SMW AUTOBLOK

Industry 4.0 Product

F500

ELECTRIC FLANGE

For the operation of standard chucks on mill-turn centers

SENSITIVE ADJUSTMENT

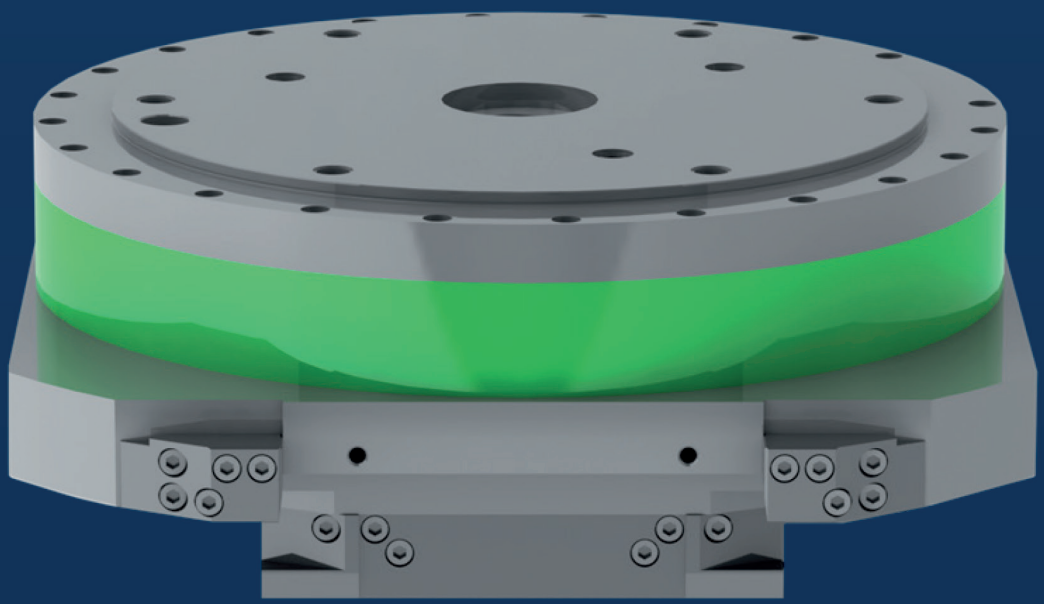
of the clamping force and the position with highest repeat accuracy

SAFETY SYSTEMS

electrical and mechanical

STANDARD MOUNTING

for power chucks

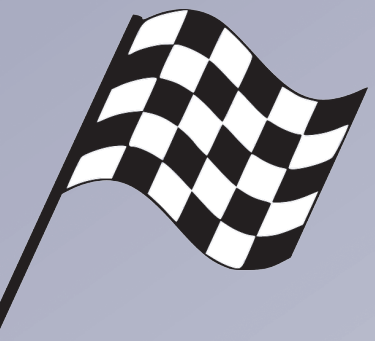


www.smw-autoblok.de

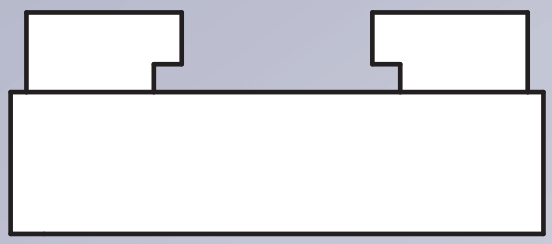
F500
Electric Flange

Industry 4.0 Product

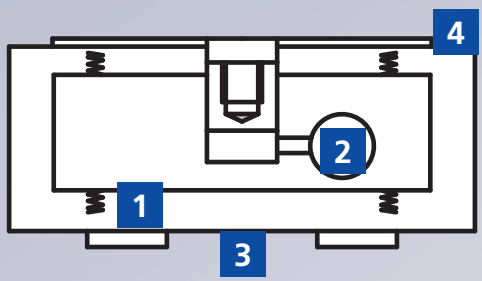
For the actuation of standard power chucks on mill-turn centers



Standard Power Chuck



Electric Flange



Modular construction kit : customizable to customer requirements

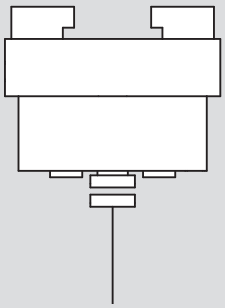
Functional Overview

1	Gripping force accumulation with the spring packs. Power will be only used for the actuation of the clamping system.
2	Electric drive e-motion
3	Wireless power and signal transmission via inductive coupler
4	Standard Interface Z380 or Z520

Configuration Example:

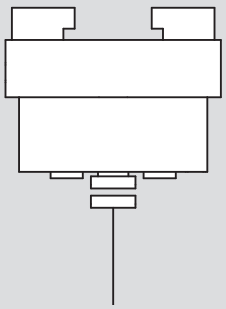
Integrated Solution

Loading Station



Wireless power and signal transmission via inductive coupler (loading operation)

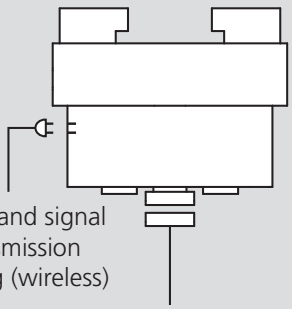
Machine



Wireless power and signal transmission via inductive coupler (processing)

Mounted Solution

Machine



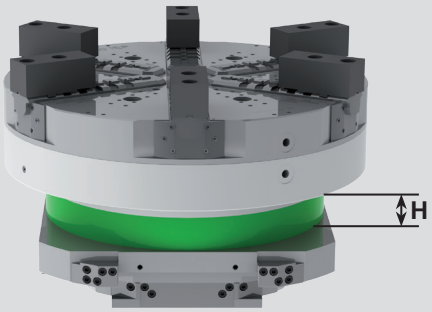
Power and signal transmission via plug (wireless)

Wireless signal transmission via inductive coupler (processing)

Integration-Options:

A. Integrated Solution in Machine Pallet

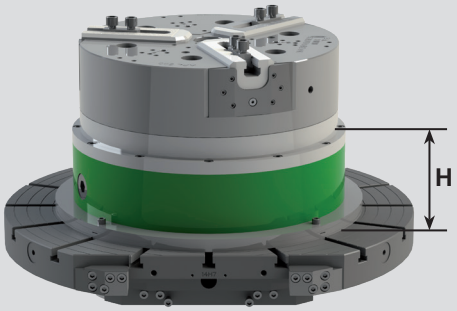
Weight without chuck: 94 kg*
Installation height H from pallet top: 106 mm



*without machine pallet

B. Top Mounted Solution

Weight without chuck: 220 kg
Installation height H from pallet top: 160 mm



Options for the Control of the Electric Flange:

A. External Control Mono

Machining Area for 1 Flange



B. External Control Duo

Loading Station / Machining Area for 2 Flanges

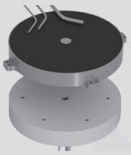


C. By Machine of the Customer



Loading Station / Machining Area: Transmission of Power and Signal via inductive coupler

Inductive Coupler Power and Signal

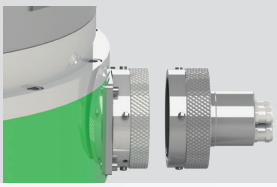


Remote (Rotating)

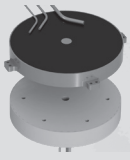
Base (Stationary)

Power and signal transmission via plug/ inductive coupler

Manual Plug Energie

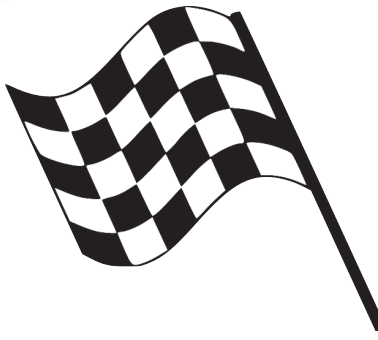


Inductive Coupler Signal



Remote (Rotating)

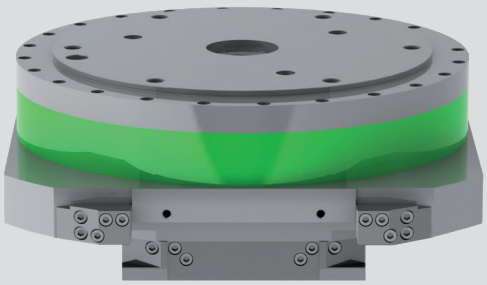
Base (Stationary)



F500

Electric Flange

- For the actuation of standard power chucks on millturn centers
- Electric drive e-motion



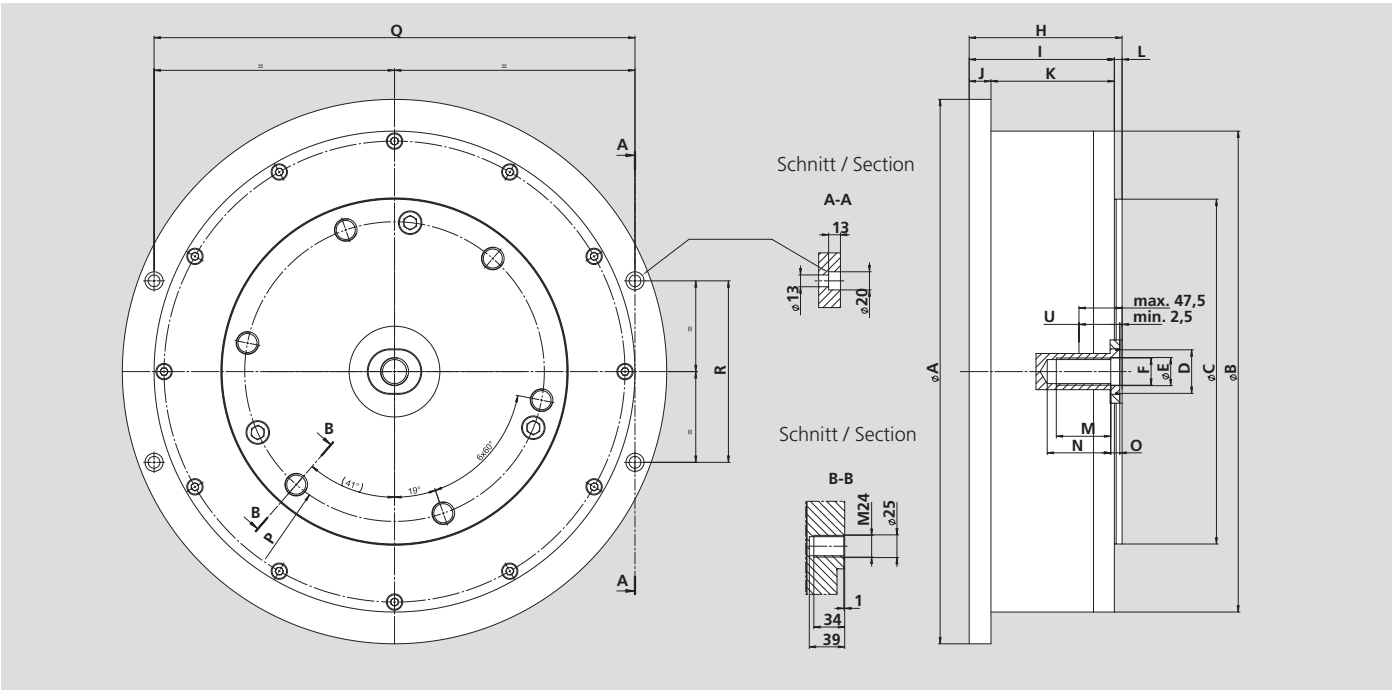
proofline® series
fully sealed – low maintenance

Application/customer benefits

- For the actuation of standard power chucks on millturn centers
- Standard mounting for power chucks
- Sensitive adjustment of the clamping force and the position with highest repeat accuracy
- Compact design: Low installation height
- Safe palleting on FMS (Flexible Manufacturing System)
- Industry 4.0 compatible
- Modular construction kit: Customizable for customer requirements

Technical features

- Piston stroke 45 mm
- Axial actuating force up to 100 kN
- Installation height from pallet top 106 mm (integrated solution) or 160 mm (top mounted solution)
- Fully sealed (proofline)



SMW-AUTOBLOK Type			F500
	A	mm	Ø 700
	B	mm	Ø 620
Mounting	C	mm	Ø 380 / Ø 520 (optional)
	D	mm	max. 48
	E	mm	31
	F	mm	M30
	H	mm	168.5
	I	mm	160
	J	mm	24
	K	mm	136
	L	mm	8.5
	M	mm	60
	N	mm	70
	O	mm	10
	P	mm	Ø 330.2 / Ø 463.6 (optional)
	Q	mm	630
	R	mm	200
Piston stroke	U	mm	45
Max. actuating force		kN	100
Min. actuating force		kN	10
Moment of inertia		kg·m²	7.9

Electric Flange

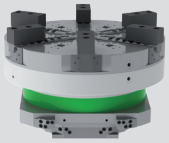
F500

■ Modular construction kit

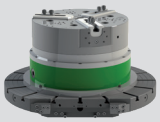
Customizable for Customer Requirements:

1. Integration

Integrated Solution in Machine Pallet



Top Mounted Solution



Type	Id. No.
Integrated Solution in Machine Pallet	460515
Top Mounted Solution	460516

2. Control Unit for the Electric Flange

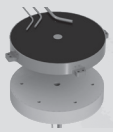
Control Unit



Type	Id. No.
External Control Unit (1 Flange) Mono	460600
External Control Unit (2 Flanges) Duo	460601

3.1 Power and Signal Transmission Wireless via Inductive Coupler

Inductive Coupler



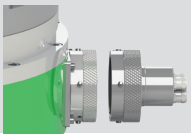
Remote (Rotating)

Base (Stationary)

Type	Id. No.
Inductive Coupler Remote (Rotating)	206665
Inductive Coupler Base (Stationary)	206666
Inductive Coupler Base + Remote Set	460621

3.1 Power and Signal Transmission via Plug; Signal Transmission Wireless via Inductive Coupler

Manual Plug



Type	Id. No.
Manual Plug	460630

Inductive Coupler (only for signal transmission)

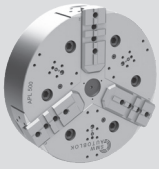


Remote (Rotating)

Base (Stationary)

Type	Id. No.
Inductive Coupler Remote (Rotating)	205790
Inductive Coupler Base (Stationary)	205789
Inductive Coupler Base + Remote Set	460700

4. Recommended Sealed Power Chucks



APL-D
High Precision Power Chuck

- 3 jaws
- Sealed - low maintenance
- Closed center

Type	Id. No.
APL-D 500	77995025
APL-D 630	77184063
APL-D 800	77184080



IEP-D
High Precision Power Chuck

- 6 jaws (2+2+2 equalising)
- Sealed - low maintenance
- Closed center

Type	Id. No.
IEP-D 500	77995018
IEP-D 630	77996318
IEP-D 800	77998020

Further Standard Power Chucks: see the general catalog from SMW-AUTOBLOK (www.smw-autoblok.de)

Notes



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



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



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



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



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



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



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



Sweden / Norway
SMW-AUTOBLOK Scandinavia AB
Kasernvägen 2
SE - 281 35 Hässleholm
Tel. +46 (0) 761 420 111
E-mail ➤ info@smw-autoblok.se



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



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



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



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



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



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



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



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

SMW AUTOBLOK
www.smw-autoblok.de

© SMW-AUTOBLOK | Subjected to technical changes and mistakes. M001179 • F500_EN_02_03_2020