

# Compact, innovative, flexible

Adapter AMS.. and AQS..



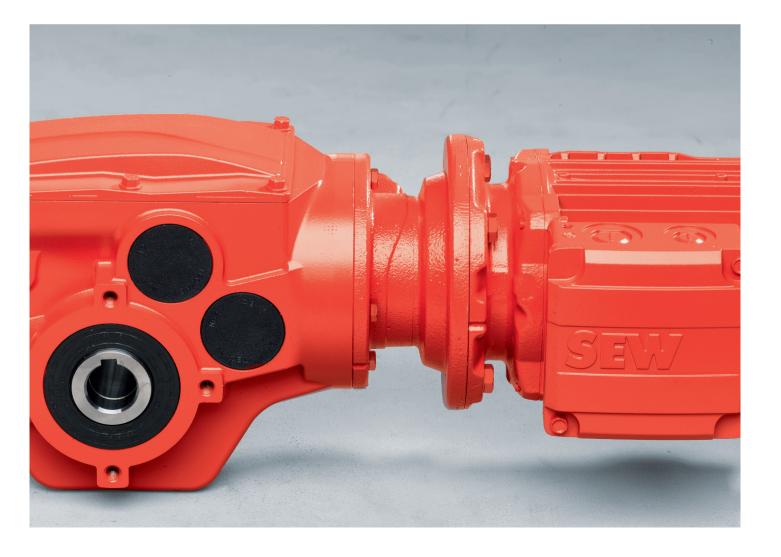


Adapter AMS.. and AQS..

## The new adapter concept

AMS.. and AQS.. adapters from SEW EURODRIVE offer an innovative mounting option for asynchronous motors standardized to IEC or NEMA, and also for market-standard servomotors. The key features of these new adapters are their highly compact design and the fact that motors can be installed and removed quickly and safely. Their striking housing with the stylized "SEW design wave" makes the new motor adapters instantly recognizable. They are compatible with all sizes of SEW's R..., F.., K..., S.. and W..9 gear unit series.

Our adapters make it easier to choose between the various options if motors from other manufacturers that don't have the special SEW interface are to be attached to SEW gear units. Using an adapter to connect an SEW motor to the gear unit also makes sense if your top priority is replacing the motor quickly without opening the gear unit.



**NEW:** The compact design is sure to give you greater flexibility during installation – even when space is limited. It also offers new possibilities for use in a whole host of applications. The "S" in the type designation identifies the new adapters and their defining feature – a shorter length – because "S" stands for "short" and thus also for a lightweight design.

During the development stage, we focused on making installation and removal of the motor both easy and safe, meaning you can now save even more time and money when mounting or replacing the drive motor.

With a few exceptions, the adapters consist of a basic flange and an adapter flange. The basic flanges incorporating the adapter shaft make the connection to SEW gear units that have the specific gear unit interface. The new LIA105 small basic flange can now also be combined with size R..07 and R..17 small helical gear units. The adapter flanges connect to the motor. The newly developed claw coupling with coupling ring for accommodating motor shafts is available with the AQS.. adapter either a keyway or a clamping ring. Axial length compensation offsets changes in the length of the motor shaft caused by heat and prevents distortion.

The new adapter couplings support higher permissible torques in both series, which means greater safety reserves – even in the event of overloading. The high permissible input speeds can also boost machine productivity.

#### **AMS..** series

AMS.. adapters make it possible to mount size 63 to 280 IEC motors and size 56 to 364/365 NEMA motors on SEW gear units. All adapters in this series benefit from full connection compatibility, which makes them easily interchangeable with existing AM.. adapters. **They are up to 37 percent shorter.** 

There are "condensation drain hole /DH", "backstop /RS" and "reinforced bearings" options for virtually every available size. The drain hole option is recommended in mounting position M4 if external influences can cause moisture or fluids to get into the adapter space. These can then be reliably removed via the condensation drain hole. The backstop's defined blocking direction prevents the drive from rotating in an impermissible direction. The reinforced bearings option is always recommended when a significantly longer bearing service life is required.

#### **AQS..** series

All adapters in this series benefit from full connection compatibility and interchangeability with existing AQ.. adapters. **They are up to 53 percent shorter.** A whole range of new adapter variants are also available for mounting further market-standard servomotors.

The AQSA.. variant can be used to connect servomotor shafts that have a key. AQSH.. adapters are equipped with a new kind of clamping ring for smooth motor shafts. Unscrewing the clamping screw until it reaches a stop spreads the clamping ring and makes the joining gap larger. This ingenious "spreading function" simplifies the process of "threading in" the motor shaft, which makes it quick and easy to fit the motor without first having to push the coupling onto the shaft.

Adapter AMS.. and AQS..

## Overview of the benefits for you

### AMS.. adapters for asynchronous motors (IEC and NEMA)

- Very short length
- Fast and safe motor installation
- Simplified motor installation for the AMS.. (NEMA) adapters and the sizes AMS250.. (IEC) and AMS280.. (IEC)
- New combination option with the R..07 and R..17 small helical gear units
- New options available with condensation drain hole and reinforced bearings (increased bearing service life)



#### AQS.. adapters for servomotors

- Very short length
- Reduced weight
- Fast and safe motor installation
- Simplified motor installation for the AQSH.. design (clamping ring with spreading func-tion)
- High permissible long-term and short-term torques (M<sub>a</sub> and M<sub>apk</sub>)
   New combination option with the R..07
- New combination option with the R..07 and R..17 small helical gear units
- New adapter variants for connecting further market-standard servomotors



## **Available adapter sizes** AQS.. for mounting

## of servo motors

AQSA/AQSH (Servo)	Centering mm	Hole circle mm	Square flange mm	Motor shaft mm
AQS.50/1*	30	46	40	81), 9
AQS.50/2*	40	63	55	
AQS.80/1 AQS.80/2	60	75	73	
AQS.80/3	50	95	82	11, 14
AQS.80/4*	50	70	60	
AQS.80/5*	60	90	75	
AQS.100/1 AQS.100/3	80	100	94	14, 16, 19
AQS.100/2 AQS.100/4	95	115	105	
AQS.100/5*	70	90	94	
AQS.115/1	95	130	115	19, 221, 24
AQS.115/2 AQS.115/3	110	130	115	
AQS.115/4*	110	145	130	
AQS.115/5*	95	115	115	
AQS.140/1	110	165	140	
AQS.140/2 AQS.140/3 AQS.140/4	130	165	140	24, 28, 32
AQS.140/5*	180	215	190	
AQS.140/6*	130	165	140	
AQS.160/1	155	190	163	
AQS.190/1	130	215	190	28, 32, 351, 38
AQS.190/2 AQS.190/3	180	215	190	
AQS.190/4*	114,3	200	180	
AQS.190/5*	230	265	240	

<sup>1)</sup> Hollow shaft mounting system only (AQSH..)

<sup>\*</sup> New adapter size

Adapter AMS.. and AQS..

## Available adapter sizes AMS.. for mounting of IEC asynchronous motors

AMS series (IEC)	Backstop option /RS	Condensation drain hole option /DH	Reinforced bearings option
AMS63	-	•	•
AMS71	-	•	•
AMS80	•	•	•
AMS90	•	•	•
AMS100	•	•	•
AMS112	•	•	•
AMS132S/M	•	•	•
AMS132ML	•	•	•
AMS160	•	•	•
AMS180	•	•	•
AMS200	•	•	•
AMS225	•	•	•
AMS250	•	•	• 1)
AMS280	•	•	<b>●</b> 1)

<sup>1)</sup> Reinforced bearings installed as standard and not available as an option in some cases, depending on the type of gear unit and the gear ratio.



## Available adapter sizes AMS for mounting of NEMA asynchronous motors

AMS series (NEMA)	Backstop option /RS	Condensation drain hole option /DH	Reinforced bearings option
AMS56	-	•	-
AMS143	•	•	•
AMS145	•	•	•
AMS182	•	•	•
AMS184	•	•	•
AMS213/215	•	•	•
AMS254/256	•	•	•
AMS284/286	•	•	•
AMS324/326	•	•	•
AMS364/365	•	•	•



# DRIVING THE WORLD



SEW-EURODRIVE, Inc.

1295 Old Spartanburg Hwy. Lyman, SC 29365 P: (864) 439-7537 cslyman@seweurodrive.com

www.seweurodrive.com