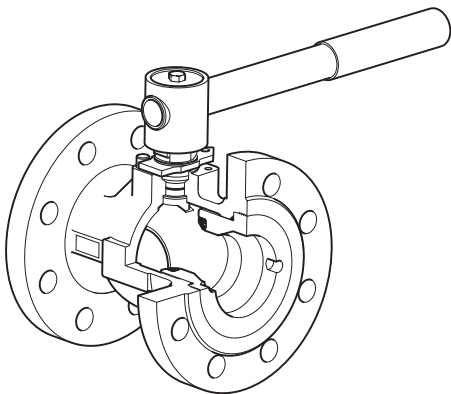


DN25 to DN50



DN65

GBV Ball Valve with Reduced Bore Firesafe API 607
 DN 25 to DN 200 Flanged ASME 150 and ASME 300
M40Fi ISO

Description

The M40Fi is a reduced bore ball valve, with a single piece body, having ISO mounting as standard. It is designed to be an isolating valve, which can be used with the majority of industrial fluids, not a control valve.

Firesafe design

In normal working conditions, the ball rests against two PDR 0.8 seats ensuring total closure. When the valve is submitted to temperature above the limits the seats can withstand, the seat becomes deformed and renders to extrusion. When the seats have been totally destroyed, the ball will come to rest firmly against the metal seat in the cap, producing a metal-to-metal closing. This secondary seat in the valve cap ensures the valve will operate to international API 607 standard.

Available types

| | |
|-------------------|--------------------------------------|
| M40Fi3 ISO | Stainless steel body, PDR 0.8 seats. |
|-------------------|--------------------------------------|

Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED) and carries the  mark when so required.

Certification

This product is available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

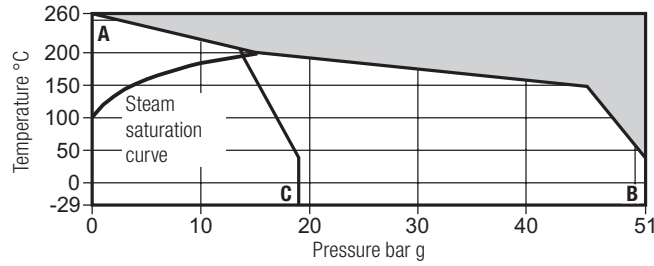
DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN150 and DN200.

Standard flanges ASME 150 and ASME 300 with face-to-face dimensions according to ASME B16.10.

Technical data

| | |
|---|-----------------|
| Flow characteristic | Modified linear |
| Port | Reduced bore |
| Leakage test procedure to ISO 5208 (Rate A)/EN 12266-1 (Rate A) | |
| Antistatic device (optional) complies with ISO 7121 and BS 5351 | |

Pressure/temperature limits



The product **must not** be used in this region.

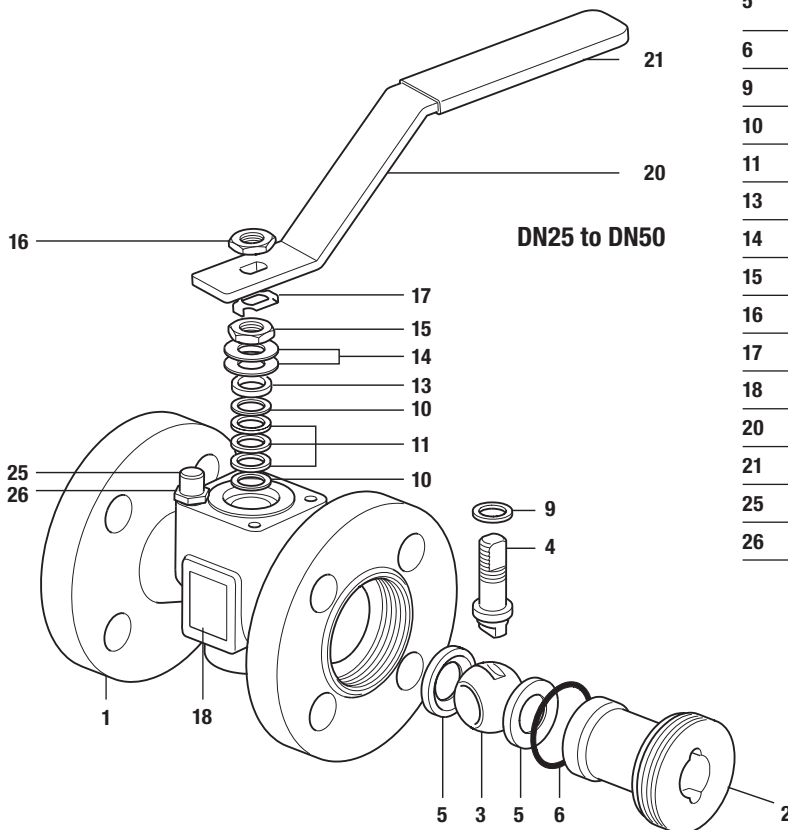
A - B Flanged ASME 300

A - C Flanged ASME 150

| Body design conditions | | ASME 150 and ASME 300 | |
|--|--|-----------------------|------------------|
| PMA | Maximum allowable pressure | ASME 150 | 19 bar g @ 38 °C |
| | | ASME 300 | 51 bar g @ 38 °C |
| TMA | Maximum allowable temperature | 260 °C @ 0 bar g | |
| Minimum allowable temperature | | -29 °C | |
| PMO | Maximum operating pressure for saturated steam service | ASME 150 | 13.8 bar g |
| | | ASME 300 | 17.5 bar g |
| TMO | Maximum operating temperature | 260 °C @ 0 bar g | |
| Minimum operating temperature | | -29 °C | |
| Note: For lower operating temperatures consult GESTRA | | | |
| ΔPMX | Maximum differential pressure is limited to the PMO | | |
| Designed for a maximum cold hydraulic test pressure of: | ASME 150 | 28.5 bar g | |
| | ASME 300 | 76.5 bar g | |

Materials

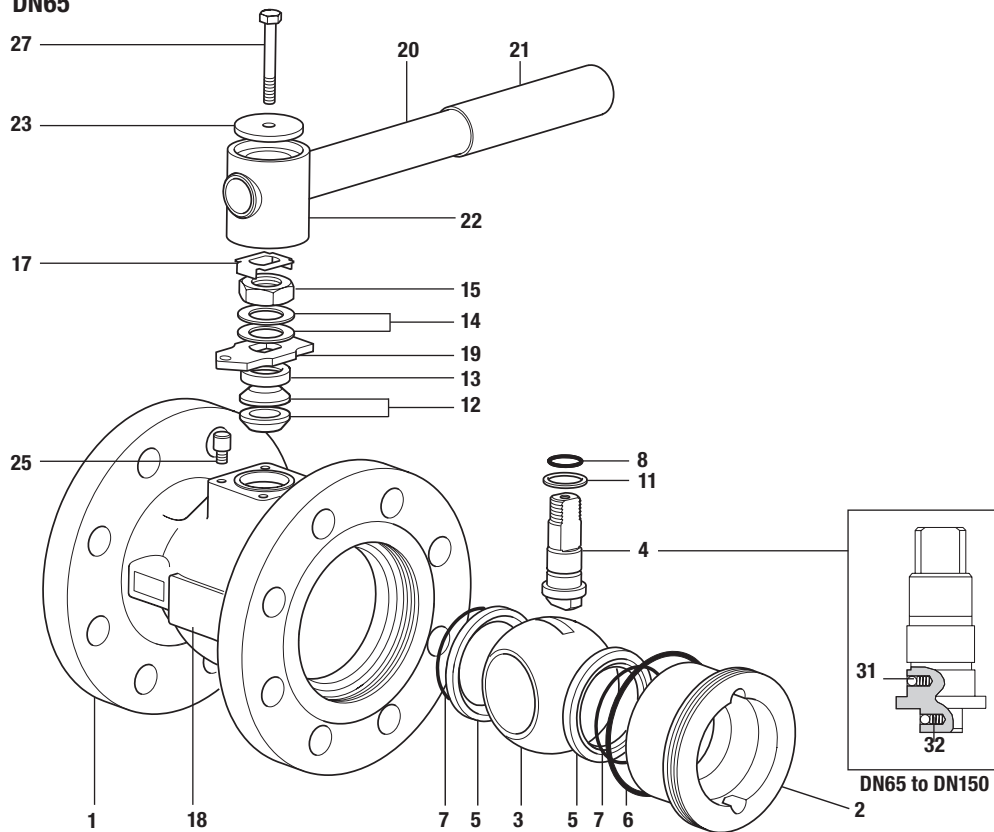
| No. | Part | Material | |
|-----|-------------------|------------|---|
| 1 | Body | M40Fi3 ISO | Stainless steel ASTM A351 CF8M |
| 2 | Insert | M40Fi3 ISO | Stainless steel AISI 316 |
| 3 | Ball | | Stainless steel AISI 316 |
| 4 | Stem | | Stainless steel AISI 316 |
| 5 | Seat | | Carbon and graphite reinforced PTFE PDR 0.8 |
| 6 | Insert gasket | | Graphite |
| 9 | Stem seal | | Antistatic R-PTFE |
| 10 | Stem seal | | Stainless steel AISI 304 |
| 11 | Stem seal | | Graphite |
| 13 | Separator | | Zinc plated carbon steel SAE 1010 |
| 14 | Belleville washer | | Stainless steel AISI 301 |
| 15 | Gland nut | | Zinc plated carbon steel SAE 1010/SAE 12L14 |
| 16 | Upper stem nut | | Zinc plated carbon steel SAE 1010/SAE 12L14 |
| 17 | Locking plate | | Stainless steel AISI 304 |
| 18 | Nameplate | | Stainless steel AISI 430 |
| 20 | Lever | | Zinc plated carbon steel SAE 1010 |
| 21 | Grip | | Vinyl Red |
| 25 | Stop screw | | Zinc plated carbon steel SAE 12L14 |
| 26 | Split lock washer | | Stainless steel AISI 304 |



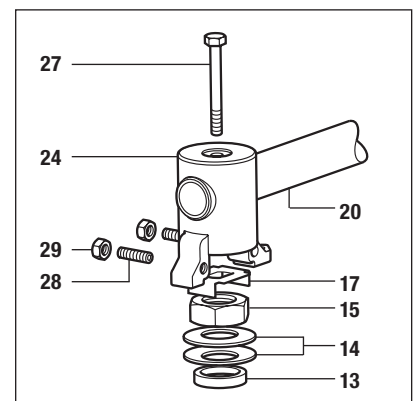
Materials

| No. | Part | | Material | |
|-----|---------------------------|---------------|-------------------------------------|--------------------|
| 1 | Body | M40F13 ISO | Stainless steel | ASTM A351 CF8M |
| 2 | Insert | M40F13 ISO | Stainless steel | AISI 316 |
| 3 | Ball | | Stainless steel | AISI 316 |
| 4 | Stem | | Stainless steel | AISI 316/AISI 420 |
| 5 | Seat | | Carbon and graphite reinforced PTFE | PDR 0.8 |
| 6 | Insert gasket | | Graphite | |
| 7 | Seat 'O' ring | | Viton | |
| 8 | Stem 'O' ring | | Viton | |
| 11 | Lower stem seal | | Antistatic R-PTFE | |
| 12 | Upper stem packing | | Graphite | |
| 13 | Separator | | Zinc plated carbon steel | SAE 1010 |
| 14 | Belleville washer | | Carbon steel/Stainless steel | |
| 15 | Gland nut | | Zinc plated carbon steel | SAE 1010/SAE 12L14 |
| 17 | Locking plate | | Stainless steel | AISI 304 |
| 18 | Nameplate | | Stainless steel | AISI 430 |
| 19 | Stop plate with indicator | DN65 only | Zinc plated carbon steel | SAE 1010 |
| 20 | Lever | | Zinc plated carbon steel | SAE 1010 |
| 21 | Grip | | Vinyl | Red |
| 22 | Adaptor | DN65 only | Zinc plated SG iron | |
| 23 | Adaptor plate | DN65 only | Zinc plated carbon steel | SAE 1010 |
| 24 | Adaptor with indicator | DN80 to DN200 | Zinc plated SG iron | |
| 25 | Stop screw | | Zinc plated carbon steel | SAE 12L14 |
| 27 | Adaptor screw | | Zinc plated carbon steel | Grade 5 |
| 28 | Stop screw | DN80 to DN200 | Carbon steel | |
| 29 | Adaptor hex. nut | DN80 to DN200 | Zinc plated carbon steel | |
| 31 | Antistatic device ball | | Stainless steel | AISI 302 |
| 32 | Antistatic device spring | | Stainless steel | AISI 301 |

DN65



DN80 to DN200



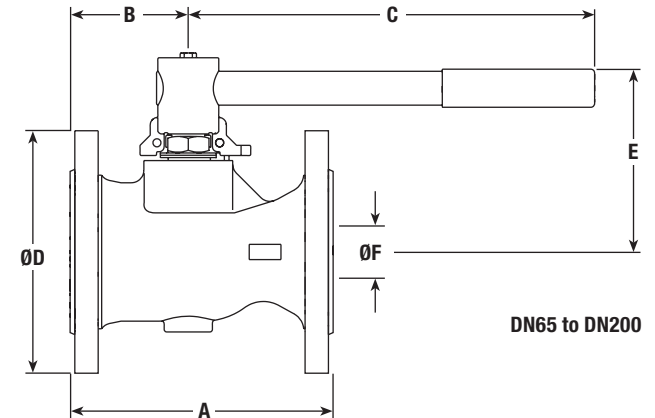
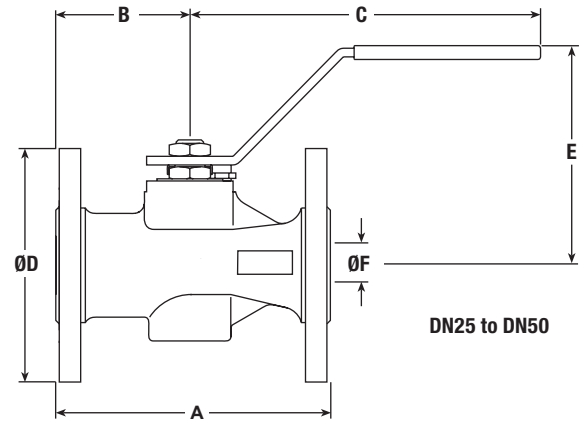
Dimensions/weights (approximate) in mm and kg

Flanged ASME 150

| Size | A | B | C | D | E | F | Weight |
|-------|-----|-----|-----|-----|-----|-----|--------|
| DN25 | 127 | 62 | 162 | 108 | 101 | 19 | 2.9 |
| DN32 | 140 | 65 | 182 | 118 | 106 | 25 | 3.8 |
| DN40 | 165 | 70 | 186 | 127 | 118 | 30 | 5.4 |
| DN50 | 178 | 75 | 186 | 152 | 123 | 37 | 7.9 |
| DN65 | 190 | 79 | 278 | 178 | 144 | 50 | 12.0 |
| DN80 | 203 | 91 | 417 | 191 | 157 | 57 | 15.8 |
| DN100 | 229 | 98 | 517 | 229 | 172 | 75 | 24.8 |
| DN150 | 267 | 130 | 700 | 279 | 205 | 100 | 43.8 |
| DN200 | 292 | 146 | 850 | 343 | 286 | 200 | 82.5 |

Flanged ASME 300

| Size | A | B | C | D | E | F | Weight |
|-------|-----|-----|-----|-----|-----|-----|--------|
| DN25 | 165 | 62 | 162 | 124 | 101 | 19 | 4.5 |
| DN32 | 178 | 65 | 182 | 134 | 106 | 25 | 5.7 |
| DN40 | 190 | 70 | 186 | 156 | 118 | 30 | 8.2 |
| DN50 | 216 | 75 | 186 | 165 | 123 | 37 | 10.3 |
| DN65 | 241 | 79 | 278 | 190 | 144 | 50 | 16.0 |
| DN80 | 283 | 91 | 417 | 210 | 157 | 57 | 22.3 |
| DN100 | 305 | 98 | 517 | 254 | 172 | 75 | 36.1 |
| DN150 | 403 | 130 | 700 | 318 | 205 | 100 | 66.6 |
| DN200 | 419 | 146 | 850 | 381 | 286 | 200 | 117.5 |



K_v values

| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 150 | 200 |
|----------------|----|----|----|-----|-----|-----|-----|-----|------|
| K _v | 30 | 40 | 81 | 103 | 197 | 248 | 581 | 735 | 1600 |

For conversion:

$$C_v \text{ (UK)} = K_v \times 0.963$$

$$C_v \text{ (US)} = K_v \times 1.156$$

Operating torques (Nm)

| DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 150 | 200 |
|-----|----|----|----|----|----|----|-----|-----|-----|
| N m | 10 | 15 | 20 | 25 | 50 | 70 | 100 | 155 | 720 |

Note: The torque figures shown are for a valve that is frequently operated at the maximum operating pressure. Valves that are subject to long static periods, may require a greater break-out torque.

Safety information, installation and maintenance

For full details see the Original Installation Instructions supplied with the product.

Welding

Only the models that have connections designed for welding (SW, BW, Imperial Tube connections) should be welded. Valves with flanged connections must not be welded to avoid damages to the valve and/or injury to personnel.

How to order

| Specify | Model | Seat material | F = | Carbon and graphite reinforced PTFE - PDR 0.8 |
|---------|----------|---------------|-----|---|
| | Material | Body material | 3 = | Stainless steel |

Example: 1 off GESTRA DN50 M40Fi3 ISO ball valve having flanged ASME 150 connections.

Optional extras:

- Self-venting ball.
- Extended stems to allow full insulation: 50 mm (2") for DN15 to DN50 sizes and 100 mm (4") for DN25 to DN200 sizes.
- Lockable handle.
- 100 mm extended stem with lockable handle.

DN25 to DN50 - Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

Available spares

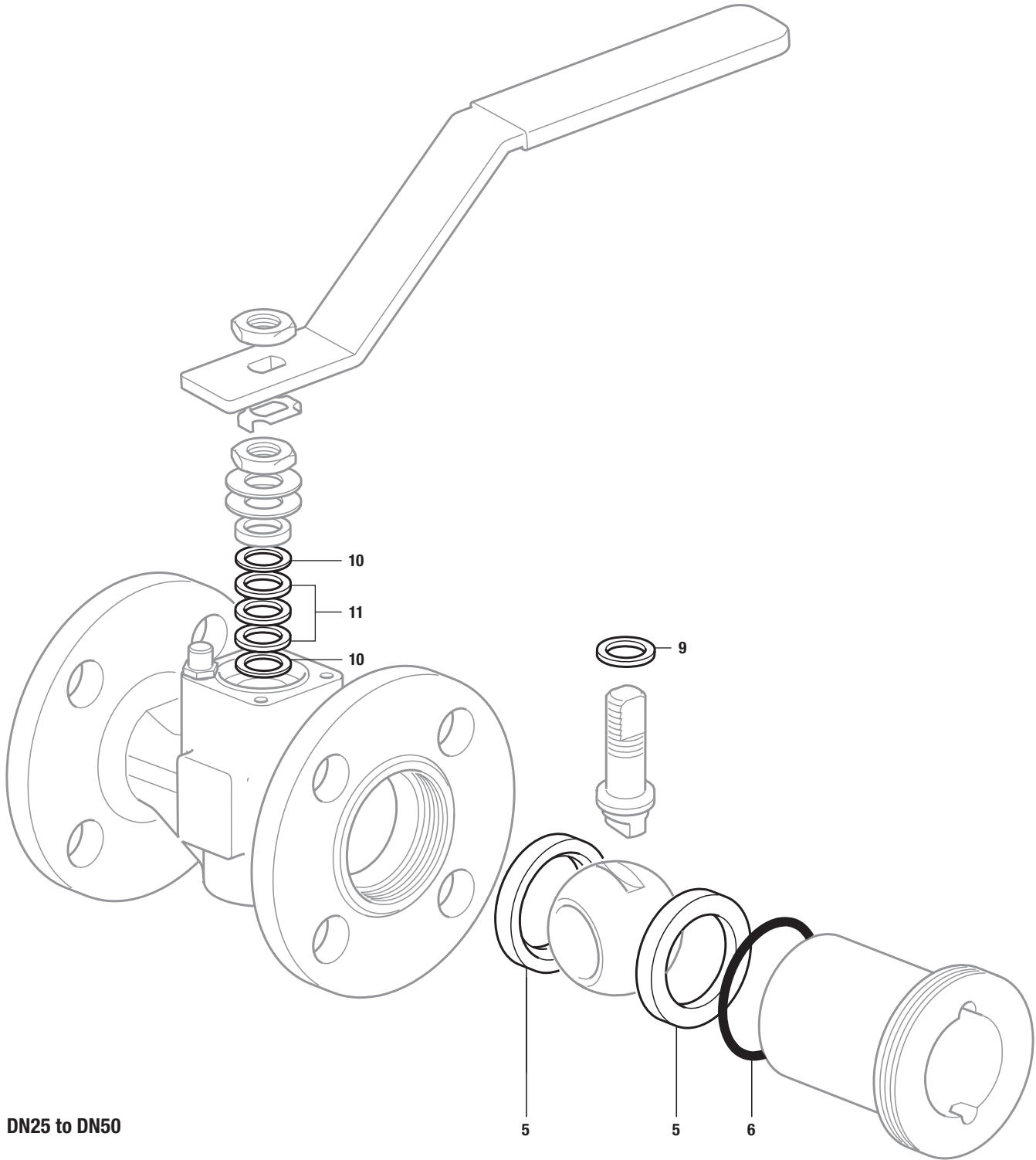
Seats, insert gasket and stem seals

5, 6, 9, 10, 11

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of ball valve.

Example: 1 set of seats, insert gasket and stem seals for a GESTRA DN50 flanged ASME 150 M40Fi3 ball valve.



DN25 to DN50

DN65 to DN200 - Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

Available spares

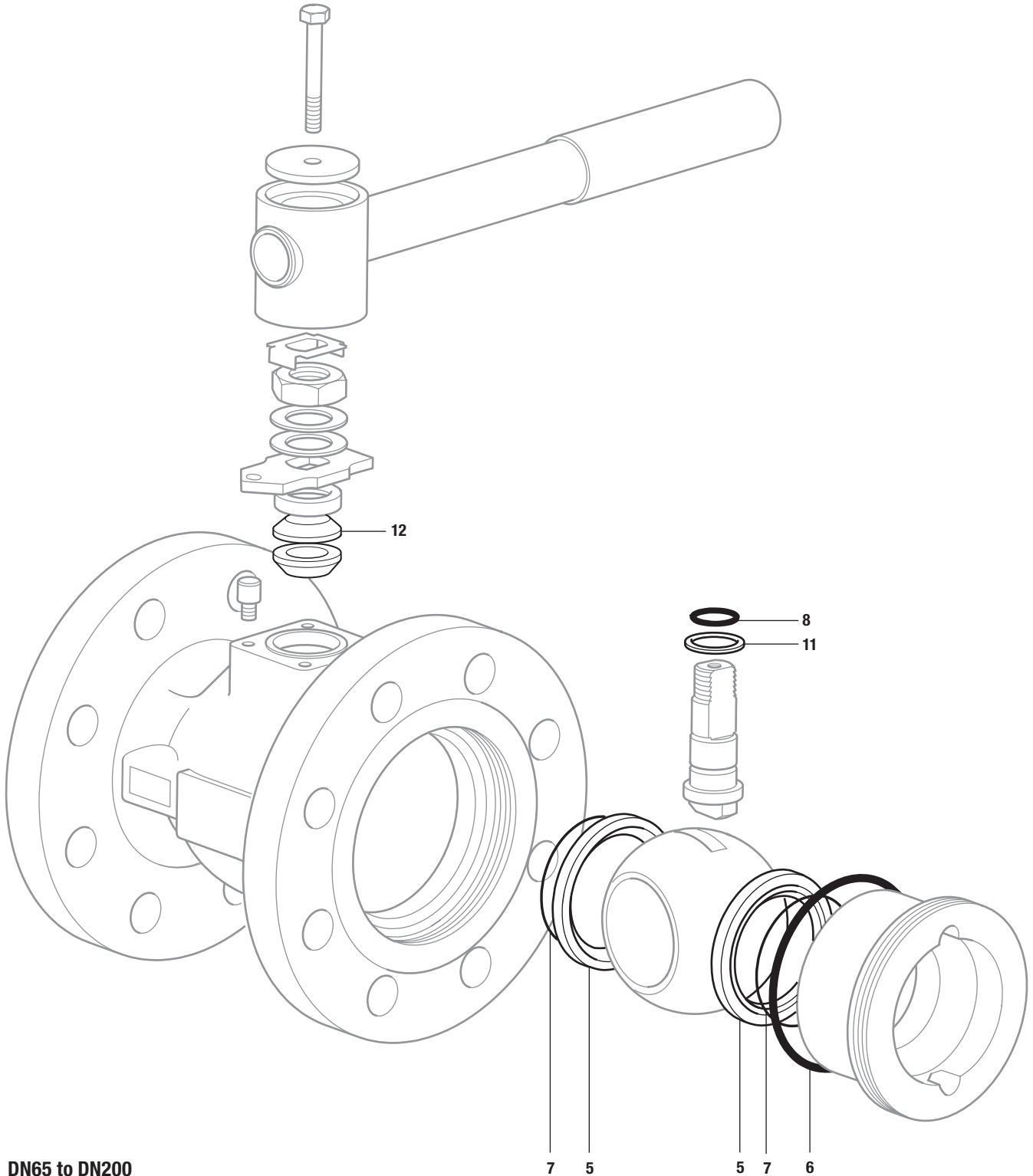
Seats, insert gasket, seat 'O' ring, stem 'O' ring, lower stem seal and upper stem packing

5, 6, 7, 8, 11, 12

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of ball valve.

Example: 1 set of seats, insert gasket, seat 'O' ring, stem 'O' ring, lower stem seal and upper stem packing for a GESTRA DN80 flanged ASME 150 M40Fi2 ball valve.



DN65 to DN200

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