Kübler



INTEGRATED SERVOMOTORS
ACTILINK-S

synapticon by Kübler

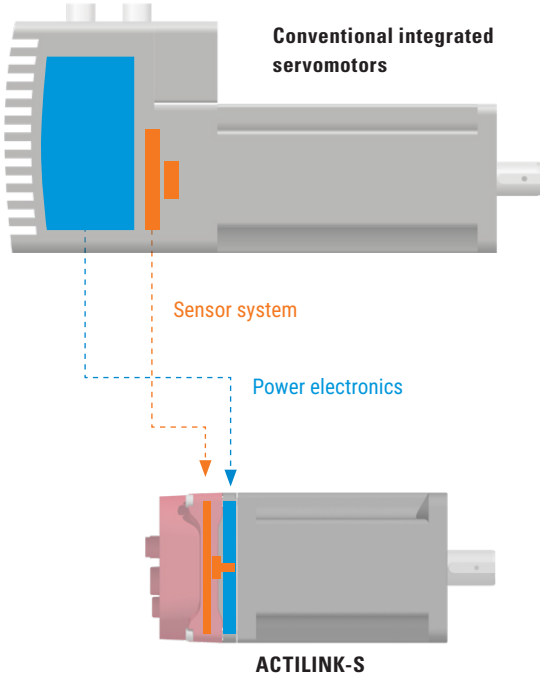
pulses for automation

Compact all-in-one servo drives with maximum power density

Space, time and costs are decisive factors in modern automation. With the new ACTILINK-S product line, Kübler, in partnership with Synapticon, is presenting a highly integrated all-in-one solution that sets new standards both technologically and economically.

The critical factor in any motor control system is thermal overload, which can be caused by the drive current itself on the one hand and by frequent switching operations of the control system on the other. Conventional integrated servo drives therefore require a lot of space for cooling the electronic components, which results in a relatively large design.

The outstanding feature of the ACTILINK-S servo drives is the lower heat generation of the control system and the selection of electronic components with a higher thermal load capacity than in conventional systems. As a result, the control system can be made smaller and at the same time less heat needs to be dissipated. This ultimately leads to an extremely compact design of the overall system. The drive is complemented by a high-performance encoder sensor system from Kübler.



80% less space

- No need for motor control in the control cabinet
- Extremely compact drive unit In the application

50% less costs

- Material savings thanks to more compact system structures
- Time and cost savings during installation
- Lower energy requirements

70% less material

- Reduced cabling lengths
- More compact control cabinets
- More compact systems and machines

100% performance

- High-resolution, real-time capable sensor
- Optimum coordination between drive and control system

ACTILINK-S product variants



ACTILINK-SC 6-1

Rated power	200 W
Peak power	520 W
Rated torque	0,65 Nm
Peak torque	2,5 Nm
Rated current	5 A DC
Rated voltage	48 V DC

ACTILINK-SC 6-2

Rated power	400 W
Peak power	1040 W
Rated torque	1,3 Nm
Peak torque	5 Nm
Rated current	10 A DC
Rated voltage	48 V DC

ACTILINK-SC 6-3

Rated power	600 W
Peak power	1670 W
Rated torque	1,9 Nm
Peak torque	8,0 Nm
Rated current	15 A DC
Rated voltage	48 V DC



ACTILINK-SC 8-1

Rated power	750 W
Peak power	2480 W
Rated torque	2,4 Nm
Peak torque	9,5 Nm
Rated current	18 A DC
Rated voltage	48 V DC

ACTILINK-SC 8-2

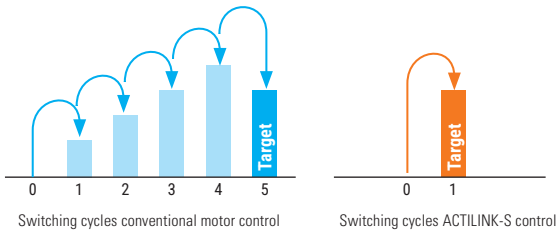
Rated power	1000 W
Peak power	3400 W
Rated torque	3,2 Nm
Peak torque	13,0 Nm
Rated current	24 A DC
Rated voltage	48 V DC

Innovative thermal concept for motor control

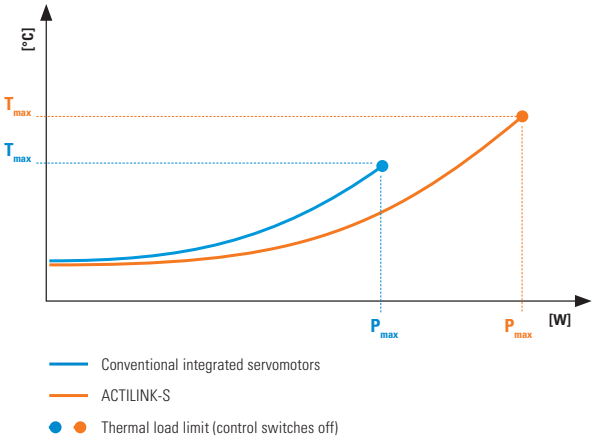
The basis of the thermal concept is the optimum adjustment of the control to the motor used.

ACTILINK-S – reach the destination quickly
Conventional controls require several switching cycles to "feel their way" to the desired result. The ACTILINK-S control system "knows" how the motor will behave when the control is changed and can therefore achieve the desired result with just one action.

Fewer switching cycles = Less heat generation



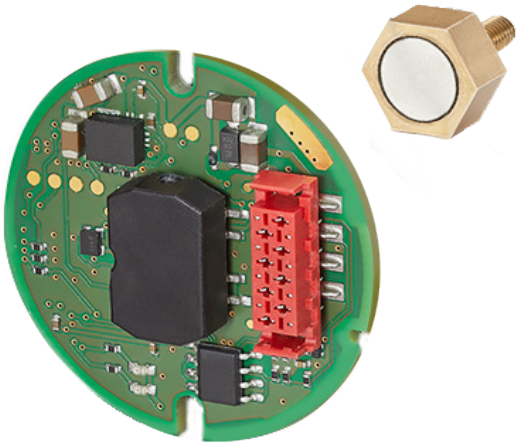
- Less heat generation with the same output
  More output with the same heat generation
- Higher temperature resistance of the electronic components used
- **Reduced installation space / higher power density**



High sensor performance

The integrated, electronic multiturn sensor system without mechanical gearing from Kübler measures the absolute position, speed and direction of rotation of the motor shaft in real time. Compared to conventional resolvers, the encoder offers a higher resolution and accuracy, which enables precise and fast positioning.

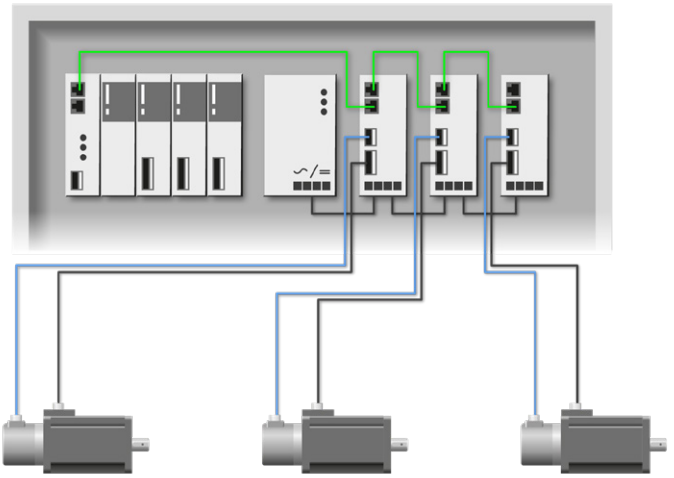
- High-resolution multiturn
- Real-time capable
- Precise positioning and short cycle times



Conventional drive concepts: Compromises with different properties

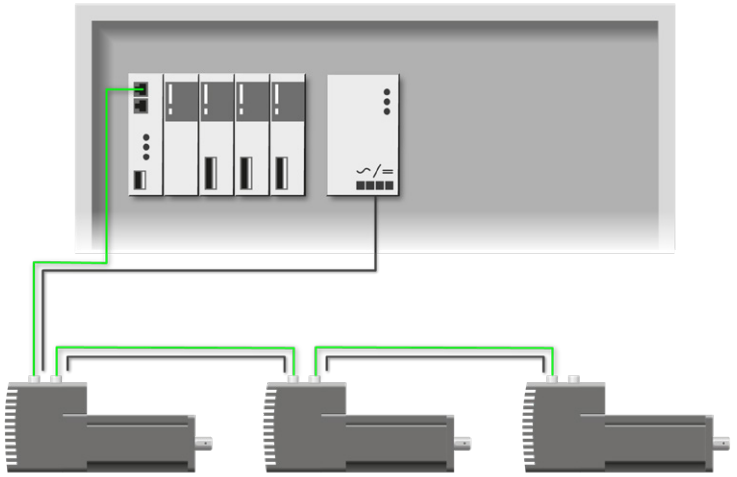
Servomotor with attached encoder and control in the control cabinet

- ⊖ High space requirement in the control cabinet
- ⊖ High cabling effort
- ⊕ Compact size in the field
- ⊕ High sensor performance



Servomotor with integrated control and sensors

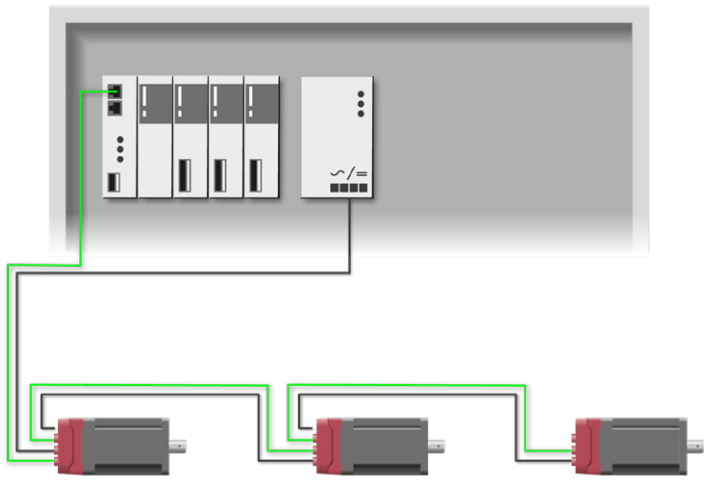
- ⊕ Low space requirement in the control cabinet
- ⊕ Low cabling effort
- ⊖ Large size in the field
- ⊖ Low sensor performance



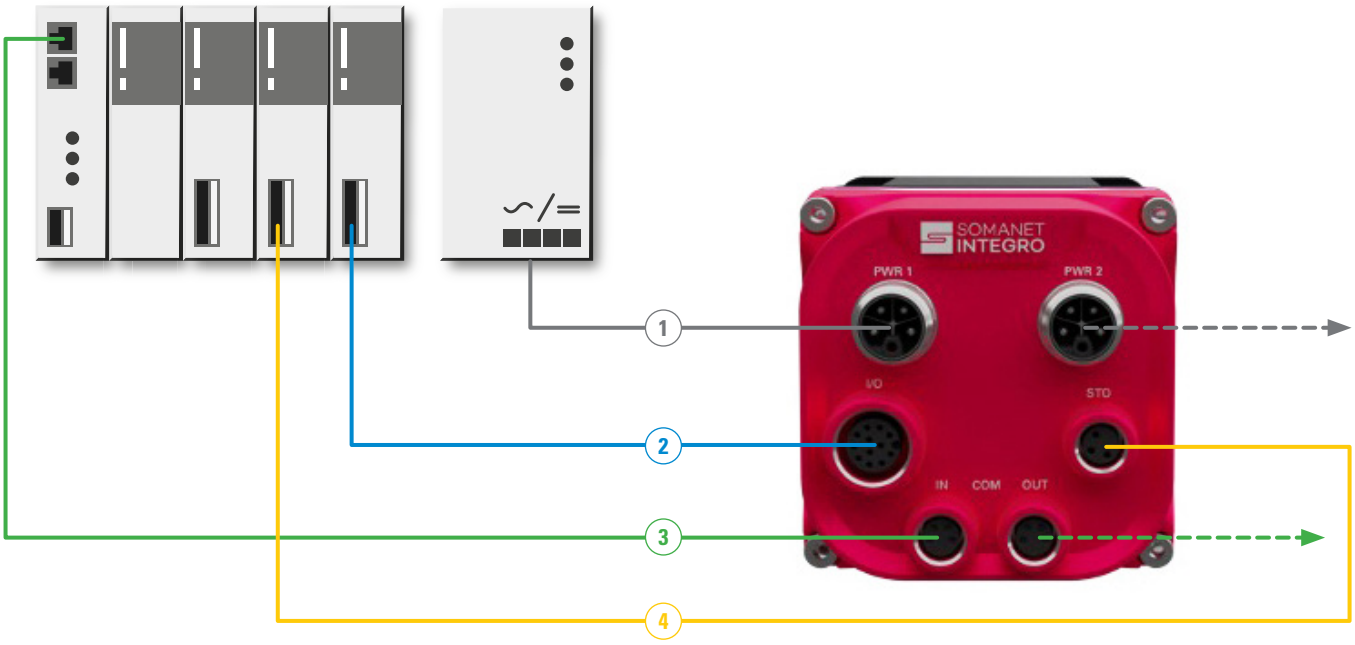
ACTILINK-S: All the advantages without compromises

Servomotor with integrated control and sensors

- ⊕ Low space requirement in the control cabinet
- ⊕ Low cabling effort
- ⊕ Compact size in the field
- ⊕ High sensor performance



Connections / Functions



1 Power supply
2 phases + PE

2 General purpose input/output (GPIO)
2 x DI/DO, 1 x DI (fast), 1 x 24 V,
1 x analog input or external SSI/BiSS encoder

3 Data communication
EtherCAT
EtherNet/IP
PROFINET

4 Safety functions
STO / SBC

ACTILINK-S connection variants


ISO connector


Hybrid I-connector


Hybrid I-connector + M12 GPIO


Hybrid Y-connector


Hybrid Y-connector + M12 GPIO

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