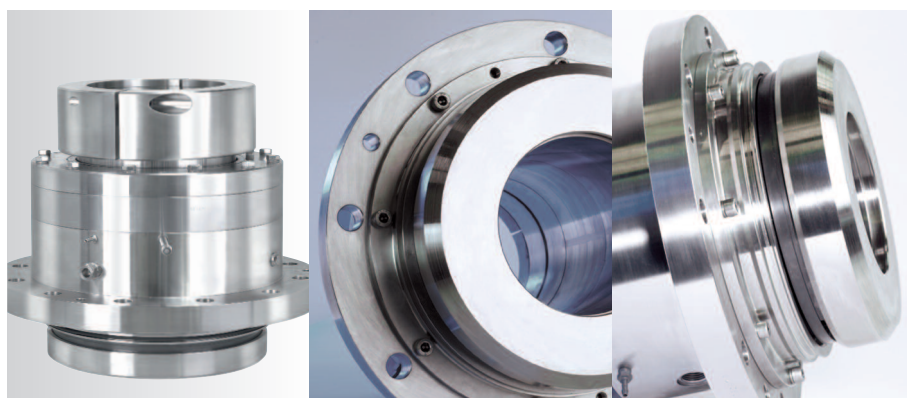


Design Series ESD 44**Product Information****Technical Data**

- Double-acting mechanical seal, liquid lubricated for slurry application



Function

- The shaft seal type ESD44 is a double-acting, bidirectional mechanical seal.
- The product side seal ring pair extends into the vessel space.
- The surfaces are smooth and the design has a minimum of gaps, so that dirty corners which would be difficult to clean do not exist and thorough cleaning is possible.
- Normally the seal liquid chamber has a pressure which lies above the vessel pressure (pressure compensation/transfer).
- The drop of pressure towards the vessel is advantageous for the lubrication of the seal faces with seal liquid and prevents the invasion of particles into the seal gap, thus reducing the danger of the product caking to the seal faces.

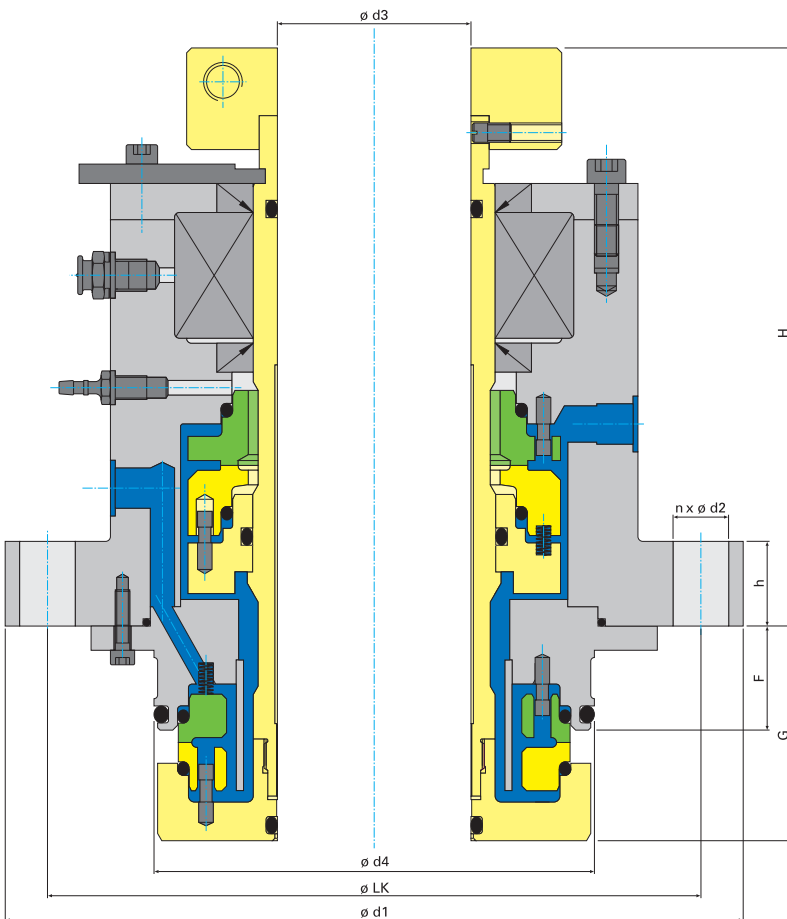
Applications

- As side or bottom entering seal for suspension agitator
- As sterile seal (ESD44S) in any orientation to the vessel
- Main areas of application are:
 - Chemical industry
 - Pharmacy
 - Biotechnology

Mechanical Seal ESD44



Design Details ESD44



Application Limits

- Vessel pressure**
Vacuum ... 16 bar (g)
- Vessel temperature**
-50 ... + 230° C
- Shaft size**
40 ... 300 mm
- Sliding speed**
0 ... 5 m/s

Materials

- Housing**
Stainless steel
- Product-wetted parts**
Stainless steel, Hastelloy, Titanium, other special materials
- Seal rings**
Carbon, Silicon Carbide, Tungsten Carbide, etc.
- O-rings**
FKM, EPDM, Perfluor elastomers, special materials
- FDA-approval**
Possible for all product-wetted parts

Dimensions

Series / \varnothing	d1	d4	LK	n x d2	F	G	h	H
ESD44/040	175	118	145	4 x 14	40	87	23	182
ESD44/060	240	158	210	8 x 18	40	87	23	222
ESD44/080	275	181	240	8 x 22	50	100	27	251
ESD44/100	305	206	270	8 x 22	50	100	27	24
ESD44/120	330	239	295	8 x 22	70	135	27	284
ESD44/140	395	253	350	12 x 22	70	134	27	301
ESD44/160	395	277	350	12 x 22	70	134	31	303
ESD44/180	445	303	400	12 x 22	70	142	31	333

all dimensions in mm; additional sizes on request;
subject to change without notice

Advantages

- dirty corners do not exist, thorough cleaning is possible
- sterilizable
- robust

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