

The 201 and 203 range of welded metal bellows shaft mounted mechanical seal assemblies are designed to deliver an economic sealing solution for a wide variety of low temperature [up to 200°C] applications.

Superior performance through optimised design characteristics and materials will maximise seal life and performance.

- ⇒ Inherently pressure balanced - no steps needed for shaft or sleeve.
- ⇒ Minimum seal face loading reducing seal face wear.
- ⇒ Centrifugal cleaning action expels materials which clog pusher type seals.
- ⇒ Bellows action overcomes the hang-up problems associated with pusher seals.
- ⇒ Inconel 625 10 convolution welded metal bellows [201] offers a combination of high mechanical strength and corrosion resistance.
- ⇒ Bellows plates shaped for extended seal performance.

201

The 201 with a 10-convolution Inconel 625 bellows and end fittings is an excellent general purpose seal element for use in a broad range of applications including corrosive and abrasive media. The wider range of potential applications makes the 201 seal the logical choice for any plant standardisation programme.

203

Dimensionally the same as the 201 supplied in all Hastelloy C construction.

Standardisation Programme:

The 200 series are an integral part of the Standardisation Programme [PSP].

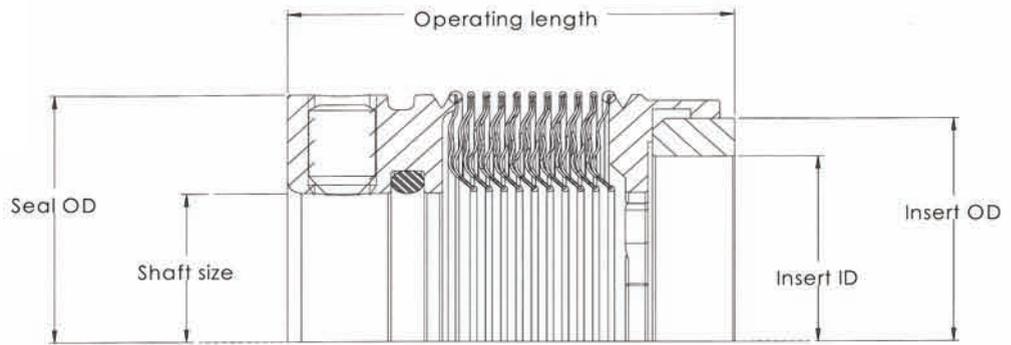
- ⇒ Dimensions conform to one "Standard Seal Unit" [SSU].
- ⇒ Fits standard 21X cartridge series.
- ⇒ Materials selected for greater universality of applications.
- ⇒ Off the shelf availability.

Specification	Limited by	Lower/Upper limits
Temperature	Elastomer	⇒ Viton: -15C to 200C ⇒ Nitrile: -30C to 100C ⇒ EPR: -45C to 130C ⇒ Aflaz: -50C to 200C (limited by seal element to 200C)
Pressure	One ply welded bellows	Vacuum to 20 bar / 300 psi
Speed	Rotary element	Up to 25 m/s / 4500 sfpm
Applications	<ul style="list-style-type: none"> • All Inconel 625 • All Hastelloy C 	⇒ All round high performance seal handles mild to medium corrosive and abrasive fluids such as caustics, chlorides and acids ⇒ handles medium to high corrosive and abrasive fluids such as hot & concentrated caustics, salts and chlorides

Quality Assurance Programme:

The company is ISO 9001 certified and committed to producing sealing devices of the highest quality.

The 200 series are manufactured to strict design specifications for optimum seal performance.



SECTION A-A

IMPERIAL SIZES					
Seal size	Shaft size	Seal OD	Operating length	Insert OD	Insert ID
	+0.00 -0.05	ref	±0.76	ref	ref
-X12	19.05	33.32	31.75	30.1	25.0
-X14	22.23	36.50	31.75	33.4	28.2
-X15	23.81	39.00	31.75	35.7	30.5
-X16	25.40	39.67	31.75	36.5	31.4
-X18	28.58	42.85	31.75	39.8	34.6
-X20	31.75	46.02	33.32	43.7	38.5
-X22	34.93	49.20	36.50	46.9	41.7
-X24	38.10	52.37	36.50	50.0	43.6
-X26	41.28	55.55	36.50	53.2	46.8
-X28	44.45	58.72	36.50	56.4	49.9
-X30	47.63	61.90	38.10	59.6	53.1
-X32	50.80	65.07	38.10	62.8	56.3
-X34	53.98	68.25	38.10	65.9	59.4
-X36	57.15	71.42	39.67	69.1	62.6
-X38	60.33	74.60	39.67	72.3	65.8
-X40	63.50	80.95	39.67	78.6	70.9
-X42	66.68	84.12	41.27	81.8	74.0
-X44	69.85	87.30	41.27	85.0	77.2
-X46	73.03	92.08	42.85	89.0	81.2
-X48	76.20	95.25	42.85	92.1	84.4
-X50	79.38	98.43	44.45	95.8	87.3
-X52	82.55	101.60	44.45	99.0	90.5
-X54	85.73	104.78	44.45	102.2	93.6
-X56	88.90	107.95	47.63	105.3	96.8
-X58	92.08	111.13	47.63	108.5	100.0
-X60	95.25	114.30	47.63	111.7	103.2
-X62	98.43	117.48	47.63	114.9	106.3
-X64	101.60	120.65	47.63	118.0	109.5

METRIC SIZES					
Seal size	Shaft size	Seal OD	Operating length	Insert OD	Insert ID
	+0.00 -0.05	ref	±0.76	ref	ref
-020	20.00	33.32	27.50	30.1	25.0
-022	22.00	36.50	27.50	33.4	28.2
-024	24.00	39.00	30.00	35.7	30.5
-025	25.00	39.00	30.00	35.7	30.5
-026	26.00	42.00	32.50	38.7	33.5
-028	28.00	42.00	32.50	38.7	33.5
-030	30.00	44.00	32.50	40.7	35.5
-032	32.00	46.02	32.50	43.7	38.5
-034	34.00	49.20	32.50	46.9	41.7
-035	35.00	49.20	32.50	46.9	41.7
-038	38.00	52.37	34.00	50.0	43.6
-040	40.00	55.55	34.00	53.2	46.8
-042	42.00	58.72	34.00	56.4	49.9
-043	43.00	58.72	34.00	56.4	49.9
-044	44.00	58.72	34.00	56.4	49.9
-045	45.00	58.72	34.00	56.4	49.9
-048	48.00	61.90	34.00	*59.6	53.1
-050	50.00	65.07	34.50	62.8	56.3
-052	52.00	68.25	34.50	65.9	59.4
-053	53.00	68.25	34.50	65.9	59.4
-054	54.00	68.25	34.50	65.9	59.4
-055	55.00	69.70	34.50	67.4	60.9
-058	58.00	74.60	39.50	72.3	65.8
-060	60.00	74.60	39.50	72.3	65.8
-062	62.00	80.95	39.50	78.6	70.9
-063	63.00	80.95	39.50	78.6	70.9
-065	65.00	84.12	39.50	81.8	74.0
-070	70.00	87.30	45.00	85.0	77.2
-072	72.00	92.08	45.00	89.0	81.2
-075	75.00	95.25	45.00	92.1	84.4
-080	80.00	98.43	44.50	95.8	87.3
-082	82.00	101.60	44.50	99.0	90.5
-085	85.00	104.78	44.50	102.2	93.7
-090	90.00	107.95	49.50	105.3	96.8
-092	92.00	111.13	49.50	108.5	100.0
-095	95.00	114.30	49.50	111.7	103.2
-0100	100.00	120.65	49.50	118.0	109.5

201/2/3
Welded metal
bellows seal

