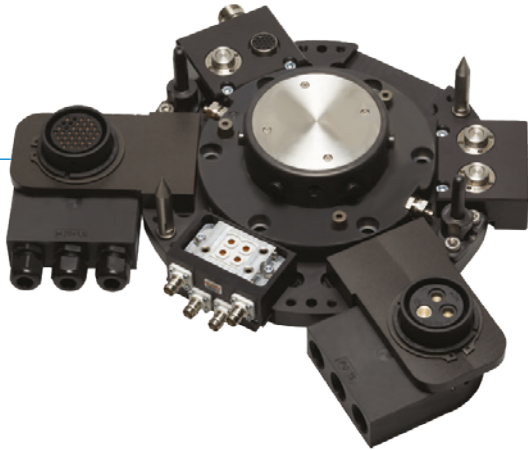


# TOOL CHANGERS

## SERIES WWR1000

### ▶ 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

#### ▶ **Handling weight from up to one tonne**

Automated changes can be carried out by this changer with process reliability even with the largest robots

#### ▶ **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



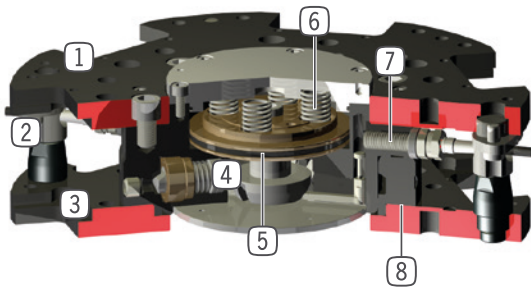
#### ▶ **Our products welcome the challenge!**

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 **Fix part**  
- for robot side assembly
- ② **Centering bolts**  
- twist protection and positioning for loose part
- ③ **Loose part**  
- for tool side assembly
- ④ **Locking bolt**  
- adapted to the clamping sleeve
- ⑤ **Drive**  
- double-acting pneumatic cylinder
- ⑥ **Integrated spring**  
- energy storage in case of drop in pressure
- ⑦ **Piston position sensing**  
- via inductive proximity switch
- ⑧ **Locking sleeve**

## ► 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

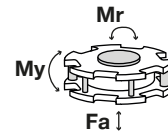
## INSTALLATION SIZE WWR1160

### ▶ PRODUCT SPECIFICATIONS



#### ▶ Forces and moments

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



Mr [Nm]	6000
My [Nm]	6000
Fa [N]	35000

### ▶ INCLUDED IN DELIVERY



Mounting bracket for proximity switch

ZUB0014

### ▶ RECOMMENDED ACCESSORIES



Programming pins

ZUB0022



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



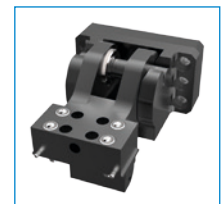
Straight Fittings - Quick Connect Style

GV1-8X8



Inductive proximity switch - Connector M8

NJ8-E2S-17



Storage station

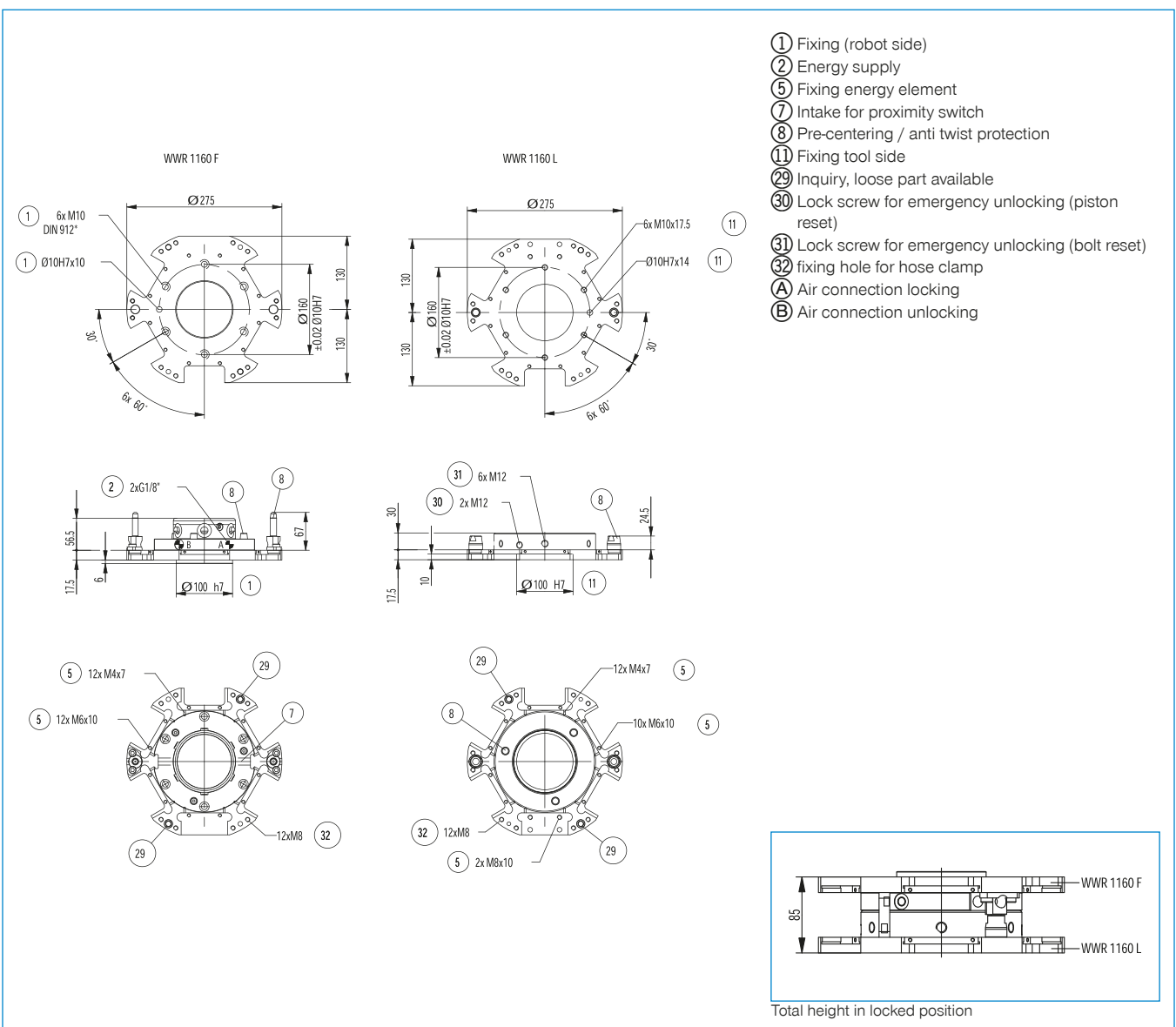
ALSR1-1200



Energy Elements see page 60

Order no.	► Technical Data*	
	WWR1160F	WWR1160L
Locking stroke [mm]	1	-
Recommended handling weight [kg]	500	-
Self locking mechanism when locking	mechanical	mechanical
Fluid energy transfer	optional	optional
Electrical energy transfer	optional	optional
Operating pressure min. [bar]	6	6
Operating pressure max. [bar]	8	8
Repetition accuracy +/- [mm]	0.02	0.02
Offset at coupling max. in X,Y [mm]	3	3
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	48	-
Weight [kg]	9	6

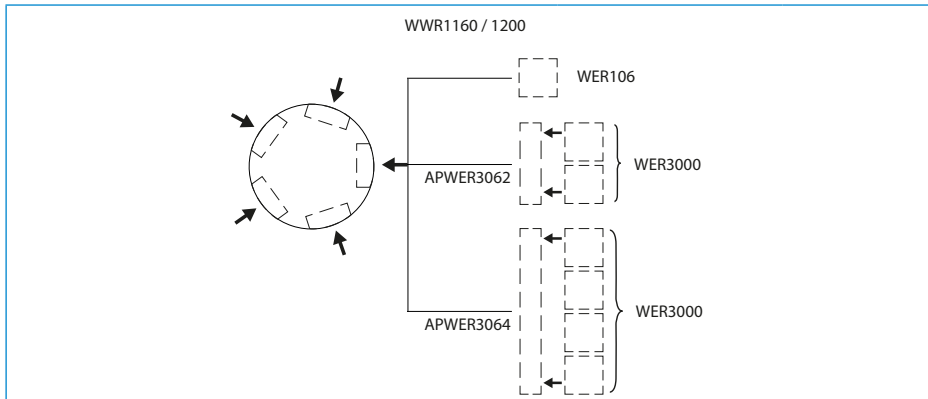
\*All data measured at 6 bar



# ENERGY ELEMENTS FOR TOOL CHANGER

## SIZES WWR1160 / WWR1200

### ▶ PRODUCT SPECIFICATIONS



### ▶ FLUIDIC

#### ▶ Technical Data

Order no.	WER106FP06	WER106LP06	WER106FP15	WER106LP15	WER106FH1DNW8	WER106LH1DNW8
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/8"	G1/8"	M5	M5	G1/2"	G1/2"
Number of fluid couplings	6	6	15	15	1	1
Nominal diameter	1/8"	1/8"	5	5	8	8
Flow per connector max. [l/min]	-	-	-	-	25	25
Operating pressure max. [bar]*	10	10	10	10	250	250
Operating pressure max. [bar]**	-	-	-	-	10	10
Weight [kg]	0.25	0.25	0.25	0.25	0.35	0.35

\* At pressures of approximately 50 bar and higher, there must be external locking of the elements.

\*\* Observe coupling force

#### ▶ Technical Data

Order no.	WER106FH2DNW5	WER106LH2DNW5	WER106FH2DNW8	WER106LH2DNW8	WER106FH4DNW8	WER106LH4DNW8
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G1/2"	G1/2"	G1/2"	G1/2"
Number of fluid couplings	2	2	2	2	4	4
Nominal diameter	5	5	8	8	8	8
Flow per connector max. [l/min]	12	12	25	25	25	25
Operating pressure max. [bar]*	350	350	250	250	250	250
Operating pressure max. [bar]**	15	15	10	10	10	10
Weight [kg]	0.35	0.35	0.69	1.00	1.40	2.10

\* At pressures of approximately 50 bar and higher, there must be external locking of the elements.

\*\* Observe coupling force

#### ▶ Technical Data

Order no.	WER3000FPL02-03	WER3000LPL02-03	WER3000FPL01-04	WER3000LPL01-04
compatible with	Fix part	Loose part	Fix part	Loose part
Fixing thread	G1/4"	G1/4"	G3/8"	G3/8"
Number of fluid couplings	2	2	1	1
Operating pressure [bar]	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10	-0.6 ... 10
Weight [kg]	0.13	0.13	0.13	0.13

## ► ELECTRICAL

Order no.	► Technical Data	
	WER106FL0335	WER106LL0335
compatible with	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector
Round Connector [Straight]	-	-
Round Connector [Angle]	-	-
Fixing thread	-	-
No. of contacts	3	3
Nominal current [A]	150	150
Supply voltage [V AC]	630	630
Weight [kg]	0.95	0.90
Connection type	Customizable	Customizable

Order no.	► Technical Data					
	WER3000FLA06-00	WER3000LLA06-00	WER3000FLA08-00	WER3000LLA08-00	WER3000FSI12-00	WER3000LSI12-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Plug-in Connector	Plug-in Connector	Plug-in Connector	Plug-in Connector
Round Connector [Straight] *	RST- VLM23G06B-B	RST- VLM23G06S-B	RST- VLM23G08B-B	RST- VLM23G08S-B	RST- VSM23G12B-B	RST- VSM23G12S-B
Round Connector [Angle] *	RSTVLM- 23W06B-B	RSTVLM- 23W06S-B	RSTVLM- 23W08B-B	RSTVLM- 23W08S-B	RSTVSM- 23W12B-B	RSTVSM- 23W12S-B
Fixing thread	M23	M23	M23	M23	M23	M23
No. of contacts	5+PE	5+PE	(3+PE) / 4	(3+PE) / 4	12	12
Nominal current [A]	15	15	15/6	15/6	6	6
Supply voltage [V AC]	600	600	600/150	600/150	150	150
Weight [kg]	0.35	0.41	0.35	0.40	0.12	0.15
Connection type	Male	Socket	Male	Socket	Male	Socket

\* als Zubehör erhältlich see page 63

Order no.	► Technical Data			
	WER3000FSI19-00	WER3000LSI19-00	WER3000FSI19-09	WER3000LSI19-09
compatible with	Fix part	Loose part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Spring contact	Spring contact
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19S-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19S-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23	M23
No. of contacts	19	19	19	19
Nominal current [A]	6	6	3	3
Supply voltage [V AC]	150	150	60	60
Weight [kg]	0.13	0.15	0.13	0.15
Connection type	Male	Socket	Male	Socket

\* als Zubehör erhältlich see page 63

# ENERGY ELEMENTS FOR TOOL CHANGER

## SIZES WWR1160 / WWR1200

### ▶ ELECTRICAL + 3 CONNECTION OPTIONS FOR WWR SENSORS

Order no.	▶ Technical Data		
	WER3000FSI19-01	WER3000FSI19-02	WER3000LSI19-00
compatible with	Fix part	Fix part	Loose part
Connection type	Plug-in Connector	Plug-in Connector	Plug-in Connector
Round Connector [Straight] *	RSTVSM23G19B-B	RSTVSM23G19B-B	RSTVSM23G19S-B
Round Connector [Angle] *	RSTVSM23W19B-B	RSTVSM23W19B-B	RSTVSM23W19S-B
Fixing thread	M23	M23	M23
No. of contacts	14+5 Sensoric	14+5 Sensoric	19
Nominal current [A]	6	6	6
Supply voltage [V AC]	150	150	150
Sensor linkage	Left	Right	-
Weight [kg]	0.16	0.16	0.15
Connection type	Male	Male	Socket

\*als Zubehör erhältlich see page 63

### ▶ FIELDBUS

Order no.	▶ Technical Data					
	WER3000FPN01-00	WER3000LPN01-00	WER3000FPB01-00	WER3000LPB01-00	WER3000FIL01-00	WER3000LIL01-00
compatible with	Fix part	Loose part	Fix part	Loose part	Fix part	Loose part
Data transmission	Profinet/Industrial Ethernet	Profinet/Industrial Ethernet	Profibus	Profibus	IO-Link	IO-Link
Data rate	100	100	12	12	-	-
Fixing thread	M12	M12	M12	M12	M12	M12
Weight [kg]	0.11	0.11	0.13	0.12	0.11	0.11

### ▶ ADAPTER PLATES

Order no.	▶ Technical Data	
	APWER3062	APWER3064
compatible with	2xWER3000	4xWER3000
Weight [kg]	0.15	0.42





# 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
	