

# Safety-Valve, springloaded

for steam, gases and liquids in closed completion

# Typ 30

## Standard version:

| Material:        | Inlet body        | / Spring bonnet,<br>outlet body | Temperature ranges<br>metal seated |
|------------------|-------------------|---------------------------------|------------------------------------|
| <b>Typ 30.1:</b> | <b>BG I</b>       | 1.0460 / 0.7043                 | -10°C to 280°C                     |
|                  | <b>BG II - IV</b> | 1.0619 / 1.0619                 | -10°C to 350°C                     |
| <b>Typ 30.2:</b> | <b>BG I</b>       | 1.4571 / 1.4581                 | -60°C to 280°C                     |
|                  | <b>BG II - IV</b> | 1.4571, 1.4581 / 1.4581         | -60°C to 350°C                     |
| <b>Typ 30.7:</b> | <b>BG I - IV</b>  | 1.4571 / 1.4308                 | -200°C to 280°C                    |

**Connections:** soft seated  
Flange connections: DIN EN / ASME B16.5 see techn. appendix: KWD-1

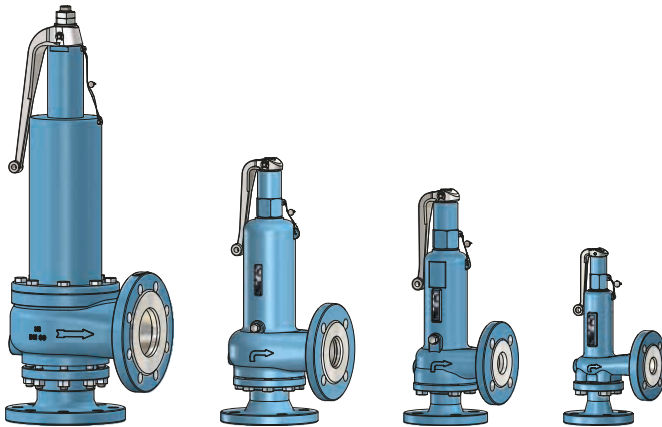
## Approvals:

**Pressure Equipment Directive:** 97/23/EG  
Declaration of Conformity



## TÜV - Approval:

VdTÜV-leaflet AD 2000-leaflet A 2 TÜV • SV • XX-713 / 820 / 896 / 902 • do • D/G/F • α<sub>w</sub> • p

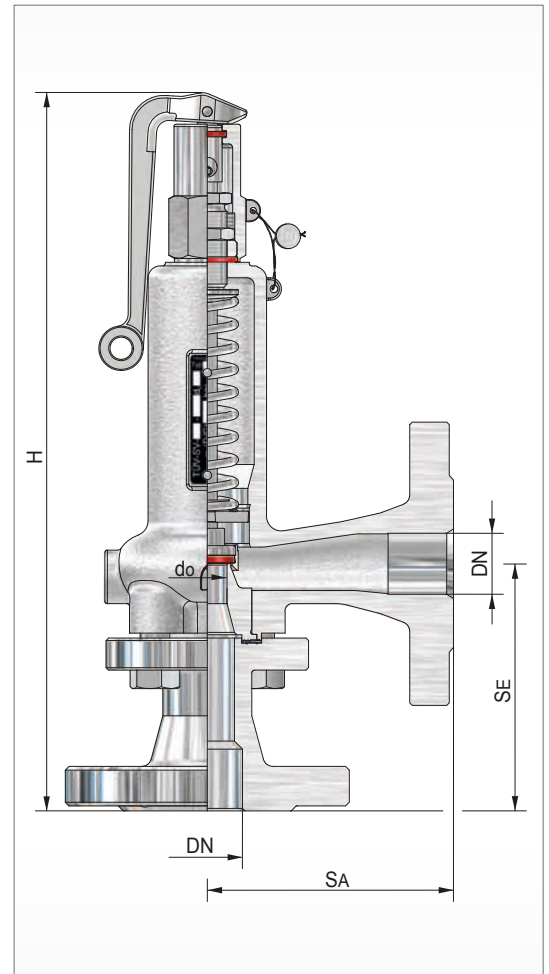


Size IV

Size III

Size II

Size I



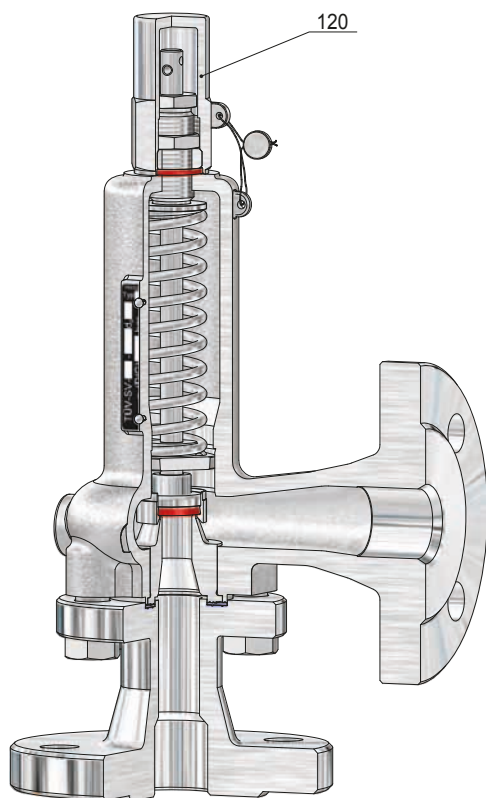
| Size | Inlet |       |                  |            |            | Outlet |       |                  |            | Height 'H' for head |           |                            | Coefficient         |                    | Set pressure       |      | Weight<br>~ [kg] |
|------|-------|-------|------------------|------------|------------|--------|-------|------------------|------------|---------------------|-----------|----------------------------|---------------------|--------------------|--------------------|------|------------------|
|      | DN    | NPS   | PN / Class       | do<br>[mm] | SE<br>[mm] | DN     | NPS   | PN / Class       | SA<br>[mm] | A<br>[mm]           | C<br>[mm] | D/G<br>α <sub>w</sub> max. | F<br>α <sub>w</sub> | p min.<br>[bar(g)] | p max.<br>[bar(g)] |      |                  |
| I    | 15    | 1/2   | 16-63<br>150-600 | 12,5       | 90         | 15     | 1/2   | 16-40<br>150-300 | 90         | 282                 | 268       | 0,45                       | 0,32                | 0,20               | 40                 | 4,3  |                  |
|      | 20    | 3/4   |                  | 12,5       | 95         | 20     | 3/4   |                  | 95         | 287                 |           | 273                        | 0,45                | 0,32               | 0,20               | 40   | 4,5              |
|      | 25    | 1     |                  | 16         | 100        | 25     | 1     |                  | 100        | 292                 |           | 278                        | 0,38                | 0,29               | 0,15               | 40   | 5,2              |
| II   | 32    | 1 1/4 | 16-63<br>150-600 | 20         | 105        | 32     | 1 1/4 | 16-40<br>150-300 | 105        | 395                 | 375       | 0,43                       | 0,34                | 0,10               | 40                 | 10,0 |                  |
|      |       |       |                  | 25         | 115        | 40     | 1 1/2 |                  |            |                     |           | 385                        | 0,31                |                    | 0,24               | 8    | 10,2             |
|      | 40    | 1 1/2 |                  | 25         | 115        | 40     | 1 1/2 |                  | 115        | 405                 |           | 385                        | 0,41                | 0,32               | 40                 | 10,7 |                  |
| III  | 50    | 2     | 16-63<br>150-600 | 32         | 125        | 50     | 2     | 16-40<br>150-300 | 125        | 450                 | 430       | 0,39                       | 0,28                | 0,05               | 40                 | 17,0 |                  |
|      |       |       |                  | 40         | 145        | 65     | 2 1/2 |                  |            |                     |           | 450                        | 0,31                |                    | 0,23               | 36   | 15,5             |
|      | 65    | 2 1/2 |                  | 40         | 145        | 65     | 2 1/2 |                  | 145        | 470                 |           | 450                        | 0,31                |                    | 0,23               | 36   | 20,3             |
| IV   | 80    | 3     | 16-63<br>150-600 | 50         | 155        | 80     | 3     | 16-40<br>150     | 155        | 700                 | 620       | 0,46                       | 0,33                | 0,08               | 25                 | 38,0 |                  |
|      |       |       |                  | 58         | 175        | 100    | 4     |                  |            |                     |           | 650                        | 0,41                |                    | 0,29               | 6    | 38,2             |
|      | 100   | 4     |                  | 60         | 175        | 100    | 4     |                  | 650        | 0,44                |           | 0,30                       | 0,05                | 18                 | 40,5               |      |                  |
|      |       |       |                  | 70         | 175        | 100    | 4     |                  | 650        | 0,40                |           | 0,28                       | 6                   | 40,5               |                    |      |                  |
|      |       |       | 70               | 175        | 100        | 4      | 650   | 0,40             | 0,28       | 6                   | 40,5      |                            |                     |                    |                    |      |                  |

other design on request

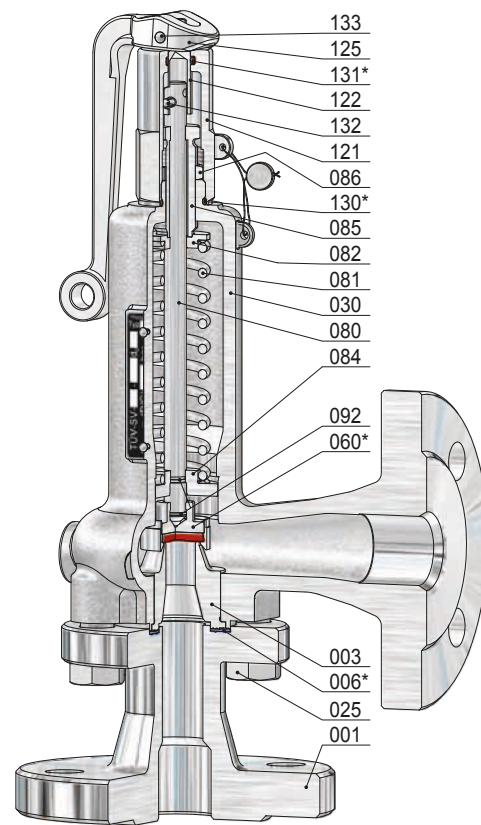
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## Typ 30



Size I  
head C



Size I  
head A

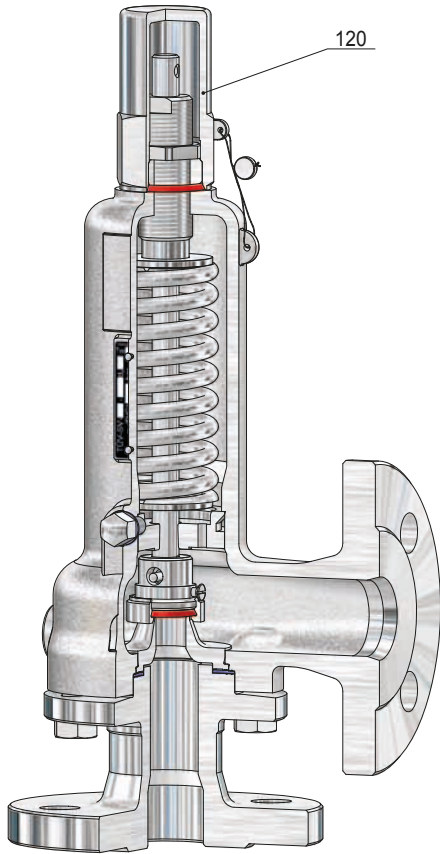
| Item  | Piece | Description        | Item  | Piece | Description    |
|-------|-------|--------------------|-------|-------|----------------|
| 001   | 1     | inlet body         | 086   | 1     | lock nut       |
| 003   | 1     | seat               | 092   | 2     | lock ring      |
| 006 * | 1     | packing ring       | 120   | 1     | cap            |
| 025   | 4     | screw              | 121   | 1     | lifting cap    |
| 030   | 1     | spring bonnet      | 122   | 1     | coupling       |
| 060 * | 1     | disc, complete     | 125   | 1     | lifting button |
| 560   | 1     | disc               | 130 * | 1     | o-ring         |
| 062   | 1     | soft sealing       | 131 * | 1     | o-ring         |
| 063   | 1     | disc ring          | 132   | 1     | groove pin     |
| 080   | 1     | spindle            | 133   | 1     | groove pin     |
| 081   | 1     | spring             |       |       |                |
| 082   | 1     | springplate, upper |       |       |                |
| 084   | 1     | springplate, lower |       |       |                |
| 085   | 1     | adjusting screw    |       |       |                |

\* expendable parts

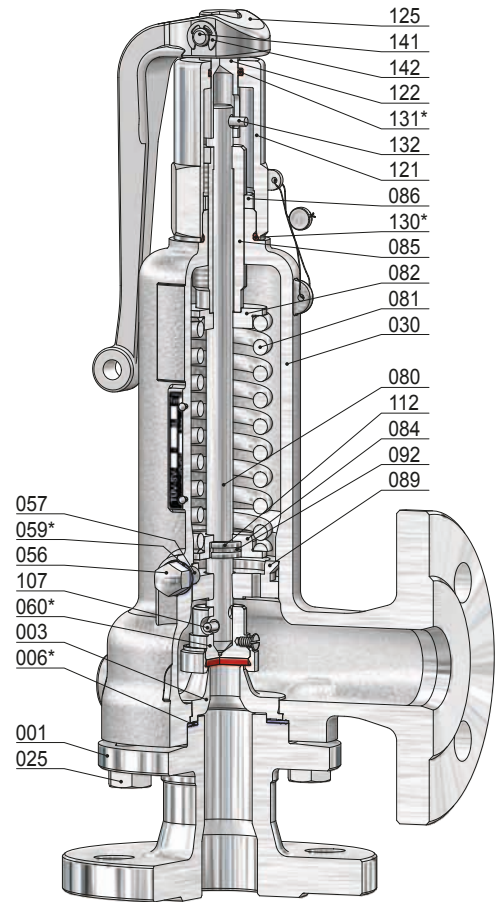
# Safety-Valve, springloaded

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## Typ 30



Size II  
head C



Size II  
head A

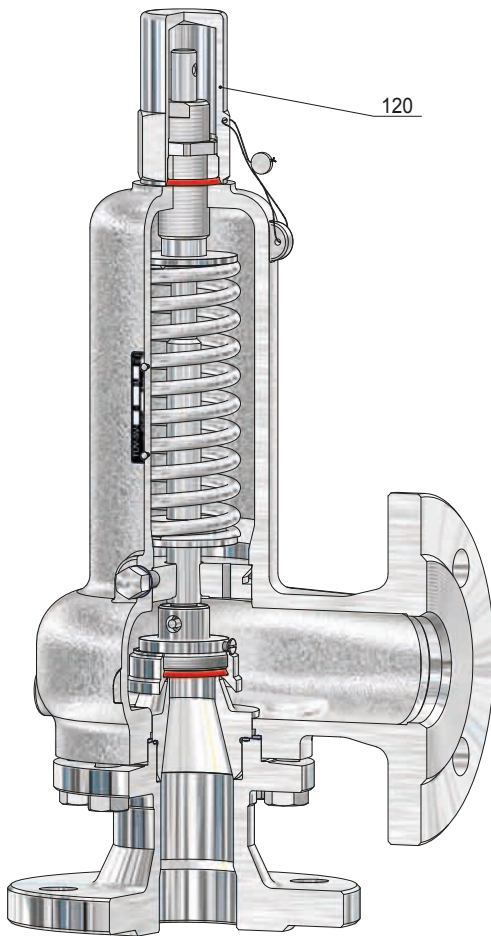
| Item  | Piece | Description        | Item  | Piece | Description     |
|-------|-------|--------------------|-------|-------|-----------------|
| 001   | 1     | inlet body         | 085   | 1     | adjusting screw |
| 003   | 1     | seat               | 086   | 1     | lock nut        |
| 006 * | 1     | packing ring       | 089   | 1     | guide plate     |
| 025   | 4     | screw              | 092   | 1     | lock ring       |
| 030   | 1     | spring bonnet      | 107   | 1     | spring pin      |
| 056   | 2     | lock nut           | 112   | 1     | split ring      |
| 057   | 2     | screwed pin        | 120   | 1     | cap             |
| 059 * | 2     | packing ring       | 121   | 1     | lifting cap     |
| 060 * | 1     | disc, complete     | 122   | 1     | coupling        |
| 062   | 1     | disc               | 125   | 1     | lifting button  |
| 063   | 1     | soft sealing       | 130 * | 1     | o-ring          |
| 067   | 1     | disc ring          | 131 * | 1     | o-ring          |
| 067   | 1     | security screw     | 132   | 1     | groove pin      |
| 080   | 1     | spindle            | 141   | 1     | bolt            |
| 081   | 1     | spring             | 142   | 2     | stop washer     |
| 082   | 1     | springplate, upper |       |       |                 |
| 084   | 1     | springplate, lower |       |       |                 |

\* expendable parts

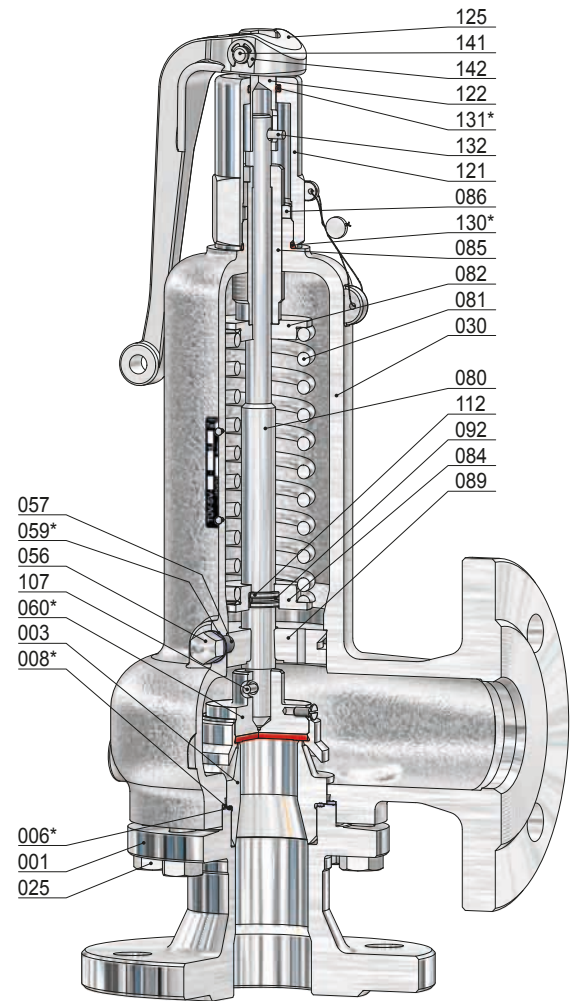
# Safety-Valve, springloaded

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## Typ 30



Size III  
head C



Size III  
head A

| Item  | Piece | Description        | Item  | Piece | Description        |
|-------|-------|--------------------|-------|-------|--------------------|
| 001   | 1     | inlet body         | 084   | 1     | springplate, lower |
| 003   | 1     | seat               | 085   | 1     | adjusting screw    |
| 006 * | 1     | packing ring       | 086   | 1     | lock nut           |
| 008 * | 1     | packing ring       | 089   | 1     | guide plate        |
| 025   | 8     | screw              | 092   | 1     | lock ring          |
| 030   | 1     | spring bonnet      | 107   | 1     | spring pin         |
| 056   | 2     | lock nut           | 112   | 1     | split ring         |
| 057   | 2     | screwed pin        | 120   | 1     | cap                |
| 059 * | 2     | packing ring       | 121   | 1     | lifting cap        |
| 060 * | 1     | disc, complete     | 122   | 1     | coupling           |
| 062   | 1     | disc               | 125   | 1     | lifting button     |
| 063   | 1     | disc ring          | 130 * | 1     | o-ring             |
| 067   | 1     | security screw     | 131 * | 1     | o-ring             |
| 080   | 1     | spindle            | 132   | 1     | groove pin         |
| 081   | 1     | spring             | 141   | 1     | bolt               |
| 082   | 1     | springplate, upper | 142   | 2     | stop washer        |

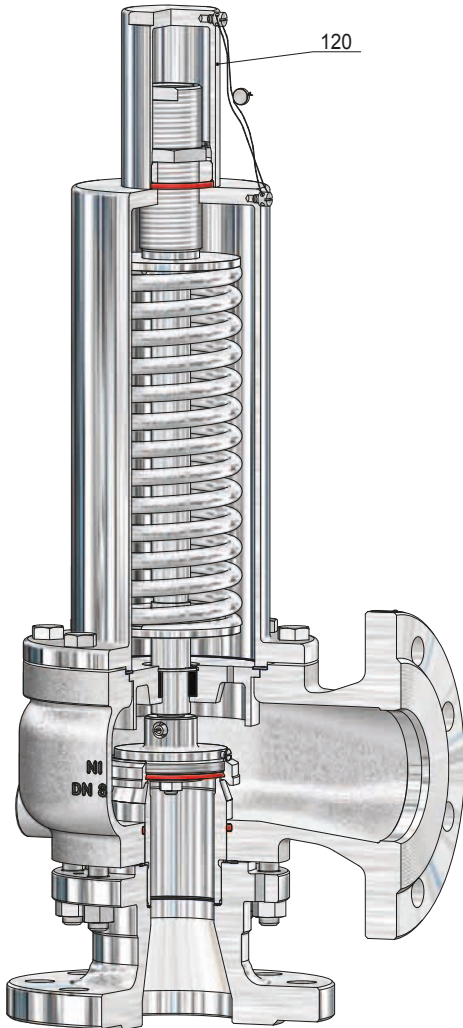
\* expendable parts



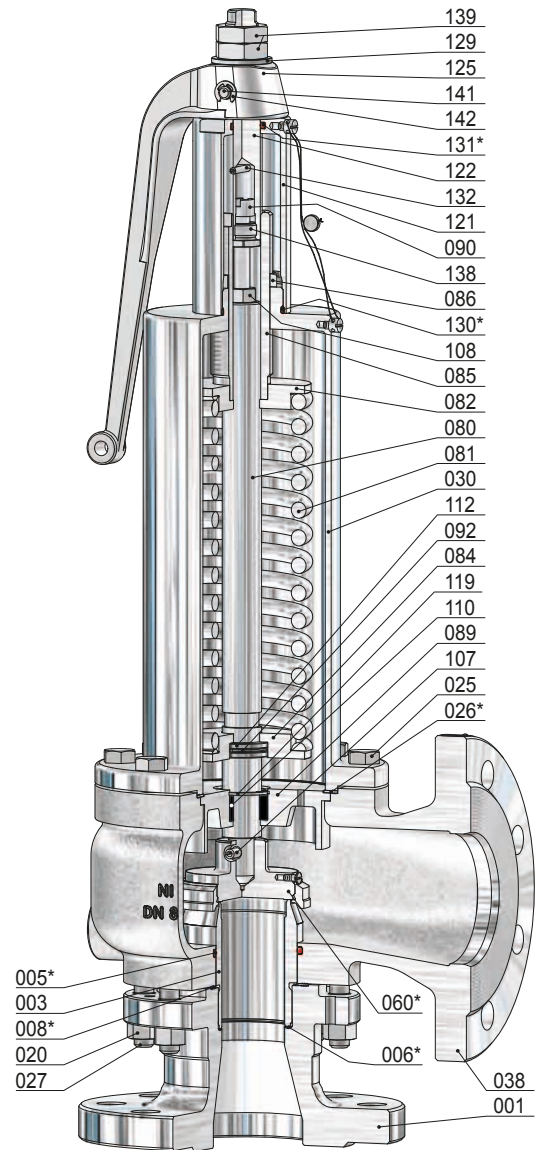
# Safety-Valve, springloaded

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## Typ 30



Size IV  
head C



Size IV  
head A

| Item  | Piece | Description    | Item | Piece | Description        | Item  | Piece | Description    |
|-------|-------|----------------|------|-------|--------------------|-------|-------|----------------|
| 001   | 1     | inlet body     | 073  | 1     | o-ring             | 121   | 1     | lifting cap    |
| 003   | 1     | seat           | 074  | 1     | disc plate         | 122   | 1     | coupling       |
| 005 * | 1     | o-ring         | 080  | 1     | spindle            | 125   | 1     | lifting button |
| 006 * | 1     | packing ring   | 081  | 1     | spring             | 129   | 1     | pressure plate |
| 008 * | 1     | packing ring   | 082  | 1     | springplate, upper | 130 * | 1     | o-ring         |
| 020   | 8     | nut            | 084  | 1     | springplate, lower | 131 * | 1     | o-ring         |
| 025   | 8     | screw          | 085  | 1     | adjusting screw    | 132   | 1     | groove pin     |
| 026 * | 1     | packing ring   | 086  | 1     | lock nut           | 138   | 1     | screw          |
| 027   | 8     | stud bolt      | 089  | 1     | guide plate        | 139   | 2     | nut            |
| 030   | 1     | spring bonnet  | 090  | 1     | screw              | 141   | 1     | bolt           |
| 038   | 1     | outlet body    | 092  | 1     | lock ring          | 142   | 2     | stop washer    |
| 060 * | 1     | disc, complete | 107  | 1     | spring pin         |       |       |                |
| 560   | 1     | disc           | 108  | 1     | nut                |       |       |                |
| 062   | 1     | soft sealing   | 110  | 1     | bush               |       |       |                |
| 063   | 1     | disc ring      | 112  | 1     | split ring         |       |       |                |
| 065   | 1     | disc bolt      | 119  | 1     | locking ring       |       |       |                |
| 067   | 1     | security screw | 120  | 1     | cap                |       |       |                |

\* expendable parts