

TOOL CHANGERS

SERIES FWR

▶ PRODUCT ADVANTAGES



▶ Automated tool change without external activation

In interaction with the storage station, the changer is actuated mechanically during retraction. As a result, no additional power supply is required for the change operation.

▶ Manual tool change

The sizes FWR40 and FWR50 can be opened with just one hand. If this is not desired, you can lock the actuation manually.

▶ Optional media transmission

Adapt the tool changer to your application. With the energy elements of the WER1000 and WER2000 series, you can transmit a variety of media with standard connections!

▶ THE BEST PRODUCT FOR YOUR APPLICATION



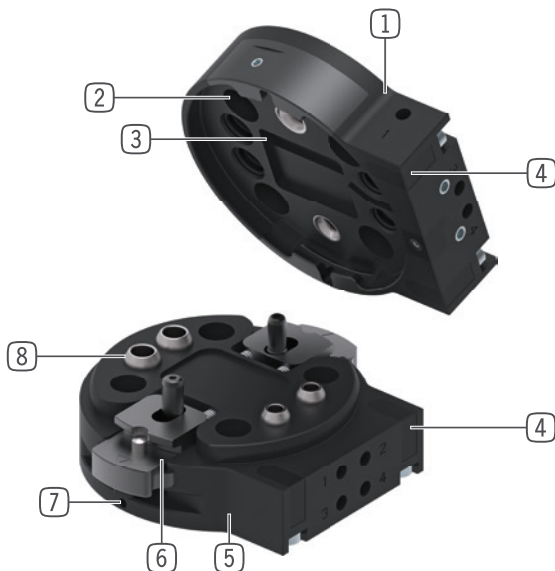
▶ Our products welcome the challenge!

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

► BENEFITS IN DETAIL



- ① **Fix part**
 - For robot side assembly
- ② **Connecting flange**
 - partial mounting circle in accordance with EN ISO 9409-1
- ③ **Loose part presence sensing**
 - Via inductive proximity switch
- ④ **Mounting for energy element**
 - Direct connection, without adapter plates
- ⑤ **Loose part**
 - For tool side assembly
- ⑥ **Locking**
 - Manual actuation
 - Automatic actuation via a storage station
- ⑦ **Lock for manual actuation (optional)**
 - Secure against inadvertent loosening
- ⑧ **Integrated air feed-through**
 - Air / vacuum transfer
 - Hoseless control possible

► TECHNICAL DATA

Installation size	Connecting flange according EN ISO 9409-1	Handling weight max.*	Tool weight max.**	Pneumatic energy transfer
		[kg]	[kg]	[Quantity]
FWR40	TK 40	13	5	4
FWR50	TK 50	16	7	4
FWR63	TK 63	20	10	4
FWR80	TK 80	29	12	4

*The **handling weight** is the maximum weight that may be on the tool changer.

Handling weight = end effector + workpiece

The **tool weight is the maximum weight of the end effector that may be in the storage station (without workpiece).

Tool weight = end effector + loose part

► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: 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

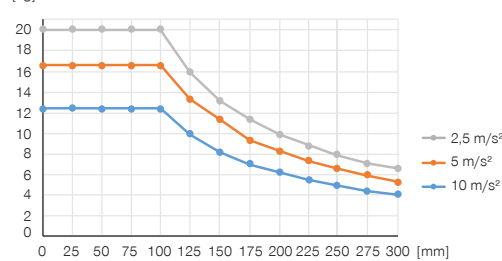
INSTALLATION SIZE FWR63

PRODUCT SPECIFICATIONS



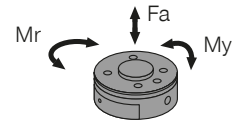
Variable installation position

Shows the maximum handling weight depending on acceleration and lever arm. Does not replace the technical design.




Forces and moments

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



Mr [Nm]	100
My [Nm]	100
Fa [N]	1900



INCLUDED IN DELIVERY

	2 [piece] Mounting screw C737903102
	2 [piece] O-Ring COR0050100



	4 [piece] Mounting screw C0912025186
	2 [piece] O-Ring COR0100100

RECOMMENDED ACCESSORIES


ENERGY SUPPLY

	GVM5 Straight Fittings - Quick Connect Style
	WV1-8X8 Angled Fittings - Quick Connect Style

CONNECTIONS / OTHER

	Energy elements and accessories for tool changers
	AFWR1-63-A Storage station

SENSORS

	NJR04-E2SK Inductive Proximity Switch Cable 0,3 m - Connector M8
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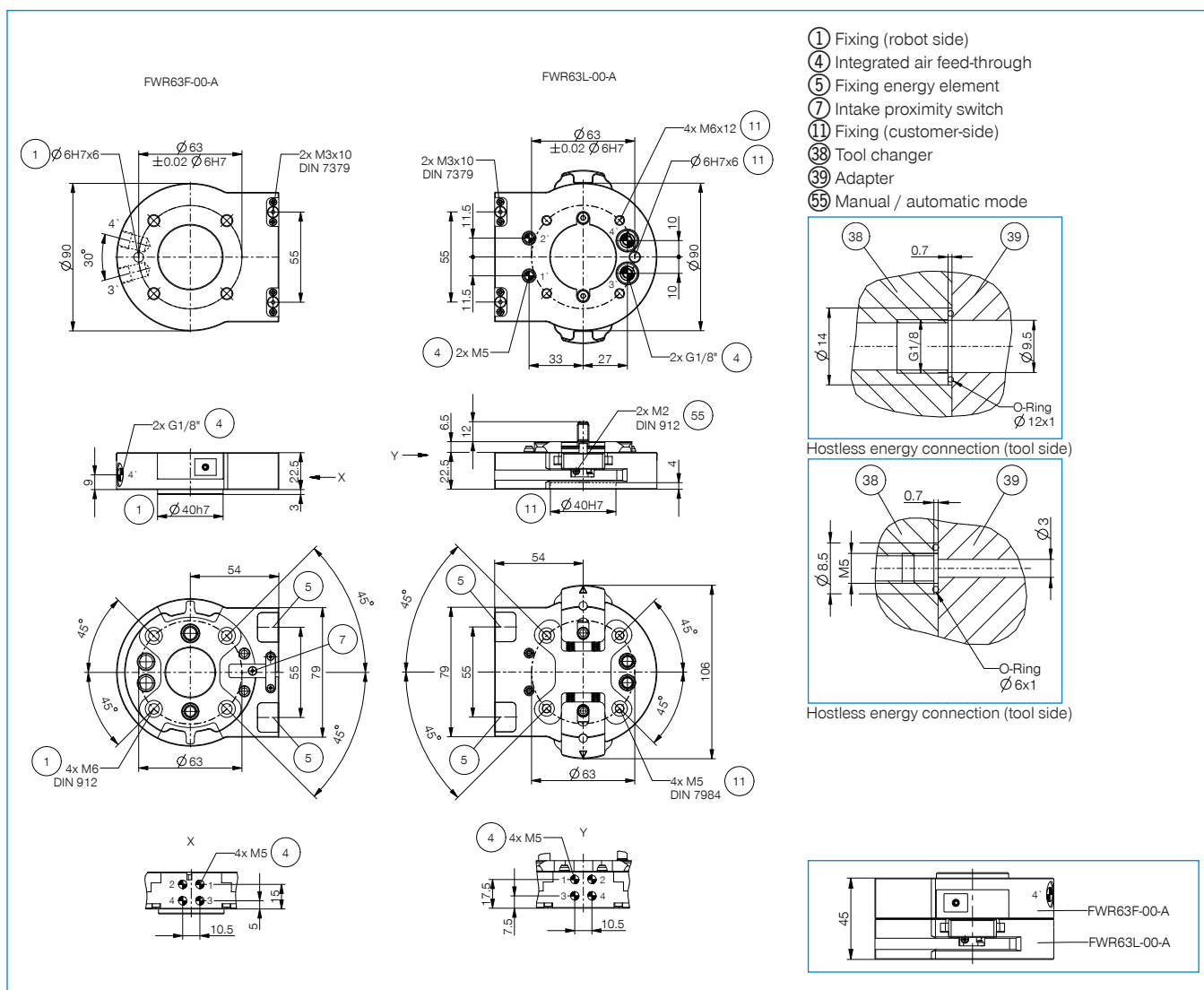
RECOMMENDED ACCESSORY STORAGE STATION

	NJ5-E2SK-01 Inductive Proximity Switch Cable 0,3 m - Connector M8
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Order no.	► Technical data	
	FWR63F-00-A	FWR63L-00-A
Connecting flange according EN ISO 9409-1		
Handling weight max. [kg]	20	20
Tool weight max. [kg]	10	10
Pneumatic energy transfer [Quantity]	4	4
Flow per connector M5 [l/min]	170	170
Flow per connector G1/8" [l/min]	650	650
Electrical energy transfer	optional	optional
Locking stroke [mm]	1	
Repetition accuracy in Z [mm]	0.02	
Repetition accuracy in X, Y [mm]	0.03	
Joining force [N]	0	0
Release force [N]	0	0
Offset at coupling max. in X,Y [mm]	2.2	2.2
Offset at coupling max. in X,Y [°]	1.5	1.5
Tightening force [N]*	100	
Tightening torque [Nm]*	5	
Operating pressure for energy transmission [bar]	-0.6 ... 6	-0.6 ... 6
Operating temperature [°C]	5 ... +80	5 ... +80
Moment of inertia [kgcm²]	5.98	7.25
Protection to IEC 60529	IP44**	IP44**
Weight [kg]	0.42	0.57

*Note the mating force of the energy elements!

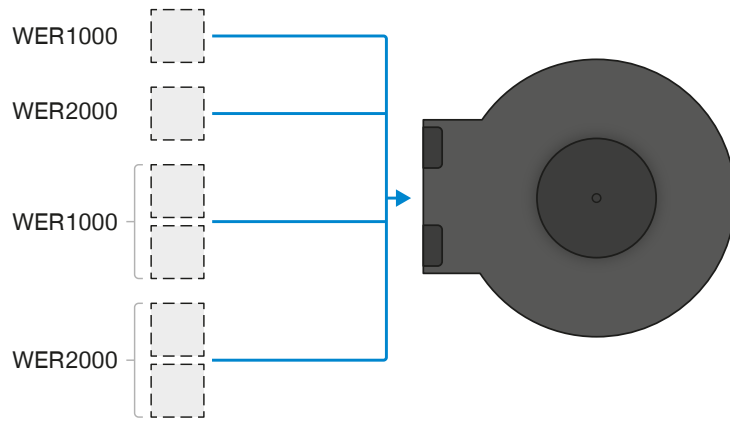
**only in coupled state



ENERGY ELEMENTS FOR TOOL CHANGER

SIZES FWR63 / FWR80

► CONNECTION DIAGRAM



Exception: WER2000FPL02-06-B and WER1000LPL02-06-B cannot be used!