

ECS



Description

Single seal
Balanced
Cartridge
Independent of direction of rotation
Single seals with flush and quench

Technical Features

Cost-effective
No damage of the shaft by dynamically loaded O-Ring
No dimensional modification of the seal chamber height
Universal applicable for packings conversions, retrofits or original equipment
Chemical industry

Typical Industrial Applications

Food and beverage industry
Petrochemical industry
Pharmaceutical industry
Process Pumps
Water and waste water technology

Standards

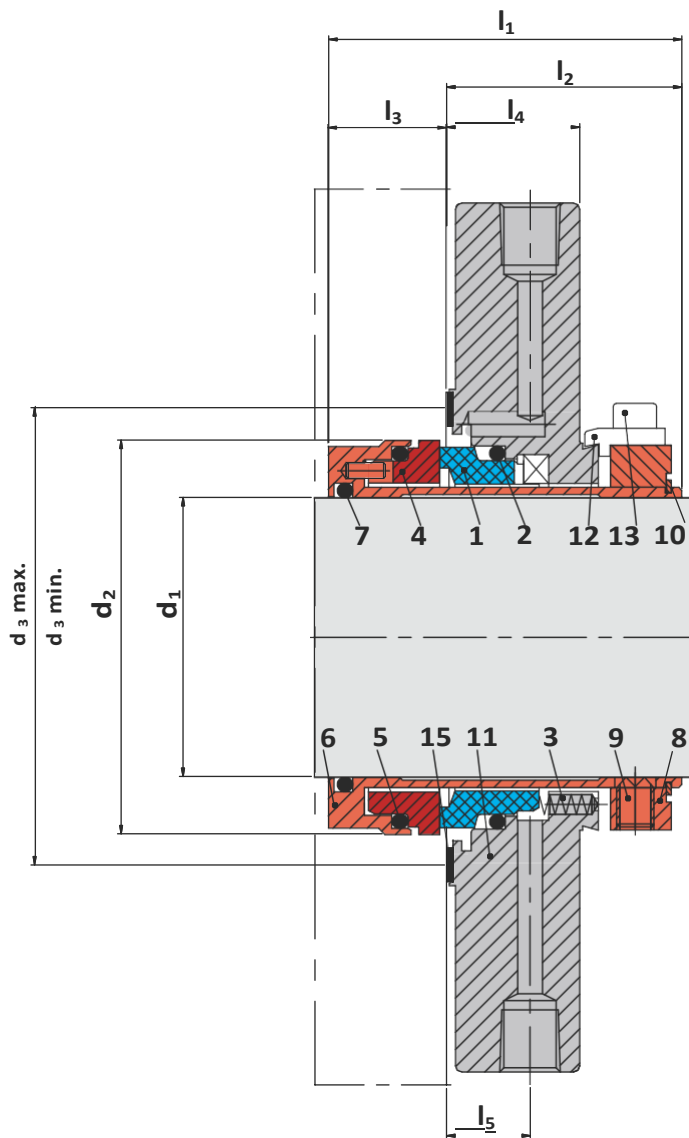
ANSI

Materials

Seal face: Silicon carbide (Q1), Carbon graphite resin impregnated (B), Tungsten carbide (U2)
Seat: Silicon carbide (Q1) Secondary seals: FKM (V), EPDM (E), FFKM (K), Perfluorocarbon rubber/PTFE (U1)
Springs: Hastelloy® C-4 (M)
Metal parts: CrNiMo steel (G), CrNiMo cast steel (G)

Performance Capabilities

ECS-SN,
Sizes: Upto 70 mm (2.75")
Other sizes on request
Temperature: $t = -40\text{ }^{\circ}\text{C} \dots 220\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F} \dots 428\text{ }^{\circ}\text{F}$)
(Check O-Ring resistance)
Sliding face material combination BQ1
Pressure: $p_1 = 20\text{ bar}$ (290 PSI) Speed = $\frac{1}{2}$ m/s
Permissible axial movement: $\pm 1.0\text{ mm}$

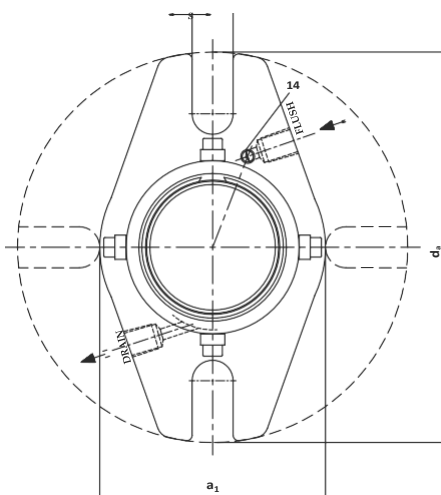


Item	Description
1	Seal face
2, 5, 7	O-Ring
3	Spring
4	Seat
6	Shaft sleeve
8	Drive collar
9	Set screw

Item	Description
10	Snap ring
11	Cover
12	Assembly fixture (remove after installation)
13	Screw
14	Plug
15	Gasket

Note: Additional technical & dimensional information will be provided on request.

Installation, Details, Options



Dimensional Data

Dimensions in inches

d ₁	d ₂	d ₃ min.	d ₃ max.	l ₁	l ₂	l ₃	l ₄	l ₅	a ₁	d _a	s	Connection
1.000	1.831	1.929	2.402	2.244	1.496	0.748	0.846	0.531	2.480	4.094	0.492	1/8" NPT
1.125	1.909	2.047	2.480	2.244	1.496	0.748	0.846	0.531	2.559	4.094	0.492	1/8" NPT
1.250	2.028	2.126	2.559	2.244	1.496	0.748	0.846	0.531	2.717	4.094	0.492	1/8" NPT
1.375	2.106	2.244	2.677	2.244	1.496	0.748	0.846	0.531	2.756	4.528	0.492	1/8" NPT
1.500	2.224	2.441	2.874	2.244	1.496	0.748	0.846	0.531	2.953	4.921	0.579	1/8" NPT
1.625	2.382	2.598	3.031	2.244	1.496	0.748	0.846	0.531	3.110	5.236	0.579	1/8" NPT
1.750	2.500	2.677	3.110	2.244	1.496	0.748	0.846	0.531	3.189	5.512	0.579	1/8" NPT
1.875	2.618	2.795	3.228	2.244	1.496	0.748	0.846	0.531	3.307	5.512	0.579	1/8" NPT
2.000	2.815	3.031	3.465	2.244	1.496	0.748	0.846	0.531	3.622	5.906	0.689	1/8" NPT
2.125	2.894	3.110	3.543	2.244	1.496	0.748	0.846	0.531	3.622	5.906	0.689	1/8" NPT
2.250	3.012	3.228	3.661	2.244	1.496	0.748	0.846	0.531	3.740	6.102	0.689	1/8" NPT
2.375	3.091	3.425	3.858	2.244	1.496	0.748	0.846	0.531	3.937	6.299	0.689	1/8" NPT
2.500	3.209	3.543	3.976	2.244	1.496	0.748	0.846	0.531	4.055	6.496	0.689	1/8" NPT
2.625	3.406	3.819	4.252	2.244	1.496	0.748	0.846	0.531	4.331	6.693	0.689	1/8" NPT
2.750	3.484	4.213	4.646	2.244	1.496	0.748	0.846	0.531	4.724	7.087	0.689	1/8" NPT

Dimensions in millimeter

d ₁	d ₂	d ₃ min.	d ₃ max.	l ₁	l ₂	l ₃	l ₄	l ₅	a ₁	d _a	s	Connection
25	43.5	49	60	57	38	19	21.5	13.5	62	104	12.5	1/8" NPT
28	46.5	50	61	57	38	19	21.5	13.5	63	104	12.5	1/8" NPT
30	48.5	52	63	57	38	19	21.5	13.5	65	104	12.5	1/8" NPT
33	51.5	54	65	57	38	19	21.5	13.5	69	104	12.5	1/8" NPT
35	53.5	57	68	57	38	19	21.5	13.5	70	115	12.5	1/8" NPT
38	56.5	62	73	57	38	19	21.5	13.5	75	125	14.7	1/8" NPT
40	58.5	62	73	57	38	19	21.5	13.5	75	125	14.7	1/8" NPT
42	60.5	66	77	57	38	19	21.5	13.5	79	133	14.7	1/8" NPT
43	61.5	67	78	57	38	19	21.5	13.5	80	133	14.7	1/8" NPT
45	63.5	68	79	57	38	19	21.5	13.5	81	140	14.7	1/8" NPT
48	66.5	71	82	57	38	19	21.5	13.5	84	140	14.7	1/8" NPT
50	68.5	74	85	57	38	19	21.5	13.5	87	140	14.7	1/8" NPT
53	71.5	77	88	57	38	19	21.5	13.5	92	150	17.5	1/8" NPT
55	73.5	79	90	57	38	19	21.5	13.5	92	150	17.5	1/8" NPT
58	76.5	82	93	57	38	19	21.5	13.5	95	155	17.5	1/8" NPT
60	78.5	87	98	57	38	19	21.5	13.5	100	160	17.5	1/8" NPT
63	81.5	90	101	57	38	19	21.5	13.5	103	165	17.5	1/8" NPT
65	83.5	92	103	57	38	19	21.5	13.5	105	165	17.5	1/8" NPT
68	86.5	97	108	57	38	19	21.5	13.5	110	170	17.5	1/8" NPT
70	88.5	107	118	57	38	19	21.5	13.5	120	180	17.5	1/8" NPT

Note: Additional technical & dimensional information will be provided on request