

ETX Single Seals

Standard Cartridge Seals

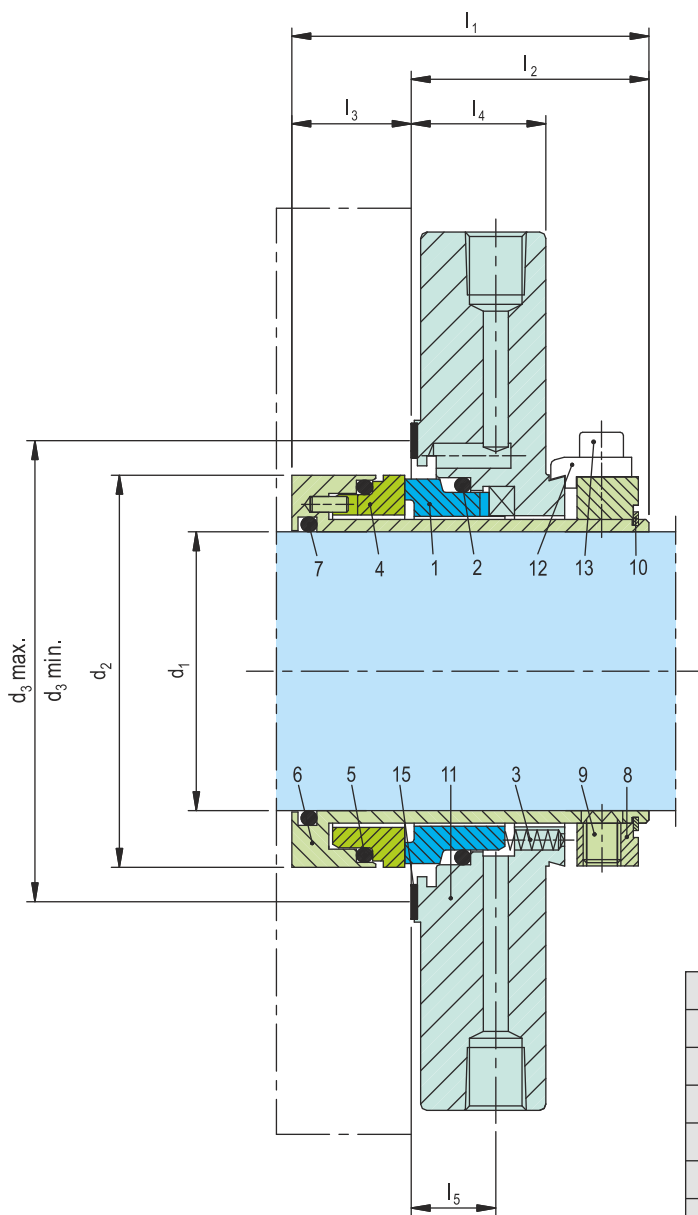


Product Description

1. Single seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Cartridge construction
5. Available with flush and quench connections

Technical Features

1. Ideal for use in process pump standardization
2. O-ring is dynamically loaded to prevent shaft damage.
3. Dimensional modification of the stuffing box chamber is not required due to short radial installation height
4. Ideal to convert and retrofit pumps with packings and large volume OEM production
5. Cartridge unit factory assembled for easy installation, which reduces downtime
6. Rugged design for long operating life



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Typical Industrial Applications

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

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)

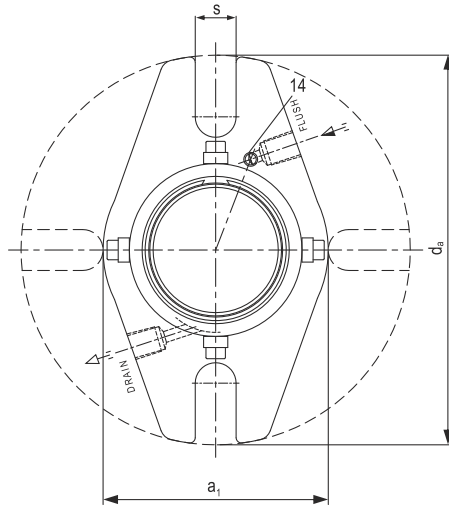
Performance Capabilities

- ETX-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 = 11.2 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	HSH Cap Screw
14	Plug
15	Gasket

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	1.851	1.929	2.402	2.244	1.496	0.748	0.846	0.531	2.480	4.134	0.511	1/8" NPT
1.125	1.930	2.047	2.480	2.244	1.496	0.748	0.846	0.531	2.480	4.134	0.511	1/8" NPT
1.250	2.048	2.126	2.559	2.244	1.496	0.748	0.846	0.531	2.678	4.134	0.511	1/8" NPT
1.375	2.126	2.244	2.677	2.244	1.496	0.748	0.846	0.531	2.796	4.567	0.511	1/8" NPT
1.500	2.245	2.441	2.874	2.244	1.496	0.748	0.846	0.531	2.993	4.961	0.590	1/8" NPT
1.625	2.402	2.598	3.031	2.244	1.496	0.748	0.846	0.531	3.150	5.276	0.590	1/8" NPT
1.750	2.520	2.677	3.110	2.244	1.496	0.748	0.846	0.531	3.229	5.552	0.590	1/8" NPT
1.875	2.638	2.795	3.228	2.244	1.496	0.748	0.846	0.531	3.347	5.552	0.590	1/8" NPT
2.000	2.835	3.031	3.465	2.244	1.496	0.748	0.846	0.531	3.662	5.945	0.709	1/8" NPT
2.125	2.914	3.110	3.543	2.244	1.496	0.748	0.846	0.531	3.662	5.945	0.709	1/8" NPT
2.250	3.032	3.228	3.661	2.244	1.496	0.748	0.846	0.531	3.780	6.142	0.709	1/8" NPT
2.375	3.111	3.425	3.858	2.244	1.496	0.748	0.846	0.531	3.977	6.339	0.709	1/8" NPT
2.500	3.229	3.543	3.976	2.244	1.496	0.748	0.846	0.531	4.095	6.536	0.709	1/8" NPT
2.625	3.426	3.819	4.252	2.244	1.496	0.748	0.846	0.531	4.370	6.733	0.709	1/8" NPT
2.750	3.504	4.213	4.646	2.244	1.496	0.748	0.846	0.531	4.764	7.126	0.709	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	44	49	60	57	38	19	21.5	13.5	63	105	13	1/8" NPT
28	47	50	60	57	38	19	21.5	13.5	64	105	13	1/8" NPT
30	49	52	63	57	38	19	21.5	13.5	66	105	13	1/8" NPT
33	52	54	65	57	38	19	21.5	13.5	68	105	13	1/8" NPT
35	54	57	68	57	38	19	21.5	13.5	71	116	13	1/8" NPT
38	57	62	73	57	38	19	21.5	13.5	76	126	15	1/8" NPT
40	59	62	73	57	38	19	21.5	13.5	76	126	15	1/8" NPT
42	61	66	77	57	38	19	21.5	13.5	80	134	15	1/8" NPT
43	62	67	78	57	38	19	21.5	13.5	81	134	15	1/8" NPT
45	64	68	79	57	38	19	21.5	13.5	82	141	15	1/8" NPT
48	67	71	82	57	38	19	21.5	13.5	85	141	15	1/8" NPT
50	69	74	85	57	38	19	21.5	13.5	88	141	15	1/8" NPT
52	72	77	88	57	38	19	21.5	13.5	91	151	18	1/8" NPT
53	72	77	88	57	38	19	21.5	13.5	91	151	18	1/8" NPT
55	74	79	90	57	38	19	21.5	13.5	93	151	18	1/8" NPT
58	77	82	93	57	38	19	21.5	13.5	96	156	18	1/8" NPT
60	79	87	98	57	38	19	21.5	13.5	101	161	18	1/8" NPT
63	82	90	101	57	38	19	21.5	13.5	104	166	18	1/8" NPT
65	84	92	103	57	38	19	21.5	13.5	106	166	18	1/8" NPT
68	87	97	108	57	38	19	21.5	13.5	111	171	18	1/8" NPT
70	89	107	118	57	38	19	21.5	13.5	121	181	18	1/8" NPT

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