

# Safety-Valve, springloaded

for non-toxic steam, gases and liquids

## Typ 110

### Standard version:

**Material:** Inlet body / Bonnet pipe metal seated  
**Typ 110.1:** 1.4104 / 2.0401 -10°C to 130°C  
**Typ 110.2:** 1.4571 / 1.4301 -60°C to 130°C

**Connections:** soft seated  
 Screwed connection: DIN ISO 228 / ASME B1.20.1 see techn. appendix: KWD-1

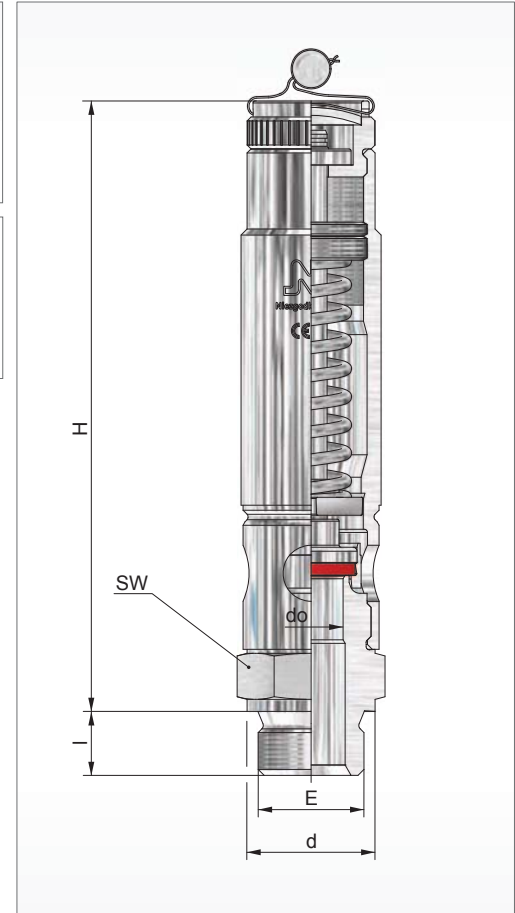
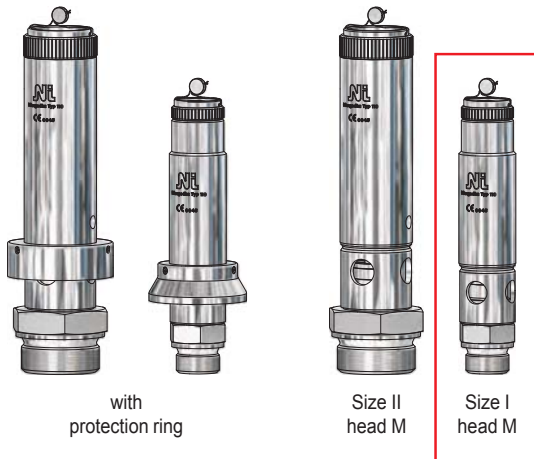
### Approvals:

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



**TÜV - Approval:**  
 VdTÜV-leaflet AD 2000-leaflet A 2

TÜV • SV • XX-990 / 1050 • do • D/G • αw • p



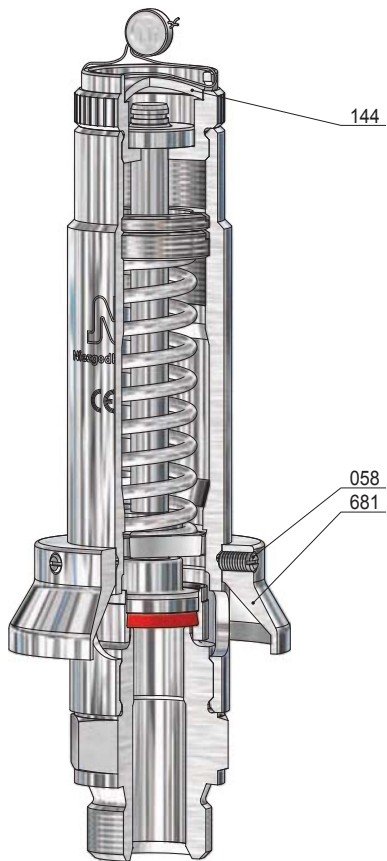
| Size | Inlet |      |       |         | Outlet<br>A | Dimensions |      |      | Height 'H' for head |    | Coefficient |          | Set pressure |        | Weight<br>~ [kg] |
|------|-------|------|-------|---------|-------------|------------|------|------|---------------------|----|-------------|----------|--------------|--------|------------------|
|      | E     | d    | I (G) | I (NPT) |             | SW         | do   |      | M                   |    | D/G         | p min.   | p max.       |        |                  |
|      | [mm]  | [mm] | [mm]  | [mm]    | [mm]        | [mm]       |      | [mm] |                     |    | αw max.     | [bar(g)] | [bar(g)]     |        |                  |
| I    | 3/8   | 22   | 12    | 11      | free        | 32         | 10   | 0,29 | 0,1                 | 52 | 153         | D/G      | p min.       | p max. | ~ [kg]           |
|      |       |      |       |         |             |            | 8    | 0,46 | 15,0                | 84 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 12,5 | 0,12 | 0,1                 | 45 |             |          |              |        |                  |
|      | 1/2   | 26   | 14    | 14      |             |            | 10   | 0,29 | 0,1                 | 52 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 8    | 0,46 | 15,0                | 84 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 16   | 0,13 | 0,05                | 31 |             |          |              |        |                  |
|      | 3/4   | 32   | 16    | 14      |             |            | 12,5 | 0,12 | 0,1                 | 45 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 10   | 0,29 | 0,1                 | 52 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 8    | 0,46 | 15,0                | 84 |             |          |              |        |                  |
| II   | 1/2   | 26   | 14    | 14      | free        | 41         | 12,5 | 0,50 | 0,09                | 67 | 190         | D/G      | p min.       | p max. | ~ [kg]           |
|      |       |      |       |         |             |            | 16   | 0,38 | 0,06                | 60 |             |          |              |        |                  |
|      | 3/4   | 32   | 16    | 14      |             |            | 12,5 | 0,50 | 0,09                | 67 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 16   | 0,38 | 0,06                | 60 |             |          |              |        |                  |
|      | 1     | 39   | 18    | 18      |             |            | 12,5 | 0,50 | 0,09                | 67 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 27   | 0,20 | 0,03                | 25 |             |          |              |        |                  |
|      | 1 1/4 | 49   | 20    | 18      |             |            | 22   | 0,22 | 0,04                | 35 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 16   | 0,38 | 0,06                | 60 |             |          |              |        |                  |
|      | 1 1/2 | 55   | 22    | 19      |             |            | 27   | 0,20 | 0,03                | 25 |             |          |              |        |                  |
|      |       |      |       |         |             |            | 22   | 0,16 | 0,04                | 35 |             |          |              |        |                  |
|      | 2     | 60   | 24    | 20      |             |            | 27   | 0,20 | 0,03                | 25 |             |          |              |        |                  |

other design on request

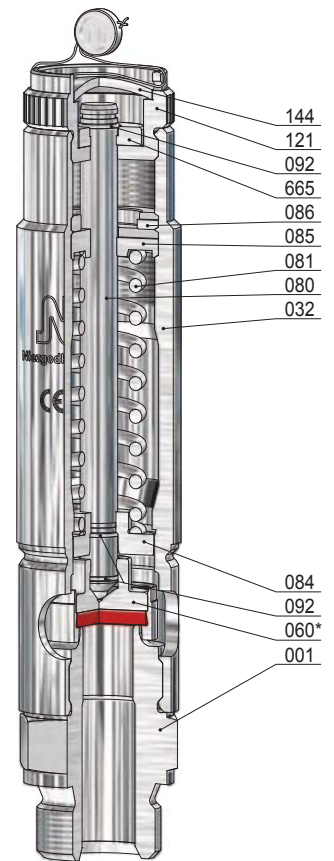
# Safety-Valve, springloaded

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# Typ 110



with protection ring  
recommend at each do  
for  $p > 30$  [bar(g)]



Size I  
head M, liftable

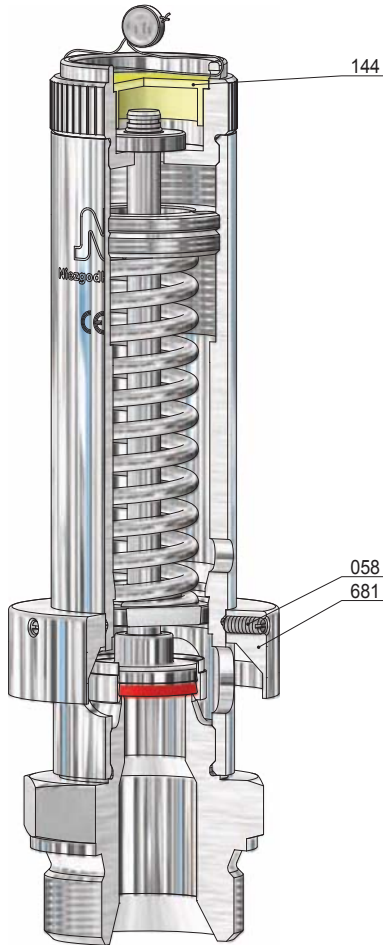
| Item  | Piece | Description        | Item | Piece | Description     |
|-------|-------|--------------------|------|-------|-----------------|
| 001   | 1     | inlet body         | 121  | 1     | lifting cap     |
| 032   | 1     | bonnet pipe        | 144  | 1     | lock washer     |
| 058   | 3     | screwed pin        | 665  | 1     | washer          |
| 060 * | 1     | disc, complete     | 681  | 1     | protection ring |
| 560   | 1     | disc               |      |       |                 |
| 062   | 1     | soft sealing       |      |       |                 |
| 063   | 1     | disc ring          |      |       |                 |
| 080   | 1     | spindle            |      |       |                 |
| 081   | 1     | spring             |      |       |                 |
| 084   | 1     | springplate, lower |      |       |                 |
| 085   | 1     | adjusting screw    |      |       |                 |
| 086   | 1     | lock nut           |      |       |                 |
| 092   | 3     | lock ring          |      |       |                 |

\* expendable parts

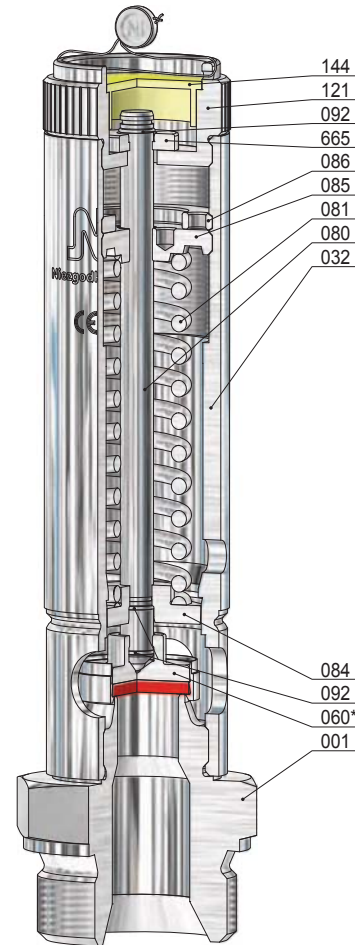
# Safety-Valve, springloaded

for non-toxic steam, gases and liquids

## Typ 110



with protection ring  
recommend at each  
do 12,5; 16: for / p > 30 [bar(g)]  
do 22: for / p > 10 [bar(g)]  
do 27: for / p > 8 [bar(g)]



Size II  
head M, liftable

| Item  | Piece | Description        | Item | Piece | Description     |
|-------|-------|--------------------|------|-------|-----------------|
| 001   | 1     | inlet body         | 121  | 1     | lifting cap     |
| 032   | 1     | bonnet pipe        | 144  | 1     | lock washer     |
| 058   | 3     | screwed pin        | 665  | 1     | washer          |
| 060 * | 1     | disc, complete     | 681  | 1     | protection ring |
| 560   | 1     | disc               |      |       |                 |
| 062   | 1     | soft sealing       |      |       |                 |
| 063   | 1     | disc ring          |      |       |                 |
| 080   | 1     | spindle            |      |       |                 |
| 081   | 1     | spring             |      |       |                 |
| 084   | 1     | springplate, lower |      |       |                 |
| 085   | 1     | adjusting screw    |      |       |                 |
| 086   | 1     | lock nut           |      |       |                 |
| 092   | 3     | lock ring          |      |       |                 |

\* expendable parts