

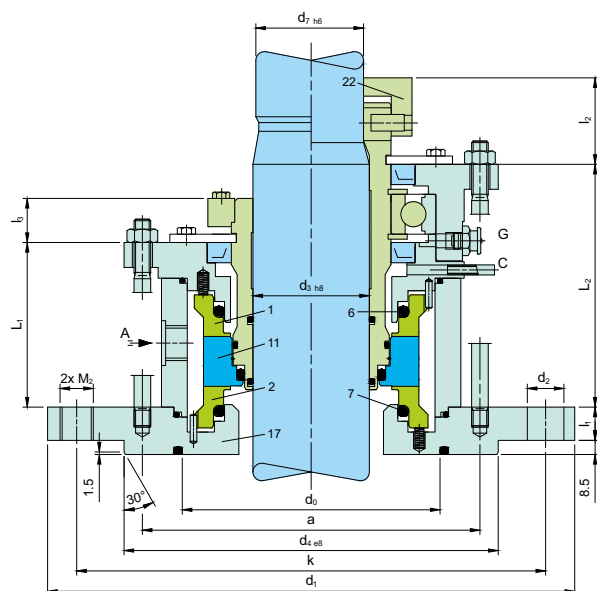


Product Description

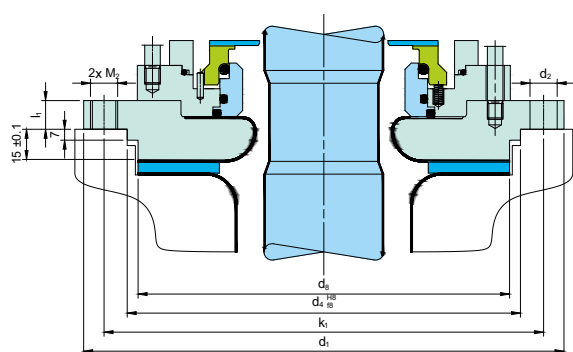
1. Dual seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Cartridge construction
5. Gas-lubricated design
6. Designed for top entry vessels

Technical Features

1. Seal faces are designed to be non-contacting during operation
2. Designed for environmental protection with high efficiency
3. Due to non-contacting design there is no friction on the seal faces and there is no heat generated at the seal or in the medium
4. Trouble free operations as complex components are not required to dissipate frictional heat
5. To accommodate large axial movement torque transmission is through clamping ring
6. Rotating seat is designed and arranged in the center



| Item | Description |
|------|--|
| 1 | Seal face(Diamond Coated), atmosphere side |
| 2 | Seal face (Q1), product side |
| 6,7 | O-ring |
| 11 | Seat (Q1) |
| 17 | Flange |
| 22 | Clamping ring |



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Design Variations

GSAZ184K(L)-D

Double seal (with integrated bearing) for steel vessels to DIN 28136, connection flange to DIN 28141 and shaft ends to DIN 28154.

Flange connection acc. to DIN 28137 T2 for nominal diameters 40 ... 100.

Torque Transmissions

NOTE:

Refer "Agitator Seals Accessories" page no. 83

Typical Industrial Applications

| | |
|-----------------------------|-------------------|
| Agitators | High purity media |
| Chemical | Pharmaceutical |
| Environmental harmful media | |
| Food & beverage | |
| Gases & liquids | |

Performance Capabilities

| | |
|----------------|---|
| Shaft diameter | $d_s = 40 \dots 220 \text{ mm (1.6" ... 8.7")}$ |
| Pressure | $p_1 = \text{vacuum } 6 \text{ bar (87 PSI)}, \dots$ $\Delta p = \text{min. } 3 \text{ bar (44 PSI)}, \dots$ $p_2 = 9 \text{ bar (131 PSI)}$ |
| Temperature | $t_1 = -20^\circ\text{C} \dots +150^\circ\text{C (-4}^\circ\text{F} \dots +302^\circ\text{F)}$, with cooling flange $250^\circ\text{C (482}^\circ\text{F)}$ |
| Speed | $0 \dots 10 \text{ m/s (0 ... 33 ft/s)}$ |

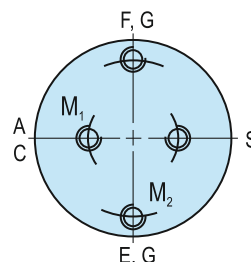
Standards

DIN 28136 T2 (for steel vessels)
DIN 28141 (flange connection for steel vessels)
DIN 28154 (shaft end for steel vessel)
DIN 28136 T3 (for glass-lined vessels)
DIN 28137 T2 (flange connection for glass-lined vessels)

Notes

Options:
Cooling or heating flange
Flush
Polymerization barrier

Installation, Details, Options



Supply connections

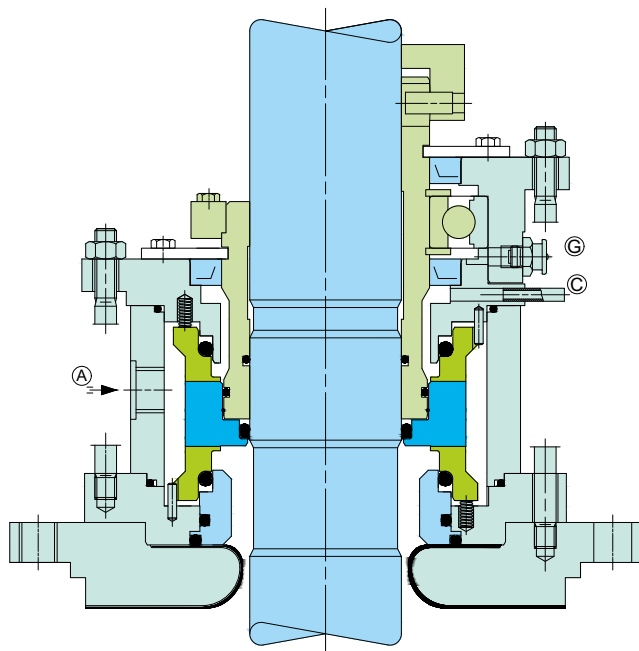
Designation and positions of supply connections, pull-off and jacket threads acc. to DIN 28138 T3.

| | |
|---|----------------|
| A | Barrier gas IN |
| C | Leakage |
| E | Cooling IN |
| F | Cooling OUT |
| S | Flush |
| G | Grease |

NOTE:

Refer "Agitator Seals Accessories" page no. 83

Design Variations



GSAZ164K(L)-D

Double seal (with integrated bearing) for glass-lined vessels to DIN 28136, connection flange to DIN 28137 and shaft ends to DIN 28159.

Flange connection acc. to DIN 28137 T2 for nominal diameters 125 ... 161.

Dimensional Data

GSAZ184 - Dimensions in millimeter

| $d_3^{1)}$ | $d_7^{1)}$ | d_1 | $n \times d_2$ | d_4 | d_0 | k | L_1 | L_2 | $L_w^{1)}$ | I_1 | I_2 | I_3 | a | M_1 | M_2 | A, B |
|------------|------------|-------|----------------|-------|-------|-----|-------|-------|------------|-------|-------|-------|-----|-------|-------|------|
| 40 | 38 | 175 | 4x18 | 110 | 90 | 145 | 81 | 137 | 143 | 15 | 35 | 28 | 122 | M12 | M16 | G3/8 |
| 50 | 48 | 240 | 8x18 | 176 | 135 | 210 | 82.5 | 130.5 | 148 | 17 | 42 | 28 | 155 | M12 | M16 | G3/8 |
| 60 | 58 | 240 | 8x18 | 176 | 135 | 210 | 78.5 | 128 | 158 | 18 | 39 | 28 | 176 | M12 | M16 | G3/8 |
| 80 | 78 | 275 | 8x22 | 204 | 155 | 240 | 94.5 | 146 | 168 | 20 | 50 | 34 | 203 | M16 | M20 | G1/2 |
| 100 | 98 | 305 | 8x22 | 234 | 190 | 270 | 95 | 156.5 | 178 | 20 | 56.5 | 34 | 228 | M16 | M20 | G1/2 |
| 125 | 120 | 330 | 8x22 | 260 | 215 | 295 | 95 | 163.5 | 203 | 20 | 60 | 39 | 268 | M20 | M20 | G1/2 |
| 140 | 135 | 395 | 12x22 | 313 | 250 | 350 | 97 | 168.5 | 208 | 20 | 82 | 41 | 285 | M20 | M20 | G1/2 |
| 160 | 150 | 395 | 12x22 | 313 | 265 | 350 | 97 | 176.5 | 213 | 25 | 81 | 41 | 302 | M20 | M20 | G1/2 |
| 180 | 170 | 445 | 12x22 | 364 | 310 | 400 | - | - | 233 | 25 | - | - | 332 | M24 | M20 | G1/2 |
| 200 | 190 | 445 | 12x22 | 364 | 310 | 400 | - | - | 243 | 25 | - | - | 352 | M24 | M20 | G1/2 |
| 220 | 210 | 505 | 16x22 | 422 | 340 | 460 | - | - | 263 | 25 | - | - | - | M24 | M20 | G1/2 |

1) Shaft diameters d_3 and d_7 to DIN 28154

GSAZ164 - Dimensions in millimeter

| d ₃ ¹⁾ | d ₇ ¹⁾ | Nominal size | Flange size ²⁾ | d ₁ | nxd ₂ | d ₄ | nxd ₅ | d ₆ | d ₇ | k ₁ | k ₂ | I ₁ | I ₂ | I ₁ | I ₂ | I ₃ | I ₄ | I ₅ | M ₁ | M ₂ | A |
|------------------------------|------------------------------|--------------|---------------------------|----------------|------------------|----------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| 40 | 38 | 40 | E125 | 175 | 4x18 | 110 | – | – | 102 | 145 | – | 142 | 184 | 25 | 35 | 28 | 50 | 50 | M12 | M16 | G3/8 |
| 50 | 48 | 50 | E200 | 240 | 8x18 | 176 | – | – | 138 | 210 | – | 147 | 195 | 25 | 40 | 28 | 50 | 50 | M12 | M16 | G3/8 |
| 60 | 58 | 60 | E250 | 275 | 8x22 | 204 | – | – | 188 | 240 | – | 158 | 203 | 25 | 42 | 28 | 50 | 60 | M12 | M20 | G3/8 |
| 80 | 78 | 80 | E300 | 305 | 8x22 | 234 | – | – | 212 | 270 | – | 170 | 240 | 30 | 45 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 100 | 98 | 100 | E400 | 395 | 12x22 | 313 | – | – | 268 | 350 | – | 177 | 240 | 30 | 52 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 100 | 98 | 100 | E500 | 395 | 12x22 | 313 | – | – | 268 | 350 | – | 177 | 240 | 30 | 52 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 125 | 120 | 125 | E700 | 505 | 4x22 | 422 | 12x22 | 320 | 306 | 460 | 350 | 208 | 266 | 30 | 75 | 40 | 60 | 80 | M20 | M20 | G1/2 |
| 140 | 135 | 140 | E700 | 505 | 4x22 | 422 | 12x22 | 320 | 306 | 460 | 350 | 223 | 282 | 30 | 79 | 40 | 60 | 80 | M20 | M20 | G1/2 |
| 160 | 150 | 160 | E700 | 505 | 4x22 | 422 | 12x22 | 320 | 306 | 460 | 350 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |
| 160 | 150 | 160 | E900 | 505 | 4x22 | 422 | 12x22 | 320 | 306 | 460 | 350 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |
| 160 | 150 | 161 | E901 | 565 | 4x26 | 474 | 12x22 | 370 | 356 | 515 | 400 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |

1) Shaft diameters d_3 and d_7 to DIN 28159

2) Flange size to DIN 28137T2

Note: Additional technical & dimensional information will be provided on request

The specifications, drawings, images etc included in this catalogue are intended to be generic and must be interpreted as equivalent or functionally equivalent, more specifically the performance capabilities mentioned in this catalogue is based on optimum values, however the performance of the product is dependent on size, material of construction, media, pressure, temperature, sliding velocity etc and it shall vary from size to size or application to application. Customers are requested to consult with Sealmatic before employing the product from this catalogue for any application.