

# SKF SPEEDI-SLEEVE new generation

and wear sleeves for heavy industrial applications



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# The new generation concept and characteristics

## Enhanced sealing system solution

To seal effectively, radial shaft seals must run against a smooth, round counterface. If the counterface becomes worn, the seal will no longer be able to fulfil its function, which is to retain lubricant and to exclude contaminants.

Typically, the counterface becomes scored when a contaminant particle is caught under the sealing lip and abrades a track as the shaft rotates. As this continues, the seal will enable more particles to pass or get stuck eventually leading to malfunction of the component that the sealing system is meant to protect. A simple seal replacement will not be sufficient and to repair the shaft, it is usually necessary to disassemble the machine to be able to grind down the counterface until it is within speci-

cation again. Otherwise, the sealing system will not function properly.

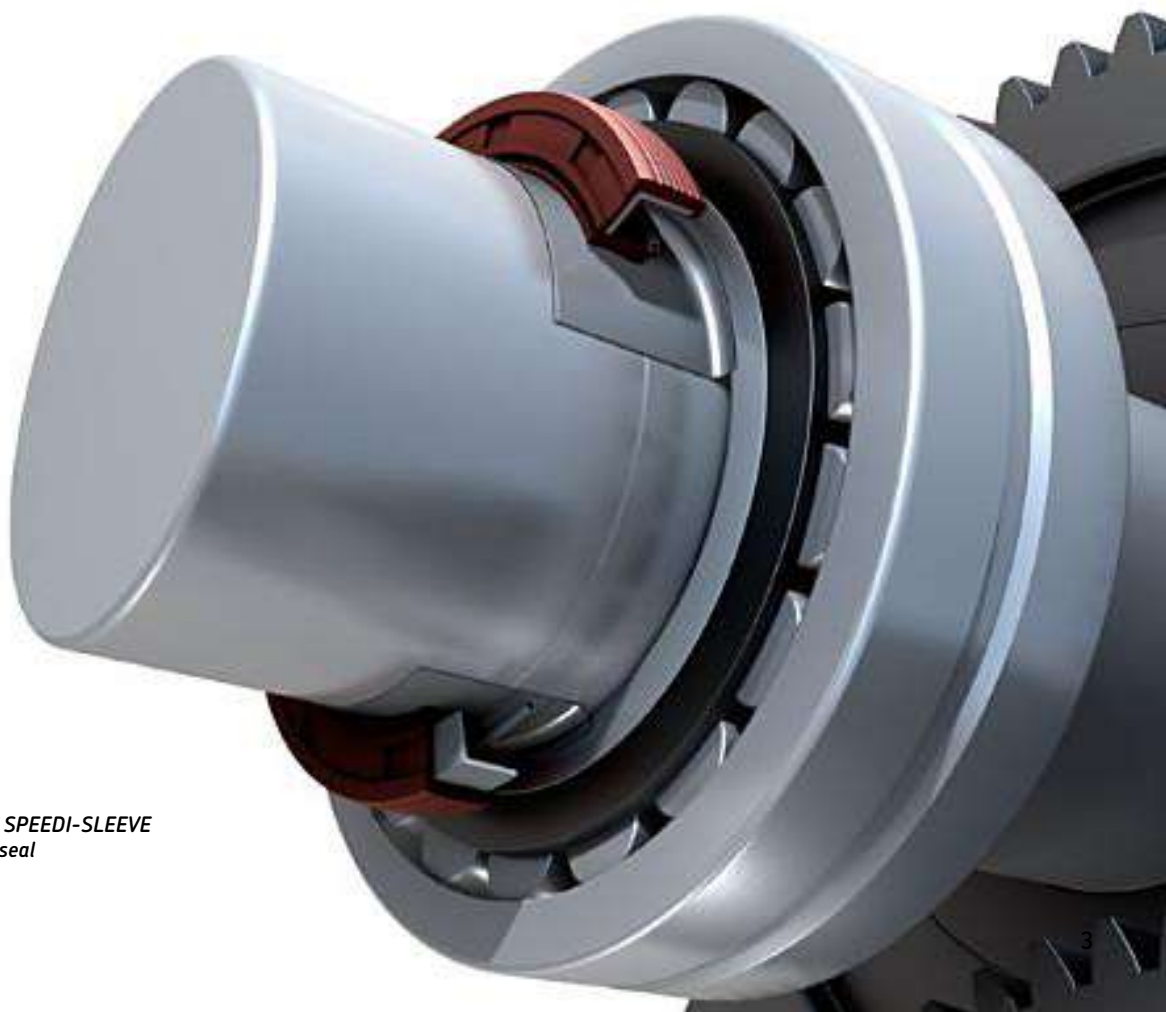
SKF SPEEDI-SLEEVE is a well-proven solution to overcome problems with worn shafts, without having to disassemble the shaft or specifying a new size of the replacement seal, while offering an excellent sealing surface. Now, SKF has developed a patent pending new generation SKF SPEEDI-SLEEVE with features providing an even further enhanced sealing system performance.

## Features

The new generation of SKF SPEEDI-SLEEVE combines a proprietary stainless steel material and manufacturing process, resulting in an optimized seal counterface surface that

minimizes wear on both the sleeve and sealing lip. The proprietary material provides increased strength and excellent ductility properties of the sleeve. Imperceptible lubricant pockets enable the lubricant to reside on the sleeve and thereby prevent dry running of the sealing lip that otherwise can create excessive wear. The sleeves are thin-walled (0,28 mm (0.011 in.)) and the contact surface is wear resistant and manufactured to minimize directionality ( $0^\circ \pm 0,05$ ) with a finish of  $R_a$  0,25 to 0,5  $\mu\text{m}$  (10 to 20  $\mu\text{in.}$ ). This is, in fact, a better counterface than can often be achieved on a shaft.

*The optimized sealing system: SKF SPEEDI-SLEEVE new generation + SKF radial shaft seal*



## Removable flange

SKF SPEEDI-SLEEVE has a removable flange to simplify installation (→ **fig. 1**). The flange can most often be left intact, but in applications where the flange will interfere with other system components, it should be removed so it does not cause friction heat and wear debris. The flange should also be removed in applications where it may reduce the supply of lubricant to the seal. This would cause a reduced cooling effect of the lubricant, resulting in elevated underlip temperature and premature ageing of the seal material.

If the flange is to be removed, it should be cut from the outside diameter into the radius in one location prior to installation. The flange can then be twisted and raised up after installation and grasped with a pair of pliers and twisted into a coil.

## SKF SPEEDI-SLEEVE Gold

The new generation of SKF SPEEDI-SLEEVE is also available in the Gold version, designed for highly abrasive applications. A thin, metallic coating applied to the base stainless steel imparts a gold colour and significantly increases durability. SKF SPEEDI-SLEEVE Gold is particularly effective in environments where there are abrasive contaminants, especially when combined with a seal manufactured from the SKF fluoro rubber material SKF Duralife<sup>1)</sup>. This sealing system solution lasted 2 500 hours in a contamination test.

The installation procedure is common to both SKF SPEEDI-SLEEVE designs and the original seal size can still be used.

All sleeves listed in the product tables starting on page 8 can be manufactured as SKF SPEEDI-SLEEVE Gold.

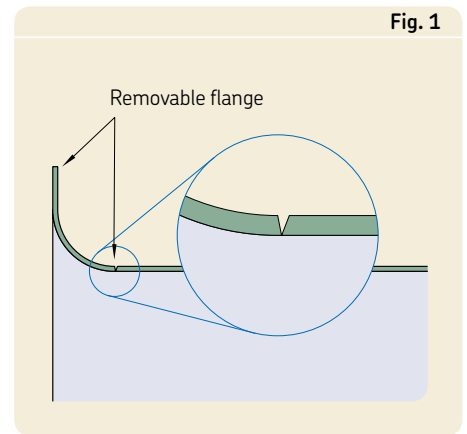
## Size range

The standard size range covers sleeves for shaft diameters from 11,99 to 203,33 mm (0.472 to 8 in.). Depending on production quantities, non-standard sizes can be manufactured. For additional information, contact SKF. Each sleeve is designed to fit a specific shaft range, usually above and below the nominal shaft diameter. This permits some flexibility to accommodate variations in the actual shaft diameter.

## Selecting the sleeve size

To determine the appropriate sleeve size, it is first necessary to clean the shaft carefully. The diameter of an undamaged section of the seal counterface should then be measured on at least three different planes. The arithmetical mean of these measurements determines the size of SKF SPEEDI-SLEEVE. If the value lies within the permissible range listed in the product table for the shaft diameter  $d_1$ , the selected SKF SPEEDI-SLEEVE will have an adequate tight fit on the shaft and will not require an adhesive.

Fig. 1



SKF SPEEDI-SLEEVE removable flange



SKF SPEEDI-SLEEVE new generation, Gold version



The standard size range covers sleeves for shaft diameters from 11,99 to 203,33 mm (0.472 to 8 in.).

<sup>1)</sup> Previously named Longlife

## Test results

The previous and new generation of SKF SPEEDI-SLEEVE products were tested for abrasion resistance under both coarse and fine dust conditions. A 500 hour contamination test (→ **diagram 1**) showed that when compared to the previous generation sleeve, the new generation SKF SPEEDI-SLEEVE reduced abrasion by a factor of 1,5 and was still operating efficiently.

To test sealing system effectiveness, a 2 000 hour life test was performed (→ **diagram 2**) using SKF SPEEDI-SLEEVE new and previous generation products and SKF WAVE seals made from the SKF fluoro rubber material SKF Duralife. The test results showed that SKF SPEEDI-SLEEVE new generation reduced the sealing lip wear and the variation in the wear rate by approximately 30% compared to the previous generation sleeve and outperformed a chromium-plated surface by a factor of 2. This reduction improves the sealing system reliability as well as the predictability of the system service life.

Both tests were carried out under the same operating conditions:

- temperatures up to 110 °C (225 °F)
- linear shaft speeds of up to 8,6 m/s (1 700 ft/min)

In other tests, it was found that continuous salt spray at 35 °C (95 °F) produced no trace of corrosion even after 600 hours. This optimized performance is made possible through the use of the new generation of SKF SPEEDI-SLEEVE.

Diagram 1

### SKF SPEEDI-SLEEVE wear test Abrasive media, test stopped at 500 hours

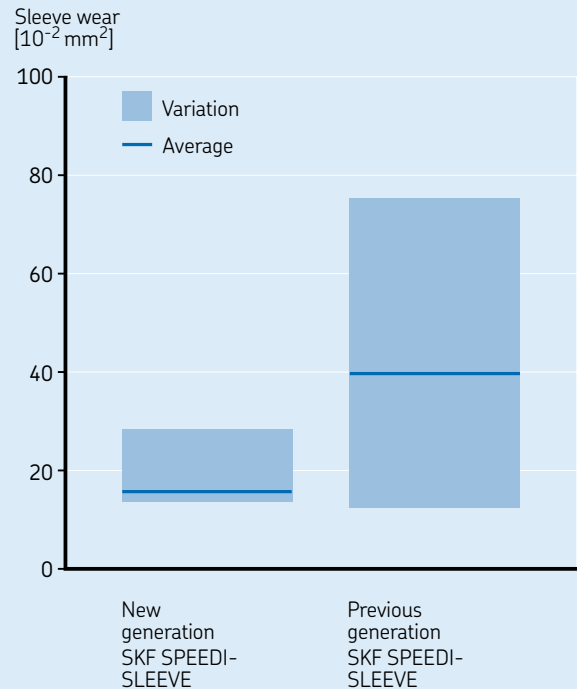
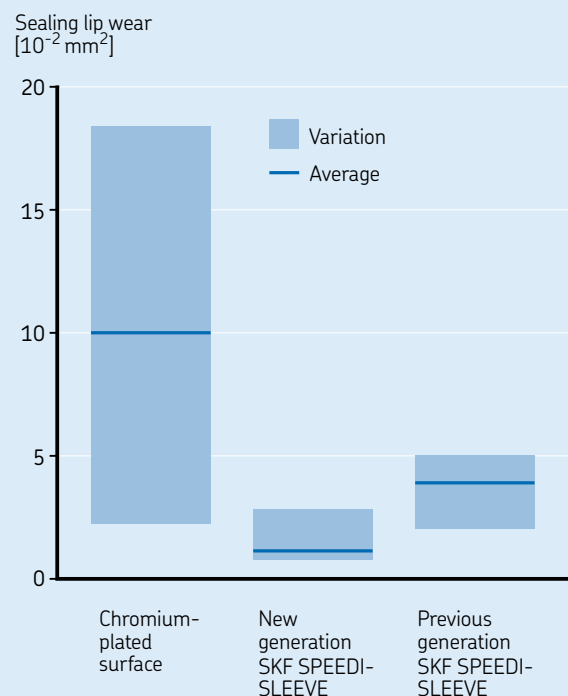


Diagram 2

### Sealing lip wear test Seals made from fluoro rubber, test stopped at 2 000 hours



# Installing SKF SPEEDI-SLEEVE

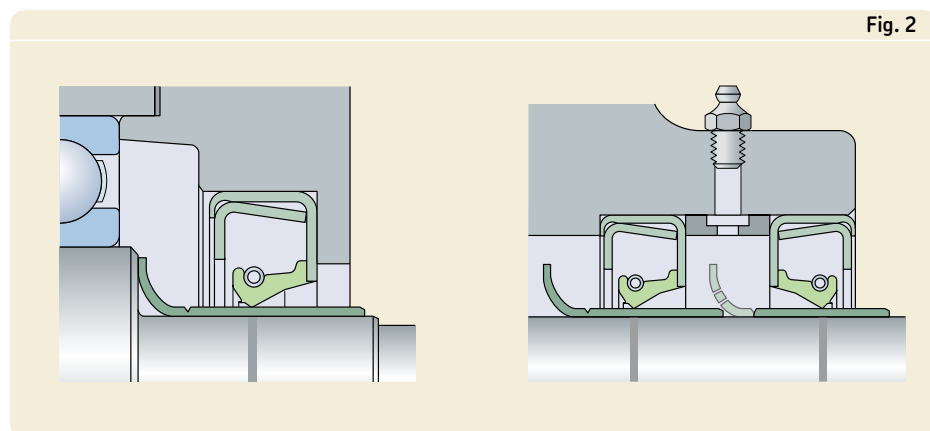
## A new seal counterface in a few minutes

Although installation is simple, it should be done carefully to achieve the best results. As the thin-walled sleeve has an interference fit, any disturbances on the shaft surface may create a similar pattern on the sleeve surface and cause the seal to leak. Therefore, the seal counterface surface of the shaft should be carefully cleaned and any burrs or rough spots filed down prior to installation. Deep wear grooves, scratches or very rough surfaces should be treated with a suitable powdered metal epoxy-type filler. The sleeve must be positioned on the shaft before the filler has hardened.

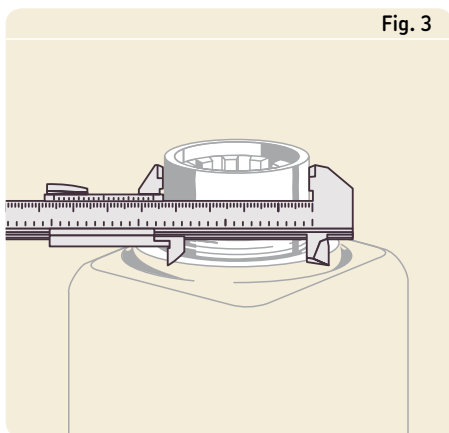
SKF SPEEDI-SLEEVE must not be installed over keyways, cross holes, splines or threads since this will result in deformation of the sleeve, making it difficult for the seal to follow its new counterface surface as it rotates.

SKF SPEEDI-SLEEVE should never be heated prior to installation. Using heat will cause the sleeve to expand, but when it cools, it may not contract back to its original size, resulting in a loose fit on the shaft. See **fig. 2** for different SKF SPEEDI-SLEEVE installations.

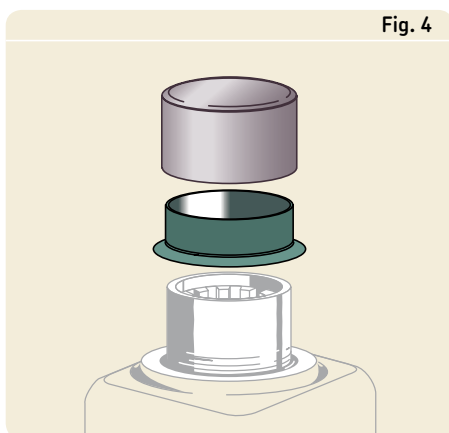
*SKF SPEEDI-SLEEVE installations*



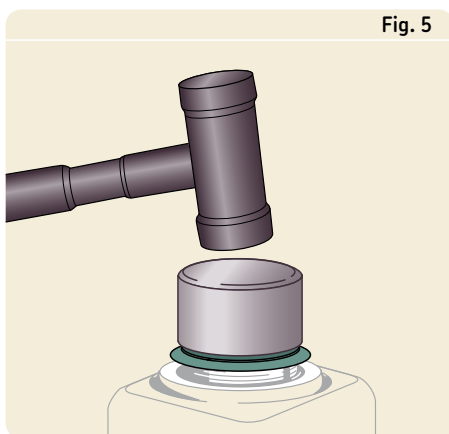
**Fig. 2**



*Clean and measure the diameter of the worn shaft and mark the area where the sleeve will cover the scored portion of the shaft.*



*Place SKF SPEEDI-SLEEVE on the shaft and then place the special installation tool over the sleeve.*



*Tap the installation tool with a mallet until the sleeve is seated on the shaft over the marked area. Remove the installation tool.*

## Installation procedure

- 1 Clean the seal counterface surface on the shaft. File down any burrs or rough spots and make sure that the sleeve will not be installed over keyways, cross holes, splines or similar.
- 2 Measure the diameter on an unworn portion of the shaft where the sleeve will be positioned (→ fig. 3). Measure in three positions and average the readings to make sure the shaft is within recommended specifications. If the average diameter is within the range for a given sleeve size, there is sufficient press fit built into the sleeve to prevent it from sliding or spinning without using an adhesive.
- 3 Determine where the sleeve must be positioned to cover the worn area. Measure to the exact point, or mark directly on the surface. The sleeve must be placed over the worn area, not just bottomed or left flush with the end of the shaft.
- 4 Shallow wear grooves do not require filling. Optionally, a light layer of a non-hardening sealant can be applied to the inside diameter surface of the sleeve. Clean away sealant that migrates to the shaft or sleeve outside diameter surface.
- 5 If the shaft is deeply scored, fill the groove with a powdered metal epoxy-type filler. Install the sleeve before the filler hardens, enabling the sleeve to wipe off any excess filler. Clean away any remaining filler from the sleeve outside diameter surface.
- 6 It should be repeated that heat should never be used to install SKF SPEEDI-SLEEVE.
- 7 If the flange should be removed after installation, cut it from the outside diameter into the radius in one location. The flange end of the sleeve goes on the shaft first. Then, place the installation tool over the sleeve (→ fig. 4).
- 8 Gently tap the centre of the installation tool until the sleeve covers the worn shaft surface (→ fig. 5). If the installation tool is too short, a length of pipe or tubing with a squared-off, burr-free end can be used. Be sure that the inside diameter of the pipe is the same as that of the installation tool. Use care not to scratch the precision ground sleeve's outside diameter.
- 9 SKF SPEEDI-SLEEVE should always be installed so that the outside edge of the sleeve is seated on the full shaft diameter. It must not rest in or outside the chamfer area since the sharp edge will likely cut the sealing lip during seal installation.

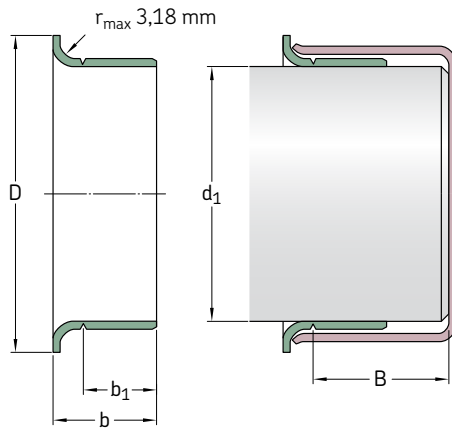
- 10 If the flange was cut for removal, use a pair of long-nosed pliers to grasp the flange away from the sleeve and twist it into a coil, being careful not to lift the end of the sleeve off the shaft or it will leave a jagged edge. Flange removal must be done with care to avoid damage to the outside diameter of the sleeve.
- 11 After the sleeve is installed, check again for burrs that could damage the seal.
- 12 Lubricate the sleeve with the system medium before installing the seal.
- 13 Proceed with seal installation.

## Removal

SKF SPEEDI-SLEEVE can be removed by applying heat to the sleeve with an electric heat blower, which will expand it enough to let it slide off the shaft without causing any damage to the shaft. Alternatively, the sleeve can be removed in any of the following ways, always using care not to damage the shaft surface:

- by relieving the press-fit tension using a small hammer to peen across the full width of the sleeve
- by using a cold chisel to cut through the sleeve
- by using a pair of wire cutters starting at or near the flange and applying a twisting motion

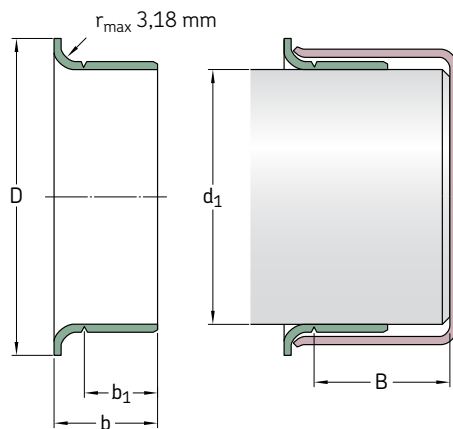
Please note that SKF SPEEDI-SLEEVE cannot be reused.

**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 11,99 – 34,01 mm**


| Shaft diameter range  |       | Nominal dimensions |           |                        |           |                 | Designation         |
|-----------------------|-------|--------------------|-----------|------------------------|-----------|-----------------|---------------------|
| d <sub>1</sub><br>min | max   | d <sub>1</sub>     | D<br>±1,6 | b <sub>1</sub><br>±0,8 | b<br>±0,8 | B <sup>1)</sup> |                     |
| mm                    |       | mm                 |           |                        |           |                 | –                   |
| 11,99                 | 12,07 | 11,99              | 15,49     | 5,99                   | 8,41      | 47,63           | 99049               |
| 12,65                 | 12,75 | 12,70              | 15,49     | 6,35                   | 8,74      | 50,80           | 99050               |
| 13,89                 | 14,00 | 14,00              | 19,05     | 6,35                   | 9,93      | 46,51           | 99055               |
| 14,22                 | 14,38 | 14,30              | 19,05     | 6,35                   | 9,93      | 46,51           | 99056               |
| 14,96                 | 15,06 | 15,01              | 19,05     | 5,00                   | 8,99      | 47,29           | 99059               |
| 15,82                 | 15,93 | 15,88              | 19,05     | 7,95                   | 10,31     | 50,80           | 99810 <sup>2)</sup> |
|                       |       | 15,88              | 19,05     | 7,95                   | 10,31     | 50,80           | 99062               |
| 15,90                 | 16,00 | 16,00              | 18,24     | 7,95                   | 11,13     | 50,80           | 99058               |
| 16,94                 | 17,04 | 16,99              | 22,23     | 8,00                   | 11,00     | 50,80           | 99068               |
| 17,32                 | 17,42 | 17,37              | 22,86     | 7,95                   | 11,13     | 50,80           | 99060               |
| 17,88                 | 18,01 | 18,01              | 24,43     | 8,00                   | 11,00     | 46,00           | 99082               |
| 19,00                 | 19,10 | 19,05              | 24,00     | 7,95                   | 11,13     | 50,80           | 99811 <sup>2)</sup> |
|                       |       | 19,05              | 24,00     | 7,95                   | 11,13     | 50,80           | 99076               |
| 19,28                 | 19,33 | 19,30              | 23,83     | 7,95                   | 11,13     | 50,80           | 99081               |
| 19,81                 | 19,91 | 19,84              | 23,75     | 7,95                   | 11,13     | 50,80           | 99080               |
| 19,94                 | 20,04 | 19,99              | 23,62     | 8,00                   | 11,00     | 50,80           | 99078               |
| 20,62                 | 20,70 | 20,65              | 30,18     | 9,53                   | 14,30     | 76,20           | 99083               |
| 21,77                 | 21,87 | 21,82              | 29,34     | 6,35                   | 9,53      | 50,80           | 99086               |
| 21,87                 | 22,00 | 22,00              | 30,18     | 6,58                   | 9,12      | 47,14           | 99084               |
|                       |       | 22,00              | 30,18     | 8,00                   | 11,99     | 46,02           | 99085               |
| 22,17                 | 22,28 | 22,23              | 27,79     | 7,95                   | 11,13     | 50,80           | 99812 <sup>2)</sup> |
|                       |       | 22,23              | 27,79     | 7,95                   | 11,13     | 50,80           | 99087               |
| 23,06                 | 23,16 | 23,11              | 30,94     | 7,95                   | 11,13     | 46,91           | 99860 <sup>2)</sup> |
|                       |       | 23,11              | 30,94     | 7,95                   | 11,13     | 46,91           | 99091               |
| 23,88                 | 24,00 | 24,00              | 28,70     | 7,95                   | 11,13     | 50,80           | 99092               |
| 24,54                 | 24,64 | 24,61              | 28,70     | 7,95                   | 11,13     | 50,80           | 99094               |
|                       |       | 24,61              | 28,70     | 15,88                  | 18,26     | 50,80           | 99096               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

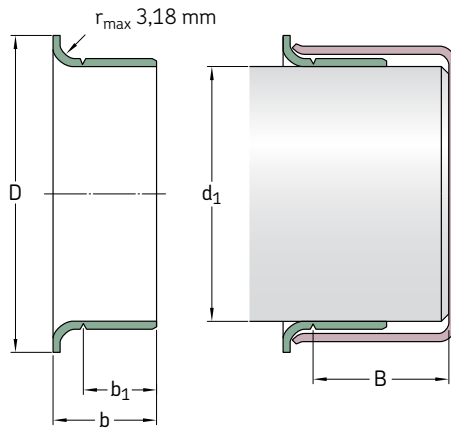


| Shaft diameter range |              | Nominal dimensions      |                         |                      |                         |                         | Designation                                               |
|----------------------|--------------|-------------------------|-------------------------|----------------------|-------------------------|-------------------------|-----------------------------------------------------------|
| $d_1$<br>min         | max          | $d_1$                   | $D$<br>$\pm 1,6$        | $b_1$<br>$\pm 0,8$   | $b$<br>$\pm 0,8$        | $B^{1)}$                |                                                           |
| mm                   |              | mm                      |                         |                      |                         |                         | —                                                         |
| <b>24,94</b>         | <b>25,04</b> | 24,99<br>24,99          | 33,02<br>33,02          | 7,95<br>7,95         | 11,00<br>11,00          | 50,80<br>50,80          | <b>99813<sup>2)</sup></b><br><b>99098</b>                 |
| <b>25,35</b>         | <b>25,45</b> | 25,40<br>25,40          | 30,96<br>30,96          | 7,95<br>7,95         | 11,13<br>11,13          | 50,80<br>50,80          | <b>99814<sup>2)</sup></b><br><b>99868<sup>3)</sup></b>    |
| <b>25,88</b>         | <b>26,01</b> | 26,01                   | 33,35                   | 8,00                 | 11,99                   | 46,05                   | <b>99103</b>                                              |
| <b>26,92</b>         | <b>27,03</b> | 27,00<br>27,00          | 33,53<br>33,53          | 7,95<br>7,95         | 11,13<br>11,13          | 46,81<br>46,81          | <b>99815<sup>2)</sup></b><br><b>99106</b>                 |
| <b>27,61</b>         | <b>27,71</b> | 27,66                   | 35,71                   | 7,95                 | 11,13                   | 15,88                   | <b>99108</b>                                              |
| <b>27,94</b>         | <b>28,04</b> | 27,99<br>27,99          | 34,93<br>34,93          | 9,53<br>9,53         | 12,70<br>12,70          | 46,81<br>46,81          | <b>99866<sup>2)</sup></b><br><b>99111</b>                 |
| <b>28,52</b>         | <b>28,63</b> | 28,58<br>28,58<br>28,58 | 38,10<br>38,10<br>38,10 | 7,95<br>7,95<br>9,53 | 11,13<br>11,13<br>12,70 | 17,48<br>17,48<br>17,48 | <b>99816<sup>2)</sup></b><br><b>99112</b><br><b>99116</b> |
| <b>29,31</b>         | <b>29,41</b> | 29,36<br>29,36          | 34,29<br>34,29          | 9,53<br>9,53         | 12,70<br>12,70          | 17,48<br>17,48          | <b>99865<sup>2)</sup></b><br><b>99120</b>                 |
| <b>29,79</b>         | <b>29,92</b> | 29,85                   | 35,56                   | 7,95                 | 11,13                   | 17,48                   | <b>99122</b>                                              |
| <b>29,95</b>         | <b>30,07</b> | 30,00                   | 35,56                   | 8,00                 | 11,00                   | 17,48                   | <b>99114</b>                                              |
| <b>30,10</b>         | <b>30,23</b> | 30,18                   | 35,56                   | 7,95                 | 11,13                   | 17,48                   | <b>99118</b>                                              |
| <b>30,89</b>         | <b>31,04</b> | 30,96                   | 39,70                   | 7,95                 | 11,00                   | 15,88                   | <b>99123</b>                                              |
| <b>31,42</b>         | <b>31,57</b> | 31,50                   | 39,12                   | 8,00                 | 11,13                   | 17,48                   | <b>99141</b>                                              |
| <b>31,67</b>         | <b>31,83</b> | 31,75<br>31,75          | 38,10<br>38,10          | 7,95<br>7,95         | 11,13<br>11,13          | 17,48<br>17,48          | <b>99817<sup>2)</sup></b><br><b>99125</b>                 |
| <b>31,93</b>         | <b>32,08</b> | 32,00                   | 38,10                   | 8,00                 | 11,13                   | 17,48                   | <b>99128</b>                                              |
| <b>32,94</b>         | <b>33,05</b> | 32,99                   | 40,49                   | 15,01                | 18,01                   | 25,40                   | <b>99121</b>                                              |
| <b>33,22</b>         | <b>33,38</b> | 33,35                   | 40,64                   | 6,35                 | 9,53                    | 20,65                   | <b>99129</b>                                              |
| <b>33,27</b>         | <b>33,43</b> | 33,35<br>33,35          | 40,49<br>40,49          | 12,70<br>12,70       | 15,88<br>15,88          | 20,65<br>20,65          | <b>99818<sup>2)</sup></b><br><b>99131</b>                 |
| <b>33,86</b>         | <b>34,01</b> | 34,01                   | 41,28                   | 12,70                | 15,88                   | 20,65                   | <b>99134</b>                                              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

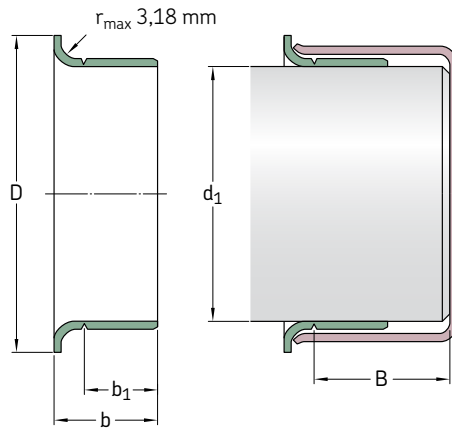
<sup>3)</sup> Previously 99100

**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 34,82 – 49,28 mm**


| Shaft diameter range  |              | Nominal dimensions |           |                        |           |                 | Designation               |
|-----------------------|--------------|--------------------|-----------|------------------------|-----------|-----------------|---------------------------|
| d <sub>1</sub><br>min | max          | d <sub>1</sub>     | D<br>±1,6 | b <sub>1</sub><br>±0,8 | b<br>±0,8 | B <sup>1)</sup> |                           |
| mm                    |              | mm                 |           |                        |           |                 | –                         |
| <b>34,82</b>          | <b>34,98</b> | 34,93              | 41,61     | 7,95                   | 11,13     | 20,65           | <b>99133</b>              |
|                       |              | 34,93              | 41,61     | 12,70                  | 15,88     | 20,65           | <b>99819<sup>2)</sup></b> |
|                       |              | 34,93              | 41,61     | 12,70                  | 15,88     | 20,65           | <b>99138</b>              |
| <b>34,93</b>          | <b>35,08</b> | 34,93              | 41,61     | 13,00                  | 16,00     | 20,65           | <b>99820<sup>2)</sup></b> |
|                       |              | 34,93              | 41,61     | 13,00                  | 16,00     | 20,65           | <b>99139</b>              |
| <b>35,84</b>          | <b>35,99</b> | 35,99              | 45,24     | 13,00                  | 16,99     | 24,99           | <b>99146</b>              |
| <b>36,37</b>          | <b>36,53</b> | 36,53              | 45,24     | 14,30                  | 17,48     | 25,81           | <b>99821<sup>2)</sup></b> |
|                       |              | 36,53              | 45,24     | 14,30                  | 17,48     | 25,81           | <b>99143</b>              |
| <b>36,45</b>          | <b>36,60</b> | 36,53              | 45,24     | 9,53                   | 12,70     | 25,81           | <b>99144</b>              |
| <b>37,85</b>          | <b>38,00</b> | 38,00              | 45,24     | 13,00                  | 16,99     | 24,99           | <b>99147</b>              |
| <b>38,02</b>          | <b>38,18</b> | 38,10              | 45,24     | 9,53                   | 12,70     | 25,81           | <b>99823<sup>2)</sup></b> |
|                       |              | 38,10              | 45,24     | 9,53                   | 12,70     | 25,81           | <b>99150</b>              |
|                       |              | 38,10              | 45,24     | 14,30                  | 17,48     | 25,81           | <b>99822<sup>2)</sup></b> |
|                       |              | 38,10              | 45,24     | 14,30                  | 17,48     | 25,81           | <b>99149</b>              |
| <b>38,61</b>          | <b>38,76</b> | 38,68              | 47,22     | 11,13                  | 14,30     | 25,81           | <b>99152</b>              |
| <b>39,34</b>          | <b>39,50</b> | 39,42              | 47,22     | 11,13                  | 14,30     | 25,81           | <b>99155</b>              |
| <b>39,60</b>          | <b>39,75</b> | 39,67              | 47,22     | 14,30                  | 17,48     | 25,81           | <b>99824<sup>2)</sup></b> |
|                       |              | 39,67              | 47,22     | 14,30                  | 17,48     | 25,81           | <b>99156</b>              |
| <b>39,78</b>          | <b>39,93</b> | 39,85              | 47,22     | 15,88                  | 19,05     | 25,81           | <b>99159</b>              |
| <b>39,85</b>          | <b>40,01</b> | 40,01              | 46,99     | 9,91                   | 12,93     | 25,40           | <b>99153</b>              |
| <b>39,93</b>          | <b>40,08</b> | 40,08              | 46,99     | 13,00                  | 16,00     | 25,98           | <b>99825<sup>2)</sup></b> |
|                       |              | 40,08              | 46,99     | 13,00                  | 16,00     | 25,98           | <b>99157</b>              |
| <b>40,69</b>          | <b>40,84</b> | 40,77              | 49,23     | 12,70                  | 16,28     | 25,40           | <b>99160</b>              |
| <b>40,84</b>          | <b>41,00</b> | 41,00              | 49,23     | 12,70                  | 15,88     | 25,81           | <b>99163</b>              |
| <b>41,20</b>          | <b>41,35</b> | 41,28              | 47,63     | 7,95                   | 11,13     | 25,81           | <b>99161</b>              |
|                       |              | 41,28              | 47,63     | 14,30                  | 17,48     | 20,65           | <b>99826<sup>2)</sup></b> |
|                       |              | 41,28              | 47,63     | 14,30                  | 17,48     | 20,65           | <b>99162</b>              |
| <b>41,83</b>          | <b>42,01</b> | 41,91              | 53,01     | 11,30                  | 14,50     | 21,49           | <b>99166</b>              |
|                       |              | 41,91              | 53,01     | 14,30                  | 17,50     | 21,01           | <b>99169</b>              |
|                       |              | 42,01              | 53,01     | 14,30                  | 17,50     | 21,01           | <b>99873<sup>2)</sup></b> |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

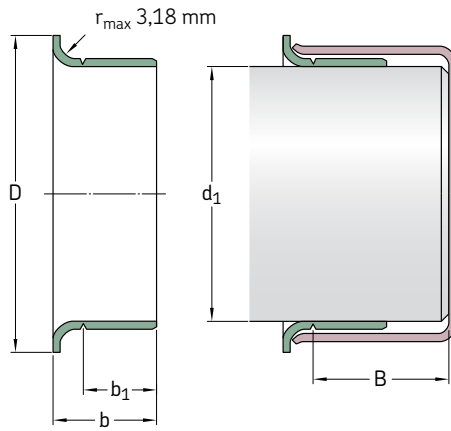
<sup>2)</sup> SKF SPEEDI-SLEEVE Gold



| Shaft diameter range |       | Nominal dimensions |                  |                    |                  |          | Designation         |
|----------------------|-------|--------------------|------------------|--------------------|------------------|----------|---------------------|
| $d_1$<br>min         | max   | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                     |
| mm                   |       | mm                 |                  |                    |                  |          | —                   |
| 41,99                | 42,14 | 42,06              | 53,01            | 13,97              | 17,50            | 21,01    | 99165               |
| 42,77                | 42,93 | 42,88              | 48,41            | 14,30              | 17,48            | 22,23    | 99168               |
| 42,80                | 42,95 | 42,88              | 48,41            | 7,95               | 11,13            | 22,23    | 99167               |
| 42,85                | 43,00 | 43,00              | 48,41            | 12,70              | 15,88            | 21,44    | 99182               |
| 43,56                | 43,71 | 43,66              | 51,59            | 14,30              | 17,48            | 20,65    | 99171               |
| 44,09                | 44,25 | 44,17              | 52,40            | 9,53               | 12,70            | 20,65    | 99170               |
| 44,37                | 44,53 | 44,45              | 52,20            | 9,53               | 12,70            | 20,65    | 99172               |
|                      |       | 44,45              | 52,40            | 13,49              | 15,88            | 22,30    | 99180               |
|                      |       | 44,45              | 52,40            | 14,30              | 17,48            | 20,65    | 99827 <sup>2)</sup> |
|                      |       | 44,45              | 52,40            | 14,30              | 17,48            | 20,65    | 99174               |
|                      |       | 44,45              | 52,40            | 19,05              | 22,23            | 20,65    | 99828 <sup>2)</sup> |
|                      |       | 44,45              | 52,40            | 19,05              | 22,23            | 20,65    | 99175               |
| 44,73                | 44,88 | 44,86              | 52,40            | 14,30              | 17,48            | 20,65    | 99829 <sup>2)</sup> |
|                      |       | 44,86              | 52,40            | 14,30              | 17,48            | 20,65    | 99176               |
| 44,93                | 45,09 | 45,01              | 53,01            | 14,00              | 16,99            | 20,62    | 99830 <sup>2)</sup> |
|                      |       | 45,01              | 53,01            | 14,00              | 16,99            | 20,62    | 99177               |
| 45,16                | 45,31 | 45,24              | 53,98            | 16,94              | 20,32            | 26,97    | 99179               |
| 45,95                | 46,10 | 46,05              | 53,09            | 14,30              | 17,48            | 25,40    | 99831 <sup>2)</sup> |
|                      |       | 46,05              | 53,09            | 14,30              | 17,48            | 25,40    | 99181               |
| 47,17                | 47,32 | 47,22              | 54,76            | 14,30              | 17,48            | 25,40    | 99185               |
| 47,40                | 47,55 | 47,45              | 55,58            | 22,58              | 26,04            | 25,40    | 99186               |
| 47,55                | 47,70 | 47,63              | 55,96            | 4,45               | 7,49             | 18,90    | 99190               |
|                      |       | 47,63              | 55,96            | 7,49               | 10,54            | 18,90    | 99188               |
|                      |       | 47,63              | 55,96            | 9,53               | 13,11            | 26,67    | 99184               |
|                      |       | 47,63              | 55,96            | 14,30              | 17,48            | 25,40    | 99832 <sup>2)</sup> |
|                      |       | 47,63              | 55,96            | 14,30              | 17,48            | 25,40    | 99187               |
| 47,93                | 48,08 | 48,03              | 56,01            | 14,00              | 16,97            | 24,99    | 99189               |
| 48,49                | 48,64 | 48,56              | 56,36            | 9,53               | 12,70            | 25,40    | 99192               |
| 49,12                | 49,28 | 49,23              | 56,36            | 14,30              | 17,48            | 25,40    | 99833 <sup>2)</sup> |
|                      |       | 49,23              | 56,36            | 14,30              | 17,48            | 25,40    | 99193               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

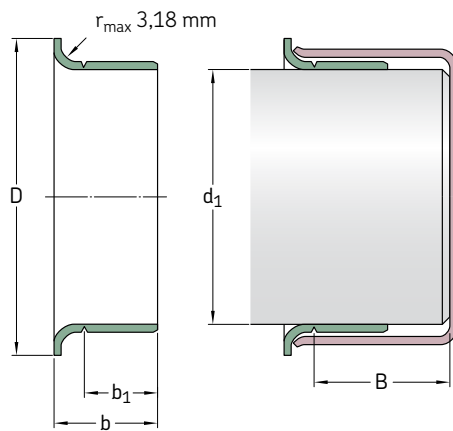
**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 49,91 – 69,93 mm**


| Shaft diameter range  |              | Nominal dimensions |           |                        |           |                 | Designation               |
|-----------------------|--------------|--------------------|-----------|------------------------|-----------|-----------------|---------------------------|
| d <sub>1</sub><br>min | max          | d <sub>1</sub>     | D<br>±1,6 | b <sub>1</sub><br>±0,8 | b<br>±0,8 | B <sup>1)</sup> |                           |
| mm                    |              | mm                 |           |                        |           |                 | –                         |
| <b>49,91</b>          | <b>50,06</b> | 50,01              | 56,49     | 14,00                  | 16,97     | 34,29           | <b>99052</b>              |
|                       |              | 50,01              | 57,00     | 14,00                  | 16,97     | 24,99           | <b>99196</b>              |
| <b>50,22</b>          | <b>50,37</b> | 50,29              | 58,75     | 14,30                  | 17,88     | 26,67           | <b>99198</b>              |
| <b>50,72</b>          | <b>50,88</b> | 50,80              | 61,11     | 14,30                  | 17,48     | 25,55           | <b>99834<sup>2)</sup></b> |
|                       |              | 50,80              | 61,11     | 14,30                  | 17,48     | 25,40           | <b>99199</b>              |
|                       |              | 50,80              | 61,11     | 22,23                  | 25,40     | 25,40           | <b>99835<sup>2)</sup></b> |
|                       |              | 50,80              | 61,11     | 22,23                  | 25,40     | 25,40           | <b>99200</b>              |
| <b>51,82</b>          | <b>51,99</b> | 51,99              | 62,71     | 12,70                  | 15,88     | 34,52           | <b>99878<sup>3)</sup></b> |
| <b>52,25</b>          | <b>52,40</b> | 52,40              | 62,71     | 19,84                  | 23,83     | 34,93           | <b>99205</b>              |
| <b>53,92</b>          | <b>54,05</b> | 53,98              | 61,52     | 12,70                  | 19,05     | 32,54           | <b>99210</b>              |
| <b>53,95</b>          | <b>54,10</b> | 53,98              | 61,52     | 19,84                  | 23,83     | 34,93           | <b>99836<sup>2)</sup></b> |
|                       |              | 53,98              | 61,52     | 19,84                  | 23,83     | 34,93           | <b>99212</b>              |
| <b>54,91</b>          | <b>55,07</b> | 54,99              | 62,00     | 19,99                  | 22,99     | 31,75           | <b>99863<sup>2)</sup></b> |
|                       |              | 54,99              | 62,00     | 19,99                  | 22,99     | 31,75           | <b>99215</b>              |
| <b>55,52</b>          | <b>55,68</b> | 55,58              | 63,50     | 19,84                  | 23,83     | 33,35           | <b>99218</b>              |
| <b>55,83</b>          | <b>56,01</b> | 56,01              | 64,29     | 12,70                  | 15,88     | 33,35           | <b>99220</b>              |
|                       |              | 56,01              | 64,29     | 19,79                  | 23,77     | 80,01           | <b>99224</b>              |
| <b>56,57</b>          | <b>56,72</b> | 56,64              | 64,29     | 12,70                  | 15,88     | 33,35           | <b>99861<sup>2)</sup></b> |
|                       |              | 56,64              | 64,29     | 12,70                  | 15,88     | 33,35           | <b>99229</b>              |
|                       |              | 56,64              | 64,29     | 19,84                  | 23,01     | 31,75           | <b>99230</b>              |
| <b>56,82</b>          | <b>56,97</b> | 56,90              | 65,10     | 19,41                  | 22,86     | 31,75           | <b>99226</b>              |
| <b>57,12</b>          | <b>57,28</b> | 57,15              | 64,29     | 7,95                   | 11,13     | 33,35           | <b>99838<sup>2)</sup></b> |
|                       |              | 57,15              | 64,29     | 7,95                   | 11,13     | 33,35           | <b>99227</b>              |
|                       |              | 57,15              | 64,29     | 19,84                  | 23,83     | 33,35           | <b>99837<sup>2)</sup></b> |
|                       |              | 57,15              | 64,29     | 19,84                  | 23,83     | 33,35           | <b>99225</b>              |
| <b>57,91</b>          | <b>58,06</b> | 57,99              | 65,99     | 19,99                  | 23,83     | 34,93           | <b>99219</b>              |
| <b>58,65</b>          | <b>58,80</b> | 58,75              | 68,28     | 19,84                  | 23,83     | 34,93           | <b>99231</b>              |
| <b>59,11</b>          | <b>59,26</b> | 59,13              | 69,85     | 19,05                  | 22,23     | 38,10           | <b>99233</b>              |
| <b>59,92</b>          | <b>60,07</b> | 59,99              | 70,74     | 9,40                   | 11,43     | 37,36           | <b>99241</b>              |
|                       |              | 59,99              | 70,74     | 19,99                  | 22,99     | 34,93           | <b>99869<sup>2)</sup></b> |
|                       |              | 59,99              | 70,74     | 19,99                  | 22,99     | 34,93           | <b>99235</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

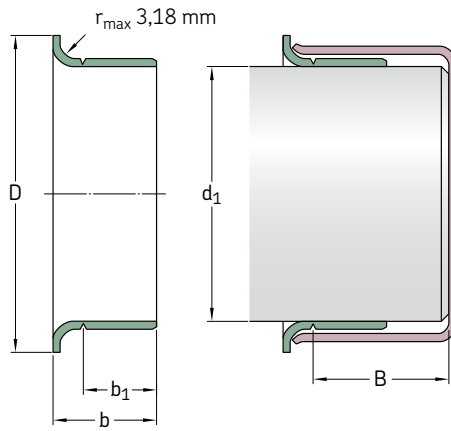
<sup>3)</sup> Previously 99204



| Shaft diameter range |       | Nominal dimensions |                  |                    |                  |          | Designation         |
|----------------------|-------|--------------------|------------------|--------------------|------------------|----------|---------------------|
| $d_1$<br>min         | max   | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                     |
| mm                   |       | mm                 |                  |                    |                  |          | —                   |
| 60,25                | 60,40 | 60,33              | 69,85            | 15,09              | 19,05            | 34,93    | 99238               |
| 60,30                | 60,45 | 60,33              | 69,85            | 13,36              | 17,35            | 34,93    | 99240               |
|                      |       | 60,33              | 69,85            | 19,84              | 23,83            | 34,93    | 99839 <sup>2)</sup> |
|                      |       | 60,33              | 69,85            | 19,84              | 23,83            | 34,93    | 99237               |
| 61,82                | 62,00 | 61,93              | 71,83            | 19,84              | 23,83            | 35,38    | 99243               |
|                      |       | 62,00              | 71,83            | 12,70              | 15,88            | 36,20    | 99244               |
| 61,85                | 62,00 | 61,93              | 71,83            | 12,70              | 15,88            | 36,20    | 99242               |
| 63,22                | 63,37 | 63,30              | 73,03            | 19,84              | 23,83            | 35,38    | 99249               |
| 63,42                | 63,58 | 63,50              | 71,63            | 14,10              | 16,51            | 22,61    | 99253               |
| 63,50                | 63,65 | 63,50              | 71,83            | 12,70              | 16,66            | 35,38    | 99248               |
|                      |       | 63,50              | 71,63            | 19,84              | 23,83            | 34,93    | 99840 <sup>2)</sup> |
|                      |       | 63,50              | 71,63            | 19,84              | 23,83            | 34,93    | 99250               |
| 63,75                | 63,91 | 63,91              | 71,83            | 19,84              | 23,01            | 36,53    | 99251               |
| 64,92                | 65,07 | 65,00              | 72,39            | 19,99              | 22,99            | 34,93    | 99841 <sup>2)</sup> |
|                      |       | 65,00              | 72,39            | 19,99              | 22,99            | 34,93    | 99254               |
| 65,02                | 65,18 | 65,10              | 73,43            | 19,84              | 23,83            | 34,93    | 99256               |
| 65,91                | 66,07 | 65,99              | 75,95            | 19,84              | 23,83            | 31,75    | 99259               |
| 66,50                | 66,65 | 66,57              | 77,39            | 19,84              | 23,83            | 34,93    | 99261               |
| 66,57                | 66,73 | 66,68              | 77,39            | 19,84              | 23,01            | 34,93    | 99264               |
| 66,60                | 66,75 | 66,68              | 77,39            | 12,70              | 15,88            | 34,93    | 99260               |
| 66,68                | 66,83 | 66,68              | 77,39            | 19,84              | 23,83            | 34,93    | 99842 <sup>2)</sup> |
|                      |       | 66,68              | 77,39            | 19,84              | 23,83            | 34,93    | 99262               |
| 67,82                | 68,00 | 68,00              | 79,38            | 19,05              | 22,23            | 42,88    | 99266               |
| 69,27                | 69,42 | 69,34              | 79,38            | 19,84              | 23,01            | 33,35    | 99268               |
| 69,60                | 69,75 | 69,67              | 77,85            | 19,84              | 23,83            | 31,75    | 99273               |
| 69,72                | 69,88 | 69,85              | 79,38            | 19,84              | 23,83            | 31,75    | 99843 <sup>2)</sup> |
|                      |       | 69,85              | 79,38            | 19,84              | 23,83            | 31,75    | 99274               |
| 69,77                | 69,93 | 69,85              | 78,11            | 36,53              | 41,28            | 41,28    | 99267               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

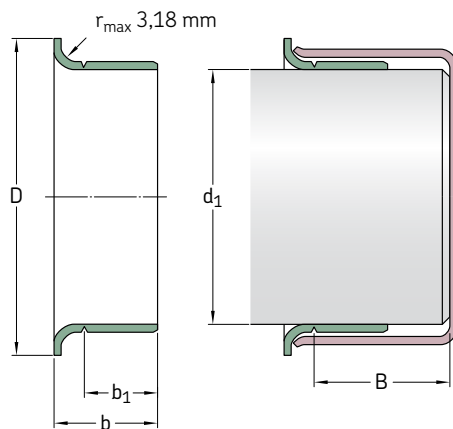
**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 69,85 – 90,58 mm**


| Shaft diameter range  |              | Nominal dimensions |           |                        |           |                 | Designation               |
|-----------------------|--------------|--------------------|-----------|------------------------|-----------|-----------------|---------------------------|
| d <sub>1</sub><br>min | max          | d <sub>1</sub>     | D<br>±1,6 | b <sub>1</sub><br>±0,8 | b<br>±0,8 | B <sup>1)</sup> |                           |
| mm                    |              | mm                 |           |                        |           |                 | –                         |
| <b>69,85</b>          | <b>70,00</b> | 69,85              | 79,38     | 10,31                  | 14,30     | 31,75           | <b>99272</b>              |
|                       |              | 69,85              | 79,38     | 19,84                  | 23,83     | 31,75           | <b>99844<sup>2)</sup></b> |
|                       |              | 69,85              | 79,38     | 19,84                  | 23,83     | 31,75           | <b>99275</b>              |
|                       |              | 69,85              | 79,38     | 28,58                  | 31,75     | 33,32           | <b>99269</b>              |
| <b>69,93</b>          | <b>70,08</b> | 70,00              | 79,38     | 19,99                  | 24,00     | 31,75           | <b>99276</b>              |
| <b>71,35</b>          | <b>71,50</b> | 71,45              | 80,98     | 15,09                  | 17,48     | 31,75           | <b>99281</b>              |
| <b>71,83</b>          | <b>72,01</b> | 72,01              | 81,92     | 19,05                  | 22,23     | 34,11           | <b>99870<sup>2)</sup></b> |
|                       |              | 72,01              | 81,92     | 19,05                  | 22,23     | 34,11           | <b>99284</b>              |
| <b>72,09</b>          | <b>72,24</b> | 72,09              | 81,92     | 12,70                  | 16,66     | 31,75           | <b>99845<sup>2)</sup></b> |
|                       |              | 72,09              | 81,92     | 12,70                  | 16,66     | 31,75           | <b>99282</b>              |
| <b>72,80</b>          | <b>72,95</b> | 72,87              | 80,98     | 19,84                  | 23,83     | 31,75           | <b>99286</b>              |
| <b>72,97</b>          | <b>73,13</b> | 73,03              | 81,76     | 19,84                  | 23,83     | 31,75           | <b>99846<sup>2)</sup></b> |
|                       |              | 73,03              | 81,76     | 19,84                  | 23,83     | 31,75           | <b>99287</b>              |
| <b>74,60</b>          | <b>74,75</b> | 74,63              | 84,94     | 12,70                  | 16,28     | 33,81           | <b>99290</b>              |
|                       |              | 74,63              | 84,94     | 19,84                  | 23,83     | 33,35           | <b>99847<sup>2)</sup></b> |
|                       |              | 74,68              | 84,94     | 19,84                  | 23,83     | 33,35           | <b>99293</b>              |
| <b>74,93</b>          | <b>75,08</b> | 75,01              | 83,13     | 15,09                  | 17,53     | 27,51           | <b>99289</b>              |
|                       |              | 75,01              | 83,95     | 22,00                  | 26,01     | 33,35           | <b>99875<sup>2)</sup></b> |
|                       |              | 75,01              | 83,95     | 22,00                  | 26,01     | 33,35           | <b>99294</b>              |
| <b>75,49</b>          | <b>75,59</b> | 75,54              | 82,17     | 20,65                  | 25,40     | 31,75           | <b>99292</b>              |
| <b>75,95</b>          | <b>76,10</b> | 76,02              | 85,32     | 12,29                  | 15,88     | 33,81           | <b>99291</b>              |
|                       |              | 76,02              | 85,32     | 14,30                  | 17,48     | 34,93           | <b>99298</b>              |
|                       |              | 76,02              | 85,09     | 20,65                  | 25,40     | 32,54           | <b>99299</b>              |
| <b>76,12</b>          | <b>76,28</b> | 76,20              | 82,30     | 20,65                  | 23,83     | 34,93           | <b>99296</b>              |
| <b>76,20</b>          | <b>76,35</b> | 76,20              | 84,96     | 15,88                  | 20,65     | 32,51           | <b>99048<sup>3)</sup></b> |
|                       |              | 76,20              | 82,17     | 20,65                  | 25,40     | 32,54           | <b>99848<sup>2)</sup></b> |
|                       |              | 76,20              | 82,17     | 20,65                  | 25,40     | 32,54           | <b>99300</b>              |
| <b>76,40</b>          | <b>76,56</b> | 76,48              | 85,22     | 12,70                  | 15,88     | 50,80           | <b>99301</b>              |
| <b>77,83</b>          | <b>78,00</b> | 78,00              | 88,09     | 19,05                  | 22,23     | 52,22           | <b>99306</b>              |
| <b>79,25</b>          | <b>79,40</b> | 79,38              | 89,69     | 17,48                  | 20,65     | 50,80           | <b>99311</b>              |
|                       |              | 79,38              | 89,69     | 20,65                  | 25,40     | 50,80           | <b>99849<sup>2)</sup></b> |
|                       |              | 79,38              | 89,69     | 20,65                  | 25,40     | 50,80           | <b>99312</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99303

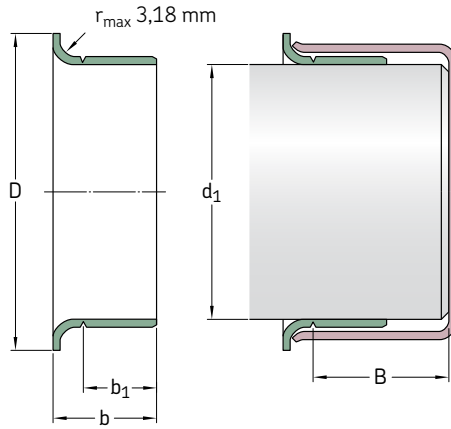


| Shaft diameter range |       | Nominal dimensions |                  |                    |                  |          | Designation         |
|----------------------|-------|--------------------|------------------|--------------------|------------------|----------|---------------------|
| $d_1$<br>min         | max   | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                     |
| mm                   |       | mm                 |                  |                    |                  |          | —                   |
| 79,35                | 79,55 | 79,38              | 89,54            | 14,00              | 18,01            | 51,59    | 99053 <sup>3)</sup> |
| 79,81                | 80,01 | 80,01              | 89,92            | 19,05              | 22,50            | 34,93    | 99313               |
| 79,91                | 80,09 | 80,01              | 89,99            | 11,00              | 15,01            | 34,93    | 99317               |
|                      |       | 80,01              | 89,99            | 21,01              | 24,00            | 34,93    | 99315               |
| 81,92                | 82,07 | 81,99              | 91,06            | 16,76              | 21,54            | 44,45    | 99328               |
| 82,47                | 82,63 | 82,55              | 91,29            | 20,65              | 25,40            | 34,93    | 99322               |
| 82,55                | 82,70 | 82,55              | 90,81            | 15,11              | 18,26            | 34,93    | 99850 <sup>2)</sup> |
|                      |       | 82,55              | 90,81            | 15,11              | 18,26            | 34,93    | 99324               |
|                      |       | 82,55              | 91,06            | 17,48              | 22,23            | 31,75    | 99326               |
|                      |       | 82,55              | 91,06            | 20,65              | 25,40            | 34,93    | 99851 <sup>2)</sup> |
|                      |       | 82,55              | 91,06            | 20,65              | 25,40            | 34,93    | 99325               |
| 84,00                | 84,15 | 84,07              | 93,68            | 20,65              | 25,40            | 34,93    | 99331               |
| 84,76                | 85,01 | 84,89              | 93,98            | 16,99              | 21,01            | 35,00    | 99332               |
|                      |       | 84,89              | 93,98            | 21,01              | 24,99            | 35,00    | 99872 <sup>2)</sup> |
|                      |       | 84,89              | 93,98            | 21,01              | 24,99            | 35,00    | 99333               |
| 84,79                | 85,01 | 85,01              | 90,93            | 10,13              | 12,67            | 36,35    | 99334               |
| 85,67                | 85,83 | 85,73              | 93,68            | 9,53               | 12,70            | 35,81    | 99338               |
|                      |       | 85,73              | 93,85            | 20,65              | 25,40            | 34,93    | 99337               |
| 87,25                | 87,40 | 87,33              | 97,64            | 19,84              | 23,01            | 35,71    | 99339               |
| 87,80                | 88,00 | 88,00              | 95,28            | 29,21              | 34,27            | 42,50    | 99481               |
| 88,32                | 88,47 | 88,39              | 97,41            | 19,84              | 23,01            | 35,71    | 99340               |
| 88,82                | 88,98 | 88,90              | 97,64            | 15,88              | 20,65            | 34,21    | 99346               |
| 88,90                | 89,05 | 88,90              | 97,16            | 7,95               | 12,70            | 34,21    | 99347               |
|                      |       | 88,90              | 97,64            | 20,65              | 25,40            | 34,21    | 99852 <sup>2)</sup> |
|                      |       | 88,90              | 97,64            | 20,65              | 25,40            | 34,21    | 99350               |
| 88,93                | 89,08 | 89,00              | 97,64            | 15,88              | 20,65            | 34,24    | 99349               |
| 89,92                | 90,07 | 89,99              | 101,60           | 11,13              | 13,67            | 46,05    | 99352               |
|                      |       | 89,99              | 101,60           | 13,36              | 16,94            | 44,45    | 99353               |
|                      |       | 89,99              | 101,60           | 18,03              | 23,01            | 46,05    | 99351               |
|                      |       | 89,99              | 101,60           | 23,01              | 27,99            | 44,45    | 99354               |
| 90,42                | 90,58 | 90,50              | 99,06            | 20,65              | 25,40            | 44,45    | 99356               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99307

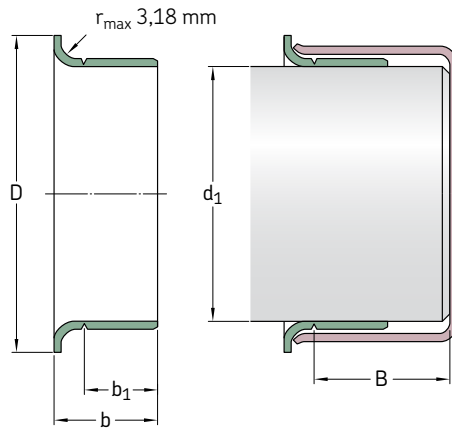
**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 91,90 – 130,18 mm**


| Shaft diameter range  |               | Nominal dimensions |           |                        |           |                 | Designation                 |
|-----------------------|---------------|--------------------|-----------|------------------------|-----------|-----------------|-----------------------------|
| d <sub>1</sub><br>min | max           | d <sub>1</sub>     | D<br>±1,6 | b <sub>1</sub><br>±0,8 | b<br>±0,8 | B <sup>1)</sup> |                             |
| mm                    |               | mm                 |           |                        |           |                 | –                           |
| <b>91,90</b>          | <b>92,05</b>  | 91,97              | 102,39    | 20,65                  | 25,40     | 44,45           | <b>99360</b>                |
| <b>92,02</b>          | <b>92,18</b>  | 92,08              | 102,24    | 12,70                  | 15,88     | 44,45           | <b>99363</b>                |
|                       |               | 92,08              | 102,39    | 20,65                  | 25,40     | 44,45           | <b>99362</b>                |
| <b>93,57</b>          | <b>93,73</b>  | 93,68              | 102,39    | 7,95                   | 11,13     | 22,23           | <b>99368</b>                |
| <b>93,60</b>          | <b>93,75</b>  | 93,68              | 102,24    | 20,65                  | 23,83     | 45,72           | <b>99365</b>                |
| <b>94,67</b>          | <b>94,82</b>  | 94,74              | 102,01    | 11,91                  | 15,09     | 45,72           | <b>99359</b>                |
|                       |               | 94,74              | 102,24    | 19,84                  | 23,01     | 45,72           | <b>99366</b>                |
| <b>94,92</b>          | <b>95,07</b>  | 95,00              | 102,24    | 21,01                  | 24,00     | 45,72           | <b>99369</b>                |
| <b>95,00</b>          | <b>95,15</b>  | 95,07              | 102,39    | 8,74                   | 12,70     | 45,72           | <b>99374</b>                |
|                       |               | 95,07              | 102,49    | 11,91                  | 15,09     | 45,72           | <b>99364</b>                |
| <b>95,15</b>          | <b>95,30</b>  | 95,22              | 102,24    | 14,30                  | 17,48     | 45,72           | <b>99376</b>                |
| <b>95,25</b>          | <b>95,40</b>  | 95,25              | 102,11    | 17,48                  | 22,23     | 45,72           | <b>99853<sup>2)3)</sup></b> |
|                       |               | 95,33              | 102,24    | 8,74                   | 12,70     | 45,72           | <b>99367</b>                |
|                       |               | 95,33              | 102,11    | 17,48                  | 22,23     | 45,72           | <b>99372</b>                |
| <b>98,25</b>          | <b>98,40</b>  | 98,32              | 106,30    | 20,65                  | 25,40     | 47,63           | <b>99386</b>                |
| <b>98,37</b>          | <b>98,53</b>  | 98,43              | 107,16    | 20,65                  | 25,40     | 47,63           | <b>99387</b>                |
| <b>99,95</b>          | <b>100,10</b> | 100,03             | 109,55    | 20,65                  | 25,40     | 52,07           | <b>99854<sup>2)</sup></b>   |
|                       |               | 100,03             | 109,55    | 20,65                  | 25,40     | 52,07           | <b>99393</b>                |
| <b>101,55</b>         | <b>101,75</b> | 101,60             | 111,13    | 12,70                  | 15,88     | 52,48           | <b>99401</b>                |
|                       |               | 101,60             | 111,13    | 15,24                  | 18,42     | 52,07           | <b>99395</b>                |
|                       |               | 101,60             | 111,13    | 16,51                  | 19,69     | 34,93           | <b>99400</b>                |
|                       |               | 101,60             | 111,13    | 20,65                  | 25,40     | 52,07           | <b>99855<sup>2)</sup></b>   |
|                       |               | 101,60             | 111,13    | 20,65                  | 25,40     | 52,07           | <b>99399</b>                |
| <b>103,89</b>         | <b>104,09</b> | 103,99             | 112,73    | 19,99                  | 24,00     | 35,99           | <b>99409</b>                |
| <b>104,70</b>         | <b>104,90</b> | 104,78             | 113,54    | 20,65                  | 25,40     | 34,93           | <b>99412</b>                |
| <b>104,90</b>         | <b>105,11</b> | 105,00             | 113,54    | 19,99                  | 23,19     | 35,00           | <b>99413</b>                |
| <b>106,25</b>         | <b>106,45</b> | 106,38             | 114,30    | 20,65                  | 25,40     | 34,93           | <b>99418</b>                |
| <b>107,34</b>         | <b>107,54</b> | 107,54             | 117,09    | 19,84                  | 23,01     | 36,53           | <b>99423</b>                |
| <b>107,90</b>         | <b>108,10</b> | 107,95             | 117,09    | 20,65                  | 25,40     | 36,53           | <b>99424</b>                |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

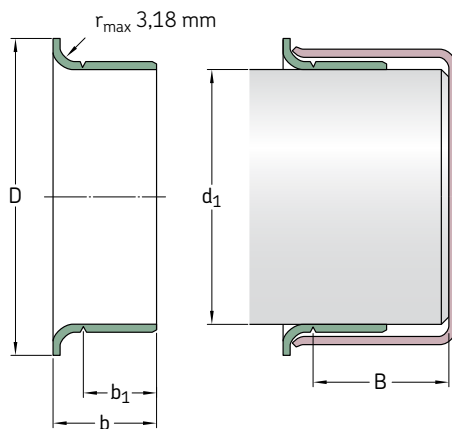
<sup>3)</sup> Previously 99372



| Shaft diameter range |        | Nominal dimensions |                  |                    |                  |          | Designation         |
|----------------------|--------|--------------------|------------------|--------------------|------------------|----------|---------------------|
| $d_1$<br>min         | max    | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                     |
| mm                   |        | mm                 |                  |                    |                  |          | —                   |
| 109,78               | 110,01 | 110,01             | 124,99           | 11,38              | 14,96            | 32,94    | 99434               |
| 109,91               | 110,11 | 109,93             | 124,99           | 12,93              | 16,51            | 31,75    | 99435               |
| 111,00               | 111,20 | 111,13             | 120,65           | 20,65              | 25,40            | 41,91    | 99437               |
| 111,79               | 111,99 | 111,99             | 120,65           | 19,05              | 22,50            | 33,02    | 99438               |
| 112,62               | 112,83 | 112,73             | 122,25           | 25,40              | 29,01            | 33,35    | 99439               |
| 114,20               | 114,40 | 114,30             | 123,19           | 20,65              | 25,40            | 31,75    | 99856 <sup>2)</sup> |
|                      |        | 114,30             | 124,46           | 20,65              | 25,40            | 31,75    | 99450               |
| 114,88               | 115,09 | 115,01             | 127,00           | 20,65              | 23,83            | 31,75    | 99452               |
| 117,37               | 117,58 | 117,48             | 127,00           | 11,13              | 15,88            | 34,93    | 99465               |
|                      |        | 117,48             | 128,60           | 25,40              | 31,75            | 34,93    | 99463               |
| 119,00               | 119,20 | 119,08             | 128,60           | 20,65              | 25,40            | 34,93    | 99468               |
| 119,89               | 120,09 | 119,99             | 129,79           | 8,00               | 11,00            | 33,60    | 99471               |
|                      |        | 119,99             | 129,79           | 19,99              | 24,99            | 32,00    | 99473               |
| 120,55               | 120,75 | 120,65             | 127,00           | 12,70              | 19,05            | 38,10    | 99475               |
| 121,89               | 122,10 | 122,00             | 131,50           | 19,99              | 24,00            | 32,00    | 99472               |
| 122,91               | 123,11 | 123,01             | 132,82           | 19,99              | 24,99            | 31,60    | 99484               |
| 123,72               | 123,93 | 123,83             | 133,35           | 15,88              | 19,05            | 36,53    | 99487               |
| 124,89               | 125,10 | 124,99             | 137,16           | 10,01              | 14,00            | 36,53    | 99490               |
|                      |        | 124,99             | 137,16           | 26,01              | 32,00            | 36,53    | 99492               |
| 126,95               | 127,15 | 127,00             | 137,16           | 13,72              | 17,30            | 36,53    | 99501               |
|                      |        | 127,00             | 137,16           | 17,48              | 22,23            | 36,53    | 99857 <sup>2)</sup> |
|                      |        | 127,00             | 137,16           | 17,48              | 22,23            | 36,53    | 99498               |
|                      |        | 127,00             | 136,91           | 20,65              | 25,40            | 36,53    | 99858 <sup>2)</sup> |
|                      |        | 127,00             | 136,91           | 20,65              | 25,40            | 36,53    | 99499               |
| 127,80               | 128,00 | 128,00             | 135,26           | 29,21              | 34,27            | 40,30    | 99482               |
| 129,79               | 130,00 | 129,90             | 139,52           | 19,05              | 23,83            | 30,00    | 99494               |
| 129,97               | 130,18 | 130,00             | 139,52           | 22,00              | 25,30            | 32,51    | 99874 <sup>2)</sup> |
|                      |        | 130,18             | 139,52           | 22,00              | 25,30            | 32,51    | 99491               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

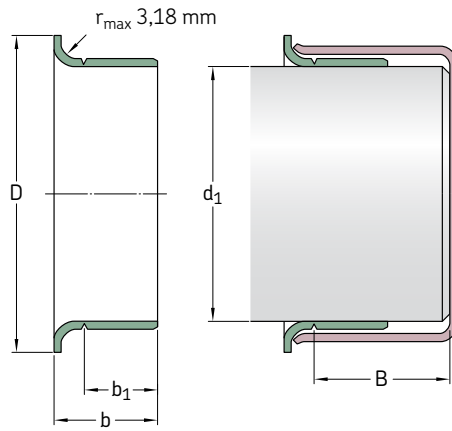
<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

**SKF SPEEDI-SLEEVE – metric dimensions (converted from inch dimensions)**
**d<sub>1</sub> 130,05 – 203,33 mm**


| Shaft diameter range |        | Nominal dimensions |                  |                    |                  |          | Designation         |
|----------------------|--------|--------------------|------------------|--------------------|------------------|----------|---------------------|
| $d_1$<br>min         | max    | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                     |
| mm                   |        | mm                 |                  |                    |                  |          | –                   |
| 130,05               | 130,25 | 130,18             | 139,70           | 20,65              | 25,40            | 31,75    | 99513               |
| 133,25               | 133,45 | 133,35             | 141,22           | 20,65              | 25,40            | 31,75    | 99525               |
| 134,80               | 135,00 | 134,90             | 145,67           | 20,50              | 25,40            | 31,75    | 99533               |
| 136,42               | 136,63 | 136,53             | 149,23           | 20,65              | 25,40            | 31,75    | 99537               |
| 138,02               | 138,23 | 138,13             | 146,05           | 38,10              | 42,88            | 47,63    | 99548               |
| 138,99               | 139,19 | 139,09             | 149,86           | 14,30              | 19,05            | 31,34    | 99547               |
| 139,65               | 139,85 | 139,70             | 150,83           | 13,16              | 17,91            | 31,75    | 99550               |
|                      |        | 139,70             | 150,83           | 20,65              | 25,40            | 31,75    | 99859 <sup>2)</sup> |
|                      |        | 139,70             | 150,83           | 20,65              | 25,40            | 31,75    | 99549               |
| 139,90               | 140,11 | 140,00             | 151,00           | 20,50              | 25,40            | 31,75    | 99552               |
| 142,77               | 142,98 | 142,88             | 157,18           | 22,23              | 25,40            | 46,02    | 99560               |
| 144,75               | 145,01 | 145,01             | 154,94           | 19,05              | 22,23            | 46,02    | 99571               |
| 145,44               | 145,64 | 145,64             | 154,94           | 14,30              | 19,05            | 49,23    | 99562               |
| 145,95               | 146,15 | 146,05             | 156,97           | 20,65              | 25,40            | 44,45    | 99575               |
| 149,12               | 149,33 | 149,23             | 157,18           | 25,40              | 31,75            | 33,35    | 99862 <sup>2)</sup> |
|                      |        | 149,23             | 157,18           | 25,40              | 31,75            | 33,35    | 99587               |
| 149,76               | 150,01 | 149,99             | 159,00           | 26,01              | 30,00            | 32,51    | 99595               |
| 150,72               | 150,93 | 150,83             | 161,93           | 25,40              | 28,58            | 47,63    | 99596               |
| 152,27               | 152,48 | 152,40             | 161,54           | 12,70              | 19,05            | 44,45    | 99601               |
|                      |        | 152,40             | 161,93           | 25,40              | 31,75            | 44,45    | 99599               |
| 153,87               | 154,13 | 154,00             | 161,93           | 26,01              | 30,00            | 32,99    | 99605               |
| 154,74               | 154,99 | 154,86             | 167,01           | 26,01              | 30,00            | 32,99    | 99606               |
| 157,43               | 157,68 | 157,56             | 168,28           | 20,65              | 27,00            | 44,45    | 99620               |
| 158,62               | 158,88 | 158,75             | 168,28           | 26,19              | 31,75            | 44,45    | 99625               |
| 159,74               | 159,99 | 159,99             | 171,45           | 25,40              | 31,75            | 34,93    | 99630               |
| 164,97               | 165,23 | 165,10             | 177,80           | 25,40              | 31,75            | 34,93    | 99650               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold



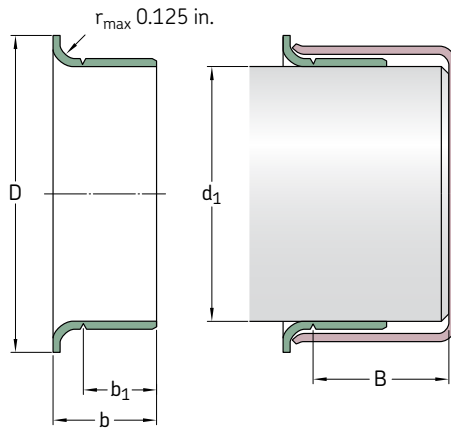
| Shaft diameter range |               | Nominal dimensions |                  |                    |                  |          | Designation               |
|----------------------|---------------|--------------------|------------------|--------------------|------------------|----------|---------------------------|
| $d_1$<br>min         | max           | $d_1$              | $D$<br>$\pm 1,6$ | $b_1$<br>$\pm 0,8$ | $b$<br>$\pm 0,8$ | $B^{1)}$ |                           |
| mm                   |               | mm                 |                  |                    |                  |          | —                         |
| <b>169,75</b>        | <b>170,00</b> | 169,88             | 182,58           | 31,75              | 38,00            | 44,45    | <b>99640</b>              |
| <b>171,32</b>        | <b>171,58</b> | 171,45             | 180,98           | 20,65              | 27,00            | 44,45    | <b>99675</b>              |
| <b>174,75</b>        | <b>175,01</b> | 175,01             | 186,99           | 27,99              | 32,00            | 35,00    | <b>99687</b>              |
| <b>177,67</b>        | <b>177,93</b> | 177,80             | 189,87           | 25,40              | 31,75            | 42,88    | <b>99864<sup>2)</sup></b> |
|                      |               | 177,80             | 189,87           | 25,40              | 31,75            | 42,88    | <b>99700</b>              |
| <b>179,76</b>        | <b>180,01</b> | 180,01             | 190,50           | 32,99              | 38,00            | 44,50    | <b>99721</b>              |
| <b>184,00</b>        | <b>184,25</b> | 184,15             | 197,10           | 31,75              | 38,10            | 55,25    | <b>99725</b>              |
| <b>184,73</b>        | <b>184,99</b> | 184,86             | 197,10           | 32,00              | 38,00            | 54,99    | <b>99726</b>              |
| <b>189,08</b>        | <b>189,33</b> | 189,31             | 199,64           | 20,65              | 25,40            | 31,75    | <b>99745</b>              |
| <b>190,37</b>        | <b>190,63</b> | 190,50             | 200,03           | 20,65              | 25,40            | 31,75    | <b>99750</b>              |
| <b>196,72</b>        | <b>196,98</b> | 196,85             | 210,06           | 25,40              | 33,35            | 47,63    | <b>99775</b>              |
| <b>199,87</b>        | <b>200,13</b> | 200,03             | 212,73           | 34,52              | 38,10            | 44,45    | <b>99787</b>              |
| <b>201,50</b>        | <b>201,75</b> | 201,63             | 212,73           | 25,40              | 31,75            | 44,45    | <b>99799</b>              |
| <b>203,07</b>        | <b>203,33</b> | 203,20             | 212,73           | 25,40              | 31,75            | 44,45    | <b>99800</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

# SKF SPEEDI-SLEEVE – inch dimensions

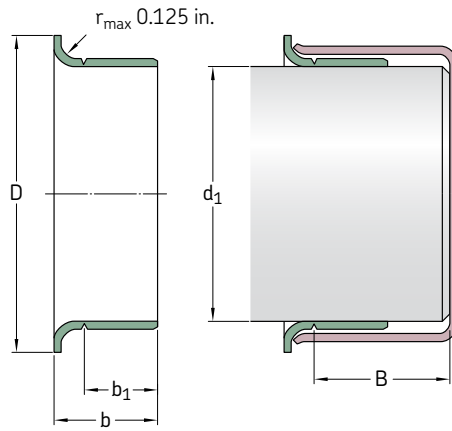
d<sub>1</sub> 0.472 – 1.339 in.



| Shaft diameter range  |       | Nominal dimensions |             |                          |             |                 | Designation         |
|-----------------------|-------|--------------------|-------------|--------------------------|-------------|-----------------|---------------------|
| d <sub>1</sub><br>min | max   | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                     |
| in.                   |       | in.                |             |                          |             |                 | –                   |
| 0.472                 | 0.475 | 0.472              | 0.610       | 0.236                    | 0.331       | 1.875           | 99049               |
| 0.498                 | 0.502 | 0.500              | 0.610       | 0.250                    | 0.344       | 2.000           | 99050               |
| 0.547                 | 0.551 | 0.551              | 0.750       | 0.250                    | 0.391       | 1.831           | 99055               |
| 0.560                 | 0.566 | 0.563              | 0.750       | 0.250                    | 0.391       | 1.831           | 99056               |
| 0.589                 | 0.593 | 0.591              | 0.750       | 0.197                    | 0.354       | 1.862           | 99059               |
| 0.623                 | 0.627 | 0.625              | 0.750       | 0.313                    | 0.406       | 2.000           | 99810 <sup>2)</sup> |
|                       |       | 0.625              | 0.750       | 0.313                    | 0.406       | 2.000           | 99062               |
| 0.626                 | 0.630 | 0.630              | 0.718       | 0.313                    | 0.438       | 2.000           | 99058               |
| 0.667                 | 0.671 | 0.669              | 0.875       | 0.315                    | 0.433       | 2.000           | 99068               |
| 0.682                 | 0.686 | 0.684              | 0.900       | 0.313                    | 0.438       | 2.000           | 99060               |
| 0.704                 | 0.709 | 0.709              | 0.962       | 0.315                    | 0.433       | 1.811           | 99082               |
| 0.748                 | 0.752 | 0.750              | 0.945       | 0.313                    | 0.438       | 2.000           | 99811 <sup>2)</sup> |
|                       |       | 0.750              | 0.945       | 0.313                    | 0.438       | 2.000           | 99076               |
| 0.759                 | 0.761 | 0.760              | 0.938       | 0.313                    | 0.438       | 2.000           | 99081               |
| 0.780                 | 0.784 | 0.781              | 0.935       | 0.313                    | 0.438       | 2.000           | 99080               |
| 0.785                 | 0.789 | 0.787              | 0.930       | 0.315                    | 0.433       | 2.000           | 99078               |
| 0.812                 | 0.815 | 0.813              | 1.188       | 0.375                    | 0.563       | 3.000           | 99083               |
| 0.857                 | 0.861 | 0.859              | 1.155       | 0.250                    | 0.375       | 2.000           | 99086               |
| 0.861                 | 0.866 | 0.866              | 1.188       | 0.259                    | 0.359       | 1.856           | 99084               |
|                       |       | 0.866              | 1.188       | 0.315                    | 0.472       | 1.812           | 99085               |
| 0.873                 | 0.877 | 0.875              | 1.094       | 0.313                    | 0.438       | 2.000           | 99812 <sup>2)</sup> |
|                       |       | 0.875              | 1.094       | 0.313                    | 0.438       | 2.000           | 99087               |
| 0.908                 | 0.912 | 0.910              | 1.218       | 0.313                    | 0.438       | 1.847           | 99860 <sup>2)</sup> |
|                       |       | 0.910              | 1.218       | 0.313                    | 0.438       | 1.847           | 99091               |
| 0.940                 | 0.945 | 0.945              | 1.130       | 0.313                    | 0.438       | 2.000           | 99092               |
| 0.966                 | 0.970 | 0.969              | 1.130       | 0.313                    | 0.438       | 2.000           | 99094               |
|                       |       | 0.969              | 1.130       | 0.625                    | 0.719       | 2.000           | 99096               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold



| Shaft diameter range |              | Nominal dimensions      |                         |                         |                         |                         | Designation                                               |
|----------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------------------------------|
| $d_1$<br>min         | max          | $d_1$                   | $D$<br>$\pm 0.063$      | $b_1$<br>$\pm 0.031$    | $b$<br>$\pm 0.031$      | $B^{1)}$                |                                                           |
| in.                  |              | in.                     |                         |                         |                         |                         | —                                                         |
| <b>0.982</b>         | <b>0.986</b> | 0.984<br>0.984          | 1.300<br>1.300          | 0.313<br>0.313          | 0.433<br>0.433          | 2.000<br>2.000          | <b>99813<sup>2)</sup></b><br><b>99098</b>                 |
| <b>0.998</b>         | <b>1.002</b> | 1.000<br>1.000          | 1.219<br>1.219          | 0.313<br>0.313          | 0.438<br>0.438          | 2.000<br>2.000          | <b>99814<sup>2)</sup></b><br><b>99868<sup>3)</sup></b>    |
| <b>1.019</b>         | <b>1.024</b> | 1.024                   | 1.313                   | 0.315                   | 0.472                   | 1.813                   | <b>99103</b>                                              |
| <b>1.060</b>         | <b>1.064</b> | 1.063<br>1.063          | 1.320<br>1.320          | 0.313<br>0.313          | 0.438<br>0.438          | 1.843<br>1.843          | <b>99815<sup>2)</sup></b><br><b>99106</b>                 |
| <b>1.087</b>         | <b>1.091</b> | 1.089                   | 1.406                   | 0.313                   | 0.438                   | 0.625                   | <b>99108</b>                                              |
| <b>1.100</b>         | <b>1.104</b> | 1.102<br>1.102          | 1.375<br>1.375          | 0.375<br>0.375          | 0.500<br>0.500          | 1.843<br>1.843          | <b>99866<sup>2)</sup></b><br><b>99111</b>                 |
| <b>1.123</b>         | <b>1.127</b> | 1.125<br>1.125<br>1.125 | 1.500<br>1.500<br>1.500 | 0.313<br>0.313<br>0.375 | 0.438<br>0.438<br>0.500 | 0.688<br>0.688<br>0.688 | <b>99816<sup>2)</sup></b><br><b>99112</b><br><b>99116</b> |
| <b>1.154</b>         | <b>1.158</b> | 1.156<br>1.156          | 1.350<br>1.350          | 0.375<br>0.375          | 0.500<br>0.500          | 0.688<br>0.688          | <b>99865<sup>2)</sup></b><br><b>99120</b>                 |
| <b>1.173</b>         | <b>1.178</b> | 1.175                   | 1.400                   | 0.313                   | 0.438                   | 0.688                   | <b>99122</b>                                              |
| <b>1.179</b>         | <b>1.184</b> | 1.181                   | 1.400                   | 0.315                   | 0.433                   | 0.688                   | <b>99114</b>                                              |
| <b>1.185</b>         | <b>1.190</b> | 1.188                   | 1.400                   | 0.313                   | 0.438                   | 0.688                   | <b>99118</b>                                              |
| <b>1.216</b>         | <b>1.222</b> | 1.219                   | 1.563                   | 0.313                   | 0.433                   | 0.625                   | <b>99123</b>                                              |
| <b>1.237</b>         | <b>1.243</b> | 1.240                   | 1.540                   | 0.315                   | 0.438                   | 0.688                   | <b>99141</b>                                              |
| <b>1.247</b>         | <b>1.253</b> | 1.250<br>1.250          | 1.500<br>1.500          | 0.313<br>0.313          | 0.438<br>0.438          | 0.688<br>0.688          | <b>99817<sup>2)</sup></b><br><b>99125</b>                 |
| <b>1.257</b>         | <b>1.263</b> | 1.260                   | 1.500                   | 0.315                   | 0.438                   | 0.688                   | <b>99128</b>                                              |
| <b>1.297</b>         | <b>1.301</b> | 1.299                   | 1.594                   | 0.591                   | 0.709                   | 1.000                   | <b>99121</b>                                              |
| <b>1.308</b>         | <b>1.314</b> | 1.313                   | 1.600                   | 0.250                   | 0.375                   | 0.813                   | <b>99129</b>                                              |
| <b>1.310</b>         | <b>1.316</b> | 1.313<br>1.313          | 1.594<br>1.594          | 0.500<br>0.500          | 0.625<br>0.625          | 0.813<br>0.813          | <b>99818<sup>2)</sup></b><br><b>99131</b>                 |
| <b>1.333</b>         | <b>1.339</b> | 1.339                   | 1.625                   | 0.500                   | 0.625                   | 0.813                   | <b>99134</b>                                              |

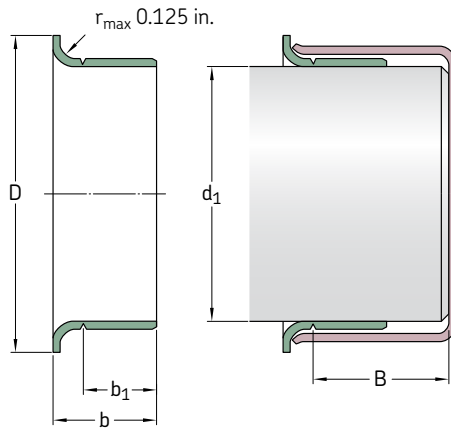
<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99100

# SKF SPEEDI-SLEEVE – inch dimensions

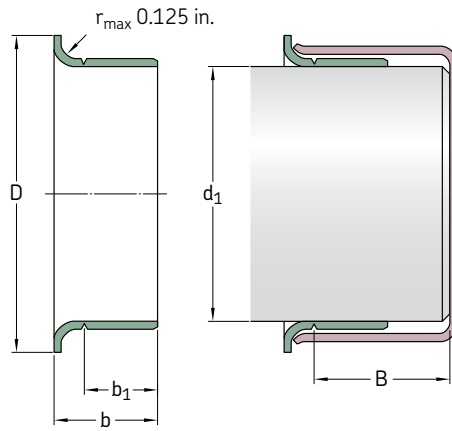
d<sub>1</sub> 1.371 – 1.940 in.



| Shaft diameter range  |              | Nominal dimensions |             |                          |             |                 | Designation               |
|-----------------------|--------------|--------------------|-------------|--------------------------|-------------|-----------------|---------------------------|
| d <sub>1</sub><br>min | max          | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                           |
| in.                   |              | in.                |             |                          |             |                 | –                         |
| <b>1.371</b>          | <b>1.377</b> | 1.375              | 1.638       | 0.313                    | 0.438       | 0.813           | <b>99133</b>              |
|                       |              | 1.375              | 1.638       | 0.500                    | 0.625       | 0.813           | <b>99819<sup>2)</sup></b> |
|                       |              | 1.375              | 1.638       | 0.500                    | 0.625       | 0.813           | <b>99138</b>              |
| <b>1.375</b>          | <b>1.381</b> | 1.375              | 1.638       | 0.512                    | 0.630       | 0.813           | <b>99820<sup>2)</sup></b> |
|                       |              | 1.375              | 1.638       | 0.512                    | 0.630       | 0.813           | <b>99139</b>              |
| <b>1.411</b>          | <b>1.417</b> | 1.417              | 1.781       | 0.512                    | 0.669       | 0.984           | <b>99146</b>              |
| <b>1.432</b>          | <b>1.438</b> | 1.438              | 1.781       | 0.563                    | 0.688       | 1.016           | <b>99821<sup>2)</sup></b> |
|                       |              | 1.438              | 1.781       | 0.563                    | 0.688       | 1.016           | <b>99143</b>              |
| <b>1.435</b>          | <b>1.441</b> | 1.438              | 1.781       | 0.375                    | 0.500       | 1.016           | <b>99144</b>              |
| <b>1.490</b>          | <b>1.496</b> | 1.496              | 1.781       | 0.512                    | 0.669       | 0.984           | <b>99147</b>              |
| <b>1.497</b>          | <b>1.503</b> | 1.500              | 1.781       | 0.375                    | 0.500       | 1.016           | <b>99823<sup>2)</sup></b> |
|                       |              | 1.500              | 1.781       | 0.375                    | 0.500       | 1.016           | <b>99150</b>              |
|                       |              | 1.500              | 1.781       | 0.563                    | 0.688       | 1.016           | <b>99822<sup>2)</sup></b> |
|                       |              | 1.500              | 1.781       | 0.563                    | 0.688       | 1.016           | <b>99149</b>              |
| <b>1.520</b>          | <b>1.526</b> | 1.523              | 1.859       | 0.438                    | 0.563       | 1.016           | <b>99152</b>              |
| <b>1.549</b>          | <b>1.555</b> | 1.552              | 1.859       | 0.438                    | 0.563       | 1.016           | <b>99155</b>              |
| <b>1.559</b>          | <b>1.565</b> | 1.562              | 1.859       | 0.563                    | 0.688       | 1.016           | <b>99824<sup>2)</sup></b> |
|                       |              | 1.562              | 1.859       | 0.563                    | 0.688       | 1.016           | <b>99156</b>              |
| <b>1.566</b>          | <b>1.572</b> | 1.569              | 1.859       | 0.625                    | 0.750       | 1.016           | <b>99159</b>              |
| <b>1.569</b>          | <b>1.575</b> | 1.575              | 1.850       | 0.390                    | 0.509       | 1.000           | <b>99153</b>              |
| <b>1.572</b>          | <b>1.578</b> | 1.578              | 1.850       | 0.512                    | 0.630       | 1.023           | <b>99825<sup>2)</sup></b> |
|                       |              | 1.578              | 1.850       | 0.512                    | 0.630       | 1.023           | <b>99157</b>              |
| <b>1.602</b>          | <b>1.608</b> | 1.605              | 1.938       | 0.500                    | 0.641       | 1.000           | <b>99160</b>              |
| <b>1.608</b>          | <b>1.614</b> | 1.614              | 1.938       | 0.500                    | 0.625       | 1.016           | <b>99163</b>              |
| <b>1.622</b>          | <b>1.628</b> | 1.625              | 1.875       | 0.313                    | 0.438       | 1.016           | <b>99161</b>              |
|                       |              | 1.625              | 1.875       | 0.563                    | 0.688       | 0.813           | <b>99826<sup>2)</sup></b> |
|                       |              | 1.625              | 1.875       | 0.563                    | 0.688       | 0.813           | <b>99162</b>              |
| <b>1.647</b>          | <b>1.654</b> | 1.650              | 2.087       | 0.445                    | 0.571       | 0.846           | <b>99166</b>              |
|                       |              | 1.650              | 2.087       | 0.563                    | 0.689       | 0.827           | <b>99169</b>              |
|                       |              | 1.654              | 2.087       | 0.563                    | 0.689       | 0.827           | <b>99873<sup>2)</sup></b> |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold



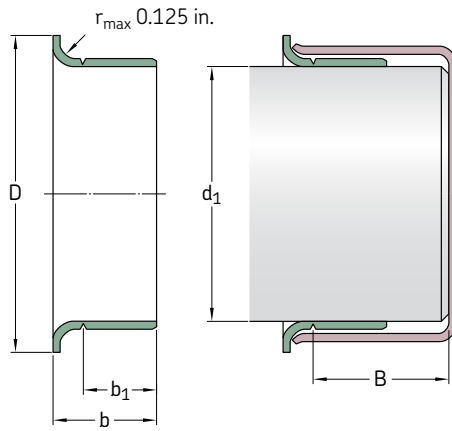
| Shaft diameter range |              | Nominal dimensions |                    |                      |                    |          | Designation               |
|----------------------|--------------|--------------------|--------------------|----------------------|--------------------|----------|---------------------------|
| $d_1$<br>min         | max          | $d_1$              | $D$<br>$\pm 0.063$ | $b_1$<br>$\pm 0.031$ | $b$<br>$\pm 0.031$ | $B^{1)}$ |                           |
| in.                  |              | in.                |                    |                      |                    |          | —                         |
| <b>1.653</b>         | <b>1.659</b> | 1.656              | 2.087              | 0.550                | 0.689              | 0.827    | <b>99165</b>              |
| <b>1.684</b>         | <b>1.690</b> | 1.688              | 1.906              | 0.563                | 0.688              | 0.875    | <b>99168</b>              |
| <b>1.685</b>         | <b>1.691</b> | 1.688              | 1.906              | 0.313                | 0.438              | 0.875    | <b>99167</b>              |
| <b>1.687</b>         | <b>1.693</b> | 1.693              | 1.906              | 0.500                | 0.625              | 0.844    | <b>99182</b>              |
| <b>1.715</b>         | <b>1.721</b> | 1.719              | 2.031              | 0.563                | 0.688              | 0.813    | <b>99171</b>              |
| <b>1.736</b>         | <b>1.742</b> | 1.739              | 2.063              | 0.375                | 0.500              | 0.813    | <b>99170</b>              |
| <b>1.747</b>         | <b>1.753</b> | 1.750              | 2.055              | 0.375                | 0.500              | 0.813    | <b>99172</b>              |
|                      |              | 1.750              | 2.063              | 0.531                | 0.625              | 0.878    | <b>99180</b>              |
|                      |              | 1.750              | 2.063              | 0.563                | 0.688              | 0.813    | <b>99827<sup>2)</sup></b> |
|                      |              | 1.750              | 2.063              | 0.563                | 0.688              | 0.813    | <b>99174</b>              |
|                      |              | 1.750              | 2.063              | 0.750                | 0.875              | 0.813    | <b>99828<sup>2)</sup></b> |
|                      |              | 1.750              | 2.063              | 0.750                | 0.875              | 0.813    | <b>99175</b>              |
| <b>1.761</b>         | <b>1.767</b> | 1.766              | 2.063              | 0.563                | 0.688              | 0.813    | <b>99829<sup>2)</sup></b> |
|                      |              | 1.766              | 2.063              | 0.563                | 0.688              | 0.813    | <b>99176</b>              |
| <b>1.769</b>         | <b>1.775</b> | 1.772              | 2.087              | 0.551                | 0.669              | 0.812    | <b>99830<sup>2)</sup></b> |
|                      |              | 1.772              | 2.087              | 0.551                | 0.669              | 0.812    | <b>99177</b>              |
| <b>1.778</b>         | <b>1.784</b> | 1.781              | 2.125              | 0.667                | 0.800              | 1.062    | <b>99179</b>              |
| <b>1.809</b>         | <b>1.815</b> | 1.813              | 2.090              | 0.563                | 0.688              | 1.000    | <b>99831<sup>2)</sup></b> |
|                      |              | 1.813              | 2.090              | 0.563                | 0.688              | 1.000    | <b>99181</b>              |
| <b>1.857</b>         | <b>1.863</b> | 1.859              | 2.156              | 0.563                | 0.688              | 1.000    | <b>99185</b>              |
| <b>1.866</b>         | <b>1.872</b> | 1.868              | 2.188              | 0.889                | 1.025              | 1.000    | <b>99186</b>              |
| <b>1.872</b>         | <b>1.878</b> | 1.875              | 2.203              | 0.175                | 0.295              | 0.744    | <b>99190</b>              |
|                      |              | 1.875              | 2.203              | 0.295                | 0.415              | 0.744    | <b>99188</b>              |
|                      |              | 1.875              | 2.203              | 0.375                | 0.516              | 1.050    | <b>99184</b>              |
|                      |              | 1.875              | 2.203              | 0.563                | 0.688              | 1.000    | <b>99832<sup>2)</sup></b> |
|                      |              | 1.875              | 2.203              | 0.563                | 0.688              | 1.000    | <b>99187</b>              |
| <b>1.887</b>         | <b>1.893</b> | 1.891              | 2.205              | 0.551                | 0.668              | 0.984    | <b>99189</b>              |
| <b>1.909</b>         | <b>1.915</b> | 1.912              | 2.219              | 0.375                | 0.500              | 1.000    | <b>99192</b>              |
| <b>1.934</b>         | <b>1.940</b> | 1.938              | 2.219              | 0.563                | 0.688              | 1.000    | <b>99833<sup>2)</sup></b> |
|                      |              | 1.938              | 2.219              | 0.563                | 0.688              | 1.000    | <b>99193</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

# SKF SPEEDI-SLEEVE – inch dimensions

d<sub>1</sub> 1.965 – 2.753 in.

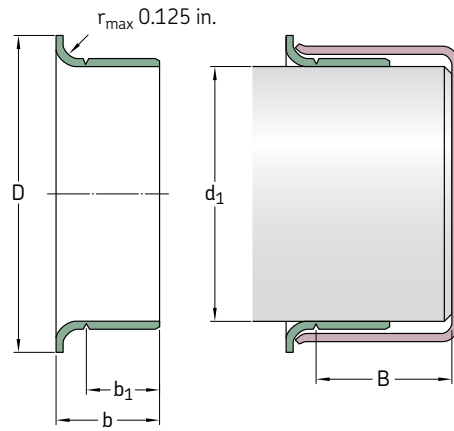


| Shaft diameter range  |              | Nominal dimensions |             |                          |             |                 | Designation               |
|-----------------------|--------------|--------------------|-------------|--------------------------|-------------|-----------------|---------------------------|
| d <sub>1</sub><br>min | max          | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                           |
| in.                   |              | in.                |             |                          |             |                 | –                         |
| <b>1.965</b>          | <b>1.971</b> | 1.969              | 2.244       | 0.551                    | 0.668       | 1.350           | <b>99052</b>              |
|                       |              | 1.969              | 2.244       | 0.551                    | 0.668       | 0.984           | <b>99196</b>              |
| <b>1.977</b>          | <b>1.983</b> | 1.980              | 2.313       | 0.563                    | 0.704       | 1.050           | <b>99198</b>              |
| <b>1.997</b>          | <b>2.003</b> | 2.000              | 2.406       | 0.563                    | 0.688       | 1.006           | <b>99834<sup>2)</sup></b> |
|                       |              | 2.000              | 2.406       | 0.563                    | 0.688       | 1.000           | <b>99199</b>              |
|                       |              | 2.000              | 2.406       | 0.875                    | 1.000       | 1.000           | <b>99835<sup>2)</sup></b> |
|                       |              | 2.000              | 2.406       | 0.875                    | 1.000       | 1.000           | <b>99200</b>              |
| <b>2.040</b>          | <b>2.047</b> | 2.047              | 2.469       | 0.500                    | 0.625       | 1.359           | <b>99878<sup>3)</sup></b> |
| <b>2.057</b>          | <b>2.063</b> | 2.063              | 2.469       | 0.781                    | 0.938       | 1.375           | <b>99205</b>              |
| <b>2.123</b>          | <b>2.128</b> | 2.125              | 2.422       | 0.500                    | 0.750       | 1.281           | <b>99210</b>              |
| <b>2.124</b>          | <b>2.130</b> | 2.125              | 2.422       | 0.781                    | 0.938       | 1.375           | <b>99836<sup>2)</sup></b> |
|                       |              | 2.125              | 2.422       | 0.781                    | 0.938       | 1.375           | <b>99212</b>              |
| <b>2.162</b>          | <b>2.168</b> | 2.165              | 2.441       | 0.787                    | 0.905       | 1.250           | <b>99863<sup>2)</sup></b> |
|                       |              | 2.165              | 2.441       | 0.787                    | 0.905       | 1.250           | <b>99215</b>              |
| <b>2.186</b>          | <b>2.192</b> | 2.188              | 2.500       | 0.781                    | 0.938       | 1.313           | <b>99218</b>              |
| <b>2.198</b>          | <b>2.205</b> | 2.205              | 2.531       | 0.500                    | 0.625       | 1.313           | <b>99220</b>              |
|                       |              | 2.205              | 2.531       | 0.779                    | 0.936       | 3.150           | <b>99224</b>              |
| <b>2.227</b>          | <b>2.233</b> | 2.230              | 2.531       | 0.500                    | 0.625       | 1.313           | <b>99861<sup>2)</sup></b> |
|                       |              | 2.230              | 2.531       | 0.500                    | 0.625       | 1.313           | <b>99229</b>              |
|                       |              | 2.230              | 2.531       | 0.781                    | 0.906       | 1.250           | <b>99230</b>              |
| <b>2.237</b>          | <b>2.243</b> | 2.240              | 2.563       | 0.764                    | 0.900       | 1.250           | <b>99226</b>              |
| <b>2.249</b>          | <b>2.255</b> | 2.250              | 2.531       | 0.313                    | 0.438       | 1.313           | <b>99838<sup>2)</sup></b> |
|                       |              | 2.250              | 2.531       | 0.313                    | 0.438       | 1.313           | <b>99227</b>              |
|                       |              | 2.250              | 2.531       | 0.781                    | 0.938       | 1.313           | <b>99837<sup>2)</sup></b> |
|                       |              | 2.250              | 2.531       | 0.781                    | 0.938       | 1.313           | <b>99225</b>              |
| <b>2.280</b>          | <b>2.286</b> | 2.283              | 2.598       | 0.787                    | 0.938       | 1.375           | <b>99219</b>              |
| <b>2.309</b>          | <b>2.315</b> | 2.313              | 2.688       | 0.781                    | 0.938       | 1.375           | <b>99231</b>              |
| <b>2.327</b>          | <b>2.333</b> | 2.328              | 2.750       | 0.750                    | 0.875       | 1.500           | <b>99233</b>              |
| <b>2.359</b>          | <b>2.365</b> | 2.362              | 2.785       | 0.370                    | 0.450       | 1.471           | <b>99241</b>              |
|                       |              | 2.362              | 2.785       | 0.787                    | 0.905       | 1.375           | <b>99869<sup>2)</sup></b> |
|                       |              | 2.362              | 2.785       | 0.787                    | 0.905       | 1.375           | <b>99235</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99204



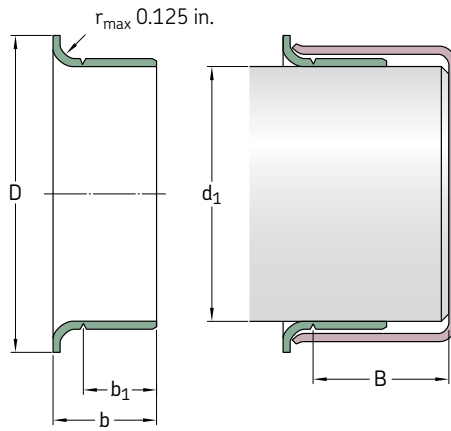
| Shaft diameter range |       | Nominal dimensions |                    |                      |                    |          | Designation         |
|----------------------|-------|--------------------|--------------------|----------------------|--------------------|----------|---------------------|
| $d_1$<br>min         | max   | $d_1$              | $D$<br>$\pm 0.063$ | $b_1$<br>$\pm 0.031$ | $b$<br>$\pm 0.031$ | $B^{1)}$ |                     |
| in.                  |       | in.                |                    |                      |                    |          | —                   |
| 2.372                | 2.378 | 2.375              | 2.750              | 0.594                | 0.750              | 1.375    | 99238               |
| 2.374                | 2.380 | 2.375              | 2.750              | 0.526                | 0.683              | 1.375    | 99240               |
|                      |       | 2.375              | 2.750              | 0.781                | 0.938              | 1.375    | 99839 <sup>2)</sup> |
|                      |       | 2.375              | 2.750              | 0.781                | 0.938              | 1.375    | 99237               |
| 2.434                | 2.441 | 2.438              | 2.828              | 0.781                | 0.938              | 1.393    | 99243               |
|                      |       | 2.441              | 2.828              | 0.500                | 0.625              | 1.425    | 99244               |
| 2.435                | 2.441 | 2.438              | 2.828              | 0.500                | 0.625              | 1.425    | 99242               |
| 2.489                | 2.495 | 2.492              | 2.875              | 0.781                | 0.938              | 1.393    | 99249               |
| 2.497                | 2.503 | 2.500              | 2.820              | 0.555                | 0.650              | 0.890    | 99253               |
| 2.500                | 2.506 | 2.500              | 2.828              | 0.500                | 0.656              | 1.393    | 99248               |
|                      |       | 2.500              | 2.820              | 0.781                | 0.938              | 1.375    | 99840 <sup>2)</sup> |
|                      |       | 2.500              | 2.820              | 0.781                | 0.938              | 1.375    | 99250               |
| 2.510                | 2.516 | 2.516              | 2.828              | 0.781                | 0.906              | 1.438    | 99251               |
| 2.556                | 2.562 | 2.559              | 2.850              | 0.787                | 0.905              | 1.375    | 99841 <sup>2)</sup> |
|                      |       | 2.559              | 2.850              | 0.787                | 0.905              | 1.375    | 99254               |
| 2.560                | 2.566 | 2.563              | 2.891              | 0.781                | 0.938              | 1.375    | 99256               |
| 2.595                | 2.601 | 2.598              | 2.990              | 0.781                | 0.938              | 1.250    | 99259               |
| 2.618                | 2.624 | 2.621              | 3.047              | 0.781                | 0.938              | 1.375    | 99261               |
| 2.621                | 2.627 | 2.625              | 3.047              | 0.781                | 0.906              | 1.375    | 99264               |
| 2.622                | 2.628 | 2.625              | 3.047              | 0.500                | 0.625              | 1.375    | 99260               |
| 2.625                | 2.631 | 2.625              | 3.047              | 0.781                | 0.938              | 1.375    | 99842 <sup>2)</sup> |
|                      |       | 2.625              | 3.047              | 0.781                | 0.938              | 1.375    | 99262               |
| 2.670                | 2.677 | 2.677              | 3.125              | 0.750                | 0.875              | 1.688    | 99266               |
| 2.727                | 2.733 | 2.730              | 3.125              | 0.781                | 0.906              | 1.313    | 99268               |
| 2.740                | 2.746 | 2.743              | 3.065              | 0.781                | 0.938              | 1.250    | 99273               |
| 2.745                | 2.751 | 2.750              | 3.125              | 0.781                | 0.938              | 1.250    | 99843 <sup>2)</sup> |
|                      |       | 2.750              | 3.125              | 0.781                | 0.938              | 1.250    | 99274               |
| 2.747                | 2.753 | 2.750              | 3.075              | 1.438                | 1.625              | 1.625    | 99267               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

# SKF SPEEDI-SLEEVE – inch dimensions

d<sub>1</sub> 2.750 – 3.566 in.

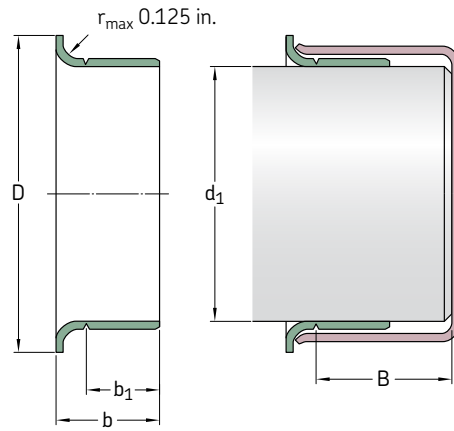


| Shaft diameter range  |       | Nominal dimensions |             |                          |             |                 | Designation         |
|-----------------------|-------|--------------------|-------------|--------------------------|-------------|-----------------|---------------------|
| d <sub>1</sub><br>min | max   | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                     |
| in.                   |       | in.                |             |                          |             |                 | –                   |
| 2.750                 | 2.756 | 2.750              | 3.125       | 0.406                    | 0.563       | 1.250           | 99272               |
|                       |       | 2.750              | 3.125       | 0.781                    | 0.938       | 1.250           | 99844 <sup>2)</sup> |
|                       |       | 2.750              | 3.125       | 0.781                    | 0.938       | 1.250           | 99275               |
|                       |       | 2.750              | 3.125       | 1.125                    | 1.250       | 1.312           | 99269               |
| 2.753                 | 2.759 | 2.756              | 3.125       | 0.787                    | 0.945       | 1.250           | 99276               |
| 2.809                 | 2.815 | 2.813              | 3.188       | 0.594                    | 0.688       | 1.250           | 99281               |
|                       |       |                    |             |                          |             |                 |                     |
| 2.828                 | 2.835 | 2.835              | 3.225       | 0.750                    | 0.875       | 1.343           | 99870 <sup>2)</sup> |
|                       |       | 2.835              | 3.225       | 0.750                    | 0.875       | 1.343           | 99284               |
| 2.838                 | 2.844 | 2.838              | 3.225       | 0.500                    | 0.656       | 1.250           | 99845 <sup>2)</sup> |
|                       |       | 2.838              | 3.225       | 0.500                    | 0.656       | 1.250           | 99282               |
| 2.866                 | 2.872 | 2.869              | 3.188       | 0.781                    | 0.938       | 1.250           | 99286               |
| 2.873                 | 2.879 | 2.875              | 3.219       | 0.781                    | 0.938       | 1.250           | 99846 <sup>2)</sup> |
|                       |       | 2.875              | 3.219       | 0.781                    | 0.938       | 1.250           | 99287               |
| 2.937                 | 2.943 | 2.938              | 3.344       | 0.500                    | 0.641       | 1.331           | 99290               |
|                       |       | 2.938              | 3.344       | 0.781                    | 0.938       | 1.313           | 99847 <sup>2)</sup> |
|                       |       | 2.940              | 3.344       | 0.781                    | 0.938       | 1.313           | 99293               |
| 2.950                 | 2.956 | 2.953              | 3.273       | 0.594                    | 0.690       | 1.083           | 99289               |
|                       |       | 2.953              | 3.305       | 0.866                    | 1.024       | 1.313           | 99875 <sup>2)</sup> |
|                       |       | 2.953              | 3.305       | 0.866                    | 1.024       | 1.313           | 99294               |
| 2.972                 | 2.976 | 2.974              | 3.235       | 0.813                    | 1.000       | 1.250           | 99292               |
| 2.990                 | 2.996 | 2.993              | 3.359       | 0.484                    | 0.625       | 1.331           | 99291               |
|                       |       | 2.993              | 3.359       | 0.563                    | 0.688       | 1.375           | 99298               |
|                       |       | 2.993              | 3.350       | 0.813                    | 1.000       | 1.281           | 99299               |
| 2.997                 | 3.003 | 3.000              | 3.240       | 0.813                    | 0.938       | 1.375           | 99296               |
| 3.000                 | 3.006 | 3.000              | 3.345       | 0.625                    | 0.813       | 1.280           | 99048 <sup>3)</sup> |
|                       |       | 3.000              | 3.235       | 0.813                    | 1.000       | 1.281           | 99848 <sup>2)</sup> |
|                       |       | 3.000              | 3.235       | 0.813                    | 1.000       | 1.281           | 99300               |
| 3.008                 | 3.014 | 3.011              | 3.355       | 0.500                    | 0.625       | 2.000           | 99301               |
| 3.064                 | 3.071 | 3.071              | 3.468       | 0.750                    | 0.875       | 2.056           | 99306               |
| 3.120                 | 3.126 | 3.125              | 3.531       | 0.688                    | 0.813       | 2.000           | 99311               |
|                       |       | 3.125              | 3.531       | 0.813                    | 1.000       | 2.000           | 99849 <sup>2)</sup> |
|                       |       | 3.125              | 3.531       | 0.813                    | 1.000       | 2.000           | 99312               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99303



| Shaft diameter range |              | Nominal dimensions |                    |                      |                    |          | Designation               |
|----------------------|--------------|--------------------|--------------------|----------------------|--------------------|----------|---------------------------|
| $d_1$<br>min         | max          | $d_1$              | $D$<br>$\pm 0.063$ | $b_1$<br>$\pm 0.031$ | $b$<br>$\pm 0.031$ | $B^{1)}$ |                           |
| in.                  |              | in.                |                    |                      |                    |          | —                         |
| <b>3.124</b>         | <b>3.132</b> | 3.125              | 3.525              | 0.551                | 0.709              | 2.031    | <b>99053<sup>3)</sup></b> |
| <b>3.142</b>         | <b>3.150</b> | 3.150              | 3.540              | 0.750                | 0.886              | 1.375    | <b>99313</b>              |
| <b>3.146</b>         | <b>3.153</b> | 3.150              | 3.543              | 0.433                | 0.591              | 1.375    | <b>99317</b>              |
|                      |              | 3.150              | 3.543              | 0.827                | 0.945              | 1.375    | <b>99315</b>              |
| <b>3.225</b>         | <b>3.231</b> | 3.228              | 3.585              | 0.660                | 0.848              | 1.750    | <b>99328</b>              |
| <b>3.247</b>         | <b>3.253</b> | 3.250              | 3.594              | 0.813                | 1.000              | 1.375    | <b>99322</b>              |
| <b>3.250</b>         | <b>3.256</b> | 3.250              | 3.575              | 0.595                | 0.719              | 1.375    | <b>99850<sup>2)</sup></b> |
|                      |              | 3.250              | 3.575              | 0.595                | 0.719              | 1.375    | <b>99324</b>              |
|                      |              | 3.250              | 3.585              | 0.688                | 0.875              | 1.250    | <b>99326</b>              |
|                      |              | 3.250              | 3.585              | 0.813                | 1.000              | 1.375    | <b>99851<sup>2)</sup></b> |
|                      |              | 3.250              | 3.585              | 0.813                | 1.000              | 1.375    | <b>99325</b>              |
| <b>3.307</b>         | <b>3.313</b> | 3.310              | 3.688              | 0.813                | 1.000              | 1.375    | <b>99331</b>              |
| <b>3.337</b>         | <b>3.347</b> | 3.342              | 3.700              | 0.669                | 0.827              | 1.378    | <b>99332</b>              |
|                      |              | 3.342              | 3.700              | 0.827                | 0.984              | 1.378    | <b>99872<sup>2)</sup></b> |
|                      |              | 3.342              | 3.700              | 0.827                | 0.984              | 1.378    | <b>99333</b>              |
| <b>3.338</b>         | <b>3.347</b> | 3.347              | 3.580              | 0.399                | 0.499              | 1.431    | <b>99334</b>              |
| <b>3.373</b>         | <b>3.379</b> | 3.375              | 3.688              | 0.375                | 0.500              | 1.410    | <b>99338</b>              |
|                      |              | 3.375              | 3.695              | 0.813                | 1.000              | 1.375    | <b>99337</b>              |
| <b>3.435</b>         | <b>3.441</b> | 3.438              | 3.844              | 0.781                | 0.906              | 1.406    | <b>99339</b>              |
| <b>3.457</b>         | <b>3.465</b> | 3.465              | 3.751              | 1.150                | 1.349              | 1.673    | <b>99481</b>              |
| <b>3.477</b>         | <b>3.483</b> | 3.480              | 3.835              | 0.781                | 0.906              | 1.406    | <b>99340</b>              |
| <b>3.497</b>         | <b>3.503</b> | 3.500              | 3.844              | 0.625                | 0.813              | 1.347    | <b>99346</b>              |
| <b>3.500</b>         | <b>3.506</b> | 3.500              | 3.825              | 0.313                | 0.500              | 1.347    | <b>99347</b>              |
|                      |              | 3.500              | 3.844              | 0.813                | 1.000              | 1.347    | <b>99852<sup>2)</sup></b> |
|                      |              | 3.500              | 3.844              | 0.813                | 1.000              | 1.347    | <b>99350</b>              |
| <b>3.501</b>         | <b>3.507</b> | 3.504              | 3.844              | 0.625                | 0.813              | 1.348    | <b>99349</b>              |
| <b>3.540</b>         | <b>3.546</b> | 3.543              | 4.000              | 0.438                | 0.538              | 1.813    | <b>99352</b>              |
|                      |              | 3.543              | 4.000              | 0.526                | 0.667              | 1.750    | <b>99353</b>              |
|                      |              | 3.543              | 4.000              | 0.710                | 0.906              | 1.813    | <b>99351</b>              |
|                      |              | 3.543              | 4.000              | 0.906                | 1.102              | 1.750    | <b>99354</b>              |
| <b>3.560</b>         | <b>3.566</b> | 3.563              | 3.900              | 0.813                | 1.000              | 1.750    | <b>99356</b>              |

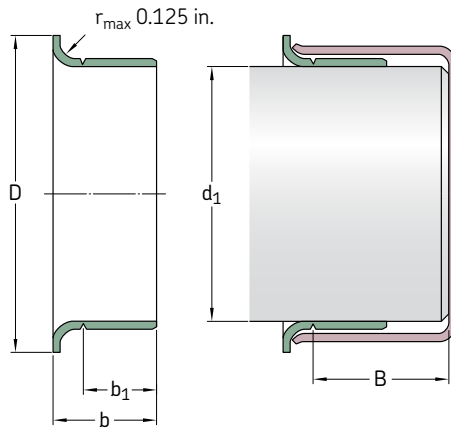
<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99307

# SKF SPEEDI-SLEEVE – inch dimensions

d<sub>1</sub> 3.618 – 5.125 in.

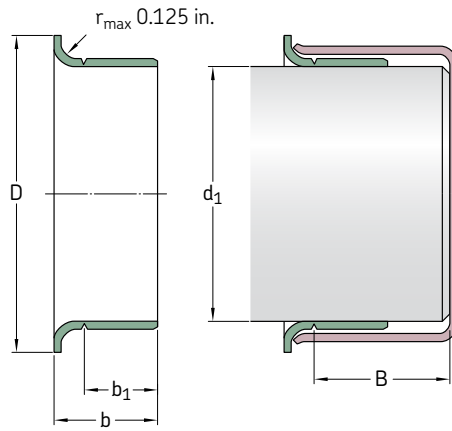


| Shaft diameter range  |       | Nominal dimensions |             |                          |             |                 | Designation                  |
|-----------------------|-------|--------------------|-------------|--------------------------|-------------|-----------------|------------------------------|
| d <sub>1</sub><br>min | max   | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                              |
| in.                   |       | in.                |             |                          |             |                 | –                            |
| 3.618                 | 3.624 | 3.621              | 4.031       | 0.813                    | 1.000       | 1.750           | <b>99360</b>                 |
| 3.623                 | 3.629 | 3.625              | 4.025       | 0.500                    | 0.625       | 1.750           | <b>99363</b>                 |
|                       |       | 3.625              | 4.031       | 0.813                    | 1.000       | 1.750           | <b>99362</b>                 |
| 3.684                 | 3.690 | 3.688              | 4.031       | 0.313                    | 0.438       | 0.875           | <b>99368</b>                 |
| 3.685                 | 3.691 | 3.688              | 4.025       | 0.813                    | 0.938       | 1.800           | <b>99365</b>                 |
| 3.727                 | 3.733 | 3.730              | 4.016       | 0.469                    | 0.594       | 1.800           | <b>99359</b>                 |
|                       |       | 3.730              | 4.025       | 0.781                    | 0.906       | 1.800           | <b>99366</b>                 |
| 3.737                 | 3.743 | 3.740              | 4.025       | 0.827                    | 0.945       | 1.800           | <b>99369</b>                 |
| 3.740                 | 3.746 | 3.743              | 4.031       | 0.344                    | 0.500       | 1.800           | <b>99374</b>                 |
|                       |       | 3.743              | 4.035       | 0.469                    | 0.594       | 1.800           | <b>99364</b>                 |
| 3.746                 | 3.752 | 3.749              | 4.025       | 0.563                    | 0.688       | 1.800           | <b>99376</b>                 |
| 3.750                 | 3.756 | 3.750              | 4.020       | 0.688                    | 0.875       | 1.800           | <b>99853</b> <sup>2)3)</sup> |
|                       |       | 3.753              | 4.025       | 0.344                    | 0.500       | 1.800           | <b>99367</b>                 |
|                       |       | 3.753              | 4.020       | 0.688                    | 0.875       | 1.800           | <b>99372</b>                 |
| 3.868                 | 3.874 | 3.871              | 4.185       | 0.813                    | 1.000       | 1.875           | <b>99386</b>                 |
| 3.873                 | 3.879 | 3.875              | 4.219       | 0.813                    | 1.000       | 1.875           | <b>99387</b>                 |
| 3.935                 | 3.941 | 3.938              | 4.313       | 0.813                    | 1.000       | 2.050           | <b>99854</b> <sup>2)</sup>   |
|                       |       | 3.938              | 4.313       | 0.813                    | 1.000       | 2.050           | <b>99393</b>                 |
| 3.998                 | 4.006 | 4.000              | 4.375       | 0.500                    | 0.625       | 2.066           | <b>99401</b>                 |
|                       |       | 4.000              | 4.375       | 0.600                    | 0.725       | 2.050           | <b>99395</b>                 |
|                       |       | 4.000              | 4.375       | 0.650                    | 0.775       | 1.375           | <b>99400</b>                 |
|                       |       | 4.000              | 4.375       | 0.813                    | 1.000       | 2.050           | <b>99855</b> <sup>2)</sup>   |
|                       |       | 4.000              | 4.375       | 0.813                    | 1.000       | 2.050           | <b>99399</b>                 |
| 4.090                 | 4.098 | 4.094              | 4.438       | 0.787                    | 0.945       | 1.417           | <b>99409</b>                 |
| 4.122                 | 4.130 | 4.125              | 4.470       | 0.813                    | 1.000       | 1.375           | <b>99412</b>                 |
| 4.130                 | 4.138 | 4.134              | 4.470       | 0.787                    | 0.913       | 1.378           | <b>99413</b>                 |
| 4.183                 | 4.191 | 4.188              | 4.500       | 0.813                    | 1.000       | 1.375           | <b>99418</b>                 |
| 4.226                 | 4.234 | 4.234              | 4.610       | 0.781                    | 0.906       | 1.438           | <b>99423</b>                 |
| 4.248                 | 4.256 | 4.250              | 4.610       | 0.813                    | 1.000       | 1.438           | <b>99424</b>                 |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

<sup>3)</sup> Previously 99372



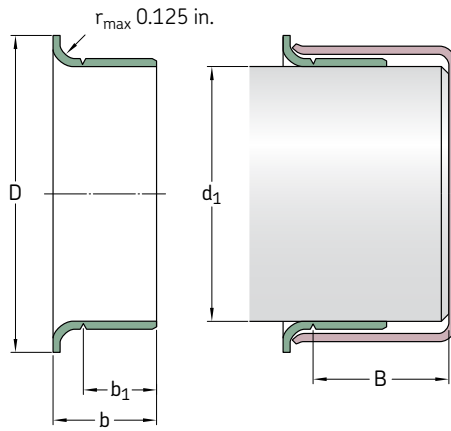
| Shaft diameter range |       | Nominal dimensions |                    |                      |                    |          | Designation         |
|----------------------|-------|--------------------|--------------------|----------------------|--------------------|----------|---------------------|
| $d_1$<br>min         | max   | $d_1$              | $D$<br>$\pm 0.063$ | $b_1$<br>$\pm 0.031$ | $b$<br>$\pm 0.031$ | $B^{1)}$ |                     |
| in.                  |       | in.                |                    |                      |                    |          | —                   |
| 4.322                | 4.331 | 4.331              | 4.921              | 0.448                | 0.589              | 1.297    | 99434               |
| 4.327                | 4.335 | 4.328              | 4.921              | 0.509                | 0.650              | 1.250    | 99435               |
| 4.370                | 4.378 | 4.375              | 4.750              | 0.813                | 1.000              | 1.650    | 99437               |
| 4.401                | 4.409 | 4.409              | 4.750              | 0.750                | 0.886              | 1.300    | 99438               |
| 4.434                | 4.442 | 4.438              | 4.813              | 1.000                | 1.142              | 1.313    | 99439               |
| 4.496                | 4.504 | 4.500              | 4.850              | 0.813                | 1.000              | 1.250    | 99856 <sup>2)</sup> |
|                      |       | 4.500              | 4.900              | 0.813                | 1.000              | 1.250    | 99450               |
| 4.523                | 4.531 | 4.528              | 5.000              | 0.813                | 0.938              | 1.250    | 99452               |
| 4.621                | 4.629 | 4.625              | 5.000              | 0.438                | 0.625              | 1.375    | 99465               |
|                      |       | 4.625              | 5.063              | 1.000                | 1.250              | 1.375    | 99463               |
| 4.685                | 4.693 | 4.688              | 5.063              | 0.813                | 1.000              | 1.375    | 99468               |
| 4.720                | 4.728 | 4.724              | 5.110              | 0.315                | 0.433              | 1.323    | 99471               |
|                      |       | 4.724              | 5.110              | 0.787                | 0.984              | 1.260    | 99473               |
| 4.746                | 4.754 | 4.750              | 5.000              | 0.500                | 0.750              | 1.500    | 99475               |
| 4.799                | 4.807 | 4.803              | 5.177              | 0.787                | 0.945              | 1.260    | 99472               |
| 4.839                | 4.847 | 4.843              | 5.229              | 0.787                | 0.984              | 1.244    | 99484               |
| 4.871                | 4.879 | 4.875              | 5.250              | 0.625                | 0.750              | 1.438    | 99487               |
| 4.917                | 4.925 | 4.921              | 5.400              | 0.394                | 0.551              | 1.438    | 99490               |
|                      |       | 4.921              | 5.400              | 1.024                | 1.260              | 1.438    | 99492               |
| 4.998                | 5.006 | 5.000              | 5.400              | 0.540                | 0.681              | 1.438    | 99501               |
|                      |       | 5.000              | 5.400              | 0.688                | 0.875              | 1.438    | 99857 <sup>2)</sup> |
|                      |       | 5.000              | 5.400              | 0.688                | 0.875              | 1.438    | 99498               |
|                      |       | 5.000              | 5.390              | 0.813                | 1.000              | 1.438    | 99858 <sup>2)</sup> |
|                      |       | 5.000              | 5.390              | 0.813                | 1.000              | 1.438    | 99499               |
| 5.032                | 5.039 | 5.039              | 5.325              | 1.150                | 1.349              | 1.587    | 99482               |
| 5.110                | 5.118 | 5.114              | 5.493              | 0.750                | 0.938              | 1.181    | 99494               |
| 5.117                | 5.125 | 5.118              | 5.493              | 0.866                | 0.996              | 1.280    | 99874 <sup>2)</sup> |
|                      |       | 5.125              | 5.493              | 0.866                | 0.996              | 1.280    | 99491               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

# SKF SPEEDI-SLEEVE – inch dimensions

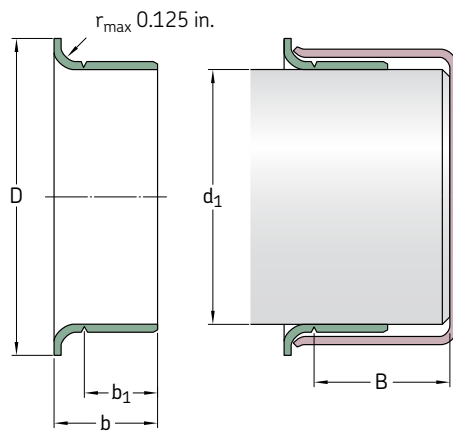
d<sub>1</sub> 5.120 – 8.005 in.



| Shaft diameter range  |       | Nominal dimensions |             |                          |             |                 | Designation         |
|-----------------------|-------|--------------------|-------------|--------------------------|-------------|-----------------|---------------------|
| d <sub>1</sub><br>min | max   | d <sub>1</sub>     | D<br>±0.063 | b <sub>1</sub><br>±0.031 | b<br>±0.031 | B <sup>1)</sup> |                     |
| in.                   |       | in.                |             |                          |             |                 | –                   |
| 5.120                 | 5.128 | 5.125              | 5.500       | 0.813                    | 1.000       | 1.250           | 99513               |
| 5.246                 | 5.254 | 5.250              | 5.560       | 0.813                    | 1.000       | 1.250           | 99525               |
| 5.307                 | 5.315 | 5.311              | 5.735       | 0.807                    | 1.000       | 1.250           | 99533               |
| 5.371                 | 5.379 | 5.375              | 5.875       | 0.813                    | 1.000       | 1.250           | 99537               |
| 5.434                 | 5.442 | 5.438              | 5.750       | 1.500                    | 1.688       | 1.875           | 99548               |
| 5.472                 | 5.480 | 5.476              | 5.900       | 0.563                    | 0.750       | 1.234           | 99547               |
| 5.498                 | 5.506 | 5.500              | 5.938       | 0.518                    | 0.705       | 1.250           | 99550               |
|                       |       | 5.500              | 5.938       | 0.813                    | 1.000       | 1.250           | 99859 <sup>2)</sup> |
|                       |       | 5.500              | 5.938       | 0.813                    | 1.000       | 1.250           | 99549               |
| 5.508                 | 5.516 | 5.512              | 5.945       | 0.807                    | 1.000       | 1.250           | 99552               |
| 5.621                 | 5.629 | 5.625              | 6.188       | 0.875                    | 1.000       | 1.812           | 99560               |
| 5.699                 | 5.709 | 5.709              | 6.100       | 0.750                    | 0.875       | 1.812           | 99571               |
| 5.726                 | 5.734 | 5.734              | 6.100       | 0.563                    | 0.750       | 1.938           | 99562               |
| 5.746                 | 5.754 | 5.750              | 6.180       | 0.813                    | 1.000       | 1.750           | 99575               |
| 5.871                 | 5.879 | 5.875              | 6.188       | 1.000                    | 1.250       | 1.313           | 99862 <sup>2)</sup> |
|                       |       | 5.875              | 6.188       | 1.000                    | 1.250       | 1.313           | 99587               |
| 5.896                 | 5.906 | 5.905              | 6.260       | 1.024                    | 1.181       | 1.280           | 99595               |
| 5.934                 | 5.942 | 5.938              | 6.375       | 1.000                    | 1.125       | 1.875           | 99596               |
| 5.995                 | 6.003 | 6.000              | 6.360       | 0.500                    | 0.750       | 1.750           | 99601               |
|                       |       | 6.000              | 6.375       | 1.000                    | 1.250       | 1.750           | 99599               |
| 6.058                 | 6.068 | 6.063              | 6.375       | 1.024                    | 1.181       | 1.299           | 99605               |
| 6.092                 | 6.102 | 6.097              | 6.575       | 1.024                    | 1.181       | 1.299           | 99606               |
| 6.198                 | 6.208 | 6.203              | 6.625       | 0.813                    | 1.063       | 1.750           | 99620               |
| 6.245                 | 6.255 | 6.250              | 6.625       | 1.031                    | 1.250       | 1.750           | 99625               |
| 6.289                 | 6.299 | 6.299              | 6.750       | 1.000                    | 1.250       | 1.375           | 99630               |
| 6.495                 | 6.505 | 6.500              | 7.000       | 1.000                    | 1.250       | 1.375           | 99650               |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold



| Shaft diameter range |              | Nominal dimensions |                    |                      |                    |          | Designation               |
|----------------------|--------------|--------------------|--------------------|----------------------|--------------------|----------|---------------------------|
| $d_1$<br>min         | max          | $d_1$              | $D$<br>$\pm 0.063$ | $b_1$<br>$\pm 0.031$ | $b$<br>$\pm 0.031$ | $B^{1)}$ |                           |
| in.                  |              | in.                |                    |                      |                    |          | —                         |
| <b>6.683</b>         | <b>6.693</b> | 6.688              | 7.188              | 1.250                | 1.496              | 1.750    | <b>99640</b>              |
| <b>6.745</b>         | <b>6.755</b> | 6.750              | 7.125              | 0.813                | 1.063              | 1.750    | <b>99675</b>              |
| <b>6.880</b>         | <b>6.890</b> | 6.890              | 7.362              | 1.102                | 1.260              | 1.378    | <b>99687</b>              |
| <b>6.995</b>         | <b>7.005</b> | 7.000              | 7.475              | 1.000                | 1.250              | 1.688    | <b>99864<sup>2)</sup></b> |
|                      |              | 7.000              | 7.475              | 1.000                | 1.250              | 1.688    | <b>99700</b>              |
| <b>7.077</b>         | <b>7.087</b> | 7.087              | 7.500              | 1.299                | 1.496              | 1.752    | <b>99721</b>              |
| <b>7.244</b>         | <b>7.254</b> | 7.250              | 7.760              | 1.250                | 1.500              | 2.175    | <b>99725</b>              |
| <b>7.273</b>         | <b>7.283</b> | 7.278              | 7.760              | 1.260                | 1.496              | 2.165    | <b>99726</b>              |
| <b>7.444</b>         | <b>7.454</b> | 7.453              | 7.860              | 0.813                | 1.000              | 1.250    | <b>99745</b>              |
| <b>7.495</b>         | <b>7.505</b> | 7.500              | 7.875              | 0.813                | 1.000              | 1.250    | <b>99750</b>              |
| <b>7.745</b>         | <b>7.755</b> | 7.750              | 8.270              | 1.000                | 1.313              | 1.875    | <b>99775</b>              |
| <b>7.869</b>         | <b>7.879</b> | 7.875              | 8.375              | 1.359                | 1.500              | 1.750    | <b>99787</b>              |
| <b>7.933</b>         | <b>7.943</b> | 7.938              | 8.375              | 1.000                | 1.250              | 1.750    | <b>99799</b>              |
| <b>7.995</b>         | <b>8.005</b> | 8.000              | 8.375              | 1.000                | 1.250              | 1.750    | <b>99800</b>              |

<sup>1)</sup> Possible max. distance of the rear groove from the shaft end when the installation tool supplied with the sleeve is used

<sup>2)</sup> SKF SPEEDI-SLEEVE Gold

# Wear sleeves for heavy industrial applications

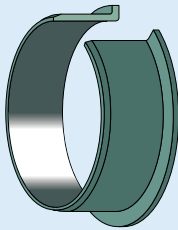
Outside contamination particles and polishing friction between a rotating shaft and a seal can, over time, result in severe shaft damage. Instead of repairing or replacing the damaged shaft, SKF recommends the use of wear sleeves for heavy industrial applications (LDSL), primarily in applications where no SKF SPEEDI-SLEEVE is available, i.e. for shaft diameters ranging from 211,15 to 1 143 mm (8.313 to 45 in.). The sleeves are made to order to fit shaft diameters within the primary ranges listed in **tables 1** and **2**. A selection of sizes is listed in the product tables starting on **page 34**.

The LDSLV designs are recommended for applications where the operating conditions for the seals are difficult, particularly where solid contaminants can reach the seals, like in rolling mills, primary metal plants and in chemical and mineral plants.

In applications where seal wear and shaft damage can be expected, SKF recommends that the wear sleeves be installed into the application from the outset. It will then not be necessary to rework the shaft before installing a replacement sleeve and the original size can be used for the replacement seal.

**Table 1**

## Primary dimension range of LDSLV3



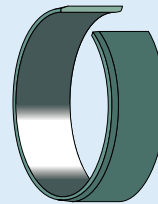
| Shaft range<br>over      incl. | Width <sup>1)</sup> |                | max            |
|--------------------------------|---------------------|----------------|----------------|
|                                | min                 |                |                |
| mm/in.                         | mm/in.              |                |                |
| 211,15<br>8.313                | 736,60<br>29.000    | 17,48<br>0.688 | 63,50<br>2.500 |
| 736,60<br>29.000               | 1 143,00<br>45.000  | 25,40<br>1.000 | 63,50<br>2.500 |

<sup>1)</sup> Total width (b), 38,10 to 50,80 mm (1.5 to 2 in.) at 1 143,00 mm (45 in.) shaft diameter

Contact SKF for LDSLV3 designs outside the primary range.

**Table 2**

## Primary dimension range of LDSLV4



| Shaft range<br>over      incl. | Width <sup>1)</sup> |                | max            |
|--------------------------------|---------------------|----------------|----------------|
|                                | min                 |                |                |
| mm/in.                         | mm/in.              |                |                |
| 211,15<br>8.313                | 736,60<br>29.000    | 12,70<br>0.500 | 63,50<br>2.500 |
| 736,60<br>29.000               | 1 143,00<br>45.000  | 19,05<br>0.750 | 63,50<br>2.500 |

<sup>1)</sup> Total width (b), 38,10 to 50,80 mm (1.5 to 2 in.) at 1 143,00 mm (45 in.) shaft diameter

Contact SKF for LDSLV4 designs outside the primary range.

## Designs and features

There are two designs of SKF wear sleeves for heavy industrial applications; LDSLV3 with a flange (→ **fig. 1**) and LDSLV4 without a flange (→ **fig. 2**). Both designs are made of SAE 1008 chromium-plated carbon steel to enhance wear and corrosion resistance. Other sleeve materials can be provided to meet the demands of a specific application. The sleeve outside diameter is specially ground to provide a precision counterface surface for the seal. The wall thickness of the standard sleeves is 2,39 mm (0.094 in.).

LDSLV3 is designed with a flange to simplify final positioning of the sleeve. The width of the counterface for the seal is 6,35 mm (0.25 in.) narrower than the total width of the sleeve. The flange adds a nominal 25,4 mm (1 in.) over the shaft diameter. The flange height is 12,7 mm (0.5 in.) for all sizes. Note that force should never be applied directly to the flange when installing an LDSLV3.

LDSLV4 has the same features as LDSLV3 but has no flange. LDSLV4 is intended for applications where a flange could interfere with other components during installation, or where a wider contact surface for the seal is required.

## Using LDSLV designs

There are two alternative ways of using SKF wear sleeves for heavy industrial applications (→ **fig. 3**);

- 1 The sleeve is positioned on the shaft until it covers the damaged part and a new seal, designed for a 4,78 mm (0.188 in.) larger shaft diameter is used.
- 2 The shaft is machined down by 4,78 mm (0.188 in.) in diameter, the sleeve is installed and the original seal size is used.

The reworked shaft surface for the sleeve should have a surface roughness of between  $R_a$  2,5 and 3,2  $\mu\text{m}$  (100 to 125  $\mu\text{in.}$ )

**NOTE:** The shaft tolerances for LDSLV designs, due to their heated slip-fit installation, are different from those for radial shaft seals. Contact SKF for assistance if the sleeves are to be used in systems with sustained temperatures higher than 75 °C (165 °F) and surface speeds in excess of 20 m/s (3 900 ft/min).

## Installation

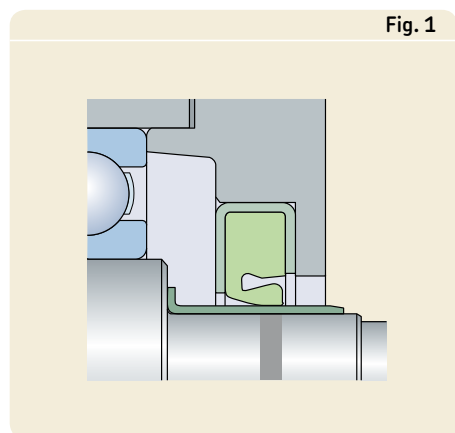
SKF wear sleeves for heavy industrial applications are designed for a heated slip-fit installation and must therefore be uniformly heated prior to installation on the shaft. The sleeve temperature should be approximately 180 °C (355 °F). Under no circumstances should the sleeve be heated to above 200 °C (390 °F). Any of the heating techniques normally used for bearings is suitable, e.g. induction heaters or heating cabinets.

The sleeves should be installed immediately after heating since they cool rapidly and could seize on the shaft before the correct position is achieved. If repositioning is necessary, use a soft faced hammer and a wooden block. After the sleeve is in the desired position, check the lead-in chamfer for any damage during installation.

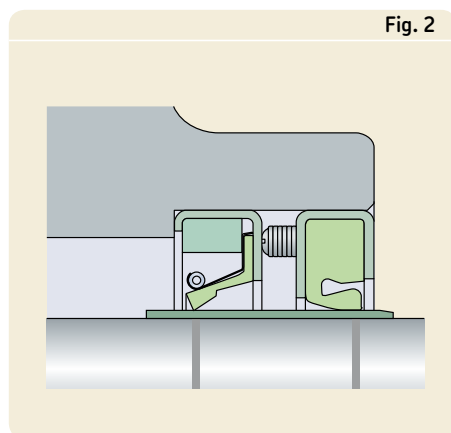
## Removal

Wear sleeves for heavy industrial applications can be removed either by heating them or expanding them by light hammer blows. Prior to removal, the flange of the LDSLV3 should first be cut through at one point, using care not to damage the shaft surface.

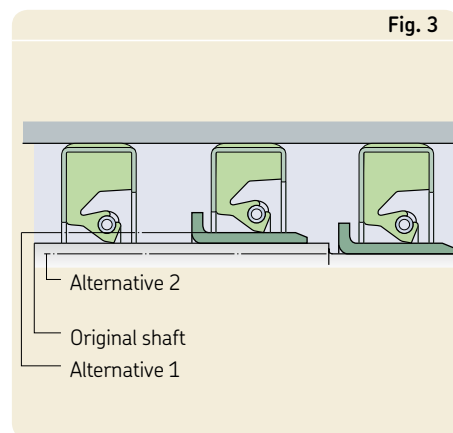
LDSLV3



LDSLV4

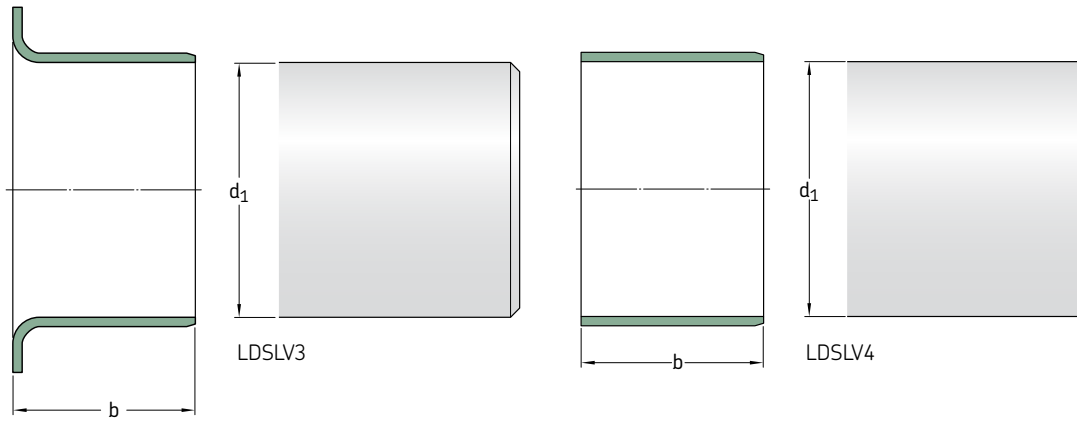


Using LDSLV designs

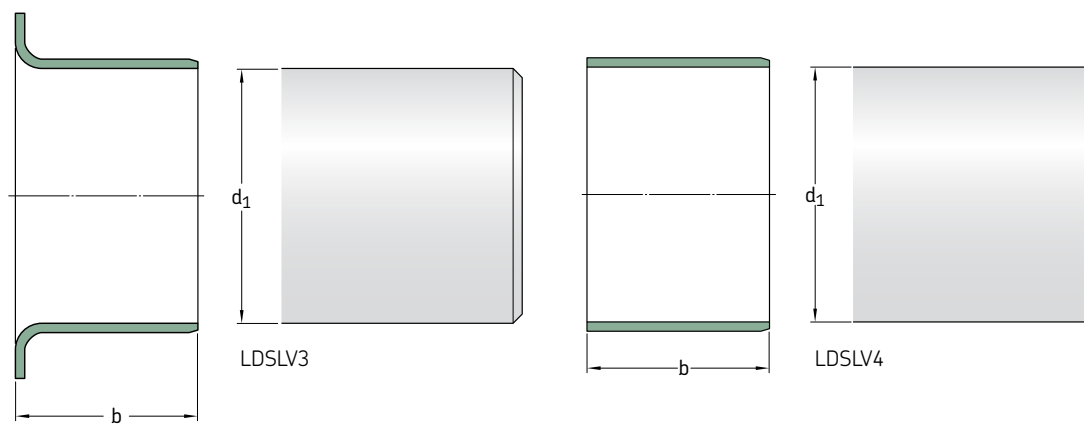


# Wear sleeves for heavy industrial applications – LDSLV3 and LDSLV4 – metric dimensions

d<sub>1</sub> 215,00 – 1 100,23 mm



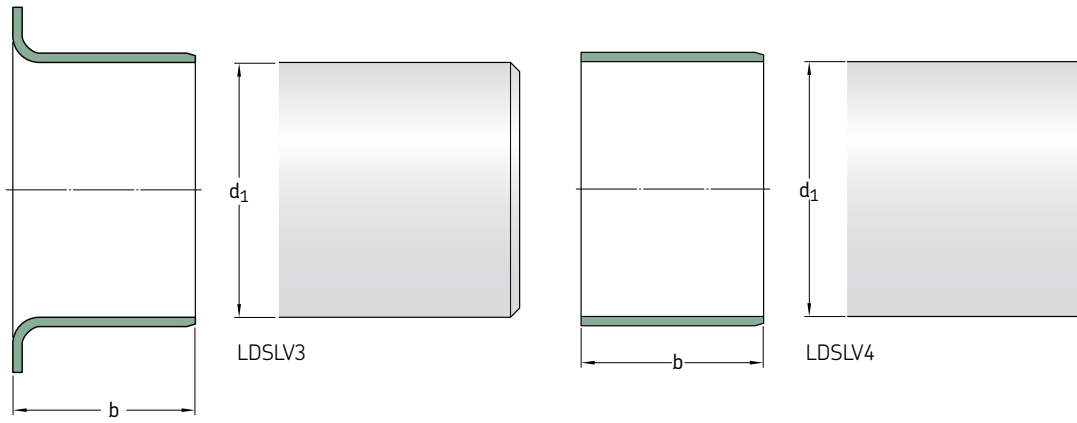
| Shaft diameter | Sleeve width | Reference sleeve installed outside diameter | Design | Designation | Shaft diameter | Sleeve width | Reference sleeve installed outside diameter | Design | Designation |
|----------------|--------------|---------------------------------------------|--------|-------------|----------------|--------------|---------------------------------------------|--------|-------------|
| d <sub>1</sub> | b            |                                             |        |             | d <sub>1</sub> | b            |                                             |        |             |
| mm             | mm           | mm                                          | –      | –           | mm             | mm           | mm                                          | –      | –           |
| 215,00         | 25,40        | 220                                         | LDSLV3 | 90179       | 405,23         | 50           | 410                                         | LDSLV4 | 90042       |
| 215,20         | 35           | 220                                         | LDSLV3 | 87831       | 419,99         | 63,50        | 425                                         | LDSLV3 | 97064       |
| 220,00         | 25           | 225                                         | LDSLV3 | 90806       | 435,20         | 63,50        | 440                                         | LDSLV4 | 87916       |
|                | 40           | 225                                         | LDSLV3 | 87914       | 455,00         | 30           | 460                                         | LDSLV4 | 90347       |
|                | 50,80        | 225                                         | LDSLV3 | 87915       | 455,20         | 50           | 460                                         | LDSLV4 | 87504       |
| 235,23         | 18           | 240                                         | LDSLV4 | 90952       | 475,18         | 20           | 480                                         | LDSLV4 | 87921       |
| 240,00         | 17,50        | 250                                         | LDSLV3 | 90156       | 494,44         | 24           | 500                                         | LDSLV4 | 90259       |
| 240,21         | 44           | 245                                         | LDSLV4 | 87911       | 495,20         | 30           | 500                                         | LDSLV4 | 87503       |
| 245,20         | 63,50        | 250                                         | LDSLV3 | 90766       | 503,25         | 24           | 508                                         | LDSLV4 | 90149       |
| 275,00         | 22           | 280                                         | LDSLV4 | 90546       | 530,00         | 20           | 535                                         | LDSLV4 | 87783       |
| 280,00         | 45           | 285                                         | LDSLV4 | 90437       | 535,23         | 63           | 540                                         | LDSLV4 | 90802       |
| 285,22         | 63,50        | 290                                         | LDSLV4 | 90238       | 555,20         | 63,50        | 560                                         | LDSLV4 | 90075       |
| 295,20         | 32           | 300                                         | LDSLV3 | 90114       | 575,23         | 63,50        | 580                                         | LDSLV4 | 90951       |
| 315,19         | 63,50        | 320                                         | LDSLV4 | 90155       | 585,22         | 55           | 590                                         | LDSLV4 | 90292       |
| 320,00         | 63,50        | 325                                         | LDSLV4 | 90198       | 595,20         | 58,20        | 600                                         | LDSLV3 | 90120       |
| 325,22         | 63,50        | 330                                         | LDSLV4 | 90239       |                | 63,50        | 600                                         | LDSLV4 | 89997       |
| 335,22         | 39           | 340                                         | LDSLV4 | 90777       | 595,22         | 50           | 600                                         | LDSLV3 | 90241       |
|                | 50           | 340                                         | LDSLV4 | 90792       | 645,20         | 64           | 650                                         | LDSLV4 | 90004       |
| 340,00         | 18           | 340                                         | LDSLV4 | 87901       | 645,24         | 63,50        | 650                                         | LDSLV3 | 87817       |
|                | 50           | 340                                         | LDSLV4 | 90801       | 665,20         | 45           | 670                                         | LDSLV4 | 90799       |
|                | 50           | 345                                         | LDSLV3 | 90113       | 685,22         | 63,50        | 690                                         | LDSLV4 | 90953       |
| 355,20         | 25,40        | 360                                         | LDSLV4 | 90778       | 714,81         | 50           | 720                                         | LDSLV4 | 87820       |
|                | 50           | 360                                         | LDSLV4 | 90785       | 735,23         | 63           | 740                                         | LDSLV4 | 89949       |
| 360,00         | 44           | 365                                         | LDSLV4 | 87500       | 755,19         | 63,50        | 760                                         | LDSLV3 | 87981       |
| 360,22         | 45           | 365                                         | LDSLV4 | 90788       | 865,23         | 63,50        | 870                                         | LDSLV4 | 90221       |
| 365,20         | 20           | 370                                         | LDSLV4 | 87531       |                |              |                                             |        |             |
| 395,22         | 63,50        | 400                                         | LDSLV4 | 87461       |                |              |                                             |        |             |



| Shaft diameter  | Sleeve width | Reference sleeve installed outside diameter | Design | Designation  |
|-----------------|--------------|---------------------------------------------|--------|--------------|
| $d_1$           | $b$          |                                             |        |              |
| mm              | mm           | mm                                          | —      | —            |
| <b>875,18</b>   | 63,50        | 880                                         | LDSLV4 | <b>90103</b> |
| <b>1 015,20</b> | 25           | 1 020                                       | LDSLV4 | <b>90786</b> |
| <b>1 049,33</b> | 60           | 1 054                                       | LDSLV4 | <b>89947</b> |
| <b>1 100,23</b> | 63           | 1 105                                       | LDSLV4 | <b>89946</b> |

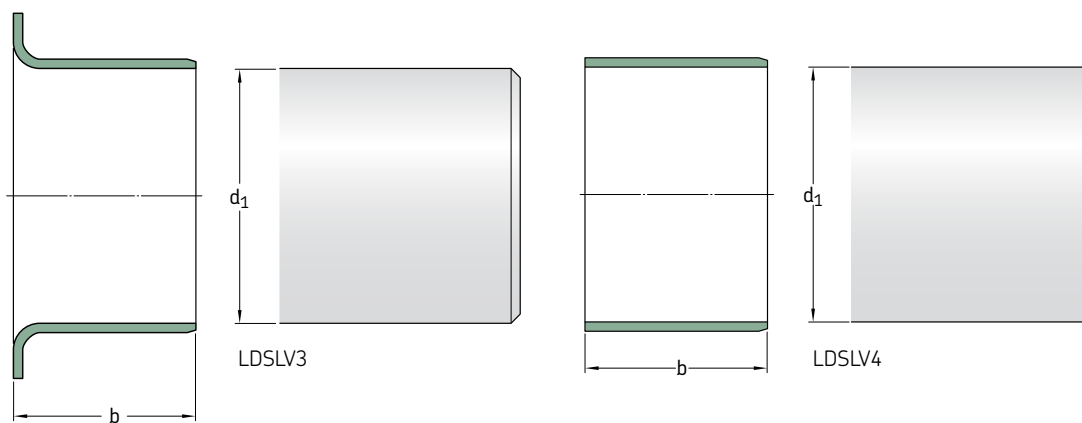
# Wear sleeves for heavy industrial applications – LDSLV3 and LDSLV4 – inch dimensions

d<sub>1</sub> 8.313 – 11.969 in.



| Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  |
|----------------------------------|-------------------|---------------------------------------------|--------|--------------|
| in./mm                           | in./mm            | in./mm                                      | –      | –            |
| <b>8.313</b><br>211,15           | 1.250<br>31,75    | 8.501<br>215,93                             | LDSLV4 | <b>85885</b> |
| <b>8.353</b><br>212,17           | 1.500<br>38,10    | 8.541<br>216,94                             | LDSLV4 | <b>86907</b> |
| <b>8.500</b><br>215,90           | 1.000<br>25,40    | 8.688<br>220,68                             | LDSLV3 | <b>85158</b> |
| <b>8.625</b><br>219,08           | 2.750<br>69,85    | 8.813<br>223,85                             | LDSLV3 | <b>85643</b> |
| <b>8.661</b><br>220,00           | 1.000<br>25,40    | 8.849<br>224,76                             | LDSLV4 | <b>87319</b> |
| <b>8.687</b><br>220,65           | 2.250<br>57,15    | 8.875<br>225,43                             | LDSLV3 | <b>86543</b> |
| <b>8.750</b><br>222,25           | 1.500<br>38,10    | 8.938<br>227,03                             | LDSLV3 | <b>87196</b> |
| <b>8.812</b><br>223,82           | 2.000<br>50,80    | 9.000<br>228,60                             | LDSLV4 | <b>86551</b> |
| <b>8.813</b><br>223,85           | 1.000<br>25,40    | 9.001<br>228,63                             | LDSLV3 | <b>85688</b> |
| <b>8.866</b><br>225,20           | 2.500<br>63,50    | 9.054<br>229,97                             | LDSLV4 | <b>87166</b> |
| <b>8.867</b><br>225,22           | 1.000<br>25,40    | 9.055<br>230,00                             | LDSLV4 | <b>87462</b> |
| <b>8.875</b><br>225,43           | 1.250<br>31,75    | 9.063<br>230,20                             | LDSLV3 | <b>85973</b> |
|                                  | 1.250<br>31,75    | 9.063<br>230,20                             | LDSLV4 | <b>87526</b> |
| <b>8.938</b><br>227,03           | 2.500<br>63,50    | 9.126<br>231,80                             | LDSLV4 | <b>86546</b> |
| <b>9.000</b><br>228,60           | 1.000<br>25,40    | 9.188<br>233,38                             | LDSLV3 | <b>87555</b> |
| <b>9.055</b><br>230,00           | 1.000<br>25,40    | 9.243<br>234,77                             | LDSLV3 | <b>89943</b> |
| <b>9.063</b><br>230,20           | 1.500<br>38,10    | 9.251<br>234,98                             | LDSLV4 | <b>85931</b> |

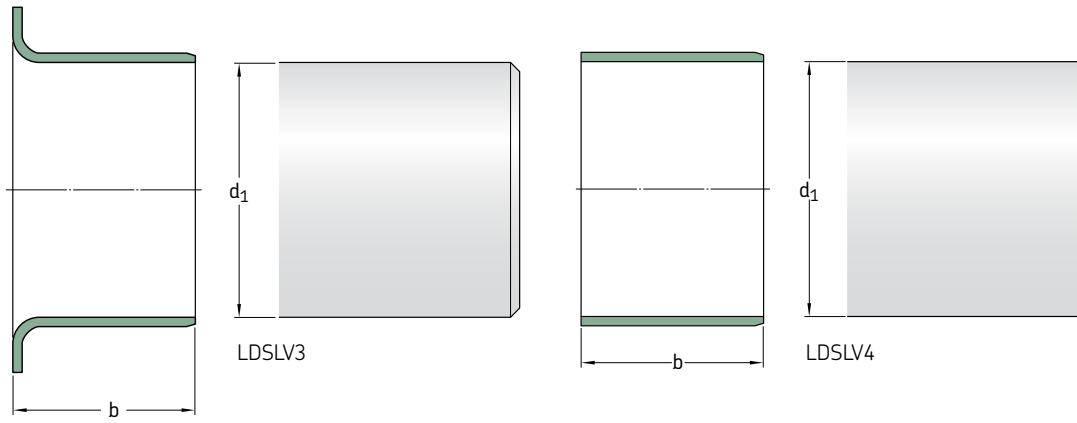
| Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  |
|----------------------------------|-------------------|---------------------------------------------|--------|--------------|
| in./mm                           | in./mm            | in./mm                                      | –      | –            |
| <b>9.125</b><br>231,78           | 1.000<br>25,40    | 9.313<br>236,55                             | LDSLV4 | <b>86547</b> |
|                                  | 1.500<br>38,10    | 9.313<br>236,55                             | LDSLV4 | <b>90130</b> |
| <b>9.250</b><br>234,95           | 0.875<br>22,23    | 9.438<br>239,73                             | LDSLV4 | <b>84643</b> |
| <b>9.260</b><br>235,20           | 1.102<br>27,99    | 9.448<br>239,98                             | LDSLV4 | <b>87789</b> |
| <b>9.313</b><br>236,55           | 1.500<br>38,10    | 9.501<br>241,33                             | LDSLV3 | <b>85377</b> |
| <b>9.449</b><br>240,00           | 1.181<br>30,00    | 9.637<br>244,78                             | LDSLV4 | <b>87144</b> |
| <b>9.500</b><br>241,30           | 2.500<br>63,50    | 9.688<br>246,08                             | LDSLV4 | <b>86562</b> |
|                                  | 1.000<br>25,40    | 9.688<br>246,08                             | LDSLV3 | <b>86633</b> |
| <b>9.563</b><br>242,90           | 1.000<br>25,40    | 9.751<br>247,68                             | LDSLV4 | <b>85073</b> |
|                                  | 2.000<br>50,80    | 9.751<br>247,68                             | LDSLV4 | <b>85397</b> |
| <b>9.750</b><br>247,65           | 1.438<br>36,53    | 9.938<br>252,43                             | LDSLV4 | <b>84965</b> |
|                                  | 2.250<br>57,15    | 9.938<br>252,43                             | LDSLV4 | <b>85045</b> |
| <b>9.813</b><br>249,25           | 1.125<br>28,58    | 10.001<br>254,03                            | LDSLV4 | <b>86413</b> |
|                                  | 2.000<br>50,80    | 10.001<br>254,03                            | LDSLV3 | <b>84156</b> |
| <b>9.835</b><br>249,81           | 1.575<br>40,01    | 10.023<br>254,58                            | LDSLV4 | <b>90773</b> |
| <b>10.000</b><br>254,00          | 1.000<br>25,40    | 10.188<br>258,78                            | LDSLV3 | <b>90070</b> |
| <b>10.063</b><br>255,60          | 2.250<br>57,15    | 10.251<br>260,38                            | LDSLV4 | <b>86000</b> |
| <b>10.188</b><br>258,78          | 1.125<br>28,58    | 10.376<br>263,55                            | LDSLV4 | <b>84962</b> |



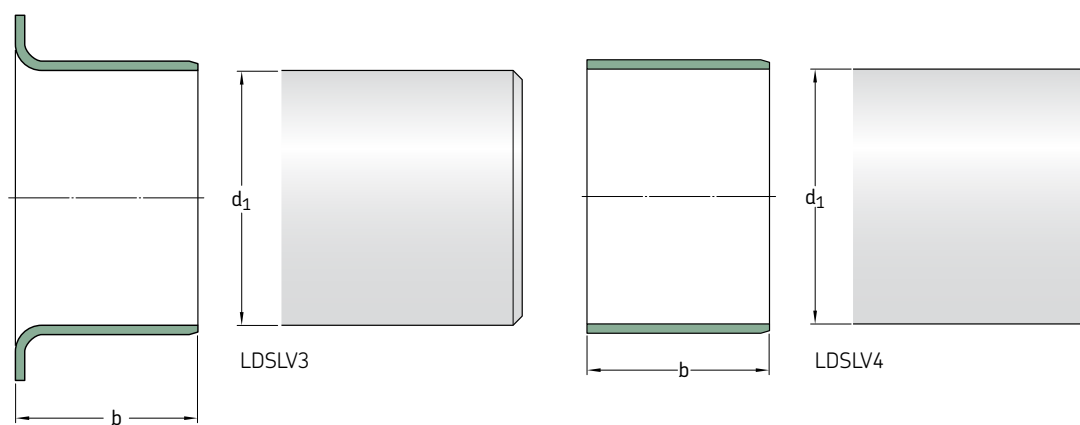
| Shaft diameter          | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  | Shaft diameter          | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  |
|-------------------------|----------------|---------------------------------------------|--------|--------------|-------------------------|----------------|---------------------------------------------|--------|--------------|
| d <sub>1</sub>          | b              |                                             |        |              | d <sub>1</sub>          | b              |                                             |        |              |
| in./mm                  | in./mm         | in./mm                                      | –      | –            | in./mm                  | in./mm         | in./mm                                      | –      | –            |
| <b>10.240</b><br>260,00 | 1.970<br>50,00 | 10.424<br>264,77                            | LDSLV3 | <b>87738</b> | <b>11.031</b><br>280,19 | 1.260<br>32,00 | 11.219<br>284,96                            | LDSLV4 | <b>87525</b> |
| <b>10.313</b><br>261,95 | 2.000<br>50,80 | 10.501<br>266,73                            | LDSLV4 | <b>85629</b> | <b>11.062</b><br>280,97 | 1.750<br>44,45 | 11.250<br>285,75                            | LDSLV4 | <b>85469</b> |
|                         | 2.250<br>57,15 | 10.501<br>266,73                            | LDSLV3 | <b>85191</b> | <b>11.187</b><br>284,15 | 1.250<br>31,75 | 11.375<br>288,93                            | LDSLV4 | <b>86269</b> |
| <b>10.441</b><br>265,20 | 2.165<br>54,99 | 10.629<br>269,98                            | LDSLV4 | <b>86798</b> | <b>11.188</b><br>284,18 | 2.250<br>57,15 | 11.376<br>288,95                            | LDSLV4 | <b>85212</b> |
| <b>10.500</b><br>266,70 | 2.750<br>69,85 | 10.688<br>271,48                            | LDSLV4 | <b>86013</b> | <b>11.190</b><br>284,23 | 2.250<br>57,15 | 11.378<br>289,00                            | LDSLV4 | <b>87566</b> |
| <b>10.557</b><br>268,15 | 2.250<br>57,15 | 10.745<br>272,92                            | LDSLV4 | <b>85491</b> | <b>11.313</b><br>287,35 | 1.500<br>38,10 | 11.501<br>292,13                            | LDSLV4 | <b>84094</b> |
| <b>10.562</b><br>268,27 | 0.984<br>24,99 | 10.750<br>273,05                            | LDSLV4 | <b>90800</b> | <b>11.375</b><br>288,93 | 2.250<br>57,15 | 11.563<br>293,70                            | LDSLV4 | <b>86145</b> |
|                         | 1.750<br>44,45 | 10.750<br>273,05                            | LDSLV4 | <b>86468</b> | <b>11.417</b><br>290,00 | 1.750<br>44,45 | 11.605<br>294,77                            | LDSLV4 | <b>86441</b> |
|                         | 1.813<br>46,05 | 10.750<br>273,05                            | LDSLV4 | <b>86544</b> | <b>11.500</b><br>292,10 | 0.750<br>19,05 | 11.688<br>296,88                            | LDSLV4 | <b>90761</b> |
| <b>10.563</b><br>268,30 | 1.500<br>38,10 | 10.751<br>273,08                            | LDSLV4 | <b>87768</b> | <b>11.562</b><br>293,67 | 1.000<br>25,40 | 11.750<br>298,45                            | LDSLV4 | <b>90333</b> |
| <b>10.750</b><br>273,05 | 2.500<br>63,50 | 10.938<br>277,83                            | LDSLV4 | <b>86435</b> | <b>11.623</b><br>295,22 | 1.417<br>35,99 | 11.811<br>300,00                            | LDSLV3 | <b>87875</b> |
| <b>10.813</b><br>274,65 | 1.000<br>25,40 | 11.001<br>279,43                            | LDSLV3 | <b>81389</b> | <b>11.750</b><br>298,45 | 2.375<br>60,33 | 11.938<br>303,23                            | LDSLV3 | <b>87872</b> |
|                         | 2.000<br>50,80 | 11.001<br>279,43                            | LDSLV4 | <b>85033</b> | <b>11.812</b><br>300,02 | 1.125<br>28,58 | 12.000<br>304,80                            | LDSLV4 | <b>86687</b> |
| <b>10.846</b><br>275,49 | 0.709<br>18,01 | 11.034<br>280,26                            | LDSLV4 | <b>86601</b> | <b>11.813</b><br>300,05 | 1.500<br>38,10 | 12.001<br>304,83                            | LDSLV4 | <b>85979</b> |
| <b>10.875</b><br>276,23 | 2.000<br>50,80 | 11.063<br>281,00                            | LDSLV4 | <b>84510</b> |                         | 2.250<br>57,15 | 12.001<br>304,83                            | LDSLV3 | <b>84819</b> |
| <b>11.000</b><br>279,40 | 1.500<br>38,10 | 11.188<br>284,18                            | LDSLV4 | <b>86486</b> |                         | 2.750<br>69,85 | 12.001<br>304,83                            | LDSLV4 | <b>85844</b> |
|                         | 2.500<br>63,50 | 11.188<br>284,18                            | LDSLV4 | <b>86454</b> | <b>11.969</b><br>304,00 | 0.709<br>18,00 | 12.157<br>308,79                            | LDSLV4 | <b>86600</b> |
| <b>11.024</b><br>280,00 | 1.181<br>30,00 | 11.212<br>284,78                            | LDSLV4 | <b>87142</b> |                         |                |                                             |        |              |

# Wear sleeves for heavy industrial applications – LDSLV3 and LDSLV4 – inch dimensions

d<sub>1</sub> 12.000 – 20.813 in.



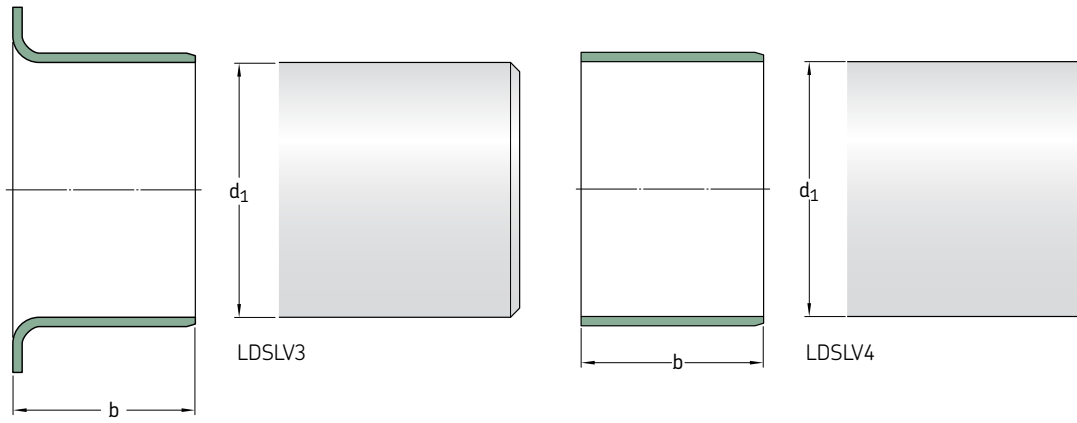
| Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  | Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  |
|----------------------------------|-------------------|---------------------------------------------|--------|--------------|----------------------------------|-------------------|---------------------------------------------|--------|--------------|
| in./mm                           | in./mm            | in./mm                                      | –      | –            | in./mm                           | in./mm            | in./mm                                      | –      | –            |
| <b>12.000</b><br>304,80          | 2.250<br>57,15    | 12.188<br>309,58                            | LDSLV4 | <b>85577</b> | <b>13.813</b><br>350,85          | 1.500<br>38,10    | 14.001<br>355,63                            | LDSLV3 | <b>81390</b> |
|                                  | 2.250<br>57,15    | 12.188<br>309,58                            | LDSLV3 | <b>87406</b> |                                  | 2.000<br>50,80    | 14.001<br>355,63                            | LDSLV4 | <b>85179</b> |
| <b>12.063</b><br>306,40          | 0.625<br>15,88    | 12.251<br>311,18                            | LDSLV4 | <b>85418</b> | <b>14.000</b><br>355,60          | 1.375<br>34,93    | 14.188<br>360,38                            | LDSLV3 | <b>89951</b> |
|                                  | 2.500<br>63,50    | 12.251<br>311,18                            | LDSLV3 | <b>86404</b> |                                  | 1.500<br>38,10    | 14.188<br>360,38                            | LDSLV3 | <b>81352</b> |
| <b>12.312</b><br>312,72          | 1.500<br>38,10    | 12.500<br>317,50                            | LDSLV4 | <b>90174</b> | <b>14.173</b><br>359,99          | 1.000<br>25,40    | 14.361<br>364,77                            | LDSLV4 | <b>87445</b> |
| <b>12.313</b><br>312,75          | 0.750<br>19,05    | 12.501<br>317,53                            | LDSLV4 | <b>83760</b> | <b>14.313</b><br>363,55          | 1.500<br>38,10    | 14.501<br>368,33                            | LDSLV4 | <b>86429</b> |
| <b>12.500</b><br>317,50          | 2.125<br>53,98    | 12.688<br>322,28                            | LDSLV3 | <b>86169</b> | <b>14.438</b><br>366,73          | 2.500<br>63,50    | 14.626<br>371,50                            | LDSLV3 | <b>86403</b> |
| <b>12.598</b><br>320,00          | 0.984<br>25,00    | 12.786<br>324,76                            | LDSLV3 | <b>87434</b> | <b>14.500</b><br>368,30          | 1.000<br>25,40    | 14.688<br>373,08                            | LDSLV4 | <b>85914</b> |
| <b>12.750</b><br>323,85          | 0.688<br>17,48    | 12.938<br>328,63                            | LDSLV4 | <b>87513</b> | <b>14.813</b><br>376,25          | 1.500<br>38,10    | 15.001<br>381,03                            | LDSLV4 | <b>87723</b> |
|                                  | 1.125<br>28,58    | 12.938<br>328,63                            | LDSLV3 | <b>82099</b> |                                  | 2.125<br>53,98    | 15.001<br>381,03                            | LDSLV3 | <b>81391</b> |
|                                  | 1.500<br>38,10    | 12.938<br>328,63                            | LDSLV3 | <b>90143</b> | <b>15.000</b><br>381,00          | 1.000<br>25,40    | 15.188<br>385,78                            | LDSLV4 | <b>87247</b> |
| <b>12.813</b><br>325,45          | 1.000<br>25,40    | 13.001<br>330,23                            | LDSLV4 | <b>86258</b> | <b>15.062</b><br>382,57          | 0.750<br>19,05    | 15.250<br>387,35                            | LDSLV4 | <b>90272</b> |
|                                  | 1.375<br>34,93    | 13.001<br>330,23                            | LDSLV4 | <b>84263</b> | <b>15.066</b><br>382,68          | 1.000<br>25,40    | 15.254<br>387,45                            | LDSLV3 | <b>87871</b> |
|                                  | 2.000<br>50,80    | 13.001<br>330,23                            | LDSLV3 | <b>84390</b> | <b>15.188</b><br>385,78          | 2.500<br>63,50    | 15.376<br>390,55                            | LDSLV4 | <b>87569</b> |
|                                  | 2.500<br>63,50    | 13.001<br>330,23                            | LDSLV4 | <b>86722</b> | <b>15.250</b><br>387,35          | 0.750<br>19,05    | 15.438<br>392,13                            | LDSLV3 | <b>84964</b> |
| <b>13.000</b><br>330,20          | 1.750<br>44,45    | 13.188<br>334,98                            | LDSLV4 | <b>85535</b> | <b>15.560</b><br>395,22          | 0.906<br>23,01    | 15.748<br>400,00                            | LDSLV4 | <b>85582</b> |
| <b>13.063</b><br>331,80          | 1.125<br>28,58    | 13.251<br>336,53                            | LDSLV4 | <b>84963</b> | <b>15.812</b><br>401,62          | 2.500<br>63,50    | 16.000<br>406,40                            | LDSLV3 | <b>87634</b> |
| <b>13.313</b><br>338,15          | 0.813<br>20,65    | 13.501<br>342,93                            | LDSLV4 | <b>86688</b> |                                  |                   |                                             |        |              |
|                                  | 1.500<br>38,10    | 13.501<br>342,93                            | LDSLV4 | <b>87463</b> |                                  |                   |                                             |        |              |
|                                  | 2.000<br>50,80    | 13.501<br>342,93                            | LDSLV3 | <b>85852</b> |                                  |                   |                                             |        |              |



| Shaft diameter          | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  | Shaft diameter          | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  |
|-------------------------|----------------|---------------------------------------------|--------|--------------|-------------------------|----------------|---------------------------------------------|--------|--------------|
| $d_1$                   | $b$            |                                             |        |              | $d_1$                   | $b$            |                                             |        |              |
| in./mm                  | in./mm         | in./mm                                      | –      | –            | in./mm                  | in./mm         | in./mm                                      | –      | –            |
| <b>15.813</b><br>401,65 | 2.000<br>50,80 | 16.001<br>406,43                            | LDSLV4 | <b>85181</b> | <b>17.750</b><br>450,85 | 1.250<br>31,75 | 17.938<br>455,63                            | LDSLV4 | <b>90774</b> |
|                         | 2.000<br>50,80 | 16.001<br>406,43                            | LDSLV3 | <b>87446</b> |                         | 2.500<br>63,50 | 17.938<br>455,63                            | LDSLV3 | <b>86631</b> |
|                         | 2.500<br>63,50 | 16.001<br>406,43                            | LDSLV4 | <b>86407</b> |                         |                |                                             |        |              |
| <b>15.998</b><br>406,35 | 2.250<br>57,15 | 16.186<br>411,12                            | LDSLV3 | <b>85908</b> | <b>17.812</b><br>452,42 | 2.125<br>53,98 | 18.000<br>457,20                            | LDSLV4 | <b>87271</b> |
| <b>16.000</b><br>406,40 | 2.000<br>50,80 | 16.188<br>411,18                            | LDSLV3 | <b>81354</b> | <b>17.813</b><br>452,45 | 2.500<br>63,50 | 18.001<br>457,23                            | LDSLV3 | <b>86405</b> |
| <b>16.063</b><br>408,00 | 0.500<br>12,70 | 16.251<br>412,78                            | LDSLV4 | <b>87613</b> | <b>18.163</b><br>461,34 | 2.000<br>50,80 | 18.351<br>466,12                            | LDSLV4 | <b>86343</b> |
|                         | 1.250<br>31,75 | 16.251<br>412,78                            | LDSLV4 | <b>86175</b> | <b>18.312</b><br>465,12 | 1.191<br>30,25 | 18.500<br>469,90                            | LDSLV4 | <b>90790</b> |
|                         | 1.300<br>33,02 | 16.251<br>412,78                            | LDSLV4 | <b>86426</b> | <b>18.813</b><br>477,85 | 1.750<br>44,45 | 19.001<br>482,63                            | LDSLV4 | <b>86563</b> |
|                         | 2.000<br>50,80 | 16.251<br>412,78                            | LDSLV4 | <b>86575</b> |                         | 2.250<br>57,15 | 19.001<br>482,63                            | LDSLV4 | <b>87015</b> |
| <b>16.313</b><br>414,35 | 2.000<br>50,80 | 16.501<br>419,13                            | LDSLV4 | <b>84697</b> |                         | 2.500<br>63,50 | 19.001<br>482,63                            | LDSLV4 | <b>86716</b> |
| <b>16.750</b><br>425,45 | 1.500<br>38,10 | 16.938<br>430,23                            | LDSLV4 | <b>87585</b> | <b>19.496</b><br>495,20 | 2.362<br>59,99 | 19.684<br>499,97                            | LDSLV4 | <b>87631</b> |
| <b>16.812</b><br>427,02 | 1.000<br>25,40 | 17.000<br>431,80                            | LDSLV4 | <b>86737</b> | <b>19.497</b><br>495,22 | 1.575<br>40,01 | 19.685<br>500,00                            | LDSLV4 | <b>87785</b> |
| <b>16.813</b><br>427,05 | 2.250<br>57,15 | 17.001<br>431,83                            | LDSLV4 | <b>84616</b> | <b>19.500</b><br>495,30 | 1.250<br>31,75 | 19.688<br>500,08                            | LDSLV4 | <b>90769</b> |
| <b>17.250</b><br>438,15 | 1.000<br>25,40 | 17.438<br>442,93                            | LDSLV4 | <b>90779</b> | <b>19.563</b><br>496,90 | 2.750<br>69,85 | 19.751<br>501,68                            | LDSLV4 | <b>85654</b> |
|                         | 2.000<br>50,80 | 17.438<br>442,93                            | LDSLV4 | <b>84576</b> | <b>19.813</b><br>503,25 | 1.250<br>31,75 | 20.001<br>508,03                            | LDSLV4 | <b>84781</b> |
| <b>17.313</b><br>439,75 | 1.500<br>38,10 | 17.501<br>444,53                            | LDSLV4 | <b>86430</b> | <b>20.312</b><br>515,92 | 1.000<br>25,40 | 20.500<br>520,70                            | LDSLV4 | <b>86739</b> |
| <b>17.449</b><br>443,20 | 2.000<br>50,80 | 17.637<br>447,98                            | LDSLV4 | <b>85762</b> | <b>20.813</b><br>528,65 | 1.250<br>31,75 | 21.001<br>533,43                            | LDSLV3 | <b>85800</b> |
| <b>17.500</b><br>444,50 | 1.250<br>31,75 | 17.688<br>449,28                            | LDSLV4 | <b>90770</b> |                         | 2.125<br>53,98 | 21.001<br>533,43                            | LDSLV4 | <b>85367</b> |
| <b>17.543</b><br>445,59 | 2.362<br>59,99 | 17.731<br>450,37                            | LDSLV4 | <b>86799</b> |                         | 2.500<br>63,50 | 21.001<br>533,43                            | LDSLV4 | <b>87298</b> |

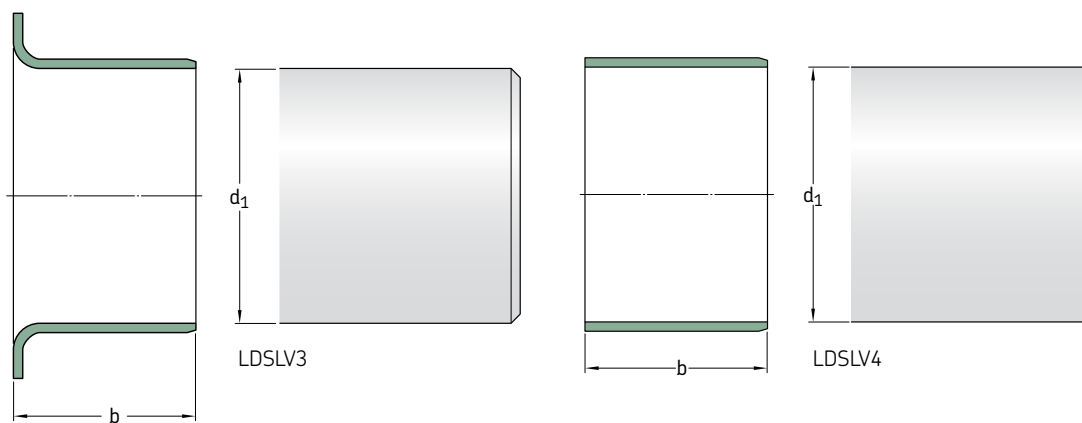
# Wear sleeves for heavy industrial applications – LDSLV3 and LDSLV4 – inch dimensions

d<sub>1</sub> 20.865 – 42.500 in.



| Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  |
|----------------------------------|-------------------|---------------------------------------------|--------|--------------|
| in./mm                           | in./mm            | in./mm                                      | –      | –            |
| <b>20.865</b><br>529,97          | 2.250<br>57,15    | 21.053<br>534,75                            | LDSLV4 | <b>90805</b> |
| <b>20.990</b><br>533,15          | 2.250<br>57,15    | 21.178<br>537,92                            | LDSLV3 | <b>84579</b> |
| <b>21.000</b><br>533,40          | 2.250<br>57,15    | 21.188<br>538,18                            | LDSLV4 | <b>87090</b> |
| <b>21.803</b><br>553,80          | 2.362<br>59,99    | 21.991<br>558,57                            | LDSLV4 | <b>87069</b> |
| <b>21.813</b><br>554,05          | 2.250<br>57,15    | 22.001<br>558,83                            | LDSLV4 | <b>84590</b> |
| <b>22.250</b><br>565,15          | 1.000<br>25,40    | 22.438<br>569,93                            | LDSLV3 | <b>85691</b> |
| <b>22.303</b><br>566,50          | 2.362<br>59,99    | 22.491<br>571,27                            | LDSLV4 | <b>87070</b> |
| <b>22.313</b><br>566,75          | 1.250<br>31,75    | 22.501<br>571,53                            | LDSLV4 | <b>85907</b> |
| <b>22.812</b><br>579,42          | 2.000<br>50,80    | 23.000<br>584,20                            | LDSLV4 | <b>90163</b> |
| <b>23.000</b><br>584,20          | 2.000<br>50,80    | 23.188<br>588,98                            | LDSLV4 | <b>90146</b> |
| <b>23.434</b><br>595,22          | 0.984<br>24,99    | 23.622<br>600,00                            | LDSLV4 | <b>87777</b> |
| <b>23.687</b><br>601,65          | 1.950<br>49,53    | 23.875<br>606,43                            | LDSLV4 | <b>87907</b> |
| <b>23.812</b><br>604,82          | 0.750<br>19,05    | 24.000<br>609,60                            | LDSLV4 | <b>87922</b> |
|                                  | 2.500<br>63,50    | 24.000<br>609,60                            | LDSLV4 | <b>87960</b> |
| <b>25.000</b><br>635,00          | 2.500<br>63,50    | 25.188<br>639,78                            | LDSLV4 | <b>86567</b> |
| <b>25.312</b><br>642,92          | 2.000<br>50,80    | 25.500<br>647,70                            | LDSLV4 | <b>86091</b> |
| <b>25.313</b><br>642,95          | 2.500<br>63,50    | 25.501<br>647,73                            | LDSLV4 | <b>87802</b> |

| Shaft diameter<br>d <sub>1</sub> | Sleeve width<br>b | Reference sleeve installed outside diameter | Design | Designation  |
|----------------------------------|-------------------|---------------------------------------------|--------|--------------|
| in./mm                           | in./mm            | in./mm                                      | –      | –            |
| <b>26.000</b><br>660,40          | 2.250<br>57,15    | 26.188<br>665,18                            | LDSLV3 | <b>86640</b> |
| <b>26.312</b><br>668,32          | 1.375<br>34,93    | 26.500<br>673,10                            | LDSLV4 | <b>90809</b> |
| <b>26.813</b><br>681,05          | 1.250<br>31,75    | 27.001<br>685,83                            | LDSLV4 | <b>85384</b> |
|                                  | 2.250<br>57,15    | 27.001<br>685,83                            | LDSLV4 | <b>85531</b> |
| <b>27.000</b><br>685,80          | 2.000<br>50,80    | 27.188<br>690,58                            | LDSLV4 | <b>86841</b> |
| <b>27.063</b><br>687,40          | 2.250<br>57,15    | 27.251<br>692,18                            | LDSLV4 | <b>84764</b> |
| <b>27.313</b><br>693,75          | 2.250<br>57,15    | 27.501<br>698,53                            | LDSLV4 | <b>91311</b> |
| <b>27.500</b><br>698,50          | 2.250<br>57,15    | 27.688<br>703,28                            | LDSLV4 | <b>84711</b> |
| <b>27.812</b><br>706,42          | 2.500<br>63,50    | 28.000<br>711,20                            | LDSLV4 | <b>87421</b> |
| <b>28.312</b><br>719,12          | 2.313<br>58,75    | 28.500<br>723,90                            | LDSLV3 | <b>87623</b> |
| <b>28.813</b><br>731,85          | 2.250<br>57,15    | 29.001<br>736,63                            | LDSLV4 | <b>84641</b> |
| <b>29.813</b><br>757,25          | 2.250<br>57,15    | 30.001<br>762,03                            | LDSLV4 | <b>84642</b> |
| <b>30.000</b><br>762,00          | 2.500<br>63,50    | 30.188<br>766,78                            | LDSLV3 | <b>86641</b> |
| <b>30.309</b><br>769,85          | 1.375<br>34,93    | 30.497<br>774,62                            | LDSLV4 | <b>87530</b> |
| <b>30.312</b><br>769,92          | 2.500<br>63,50    | 30.500<br>774,70                            | LDSLV3 | <b>87842</b> |
| <b>30.813</b><br>782,65          | 2.000<br>50,80    | 31.001<br>787,43                            | LDSLV4 | <b>85039</b> |
| <b>31.812</b><br>808,02          | 2.500<br>63,50    | 32.000<br>812,80                            | LDSLV4 | <b>90810</b> |



| Shaft diameter           | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  |
|--------------------------|----------------|---------------------------------------------|--------|--------------|
| $d_1$                    | $b$            |                                             |        |              |
| in./mm                   | in./mm         | in./mm                                      | –      | –            |
| <b>32.313</b><br>820,75  | 2.000<br>50,80 | 32.501<br>825,53                            | LDSLV4 | <b>86090</b> |
| <b>32.812</b><br>833,42  | 2.220<br>56,39 | 33.000<br>838,20                            | LDSLV4 | <b>87850</b> |
| <b>33.313</b><br>846,15  | 2.625<br>66,68 | 33.501<br>850,93                            | LDSLV4 | <b>84730</b> |
| <b>34.312</b><br>871,52  | 1.750<br>44,45 | 34.500<br>876,30                            | LDSLV4 | <b>87529</b> |
| <b>35.313</b><br>896,95  | 2.500<br>63,50 | 35.501<br>901,73                            | LDSLV4 | <b>85814</b> |
| <b>35.812</b><br>909,62  | 1.500<br>38,10 | 36.000<br>914,40                            | LDSLV4 | <b>90332</b> |
| <b>36.375</b><br>923,93  | 2.500<br>63,50 | 36.563<br>928,70                            | LDSLV4 | <b>86111</b> |
| <b>36.813</b><br>935,05  | 2.500<br>63,50 | 37.001<br>939,83                            | LDSLV4 | <b>86458</b> |
| <b>37.813</b><br>960,45  | 1.500<br>38,10 | 38.001<br>965,23                            | LDSLV4 | <b>86973</b> |
| <b>38.000</b><br>965,20  | 1.500<br>38,10 | 38.188<br>969,98                            | LDSLV4 | <b>86840</b> |
| <b>38.500</b><br>977,90  | 1.500<br>38,10 | 38.688<br>982,68                            | LDSLV4 | <b>81753</b> |
| <b>38.813</b><br>985,85  | 2.125<br>53,98 | 39.001<br>990,63                            | LDSLV4 | <b>85123</b> |
| <b>39.813</b><br>1011,25 | 2.125<br>53,98 | 40.001<br>1016,03                           | LDSLV4 | <b>81826</b> |
| <b>41.312</b><br>1049,32 | 1.968<br>49,99 | 41.500<br>1054,10                           | LDSLV4 | <b>89948</b> |
| <b>42.063</b><br>1068,40 | 2.125<br>53,98 | 42.251<br>1073,18                           | LDSLV4 | <b>85038</b> |
| <b>42.125</b><br>1069,98 | 2.125<br>53,98 | 42.313<br>1074,75                           | LDSLV4 | <b>87054</b> |
| <b>42.312</b><br>1074,72 | 1.250<br>31,75 | 42.500<br>1079,50                           | LDSLV4 | <b>87379</b> |

| Shaft diameter           | Sleeve width   | Reference sleeve installed outside diameter | Design | Designation  |
|--------------------------|----------------|---------------------------------------------|--------|--------------|
| $d_1$                    | $b$            |                                             |        |              |
| in./mm                   | in./mm         | in./mm                                      | –      | –            |
| <b>42.500</b><br>1079,50 | 1.250<br>31,75 | 42.688<br>1084,28                           | LDSLV4 | <b>87392</b> |

# SKF – the knowledge engineering company

From one simple but inspired solution to a misalignment problem in a textile mill in Sweden, and fifteen employees in 1907, SKF has grown to become a global industrial knowledge leader. Over the

years we have built on our expertise in bearings, extending it to seals, mechatronics, services and lubrication systems. Our knowledge network includes 46 000 employees, 15 000 distributor partners, offices in more than 130 countries, and a growing number of SKF Solution Factory sites around the world.

## Research and development

We have hands-on experience in over forty industries, based on our employees' knowledge of real life conditions. In addition our world-leading experts and university partners who pioneer advanced theoretical research and development in areas including tribology, condition monitoring, asset management and bearing life theory. Our ongoing commitment to research and development helps us keep our customers at the forefront of their industries.



## Meeting the toughest challenges

Our network of knowledge and experience along with our understanding of how our core technologies can be combined helps us create innovative solutions that meet the toughest of challenges. We work closely with our customers throughout the asset life cycle, helping them to profitably and responsibly grow their businesses.

## Working for a sustainable future

Since 2005, SKF has worked to reduce the negative environmental impact from our own operations and those of our suppliers. Our continuing technology development introduced the SKF BeyondZero portfolio of products and services which improve efficiency and reduce energy losses, as well as enable new technologies harnessing wind, solar and ocean power. This combined approach helps reduce the environmental impact both in our own operations and in our customers'.

*SKF Solution Factory makes SKF knowledge and manufacturing expertise available locally, to provide unique solutions and services to our customers.*

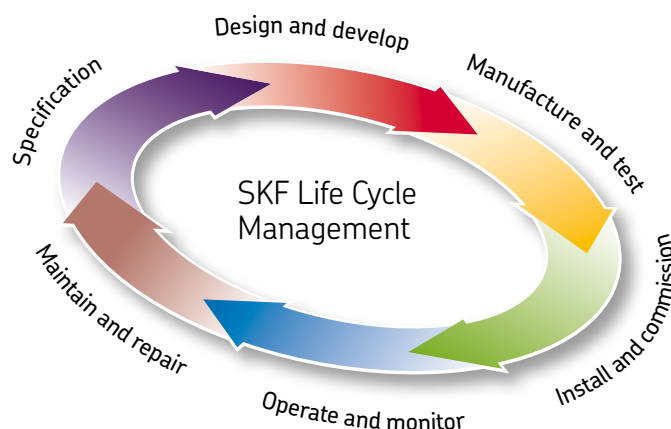


*Working with SKF IT and logistics systems and application experts, SKF Authorized Distributors deliver a valuable mix of product and application knowledge to customers worldwide.*



## Our knowledge – your success

**SKF Life Cycle Management is how we combine our technology platforms and advanced services, and apply them at each stage of the asset life cycle, to help our customers to be more successful, sustainable and profitable.**



### Working closely with you

Our objective is to help our customers improve productivity, minimize maintenance, achieve higher energy and resource efficiency, and optimize designs for long service life and reliability.

### Innovative solutions

Whether the application is linear or rotary or a combination of the two, SKF engineers can work with you at each stage of the asset life cycle to improve machine performance by looking at the entire application. This approach doesn't just focus on individual components like bearings or seals. It looks at the whole application to see how each component interacts with the next.

### Design optimization and verification

SKF can work with you to optimize current or new designs with proprietary 3-D modeling software that can also be used as a virtual test rig to confirm the integrity of the design.



### Bearings

SKF is the world leader in the design, development and manufacture of high performance rolling bearings, plain bearings, bearing units and housings.



### Machinery maintenance

Condition monitoring technologies and maintenance services from SKF can help minimize unplanned downtime, improve operational efficiency and reduce maintenance costs.



### Sealing solutions

SKF offers standard seals and custom engineered sealing solutions to increase uptime, improve machine reliability, reduce friction and power losses, and extend lubricant life.



### Mechatronics

SKF fly-by-wire systems for aircraft and drive-by-wire systems for off-road, agricultural and forklift applications replace heavy, grease or oil consuming mechanical and hydraulic systems.



### Lubrication solutions

From specialized lubricants to state-of-the-art lubrication systems and lubrication management services, lubrication solutions from SKF can help to reduce lubrication related downtime and lubricant consumption.



### Actuation and motion control

With a wide assortment of products – from actuators and ball screws to profile rail guides – SKF can work with you to solve your most pressing linear system challenges.

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