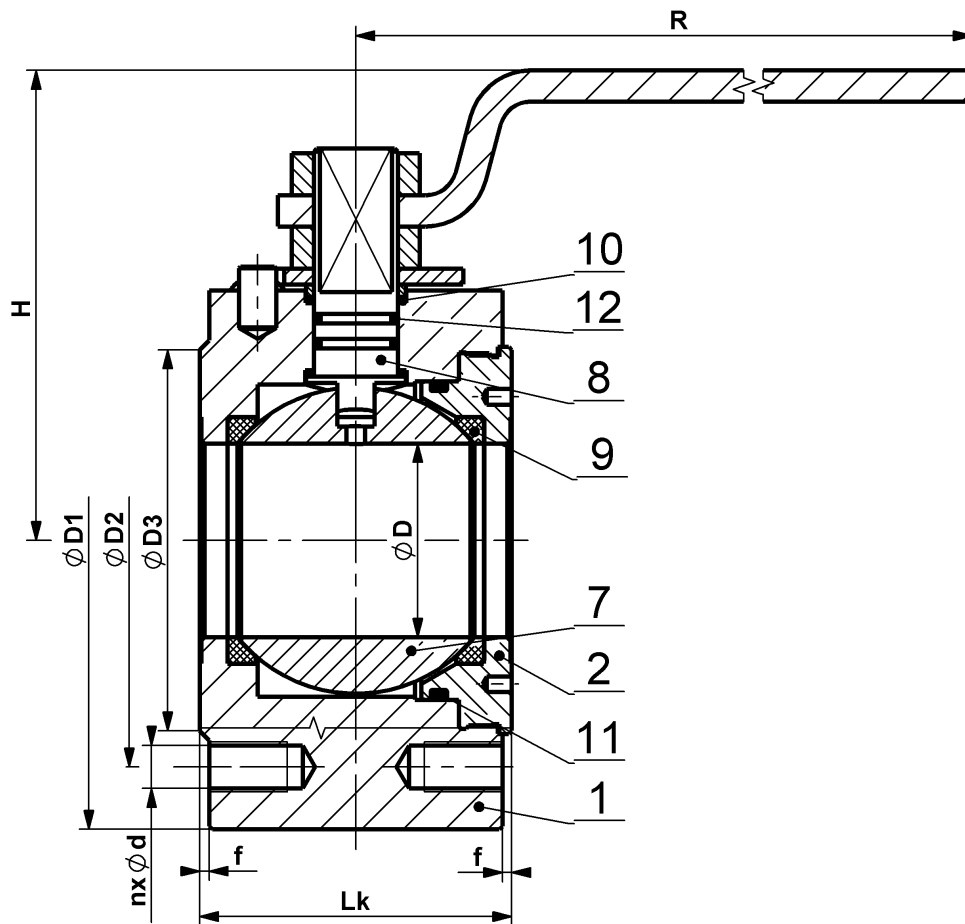


**WAFER-TYPE BALL VALVE**  
**KM 9107.X-01 – long pattern**  
**KM 9107.X-02 – short pattern**  
 DN 10–100 PN 16–160



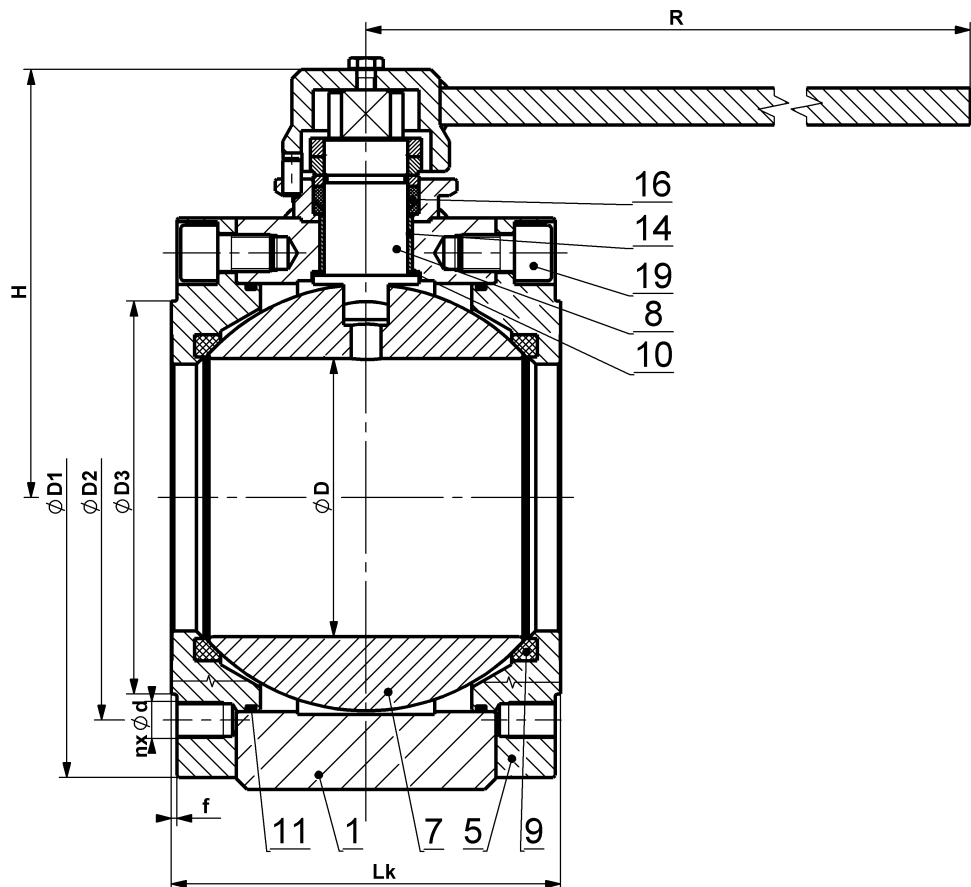
**Materials**

| Type KM 9107.X-01<br>Type KM 9107.X-02 |           | Material   |   |   |   |
|--|-----------|--|---|---|---|
|  |           | Carbon steel   |   | Stainless steel                                 |   |
| Position                               | Component | X=1<br>For common temperatures<br>from -20°C to +200°C | X=5<br>For low temperatures<br>from -46°C to +200°C | X=3<br>For temperatures<br>from -50°C to +200°C | X=4<br>For temperatures<br>from -50°C to +200°C |
| 1                                      | Body      | 1.0577, S355J2   | 1.0565, A350 LF2                                    | 1.4541, A182 F321                               | 1.4571, A182 F316                               |
| 2                                      | Cover     |  |   |   |   |
| 7                                      | Ball      | 1.4571, A182 F316, A351 CF8M, ČSN 17 027, 1.4021       |   |   |   |
| 8                                      | Stem      | 1.4021, ČSN 17 027                                     | 1.4541, A182 F321                                   | 1.4541, A182 F321                               | 1.4571, A182 F316                               |
| 9                                      | Seat      | PTFE, PTFE+C, PEEK                                     |   |   |   |
| 10                                     | Gasket    | PTFE+C, PEEK   |   |   |   |
| 11                                     | Sealing   | NBR, HNBR, EPDM, FPM, FPM+FEP                          |   |   |   |
| 12                                     | Sealing   | NBR, HNBR, EPDM, FPM, FPM+FEP                          |   |   |   |

Other materials upon request (P265GH, 1.4306, 1.4462 etc.).  
 Operating temperature range can be reduced based on selected sealing materials.

## WAFER-TYPE BALL VALVE KM 9107.X-SB-02 – short pattern

DN 125–250 PN 16–160



### Materials

| Type KM 9107.X-SB-02 |           | Material   |   |   |   |
|----------------------|-----------|--|---|---|---|
|                      |           | Carbon steel   |   | Stainless steel                                 |   |
| Position             | Component | X=1<br>For common temperatures<br>from -20°C to +200°C | X=5<br>For low temperatures<br>from -46°C to +200°C | X=3<br>For temperatures<br>from -50°C to +200°C | X=4<br>For temperatures<br>from -50°C to +200°C |
| 1                    | Body      | 1.0577, S355J2   | 1.0565, A350 LF2                                    | 1.4541, A182 F321                               | 1.4571, A182 F316                               |
| 6                    | Cover     |  |   |   |   |
| 7                    | Ball      | 1.4571, A182 F316, A351 CF8M, ČSN 17 027, 1.4021       |   |   |   |
| 8                    | Stem      | 1.4021, ČSN 17 027                                     | 1.4541, A182 F321                                   | 1.4541, A182 F321                               | 1.4571, A182 F316                               |
| 9                    | Seat      | PTFE, PTFE+C, PEEK                                     |   |   |   |
| 10                   | Gasket    | PTFE+C, PEEK   |   |   |   |
| 11                   | Sealing   | NBR, HNBR, EPDM, FPM, FPM+FEP                          |   |   |   |
| 14                   | Bearing   | KU   |   |   |   |
| 16                   | Gasket    | PTFE, RPTFE, Graphite                                  |   |   |   |
| 19                   | Bolt      | 8.8, A2-70, A193 B7                                    | A2-70, A320 L7                                      | A2-70, A193 B8                                  | A2-70, A193 B8                                  |

Other materials upon request (P265GH, 1.4306, 1.4462 etc.).

Operating temperature range can be reduced based on selected sealing materials.

## Dimensions and weights

|                | DN    | øD  | øD1 | øD2 | øD3 | f | n  | ød  | Lk-01      | Lk-02      | H     | R   | Hm / W |
|----------------|-------|-----|-----|-----|-----|---|----|-----|------------|------------|-------|-----|--------|
| PN 16, 25, 40  | 10    | 9,5 | 90  | 60  | 40  | 2 | 4  | M12 | <b>38</b>  |            | 72    | 115 | 1,5    |
|                | 15    | 15  | 88  | 65  | 45  | 2 | 4  | M12 | <b>38</b>  |            | 96    | 100 | 1,5    |
|                | 20    | 19  | 105 | 75  | 58  | 2 | 4  | M12 | <b>38</b>  |            | 100   | 100 | 2,2    |
|                | 25    | 25  | 115 | 85  | 68  | 2 | 4  | M12 | <b>42</b>  |            | 109   | 150 | 2,9    |
|                | 32    | 30  | 140 | 100 | 78  | 2 | 4  | M16 | <b>50</b>  |            | 120   | 150 | 4,9    |
|                | 40    | 38  | 150 | 110 | 88  | 2 | 4  | M16 | <b>64</b>  | 60         | 134   | 250 | 7,5    |
|                | 50    | 47  | 165 | 125 | 102 | 2 | 4  | M16 | <b>80</b>  | 70         | 141   | 250 | 11,3   |
|                | 65    | 62  | 185 | 145 | 122 | 2 | 8  | M16 | <b>100</b> | 95         | 161   | 350 | 18     |
|                | 80    | 76  | 200 | 160 | 138 | 2 | 8  | M16 | <b>120</b> | 118        | 171   | 350 | 24,5   |
| PN 16          | 100   | 98  | 220 | 180 | 158 | 2 | 8  | M16 | <b>160</b> | 140        | 173   | 450 | 36     |
|                | 125   | 125 | 250 | 210 | 188 | 2 | 8  | M16 | -          | <b>175</b> | 184   | 450 | 49     |
|                | 150   | 150 | 285 | 240 | 212 | 2 | 8  | M20 | -          | <b>210</b> | 221   | 540 | 92,5   |
|                | 200*  | 200 | 340 | 295 | 268 | 2 | 12 | M20 | -          | <b>280</b> | -     | *   | 192    |
|                | 250** | 250 | 405 | 355 | 320 | 2 | 12 | M24 | -          | -          | -     | *   |        |
| PN 25<br>PN 40 | 100   | 98  | 235 | 190 | 160 | 2 | 8  | M20 | <b>160</b> | 140        | 177.5 | 500 | 43     |
|                | 125*  | 125 | 270 | 220 | 188 | 2 | 8  | M24 | -          | 175        | -     | *   |        |
|                | 150*  | 150 | 300 | 250 | 218 | 2 | 8  | M24 | -          | 210        | -     | *   | 93     |
| PN 25          | 200** | 200 | 360 | 310 | 278 | 2 | 12 | M24 | -          | -          | -     | **  |        |
|                | 250** | 250 | 425 | 370 | 335 | 2 | 12 | M27 | -          | -          | -     | **  |        |
| PN 40          | 200** | 200 | 375 | 320 | 285 | 2 | 12 | M27 | -          | -          | -     | **  |        |
|                | 250** | 250 | 450 | 385 | 345 | 2 | 12 | M30 | -          | -          | -     | **  |        |
| PN 63, 100     | 15    | 15  | 105 | 75  | 45  | 2 | 4  | M12 |            |            |       |     |        |
|                | 20    | 19  | 130 | 90  | 58  | 5 | 4  | M16 | 42         |            | 85.5  | 120 | 3.4    |
|                | 25    | 25  | 140 | 100 | 68  | 2 | 4  | M16 | <b>56</b>  |            | 118   | 150 | 5.7    |
|                | 32    | 30  | 155 | 110 | 78  | 2 | 4  | M20 | 62         |            | 126   | 150 |        |
|                | 40    | 38  | 170 | 125 | 88  | 2 | 4  | M20 | 74         |            | 138   | 250 |        |
| PN 63          | 50    | 47  | 180 | 135 | 102 | 2 | 4  | M20 | <b>86</b>  |            | 144   | 250 | 14.1   |
|                | 65    | 62  | 205 | 160 | 122 | 2 | 8  | M20 | 102        |            | 175   | 350 |        |
|                | 80    | 76  | 215 | 170 | 138 | 2 | 8  | M20 | 126        |            | 166   | 450 |        |
|                | 100   | 98  | 250 | 200 | 162 | 2 | 8  | M24 | <b>160</b> | 140        | 190   | 630 | 49,5   |
|                | 125*  | 125 | 295 | 240 | 188 | 2 | 8  | M27 | -          | 200        | -     |     |        |
|                | 150** | 150 | 345 | 280 | 218 | 2 | 8  | M30 | -          | 250        | -     | **  |        |
|                | 200** | 195 | 415 | 345 | 285 | 2 | 12 | M33 | -          | -          | -     | **  |        |
|                | 250** | 250 | 470 | 400 | 345 | 2 | 12 | M33 | -          | -          | -     | **  |        |
| PN 100         | 50    | 47  | 195 | 145 | 102 | 2 | 4  | M24 |            |            |       |     |        |
|                | 65    | 62  | 220 | 170 | 122 | 2 | 8  | M24 |            |            |       |     |        |
|                | 80    | 76  | 230 | 180 | 138 | 2 | 8  | M24 |            |            |       |     |        |
|                | 100*  | 98  | 265 | 210 | 162 | 2 | 8  | M27 |            |            |       |     |        |
|                | 125** | 119 | 315 | 250 | 188 | 2 | 8  | M30 |            |            |       | **  |        |
|                | 150** | 142 | 355 | 290 | 218 | 2 | 12 | M30 |            |            |       | **  |        |

\* = gearbox recommended, \*\* = with gearbox only. Dimensions in [mm], weights in [kg].

Weight shown is valid for lengths marked in bold. Dimensions for PN 160 upon request.

In case of long pattern valves type 'Lk-01' it is guaranteed that the ball in 'closed' position does not extend beyond the face-to-face/end-to-end dimension of the ball valve.

### Application

Isolating valve designed to fully open or close the service fluid flow. It is not designed to be used for throttling or regulating purposes. For temperatures from -50 °C to +200 °C.

Suitable for:

- water, steam, gas, oil, crude oil, acid, alkali and other liquids and gases without mechanical impurities.

Approved for:

- fluids in groups 1 (hazardous) and 2 according to 2014/68/EU – category III.

### Characteristics

- floating ball,
- full bore,
- anti-static design,
- stem secured against release (anti-blow-out).

### Optional accessories, adjustments and services

- different face-to-face dimensions or end combinations,
- adaptation of sealing face (Groove, Tongue, Spigot, Recess, O-ring groove, RTJ),
- connection for actuator according to ISO 5211,
- fire-safe design – fire resistance in accordance with EN ISO 10497 (API 607),
- heating jacket – for keeping the fluid liquid,
- lockable handle with a padlock,
- extended stem – e.g. for the reason of insulation of the valve and pipeline,
- limit switches,
- documentation according to EN 10204 3.2,
- special adjustments according to customer requests,
- design according to standard NACE MR 0175 or ISO 15156 for fluids with hydrogen sulfide (H<sub>2</sub>S),
- degreased for **Oxygen** service,
- design for application in potentially explosive atmospheres according to the directive 2014/34/EU (ATEX):
  - I M1 Ex h I Ma,
  - II 1G Ex h IIC T6...T1 Ga,
  - II 1D Ex h IIIC TX °C Da.

### Operation

- hand lever,
- hand wheel with worm gear,
- pneumatic actuator,
- electric actuator.

### Compliance with standards

- EN 1983,
- EN 12516-1,
- EN 1092-1,
- EN ISO 5211,
- EN ISO 80079-36 (ATEX) – II 2G Ex h IIB T6...T3 Gb,
- EN 61508-1, 2 – SIL 2.

### Testing

- EN 12266-1, leakage rate A – zero leakage.

### Type designation

