

MECHANICAL SEAL BM3AØBM3A



CAT015 ENG REV 12.09

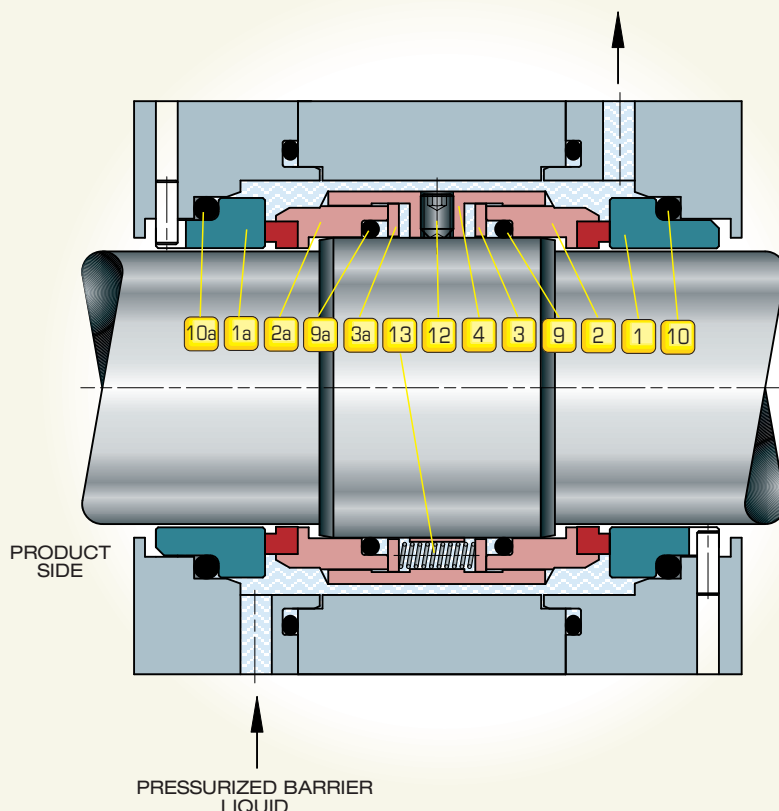
A double monobloc version is available to reduce axial bulk, suitable for dangerous, toxic, inflammable, highly abrasive, gaseous liquids and situations in which it is necessary to avoid atmospheric emissions.

Particularly suitable for dryers, hydrogenators and top-entry agitators.

Available cartridge execution with and without bearing included. The BM3AØBM3A is a double component seal with a type A pinned stationary seat, pressure balanced, multi-spring and suitable for rotation in either direction. Equipped with three drive lugs on the rotating body it can tolerate strong vibration and mechanical stresses.

The "O" ring is easily removed and refitted when assembling the seal on shafts with keyways, threads or sharp edges.

MECHANICAL SEAL BM3AØBM3A



ELEMENTS:

- | | |
|------------------------------------|-------------------------------------|
| 1 STATIONARY SEAT | 1a STATIONARY SEAT |
| 2 ROTARY FACE | 2a ROTARY FACE |
| 3 THRUST RING | 3a THRUST RING |
| 4 SEAL BODY | 9a ROTARY FACE "O" RING |
| 9 ROTARY FACE "O" RING | 10a STATIONARY SEAT "O" RING |
| 10 STATIONARY SEAT "O" RING | |
| 12 SETSCREW | |
| 13 SPRING | |

OPERATING CONDITIONS:

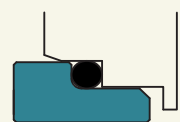
DIAMETER: (mm)	SPEED: (m/sec)	PRESSURE: (bar)	TEMPERATURE: (°C)
100 ↑ 20	20 ↑ 0	75 ↑ 0	+250 ↑ -100

CHARACTERISTICS:

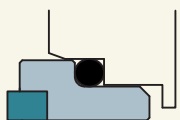
- | | | |
|---|--|---|
| II DOUBLE | ↻ BI-DIRECTIONAL | ⚖ BALANCED |
| ⦿ FLUIGAM
(energized
dynamic "O" ring) | ⚗ RESISTANT TO
ACIDS & BASES | ⚒ RESISTANT TO
MECHANICAL
STRESS |
| 💧 DIRTY & TOXIC
LIQUIDS | | |

STATIONARY SEAT: 1 1a

SOLID TYPE A

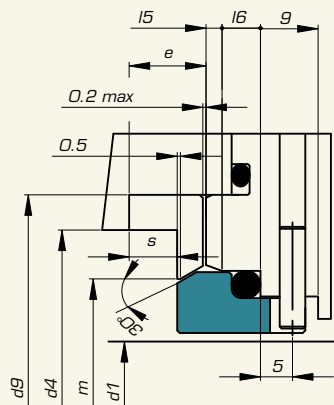


Cr-Mo Steel: **Y1**
Silicon Carbide: **U31**
TYPE A WITH INSERT



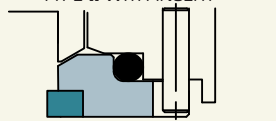
AISI 316+Tungsten Carbide: **K22**

SOLID TYPE R⁽³⁾



Cr-Mo Steel: **Y1**
Silicon Carbide: **U31**

TYPE R WITH INSERT



AISI 316+Tungsten Carbide: **K22**

STATIONARY SEAT "O" RING: 10 10a

- Nitrile Rubber: **G**
- Ethylene Propylene: **D**
- Fluoroelastomer: **V**
- Perfluoroelastomer: **G711**
- PTFE: **T**

ROTARY FACE: 2 2a

SOLID



Graphite Resins impregnated: **Z31**
Graphite Antimony impregnated: **Z11**
Silicon Carbide: **U31**

WITH INSERT



AISI 316+Graphite Resins impreg.: **Z32**
AISI 316+Silicon Carbide: **U32**
AISI 316+Tungsten Carbide: **K22**

ROTARY FACE "O" RING: 9 9a

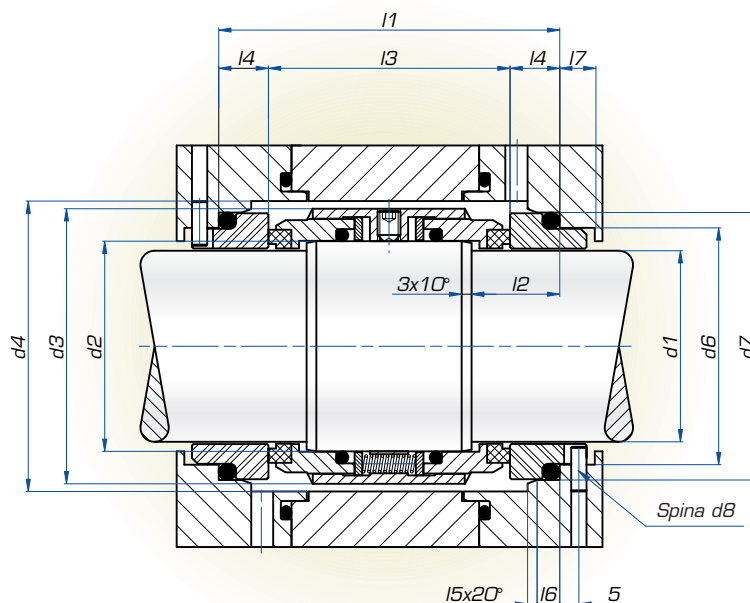
- Nitrile Rubber: **G**
- Ethylene Propylene: **D**
- Fluoroelastomer: **V**
- Perfluoroelastomer: **G711**
- PTFE with AISI 316 spring: **T3**

SPRINGS: 13

AISI 316: **E**
Hastelloy C: **I**

OTHER METAL PARTS: 4 12 3 3a

AISI 316: **E**



Seal Diam.	d1	d2	d3	d4	d6	d7	d8	l1	l2	l3	l4	l5	l6	l7	d9	m	s	e
		h6		min.	H11	H8	± 0,5	± 0,5	± 0,5						H8			
20	20	24	38	40	29	35	3	73	20	53	10	2	5	9	43	32,5	1	4
22	22	26	40	42	31	37	3	73	20	53	10	2	5	9	46	34,5	1	4
24	24	28	42	44	33	39	3	74	20	54	10	2	5	9	48	36,5	1	4
25	25	30	44	46	34	40	3	74	20	54	10	2	5	9	50	37,5	1	4
28	28	33	47	49	37	43	3	79	20	59	10	2	5	9	53	40,5	1	4
30	30	35	49	51	39	45	3	79	20	59	10	2	5	9	60	42,5	1	4
32	32	38	54	58	42	48	3	79	20	59	10	2	5	9	62	45,5	1	4
33	33	38	54	58	42	48	3	79	20	59	10	2	5	9	62	45,5	1	4
35	35	40	56	60	44	50	3	79	20	59	10	2	5	9	65	47,5	1	4
38	38	43	59	63	49	56	4	84	23	62	11	2	6	9	67	53,5	3	6
40	40	45	61	65	51	58	4	84	23	62	11	2	6	9	70	55,5	3	6
43	43	48	64	68	54	61	4	84	23	62	11	2	6	9	72	58,5	3	6
45	45	50	66	70	56	63	4	84	23	62	11	2	6	9	75	60,5	3	6
48	48	53	69	73	59	66	4	84	23	62	11	2	6	9	77	63,5	3	6
50	50	55	71	75	62	70	4	94	25	68	13	2,5	6	9	86	67,5	1,5	6
53	53	58	78	83	65	73	4	92	25	66	13	2,5	6	9	88	70,5	1,5	6
55	55	60	80	85	67	75	4	92	25	66	13	2,5	6	9	91	72,5	1,5	6
58	58	63	83	88	70	78	4	102	25	76	13	2,5	6	9	93	75,5	1,5	6
60	60	65	85	90	72	80	4	102	25	76	13	2,5	6	9	96	77,5	1,5	6
63	63	68	88	93	75	83	4	102	25	76	13	2,5	6	9	98	80,5	1,5	6
65	65	70	90	95	77	85	4	93	25	67	13	2,5	6	9	103	82,5	1,5	6
70	70	75	99	104	83	92	4	111	28	81	15	2,5	7	9	108	89,5	0,5	6
75	75	80	104	109	88	97	4	112	28	82	15	2,5	7	9	120	94,5	0,5	6
80	80	85	109	114	95	105	4	112	28	81	15,5	3	7	9	125	102,5	0,5	6
85	85	90	114	119	100	110	4	114	28	83	15,5	3	7	9	130	107,5	0,5	6
90	90	95	119	124	105	115	4	114	28	83	15,5	3	7	9	135	112,5	0,5	6
95	95	100	124	129	110	120	4	114	28	83	15,5	3	7	9	140	117,5	0,5	6
100	100	105	129	134	115	125	4	114	28	83	15,5	3	7	9	145	122,5	0,5	6

Dimensions subject to modifications without notice.

Example:

To order the seals shown on this page for shaft 65 mm and material shown in the table below:

2a	2	1a	1	9a	9	10a	10	13	4	12	3	3a
U32		U31		T3		T		I				E
	Z32		U31		V		V					

The code will be: BM3A065BM3A - U32U31T3TIE/Z32U31VIE ⁽⁴⁾

NOTES:

- 1) The material shown on this page is only part of the available range, for other products stock items, please call our Technical Sales Office.
- 2) The material should be chosen according to the operating conditions. All queries should be sent to our Technical Sales Office.
- 3) The last letter of the product code BM3AØBM3A shows the type A stationary seat with a slot for an antirotation pin: or if a stationary seat with chamfer for use of an axial lock ring fitted, please request type R. The product code will then be BM3RØBM3R.
- 4) When the material of the seal on the stationary seat "O" ring is the same as the seal on the rotary face "O" ring the product code is not repeated.