

# ST 55 A

## GENERAL INFORMATION

- Max. recommended diameter of rotating plate  $D_{tp}$ : approximately 200 mm
- Lightweight and compact rotating unit with transmission for end-of-arm applications

## TECHNICAL DATA

<b>U</b>	Voltage range:	230 V
<b>n<sub>2N</sub></b>	Nominal speed:	30 1/min
<b>n<sub>2Max</sub></b>	Max. output speed:	70 1/min
<b>T<sub>2P</sub></b>	Peak torque:	36 Nm
<b>I<sub>P</sub></b>	Peak current:	2.9 A
	Indexing precision:	60 arcsec ( $\pm 30''$ )
<b>m</b>	Weight:	1.1 kg

## LOAD DATA (for the output flange)

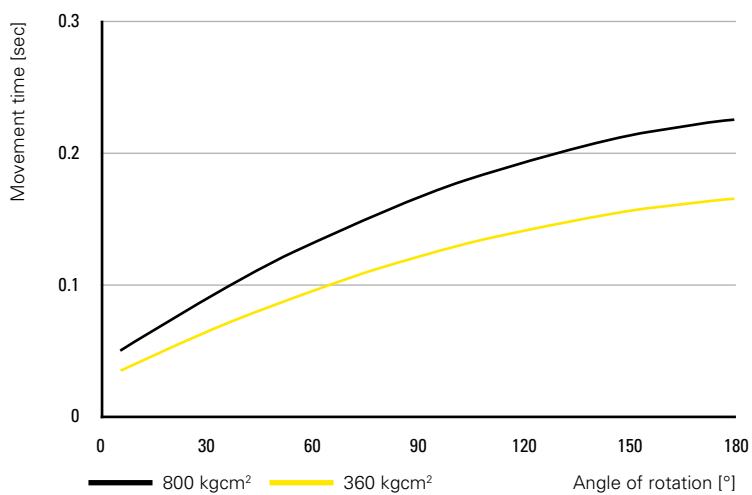
<b>M<sub>2T stat</sub></b>	Permitted static tilting moment:	44 Nm
<b>F<sub>2A stat</sub></b>	Permitted static axial force:	1900 N
<b>F<sub>2R stat</sub></b>	Permitted static radial force:	1440 N

Combined loads and permitted process forces only after inspection by WEISS.

## ENCODER

Sick-Stegmann SEL37	Hiperface
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## TIMING DIAGRAM





# ST 75 A

## GENERAL INFORMATION

- Max. recommended diameter of rotating plate  $D_{tp}$ : approximately 400 mm
- Small compact rotating units for end-of-arm or small rotary applications
- The rotating units are available in three different motor sizes with the same flange dimensions

## OPTIONS

- The rotating units can optionally be equipped with a brake
- A choice of various encoder accuracies ensures maximum design flexibility

## TECHNICAL DATA

		ST 75-1	ST 75-2	ST 75-3
<b>U</b>	Voltage range:	200-600 V	200-600 V	200-600 V
<b>n<sub>1 Max</sub></b>	Max. speed(230 V):	1000 1/min	400 1/min	450 1/min
<b>n<sub>1 Max</sub></b>	Max. speed (400 V):	3100 1/min	1700 1/min	1600 1/min
<b>T<sub>1N</sub></b>	Nominal torque:	0.5 Nm	1.0 Nm	1.4 Nm
<b>T<sub>1P</sub></b>	Peak torque:	1.4 Nm	2.8 Nm	4.2 Nm
<b>I<sub>P</sub></b>	Peak current:	1.6 A	1.9 A	2.2 A
	Indexing precision:	s. encoder	s. encoder	s. encoder
<b>A<sub>r</sub></b>	Axial run-out of the drive flange:	± 0.01 mm	± 0.01 mm	± 0.01 mm
<b>C<sub>r</sub></b>	Concentricity of the output flange:	± 0.01 mm	± 0.01 mm	± 0.01 mm
<b>m</b>	Weight:	1.7 kg	2.2 kg	2.7 kg

## LOAD DATA (for rotary plate)

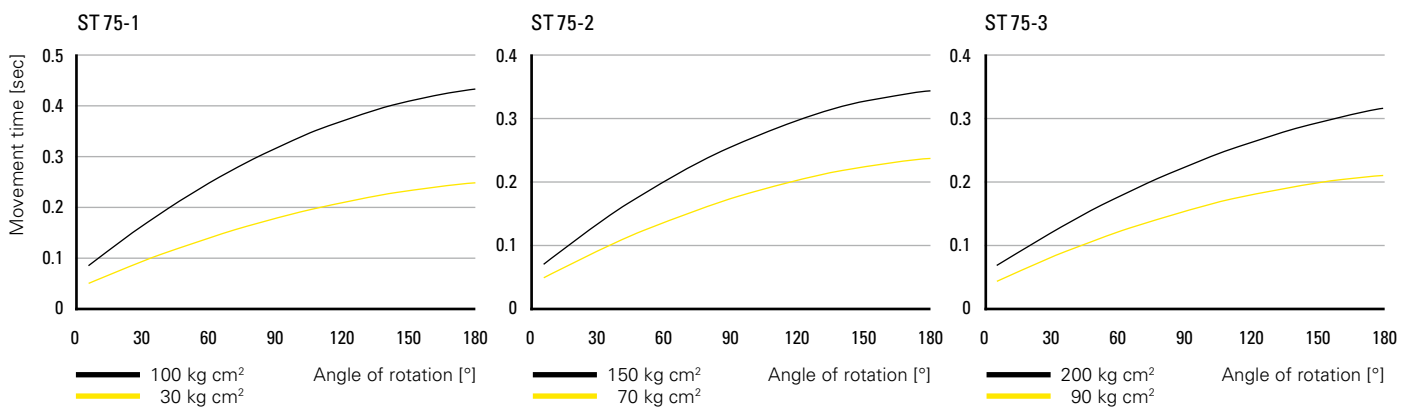
		ST 75-1	ST 75-2	ST 75-3
<b>M<sub>2T dyn</sub></b>	Perm. dynamic tilting moment:	20 Nm	25 Nm	35 Nm
<b>M<sub>2T stat</sub></b>	Perm. static tilting moment:	40 Nm	50 Nm	70 Nm
<b>F<sub>2A dyn</sub></b>	Permitted dynamic axial force:	150 N	150 N	150 N
<b>F<sub>2A stat</sub></b>	Permitted static axial force:	500 N	500 N	500 N
<b>F<sub>2R dyn</sub></b>	Permitted dynamic radial force:	200 N	220 N	250 N
<b>F<sub>2R stat</sub></b>	Permitted static radial force:	500 N	650 N	800 N

Combined loads and permitted process forces only after inspection by WEISS.

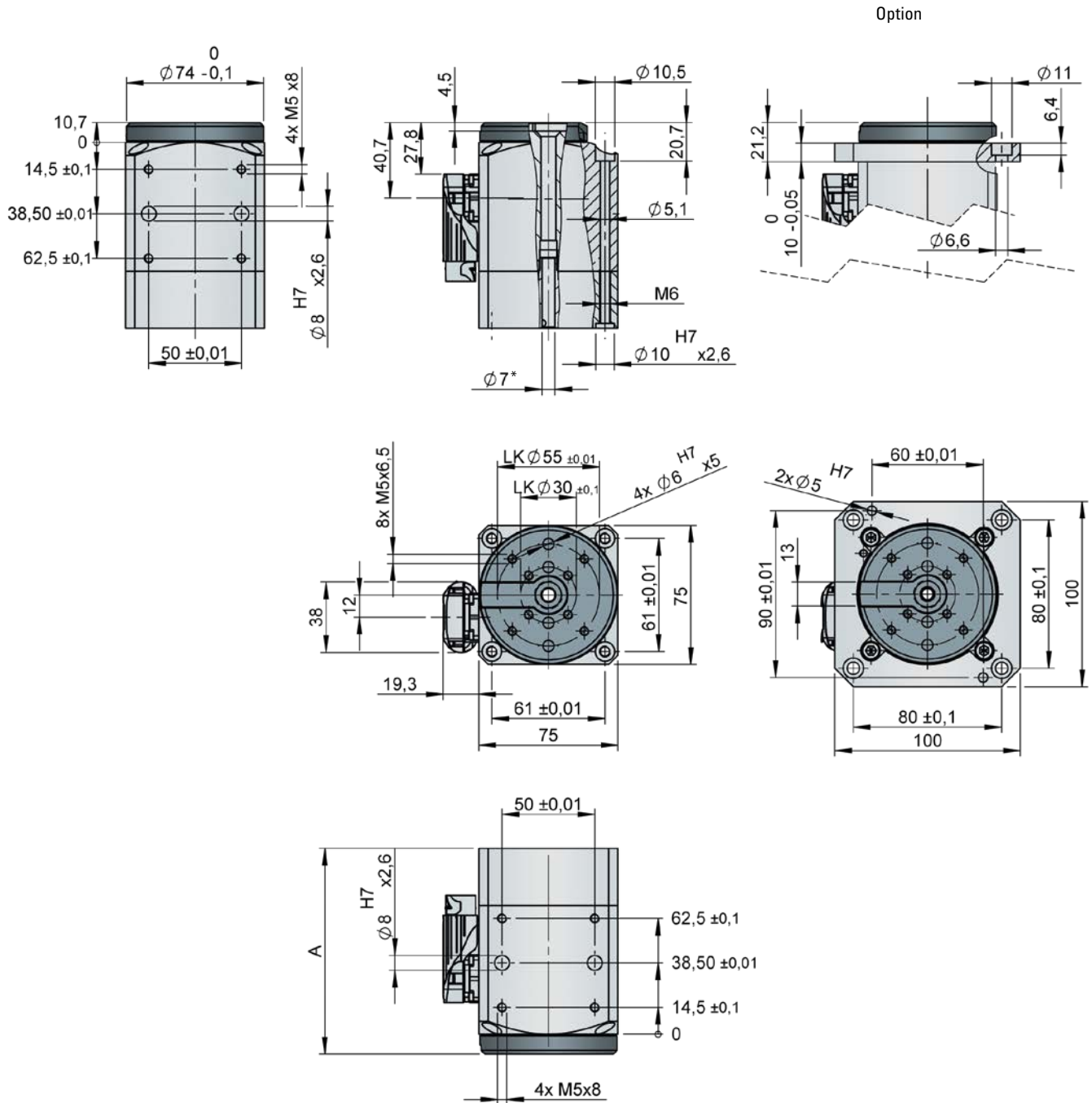
## ENCODER

Sick-Stegmann SEK52 (absolute):	560 arcsec (± 280") Hiperface
Sick-Stegmann SKS36 (absolute):	240 arcsec (± 120") Hiperface
Heidenhain ECN413 (absolute):	120 arcsec (± 60") EnDat 2.1
Heidenhain ECN413 (absolute):	40 arcsec (± 20") EnDat 2.1

## TIMING DIAGRAM



DIMENSIONS



\* only with encoder SEK52"

	A					
	SEK52		SKS36		ECN413	
		Brake		Brake		Brake
ST0075-1	111	150	123	165	143	181
ST0075-2	131	170	143	185	163	201
ST0075-3	151	190	163	205	183	221

Length depending on encoder and brake options

# ST 140 A

## GENERAL INFORMATION

- Max. recommended diameter of rotating plate  $D_{tp}$ : approximately 700 mm
- Compact rotating units for end-of-arm or small rotary applications
- The rotating units are available in two different motor sizes with the same flange dimensions

## OPTIONS

- The rotating units can optionally be equipped with a brake
- The connector outlet can be straight or angled 90° downward
- A choice of various encoder accuracies ensures maximum design flexibility

## TECHNICAL DATA

		ST 140-1	ST 140-2
<b>U</b>	Voltage range:	200-600 V	200-600 V
<b>n<sub>1 Max</sub></b>	Max. speed(230 V):	600 1/min	600 1/min
<b>n<sub>1 Max</sub></b>	Max. speed (400 V):	1400 1/min	1200 1/min
<b>T<sub>IN</sub></b>	Nominal torque:	6 Nm	12 Nm
<b>T<sub>1P</sub></b>	Peak torque:	18 Nm	36 Nm
<b>I<sub>P</sub></b>	Peak current:	5.6 A	10.5 A
	Indexing precision:	s. encoder	s. encoder
<b>A<sub>r</sub></b>	Axial run-out of the drive flange:	± 0.01 mm	± 0.01 mm
<b>C<sub>r</sub></b>	Concentricity of the output flange:	± 0.01 mm	± 0.01 mm
<b>m</b>	Weight:	6.9 kg	8.6 kg

## LOAD DATA (for rotary plate)

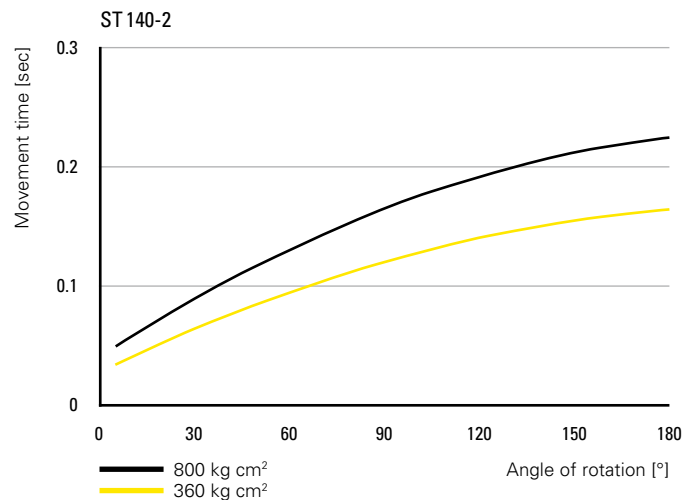
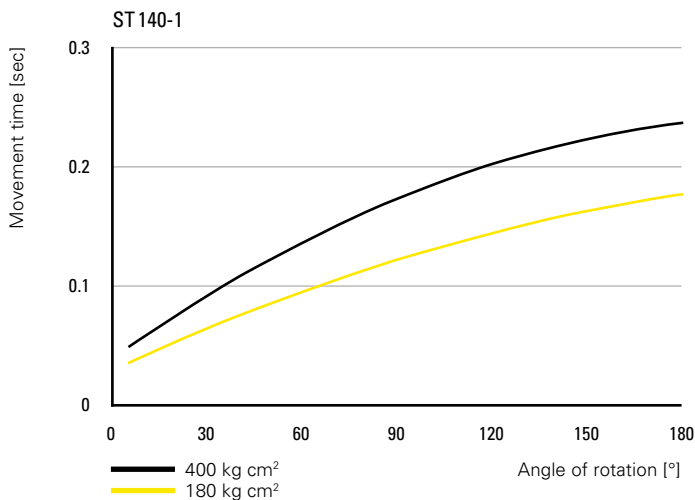
		ST 140-1	ST 140-2
<b>M<sub>ZT dyn</sub></b>	Permitted dynamic tilting moment:	65 Nm	90 Nm
<b>M<sub>ZT stat</sub></b>	Permitted static tilting moment:	130 Nm	180 Nm
<b>F<sub>2A dyn</sub></b>	Permitted dynamic axial force:	300 N	300 N
<b>F<sub>2A stat</sub></b>	Permitted static axial force:	800 N	800 N
<b>F<sub>2R dyn</sub></b>	Permitted dynamic radial force:	400 N	500 N
<b>F<sub>2R stat</sub></b>	Permitted static radial force:	800 N	1000 N

Combined loads and permitted process forces only after inspection by WEISS.

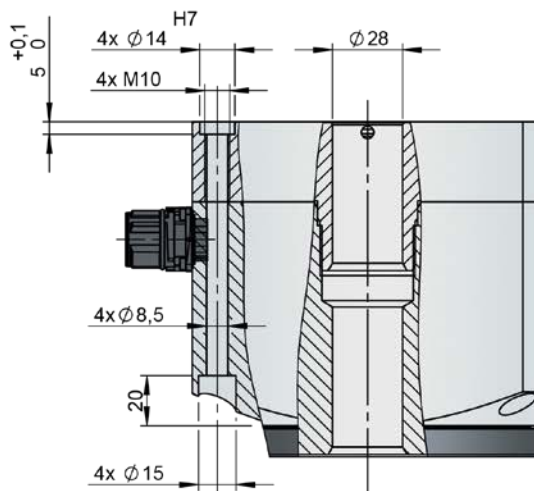
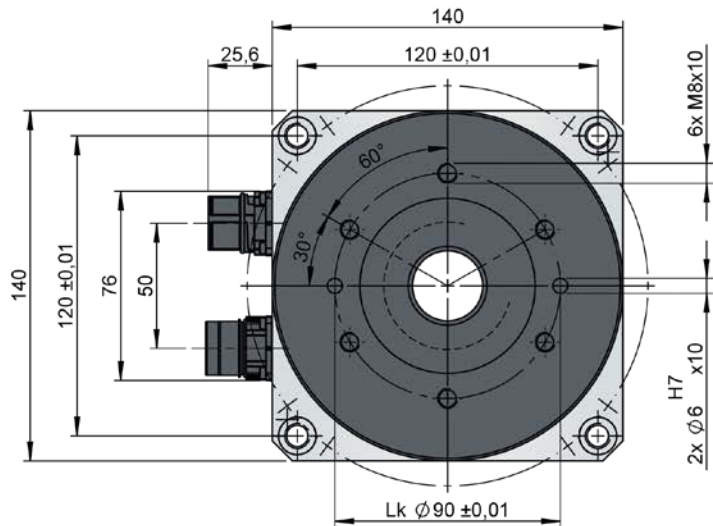
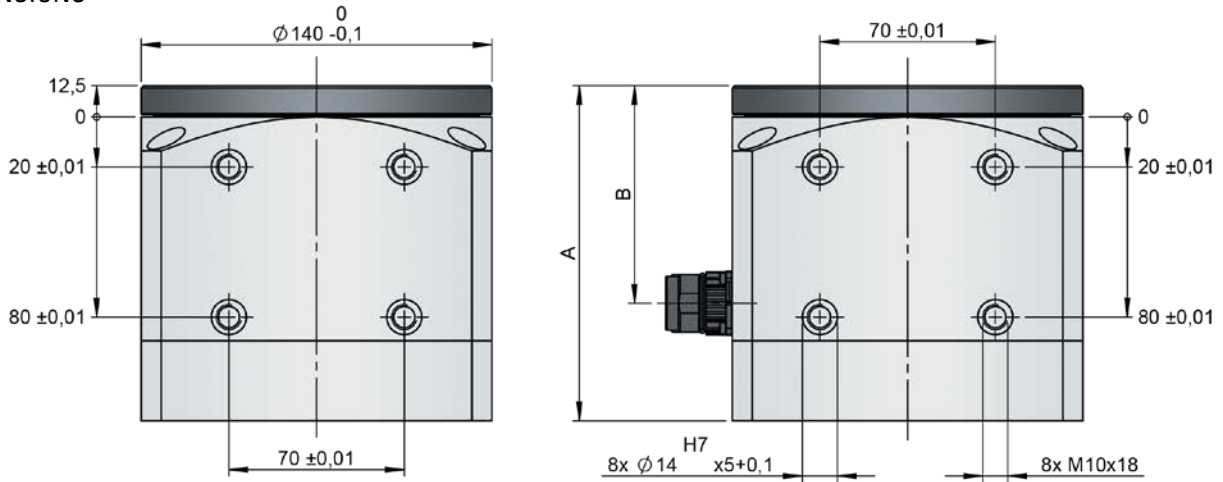
## ENCODER

Sick-Stegmann SEK90 (absolute)	240 arcsec (± 120") Hiperface
Heidenhain ECN113 (absolute)	50 arcsec (± 25") EnDat 2.1
Heidenhain ECN225 (absolute)	30 arcsec (± 15") EnDat 2.1

## TIMING DIAGRAM



DIMENSIONS



	A						B
	SEK90		ECN113		ECN225		
		Brake		Brake		Brake	
ST0140-1	134	189.5	168	224	168	224	87
ST0140-2	161.5	217	195.5	251.5	195.5	251.5	114.5

Length depending on encoder and brake options

# TW

FREELY PROGRAMMABLE ROTARY TABLES | TW ROTARY TABLE WITH HYBRID DRIVE



## DER TW MIT HYBRID-DRIVE

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### FREELY AND INTUITIVELY PROGRAMMABLE

W.A.S. 2 – WEISS Application Software: secure and fast commissioning with free-of-charge user software.

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### SMALL, MEDIUM, LARGE

Available in three sizes!





A direct drive motor integrated with a high-precision gear, absolute encoder and built-in brake combined with a robust mechanical platform. The TW sets new standards in the compact rotary table-area in the following characteristics: dynamic, precision, user programmable and ease of use, power density and the precise and robust WEISS mechanics.

These products are designed to greatly outperform any pneumatic indexing solutions available. Additional user benefits: Comparable in cost to pneumatic solutions, a clear cost advantage is developed through enhancement in productivity, lower operating cost and reduced maintenance cost.

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## ADVANTAGES

- Much faster than pneumatic solution
- Much more precise than pneumatic solution
- Higher power density than pneumatic solution
- Very little dwelltime
- Absolute encoder
- Precise zero-point through locating holes in the body
- No wear
- Precise teaching of each position
- Rigid stationary center section in various levels
- Electronic overload protection
- Any mounting position possible
- High energy efficiency
- Integrated holding brake