



Dynamic, non-balanced mechanical seals are manufactured for general use. This type of mechanical seal is frequently purchased in large numbers by OEMs. The choice of one or the other variant is dependent on the preferences of the OEM or the application or installation conditions at the customer. It is important to know that dynamic mechanical seals with an O-ring can damage the surface of a shaft through their axial movement and should therefore be used only in conjunction with shaft sleeves. Mechanical seals can be positioned more easily through steps on the shaft sleeves, rotors or the like as locating shoulders. If this is not possible, support rings with set screws to the shaft/sleeve can also be used. The stationary parts (mating rings) should be selected such that they are elastically mounted in order to dampen shocks to and vibration of the unit as far as is technically feasible.

Advantages

- Wide area of applications
- Low costs, large choice of materials
- Use with various stationary parts (mating rings) is possible
- Short installation spaces
- Available with "clockwise" or "counter clockwise" spring (dependent on the direction of rotation)

Mechanical seal

Type 161

Technical specifications

Area of application*

Pressure: up to 10 bar
Temperature: dependent on elastomer
Sliding speed: up to 15 m/s

* The maximum specifications for temperature, pressure and sliding speed apply in each case to independent higher operating conditions. However, this does not mean that the seal will function with all extreme conditions at the same time. If in doubt contact DEPAC.

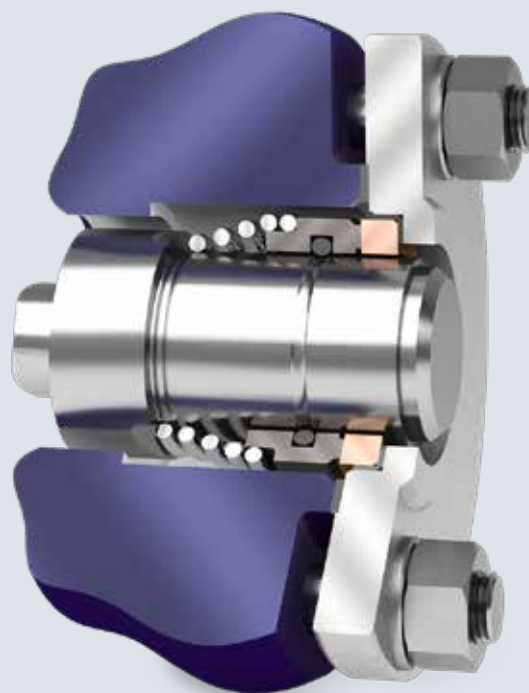
Dimensions

Shaft diameter: 10 – 75 mm
 $\frac{3}{8}$ " – 3"
Special sizes on enquiry

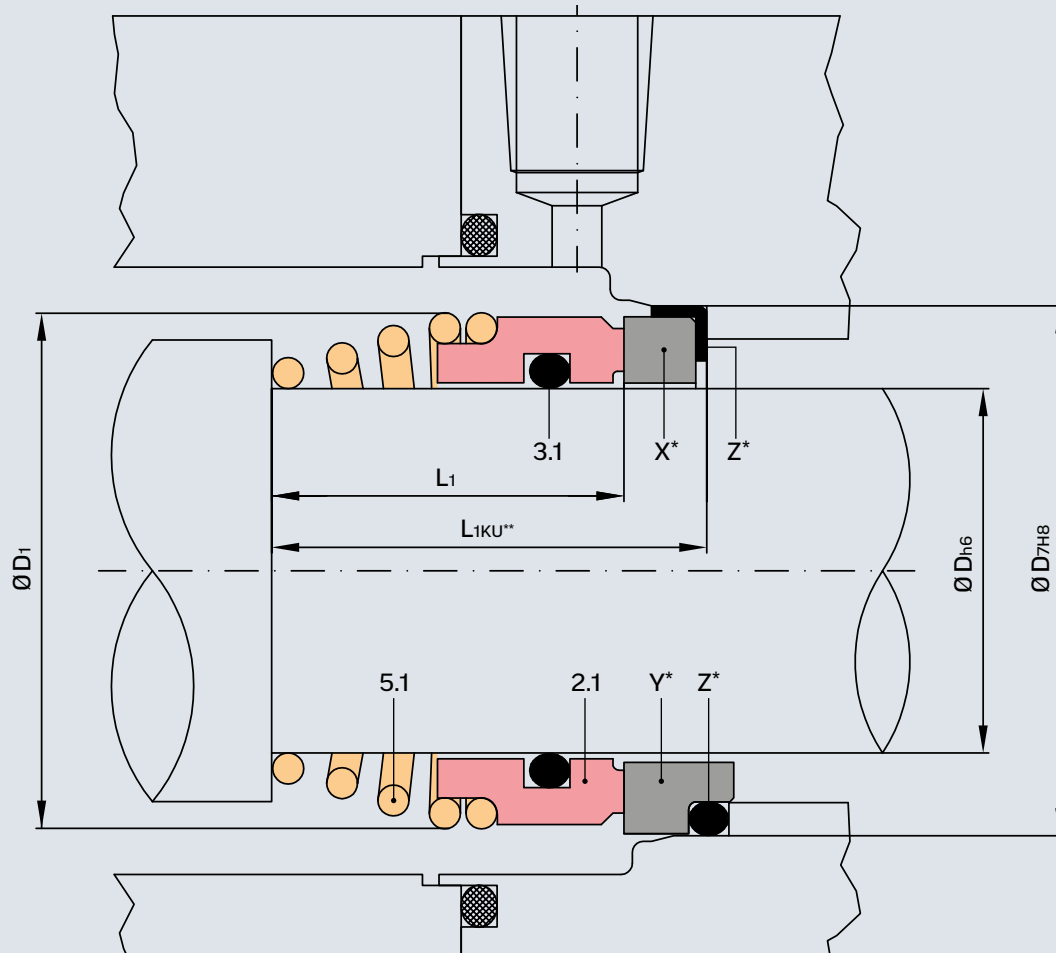
Bill of materials

Item	Description	Material
2.1	Dynamic seal face	CA, SC, SSIC
3.1	O-ring	FKM, EPDM
5.1	Spring	1.4310
X*	Stationary part DS4	CE, SC
Y*	Stationary parts DS1, DS2, DS3	SSIC, SC, TC
Z*	O-ring or profile seal	FKM, EPDM, PTFE

* Not included in the scope of delivery!



Mechanical seal Type 161 Data sheet



Dimension table $\text{Ø} 10 - 75$ millimetres

D_{h6}	D_1	D_7	L_{1KU}^{**}	L_1	O-ring DASH no. 3.1
10	19	21	32.5	25.9	111
12	21	23	32.5	25.9	112
14	23.7	25	35.0	28.4	113
15	24.7	27	35.0	28.4	114
16	25.7	27	35.0	28.4	114
18	30.5	33	37.5	30.0	210
19	31.5	35	37.5	30.0	210
20	32.5	35	37.5	30.0	211
22	34.5	37	37.5	30.0	212
24	36.5	39	40.0	32.5	214
25	37.5	40	40.0	32.5	214
28	41.5	43	42.5	35.0	216
30	43.5	45	42.5	35.0	217
32	45.5	48	42.5	35.0	219
33	46.5	48	42.5	35.0	219

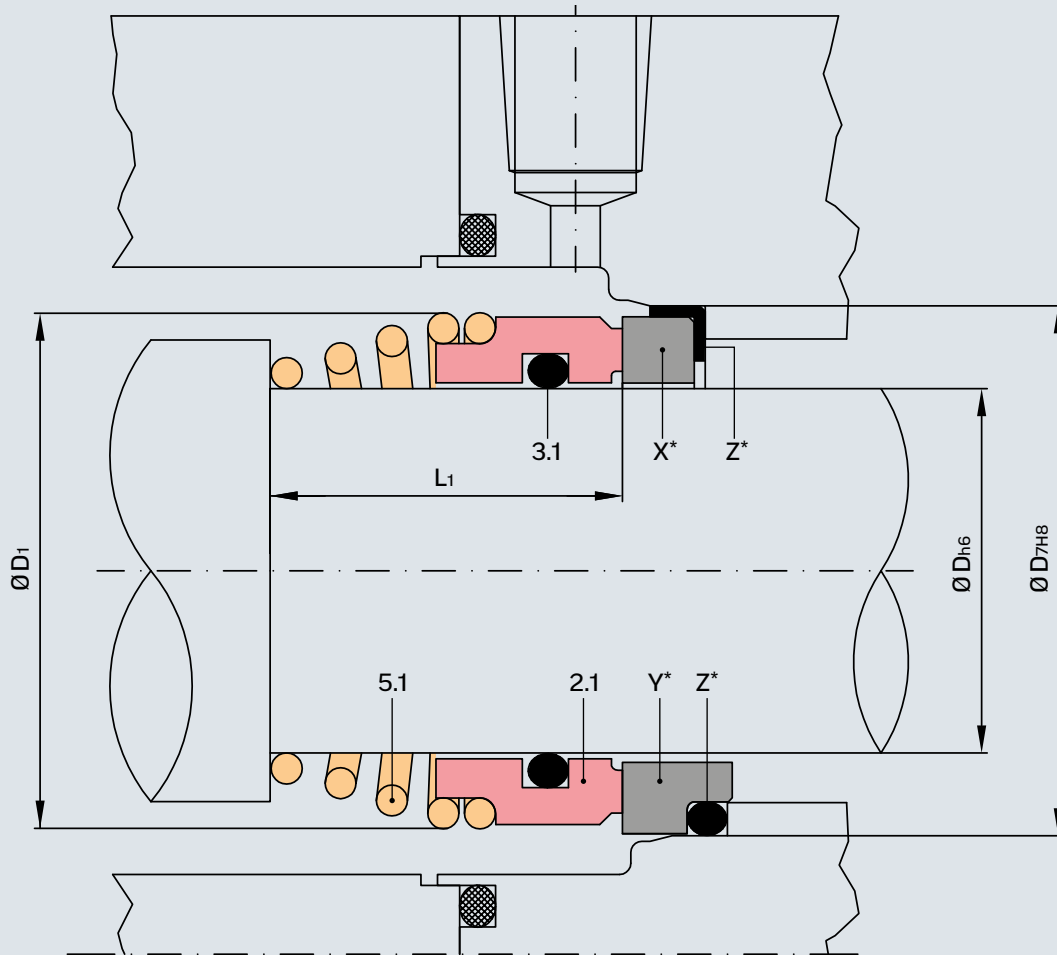
D_{h6}	D_1	D_7	L_{1KU}^{**}	L_1	O-ring DASH no. 3.1
35	48.5	50	42.5	35.0	221
38	54.5	56	45.0	36.0	222
40	56.5	58	45.0	36.0	223
43	59.5	61	45.0	36.0	224
45	61.5	63	45.0	36.0	225
48	64.5	66	45.0	36.0	226
50	66.5	70	47.5	38.0	226
53	69.5	73	47.5	36.5	227
55	72.5	75	47.5	36.5	228
60	80.5	80	52.5	41.5	229
63	83.5	83	52.5	41.5	230
65	85.5	85	52.5	41.5	231
70	90.5	92	60.0	48.7	233
75	95.5	97	60.0	48.7	234

** L1KU installation length with DS4

Mechanical seal

Type 161

Data sheet



Dimension table $\text{Ø } \frac{5}{8} - 3$ inches

D _{h6}	D ₁	D ₇	L _{1KU}	L ₁	O-ring DASH no. 3.1
$\frac{5}{8}$	1.012	1.063	1.378	1.118	114
$\frac{3}{4}$	1.240	1.378	1.476	1.181	210
$\frac{7}{8}$	1.437	1.535	1.575	1.280	213
$\frac{15}{16}$	1.437	1.535	1.575	1.280	214
1	1.634	1.693	1.673	1.378	215
1 $\frac{1}{8}$	1.713	1.772	1.673	1.378	217
1 $\frac{1}{4}$	1.791	1.890	1.673	1.378	219
1 $\frac{3}{8}$	1.909	1.969	1.673	1.378	221
1 $\frac{1}{2}$	2.146	2.205	1.772	1.417	222
1 $\frac{5}{8}$	2.343	2.402	1.772	1.417	223
1 $\frac{3}{4}$	2.421	2.480	1.772	1.417	224
1 $\frac{7}{8}$	2.539	2.598	1.772	1.417	225
2	2.736	2.874	1.870	1.437	226
2 $\frac{1}{8}$	2.854	2.953	1.870	1.437	228
2 $\frac{1}{4}$	3.091	3.071	2.067	1.634	229

D _{h6}	D ₁	D ₇	L _{1KU}	L ₁	O-ring DASH no. 3.1
2 $\frac{3}{8}$	3.287	3.268	2.067	1.634	230
2 $\frac{1}{2}$	3.327	3.346	2.067	1.634	231
2 $\frac{5}{8}$	3.563	3.622	2.362	1.917	232
2 $\frac{3}{4}$	3.563	3.622	2.362	1.917	233
2 $\frac{7}{8}$	3.760	3.819	2.362	1.917	234
3	3.957	4.134	2.362	1.890	235