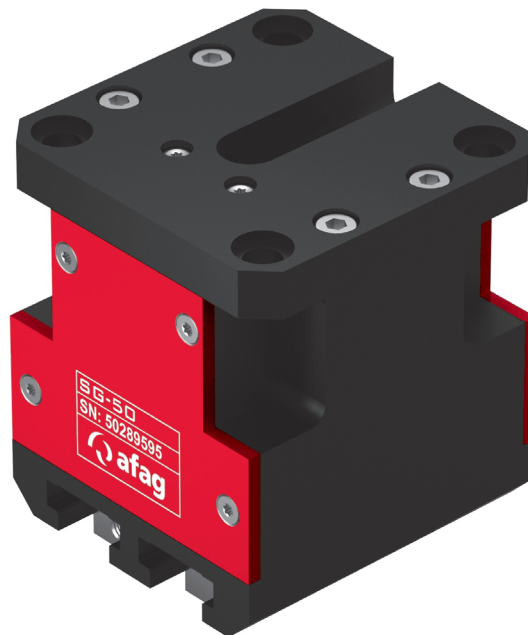


# Servo gripper SG

SG-50



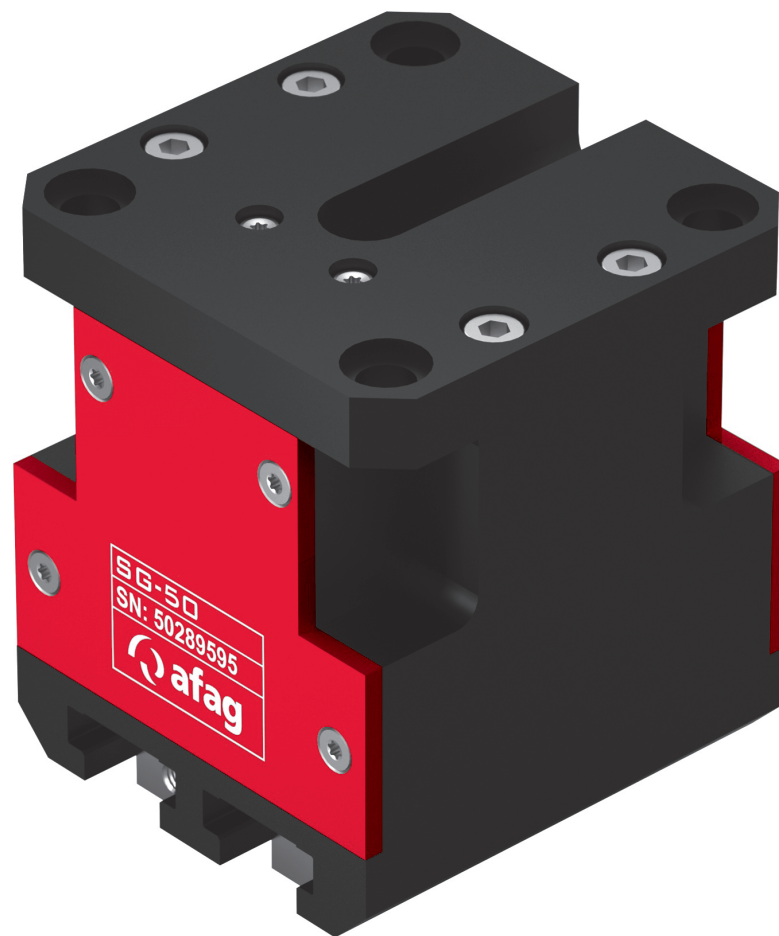
## Table of contents: SG

| Servo gripper SG | Page |
|------------------|------|
| SG-50-ABq        | 263  |



# Servo gripper SG

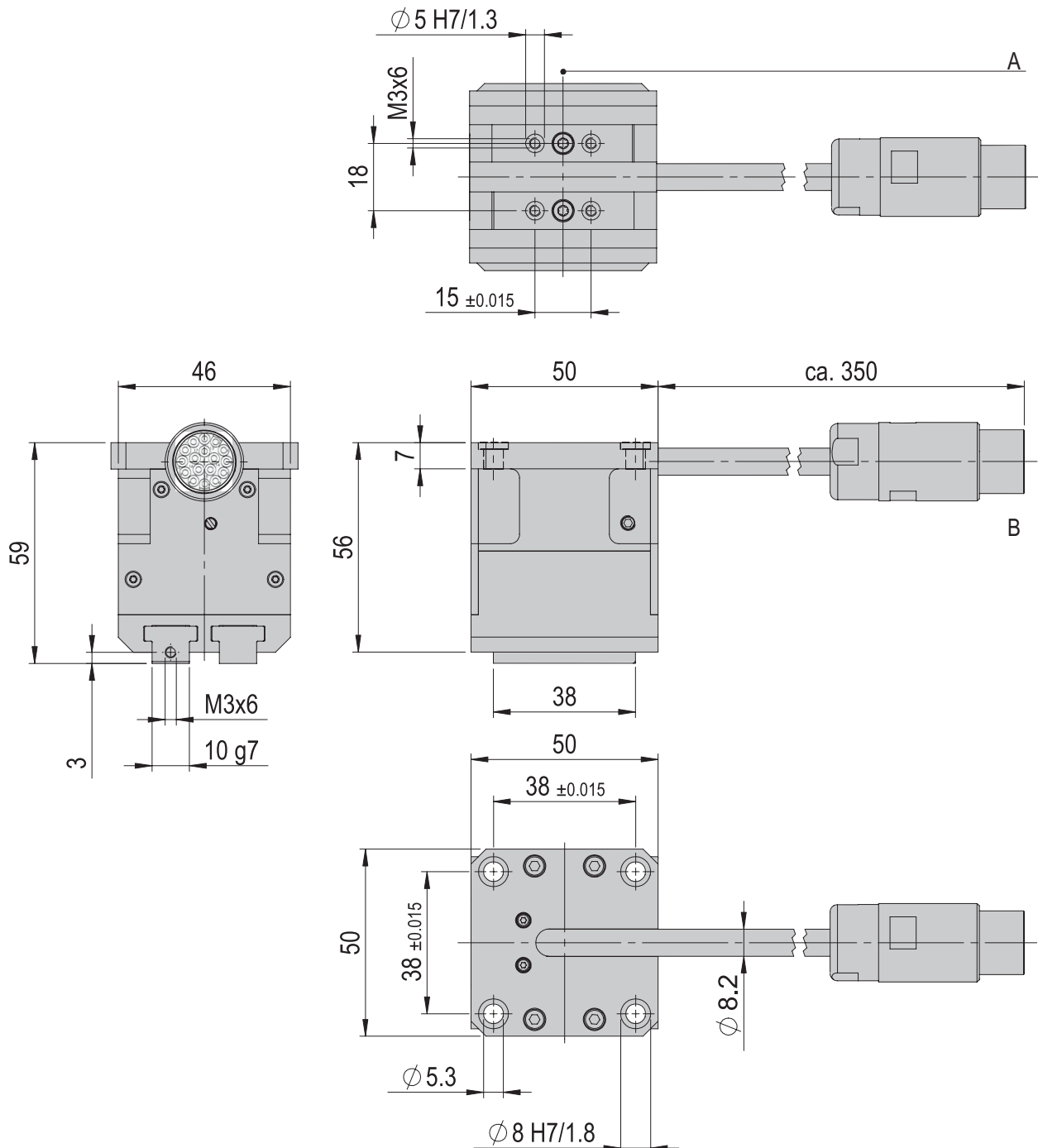
## SG-50

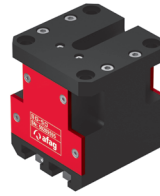


12

- Integrated measuring system
- Programmable jaw stroke
- Replaces separate testing station

| Type | SG-50-ABq                          |
|------|------------------------------------|
| A    | Jaws in middle position (+/- 5 mm) |
| B    | 17-pole industrial plug M17        |





| SG-50                         |             |
|-------------------------------|-------------|
| Attachment grid               | 38 x 38 mm  |
| Attachment grid alternative   | Jaws: 15 mm |
| Attachment thread             | M5          |
| Attachment thread alternative | Jaws: M3    |
| Operating temperature         | 0- 40 °C    |
| Storage temperature           | -20 - 50 °C |
| Humidity                      | 20 - 80 %   |

| Type                         | SG-50-ABq                               |
|------------------------------|-----------------------------------------|
| <b>Order number</b>          | <b>50460223</b>                         |
| Net weight                   | 0.42 kg                                 |
| Max. payload                 | 0.5 kg                                  |
| Gripping time                | 2x2 mm: <100 ms                         |
| Gripping force               | max. 50 N                               |
| Opening stroke               | 2 x 10 mm                               |
| Noise level                  | < 65 dB (A)                             |
| Dimensions W x H x D         | 50 x 50 x 59 mm                         |
| Nominal current              | 2.4 A                                   |
| Peak current                 | 3.6 A                                   |
| Protection type              | IP 40                                   |
| Intermediate circuit voltage | 24 VDC                                  |
| Reverse play                 | < 0.2 mm                                |
| Incremental encoder type     | Digital with A/A- ; B/B- and Z/Z- track |
| Incremental encoder voltage  | 5 VDC                                   |
| Number of increments         | 4096                                    |
| Reference switch type        | NC (normally closed)                    |
| Reference switch voltage     | 24 VDC                                  |
| Control                      | C11xx                                   |
| Repeat accuracy              | +/- 0.05 mm                             |
| Handling accuracy            | < 0.1 mm                                |
| Absolute accuracy            | 0.1 mm                                  |
| Mounting position            | ✚                                       |

The technical data pertains to Afag standard test conditions.  
 Note: The electrical data for the operation with alternative servo controllers is available upon request  
 Cleanroom class ISO 14644-1, class ISO 7

\*The gripping force depends on the selected finger length, the power and the current speed. Observe the gripping force diagrams.

### Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø8x3.5
- 8x Mounting screw M5x16

### Accessories

(Catalogue HT accessories)

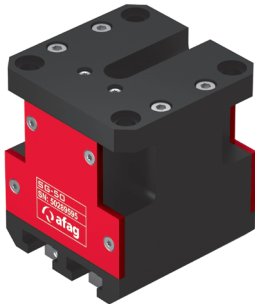
- Motor cable-M19
- Servocontroller C1xx

### Alternative accessories

(Catalogue HT accessories)

- Additional motor cables
- Additional controllers

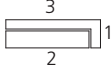
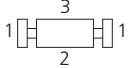
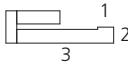
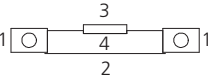
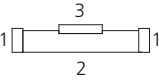
|         |     |            |    |
|---------|-----|------------|----|
| ES20    | 1   | VP 150     | 2  |
| ES30    | 1   | VP 150     | 2  |
| SA-1    | 1,2 | VP 150     | 2  |
| SA-3    | 1,2 | VP 150     | 2  |
| SA-6    | 1,2 | VP 150     | 2  |
| PEZ-65  | 3   | VP 150     | 2  |
| RE-50   | 3   | < direct > | 2  |
| RE-75   | 3   | VP 150     | 2* |
| SREH-50 | 3   | VP 157     | 2  |
| CS 16   | 1,3 | VP 150     | 2  |
| CS 20   | 1,3 | VP 150     | 2  |
| LM 20   | 1,3 | VP 150     | 2  |
| LM 25   | 1,3 | VP 150     | 2  |
| HM 10   | 1   | VP 150     | 2  |
| HM 16   | 1   | VP 150     | 2  |
| CR 16   | 3   | VP 150     | 2  |
| CR 20   | 3   | VP 150     | 2  |
| PMP-c   | 1,3 | VP 150     | 2  |



\* Offset mounting

↑                      ↑

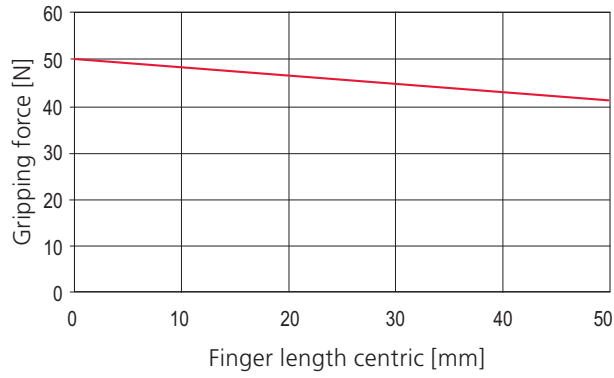
**Mounting areas**

| CS, ES                                                                              | LM                                                                                  | HM                                                                                  | SA                                                                                   | UG, GM, SG, DG, PG, GE, SGE                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| PMP, PMP-c                                                                          | PEZ, PDZ                                                                            | PEL, PDL                                                                            | RM, RE                                                                               | CR, RM 32, RE, SREH, RA                                                               |
|  |  |  |   |  |

Note that there might be different mounting positions from one module to another one.  
 The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

## Gripping force diagrams per jaw

Gripping force depends on finger length



Gripping force depends on power

