EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

M461C

Mechanical Seals | Agitator seals | Liquid-lubricated seals

Features

- Cartridge double seal for top entry drives
- For glass lined vessels
- Liquid lubricated
- Self-closing on product side
- For stepped and unstepped shafts
- Unbalanced
- Independent of direction of rotation
- Multiple springs rotating

Advantages

- Ready-to-fit and factory-tested units
- The M461CL will remain closed even during pressure variations or pressure reversal. Operation is possible with buffer fluid (p1max = 6 bar (87 PSI)) or pressurized with barrier fluid as double seal.
- Available with or without bearing
- The seal can be lifted off the glass-lined flange as a complete cartridge. The sensitive glass lined basic flange remains mounted on the vessel.
- Can be applied at higher pressure and rotating speed than specified by DIN.

Operating range

Shaft diameter:
d1 = 40 ... 125 mm (1.57" .... 4.92")

Pressure:
p1 = vacuum ... 16 bar (232 PSI)
p3 = max. 18 bar (261 PSI)
Temperature:
t1 = -40 °C ... +200 °C
(-40 °F ... +392 °F)

Sliding velocity:
vg = 0 ... 3 m/s (0 ... 9.8 ft/s)

For applications beyond this range, please inquire.

! 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: Carbon graphite or Silicon carbide, FDA compliant
Seats: Silicon carbide, FDA compliant
Secondary seals and metallic parts acc. to application and customer's requirement.

Standards and approvals

- FDA
- EG 1935/2004
- USP Class VI
- ATEX
- DIN 28138 (mechanical seals for agitator shafts)
- DIN 28136 T3 (for steel vessels)
- DIN 28137 T2 (flange connections for glass lined vessels)
- DIN 28159 (shaft end for glass lined vessels)

Recommended applications

- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Agitators
- Reactors

Recommended piping plans

Closed circuit EagleBurgmann TS system, open circuit EagleBurgmann SPA, EagleBurgmann SPN

Product links:
EagleBurgmann TS1000
EagleBurgmann TSA2
EagleBurgmann SPA
EagleBurgmann SPN (manual)
EagleBurgmann SPN (automatic)

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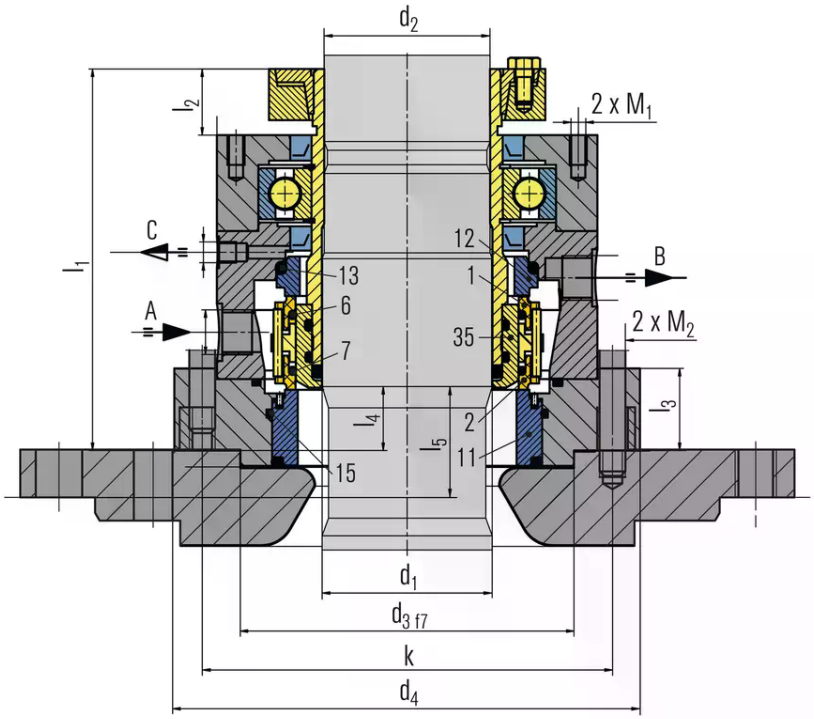
All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values.
We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. Subject to change.



Item	Description
1	Seal face, atmosphere side
2	Seal face, product side
11	Seat, product side
12	Seat, atmosphere side
35	Torque transmission, metal free
6, 7, 13, 15	O-ring

Product variants

M491CL
Variant for customer-specific dimensions. Further customer-specific adaptations are also possible.

Dimensions

ø	d1	d2	d3 f7	d 4	k	l1	l2	l3	l4	l5	M_1	M_2	nx quantity	A, B	C
ø40	40	38	93	175	145	147.5	22.5	31.5	25	50	M8	M8	M8X8	G3/8	G1/8
ø50	50	48	116	240	210	161.5	26.5	33.5	25	50	M8	M8	M8X2	G3/8	G1/8
ø60	60	58	125	204	176	161.5	26.5	33.5	25	50	M8	M8	M10X8	G3/8	G1/8
ø80	80	78	157	219	203	179	31	38.5	30	60	M8	M10	M10X8	G1/2	G1/8
ø100	100	98	185	247	228	187	32	36	30	60	M10	M10	M10X8	G1/2	G1/8
ø125	125	120	210	294	268	211	38.5	38.5	30	60	M10	M10	M10X8	G1/2	G1/8

Dimensions in millimeter 1) Shaft diameters d1 and d2 according to DIN 28159 2) Shaft shoulder acccording to DIN 28159 3) Flange according to DIN 28138 T2

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