

a member of **EKK** and **FREUDENBERG**

RELY ON EXCELLENCE

HGH201

Mechanical seals | Mechanical seals for pumps | Split seals



Features

- For plain shafts (HGH201)
- Semi split single seal
- Multiple springs rotating
- Balanced
- Independent of direction of rotation
- Unsplit as original equipment (HGH200)
- Cartridge available (based on HGH210)
- Variant for stepped shafts available (HGH211)
- Splitted seal parts: sliding faces and 0-rings

Advantages

- Economical: no complete dismantling of pump necessary
- Reduction of down-times and installation times
- Springs are protected from the product
- Rugged seal design
- Split seat can be used on both sides

Operating range

Shaft diameter:

d1 = 50 ... 310 mm (2" ... 12.20") (larger diameters on request) Pressure: p1 = 25 bar (363 PSI) Temperature: t1 = 150 °C (302 °F) Sliding velocity: vg = 20 m/s (66 ft/s)

Axial movement: ±2.0 mm

Materials

Seal face: Silicon carbide (Q1, Q2) Seat: Silicon carbide (Q1, Q2), Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)

Secondary seals:

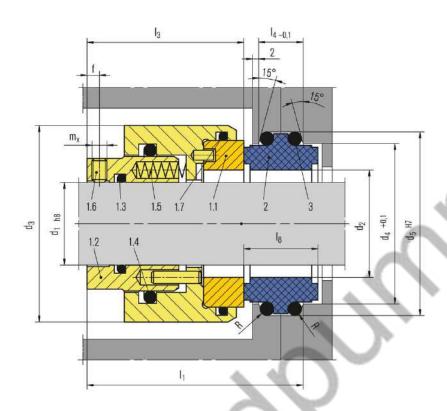
FKM(V), EPDM(E), NBR(P)
Metal parts: CrNiMo steel(G)

Recommended applications

- Water and waste water technology
- Power plant technology
- Shipbuilding
- Pulp and paper industry
- Sea water desalination
- Pulp with up to 5 % fiber content
- Water turbines
- Chest agitators
- Stern tubes
- Cooling water pumps
- Gears
- Defibrators
- Storage pumps





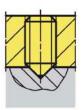


Item Description

- 1.1 Seal face¹⁾
- 1.2 Driver collar
- 1.3 O-Ring¹⁾
- 1.4 O-Ring¹⁾
- 1.5 Spring
- 1.6 Set screw
- 1.7 O-Ring¹⁾
- 2 Stationary seat¹⁾
- 3 _{0-Ring}1)
- 1) For disassembly of unsplit seal faces, seats and 0-Ring these should be broken or cut.



Torque transmissions

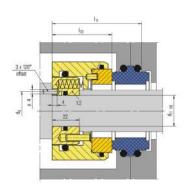


 $d1 \ge 105 \text{ mm}$ Set screws with **cone points** 4 x offset by 90°





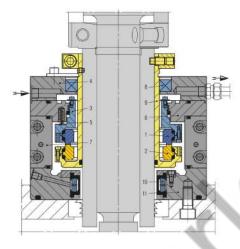
Product variants



HGH211

Dimensions, items and descriptions as HGH201. Item 1.2 driver collar is modified for securing on stepped shafts.

For first fit the seal comes unsplit: Designation HGH210.



HGH300S1

Stationary design.

For first fit the seals come with unsplit sliding faces and O-rings. Seal face also available in carbon graphite resin impregnated (B).

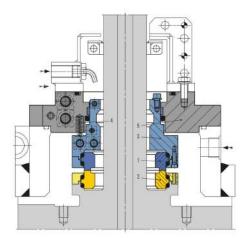
Dimensions on request.

Item Description

- Seal face
- Seat
- Adapter
- Spring
- Cover
- Housing
- Packing
- Shaft sleeve
- Pneumostop
- Flange







VGH300S1

Fully split seal based on HGH. Stationary design with rotating seat. To make a straightforward installation possible, all parts of the seal are split.

Item Description

- 1 Seal face
- 2 Seat
- 3 Adapter
- 4 Spring
- 5 Cover





Dimensions

d ₁	d ₁₁	d ₂	d ₃	d ₄	d ₅	d ₆	I ₁	I ₁₁	I ₃	I ₃₃	14	I ₈	R	f	m _X
50	40	60	95	80.5	89.6	55	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
55	45	65	100	85.5	94.6	60	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
60	50	70	105	90.5	99.6	65	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
65	55	75	110	95.5	104.6	70	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
70	60	80	115	100.5	109.6	75	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
75	65	85	120	105.5	114.6	80	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
80	70	90	125	110.5	119.6	85	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
35	75	95	130	115.5	124.6	90	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
90	80	100	135	120.5	129.6	95	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
95	85	105	140	125.5	134.6	100	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
00	90	110	145	130.5	139.6	105	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
05	95	115	150	135.5	144.6	110	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
10	100	120	155	140.5	149.6	115	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
15	105	125	160	145.5	154.6	120	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
20	110	130	165	150.5	159.6	125	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
25	115	135	170	155.5	164.6	130	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
30	120	140	175	160.5	169.6	135	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
35	125	145	180	165.5	174.6	140	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
40	130	150	185	170.5	179.6	145	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
45	135	155	190	175.5	184.6	150	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
50	140	160	195	180.5	189.6	155	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
55	145	165	200	185.5	194.6	160	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
60	150	170	205	190.5	199.6	165	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
65	155	175	210	195.5	204.6	170	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
70	160	180	215	200.5	209.6	175	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
75	165	185	220	205.5	214.6	180	95.3	75.3	70	50	18.8	31.8	2.5	6	M8
80	170	192	225	212.5	224.6	185	104.2	84.2	72	52	26.4	38.0	3.5	6	M8
85	175	197	230	217.5	229.6	190	104.2	84.2	72	52	26.4	38.0	3.5	6	M8
90	180	202	235	222.5	234.6	195	104.2	84.2	72	52	26.4	38.0	3.5	6	M8
95	185	207	240	227.5	239.6	200	104.2	84.2	72	52	26.4	38.0	3.5	6	M8
.00	190	212	245	232.5	244.6	205	109.2	84.2	77	52	26.4	38.0	3.5	6	M10
.05	195	217	255	237.5	249.6	210	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
10	200	222	260	242.5	254.6	215	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
220	210	232	270	252.5	264.6	225	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
30	220	242	280	262.5	274.6	235	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
40	230	252	290	272.5	284.6	245	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
50	240	262	300	282.5	294.6	255	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
60	250	272	310	295.5	307.6	265	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
70	260	282	320	305.5	317.6	275	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
80	270	292	330	315.5	327.6	285	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
90	280	302	340	325.5	337.6	295	109.2	84.2	77	52	26.4	38.0	3.5	8	M10
00	290	312	350	335.5	347.6	305	109.2	84.2	77	52	26.4	38.0	3.5	8	M1C
10	300	322	360	345.5	357.5	315	109.2	84.2	77	52	26.4	38.0	3.5	8	M10

Dimensions in Millimeter