

Rotary axe SE

SE30

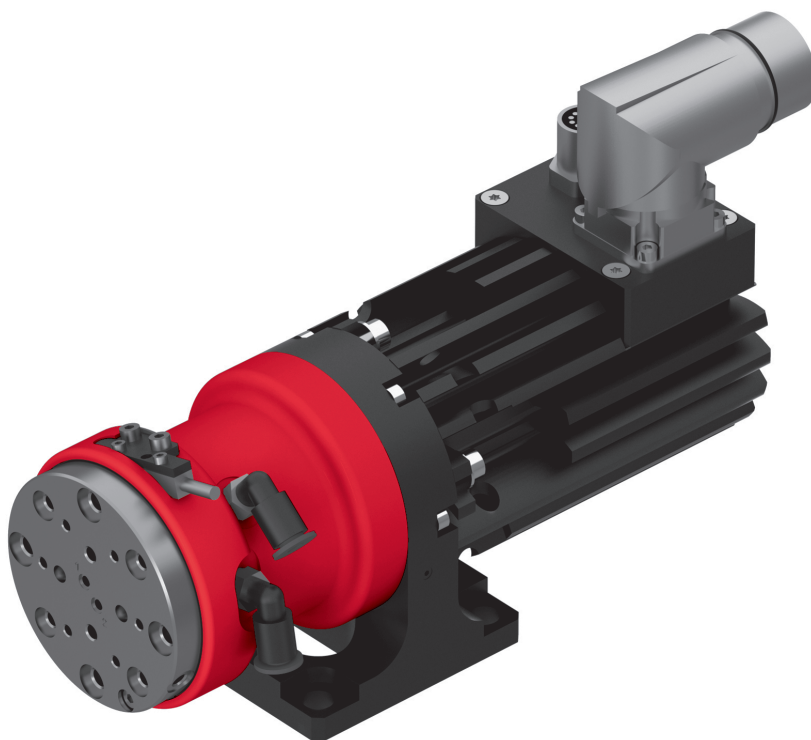


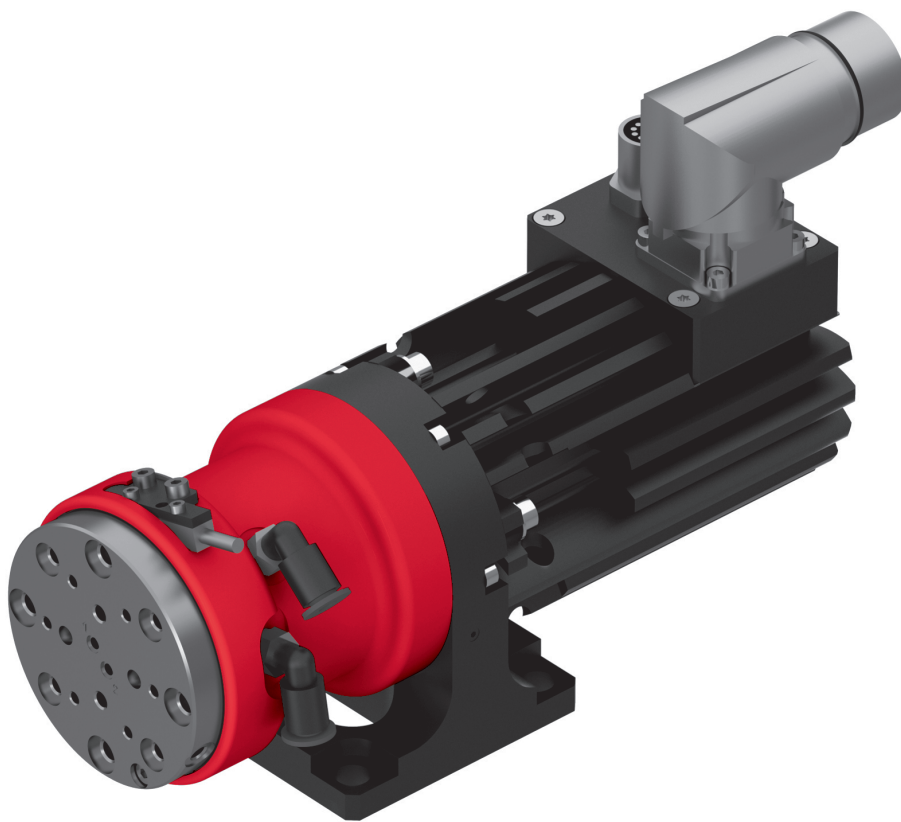
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Rotary axes SE

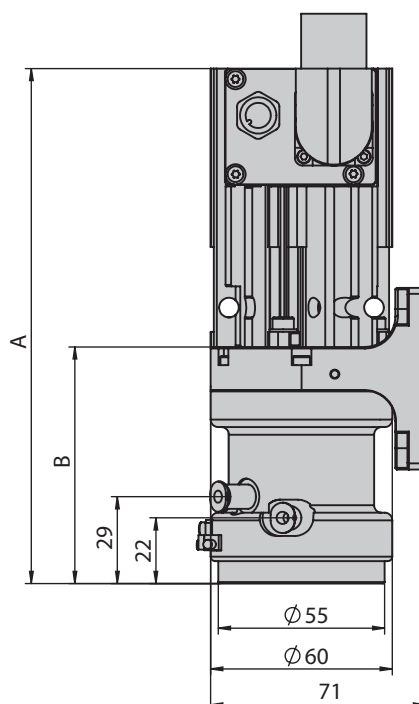
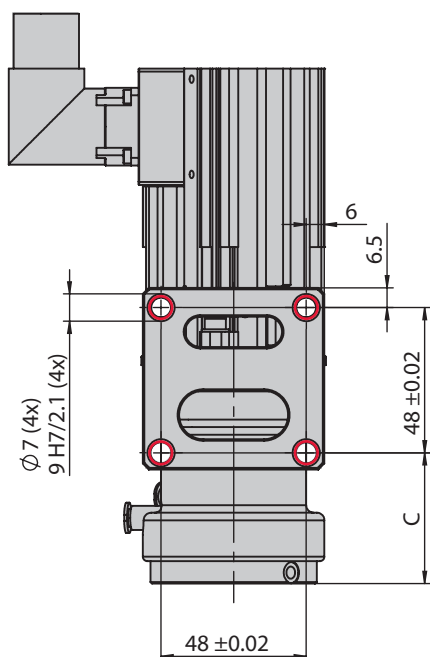
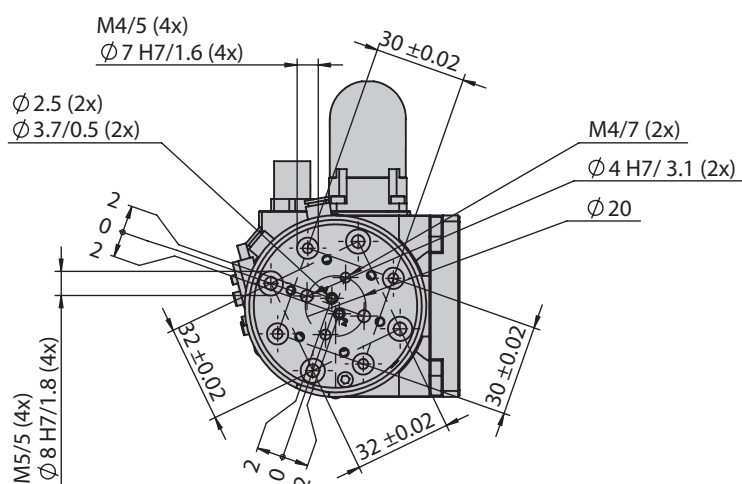
SE30

10



- Light-weight and high-torque rotating unit
- Precise positioning
- Can be used flexibly

Type	SE30-2
A	170 mm
B	78 mm
C	43.2 mm



 Bores can be screwed through



SE30-2	
Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	SE30-2-30-G	SE30-2-30-W	SE30-2-30-G-E	SE30-2-30-W-E
Order number	50444469	50444470	50444477	50444478
Net weight	1.45 kg	1.45 kg	1.45 kg	1.45 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	280 rpm	280 rpm	280 rpm	280 rpm
Fluid passages	2	2	2	2
Continuous torque	3.3 Nm	3.3 Nm	3.3 Nm	3.3 Nm
Max. output torque	8 Nm	8 Nm	8 Nm	8 Nm
Drive	electric	electric	electric	electric
Ratio	30:1	30:1	30:1	30:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)			SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 61440 Inc/U
Brake (24V)	No	No	No	No
Mounting position	⬆	⬆	⬆	⬆

Type	SE30-2-50-G	SE30-2-50-W	SE30-2-50-G-E	SE30-2-50-W-E
Order number	50444467	50444468	50444475	50444476
Net weight	1.45 kg	1.45 kg	1.45 kg	1.45 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	140 rpm	140 rpm	140 rpm	140 rpm
Fluid passages	2	2	2	2
Continuous torque	5.6 Nm	5.6 Nm	5.6 Nm	5.6 Nm
Max. output torque	16 Nm	16 Nm	16 Nm	16 Nm
Drive	electric	electric	electric	electric
Ratio	50:1	50:1	50:1	50:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)			SV-TTL ABZ 102400 Inc/U	SV-TTL ABZ 102400 Inc/U
Brake (24V)	No	No	No	No
Mounting position	⬆	⬆	⬆	⬆

The technical data pertains to Afag standard test conditions.
Air purity class 5 (ISO 14644-1)
Cleanroom class ISO 14644-1, class ISO 7

There are two version of motor plugs.
A „G“ in the article description of the rotary axis stand for a straight and the „W“ for an angular plug. Also see order key for SE20 and SE30.

Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø9x4
- 2x O-ring Ø 2.5x0.62

Accessories

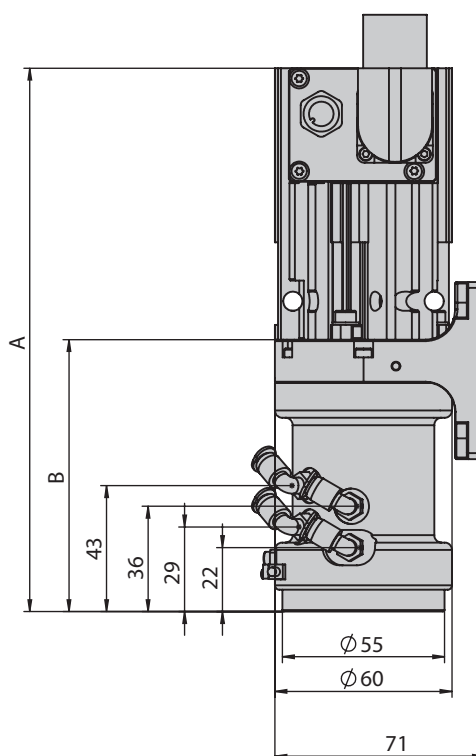
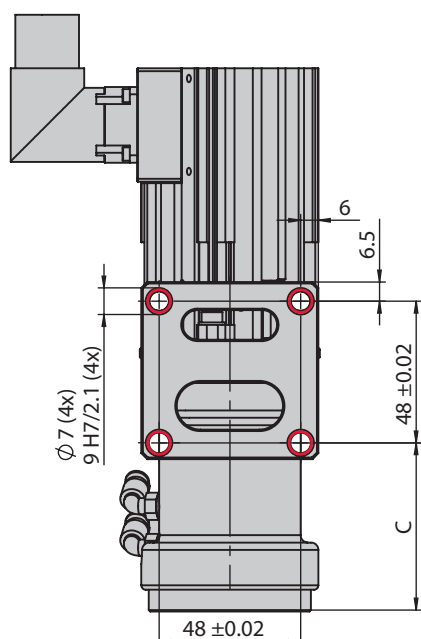
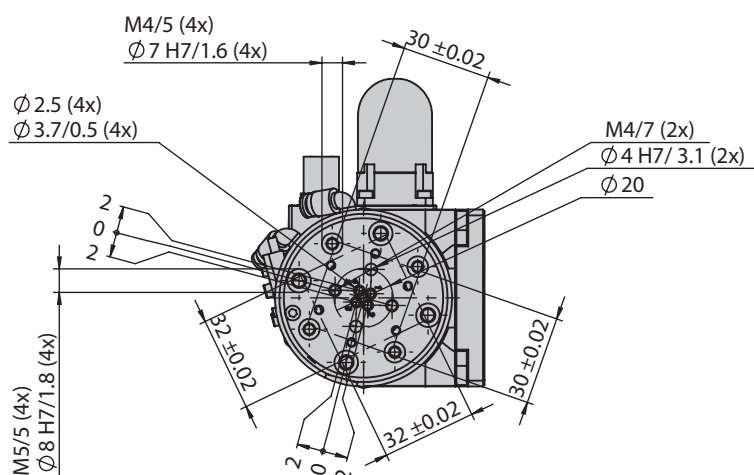
- Add-on rotation limiter for SE30 [p. 236]
 - Power supply S01-48/960, 3-phase [p. 237]
- (Catalogue HT accessories)
- Motor cable-M17
 - Controller C11xx
 - Plug kit for C1X00-1S

Alternative accessories

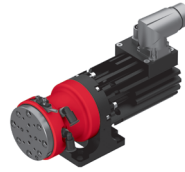
(Catalogue HT accessories)

- Additional motor cables
- Additional controllers

Type	SE30-4
A	184 mm
B	92 mm
C	57.2 mm



 Bores can be screwed through



SE30-4	
Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	SE30-4-30-G	SE30-4-30-W	SE30-4-30-G-E	SE30-4-30-W-E
Order number	50444473	50444474	50444481	50444482
Net weight	1.54 kg	1.54 kg	1.54 kg	1.54 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	280 rpm	280 rpm	280 rpm	280 rpm
Fluid passages	4	4	4	4
Continuous torque	3.3 Nm	3.3 Nm	3.3 Nm	3.3 Nm
Max. output torque	8 Nm	8 Nm	8 Nm	8 Nm
Drive	electric	electric	electric	electric
Ratio	30:1	30:1	30:1	30:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)			SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 61440 Inc/U
Brake (24V)	No	No	No	No
Mounting position	↕	↕	↕	↕

Type	SE30-4-50-G	SE30-4-50-W	SE30-4-50-G-E	SE30-4-50-W-E
Order number	50444471	50444472	50444479	50444480
Net weight	1.54 kg	1.54 kg	1.54 kg	1.54 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	140 rpm	140 rpm	140 rpm	140 rpm
Fluid passages	4	4	4	4
Continuous torque	5.6 Nm	5.6 Nm	5.6 Nm	5.6 Nm
Max. output torque	16 Nm	16 Nm	16 Nm	16 Nm
Drive	electric	electric	electric	electric
Ratio	50:1	50:1	50:1	50:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)			SV-TTL ABZ 102400 Inc/U	SV-TTL ABZ 102400 Inc/U
Brake (24V)	No	No	No	No
Mounting position	↕	↕	↕	↕

The technical data pertains to Afag standard test conditions.
Air purity class 5 (ISO 14644-1)
Cleanroom class ISO 14644-1, class ISO 7

There are two version of motor plugs.
A „G“ in the article description of the rotary axis stand for a straight and the „W“ for an angular plug. Also see order key for SE20 and SE30.

Included in the delivery (Catalogue HT accessories)

- 2x Centering bushing Ø9x4
- 4x O-ring Ø 2.5x0.62

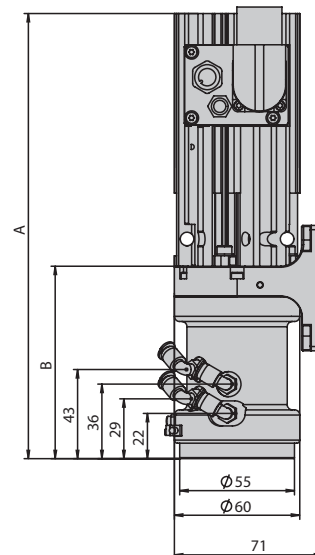
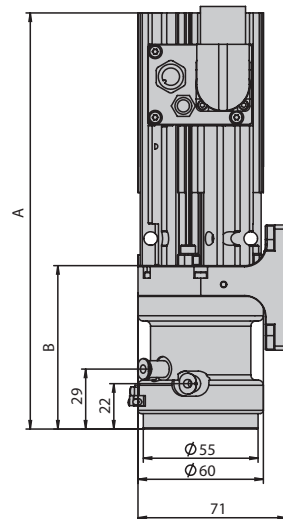
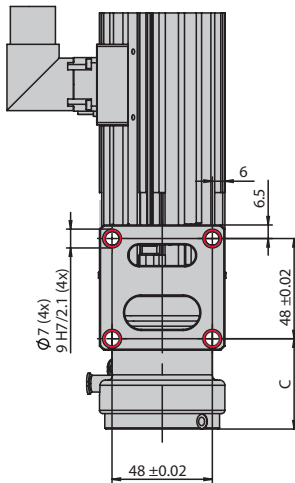
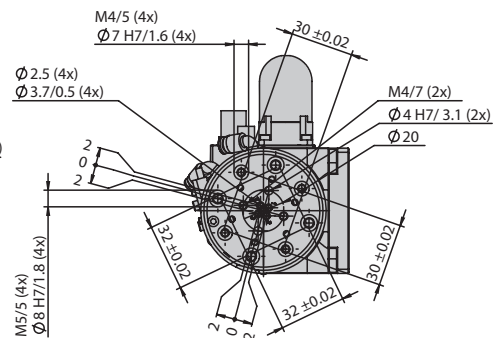
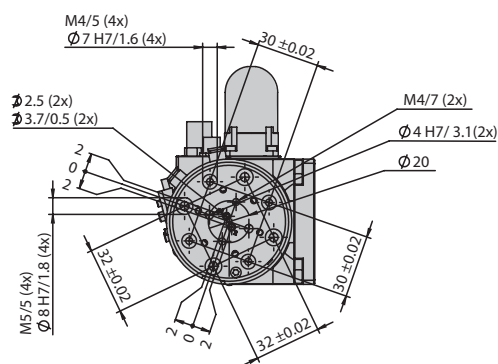
Accessories

- Add-on rotation limiter for SE30 [p. 236]
 - Power supply S01-48/960, 3-phase [p. 237]
- (Catalogue HT accessories)
- Motor cable-M17
 - Controller C11xx
 - Plug kit for C1X00-1S

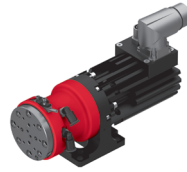
Alternative accessories (Catalogue HT accessories)

- Additional motor cables
- Additional controllers

Type	SE30-2-B	SE30-4-B
A	199 mm	213 mm
B	78 mm	92 mm
C	43.2 mm	57.2 mm



 Bores can be screwed through



SE30-B	
Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	SE30-2-30-G-E-B	SE30-2-30-W-E-B	SE30-2-50-G-E-B	SE30-2-50-W-E-B
Order number	50472260	50472261	50472257	50472259
Net weight	1.64 kg	1.64 kg	1.64 kg	1.64 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	280 rpm	280 rpm	140 rpm	140 rpm
Fluid passages	2	2	2	2
Continuous torque	3.3 Nm	3.3 Nm	5.6 Nm	5.6 Nm
Max. output torque	8 Nm	8 Nm	16 Nm	16 Nm
Drive	electric	electric	electric	electric
Ratio	30:1	30:1	50:1	50:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)	SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 102400 Inc/U	SV-TTL ABZ 102400 Inc/U
Brake (24V)	Yes	Yes	Yes	Yes
Mounting position	✚	✚	✚	✚

Type	SE30-4-30-G-E-B	SE30-4-30-W-E-B	SE30-4-50-G-E-B	SE30-4-50-W-E-B
Order number	50472265	50472266	50472262	50472263
Net weight	1 kg	1 kg	1 kg	1 kg
Angle of rotation	∞	∞	∞	∞
Max. rotational speed	280 rpm	280 rpm	140 rpm	140 rpm
Fluid passages	4	4	4	4
Continuous torque	3.3 Nm	3.3 Nm	5.6 Nm	5.6 Nm
Max. output torque	8 Nm	8 Nm	16 Nm	16 Nm
Drive	electric	electric	electric	electric
Ratio	30:1	30:1	50:1	50:1
Repeat accuracy	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°	+/- 0.0017°
Encoder (optional)	SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 61440 Inc/U	SV-TTL ABZ 102400 Inc/U	SV-TTL ABZ 102400 Inc/U
Brake (24V)	Yes	Yes	Yes	Yes
Mounting position	✚	✚	✚	✚

The technical data pertains to Afag standard test conditions.
Air purity class 5 (ISO 14644-1)
Cleanroom class ISO 14644-1, class ISO 7

There are two version of motor plugs.
A „G“ in the article description of the rotary axis stand for a straight and the „W“ for an angular plug. Also see order key for SE20 and SE30.

Inlcuded in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø9x4
- 2/4x O-ring Ø 2.5x0.62

Accessories

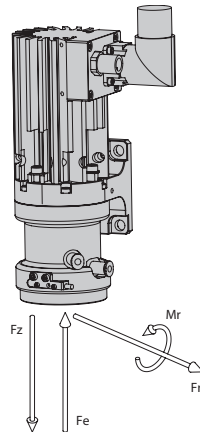
- Add-on rotation limiter for SE30 [p. 236]
 - Power supply S01-48/960, 3-phase [p. 237]
- (Catalogue HT accessories)
- Motor cable-M17
 - Controller C11xx
 - Plug kit for C1X00-1S

Alternative accessories

(Catalogue HT accessories)

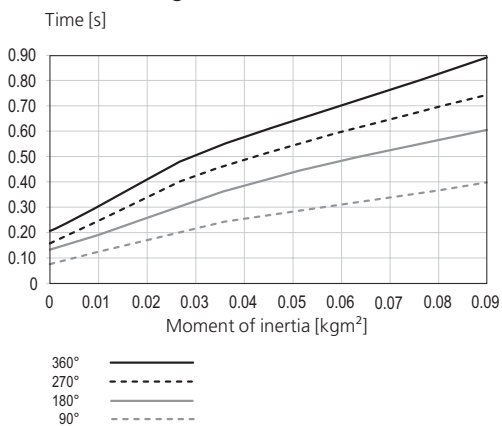
- Additional motor cables
- Additional controllers

Type	SE30
Max. torque M_r	30 Nm
Max. press-in force F_e	1000 N
Max. radial force	± 1400 N
Max. pulling force F_z	745 N

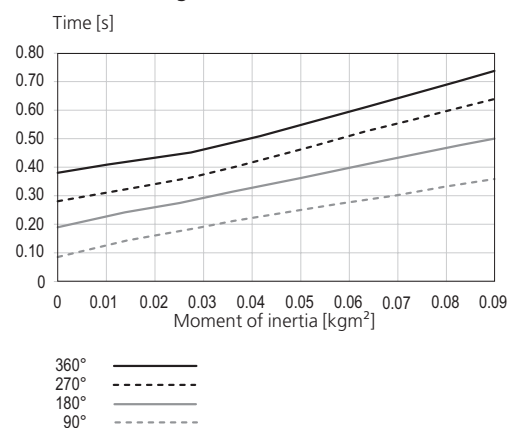


Rotation time diagrams

SE30 with 30:1-gear



SE30 with 50:1-gear



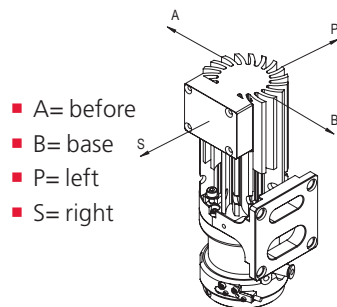
The times refer to break times of 600 ms

Order form	SE30	XXXXXXXX	X	X	X	XX
		Rotary axis	Rotation limiter	Plug connection	Plug holder reference sensor	Fluid connection

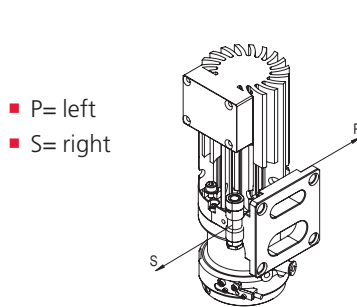
Coordinate system

The coordinate system allows you to define the position of the plug connection, the plug holder of the reference sensor as well as that of the fluid connection.

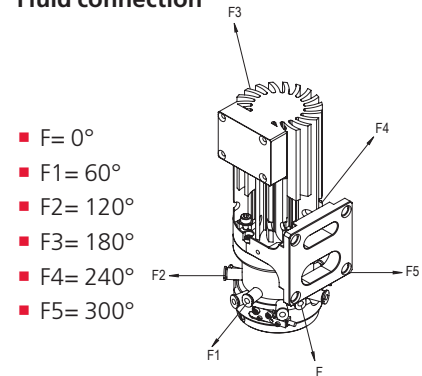
Plug connection



Plug holder reference sensor

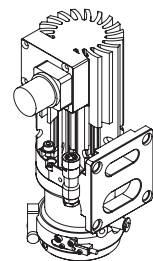


Fluid connection



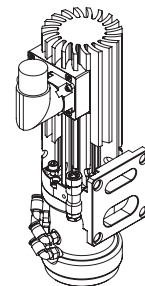
Ordering example 1 with 2-fold fluid passages, straight motor plug, gear ratio i=50 and rotation limiter

SE30	50444467	50444483	S	S	F5
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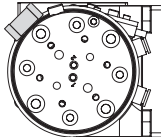
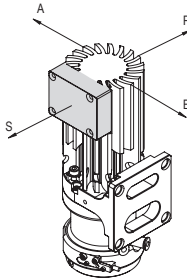
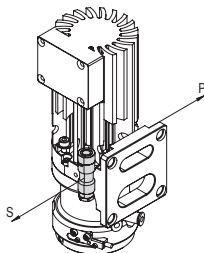
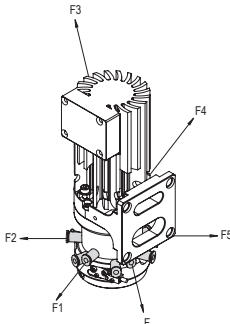
Ordering example 2 with 4-fold fluid passages, angular motor plug, gear ratio i=30, encoder and brake

SE30	50472266	X	S	S	F1
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Ordering process

- Select the desired rotary axis from the order key.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- If you want an rotation limiter select the order number in the order form in the place of the cross.
- To define the position of the plug connection and the reference sensor, enter the corresponding red order number in the order form in the place of the cross.
- To define the position of the fluid connection, enter the corresponding red order number in the order form in the place of the cross.

Rotary axis	SE30		i		i-E		i-E-B		x	x	x	xx		
	Fluid passages	Plug type	30	50	30-E	50-E	30-E-B	50-E-B						
	2-fold fluid passages	Straight	50444469	50444467	50444477	50444475	50472260	50472257						
		Angular	50444470	50444468	50444478	50444476	50472261	50472259						
	4-fold fluid passages	Straight	50444473	50444471	50444481	50444479	50472265	50472262						
		Angular	50444474	50444472	50444482	50444480	50472266	50472263						
Rotation limiter	Without								x					
	 With rotation limiter (rotational angle approx. 340°) 50444483													
Plug holder									A	B	P	S		
Plug holder reference sensor									P	S				
Fluid connection	 F=0° F1=60° F2=120° F3=180° F4=240° F5=300°								F	F1	F2	F3	F4	F5

i=Gear ratio
S=Right

E=Encoder
F= Fluid connection Position

A= Front

B=Base

P=Left

A rotation limiter is recommended when extensions to the rotary axis have to be supplied with additional cables. This will avoid a shearing and ripping of the wire.

Accessories SE

Add-on rotation limiter for SE30	
Order number	50444483
Net weight	0.02 kg

Accessories SE

Power supply S01-48/960, 3-phase	
Operating temperature	-25 - 70 °C

Type	Power supply S01-48/960, 3-phase
Order number	50469060
Net weight	2 kg
Protection rating	IP 20
Output power	960 W
Primar voltage	3 x 340 - 550 VAC, 50/60 Hz
Secondary voltage	40 - 55 VDC adjustable
Nominal output current	40 A
External fuse	16-32 A (C, D, K Type)

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