

RELY ON EXCELLENCE

## SeccoMix 481

Mechanical Seals | Agitator seals | Dry running seals



### Features

- For top entry drives
- For steel vessels acc. to DIN resp. Non-DIN
- Nitrogen pressurized dual seal, single seal optional
- Balanced
- Independent of direction of rotation
- Multiple springs rotating
- Dry running
- Cartridge unit

### Notes

Options:

- Cooling or heating flange
- Wear trap with flush
- Wear trap with flush and cooling / heating flange
- Polymerization barrier
- Axial expansion joint (shaft movement)
- Wiper ring (shaft movement)

Please inquire.

### Advantages

- Ready-to-fit and factory-tested unit
- With or without bearing available
- Suitable for pressure reversal e.g. in case of barrier pressure failure
- No contamination of the product by barrier fluid
- Friction-locked connection to the shaft
- Connections to DIN 28138 standards or as required (SeccoMix 451)
- ATEX certification available on request

### Operating range

Shaft diameter:

d1 = 40 ... 220 mm (1.57" ... 8.66")

Pressure: p1 = vacuum ... 6 bar (87 PSI)

Temperature: t1 = -20 °C ... +200 (250\*) °C  
(-4 °F ... +392 (482\*) °F)

Sliding velocity: vg = 0 ... 2 m/s (0 ... 6 ft/s)

For applications beyond this range, please inquire.

\* with cooling flange

! It should be noted that the extremal values of each operating parameter cannot be applied at the same time because of their interaction.

### Materials

Seal face: Carbon graphite, FDA conform

Seat: Silicon carbide, FDA conform

Secondary seals and metal parts according to application and customer's specifications.

### Standards and approvals

- FDA
- ATEX
- DIN 28138 (mechanical seals for agitator shafts)
- DIN 28136 T2 (steel vessels)
- DIN 28141 (flange connection for steel vessels)
- DIN 28154 (shaft end for steel vessels)
- TA-Luft-konform

### Recommended applications

- Refining technology
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Agitators
- Mixers
- Reactors

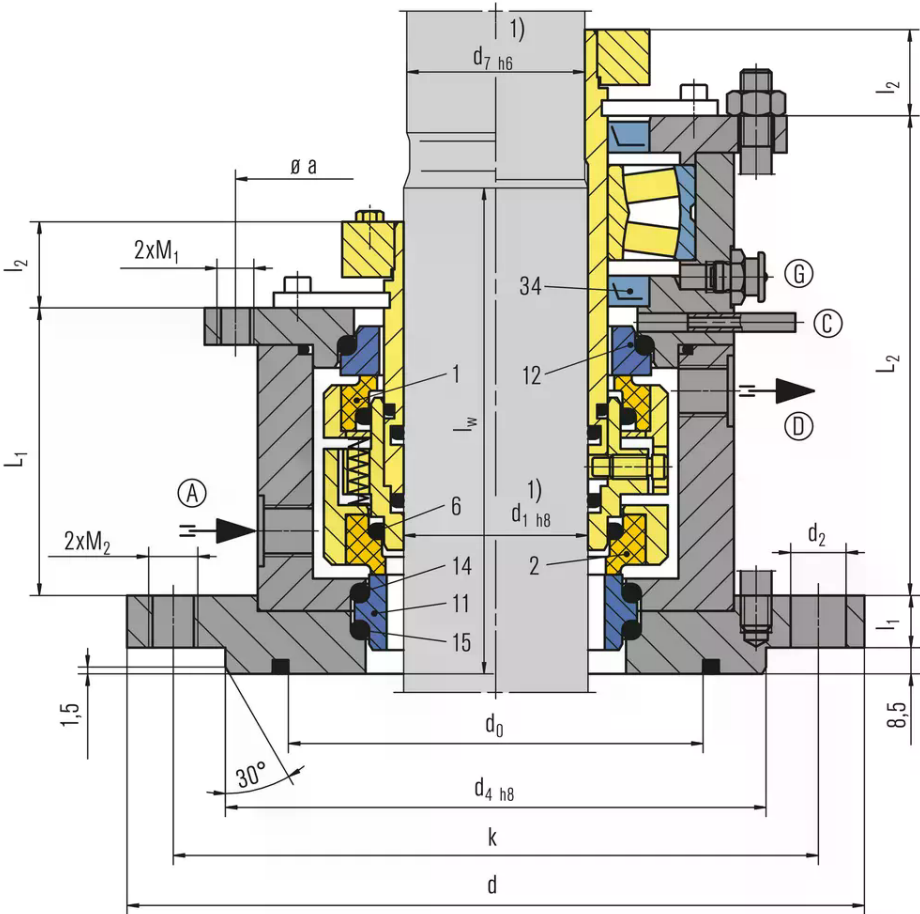
### Recommended piping plans

Gas supply

EagleBurgmann GSS4015/A400-D0

for dual seals SeccoMix 481...D..

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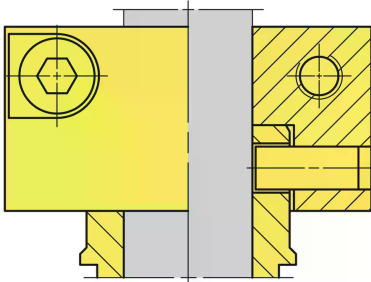


Item	Description
1	Seal face, atmosphere side
2	Seal face, product side
6, 14, 15	O-Ring
11	Seat, product side
12	Seat, atmosphere side
34	Lip seal

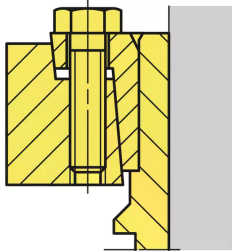
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## Torque transmissions

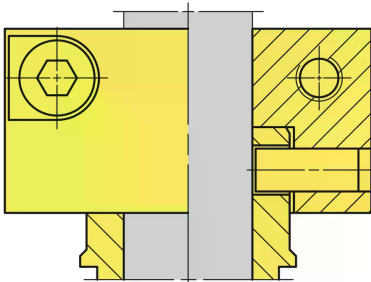
Clamping ring



Shrink disk

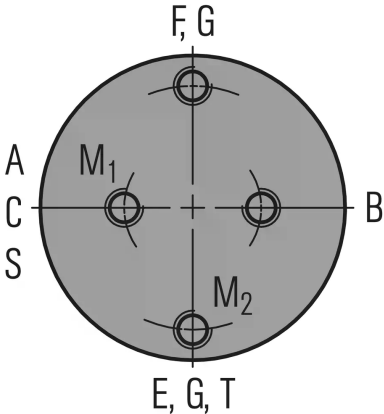


Clamping ring with pin



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## Installation, details, options



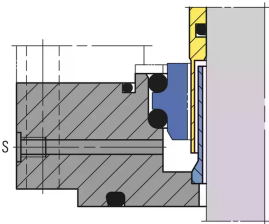
### Supply connections

Designation and position acc. to DIN 28138 T3.

- A Barrier gas IN
  - B Barrier gas OUT
  - C Drainage
  - E Cooling IN
  - F Cooling OUT
  - G Grease
  - S Flush
  - T Temperature metering
- For reasons of standardization, the supply connections of single seals are matched to those of the double seals.

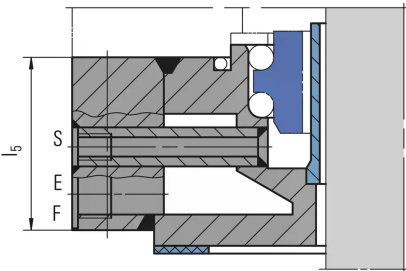
### Polymerization barrier

Can be used alternatively as wear trap with flush.



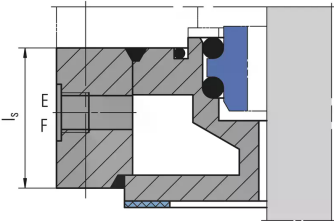
### Wear trap

with flush and cooling / heating flange.

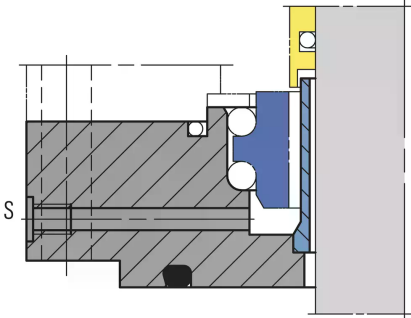


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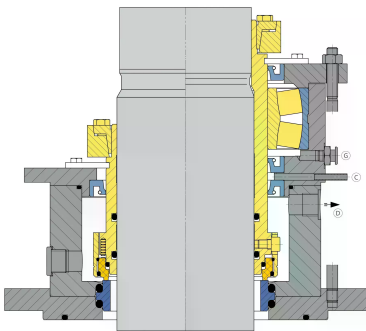
**Cooling flange**  
Can be used alternatively as a heating flange.



**Wear trap**  
with flush.



## Product variants



**SeccoMix 481**  
Single seal

**SeccoMix 481L**  
Single seal with integrated floating bearing.

**SeccoMix 451**  
All types of the SeccoMix 481 range are also available for unstepped shafts. Seal identification: SeccoMix 451...  
Customized design or e.g. different torque transmissions are available.

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### Dimensions

d <sub>1</sub> )	d <sub>7</sub> )	d	n x d <sub>2</sub>	d <sub>4</sub>	d <sub>0</sub>	k	L <sub>1</sub>	L <sub>2</sub>	L <sub>w</sub> 2)	l <sub>1</sub>	l <sub>2</sub>	A	M <sub>1</sub>	M <sub>1</sub>	A, B
40	38	175	4x18	110	90	145	87	136	143	15	28	122	M12	M16	G3/8
50	48	240	8x18	176	135	210	89	149	148	17	28	157	M12	M16	G3/8
60	58	240	8x18	176	135	210	93.5	156	158	17	28	168	M12	M16	G3/8
80	78	275	8x22	204	155	240	104.5	189	168	20	34	203	M16	M20	G1/2
100	98	305	8x22	234	190	270	109	190	178	20	34	228	M16	M20	G1/2
125	120	330	8x22	260	215	295	110	205	203	20	40	268	M20	M20	G1/2
140	135	395	12x22	313	250	350	124	222	208	20	40	285	M20	M20	G1/2
160	150	395	12x22	313	265	350	127.5	219.5	213	25	40	297	M20	M20	G1/2
180	170	445	12x22	364	310	400	132.5	230	233	25	45	332	M24	M20	G1/2
200	190	445	12x22	364	310	400	137.5	237.5	243	25	45	352	M24	M20	G1/2
220	210	505	16x22	422	340	460	149.5	249.5	263	25	50	381	M24	M20	G1/2

Dimensions in millimeter 1) Shaft diameters d~1~ and d~7~ to DIN 28154 2) Shaft step to DIN 28154