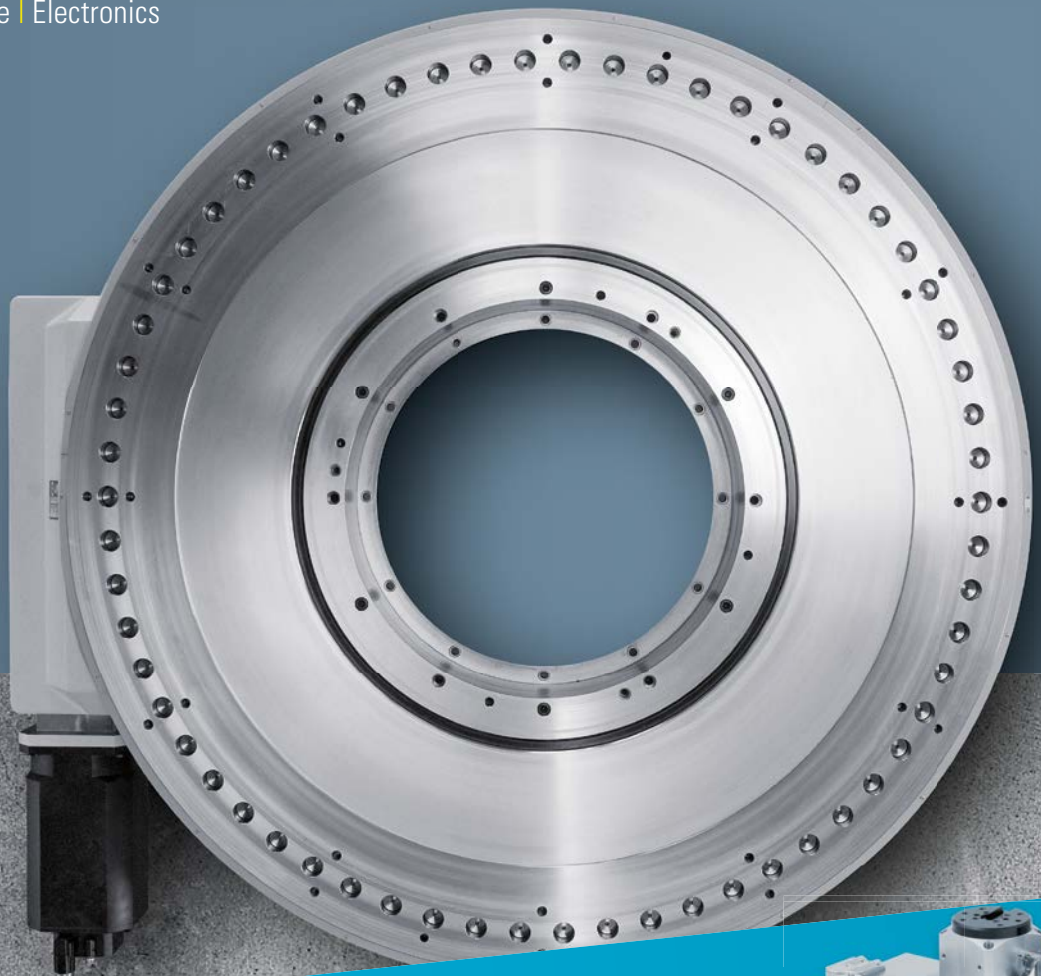


Technology that inspires



PRODUCT RANGE

Mechanics | Software | Electronics



Excerpt of the WEISS Product Range
ST/SW ROTARY UNIT



4

I would like to commission my installation quickly and efficiently



3

I require machine frames, mounting bases or custom equipment



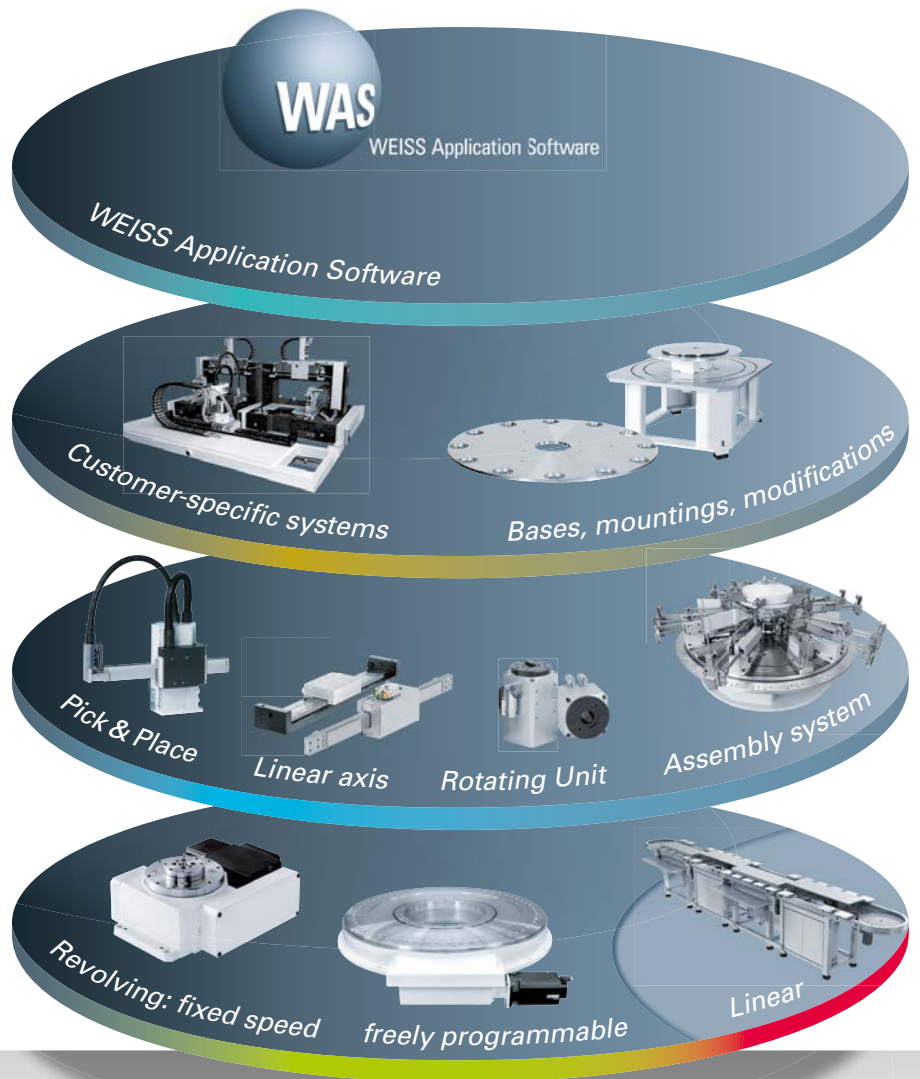
2

I require handling components



1

My transport is...



Four steps to perfect automation



Fixed position rotary indexing tables

TC rotary indexing table
TR rotary indexing ring



User-programmable rotary indexing tables

NC rotary indexing table NR rotary indexing ring
CR/TH heavy duty ring TO torque rotary indexing table
TW rotary indexing table



Linear assembly system

LS 280



Handling module

HP Pick&Place HL Linear axis
HG/HN Linear axes ST/SW rotary unit
SH Lifting-rotating unit PM Pick-o-Mat



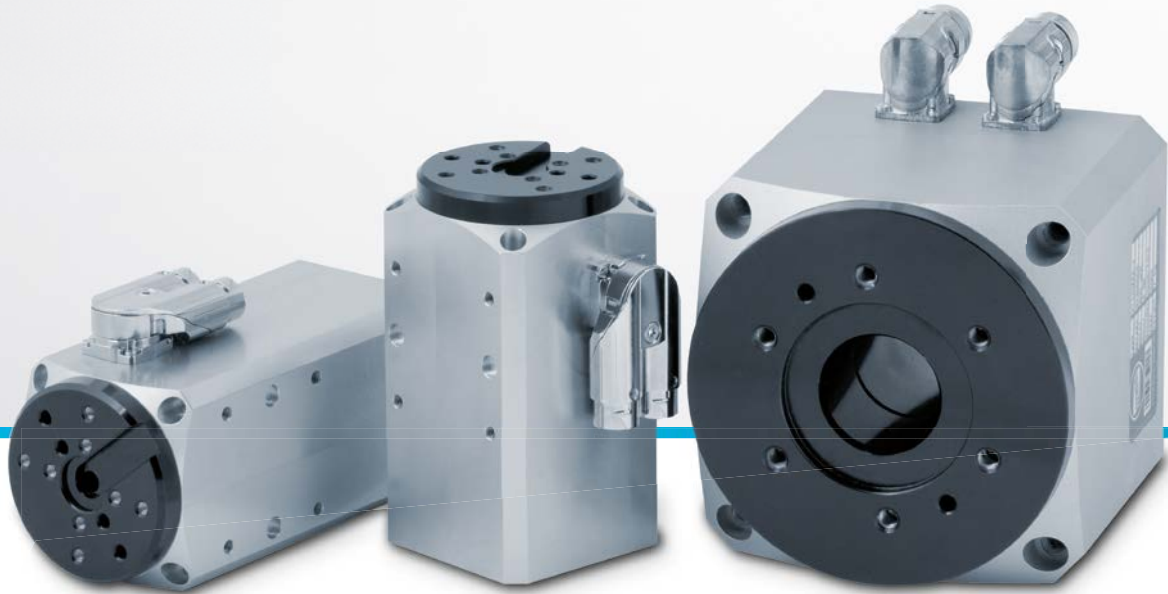
Customer specific solutions

SR/SK indexing machine bases
Additional indexing plate



WAS-Software

WEISS Application Software (WAS)



ST and SW High-Torque-Rotating-Units:

The ST and SW rotating units with direct drive and absolute encoder are exactly designed to match fast, precise and highly dynamic rotating, tilting and gripping applications.

Whether in orientating parts, utilization as a tilting-unit for grippers, or a replacement for standard servomotors with gearbox the ST and SW offer the optimal solution.

The compact profile, low weight and various mounting-possibilities as well as the different drive shafts and mechanical configurations open a wide range of applications.



Also available with electronic clamping



Compact connector for any orientation of cable connection



Fast, easy and secure setting through its unique user software

The key advantages at a glance:

- *User programmable*
- *Speed adjustable*
- *Acceleration adjustable*
- *Extremely dynamic*
- *Long lifetime*
- *No maintenance cost*
- *Low energy consumption*
- *Compact design*
- *Rigid mechanical design*
- *No oil or gears*
- *Various sizes and designs*
- *High protection degree*
- *Useable in cleanroom environment*
- *Absolute encoder*
- *Light weight*
- *High power density*

ST 75

Technical data

	ST075-1	ST075-2	ST075-3		ST075-1	ST075-2	ST0175-3
Cont. torque (Nm)	0.50	1.00	1.40	Cont. current (Arms)	0.5	0.6	0.7
Peak torque (Nm)	1.40	2.80	4.20	Peak current (Arms)	1.6	1.9	2.2
Max. speed (rpm)	3500	2000	1800	Radial run out (mm)	0.02	0.02	0.02
Friction(Nm)	0.5	0.5	0.5	Axial run out at Ø 75 (mm)	0.02	0.02	0.02
Typical load (kgcm²)	30	70	90	Thermal sensor	PTC	PTC	PTC
Max. DC- Voltage (VDC)	800	800	800	Internal inertia (kgcm²)	1	1.1	1.2
Torque of brake (Nm)	10	10	10	Weight (kg)	1.7	2.2	2.7

Weight/inertia given for version with standard encoder and without brake.

Encoder




Interface Sick-Stegmann Hiperface

Accuracy SEK52: ± 280"
SKS36: ± 120" SIL2


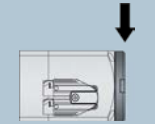

Interface Heidenhain EnDat

Accuracy ECN413: ±60" 512 counts
ECN413: ±20" 2048 counts

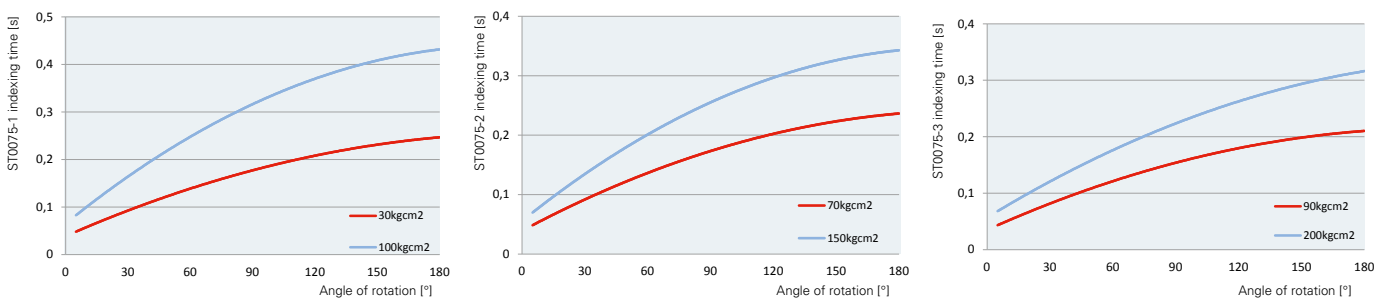
Load data (dynamic)

			
	Max. ax. load (kg)	Max. rad. load (kg)	Max. tilting moment (Nm)
ST0075-1	15	20	20
ST0075-2	15	22	25
ST0075-3	15	25	35

Load data (static)

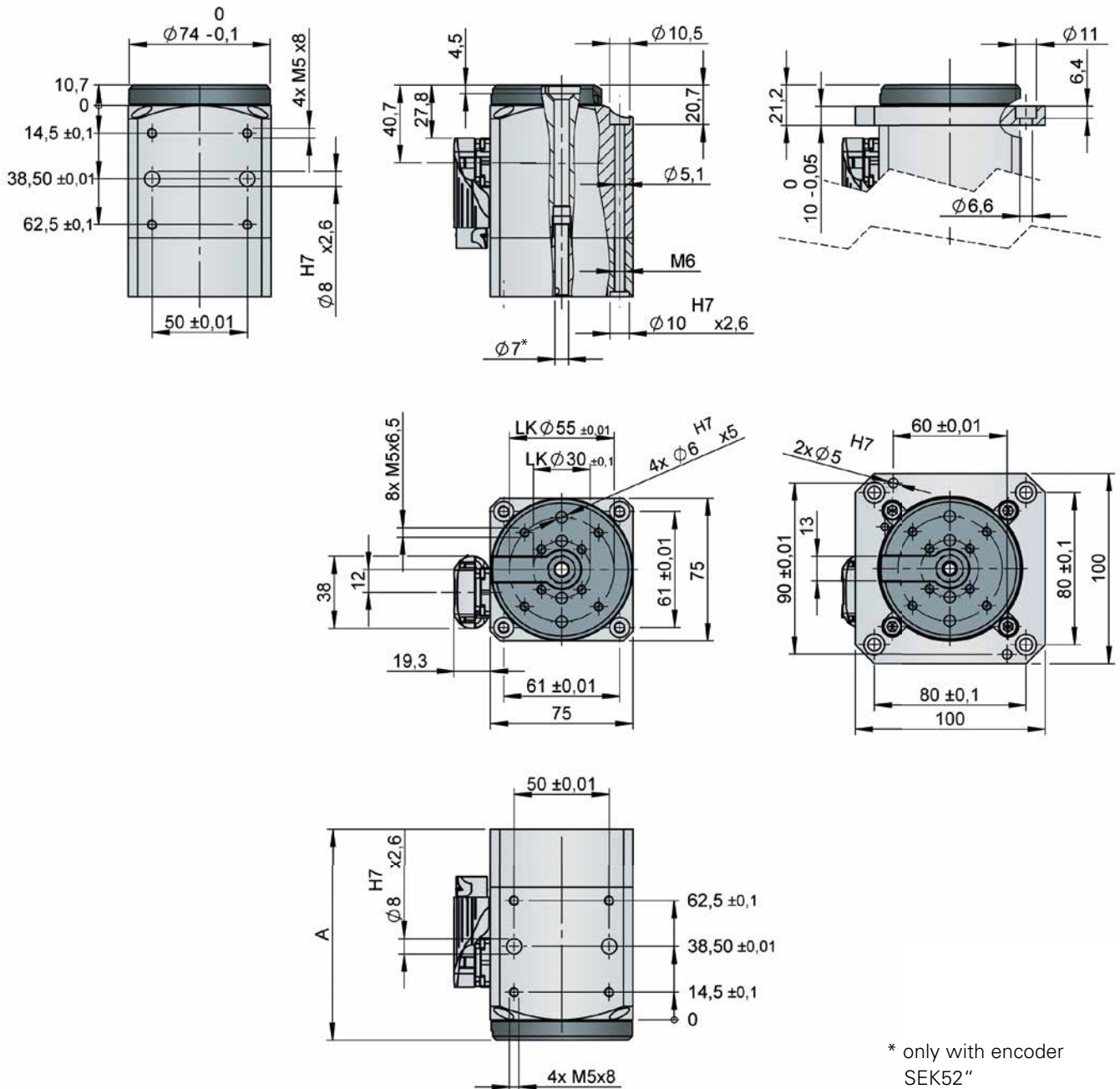
			
	Max. stat. force ax. (N)	Max. stat. force rad. (N)	Max. stat. moment (Nm)
ST0075-1	500	500	40
ST0075-2	500	650	50
ST0075-3	500	800	70

Timing diagram



Dimensions ST 75

Option



Length depending on encoder and brake options

	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	

ST 140

Technical data

	ST0140-1	ST0140-2		ST0140-1	ST0140-2
Cont. torque (Nm)	7.70	15.00	Cont. current (Arms)	1.9	3.5
Peak torque (Nm)	18.00	36.00	Peak current (Arms)	5.6	10.5
Max. speed (rpm)	1400	1200	Radial run out (mm)	0.02	0.02
Friction (Nm)	3	3	Axial run out at Ø 140 (mm)	0.02	0.02
Typical load (kgcm²)	180	360	Thermal sensor	PTC	PTC
Max. DC- Voltage (VDC)	800	800	Internal inertia (kgcm²)	52	58
Torque of brake (Nm)	40	40	Weight (kg)	6.9	8.6

Weight/inertia given for version with standard encoder and without brake.

Encoder

Interface Sick-Stegmann Hiperface

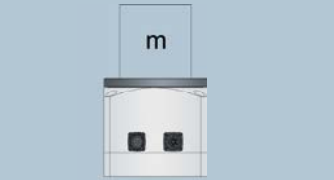
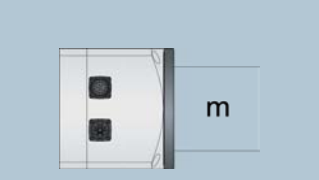
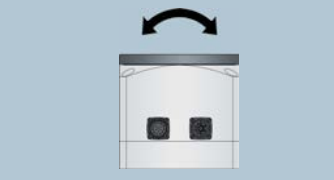
Accuracy SEK90: ± 120"

Interface Heidenhain EnDat

Accuracy ECN113: ±25"

ECN225: ±15"

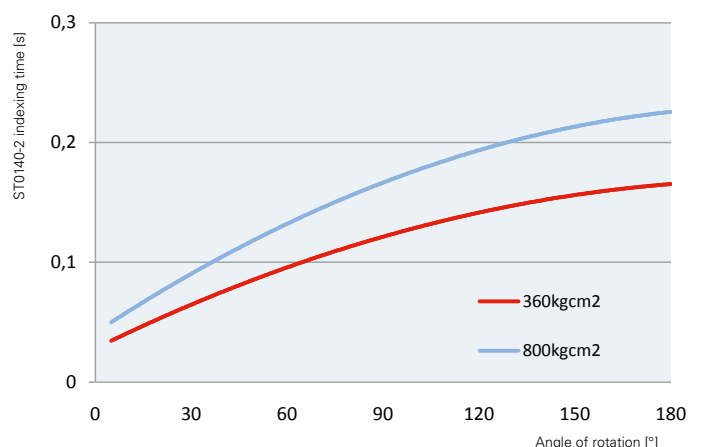
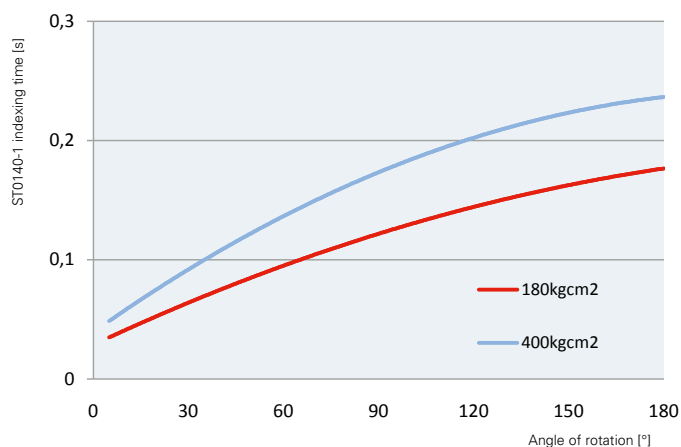
Load data (dynamic)

			
	Max. ax. load (kg)	Max. rad. load (kg)	Max. tilting moment (Nm)
ST0140-1	30	40	65
ST0140-2	30	50	90

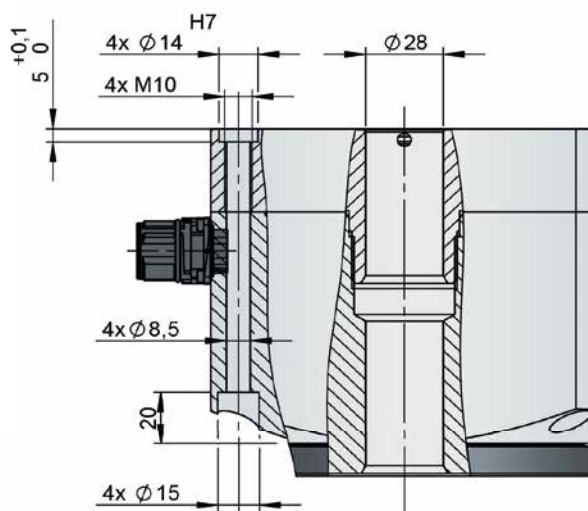
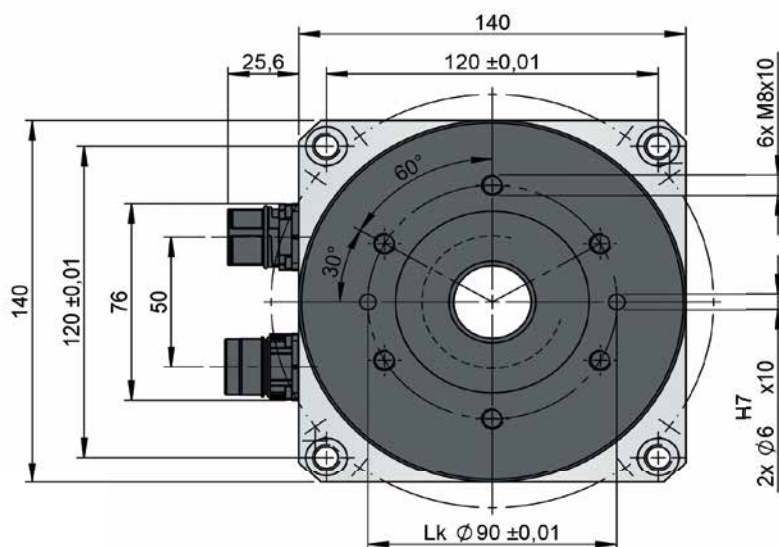
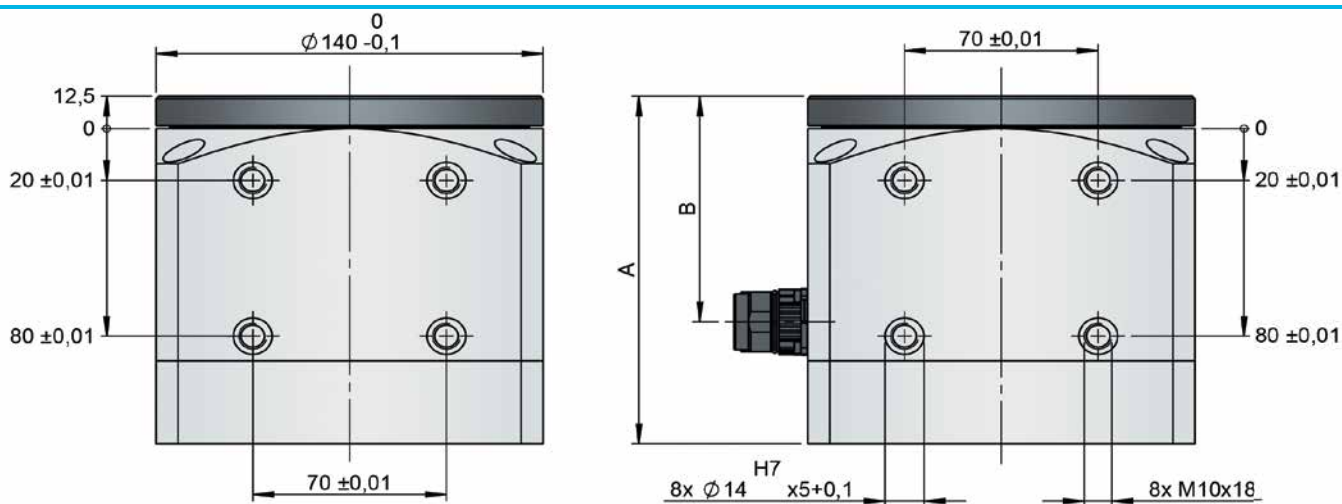
Load data (static)

			
	Max. stat. force ax. (N)	Max. stat. force rad. (N)	Max. stat. moment (Nm)
ST0140-1	800	800	130
ST0140-2	800	1000	180

Timing diagram



Dimensions ST 140



Length depending on encoder and brake options

	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

SW 140

Technical data

	SW0140		SW0140
Cont. torque (Nm)	15.00	Cont. current (Arms)	3.5
Peak torque (Nm)	36.00	Peak current (Arms)	10.5
Max. speed (rpm)	1200	Radial run out (mm)	0.02
Friction(Nm)	3	Axial run out at Ø 75 (mm)	0.02
Typical load(kgcm²)	360	Thermal sensor	PTC
Max. DC- Voltage(VDC)	800	Internal inertia (kgcm²)	55
Torque of brake (Nm)	40	Weight (kg)	8.2

Weight/inertia given for version with standard encoder and without brake.

Encoder

Interface Sick-Stegmann Hiperface

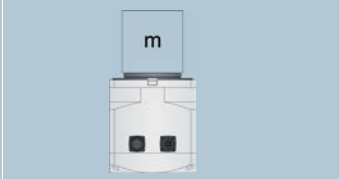
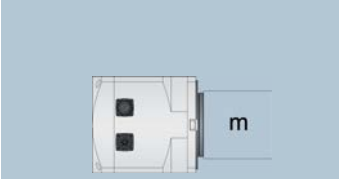

Accuracy SEK90: ± 120"

Interface Heidenhain EnDat


Accuracy ECN113: ±25"

ECN225: ±15"

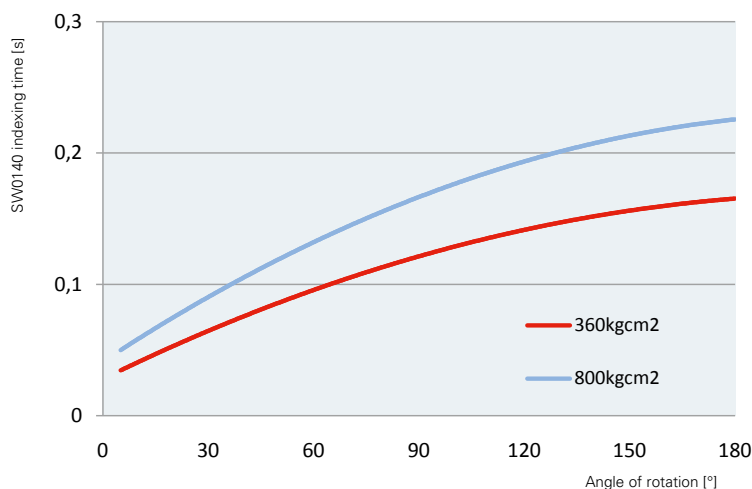
Load data (dynamic)

			
	Max. ax. load (kg)	Max. rad. load (kg)	Max. tilting moment (Nm)
SW0140	30	50	90

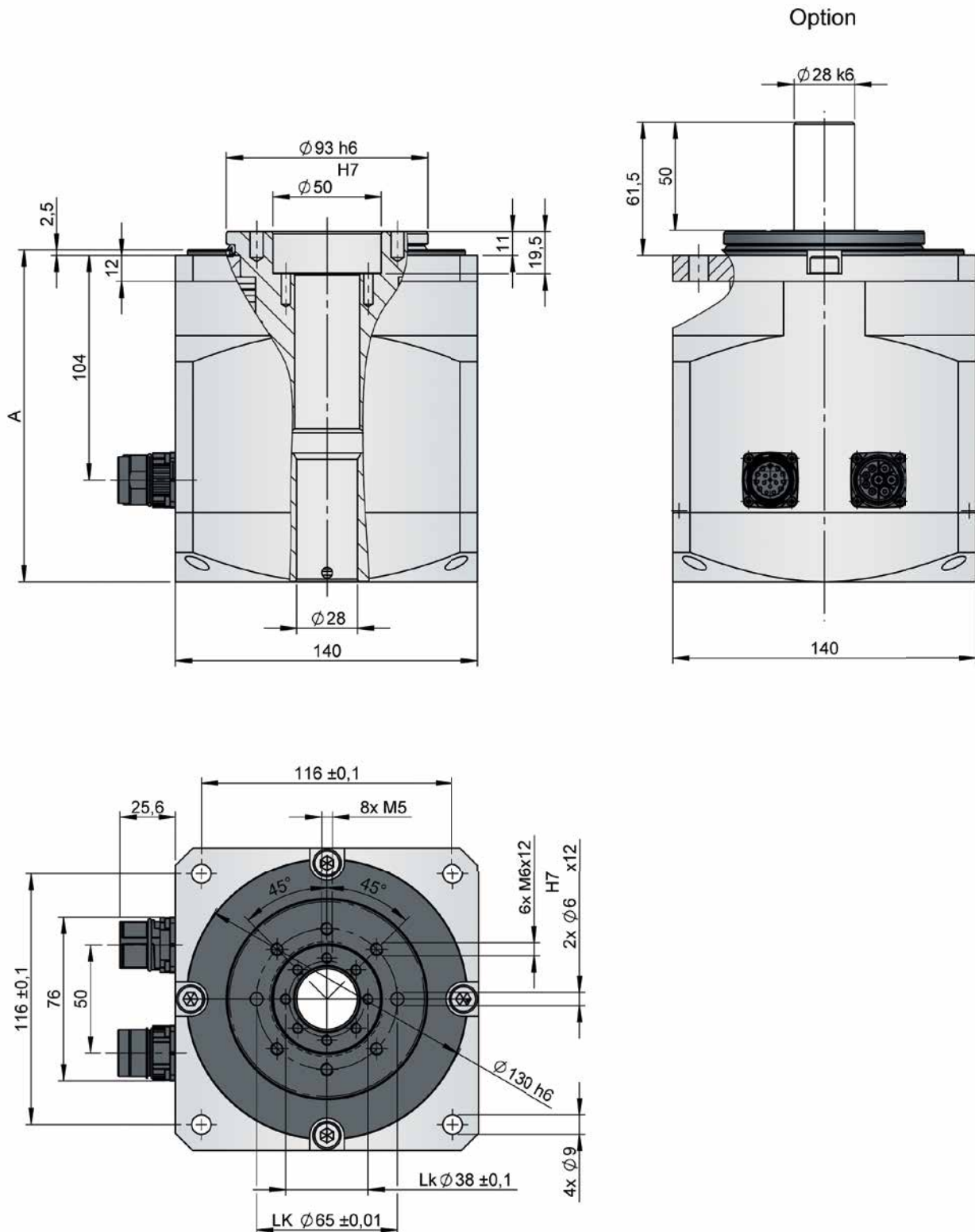
Load data (static)

			
	Max. stat. force ax. (N)	Max. stat. force rad. (N)	Max. stat. moment (Nm)
SW0140	800	1000	180

Timing diagram



Dimensions SW 140



Length depending on encoder and brake options

	A					
	SEK90		ECN113		ECN225	
		brake		brake		brake
SW0140	153.5	209	187.5	243.5	187.5	243.5

WAS – WEISS Application Software

In addition to the basic functions of the start up, WAS – WEISS Application Software also gives you easy access to the teaching of positions and programming of motion-sequences. Your Windows-PC will be connected through RS232 or Ethernet with our drive.

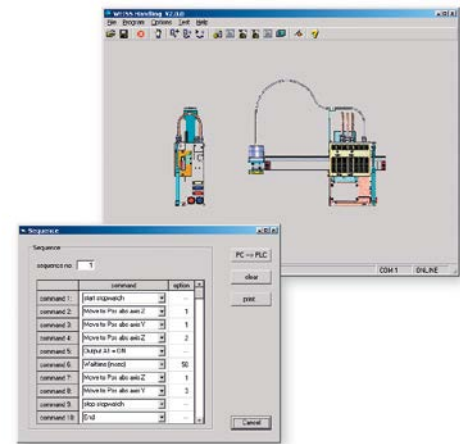


Communication

- Profibus-DP
- Digital I/O
- Free ASCII protocol
- Ethernet
- DeviceNet-CAN
- EtherNet/IP
- Modbus TCP
- CAN

Software

- All positions and speeds are user programmable
- Up to 128 teaching positions
- Up to 32 programs can be stored
- Ability to force inputs and outputs (e.g. for initial start-up)
- Software cam-functions can be defined



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