

## Seal Arrangement Type 0

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Foil
5	Packing compound
6	Packing compound profile
7	Packing pellets
8	Seal screw
9	Front body
10	Rear body
11	Gate

## Replacing of valve body seal Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 4, 5) into rear body (item 10) acc. figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into front body (item 9) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 11) into rear body half (item 10); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 6), the insert (item 2) and fill firmly with packing material (item 5).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 7) and compress evenly with the packing tool before inserting the seal screws (item 8) with a few turns.

Figure A

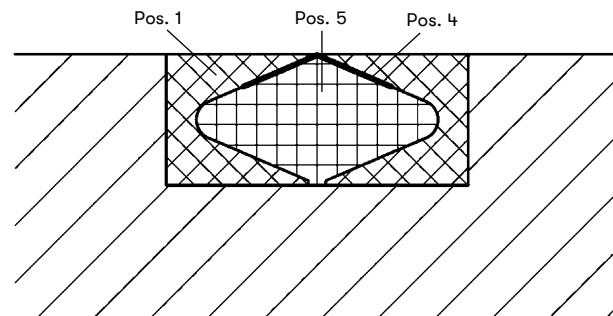
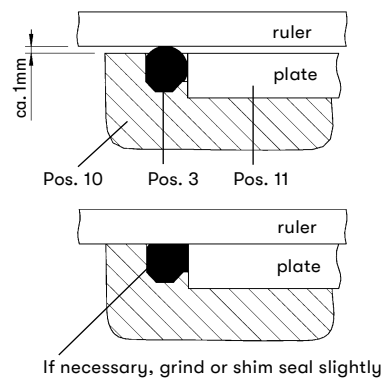
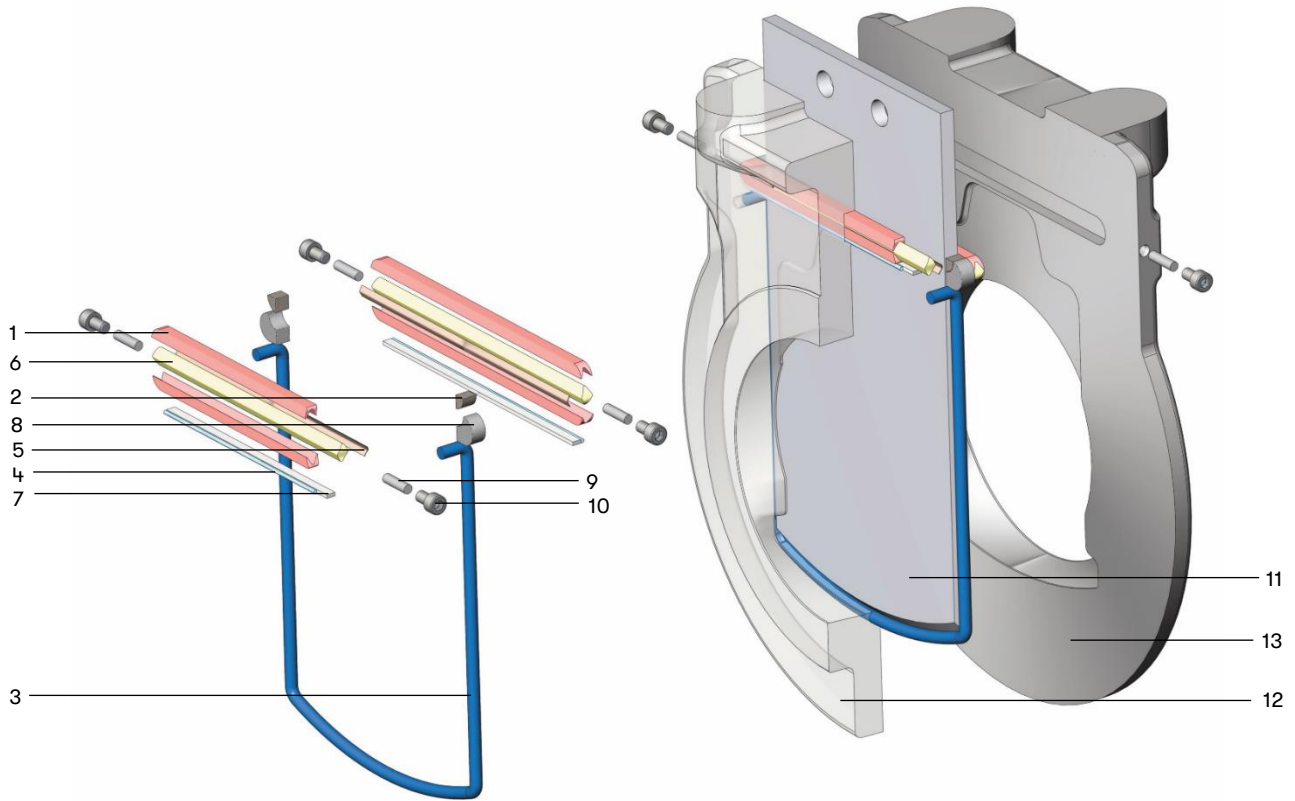


Figure B



Tab. 1

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



## Seal Arrangement Type 1

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Scraper round cord
5	Foil
6	Packing compound
7	Scraper
8	Packing compound profile
9	Packing pellets
10	Seal screw
11	Front body
12	Rear body
13	Gate

## Replacing of valve body seals Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 5, 6) into front body (item 12), followed by the scraper (item 4 and 7), both according to figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into rear body (item 11) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 13) into rear body half (item 12); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 8), the insert item (item 2) and fill firmly with packing material (item 6).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 9) and compress evenly with the packing tool before inserting the seal screws (item 10) with a few turns.

Figure A

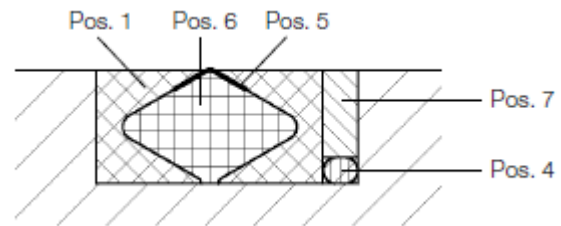
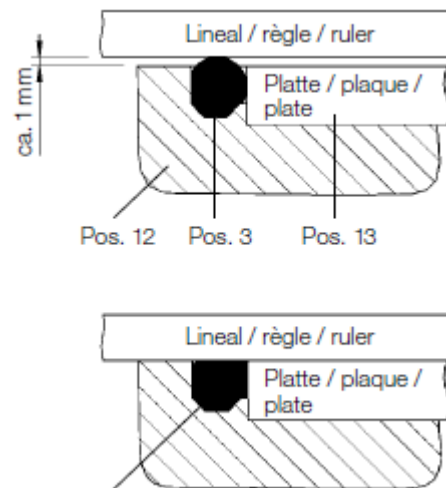


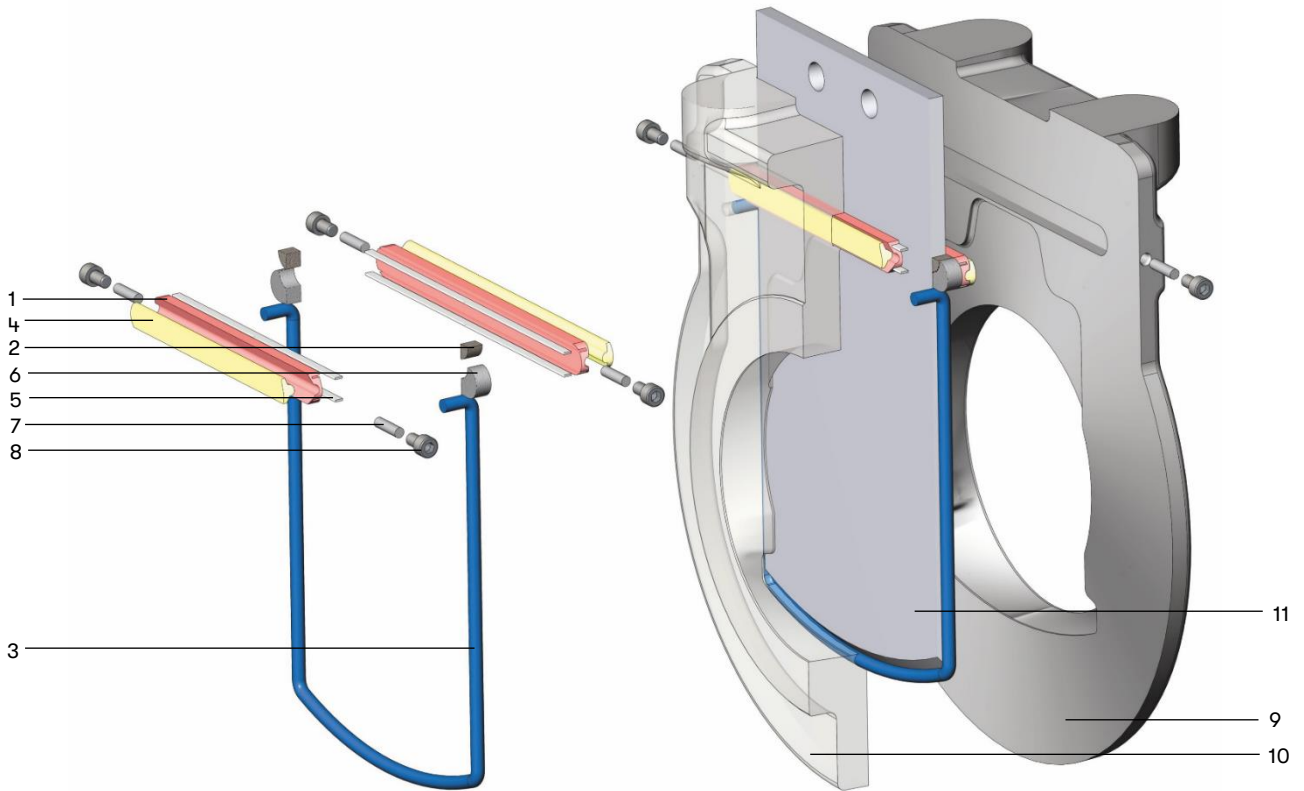
Figure B



if necessary, grind or shim seal slightly

Tab. 2

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



## Seal Arrangement Type 2

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Packing compound
5	Scraper
6	Packing compound profile
7	Packing pellets
8	Seal screw
9	Front body
10	Rear body
11	Gate

## Replacing of valve body seals Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 4) into rear body (item 10), followed by the two scraper (item 5), both according to figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into front body (item 9) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 11) into rear body half (item 10); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 6), the insert (item 2) and fill firmly with packing material (item 4).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 7) and compress evenly with the packing tool before inserting the seal screws (item 8) with a few turns.

Figure A

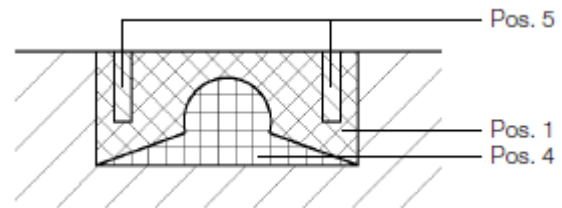
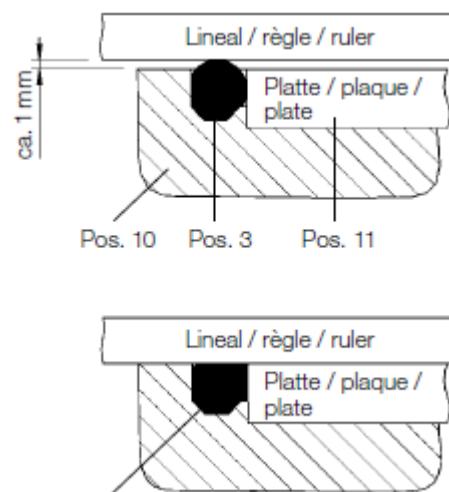


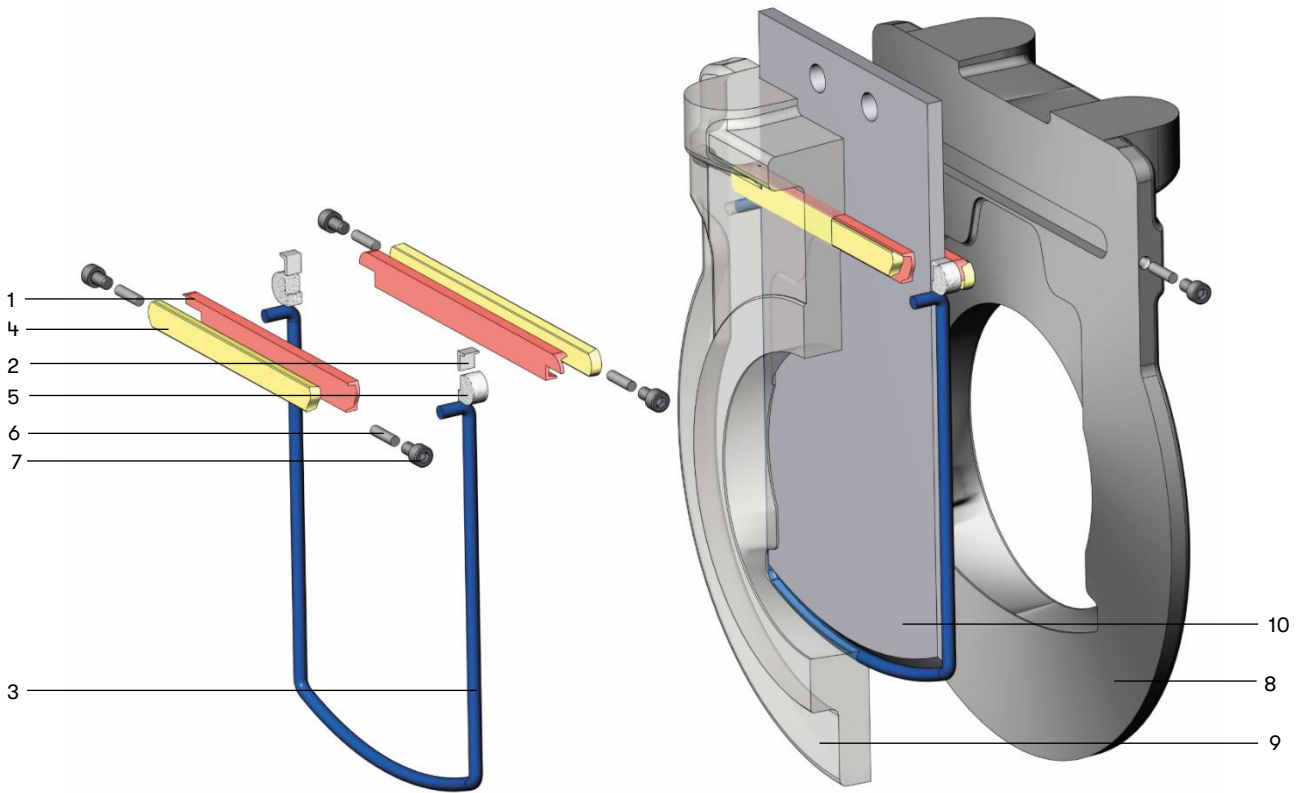
Figure B



if necessary, grind or shim seal slightly

Tab. 3

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



### Seal Arrangement Type **3**

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Packing compound
5	Packing compound profile
6	Packing pellets
7	Seal screw
8	Front body
9	Rear body
10	Gate



## Replacing of valve body seals Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 4) into rear body (item 9) acc. figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into front body (item 8) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 10) into rear body half (item 9); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 5), the insert (item 2) and fill firmly with packing material (item 4).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 6) and compress evenly with the packing tool before inserting the seal screws (item 7) with a few turns.

Figure A

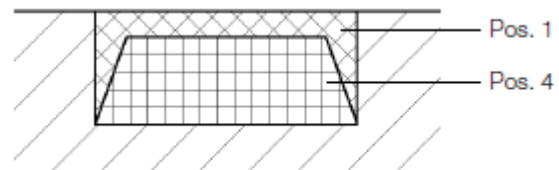
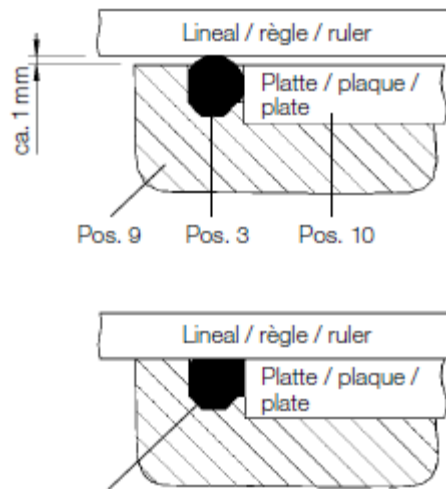


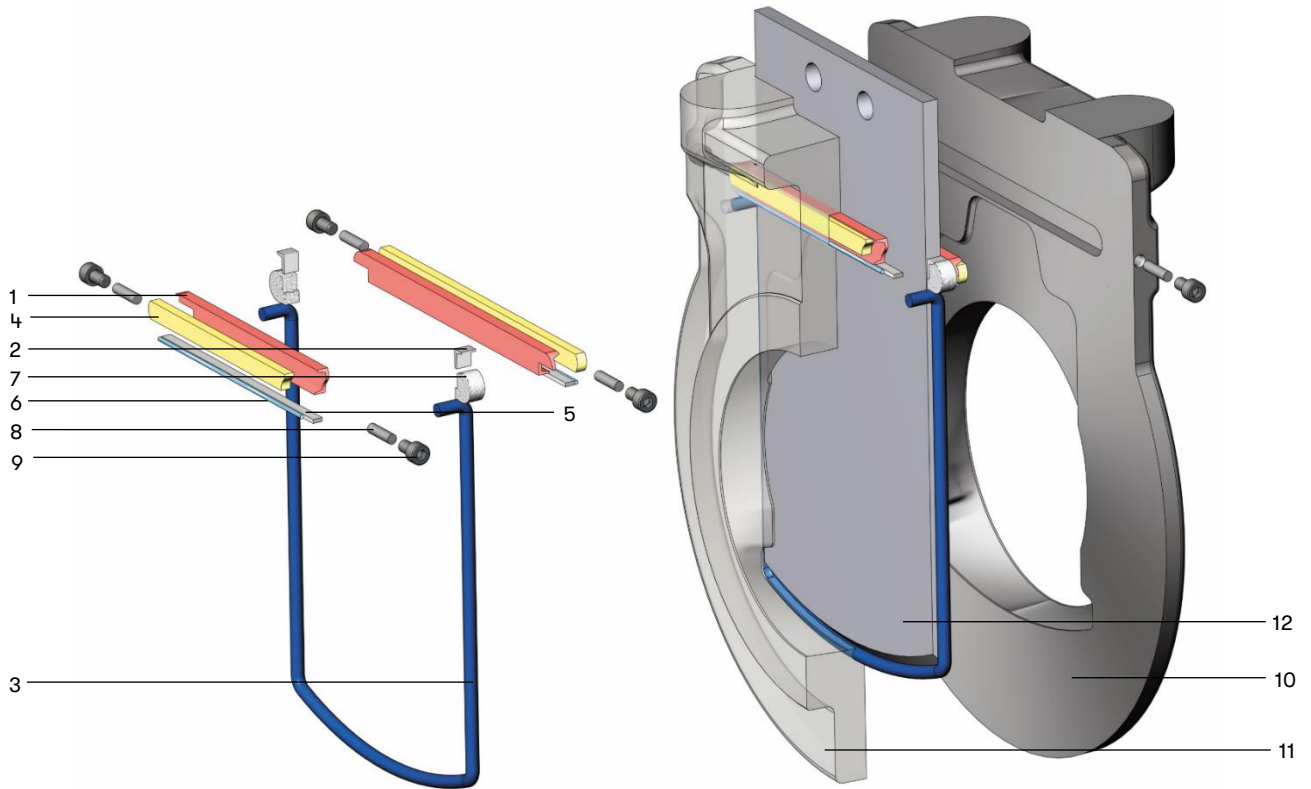
Figure B



if necessary, grind or shim seal slightly

Tab. 4

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



## Seal Arrangement Type 4

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Packing compound
5	Scaper
6	Scaper round cord
7	Packing compound profile
8	Packing pellets
9	Seal screw
10	Front body
11	Rear body
12	Gate

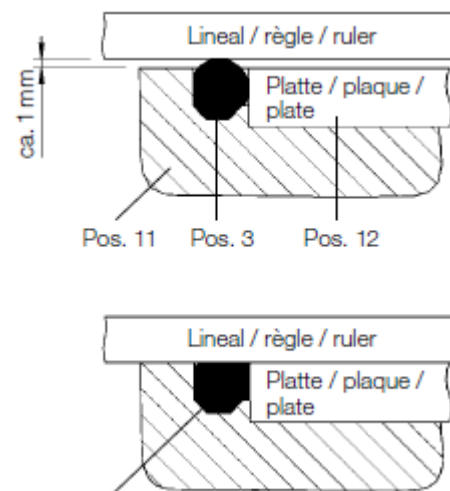
## Replacing of valve body seals Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 4) into rear body (item 11), followed by de scraper (item 5 and 6), both according to figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into front body (item 10) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 12) into rear body half (item 11); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 7), the insert (item 2) and fill firmly with packing material (item 4).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 8) and compress evenly with the packing tool before inserting the seal screws (item 9) with a few turns.

Figure A



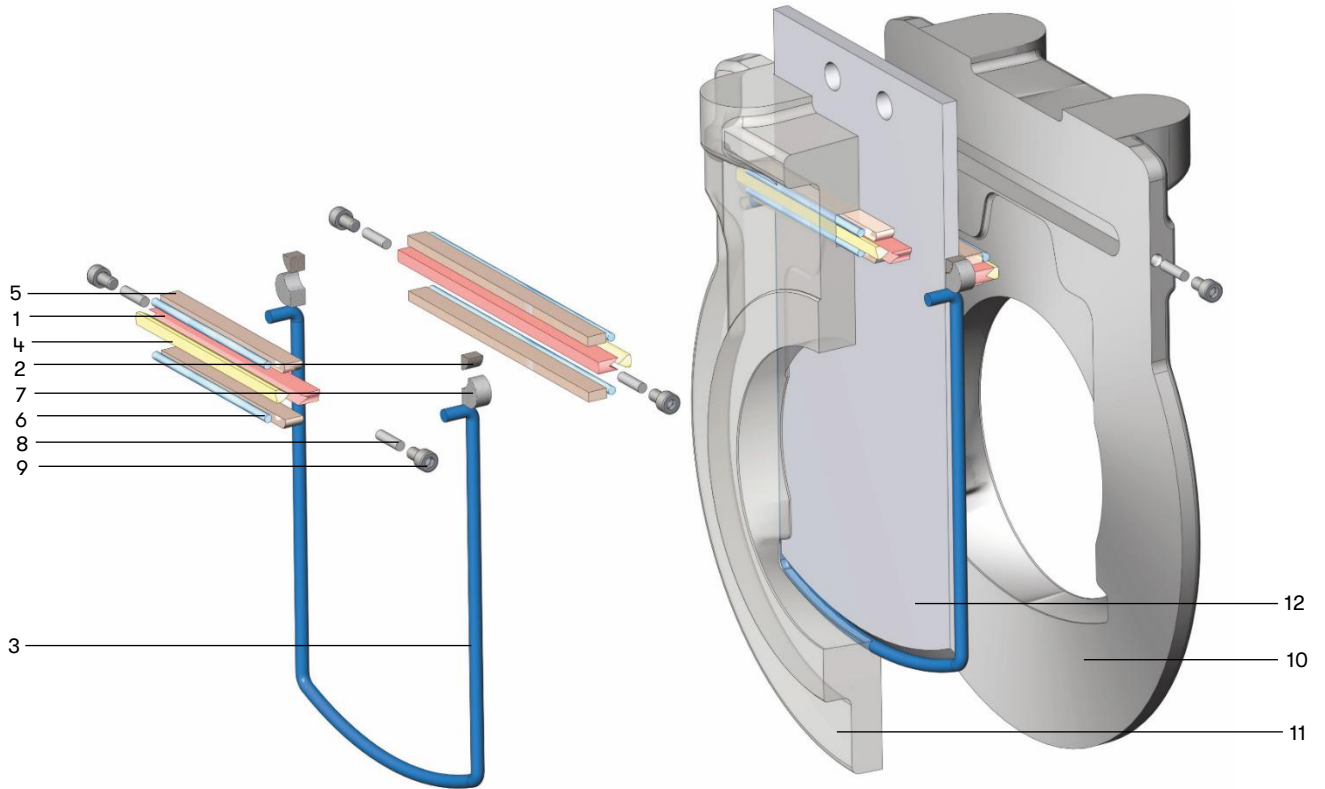
Figure B



if necessary, grind or shim seal slightly

Tab. 5

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



## Seal Arrangement Type 5

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Packing compound
5	Scraper
6	Scraper round cord
7	Packing compound profile
8	Packing pellets
9	Seal screw
10	Front body
11	Rear body
12	Gate

## Replacing of valve body seals Instructions

1. Remove all seal components (round cord seal and transverse seal) entirely from body grooves. Push remaining packing compound out of access holes.
2. Install pre-assembled transverse seal (item 1, 4) into rear body (item 11), followed by two scrapers (item 5 and 6), both according to figure A, and remove holding tape carefully.
3. Insert both ends of the round cord seal (item 3) into the fixing holes below the transverse seal groove.
4. Install pre-assembled transverse seal into front body (item 10) as in point 2.
5. Lubricate the transverse seal in both body halves with a suitable grease (silicon).
6. Install valve plate (item 12) into rear body half (item 11); push plate forward and hold it in place with a clamp (without scratching plate) so that round cord seal is fixed in the groove.
7. Check body/plate/seal assembly for its pre-tension acc. figure B; if necessary correct pre-tension by slight shimming (oil paper) or grinding the seal.
8. Into the recesses above the ends of the transverse seal next to the valve plate add a quarter round (item 7), the insert (item 2) and fill firmly with packing material (item 4).
9. Put front body carefully onto back body; remove the clamp which fixed the plate and slide front body to its final position while constantly observing the seals for proper fit.
10. Insert body bolts and tighten carefully crosswise (clamping torque acc. Tab. 1).
11. Fill the 4 access holes with packing pellets round (item 8) and compress evenly with the packing tool before inserting the packing seal (item 9) with a few turns.

Figure A

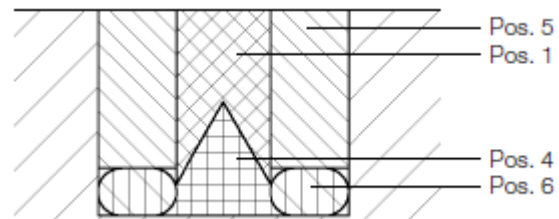
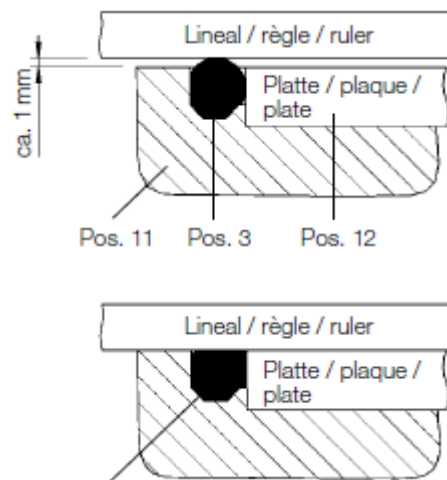


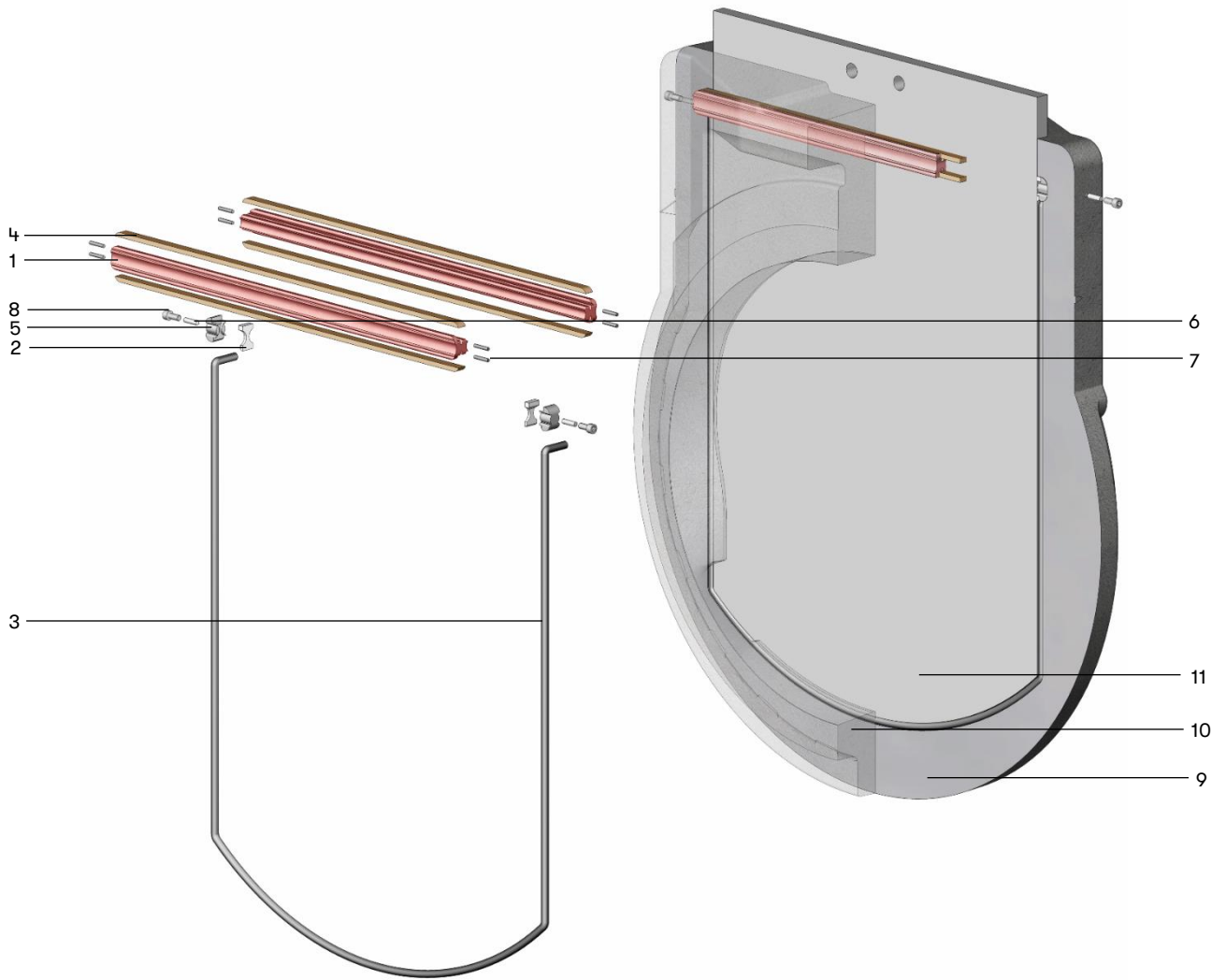
Figure B



if necessary, grind or shim seal slightly

Tab. 6

Thread	Clamping torque
M8	20 Nm
M10	39 Nm
M12	68 Nm
M16	167 Nm
M20	324 Nm



## Seal Arrangement Type 7

Part	
1	Transverse seal
2	Insert
3	Round cord
4	Scraper
5	Packing compound profile
6	Packing pellets
7	Support cord
8	Seal screw
9	Rear body
10	Front body
11	Gate