



Superior Clamping and Gripping

Product Information

Stationary rotary feed-through DDF-SE

Robust. Reliable. Flexible.

DDF-SE stationary rotary feed-through

For media feed-through of electric signals and pneumatics for stationary use.

Field of application

For use on rotary indexing tables and rotating grippers



Advantages – Your benefits

Combined air and electric feed-through for extensive supply to your gripper system / tool Standardized shaft end for easy gear assembly **Revolutions up to 500 rpm** even at fast rotations up to 500 rpm, your gripping system will be reliably supplied with pneumatic and electrics





Max. RPM 300 .. 500 1/min



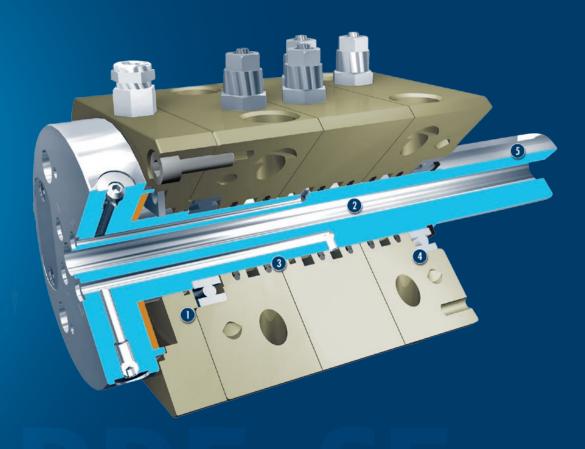
Pneumatic feed-throughs 4 .. 6



Electric feed-through 6 .. 8

Functional description

The DDF-SE allows rotary motions of more than 360° of your tool without hoses and cables twisting around the axis. Integrated slip ring contacts reliably supply the tool with energy, even at higher speeds (500 rpm). Electrics and up to six pneumatic lines are fed through. The drive motor is flange-mounted with a standard shaft end with keyway. In order to minimize the axial offset between the motor and DDF-SE, a coupling should be provided.



1 Slip ring

for the feed-through of up to eight electrical signals

② Center bore

for feed-through of workpieces, sensor systems, and actuators

- ③ **Air feed-through** for the pneumatics supply of grippers, linear units or other actuators
- Ball bearings for absorption of high forces and moments
- **5 Steel shaft with keyway** for fast and direct mounting

CAD data, operating manuals and other current product documents can be found online.

General notes about the series

Mounting: Bores and threads for stationary use

Energy transmission: Pneumatic and electrical signals

Housing: The housing consists of high-strength, hardcoated aluminum alloy The functional components are made of hardened steel.

Scope of delivery: Connection cable with open wire strands

Warranty: 24 months

Harsh environmental conditions: Please note that the use under harsh environmental conditions (e.g. with coolant or cast and grinding dust) can considerably reduce the service life of the units and is not covered in the warrant. In many cases, however, we can find a solution. Please contact us for assistance.

Handling weight: the weight of the total load attached to the flange. The design must take into account the permissible forces and moments. Please note that the life time will be reduced if the maximum handling weight is exceeded.



Application example

The gripper is safely powered by a rotary feed-through while a component is turned in a stationary application.

- 1 Drive motor
- 2 Coupling

- DDF-SE stationary rotary feed-through
- PZB-plus 3-finger centric gripper

SCHUNK offers more ...

The following components make the product DDF-SE even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



Centric gripper

Parallel gripper

ipper





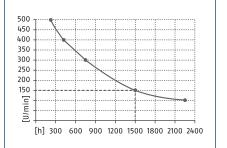
manual gripper change systems

 Additional information regarding the products can be found on the following product pages or at www.schunk.com. Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696



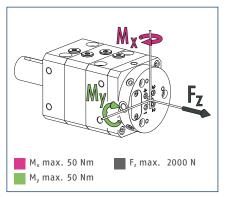


Life time of seals



Life time of seals (with 6 bar pressure); example: DDF-080 SE is driven at a constant 150 rpm in 3-shift operation (24 hours). Life time of seals: The seals should be replaced after 1,500 hours. (Set of seals available from SCHUNK)

Forces and moments

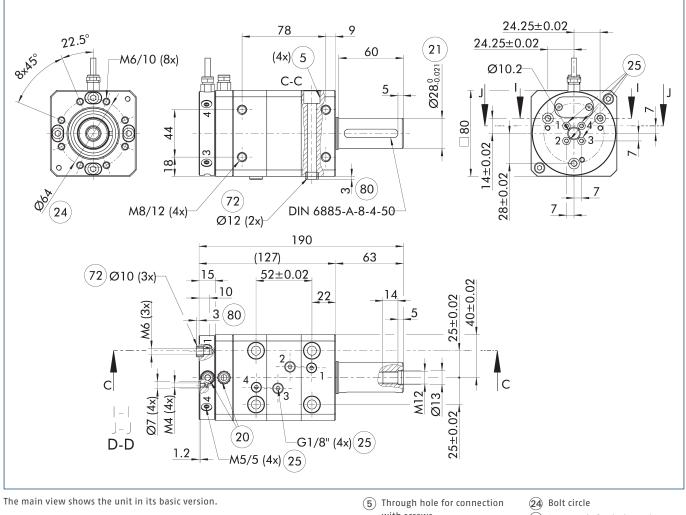


This is the max. total of all loads (acceleration forces and torques, process forces, emergency stops, etc.), which can affect a rotary feed-through, in order to ensure error-free function.

Technical data

Description		DDF-SE-080
ID		0323280
Max. RPM	[1/min]	500
Continuous torque	[Nm]	4
Starting torque	[Nm]	6
Rotary movement	[°]	> 360
Number of pneumatic feed-throughs		4
max. pressure per connection	[bar]	10
Number of electrical feed-throughs		6
max. voltage	[V]	60
Max. current strength	[A]	1
Weight	[kg]	3.3
min./max. ambient temperature	[°C]	5/60
max. static bending moment M ^x	[Nm]	60
max. static bending moment M ^y	[Nm]	60

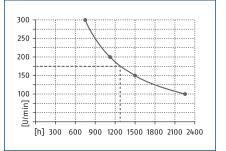




- with screws 20 Connection for electric
- feed-through
- (21) Drive connection
- 25 Pneumatic feed-throughs
- $(\underline{72})$ Fit for centering sleeves
- (80) Depth of the centering sleeve hole in the counter part

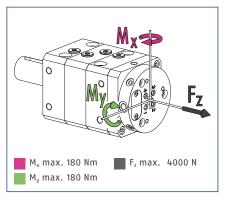


Life time of seals



Life time of seals (with 6 bar pressure); example: DDF-120 SE is driven at a constant 175 rpm in 3-shift operation (24 hours). Life time of seals: The seals should be replaced after 1,300 hours. (Set of seals available from SCHUNK)

Forces and moments

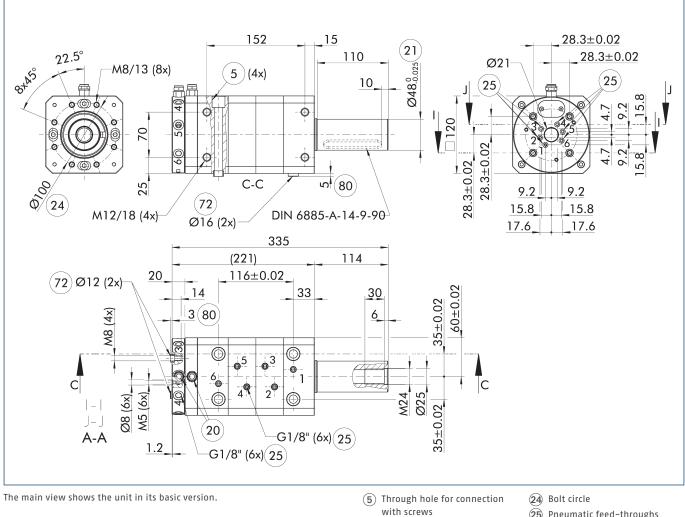


This is the max. total of all loads (acceleration forces and torques, process forces, emergency stops, etc.), which can affect a rotary feed-through, in order to ensure error-free function.

Technical data

Description		DDF-SE-120
ID		0323285
Max. RPM	[1/min]	300
Continuous torque	[Nm]	13
Starting torque	[Nm]	20
Rotary movement	[°]	> 360
Number of pneumatic feed-throughs		6
max. pressure per connection	[bar]	10
Number of electrical feed-throughs		8
max. voltage	[V]	60
Max. current strength	[A]	1
Weight	[kg]	9
min./max. ambient temperature	[°C]	5/60
max. static bending moment M ^x	[Nm]	250
max. static bending moment M ^y	[Nm]	250

Main view



- (20) Connection for electric
- feed-through
- (21) Drive connection
- (25) Pneumatic feed-throughs
- $\overline{\textbf{72}}$ Fit for centering sleeves
- (80) Depth of the centering sleeve hole in the counter part

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Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for precise gripping and safe holding. www.gb.schunk.com/Lehmann

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