

# CARE 33



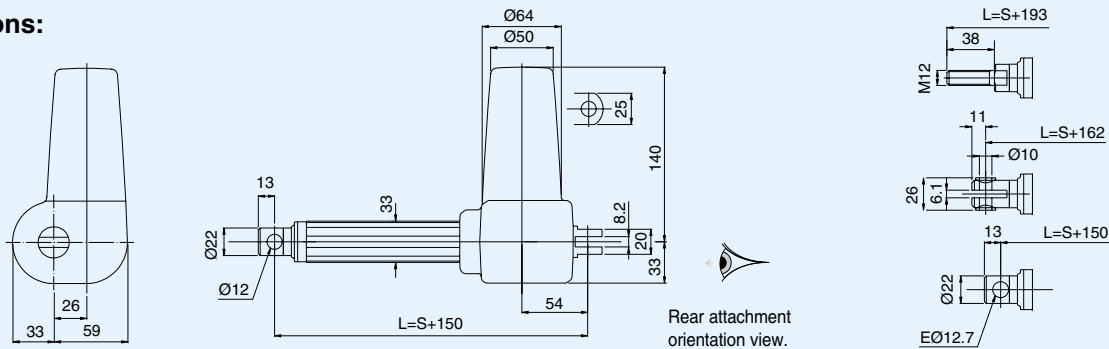
# CARE 33 Actuator Systems

The CARE 33 actuator system has primarily been designed and developed for Health Care & Ergonomic applications. Efficient design allows the CARE 33 actuators a high dynamic load capacity, silent operation and low current consumption. The safety features of the design make it particularly suitable for solving a large number of positioning needs in equipment for the elderly and disabled, as well as for many ergonomic and/or industrial applications. The gearbox is allowed to float so that the load path passes directly through a support bearing located in the rear attachment. This design offers a long operational life and minimizes the transmitted noise level. Design options are available to optimize safety in applications. The CARE 33 actuator system offers a wide range of extra

features such as power saving, overload protection, transformer cut-off, infrared remote control and CAXC limit switches. Since the motor is capable of generating greater torque than required to produce the rated thrust, our selected control units are configured to ensure proper function.



## Dimensions:



| Technical data:         | CARE 33A   | CARE 33M   | CARE 33H   |
|-------------------------|--|--|--|
| Max. dynamic load:      | 2000N  | 1400N  | 800N   |
| Max. static load:       | 6000N  | 3000N  | 3000N  |
| Stroke length:          | 50-300mm   | 50-500mm   | 50-500mm   |
| Speed:                  | 8-12mm/sec.  | 16-22mm/sec.                                       | 32-45mm/sec.                                       |
| Mains supply voltage:   | 12Vd.c. or 24Vd.c.                                 | 12Vd.c. or 24Vd.c.                                 | 12Vd.c. or 24Vd.c.                                 |
| Max. power consumption: | 12Vd.c./8A, 24Vd.c./3,5A                           | 12Vd.c./8A, 24Vd.c./3,5A                           | 12Vd.c./8A, 24Vd.c./3,5A                           |
| Duty factor:            | 20% at 2000N                                       | 20% at 1400N                                       | 20% at 800N  |
| Cable:                  | Coiled or straight, 2.0m                           | Coiled or straight, 2.0m                           | Coiled or straight, 2.0m                           |
| Connection plug:        | DIN 8-pole (VIF/xxx)<br>Phono plug (CAFxxx)        | DIN 8-pole (VIF/xxx)<br>Phono (CAFxxx)             | DIN 8-pole (VIF/xxx)<br>Phono (CAFxxx)             |
| No connector:           | 6 lead cable for encoder<br>2 lead cable (CAEDxxx) | 6 lead cable for encoder<br>2 lead cable (CAEDxxx) | 6 lead cable for encoder<br>2 lead cable (CAEDxxx) |
| Encoder:                | Hall-effect element                                | Hall-effect element                                | Hall-effect element                                |
| Protection class:       | IP44 or IP65                                       | IP44 or IP65                                       | IP44 or IP65                                       |
| Housing material:       | Polyamide PA-6                                     | Polyamide PA-6                                     | Polyamide PA-6                                     |
| Manufactured acc. to:   | EN 55 014, EN 55 011                               | EN 55 014, EN 55 011                               | EN 55 014, EN 55 011                               |

## Accessories:

Suitable controls:

CAFC 03  
CAED 3-24R  
VIF/MCT  
VIF/SCT

Limit switches:  
CAXC 33

### CAF



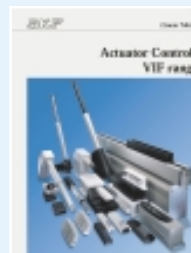
4921E

### CAED



4838E

### VIF



4881E

### CAXC



4963E

# Ordering key CARE 33

| C  | A | R | E | 3 | 3 |   |     |   |   |   |   |   |  |  |     |    |   |
|--|---|---|---|---|---|---|-----|---|---|---|---|---|--|--|-----|----|---|
| <b>Screw</b>   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| low lead   |   |   |   |   |   | A |     |   |   |   |   |   |  |  |     |    |   |
| medium lead  |   |   |   |   |   | M |     |   |   |   |   |   |  |  |     |    |   |
| high lead  |   |   |   |   |   | H |     |   |   |   |   |   |  |  |     |    |   |
| <b>Stroke length (CARE33A max 300mm)</b>                                     |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| 50mm   |   |   |   |   |   |   | 050 |   |   |   |   |   |  |  |     |    |   |
| 100mm  |   |   |   |   |   |   | 100 |   |   |   |   |   |  |  |     |    |   |
| 150mm  |   |   |   |   |   |   | 150 |   |   |   |   |   |  |  |     |    |   |
| 200mm  |   |   |   |   |   |   | 200 |   |   |   |   |   |  |  |     |    |   |
| 300mm  |   |   |   |   |   |   | 300 |   |   |   |   |   |  |  |     |    |   |
| 400mm  |   |   |   |   |   |   | 400 |   |   |   |   |   |  |  |     |    |   |
| 500mm  |   |   |   |   |   |   | 500 |   |   |   |   |   |  |  |     |    |   |
| xxxmm  |   |   |   |   |   |   | xxx |   |   |   |   |   |  |  |     |    |   |
| <b>Front attachment</b>  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| hole 12mm  |   |   |   |   |   |   |     | 1 |   |   |   |   |  |  |     |    |   |
| hole 12.7mm  |   |   |   |   |   |   |     | 2 |   |   |   |   |  |  |     |    |   |
| hole 10mm, slot 6.1mm (retracted length, L=S+162mm)                          |   |   |   |   |   |   |     | 3 |   |   |   |   |  |  |     |    |   |
| male thread M12x38 (retracted length, L=S+193mm)                             |   |   |   |   |   |   |     | 4 |   |   |   |   |  |  |     |    |   |
| <b>Rear attachment</b>   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| hole 12mm  |   |   |   |   |   |   |     |   | 1 |   |   |   |  |  |     |    |   |
| hole 12.7mm  |   |   |   |   |   |   |     |   | 2 |   |   |   |  |  |     |    |   |
| hole 8mm   |   |   |   |   |   |   |     |   | 3 |   |   |   |  |  |     |    |   |
| hole 10mm  |   |   |   |   |   |   |     |   | 4 |   |   |   |  |  |     |    |   |
| <b>Protection class</b>  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| IP65   |   |   |   |   |   |   |     |   |   | 1 |   |   |  |  |     |    |   |
| IP44   |   |   |   |   |   |   |     |   |   | 2 |   |   |  |  |     |    |   |
| <b>Feed back</b>   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| no option  |   |   |   |   |   |   |     |   |   |   | 0 |   |  |  |     |    |   |
| encoder  |   |   |   |   |   |   |     |   |   |   | 1 |   |  |  |     |    |   |
| <b>Cable / connection plug</b>   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| straight, no connector   |   |   |   |   |   |   |     |   |   |   |   | 1 |  |  |     |    |   |
| coiled, phono plug   |   |   |   |   |   |   |     |   |   |   |   | 2 |  |  |     |    |   |
| straight, no connector (6 lead cable for 2-channel encoder)                  |   |   |   |   |   |   |     |   |   |   |   | 3 |  |  |     |    |   |
| straight, phono plug   |   |   |   |   |   |   |     |   |   |   |   | 5 |  |  |     |    |   |
| straight, DIN 8-pole plug (for 1-channel encoder)                            |   |   |   |   |   |   |     |   |   |   |   | 6 |  |  |     |    |   |
| straight, DIN 8-pole plug  |   |   |   |   |   |   |     |   |   |   |   | 7 |  |  |     |    |   |
| <b>Orientation of rear attachment</b>  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| 0° (this orientation is shown on page 2)                                     |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 000 |    |   |
| 15° clockwise  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 015 |    |   |
| 30° "  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 030 |    |   |
| 45° "  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 045 |    |   |
| 60° "  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 060 |    |   |
| 75° "  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 075 |    |   |
| 90° "  |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 090 |    |   |
| 105° "   |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 105 |    |   |
| 125° "   |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 120 |    |   |
| 135° "   |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 135 |    |   |
| 150° "   |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 150 |    |   |
| 165° "   |   |   |   |   |   |   |     |   |   |   |   |   |  |  | 165 |    |   |
| <b>Motor voltage</b>   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| 24Vd.c.  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     | 24 |   |
| 12Vd.c.  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     | 12 |   |
| <b>Self locking feature (necessary when selecting screw type "H" or "M")</b> |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    |   |
| no self locking required   |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    | 0 |
| self locking for pulling load  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    | 1 |
| self locking for pushing load  |   |   |   |   |   |   |     |   |   |   |   |   |  |  |     |    | 2 |

The specifications and data in this publication are believed to be accurate and reliable. However, it is the responsibility of the product user to determine the suitability of all products selected for a specific application. Consult SKF for application support. The right is reserved to make changes without prior notice.



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### Austria

#### Linear Motion

SKF Österreich AG

Phone: +43 22 36 6709-0

Fax: +43 22 36 6709-270

### Benelux

#### SKF Multitec Benelux B.V.

Phone: +31 30 6029029

Fax: +31 30 6029028

Phone sales: +31 30 6029039

Phone distributors: +31 30 6029049

From Belgium/Luxembourg:

Phone: +32 2 5024270

Fax: +32 2 5027336

### France

#### SKF Equipements

Phone: +33 1 30 64 28 28

Fax: +33 1 30 64 41 31

[www.linearmotion.skf.com](http://www.linearmotion.skf.com)

### Germany

#### SKF Linearsysteme GmbH

Phone: +49 9721 657-0

Fax: +49 9721 657-111

### Italy

#### SKF Multitec S.p.A

Phone: +39 011 57 17 61

Fax: +39 011 571 76 33

### Spain

#### SKF Productos Industriales S.A

Phone: +34 93 3 77 99 77

+34 93 3 77 99 07

Fax: +34 93 4 74 20 39

### Switzerland

#### Linear Motion & Precision Technologies

Phone: +41 1 825 81 81

Fax: +41 1 825 82 82

### Nordic Area

#### SKF Multitec Sweden

Phone: +46 42 25 35 00

Fax: +46 42 25 35 45/46

Norway, Sales Office

Phone: +47 22 30 71 70

Fax: +47 22 30 28 14

Denmark Sales Office

Phone: +45 65 92 77 77

Fax: +45 65 92 74 77

Finland Sales Office

Phone: +358 94 52 97 54

Fax: +358 94 22 77 65

### United Kingdom

#### SKF Engineering Products Ltd.

Phone: +44 1582 490049

Fax: +44 1582 496574

### USA

#### SKF Motion Technologies

Phone: +1 610 861-4800

Fax: +1 610 861-4811

