



CARTRIDGE MOUNTED DOUBLE METAL BELLOWS SEAL



Face Material

211SXC: SiC vs CARBON

211SXS: SiC vs SiC

Performance Capabilities

Pressure: Product Seal: Vacuum to 2 MPa (20kgf/cm²G, 285 psi)

Pressure: Quench Seal: to 0.4 MPa (4kgf/cm²G, 57 psi)

Temperature: -75°C to 200°C (-100°F to 400°F)

Shaft Speed: to 25 m/s

Viscosity: to 1 Pa*s (1000cP)

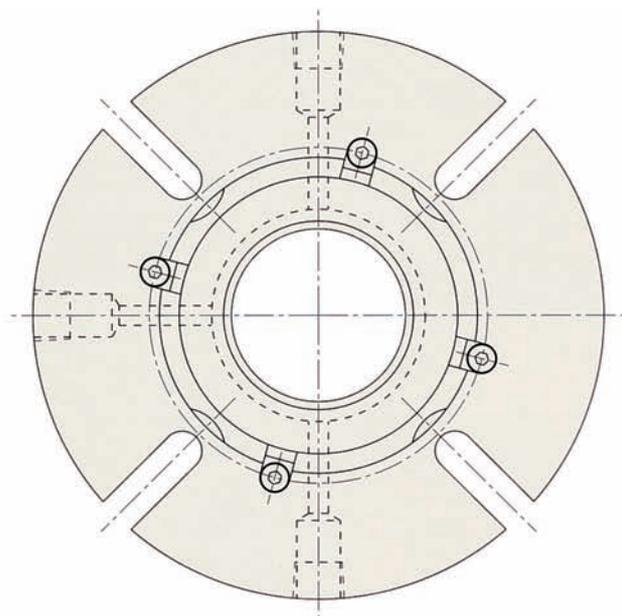
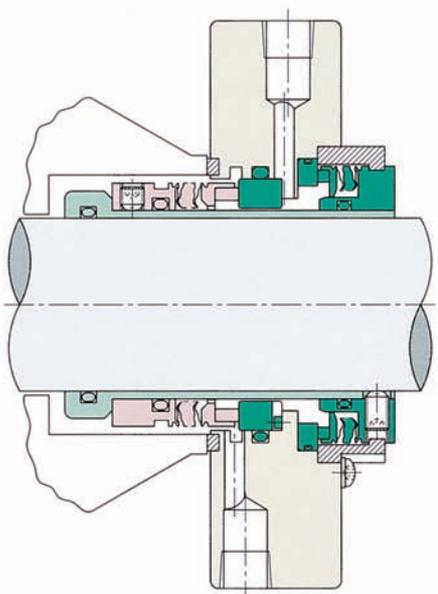
The 211Q is a compact, cartridge mounted dual seal assembly. The inner (product seal) is a standard Triseal edge welded bellows seal having a variety of material options for maximum flexibility of application.

The outer (atmospheric side) seal is a short axial length bellows seal which provides positive retention of low pressure (< 0.4 MPa) quench media as well as diverting pumpage to drain or safe area in the event of primary seal failure.

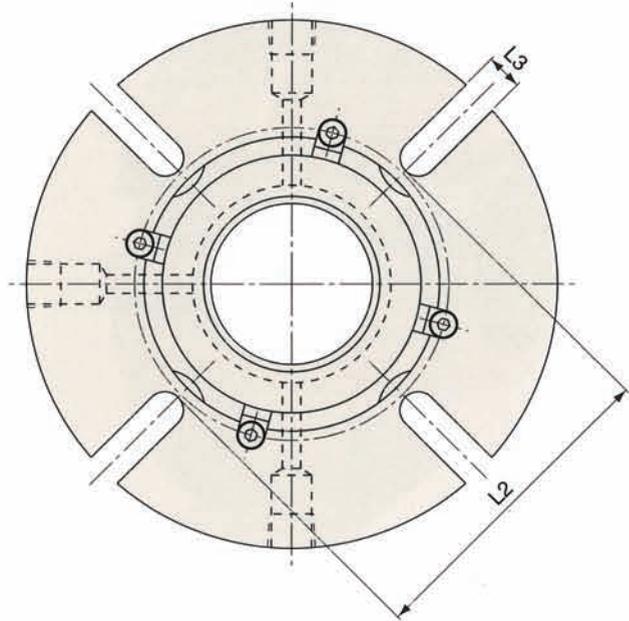
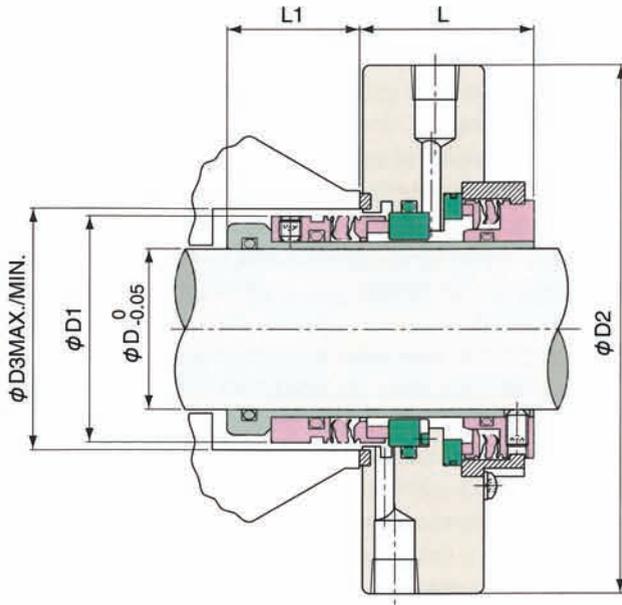
The benefits of a liquid quenching the atmospheric side of the primary seal to maximize seal life and performance is widely accepted. Dependant on the nature of the pumped media to solidify or crystallize on contact with atmosphere it is necessary to quench between the inner and outer seal faces. The flowing or static liquid quench removes or dissolves any traces of media that migrate across the inner seal faces, thus preventing deposits building up and inhibiting normal seal movement. The quench also effectively cools the seal and prevents media flashing between the inner seal faces, additionally in the event of the pump running with no or low flow the quench acts as an alternative source of seal lubrication.

The 211Q contains liquid quenches without the pressure restrictions encountered through the use of lip-seals, throttle bushings, labyrinths or other secondary containment devices. This has the benefit of eliminating quench leakage from the gland area and preventing ingress of quench media to the bearings.

The 211Q is exceptionally easy to install. There are no awkward setting clips to remove, simply bolt the seal plate to the seal chamber, lock down the sleeve set screws and the seal is ready to run.



211Q SERIES



METRIC SIZES

SIZE	D	D1	D2	D3 MIN	D3 MAX	L	L1	L2	L3
028	28	42.9	108.0	44.5	52.7	50.8	33.3	61.9	11.1
030	30	49.2	108.0	50.8	55.9	52.4	36.5	65.1	14.3
033	33	49.2	106.0	50.8	53.9	47.7	36.5	72.0	13.0
035	35	49.2	106.0	50.8	53.9	47.7	36.5	72.0	13.0
038	38	55.6	133.4	57.2	62.2	52.4	38.1	81.0	14.3
040	40	58.7	146.1	60.3	79.6	52.4	38.1	96.8	17.5
043	43	61.9	139.7	63.5	70.2	52.4	38.1	81.0	14.3
045	45	61.9	139.7	63.5	70.2	52.4	38.1	81.0	14.3
048	48	65.1	139.7	66.7	73.4	54.0	38.1	84.1	14.3
050	50	68.3	146.1	70.3	81.3	50.8	41.3	93.7	17.5
053	53	71.4	155.0	73.4	86.0	57.8	39.0	102.0	13.0
055	55	71.4	155.0	73.4	86.0	57.8	39.0	102.0	13.0
060	60	81.0	165.1	83.0	95.2	60.3	44.5	109.5	17.5
065	65	87.3	165.1	89.3	98.8	60.3	42.9	115.9	17.5
070	70	92.1	177.8	94.1	105.1	61.9	44.5	115.9	17.5
075	75	98.4	190.5	100.4	111.5	57.2	46.0	125.4	20.6
080	80	104.8	215.9	106.8	126.9	63.5	47.6	141.3	20.6
085	85	111.1	215.9	113.1	128.9	66.7	50.8	144.5	20.6
090	90	114.3	215.9	116.3	128.9	63.5	50.8	144.5	20.6

IMPERIAL SIZES

SIZE	D	D1	D2	D3 MIN	D3 MAX	L	L1	L2	L3
X18	1.125	46.0	108.0	47.6	52.7	50.8	33.3	61.9	11.1
X18LP	1.125	42.9	108.0	44.5	52.7	50.8	33.3	61.9	11.1
X20	1.250	49.2	108.0	50.8	55.9	52.4	36.5	65.1	14.3
X22	1.375	52.4	108.0	54.0	58.9	50.8	36.5	71.4	11.1
X22LP	1.375	49.2	108.0	50.8	53.9	50.8	36.5	71.4	11.1
X24	1.500	55.6	133.4	57.2	62.2	52.4	38.1	81.0	14.3
X26	1.625	58.7	146.1	60.3	79.6	52.4	38.1	96.8	17.5
X28	1.750	61.9	139.7	63.5	70.2	52.4	38.1	81.0	14.3
X30	1.875	65.1	139.7	66.7	73.4	54.0	38.1	84.1	14.3
X32	2.000	68.3	146.1	70.3	81.3	50.8	41.3	93.7	17.5
X34	2.125	71.4	152.4	73.4	81.3	57.2	39.7	96.8	17.5
X36	2.250	74.6	171.5	76.6	98.8	58.7	42.9	109.5	17.5
X38	2.375	81.0	165.1	83.0	95.2	60.3	44.5	109.5	17.5
X40	2.500	84.1	165.1	86.1	94.0	54.0	44.5	109.5	17.5
X42	2.625	87.3	165.1	89.3	98.8	60.3	42.9	115.9	17.5
X44	2.750	92.1	177.8	94.1	105.1	61.9	44.5	115.9	17.5
X46	2.875	95.3	177.8	97.3	117.8	61.9	47.6	128.6	20.6
X48	3.000	98.4	190.5	100.4	111.5	57.2	46.0	125.4	20.6
X50	3.125	104.8	215.9	106.8	126.9	63.5	47.6	141.3	20.6
X52	3.250	108.0	190.5	110.0	124.2	63.5	50.8	141.3	17.5
X54	3.375	111.1	215.9	113.1	128.9	66.7	50.8	144.5	20.6
X56	3.500	114.3	215.9	116.3	128.9	63.5	50.8	144.5	20.6

LP: Special Low Profile Bellows Used For Narrow Stuffing Box

