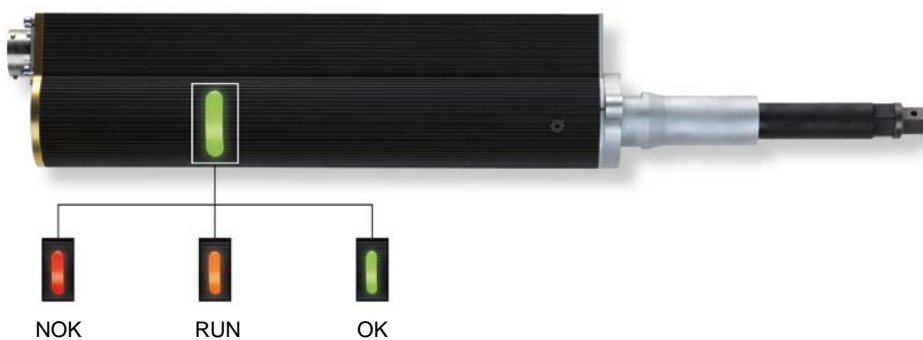


## BUILT-IN NUTRUNNERS DS line

### Overview of the different construction sizes

Type	Models Maximum torque in Nm
> DS 26	0,5   1   2   4
> DS 34	2,5   5   10   15
> DS 44	2,5   5   10   20   35
> DS 57	25   50   70   90   140
> DS 80	220   300   420   500   600
> DS 80-130	900   1000   1500   2000   2400



The illuminated field at the tool shows the tightening status.

## The correct nutrunner for every tightening process

The requirements to a built-in nutrunner are multifaceted. The DS series offers you products which are especially configured for your application.

In the suitable size, with the suitable torque, in the required precision, with the suitable output.

### Components of DS-nutrunners

- Maintenance-free brushless servo motor
- Robust housing out of stainless steel and aluminium
- Various motors and outputs

### Advantages of DS-nutrunners

- Insensitive against electro-magnetic radiation due to digital data transfer
- Absolute measuring system enables positioning (MDW)
- Illuminated field for indication of the tightening status
- Simple programmable at the control unit or via external PC

### MDW or SA – with or without torque transducer

DS-nutrunners of type MDW have a digital torque transducer. With this, the upcoming torque can be collected very precise. The accuracy-deviation is max. 0,5 % of the final value.

By DS-nutrunners of the type SA, the torque and the angle of rotation are collected via the motor. The accuracy-deviation here is max. 5 % of the final value.

Type	Torque measuring	Torque accuracy	Angle resolution
MDW	via digital torque transducer	0,5 %	> Data sheet
SA	via motor current	5 %	> Data sheet

### Suitable control units for nutrunners of the DS series



Control unit	MultiBasic Blue TA	MultiBasic TA	MultiClassic TA	MultiPro TA
suitable for type	SA	SA	MDW	MDW

## Technical data

Nutrunners of the DS series in equal measure are suitable to be used in manual working stations as well as in automatic stations.

Available in the execution MDW, the torque measurement is made directly at the output by a transducer, or in the execution SA, the torque measurement is made indirect by the motor.

The tightening tools consist out of a robust mechanic with servo drive technology and gearbox unit with precision gearwheel bearing.



- Torque control, angle of rotation control and signal control are integrated
- Integrated digital parameter memory module enables error-free setup
- Monitoring with envelope technology and windowing (tightening control system)
- Thanks to the torque transducer with consistent accuracy, only one measuring range is necessary
- Powerful, maintenance-free EC motor with infinitely variable speed control, CW / CCW
- Status indication (RUN, OK, NOK) directly at the nutrunner

DS 26 series	MDW   SA			
Models, max. torque	0,5 Nm	1 Nm	2 Nm	4 Nm
max. speed (execution MDW)	1450 rpm	1450 rpm	1020 rpm	400 rpm
max. speed (execution SA)	1700 rpm	1700 rpm	820 rpm	400 rpm

DS 34 series	MDW   SA			
Models, max. torque	2,5 Nm	5 Nm	10 Nm	15 Nm
max. speed	880 rpm	880 rpm	1540 rpm	1540 rpm
max. speed (with angle output)	610 rpm	610 rpm	1070 rpm	1070 rpm

DS 44 series	MDW   SA				
Models, max. torque	2,5 Nm	5 Nm	10 Nm	20 Nm	35 Nm
max. speed	1300 rpm	1300 rpm	900 rpm	530 rpm	480 rpm
max. speed (with angle output)	---	900 rpm	625 rpm	370 rpm	250 rpm

DS 57 series	MDW   SA				
Models, max. torque	25 Nm	50 Nm	70 Nm	90 Nm	140 Nm
max. speed	1050 rpm	1050 rpm	800 rpm	430 rpm	430 rpm
max. speed (with angle output)	---	1000 rpm	760 rpm	---	420 rpm

DS 80 series	MDW   SA				
Models, max. torque	220 Nm	300 Nm	420 Nm	500 Nm	600 Nm
max. speed	320 rpm	320 rpm	160 rpm	160 rpm	160 rpm
max. speed (with angle output)	200 rpm	---	---	---	---

DS 80-130 series	MDW   SA				
Models, max. torque	900 Nm	1000 Nm	1500 Nm	2000 Nm	2400 Nm
max. speed	100 rpm	75 rpm	75 rpm	37 rpm	37 rpm

## Accessories

- Diverse motor and output variants, crow foos as well as individual technical solutions
- Socket boxes, handling equipment
- Complete workstations