DEPRAG

machines unlimited

DEPRAG Apps

Software Solutions and Updates

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AST40

DEPRAG

Prozessanzeige

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Status   in Ordnung

| Schritt | Drehmoment [N·m] | Winkel [°] |
| 1 | 0.0000 | 10000 |

Menü   Offene Module

Software Solutions for Sequence Controllers AST5/AST6/AST11/AST40

Possible combinations with AST controllers

Which software is suitable for the screwdriving system?

Hardware including software	Part no.	AST5	AST5-S	AST(i)6	AST11	AST(i)40
Interface Graph Loader	385834A	✓	✓	✓	✓	✓
Interface Graph Loader activation key	118742					
Module WEB-IO 12E/12A	383978A	✓	x	x	x	x
WEB-IO 12E/12A activation key *)	116995					

*) no PC is required for this software

| Software	Part no.	AST5	AST5-S	AST(i)6	AST11	AST(i)40
Datalogger activation key	202699	✓	✓	✓	✓	✓
Statistics activation key	206081	✓	✓	✓	✓	✓
ASTxx Serial Remote activation key	206565	✓	✓	✓	✓	✓
ASTxx TimeSync	122728	✓	✓	✓	✓	✓
AST-CSV-Import	122724	✓	✓	✓	✓	✓
DEPRAG Clamp Force Control activation key	109108	x	x	x	x	✓
Friction value screwdriving activation key	201820	✓	✓	✓	✓	✓
DEPRAG Graph Viewer activation key	128901	✓	✓	✓	✓	✓
DEPRAG Data eXchange activation key	132680	✓	✓	✓	✓	✓
TIA Link activation key	135839	x	x	✓	✓	✓

Interface Graph Loader
the hardware with installed software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

The Interface Graph Loader is an optional accessory for the automatic transfer of screwdriving curves and final value data sets from DEPRAG screwdriving controllers. The Interface can be used with EC and EC servo screwdriving systems in combination with screwdriving controllers AST5, AST6, AST11 and AST40.
The storage of screwdriving graphs and end value data sets (e.g. torque, angle etc.) for manual work stations and screwdriving stations can be carried out automatically using the Interface Graph Loader.
The corresponding software enables immediate display on the computer screen of the current screwdriving graph, the screw assembly can be evaluated straight after completion and *csv and *bin files can be saved in individual directories.

The device requires a suitable adapter cable, a sequence controller ASTxx with screwdriver and a PC to save the data.

▶ Part no. 385834A

▶ Activation key 118742
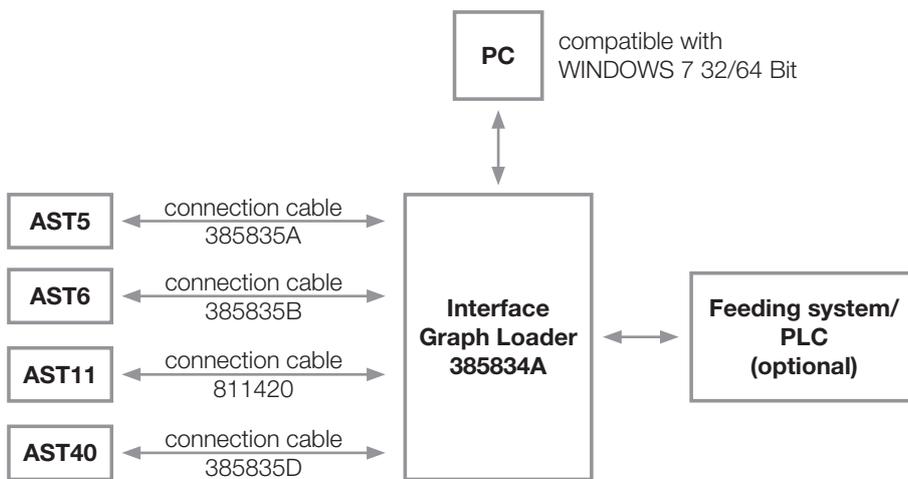
The software requires a free activation (118742).
A description of the procedure can be found on page 39.

Datalogger
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 und AST40

The software datalogger can be used to record and archive the final-values of up to 10 sequence controllers. This storage format corresponds with the required format of the software statistics, so that the data sets can be analyzed with the software statistics. Select whether the data is collected automatically while the program is running, or whether the data reading should be triggered manually. The connection to the controllers is done by Ethernet and TCP/IP. The software is available in the following languages:
German, English, French, Italian, Spanish
To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 202699

Statistics

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

The software statistics can be used to produce statistical evaluations of the screwdriving results, that are made available by the software datalogger.

When using the software statistics, we also recommend the installation of the software datalogger.

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 206081

ASTxx Serial Remote

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

The program ASTxx Serial Remote is started on a PC and is controlled by commands over a serial interface (COM-Port). With this program, screwdriving curves and result-data can be transferred quickly and simply onto a PC. The PLC controls when and which data should be stored. The storage location (also the directory) on the PC is determined by the PLC as well. The directory is setup automatically on the PC.

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 206565

ASTxx TimeSync

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

Time synchronisation between PC and sequence controller AST (download via controller website)

ASTxx TimeSync is a PC software designed for simple synchronisation of date and time between a PC and any number of sequence controllers.

If end values from a sequence controller and data from a PC need to be linked with one another for further evaluation, then the date and time must match exactly in order for correct assignment of the data to take place. The program ASTxx TimeSync is responsible for time synchronisation.

ASTxx TimeSync can run as a batch program on a server or a PC in the network and can be accessed for any number of sequence controllers. The software runs in the background, establishes the date and time of the PC on which it is running and transmits these values to the specified sequence controller. The sequence controller type and IP address must be specified in order to access the program. The use of this software is free of charge.

▶ Part no. 122728

AST-CSV-Import

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

Free add-on: Add-In for Microsoft Excel for easy import of end-value csv files into Excel (download via website of the controller).

▶ Part no. 122724

DEPRAG Clamp Force Control
the software for screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems
in combination with the sequence controller AST12/AST40

This patented, reliable and adaptive screwdriving procedure provides excellent constancy in the pre-load force even with fluctuating torque.

The complete screw assembly consists of the screwdriving template seating point detection and a screw assembly to difference torque or angle.

The main element is the seating point detection. On the basis of a torque procedure a mathematical evaluation function is continuously formed. If the trend line reached exceeds a specifically defined limit value, the seating point is considered detected and the torque and angle values at the time of the seating point are saved. The evaluation procedure combines two essential advantages. It is robust in relation to coincidental fluctuations and increases during the torque procedure which do not arise from the actual seating point. Furthermore, the algorithm is universally valid so the user does not need to set any parameters specific to the evaluation. There is also no need for time-consuming preliminary tests and parametrisations by the experts at DEPRAG. The parameters listed in the following table must be set. Torque upper limit is the abort criterion for the screwdriving step. The OK window for the seating point detection can optionally be monitored by seating point torque lower/upper limit and angle lower/upper level. Either the torque or angle values at the seating point or at the end of the program step can be stored as the end values.

Tab.: Parameters for screwdriving template seating point detection

Parameter	Function
Monitoring time	Monitoring time for screwdriving step
Speed	Speed for screwdriving step
Seating point torque lower/ upper limit	Monitoring criterion for seating point detection
Torque upper limit	Abort criterion for screwdriving step
Angle lower limit	Monitoring criterion in relation to seating point, min. 720°
Angle upper limit	Monitoring criterion in relation to seating point
End value generation	Values for seating point / end program step, basis for sequential step

The end values of the screwdriving template seating point detection portray the reference for the follow-on program step. Instead of screw assembly to difference torque the other option is screw assembly to angle.

The screwdriving procedure is used for applications where varying limiting conditions are present which can cause widely ranging torques. Using a torque controlled tightening procedure, even if there is the highest shut-off accuracy, can lead to large fluctuations in the resulting pre-load force. The new adaptive screwdriving procedure DEPRAG Clamp Force Control ensures uniform output for the follow-on end tightening due to the reliable detection of the seating point. Consequently, there is a better constancy in the pre-load force. Typical application examples are direct screw assemblies in plastic or metal.

The procedure DEPRAG Clamp Force Control does not replace the friction value measurement or the friction dependent screw assembly. The screwdriving template friction value measurement can be used if compliance with the pre-set frictional value needs to be monitored. The friction dependent torque assembly also enables a good constancy of the pre-load force for constant frictional torque procedures where the screw position varies. A screw joint analysis is recommended to determine the most suitable screwdriving procedure.

Friction value screwdriving
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

With the friction-value process, it is possible to measure and compensate varying friction-values (e.g. on self-forming screw-joints). Additionally, this procedure can be used for monitoring of predetermined friction values at verification processes.

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 201820

Module WEB-IO 12E/12A
the hardware with installed software for EC- and EC-Servo screwdriving systems
in combination with the sequence controller AST5

Input/output extension for AST5. To activate this pre-installed software, proceed as described on page 39.

▶ Part no. 383978A

▶ Activation key 116995

DEPRAG Graph Viewer for evaluation of screwdriving curves
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

During each screw assembly when using a sequence controller AST, the relevant measurement values are recorded in a file. There is now the DEPRAG Graph Viewer, to simply and easily evaluate and analyse these measurement values.
The Graph Viewer opens the curve files of each sequence controller and can display the following visualisations:

▶ Activation key 128901

- Visualisation of measurement values over time
  In this visualisation, various measurement sizes can be shown in relation to the screwdriving procedure. All available measurement values can be displayed in chronological order.

- Visualisation of measurement values over angle
  In this visualisation, the angle can be analysed in relation to the screwdriving procedure. The y-axis can be freely chosen by the user. This can e.g. enable analysis of angle in relation to torque or angle in relation to motor current, etc. In order to precisely analyse the screw assembly, a video can be played in visualisation over angle. Use the "start" and "pause" buttons in the same way as a video player to visualise the curve sequence of the screwdriving process. Individual sequences can be selected and displayed using the time bar.

- Superposition of measurement values over time / over angle
  As well as visualisation over angle and visualisation over time, there is also an option to display several curves at the same time in order to draw correlations and recognise trends. Any number of curves can be added.
  It is also possible to align curves to specifi c synchronisation points and hide or show screwdriving steps.

As well as the screwdriving curves, the processing and parameter data is also accessible. The complete process can be analysed and evaluated using a single piece of software. The process data can be printed as documentation.

The software is available as a download.
To activate this software, proceed as described on page 39.

DEPRAG Data eXchange
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

AST sequence controllers, the adaptive screwdriving system ADAPTIVE DFS and the ComCenter document relevant processing data for every screw assembly, which is then saved in a distinctive DEPRAG format.

▶ Activation key 132680

The so-called "graphic files" contain all screw curves, end values and details relating to the screwdriving process and are only readable by DEPRAG's own software solutions. In order to use and analyse this data in other systems, it is necessary to convert the internal format into a universal machine-readable format.

The new software solution DEPRAG Data eXchange enables DEPRAG graphic files to be exported either as csv or Excel files. This data can now be used in other software solutions. Optional areas of application include:

- integration in a databank
- SAP integration

- analysis in Matlab
- filing in customer-specific processing software

Compatibility: all Windows systems (7, 8, 10) without any need for configuration. The software configures itself and is ready to run with just one click.

The software is available as a download.
To activate this software, proceed as described on page 39.

TIA Link

Software TIA LINK for simple integration in SIMATIC controllers

Integration in the Siemens programming environment (Totally Integrated Automation (TIA) Portal) is required to operate DEPRAG devices with the current SIMATIC controllers.
This integration is quite time-consuming and requires expert domain knowledge of the DEPRAG devices.
Therefore, the software TIA link has been created to enable simple integration of the following DEPRAG products:

- AST11
- AST40 incl. i-versions
- AST 6 incl. i-versions
- ComCenter 10

The software not only includes integration in the TIA portal for the above products but also several Quick-Start projects in the "structured text" programming language which enable immediate execution of screw assemblies. After starting the software in the TIA portal, the first screw assembly can be carried out straightaway without dealing with communication using the user manual.
The great advantage: a significant time saving due to considerably reduced programming efforts.

The following SIMATIC controllers are supported:
SIMATIC S7-1200, SIMATIC S7-1500 and SIMATIC ET 200SP (CPU)

The software is available as a download.
To activate this software, proceed as described on page 39.

▶ Activation key 135839

Software Solutions for Sequence Controller AST30-31

Possible combinations with AST30-31 controller

Which software is suitable for the screwdriving system?

Hardware including software	Part no.	AST30-31
Interface Graph Loader	385834A	
Interface Graph Loader activation key	118742	✓

Software	Part no.	AST30-31
PC-Software TC30-PC	828560	✓
TC 30-PC Statistics	828634	✓
TC 30-PC Datalogger	829085	✓
TC 30-PC to QS-STAT conversion program	830458	✓
Shut-off at effective torque *)	829613	✓
Friction controlled fastening to torque *)	829614	✓

*) no PC is required for this software

Interface Graph Loader
the hardware with installed software for EC-Servo screwdriving system
in combination with the sequence controller AST30-31

See page 6 for details.

▶ Part no. 385834A

▶ Activation key 118742

PC Software TC30-PC
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

The software contains all programs necessary for commissioning and programming of the sequence controller AST30-31 as well as the drivers required for the interfaces (USB, Ethernet …). The Control Center collates all programs into an easy-to-use interface and contains all relevant operating manuals.

▶ Part no. 828560

TC30-PC Statistics
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

The software can be used to determine key figures (such as CM, CMK value or standard deviation) from diverse screwdriving data. Indicative graphics and visualisations facilitate process optimisation at an early stage.

▶ Part no. 828634

TC30-PC Datalogger
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

The software allows central aggregation and evaluation of all screwdriving controllers within the company. The software automatically collects all screwdriving curves and screwdriving data from the DEPRAG sequence controllers.

▶ Part no. 829085

TC 30-PC to QS-STAT conversion program
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

The software enables the analysis of DEPRAG screwdriving data in the process software "QSTAT". An intuitive user interface is used to import the process data from the AST controllers to the QSTAT program. Using this process data, evaluations and key figures can be used to optimise the process at an early stage.

▶ Part no. 830458

Shut-off at effective torque
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

Screwdriving procedure for shut-off at effective torque.

▶ Part no. 829613

Friction controlled fastening to torque
the software for EC-Servo screwdriving systems
in combination with the sequence controller AST30-31

With the friction-value process, it is possible to measure and compensate varying friction-values (e.g. on self-forming screw-joints). Additionally, this procedure can be used for monitoring of predetermined friction values at verification processes.

▶ Part no. 829614

Software Solutions for MINIMAT-EC Cordless Screwdriver

Possible combinations with MINIMAT-EC cordless screwdriver

Which software is suitable for the screwdriving system?

Hardware including software	Part no.	Base station ComCenter10
Programming kit ComCenter PC	385597A	✓

Software	Part no.	Base station ComCenter10
Datalogger activation key	202699	✓
Statistics activation key	206081	✓
ASTxx TimeSync	122728	✓
AST-CSV-Import	122724	✓
DEPRAG Graph Viewer activation key	128901	✓
DEPRAG Data eXchange activation key	132680	✓
TIA Link activation key	135839	✓

Base station ComCenter 10   the hardware with integrated software
Programming kit ComCenter PC   the software
for MINIMAT-EC Cordless Screwdriver, wireless and battery operated EC Screwdriver

Bluetooth can be used to connect the screwdriver to the optional **base station Com-Center 10**. The convenient operator interface offers a comprehensive range of functions and using a standard integrated web server screw processes can be generated and adjusted quickly and simply.

The process integration for exchange of screw specifications and results data for documentation and archiving is also possible. The base station can be used to control four tools.

This creates the best framework for successful quality management and documentation. The **base station ComCenter 10** provides temporary storage and easy access all daily results data over a whole week. The software datalogger can be used to transfer the measurement data of several base stations (up to 10 devices) automatically via Ethernet onto a PC. Data evaluation can be carried out using the software statistics.

Up to eight multi-stage screw processes, each with appropriate loosening program, can be adjusted and transferred to the screwdriver using the **base station ComCenter 10** or alternatively the **programming kit of the ComCenter PC**.
The keypad on the screwdriver itself is used to select screwdriving programs. At just the press of a button additional loosening programs can be selected at any time for any screwdriving program.

The programming kit **ComCenter PC** is a PC software used to adjust parameters on the EC cordless screwdrivers independently from the base station ComCenter 10. The licence key for the software is saved on the Bluetooth adaptor and a release code is also provided. The settings on as many EC cordless screwdrivers as required can be managed using the ComCenter PC software, just select the screwdriver required when starting the software.

Range of functions:
Screwdriving programs can be generated and adjusted using the **ComCenter PC** software. Graphs can be displayed and transferred using the software module Graph Viewer. This is included and automatically installed with the ComCenter PC software.

All settings for the EC cordless screwdrivers can also be managed via the menus on the web interface of the base station ComCenter 10. There are 12 languages available for the **ComCenter PC** software and for the user interface of the base station ComCenter 10.

▶ Part no. 385582A

▶ Part no. 385597A
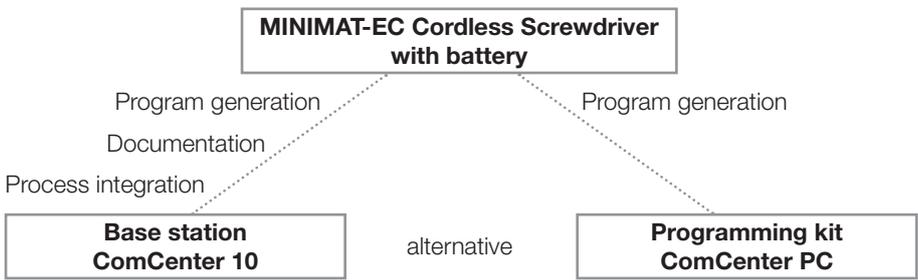
```
              ┌─────────────────────────────┐
              │  MINIMAT-EC Cordless         │
              │  Screwdriver with battery    │
              └─────────────────────────────┘
    Program generation              Program generation
    Documentation
Process integration
┌──────────────────┐                ┌──────────────────┐
│  Base station    │  alternative   │  Programming kit │
│  ComCenter 10    │                │  ComCenter PC    │
└──────────────────┘                └──────────────────┘
```

Datalogger
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

See page 6 for details.

▶ Activation key 202699

Statistics

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

See page 7 for details.

▶ Activation key 206081

ASTxx TimeSync

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

See page 7 for details.

▶ Part no. 122728

AST-CSV-Import

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5, AST6, AST11 and AST40

See page 7 for details.

▶ Part no. 122724

DEPRAG Graph Viewer for evaluation of screwdriving curves

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

See page 9 for details.

▶ Activation key 128901

DEPRAG Data eXchange

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

See page 10 for details.

▶ Activation key 132680

TIA Link

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST11, AST40, AST6 including the i-versions and for the ComCenter 10

See page 11 for details.

▶ Activation key 135839

Software Solutions for MINIMAT-ED
Digital Electric Screwdriver, stationary

Possible combinations with MINIMAT-ED, the digital electric screwdriver
Which software is suitable for the screwdriving system?

Software	Part no.	MINIMAT-ED
Interface 330E with software 330 OS BASIC	106744B	✓
Upgrade to software 330 OSADVANCED activation key	117244	✓
Interface 330E with software 330 OS ADVANCED	106744C	✓
Friction value screwdriving activation key	201820	✓

Interface 330E with software 330 OS BASIC
the hardware with integrated software for the stationary, digital electric screwdriver MINIMAT-ED

There are five screwdriving programs (PG1 to PG5) available on the screwdriver for implementing individual screwdriving procedures; the process consists of a search run, torque, and angle screw assembly. There are also five loosening programs available (PG6 to PG10).
Enhanced functionality is always available by activating software 330 OS ADVANCED.

▶ Part no. 106744B

Interface 330E with software 330 OS ADVANCED
the hardware with integrated software for the stationary, digital electric screwdriver MINIMAT-ED

With the software 330 OS ADVANCED an extended range of functions is available:

▶ Part no. 106744C

- 15 different screwdriving programs can be stored
- Screwdriving programs can be freely compiled using the following screwdriving templates and commands:
  - assembly to torque
  - extended assembly to torque
  - assembly to angle / loosening to angle
  - friction value screwdriving (optional, the part no. is 201820, see page 9 for details)
  - search run / save values / waiting time
- Statistics
- Speed reduction setting
- Extended end values
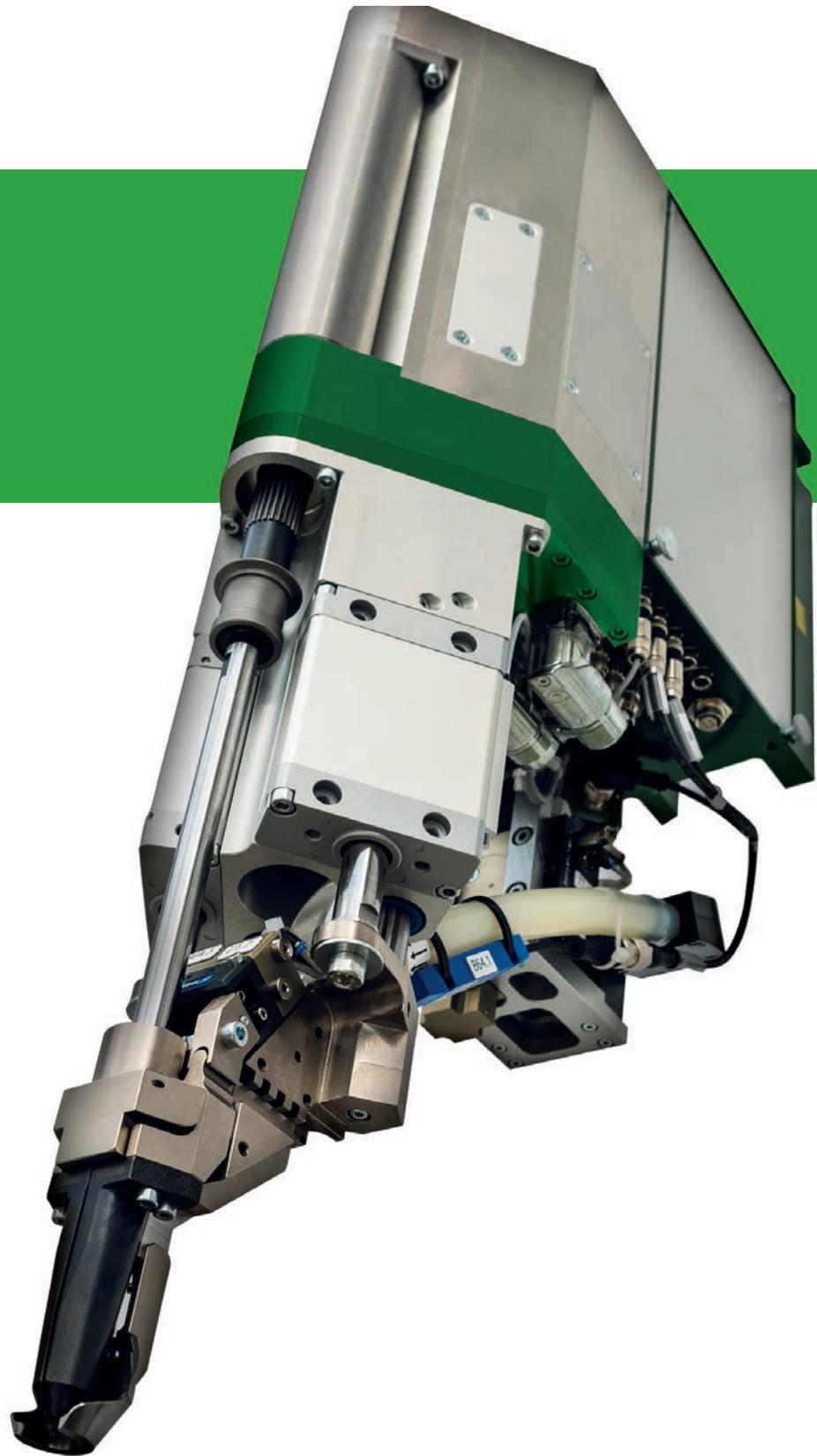
Software Solutions for ADAPTIVE DFS DEPRAG FASTENING SYSTEM

Possible combinations with ADAPTIVE DFS, the DEPRAG FASTENING SYSTEM

Which software is suitable for the screwdriving system?

Software	Part no.	ADAPTIVE DFS
DEPRAG Graph Viewer activation key	128901	✓
ADFS Threaded Fastener activation key	111914	✓
ADFS Push Fastener activation key	111915	✓
ADFS Push Plus Fastener activation key	1119151	✓
ADFS Calibration activation key	135894	✓
DEPRAG Data eXchange activation key	132680	✓
ADFS OPC UA	131142	✓

DEPRAG Graph Viewer for evaluation of screwdriving curves
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

See page 9 for details.

▶ Activation key 128901

ADFS Threaded Fastener
the software for ADAPTIVE DFS

Process software for flow forming screws.
To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 111914

ADFS Push Fastener
the software for ADAPTIVE DFS

Process software for flow push elements.
To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 111915

ADFS Push Plus Fastener
the software for ADAPTIVE DFS

Process software for the processing of FlowPush elements without entering a shut-off torque. The shut-off is based on the parameterised torque target range. The parameterisation can be used to adjust whether the screwdriving process should be optimised to short cycle times or high shut-off accuracy.
To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 1119151

ADFS Calibration
the software for ADAPTIVE DFS

Software for automatic execution of necessary calibration or adjustment procedures.

The advantages of using this software:
- significant cost and time savings
- effective avoidance of errors when transferring data
- intuitive user handling
- automatic generation of calibration certificate

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 135894

DEPRAG Data eXchange
the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers ASTxx and ADAPTIVE DFS

See page 10 for details.

▶ Activation key 132680

ADFS OPC UA
the software for ADAPTIVE DFS

OPC UA is a collection of standards for communication and data exchange within the field of industrial automation. The OPC UA is used to depict the transport of machine-to-machine data as well as interfaces and data.
The ADAPTIVE DFS OPC UA software enables retrieval of final values, statuses and system information. The OPC UA software provides the basis for the realisation of Industry 4.0 relevant content and is a unique selling point of the ADAPTIVE DFS.

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 131142
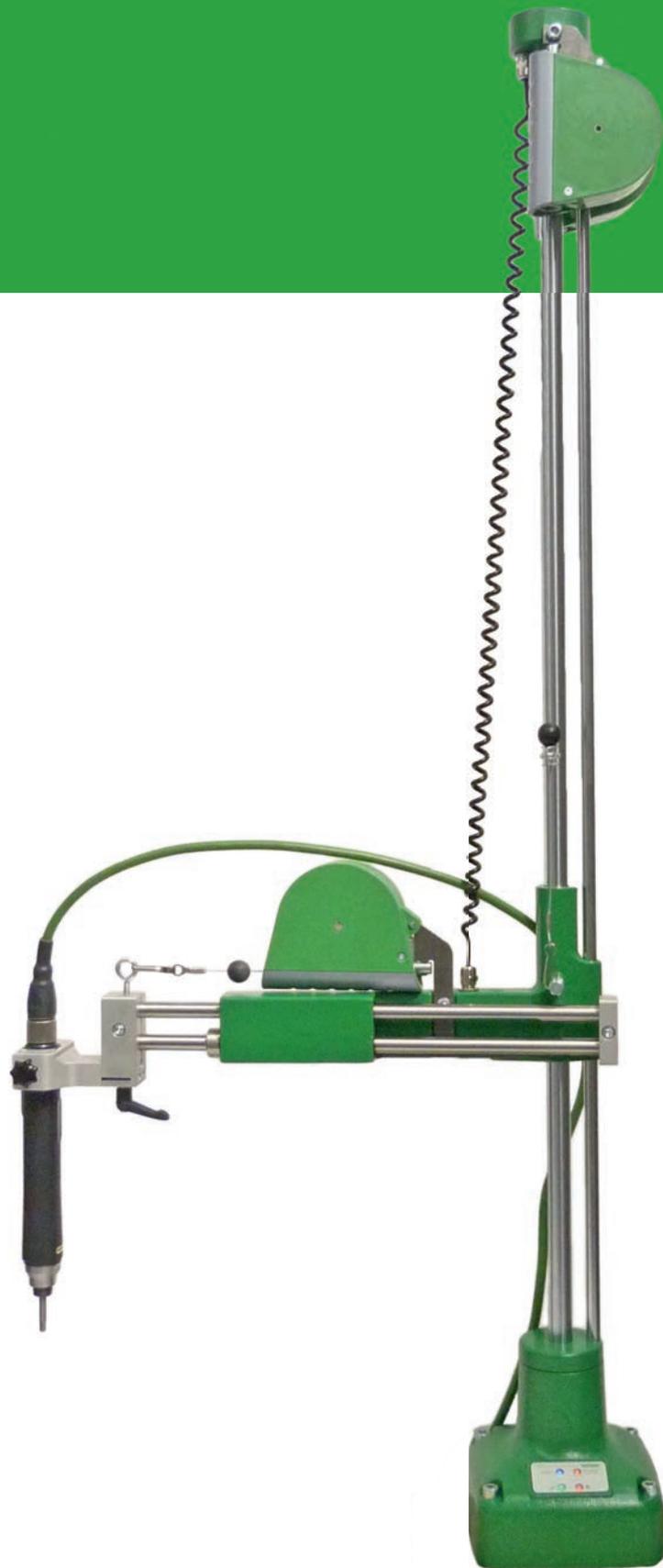
Software Solutions for Position Control Stand PKS

WEB-VISU-POSI
the software for the position control stand

Enables additional control and parameterisation of the PKS via an intuitive web interface. The position control stand can be directly integrated into the existing system environment.

To activate this pre-installed software, proceed as described on page 39.

▶ Activation key 101890

Feeding systems eacy feed guarantee optimal assembly conditions with ergonomic and comfortable operation.

The controller PFC100 enables customised settings without mechanical alterations.

- clear and easy operation via controller
- option of frequency and amplitude regulation via controller
- works to the individual working rhythm of the operator, with storage of up to 10 separate data sets

Software Solutions for DEPRAG Feeding Technology

PFC100 Manager
the parameterization software for PFC100 controllers

Read, save and transfer parameters

The PFC100 Manager facilitates the reading and saving of parameters as text files **for every PFC100 controller.** Saved parameters can be transferred to any PFC100 controller **quickly and simply using the PFC100 Manager.**

The software is available as a download. The connection cable 385520B required to connect PC and PFC100 controller is supplied.

Available languages: German and English

▶ Part no. 121759
(including connection cable 385520B)

▶ Activation key 122000
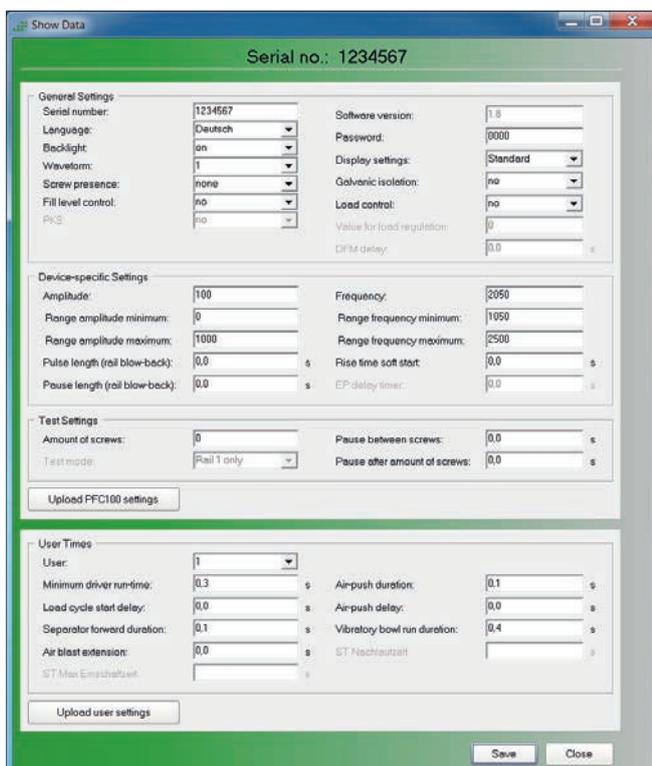
Software Solutions for DEPRAG Automation

Software packages for DCOS processing and system controllers

Intelligent software packages									
DFUN		**DVIP**		**DPRO**		**DAST**		**DSPEC**	
	Part no.		Part no.		Part no.		Part no.		
DFUN10	815454			DPRO10	815632				
DFUN50	815455	DVIP50	815629	DPRO50	815633			Part no. based upon order.	
DFUN100	815456	DVIP100	815630	DPRO100	815634	DAST100	815641		
DFUN200	815457	DVIP200	815631	DPRO200	815635	DAST200	815642		

Software packages for DCOS processing and system controllers

Intelligent software packages combined with standardised hardware based on an industrial PC allow for individual solutions customised to your application.

Perfectly coordinated interfaces between standard components and intuitive user handling guarantee superior user comfort. Our technical advisors are happy to help with configuration.

Further information can be found in the product catalogues D3390 and D3350.

DFUN – **D**EPRAG **FUN**ction – combines and controls all standard functions on the manual work station.

DPRO – **D**EPRAG **PRO**cess – process control and data processing (BDE, MDE, MES, Industry 4.0).

DVIP – **D**EPRAG **VI**sion and **P**osition – position control and visualisation of assembly tasks.

DAST – **D**EPRAG **A**blauf**ST**euerung – central operation of all EC screwdriver controllers via a DCOS operating panel.

DSPEC – **D**EPRAG customer **SPEC**ification – the software solution customised to your application.

Supported by your DEPRAG consultant, select the modules most suitable for your purposes from our standard software packages.

Software Updates

We recommend updating your software regularly so that you always have the most up-to-date drivers, enhanced features and security updates.

Protect your device from any possible threats or security issues by installing the most up-to-date software versions.

Software Updates

for AST sequence controllers

UPDATE	for	controller	AST5	AST5-S	AST6	ASTi6	AST11	AST30-31	AST40	ASTi40
		Part no.	114268	117217	114269	114270	114271	117259	114254	114261

for AST sequence controllers (no longer in the current sales program)

UPDATE	for	controller	AST10	AST30-31	AST32
		Part no.	117340	117343	137422

for EC screwdriver, EC-Servo screwdriver, electric screwdriver

UPDATE	for Screwdriver		MINIMAT-EC cordless screwdriver 318Axx-.. handheld	NANOMAT-EC, MICROMAT-EC, MINIMAT-EC 320E-.. stationary	MINIMAT-ED digital electric screwdriver 330E36-.. stationary	MINIMAT-ED digital electric screwdriver 330E36-.. handheld	MINIMAT-E 342Ex36-.. stationary	MINIMAT-EC-Servo 311Exx-.. stationary
		Part no.	117263	117238	117267	117270	117272	117273
Update for handle		Part no.	-	-	-	-	-	137484

for the ADAPTIVE DFS

UPDATE	for		ADAPTIVE DFS
		Part no.	117276

for part feeder control and position control stand

UPDATE	for		SZG Controller 6	PFC100	PFCi100	Position control stand
		Part no.	137482	117288	117290	119657

for measurement devices

UPDATE for		BME	ME1000DMS	ME1000PE	ME5000	ME5400	ME5500	ME5600	ME6000	ME6000F	ME6100
	Part no.	137354	137355	137500	117294	117295	117253	117296	117297	137362	137361

for battery, charger and programming kit

UPDATE	for		Battery Li-Ion 36V 54Wh	Charger	Programming kit ComCenter PC
		Part no.	117285	117284	117287

for function control and ComCenter

UPDATE	for	fc10	fc11	fc20	ComCenter ED	ComCenter ED-S	ComCenter 10	ComCenter PC
	Bestell- no.	137480	117280	117283	117234	117252	117232	117287

For optimal use and a full scope of features we recommend installing the most up-to-date version of the controller.

Process description for a software update

1. If your controller is connected to the internet, you will receive a message via the controller's website that there is an update available.

   Click on this message for more detailed information regarding the update.
   The next step is to place the order for the update.

2. If your controller is not connected to the internet, you can also check the availability of updates here:

   http://software.deprag.com

3. Of course, you can also contact us directly if you have any questions concerning the availability of updates or about the update itself. The contact details are found below.

Process:

We will send you the download link for the update along with the invoice. The update can then simply be installed on your controller. This process is very quick, and your controller is ready for operation after just a few minutes.

Your contact for questions about our software products:

Sales department   E-Mail: verkauf@deprag.de

Export department   E-Mail: export@deprag.de

Service department   E-Mail: service@deprag.de

Further contact details can be found on our website at www.deprag.com.

Part number index

Part no.	Category	Designation	Description
101890	9	Activation key WEB-VISU-POSI	
106744B	-	Interface 330E with OS BASIC	
106744C	-	Interface 330E with OS ADVANCED	
109108	9	DEPRAG Clamp Force Control	Activation key
111914	9	Activation key ADFS Threaded Fastener	Process software for flow forming screws
111915	9	Activation key ADFS Push Fastener	Process software for flow push elements
1119151	9	Activation key ADFS Push Plus Fastener	Process software for flow push elements
114254	2	Update	Sequence controller AST40
114261	2	Update	Sequence controller ASTi40
114268	2	Update	Sequence controller AST5
114269	2	Update	Sequence controller AST6
114270	2	Update	Sequence controller ASTi6
114271	2	Update	Sequence controller AST11
115460	3	Connection PFCi-DPU050/100	Driver and visualisation for DPU
115461	3	Connection PFCi-DPU200	Driver and visualisation for DPU
116995	1	Activation key WEB-IO 12E/12A	Input/output extension for AST5 (the activation key is free of charge)
117217	2	Update	Sequence controller AST5-S
117232	2	Update	Base station ComCenter 10
117234	2	Update	ComCenter ED
117238	6	Update	EC Screwdriver 320E-..
117244	-	Upgrade	upgrade from software BASIC to software ADVANCED
117252	2	Update	ComCenter ED-S
117253	2	Update	Measurement device ME5500
117259	6	Update	AST30-31
117263	6	Update	MINIMAT-EC Cordless screwdriver, 318Axx-..
117267	2	Update	MINIMAT-ED stationary, 330E36-..
117270	2	Update	MINIMAT-ED handheld, 330E36-..
117272	6	Update	MINIMAT-E stationary, 342Ex36-..
117273	2	Update	MINIMAT-EC-Servo stationary, 311Exx-..
117276	2	Update	ADAPTIVE DFS
117280	2	Update	Function control fc11
117283	2	Update	Function control fc20
117284	6	Update	Charger 833881 (MINIMAT-EC cordless screwdriver)
117285	6	Update	Battery Li-Ion 367V 54Wh 833880 (MINIMAT-EC cordless screwdriver)
117287	2	Update	Programming kit ComCenter PC (MINIMAT-EC cordless screwdriver)
117288	2	Update	Controller PFC100
117290	2	Update	Controller PFCi100
117294	6	Update	Measurement device ME5000
117295	2	Update	Measurement device ME5400
117296	6	Update	Measurement device ME5600
117297	2	Update	Measurement device ME6000
117340	2	Update	AST10

Part number index

Part no.	Category	Designation	Description
117343	2	Update	AST30-31
118742	9	Activation key	for Interface Graph Loader 385834A
119657	2	Update	Position control stand
121759	8	PFC100 Manager	
122000	9	Activation key of 121759	
122724	7	AST-CSV-Import	Free of charge
122728	7	ASTxx Time-Sync	Free of charge
125134	7	DEPRAG Datalogger	
125135	7	ASTxx Serial Remote	
128901	9	Graph Viewer activation key	For sequence controller AST (software requires activation)
131142	9	ADFS OPC UA activation key	
132680	9	Deprag Data eXchange activation key	Software requires activation
135839	9	TIA Link activation key	
135894	9	ADFS Calibration	Activation key
137354	2	Update	Measurement device BME
137355	2	Update	Measurement device ME1000DMS
137361	2	Update	Measurement device ME6100
137362	2	Update	Measurement device ME6000F
137422	2	Update	AST32
137480	2	Update	Function control fc10
137482	2	Update	SZG Controller 6
137484	2	Update for handle	311Exx screwdriver
137500	2	Update	Measurement device ME1000PE
139522	2	Update	Graph Viewer
201820	9	Friction value screwdriving	Activation key
202699	9	Datalogger	Activation key
206081	9	Statistics	Activation key
206565	9	ASTxx Serial Remote	Activation key
383978A	-	Module WEB-IO 12E/12A	
385834A	-	Interface Graph Loader	(Hardware and software)
385582A	-	Base station ComCenter 10	
385597A	-	Programming kit ComCenter PC	
815454	3	Software packages DFUN	The basic software package regulates the functions of your system components. The functionality matches the performance capability of the relevant system control.
815455	3		
815456	3		
815457	3		
815629	3	Software packages DVIP	The software package for visualisation and positioning. Operator guidance on the positioning control necessitates processing and sequencing visualisation. The functionality matches the performance capability of the relevant system control.
815630	3		
815631	3		
815632	3	Software packages DPRO	This software package supports the process control through BDE, MDE and MES connections. The functionality matches the performance capability of the relevant system control.
815633	3		
815634	3		
815635	3		

Part number index

Part no.	Category	Designation	Description
815641	3	Software packages DAST	The software panel for EC and EC-Servo systems. DAST is used to supervise the operation and visualisation of the screwdriver sequence controller (AST series) through the system control. The functionality matches the performance capability of the relevant system control.
815642	3		
828560	8	PC-Software TC30-PC	Software for creating the screwdriving program.
828634	8	AST30 Statistics	
829085	8	AST30 Datalogger	
829613	8	Shut-off at effective torque	
829614	8	Friction controlled fastening to torque	
830458	8	TC 30-PC to QS-STAT	Conversion program

The ordering process for our software products

Category	What do we need from our customer?	What do we deliver?	fee required
1	Purchase order / PO and automatically generated number (generated by the controller)	Activation key (via E-Mail)	no
2	Purchase order / PO	Download link (printed on the invoice)	yes
2-a	Purchase order / PO	Download link (printed on the invoice) - The software is free, the invoice will only be created when the software is activated (the activation key always has one separate order number)	yes when activated
3	Purchase order / PO only for in-house projects (special machines): Part no. must be captured internally in the customers order	Installed by DEPRAG	yes
6	Purchase order / PO, installation only possible at DEPRAG - the customer has to send the hardware to Amberg	Return of the hardware with installed software	yes

7	a) *Software already stored on control*
	   - must be installed by the customer
	b) *Software not stored on control*
	   - must be required by the customer
		a) -
		
		b) Download link
			no

8	Purchase order / PO	Delivery on data medium (e.g. CD)	yes
9	**Independent of a special machines project:** Purchase order / PO and automatically generated number (generated by the controller)	Activation key (via E-Mail)	yes
	As part of a special machines project: Purchase order / PO	Activation already done by DEPRAG	yes

The ordering process for activation key

For activation we require:

- the request key
  found to the right of the corresponding extension
  under System -> Extensions for sequence controller AST5/AST6
  under Setup -> Extensions for sequence controller AST11
  under Extras -> Extensions for sequence controller AST40

- the serial number of the sequence controller (found on the underside)

- your order number for the purchase of the extension

- a contact person with email address and telephone number in case of any queries

Send us these details via email to export@deprag.de.

The key can either be directly copied and pasted into the email or clicked on to save in a file. In this case, attach the file to the email.
In return you will receive a licence file with the corresponding activation key via email.
The activation key can be entered at the bottom of the page and confirmed by clicking on the button "Load key" (see below).
Alternatively, the licence file can be loaded. Click on the button "Search..." and select the relevant file. Then, click on "Load licence key" (see below).
Once the activation key has been loaded, the extension is shown to be unlocked and can be used.

Example: Order of activation key friction value screwdriving, part no. 201820 for AST40 sequence controller

DEPRAG

DEPRAG SCHULZ GMBH u. CO.

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