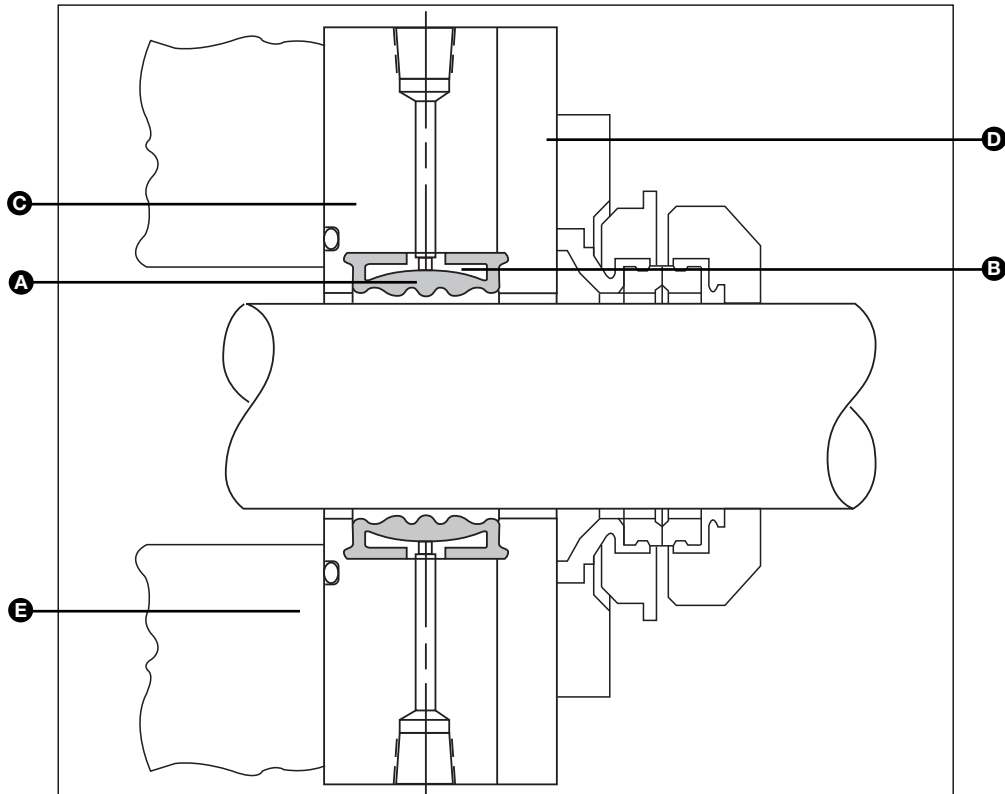


- A – Inflatable Boot
- B – Support Ring
- C – Housing
- D – Back Plate
- E – O-ring



Product Description

Type 73 is an inflatable backup seal that is used primarily to hold process fluids, without leakage, while repairs are made to primary seal, bearings and other equipment components during upset conditions or scheduled maintenance.

With this seal, there is no need to drain the tank or system. It is a low investment barrier seal for leak protection, saving days of potential lost production and product. In marine services, surface and submarine, it also is used to assure vessel integrity when making repairs at sea under pressurized conditions.

- For mixers, agitators, pulpers, and large pumps.
- For large tanks, vessels, and chests in continuous or batch processes, other industrial and marine services.
- For downtime reduction, safety, and process fluid protection.

Performance Capabilities

- Temperature: up to 180°F/82°C
- Pressure: 500 psi(g)/35 bar(g)
- Speed: Shaft cannot be rotated when inflatable seal is activated.

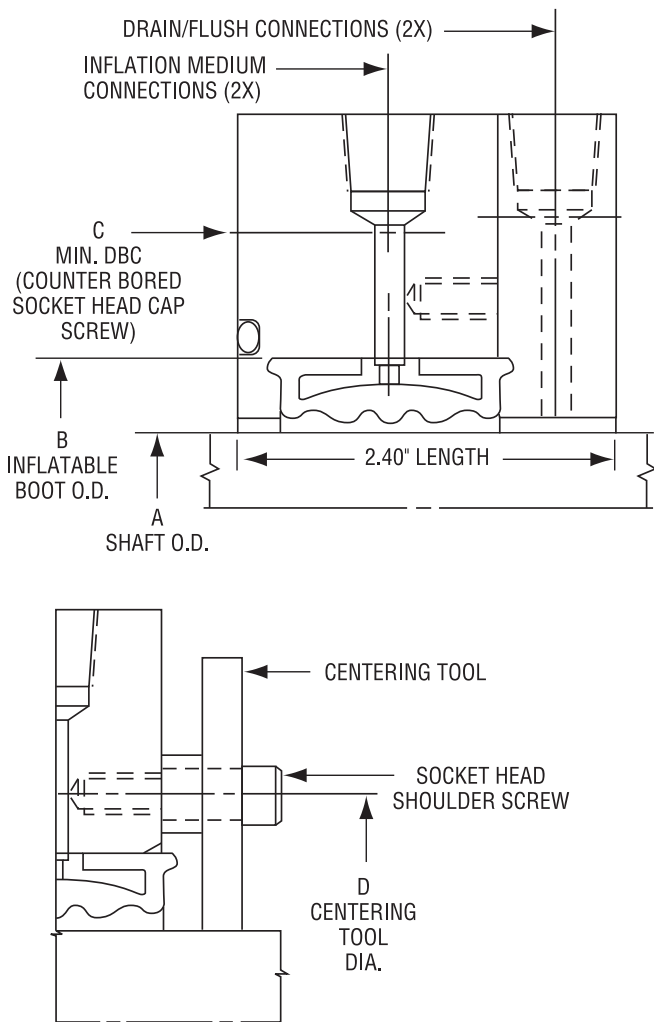
Design Features

- Minimal components - Employs a simple design with a minimum number of parts for functional efficiencies and reliable service. The key element is a John Crane-developed elastomer “boot” seal that is inflated quickly to hold process fluids in place during maintenance.
- Internal positioning - Positioned between the process fluid and primary seal, allowing complete access to equipment components beyond the boot without interruption from leakage. In some industrial applications, it can be used as secondary containment to prevent pollution to the atmosphere.
- Long service life - Designed for long service life; some have provided more than ten years of uninterrupted service in marine and industrial applications. They can be inflated and deflated through dozens of cycles.
- Easy inflation - Elastomer boot is designed for fast inflation by merely opening a valve to the inflation medium.
- Versatility in use - Provides backup seal protection when used with a wide range of primary seals and packings. They are ideally combined with John Crane split seals. This combination allows fast split seal repairs without dismantling equipment and without having to drain the tank or system first.

TYPE 73

THE PROTECTOR INFLATABLE SEAL

Type 73 Typical Arrangement



Type 73 Dimensional Data (inches)

A	B	C*			D
		3/8" Bolt	1/2" Bolt	5/8" Bolt	
2.000	3.015	4.000	4.187	4.375	3.625
2.125	3.140	4.125	4.312	4.500	3.750
2.250	3.265	4.250	4.437	4.625	3.875
2.375	3.390	4.375	4.562	4.750	4.000
2.500	3.515	4.500	4.687	4.875	4.125
2.625	3.640	4.625	4.812	5.000	4.250
2.750	3.765	4.750	4.937	5.125	4.375
2.875	3.890	4.875	5.062	5.250	4.500
3.000	4.015	5.000	5.187	5.375	4.625
3.125	4.140	5.125	5.312	5.500	4.750
3.250	4.265	5.250	5.437	5.625	4.875
3.375	4.390	5.375	5.562	5.750	5.000
3.500	4.515	5.500	5.687	5.875	5.125
3.625	4.640	5.625	5.812	6.000	5.250
3.750	4.765	5.750	5.937	6.125	5.375
3.875	4.890	5.875	6.062	6.250	5.500
4.000	5.015	6.000	6.187	6.375	5.625
4.125	5.140	6.125	6.312	6.500	5.750
4.250	5.265	6.250	6.437	6.625	5.875
4.375	5.390	6.375	6.562	6.750	6.000
4.500	5.515	6.500	6.687	6.875	6.125
4.625	5.640	6.625	6.812	7.000	6.250

A	B	C*			D
		1/2" Bolt	5/8" Bolt	3/4" Bolt	
4.750	5.765	6.937	7.125	7.312	6.375
4.875	5.890	7.062	7.250	7.437	6.500
5.000	6.015	7.187	7.375	7.562	6.625
5.125	6.140	7.312	7.500	7.687	6.750
5.250	6.265	7.437	7.625	7.812	6.875
5.375	6.390	7.562	7.750	7.937	7.000
5.500	6.515	7.687	7.875	8.062	7.125
5.625	6.640	7.812	8.000	8.187	7.250
5.750	6.765	7.937	8.125	8.312	7.375
5.875	6.890	8.062	8.250	8.437	7.500
6.000	7.015	8.187	8.375	8.562	7.625
6.125	7.140	8.312	8.500	8.687	7.750
6.250	7.265	8.437	8.625	8.812	7.875
6.375	7.390	8.562	8.750	8.937	8.000

A	B	C*			D
		5/8" Bolt	3/4" Bolt	1" Bolt	
6.500	7.515	8.875	9.062	9.437	8.125
6.625	7.640	9.000	9.187	9.562	8.250
6.750	7.765	9.125	9.312	9.687	8.375
6.875	7.890	9.250	9.437	9.812	8.500
7.000	8.015	9.375	9.562	9.937	8.625
7.125	8.140	9.500	9.687	10.062	8.750
7.250	8.265	9.625	9.812	10.187	8.875
7.375	8.390	9.750	9.937	10.312	9.000
7.500	8.515	9.875	10.062	10.437	9.125
7.625	8.640	10.000	10.187	10.562	9.250
7.750	8.765	10.125	10.312	10.687	9.375
7.875	8.890	10.250	10.437	10.812	9.500
8.000	9.015	10.375	10.562	10.937	9.625
8.125	9.140	10.500	10.687	11.062	9.750
8.250	9.265	10.625	10.812	11.187	9.875
8.375	9.390	10.750	10.937	11.312	10.000
8.500	9.515	10.875	11.062	11.437	10.125
8.625	9.640	11.000	11.187	11.562	10.250
8.750	9.765	11.125	11.312	11.687	10.375
8.875	9.890	11.250	11.437	11.812	10.500
9.000	10.015	11.375	11.562	11.937	10.625
9.125	10.140	11.500	11.687	12.062	10.750
9.250	10.265	11.625	11.812	12.187	10.875
9.375	10.390	11.750	11.937	12.312	11.000
9.500	10.515	11.875	12.062	12.437	11.125
9.625	10.640	12.000	12.187	12.562	11.250
9.750	10.765	12.125	12.312	12.687	11.375
9.875	10.890	12.250	12.437	12.812	11.500
10.000	11.015	12.375	12.437	12.937	11.625

Based on a 0.210 dia. o-ring. Dia. "C" may be reduced by .125 in. when a .139 dia. o-ring is used instead.

Materials of Construction

SEAL COMPONENTS	MATERIALS
Inflatable Seal	Ethylene Propylene (EPD) Fluoroelastomer
Support Ring	316 SS



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