

# TOOL CHANGERS

## SERIES WWR

### ▶ PRODUCT ADVANTAGES



#### ▶ **Secure hold during pressure drop**

A redundant system, created by the combination of spring accumulator and a self locking mechanism, guarantees a safe machine

#### ▶ **Extremely flat design**

This structure reduces the moment load for your robot to a minimum and makes it possible to use smaller and more affordable sizes

#### ▶ **Inexhaustible variety of media transfer systems**

No matter which medium you would like to transmit, we will draw from our wealth of experience in implementing projects and find a solution to suit your needs!

### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



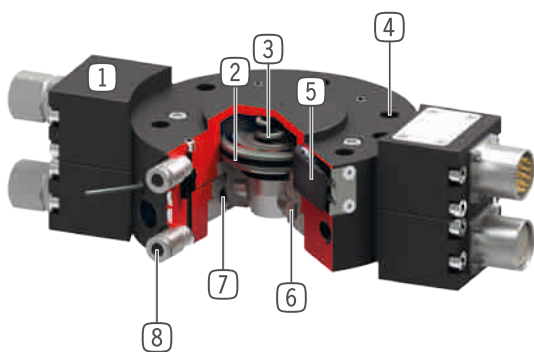
#### ▶ **Our products welcome the challenge!**

Extreme conditions, all over the world—our tried and tested components and systems give you endless possibilities.

Find the best product for your specific use:

[www.zimmer-group.com](http://www.zimmer-group.com)

## ► BENEFITS IN DETAIL



- ① **Energy element**  
- included in scope of delivery
- ② **Drive**  
- double-acting pneumatic cylinder
- ③ **Integrated spring**  
- energy storage in case of drop in pressure
- ④ **Robot flange**  
- partial mounting circle in accordance with EN ISO 9409-1
- ⑤ **Piston position sensing**  
- via magnetic field sensors
- ⑥ **Locking bolt**  
- adapted to the clamping sleeve
- ⑦ **Locking sleeve**  
- high moment capacity
- ⑧ **Integrated air feed-through**  
- air / vacuum transfer from fix to loose part, hoseless control possible

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



### ► Technical Information

All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com)

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



# TOOL CHANGERS

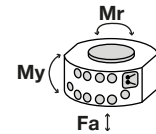
## INSTALLATION SIZE WWR80

### ▶ PRODUCT SPECIFICATIONS



#### ▶ Forces and moments

Shows static forces and moments which may impact on the tool changer.



Mr [Nm]	300
My [Nm]	600
Fa [N]	9150

### ▶ INCLUDED IN DELIVERY



O-Ring

COR0030100

### ▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style

WVM5



Piston position sensing

ZUB088925



Inductive Proximity Switch  
Cable 0,3 m - Connector  
M8

NJR04-E2SK



Energy Elements see  
page 49

### ▶ RECOMMENDED ACCESSORY STORAGE STATION



Storage station

ALSR1-80-B



Inductive proximity switch  
- Cable 5 m

NJ8-E2



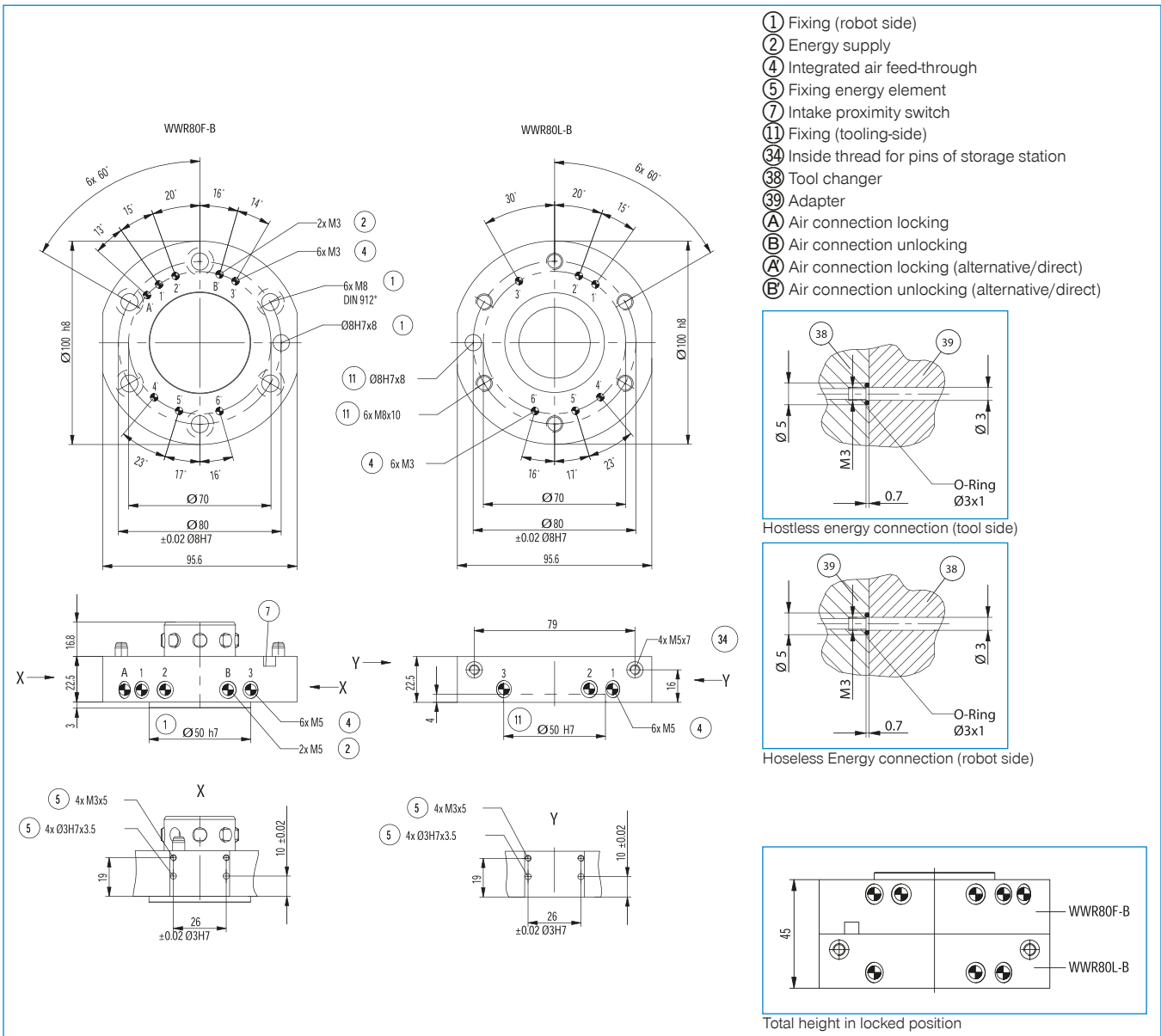
Inductive proximity switch  
- Connector M8

NJ8-E2S

► Technical Data\*

Order no.	WWR80F-B	WWR80L-B
Connecting flange according EN ISO 9409-1	TK 80	TK 80
Recommended handling weight [kg]	70	-
Pneumatic energy transfer [Quantity]	6	6
Electrical energy transfer	optional	optional
Hydraulic energy transfer	optional	optional
Self locking mechanism when locking	mechanical	mechanical
Locking stroke [mm]	1	-
Repetition accuracy in Z [mm]	0.01	-
Repetition accuracy in X, Y [mm]	0.02	-
Joining force [N]	100	-
Release force [N]	60	-
Offset at coupling max. in X,Y [mm]	1.65	1.65
Operating pressure [bar]	4 ... 10	4 ... 10
Operating temperature [°C]	5 ... +80	5 ... +80
Air volume per cycle [cm <sup>3</sup> ]	16	-
Moment of inertia [kg/cm <sup>2</sup> ]	5.6	5.5
Weight [kg]	0.58	0.45

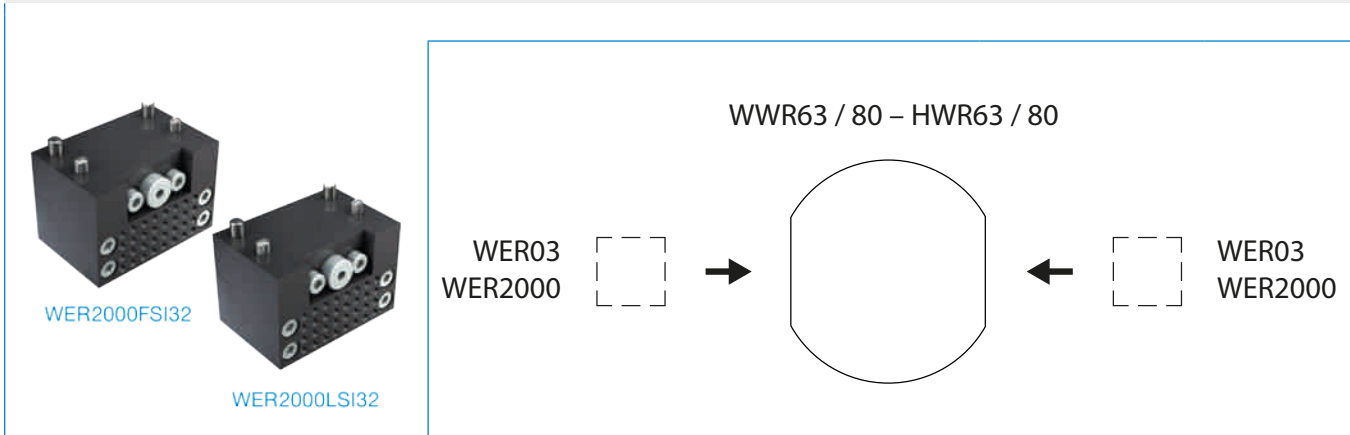
\*All data measured at 6 bar



# ENERGY ELEMENTS FOR TOOL CHANGER

## SIZES WWR63 / WWR80

### ▶ PRODUCT SPECIFICATIONS



### ▶ FLUIDIC

#### ▶ Technical Data

Order no.	WER2000FPL06-00	WER2000LPL06-00	WER2000FPL02-06	WER2000LPL02-06	WER2000FPL01-03	WER2000LPL01-03
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	M5	M5	G1/8"	G1/8"	G1/4"	G1/4"
Number of fluid couplings	6	6	2	2	1	1
Operating pressure [bar]	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10
Weight [kg]	0.05	0.05	0.06	0.07	0.06	0.06

### ▶ ELECTRICAL

#### ▶ Technical Data

Order no.	WER03FS04	WER03LS04	WER2000FSI32-05	WER2000LSI32-05	WER03FF09-B	WER03LF09-B
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	FST	FST	Spring contact	Spring contact
Round Connector [Straight] *	KAG500B4	KAG500S4	-	-	-	-
Round Connector [Angle] *	KAW500B4	KAW500S4	-	-	-	-
Fixing thread	M8	M8	-	-	-	-
No. of contacts	4	4	32	32	9	9
Nominal current [A]	4	4	3	3	3	3
Supply voltage [V AC]	60	60	60	60	60	60
Supply voltage [V DC]**	75	75	75	75	75	75
Weight [kg]	0.06	0.06	0.04	0.04	0.06	0.06
Connection type	Male	Socket	Customizable	Customizable	Plug / SUB-D	Socket / SUB-D

\*als Zubehör erhältlich see page 63

\*\*Specifications for on-site grounding, 60V without grounding





# PLUG-IN CONNECTOR FOR ENERGY ELEMENTS





## SUITABLE FOR WER201 / WER02 / WER03 / WER3000



### ► PLUG-IN CONNECTOR FOR ENERGY ELEMENTS WER201 / WER02 / WER03

Order no.	► Technical Data							
	KAG500B4	KAW500B4	B8-G-4	B8-W-4	KAG500S4	KAW500S4	S8-G-4	S8-W-4
Fixing thread	M8	M8	M8	M8	M8	M8	M8	M8
No. of contacts	4	4	4	4	4	4	4	4
Cable length [m]	5	5	-	-	5	5	-	-
Cable-Ø [mm]	4.3	4.3	-	-	4.3	4.3	-	-
Cable sheath material	PUR	PUR	-	-	PUR	PUR	-	-
Bend radius	10xØ	10xØ	-	-	10xØ	10xØ	-	-
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Connection type	Female	Female	Female	Female	Connector	Connector	Connector	Connector
Version [Type]	Straight	Angle	Straight	Angle	Straight	Angle	Straight	Angle

### ► ROUND PLUG FOR WER3000

Order no.	► Technical Data			
	RSTVLM23G06B-B	RSTVLM23W06B-B	RSTVLM23G06S-B	RSTVLM23W06S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	6	6	6	6
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
				

Order no.	► Technical Data			
	RSTVLM23G08B-B	RSTVLM23W08B-B	RSTVLM23G08S-B	RSTVLM23W08S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	8	8	8	8
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
				

Order no.	► Technical Data			
	RSTVSM23G12B-B	RSTVSM23W12B-B	RSTVSM23G12S-B	RSTVSM23W12S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	12	12	12	12
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
				

Order no.	► Technical Data			
	RSTVSM23G19B-B	RSTVSM23W19B-B	RSTVSM23G19S-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Protection to IEC 60529	IP67	IP67	IP67	IP67
Connection type	Socket	Socket	Male	Male
				