

# Фланцы для устройств защиты от падения СИТЕМА (для серий К, KR, KRP, KR/T, KRP/T) Технические характеристики

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06

Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Россия (495)268-04-70

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Казахстан (772)734-952-31

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

# Technical Data Sheet TI-A30

## SITEMA flanges for Safety Catchers and spring bases

### Table of Contents

|   |                                                                               |   |
|---|-------------------------------------------------------------------------------|---|
| 1 | General Information .....                                                     | 1 |
| 2 | Mounting flanges for K, KR, and KRP series - compressive load direction ..... | 1 |
| 3 | Flanges for KR/T and KRP/T series - tensile load direction .....              | 5 |

### 1 General Information

The SITEMA Safety Catchers of the K, KR and KRP series in the standard design are supplied with a set of threaded boreholes to bolt the unit directly to the machine frame.

However, often a mounting flange is required because bolting from below is impossible or a floating attachment is necessary (see also "Technical Information TI-A10", Chapter "Attachment").

This Technical data sheet describes the different standard mounting flanges for typical applications, e.g. *Flanges for spring bases - FL/SF types* and *Flanges for KR/T and KRP/T series - tensile load direction*.

All flanges for SITEMA Safety Catchers with compressive load direction (KR and KRP series) are slit mounting flanges (see Fig. 1). They allow you to install the Safety Catcher without removing the pre-adjusted proximity switch holders.

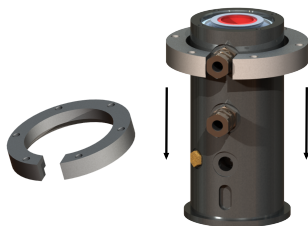


Fig. 1: Slit mounting flange for Safety Catchers with compressive load direction (KR and KRP series)

For all SITEMA Safety Catchers with tensile load direction (KR/T and KRP/T series), use mounting flanges without slot.

### 2 Mounting flanges for K, KR, and KRP series - compressive load direction

#### 2.1 Standing fixed flanges - FL/SF types

For mounting Safety Catchers KR and KRP on the machine frame or upside down travelling with the load

As an alternative to bolting from below, the FL/SF mounting flange can be used to fix the Safety Catcher to the machine frame.

In this case, the clamping rod must have sufficient play at its attachment, so that any lateral or tilting movements of the load will not create lateral forces to the rod.

For design reasons, this flange is only available for KR and KRP series Safety Catchers. Fixed flange attachments for the K series units are available on request.

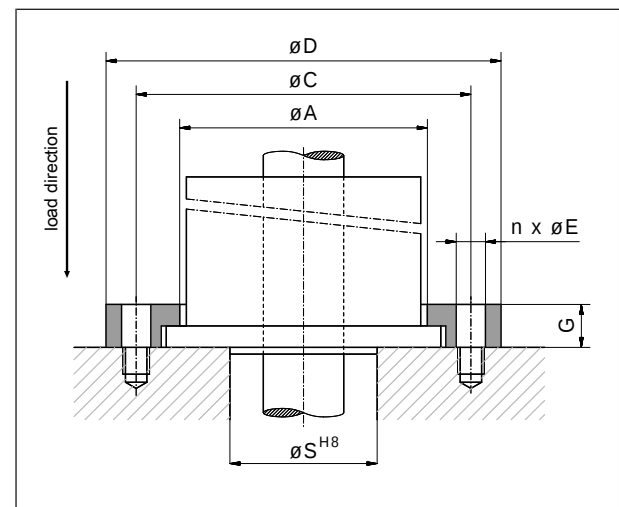


Fig. 2: KR and KRP series

| Flange type      | For Safety Catcher |    |        | D   | C   | A   | G  | E   | n       | S   |
|------------------|--------------------|----|--------|-----|-----|-----|----|-----|---------|-----|
| (order no.)      |                    |    |        | mm  | mm  | mm  | mm | mm  |         | mm  |
| <b>FL/SF 25</b>  | KR 25              | or | KRP 25 | 108 | 97  | 76  | 15 | 6.6 | 6 x 60° | 40  |
| <b>FL/SF 28*</b> | KR 28              | or | KRP 28 | 129 | 113 | 87  | 15 | 9   | 6 x 60° | 45  |
| <b>FL/SF 40</b>  | KR 40              | or | KRP 40 | 160 | 144 | 113 | 19 | 9   | 6 x 60° | 52  |
| <b>FL/SF 56</b>  | KR 56              | or | KRP 56 | 198 | 180 | 147 | 19 | 11  | 6 x 60° | 70  |
| <b>FL/SF 80</b>  | KR 80              | or | KRP 80 | 255 | 235 | 201 | 24 | 11  | 6 x 60° | 100 |

Flanges for KR and KRP series; \* = special sizes

Subject to modification without prior notice

## 2.2 Standing/floating flanges - FL/SL types

### For mounting Safety Catchers K, KR, and KRP on the machine frame

To avoid constraint forces, it is often useful to mount the Safety Catcher with a FL/SL type flange **floating** on the machine frame so that lateral movements of the rod are compensated.

In the case of hydraulic types, pressure must be supplied via a flexible line to allow movements of the housing. This means that the housing moves freely in rotation direction and aligns itself with the pressure line.

In the case of pneumatic types, a pin can be installed as anti-rotation lock. The pin (in scope of delivery) is carefully driven into the Safety Catcher and plunges into a bore in

the machine frame. In *pictures 5 and 6* and the table on *page 3*, you find information about diameter, position, and depth of the bore for the anti-rotation lock.



*Lay all connection lines without kinking. If there is a danger of kinks, take appropriate safety measures (anti-rotation pin, protective tube, thicker hose etc.).*

For design reasons the floating mounting flanges for the KR/KRP and K series are different. There are no functional differences. As the K series has no shoulder, the flanges for K series Safety Catchers consist of two parts. One part is first bolted to the Safety Catcher from below. The other part is then bolted to the machine frame.

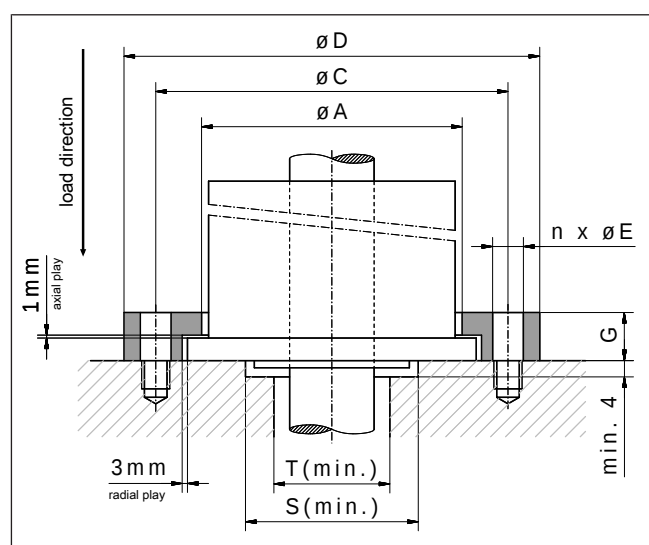


Fig. 3: For KR and KRP series

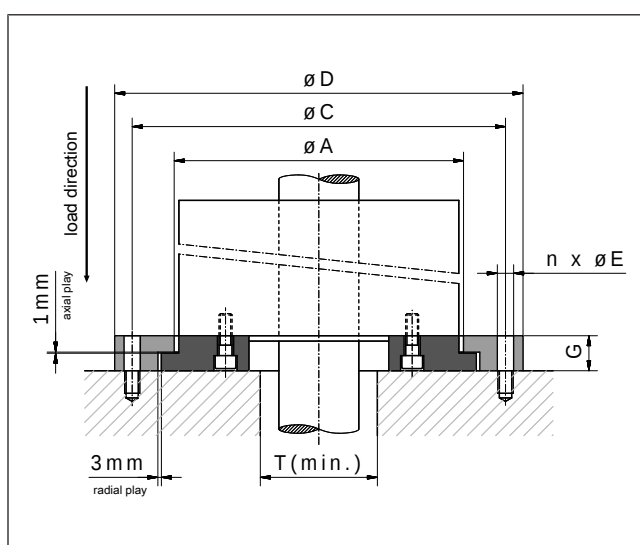


Fig. 4: Flange for K series with 2 parts

| Flange type<br>(order no.) | For Safety Catcher |    |        | D   | C   | A   | G  | E   | n       | T  | S   |
|----------------------------|--------------------|----|--------|-----|-----|-----|----|-----|---------|----|-----|
|                            |                    |    |        | mm  | mm  | mm  | mm | mm  |         | mm | mm  |
| FL/SL 25                   | KR 25              | or | KRP 25 | 108 | 97  | 78  | 16 | 6.6 | 6 x 60° | 32 | 47  |
| FL/SL 28*                  | KR 28              | or | KRP 28 | 129 | 113 | 89  | 18 | 9   | 6 x 60° | 35 | 52  |
| FL/SL 40                   | KR 40              | or | KRP 40 | 160 | 144 | 113 | 20 | 9   | 6 x 60° | 47 | 59  |
| FL/SL 50*                  | KR 50              |    |        | 183 | 165 | 132 | 20 | 11  | 6 x 60° | 57 | 72  |
| FL/SL 56                   | KR 56              | or | KRP 56 | 198 | 180 | 147 | 20 | 11  | 6 x 60° | 63 | 77  |
| FL/SL 80                   | KR 80              | or | KRP 80 | 255 | 235 | 201 | 25 | 11  | 6 x 60° | 87 | 107 |

Flanges for KR and KRP series; \* = special sizes

Subject to modification without prior notice

| Flange type<br>(order no.) | For Safety Catcher |    |         | D   | C   | A   | G  | E  | n       | T   |
|----------------------------|--------------------|----|---------|-----|-----|-----|----|----|---------|-----|
|                            |                    |    |         | mm  | mm  | mm  | mm | mm |         | mm  |
| FL/SL 100                  | K 100              | or | KRP 100 | 350 | 320 | 247 | 30 | 14 | 6 x 60° | 107 |
| FL/SL 125                  | K 125              |    |         | 370 | 330 | 277 | 35 | 18 | 4 x 90° | 132 |
| FL/SL 140                  | K 140              |    |         | 420 | 380 | 327 | 35 | 18 | 4 x 90° | 147 |
| FL/SL 160                  | K 160              |    |         | 450 | 420 | 367 | 38 | 18 | 4 x 90° | 167 |

Flanges for K series (2 parts)

Subject to modification without prior notice

## 2.3 For KRP series: position of anti-rotation lock

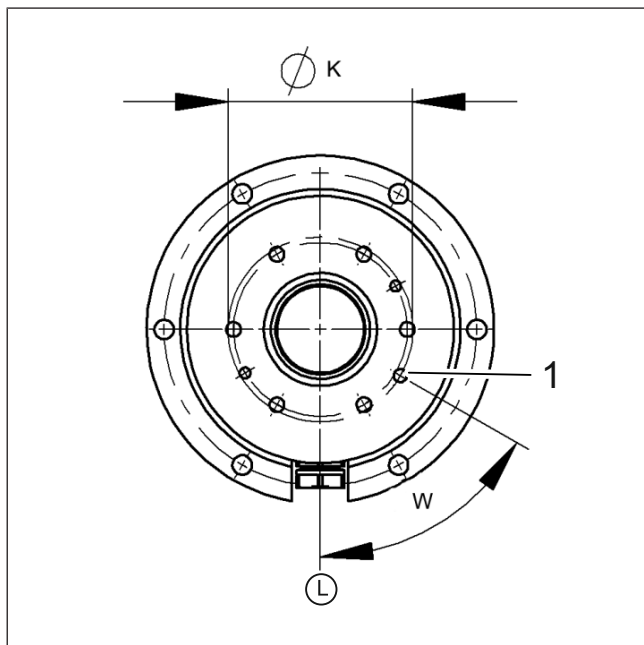


Fig. 5: Position of anti-rotation lock (1) at mounting surface

For the pin, which serves as anti-rotation lock, a bore is required in the machine frame. In figures 5 and 6 and the table below, you find information about position and depth of the bore.

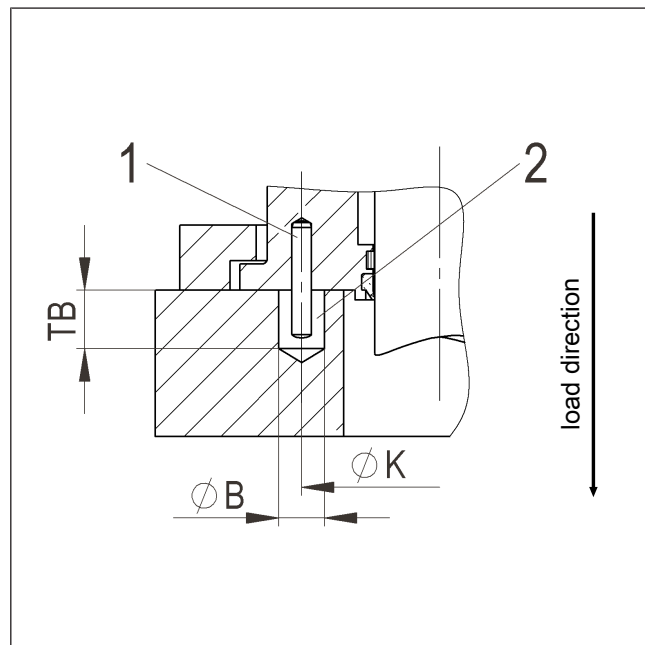


Fig. 6: Bore hole of anti-rotation lock

|   |           |
|---|-----------|
| 1 | Pin       |
| 2 | Bore hole |

| Flange type |    |           | For Safety Catcher | Pin DIN 6325 Tol. m6, Ø x length | Ø K bolt circle | Ø B (min.) bore machine | TB (min.) depth bore mach. | W angle to port L |
|-------------|----|-----------|--------------------|----------------------------------|-----------------|-------------------------|----------------------------|-------------------|
|             |    |           |                    | mm                               | mm              | mm                      | mm                         | Degree            |
| FL/SL 25    | or | FL/HL 25  | KRP 25             | 4 x 24                           | 63              | 12                      | 16                         | 180 °             |
| FL/SL 28*   | or | FL/HL 28* | KRP 28             | 6 x 36                           | 70              | 14                      | 18                         | 180 °             |
| FL/SL 40    | or | FL/HL 40  | KRP 40             | 6 x 36                           | 85              | 14                      | 18                         | 60 °              |
| FL/SL 50*   |    |           | KRP 50             | 8 x 40                           | 110             | 16                      | 18                         | 60 °              |
| FL/SL 56    | or | FL/HL 56  | KRP 56             | 8 x 40                           | 120             | 16                      | 18                         | 60 °              |
| FL/SL 80    | or | FL/HL 80  | KRP 80             | 10 x 50                          | 160             | 18                      | 22                         | 60 °              |

Bore in machine frame for anti-rotation lock; \* = special sizes

Subject to modification without prior notice

## 2.4 Hanging/floating flanges - FL/HL types

### For mounting Safety Catchers KR and KRP travelling under the load

The FL/HL flange is used if the Safety Catcher is mounted to the load from below and travelling with it, while the rod is fixed to the machine frame.

Due to the axial play of 8 mm, this flange also basically fulfills the function of a spring base (see "Technical Information TI-A10", chapter "Attachment").

In the case of hydraulic types, pressure must be supplied via a flexible line to allow movements of the housing. This means that the housing moves freely in rotation direction and aligns itself with the pressure line.

In the case of pneumatic types, a pin can be installed as anti-rotation lock. The pin (in scope of delivery) is carefully driven into the Safety Catcher and plunges into a bore in the machine frame. In figures 5 and 6 and the table on page 3, you find information about diameter, position and depth of the bore for the anti-rotation lock.



Lay all connection lines without **kinking**. If there is a danger of kinks, take appropriate safety measures (anti-rotation pin, protective tube, thicker hose etc.).

For design reasons, this flange is only available for KR and KRP series Safety Catchers.

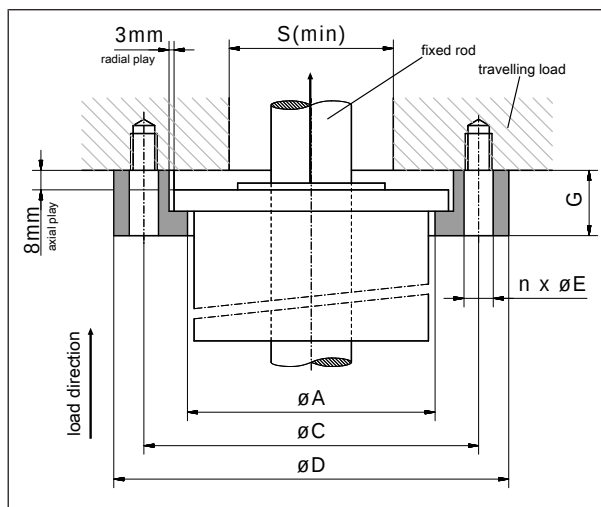


Fig. 7: Flange for KR and KRP series

| Flange type<br>(order no.) | For Safety Catcher |    |        | D   | C   | A   | G  | E   | n       | S   |
|----------------------------|--------------------|----|--------|-----|-----|-----|----|-----|---------|-----|
|                            |                    |    |        | mm  | mm  | mm  | mm | mm  |         | mm  |
| <b>FL/HL 25</b>            | KR 25              | or | KRP 25 | 108 | 97  | 78  | 23 | 6.6 | 6 x 60° | 47  |
| <b>FL/HL 28*</b>           | KR 28              | or | KRP 28 | 129 | 113 | 89  | 25 | 9   | 6 x 60° | 52  |
| <b>FL/HL 40</b>            | KR 40              | or | KRP 40 | 160 | 144 | 114 | 27 | 9   | 6 x 60° | 59  |
| <b>FL/HL 56</b>            | KR 56              | or | KRP 56 | 198 | 180 | 148 | 27 | 11  | 6 x 60° | 77  |
| <b>FL/HL 70</b>            | KR 70              |    |        | 234 | 214 | 180 | 32 | 11  | 6 x 60° | 97  |
| <b>FL/HL 80</b>            | KR 80              | or | KRP 80 | 255 | 235 | 202 | 32 | 11  | 6 x 60° | 107 |

Flanges for KR and KRP series; \* = special size

Subject to modification without prior notice

## 2.5 Flanges for spring bases - FL/FS types

For attachment of spring bases (FS) on a fixed machine frame

The FL/FS flange can be used as an alternative to bolting the FS spring base from below to the machine frame.



Lay all connection lines without **kinking**. If there is a danger of kinks, take appropriate safety measures (protective tube, thicker hose, etc.). Spring bases for Safety Catchers of the KRP series have an integrated anti-rotation lock.

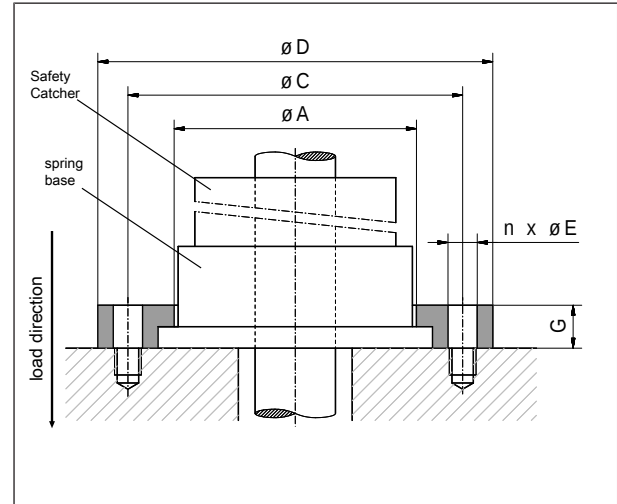


Fig. 8: Flange for KR and KRP series

| Flange type<br>(order no.) | For spring base | D<br>mm | C<br>mm | A<br>mm | G<br>mm | E<br>mm | n       |
|----------------------------|-----------------|---------|---------|---------|---------|---------|---------|
| FL/FS 25                   | FS 25           | 120     | 110     | 93      | 18      | 6.6     | 6 x 60° |
| FL/FS 40                   | FS 40           | 175     | 160     | 141     | 24      | 9       | 6 x 60° |
| FL/FS 56                   | FS 56           | 230     | 210     | 178     | 30      | 11      | 6 x 60° |
| FL/FS 80                   | FS 80           | 284     | 264     | 238     | 30      | 11      | 6 x 60° |
| FL/FS 100                  | FS 100          | 304     | 280     | 248     | 40      | 14      | 6 x 60° |
| FL/FS 125                  | FS 125          | 376     | 350     | 315     | 40      | 18      | 4 x 90° |
| FL/FS 140                  | FS 140          | 406     | 380     | 345     | 40      | 18      | 4 x 90° |

Flanges for KR and KRP series

Subject to modification without prior notice

## 3 Flanges for KR/T and KRP/T series - tensile load direction

### 3.1 Fixed flanges - FL/TF types

If the clamping rod is attached with sufficient clearance to the load that misalignments are compensated and transverse forces are avoided, the Safety Catcher can be centered and bolted on the machine frame with a FL/TF type flange.

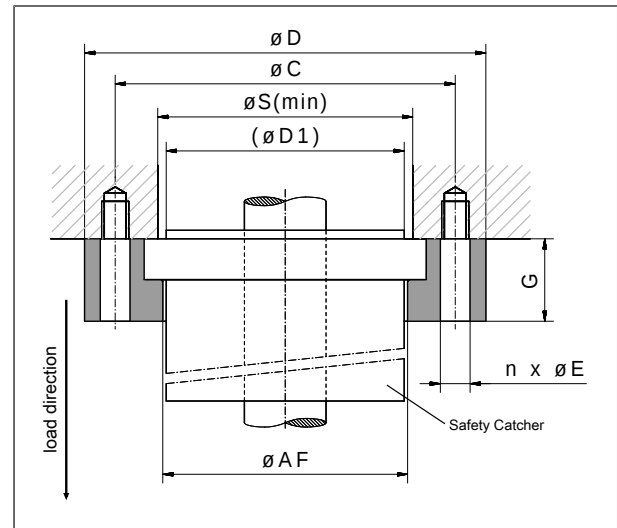


Fig. 9: Flange for KR/T and KRP/T series

| Flange type<br>(order no.) | For Safety Catcher |    |          | AF<br>mm | C<br>mm | D<br>mm | G<br>mm | E<br>mm | n        | S<br>mm |
|----------------------------|--------------------|----|----------|----------|---------|---------|---------|---------|----------|---------|
| FL/TF 25                   | KR/T 25            | or | KRP/T 25 | 74       | 112     | 129     | 30      | 11      | 6 x 60°  | 73      |
| FL/TF 40                   | KR/T 40            | or | KRP/T 40 | 109      | 153     | 175     | 40      | 14      | 8 x 45°  | 109     |
| FL/TF 56                   | KR/T 56            | or | KRP/T 56 | 143      | 200     | 236     | 50      | 17.5    | 8 x 45°  | 143     |
| FL/TF 80                   | KR/T 80            | or | KRP/T 80 | 197      | 270     | 310     | 70      | 22      | 12 x 30° | 203     |

Flanges for KR/T and KRP/T series

Subject to modification without prior notice

### 3.2 Floating flanges - FL/TL types

To avoid constraint forces, it is often useful to mount the Safety Catcher with a FL/TL type flange floating on the machine frame so that any lateral movements of the rod are compensated.

Fixing pins prevent the Safety Catcher from twisting with the FL/TL flange and thereby protect the connection lines from kinking.

**i** Lay all connection lines without **kinking**. If there is a danger of kinks, take appropriate safety measures (protective tube, thicker hose, etc.).

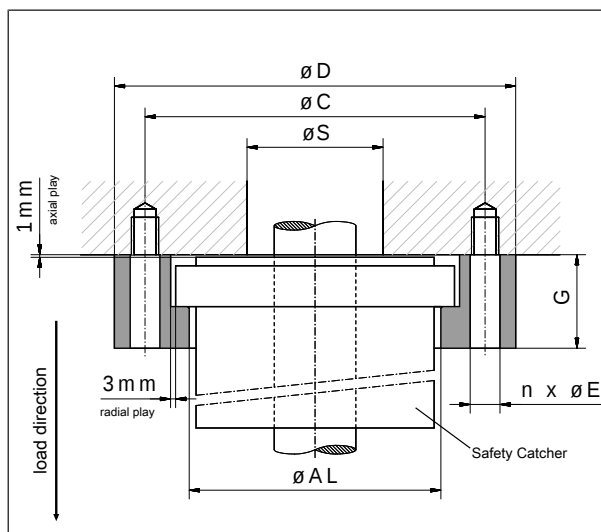


Fig. 10: Flange for KR/T and KRP/T series

| Flange type | For Safety Catcher |    |          | AL  | C   | D   | G  | E    | n        | S       |         |
|-------------|--------------------|----|----------|-----|-----|-----|----|------|----------|---------|---------|
| (order no.) |                    |    |          | mm  | mm  | mm  | mm | mm   |          | min. mm | max. mm |
| FL/TL 25    | KR/T 25            | or | KRP/T 25 | 79  | 112 | 129 | 33 | 11   | 6 x 60°  | 50      | 55      |
| FL/TL 40    | KR/T 40            | or | KRP/T 40 | 114 | 153 | 175 | 44 | 14   | 8 x 45°  | 75      | 85      |
| FL/TL 56    | KR/T 56            | or | KRP/T 56 | 148 | 200 | 236 | 55 | 17.5 | 8 x 45°  | 100     | 115     |
| FL/TL 80    | KR/T 80            | or | KRP/T 80 | 202 | 270 | 310 | 76 | 22   | 12 x 30° | 135     | 155     |

Flanges for KR/T and KRP/T series

Subject to modification without prior notice

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06

Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Россия (495)268-04-70

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Казахстан (772)734-952-31

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93