
Ready delay	< 5 s	

*max 400 W total

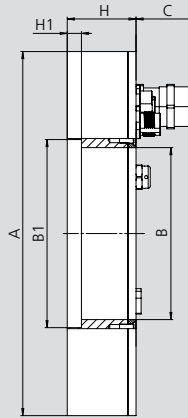
- Stationary Unit - Base
- Mobile Unit - Remote

Axial coupler

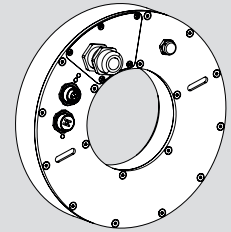
Base / Remote:



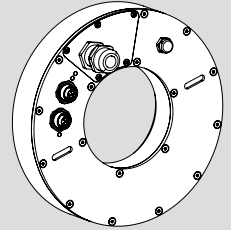
Base / Remote:



Base:



Remote:



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

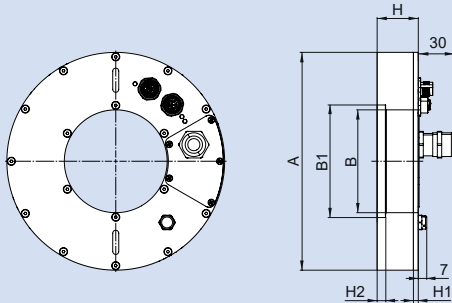
Inductive coupling system F180 Ethernet

Type	Base		Remote
Id. No.	0E011246		0E011247
A	mm	180	
B	mm	85	
B1	mm	93	
C	mm	29.5	
D	mm	57	
E	mm	20	
F	mm	5	
H	mm	34	
H1	mm	7	
a	degree	60	

Housing material	Al, GFK		
Protection class	IP67		
Weight	kg	1,172	1,275

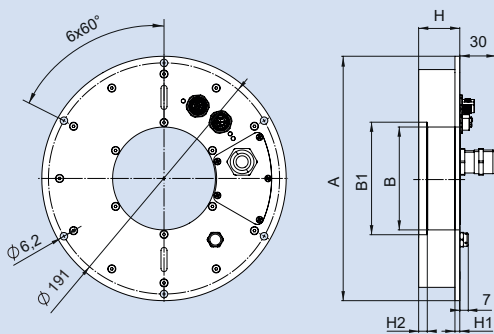
Function Base		Function Remote	
LED Power		LED Actuator	
Color	Green/red	Color	Green/red
Function	Off » Unit not supplied with voltage (or undervoltage)	Function	Off » Unit not paired
	On (green) » Voltage ok and mobile unit has been detected		On (green) » Unit paired, voltage output actuator ok
	2 Hz green 50/ 50% » Operating temperature in critical range		Flashes 2 Hz red » Unit paired but short circuit on actuator
	1 Hz green 25/75% » Voltage ok but no mobile unit detected		Flashes 5 Hz red » Internal error
	1 Hz red/green » Incompatible mobile unit detected		
	2 Hz red » Foreign element detected		
5 Hz red » Internal error		LED Sensor supply	
LED Signal transmission Ethernet		Color	Green/red
Color	Yellow/red	Function	Off » Unit not paired
Function	Off » No mobile unit detected		On (green) » Unit paired, voltage output sensor (24 V) ok
	On/yellow » Signal transmission ready		Flashes 2 Hz red » Unit paired but short circuit on sensor (24 V)
	1 Hz yellow » Data packets are being transmitted		Flashes 5 Hz red » Internal error
	3 Hz yellow » 50% of the transmission bandwidth used (10 s)		
	8 Hz red » Data packets were discarded (in the last 10 s)		LED Signal transmission
On/red » Error in data transmission (internal error)		Color	Yellow/red
LED Energy transmission		Function	Off » No mobile unit detected
Color	Yellow/red		On/yellow » Signal transmission ready
Function	Off » No mobile unit detected		Flashes 1 Hz yellow » Data packets are being transmitted
	On (yellow) » Unit coupled, voltage output ok		Flashes 3 Hz yellow » 50% of the transmission bandwidth used (10 s)
	1 Hz red/yellow » Short circuit at voltage output sensor		Flashes 8 Hz red » Data packets were discarded (in the last 10 s)
	3 Hz red/yellow » Short circuit at voltage output actuator		On/red » Error in data transmission (internal error)
	3 Hz red » Short circuit at both voltage outputs		
5 Hz red » Internal error			

Standard flange



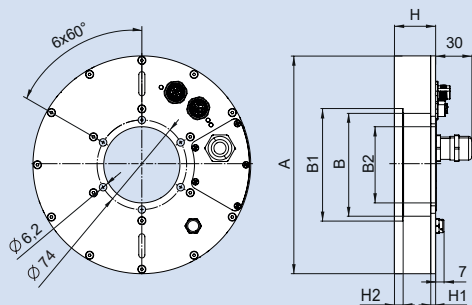
Type	F180 Ethernet	
	IC-Base F180 Ethernet D180/085	IC-Remote F180 Ethernet D180/085
Id.-No.	0E011246	0E011247
A	180	
B	85	
B1	93	
B2	-	
H	34	
H1	3	
H2	7	
Weight	1.31 kg	

Outer flange with feed-through



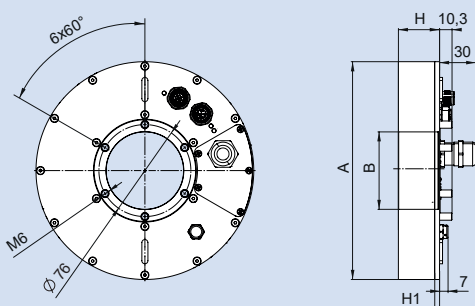
Type	F180 Ethernet	
	IC-Base F180 Ethernet D202/085	IC-Remote F180 Ethernet D202/085
Id.-No.	0E012340	0E012341
A	202	
B	85	
B1	93	
B2	-	
H	34	
H1	4	
H2	7	
Weight	1.47 kg	

Inner flange with feed-through



Type	F180 Ethernet	
	IC-Base F180 Ethernet D180/063	IC-Remote F180 Ethernet D180/063
Id.-No.	0E012342	0E012343
A	180	
B	85	
B1	93	
B2	63	
H	34	
H1	4	
H2	7	
Weight	1.4 kg	

Flange ring with feed-through



Type	F180 Ethernet	
	IC-Base F180 Ethernet D180/064	IC-Remote F180 Ethernet D180/064
Id.-No.	0E012344	0E012345
A	180	
B	64	
B1	-	
B2	-	
H	34	
H1	4	
H2	-	
Weight	1.58 kg	

FURTHER OPTIONS AVAILABLE ON REQUEST!

- Outer flange without feed-through
- Inner flange without feed-through
- Threaded sleeve with feed-through

Notes

The page contains a series of horizontal stripes in two shades of blue, alternating from top to bottom. The stripes are uniform in width and extend across the entire width of the page, providing a template for writing notes.

Notes

A series of horizontal stripes in alternating shades of blue and light blue, creating a template for notes. The stripes are uniform in width and extend across the entire width of the page.

Notes

The page contains a series of horizontal stripes in two shades of blue, alternating from top to bottom. The stripes are uniform in width and extend across the entire width of the page, providing a template for writing notes.



Germany

SMW-AUTOBLOK Spannsysteme GmbH
Wiesentalstraße 28 • D-88074 Meckenbeuren

SMW-electronics GmbH
Wiesentalstraße 19 • D-88074 Meckenbeuren

Tel. +49 (0) 7542 - 405 - 0

Fax +49 (0) 7542 - 405 - 0

E-mail ► info@smw-autoblok.de

E-mail ► info@smw-electronics.de



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) 4.72.79.18.18, Fax +33 (0) 4.72.79.18.19

E-mail ► autoblok@smwautoblok.fr



Japan

SMW-AUTOBLOK Japan Inc.
1-56 Hira, Nishi-Ku, Nagoya

Tel. +81 (0) 52 - 504 - 0203

Fax +81 (0) 52 - 504 - 0205

E-mail ► infosaj@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.
2dn Floor, Building 1, No.141, Xuanchung Road,
Xuanchung Town, Pudong District,
201399, 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, Queretaro, Qro. C.P. 76120

Tel. +52 (442) 209 - 5118, Fax +52 (442) 209 - 5121

E-mail ► smwmex@smwautoblok.mx



Canada

SMW AUTOBLOK CANADA CORP
1460 The Queensway - Suite 219
Etobicoke, ON M8Z 1S7

Tel. +1 416 - 316 - 3839

E-mail ► info@smwautoblok.ca



India

SMW-AUTOBLOK Workholding Pvt. Ltd.,
Plot No. 4, Weikfield Industrial Estate, Gat No. 125,
Sanaswadi, Tal - Shirur, Dist - Pune. 412 208

Tel. +91 2137 - 616 974

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. Sti.
Yenisehir Mah, Osmanli Blv, Volume Kurtköy Ofis
No: 9, Kat: 2, D: 30, 34912, Pendik, Istanbul

Tel. +90 216 629 20 19

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

E-mail ► info@smw-autoblok.cz



Sweden / Norway

SMW-AUTOBLOK Scandinavia AB
Kommendörsgatan 3

281 35 Hässleholm

Tel. +46 (0) 761 420 111

E-mail ► info@smw-autoblok.se



Poland

SMW-AUTOBLOK Poland Sp. z.o.o
OGRODNICZA 12

95 - 100 ZGIERZ

Tel. +48 736 059 699

E-mail ► info@smwautoblok.pl



Holland / Belgium

SMW Autoblok Benelux B.V.
Zeearend 7, 7609PT Almelo

Tel. +31 546 812 615

E-mail ► info@smwautoblok.nl



Korea

SMW-AUTOBLOK KOREA CO., LTD.
1502-ho, Charyong-ro 48beon-gil,

Uichang-gu, Changwon-si

Gyeongsangnam-do, 51391, Republic of Korea

Tel. +82 55 264 9505

E-mail ► info-korea@smw-autoblok.net