

TYPE 43

Elastomer Bellows Seal

Industries Served **Chemical Processing** Conveyor and Industrial Equipment Cryogenics Food Processing Gas Compression Industrial Blowers and Fans Marine Mixers and Agitators Nuclear Service Offshore Oil and Refinery Paint and Ink Petrochemical Processing Pharmaceutical Pipeline **Power Generation** Pulp and Paper Water Systems Wastewater Treatment Water Desalination



Uncomplicated Design

The uncomplicated design of the Type 43 eliminates the sliding action between the seal and the shaft. This not only prevents the shaft from being damaged by fretting, but also enables it to readily follow shaft run-out or pump misalignment.

Versatility

The Type 43 has been designed for high volume production and reliable service. The design offers a unit with a very high degree of interchangeability. It fits into almost all existing envelope dimensions, including DIN 24960, without any modification to the equipment.

The Type 43 offers an overall concept of standardization irrespective of the cavity that the original equipment was designed around.

Simple Assembly & Operation

The friction ring is made of rubber and is squeezed onto the shaft by the band. During the initial stages of fitting, the inside diameter of the friction ring is lubricated so that it will slide along the shaft. Once the fitting has been completed, the lubricant is squeezed out and the rubber will quickly grip the shaft, locking the part in place.

The spring merely provides axial load, therefore the seal can be rotated in either direction. Any movement that the seal is required to make during operation is accommodated by the rubber friction ring. The spring and system pressure will ensure that the faces remain in contact. Drive to the face is transmitted by drive lugs in the band and shell.

No Wear On The Shaft

The friction ring, which also forms the rubber bellows, flexes to accommodate shaft movement, face wear and any inaccuracies in the equipment that is using the Type 43.

The friction ring will adhere to the shaft beneath the band, giving an excellent static seal and very positive drive to the seal face via the band. Because there is no relative movement between the friction ring and the shaft, there is no shaft fretting, and the seal can react quickly to any movement.

John Crane TYPE 43

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Part Numbering





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Materials of Construction				
Seal Faces:	Carbon, Sealide™			
Seats:	Aluminium Oxide, Ni-Resist, Stainless Steel, Silicon Carbide			
Elastomers:	Nitrile, Ethylene Polypropylene, Viton [®] , and Neoprene			
All Seal Metal Parts:	Stainless Steel 316, Band (Sintered 316)			

Performance Capabilities				
Temperature:	-40°c to + 150°c (-40°F to 300°F)			
Pressure:	to 22 bar (325 psi)			



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Shaft	Seal	Operating Length					
Size	0. D.	43 CE 43 BE 43 DIN					
mm	E	L1	L2	L3	L4		
10	20.05	25.00	44.00	16.00	23.90		
12	21.70	25.00	44.00	16.50	23.90		
13	23.80	25.00	44.00	-	-		
14	24.50	25.00	44.00	16.50	26.40		
16	26.65	25.00	44.00	17.60	26.40		
18	30.35	25.00	44.00	19.60	27.50		
20	31.75	25.00	44.00	20.60	27.50		
22	33.55	25.00	44.00	22.10	27.50		
24	38.30	25.00	44.00	23.60	30.00		
25	38.30	25.00	44.00	25.10	30.00		
28	42.20	33.00	60.00	26.60	32.50		
30	43.95	33.00	60.00	26.60	32.50		
32	45.70	33.00	60.00	30.10	32.50		
33	49.10	33.00	60.00	-	32.50		
35	49.10	33.00	60.00	30.40	32.50		
38	52.40	33.00	60.00	33.60	34.00		
40	55.70	32.30	59.30	36.60	34.00		
42	61.20	40.30	70.30	-	-		
43	61.20	40.30	70.30	-	34.00		
45	61.20	40.30	70.30	41.40	34.00		
48	64.35	40.30	70.30	46.90	34.00		
50	67.35	41.00	71.00	47.90	34.50		
53	70.65	41.00	71.00	52.80	34.50		
55	71.65	41.00	71.00	55.80	34.50		
58	78.40	41.00	71.00	-	39.50		
60	78.40	41.00	71.00	56.80	39.50		
63	81.10	41.00	71.00	-	39.50		
65	84.30	49.00	70.00	57.80	39.50		
68	89.65	49.00	70.00	59.50	37.20		
70	89.65	49.00	70.00	59.80	44.70		
75	96 80	52.00	73.00	60.80	44 70		



L₃±0.50mm -43 BE ØA ±0.05mm ØE ±0.15mm



BREAK X١ EDGE 10 1MM RADIUS

For ease of installation, the lead-in edge of the shaft or sleeve should be chamfered as shown.

*Recommended chamfer lengths:

Seal Sizes up to 1.000 in./26mm above 1.000 in. to 2.500 in./ 26mm to 60mm above 2.500 in./60mm





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