EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

AGSZ

Mechanical Seals | Agitator seals | Gas-lubricated seals

Features

- For top entry drives
- Double seal
- Balanced
- Independent of direction of rotation
- Gas-lubricated
- Cartridge unit

Notes

Options:

- Cooling resp. heating flange
- Flush
- Hygienic flange

Advantages

- Ready-to-fit and factory-tested unit
- Central rotating seat
- Torque transmission by clamping ring for large axial movements
- Non-contacting operation
- No friction on the seal faces, no heat generated at the seal or in the medium
- ATEX certification on request

Operating range

Shaft diameter:
d1 = 40 ... 220 mm (1.6" ... 8.7")
Pressure:
p1 = vacuum ... 6 bar (87 PSI),
Δ p = min. 3 bar (44 PSI), p3 = 9 bar (131 PSI)
Temperature:
t1 = -20 °C ... +200 (+250*) °C
(-4 °F ... +392 (+482*) °F)
Sliding velocity:
vg = 0 ... 5 m/s (0 ... 16 ft/s),
higher velocities on request.

* 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 faces and seats: Silicon carbide, FDA conform
Secondary seals and metallic parts acc. to application and customers' requirement.

Standards and approvals

- FDA
- ATEX
- DIN 28138 (mechanical seals for agitator shafts)
- DIN 28136 T2 (for steel vessels)
- DIN 28141 (flange connection for steel vessels)
- DIN 28154 (shaft end for steel vessels)
- DIN 28136 T3 (for glass-lined vessels)
- DIN 28137 T2 (flange connection for glass-lined vessels)
- DIN 28159 (shaft end for glass-lined vessels)
- Compliant to TA Luft (German Clean Air Act)

Recommended applications

- Gases and liquids
- Media which require high purity
- Chemical industry
- Food and beverage industry
- Pharmaceutical industry
- Agitators
- Reactors

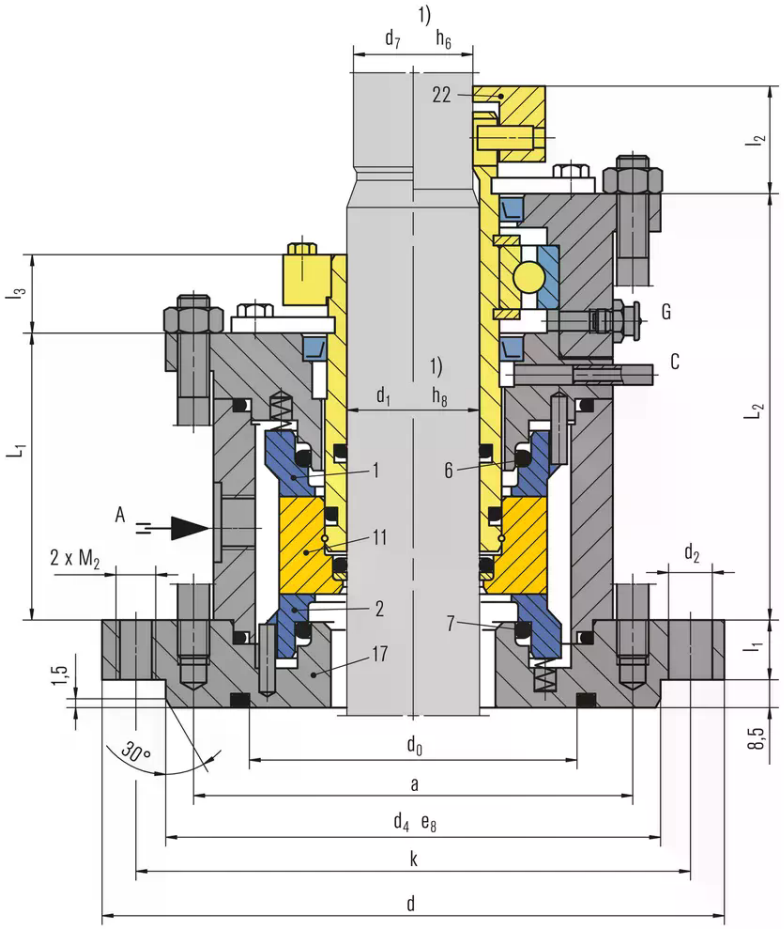
Recommended piping plans

Gas supply by EagleBurgmann GSS4015/A400-D0, GSS4016/A250-D1 or GSS4016/A350-D1.

Note: To assure a sufficient supply of the mechanical seal, pressure at entry of the supply system must be min. 3 bar (44 PSI) above max. barrier pressure always.

Product link:
EagleBurgmann GSS

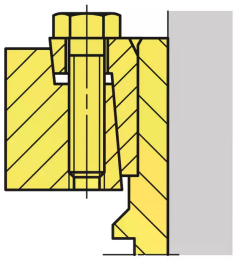
eagleburgmann.com
info@eagleburgmann.com



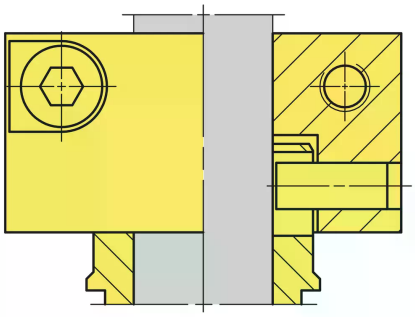
Item	Description
1	Seal face, atmosphere side
2	Seal face, product side
6, 7	O-Ring
11	Seat
17	Flange
22	Clamping ring

Torque transmissions

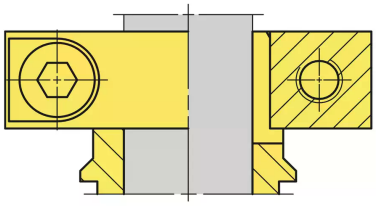
Shrink disk



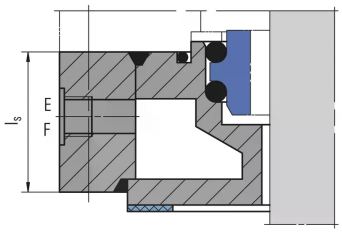
Clamping ring with pin



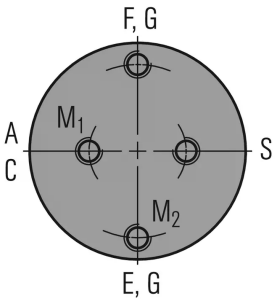
Clamping ring



Installation, details, options



Cooling flange
Can be used alternatively as a heating flange.



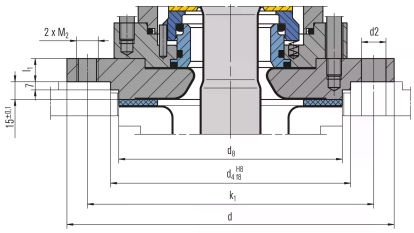
Supply connections
Designation and positions of supply connections, pull-off and jacket threads acc. to DIN 28138 T3.

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

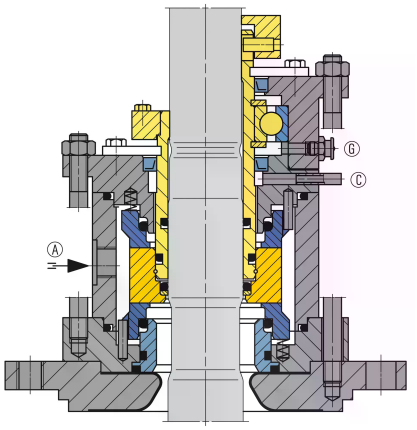
Product variants

AGSZ461K(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.

AGSZ491K(L)-D
Variant with special connection dimensions for glass-lined vessels.



AGSZ461K(L)-D Flange connection acc. to DIN 28137 T2 for nominal diameters 40 ... 100.



AGSZ461K(L)-D Flange connection acc. to DIN 28137 T2 for nominal diameters 125 ... 161.

AGSZ451K(L)-D
Version with special connection dimensions or unstepped shafts. For steel vessels.

Dimensions

$d_1$1)	$d_7$1)	Nominal size	Flange size2)	d	nxd_2	d_4	nxd_5	d_6	d_7	k_1	k_2	l_1	l_2	l_1	l_2	l_3	l_4	l_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

AGSZ461 - Dimensions in millimeter 1) Shaft diameters d~1~ and d~7~ to DIN 28159 2) Flange size to DIN 28137 T2

$d_1$1)	$d_7$1)	d	nxd_2	d_4	d_0	k	L_1	L_2	L_W1)	l_1	l_2	l_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

AGSZ481 - Dimensions in millimeter 1) Shaft diameters d~1~ and d~7~ to DIN 28154