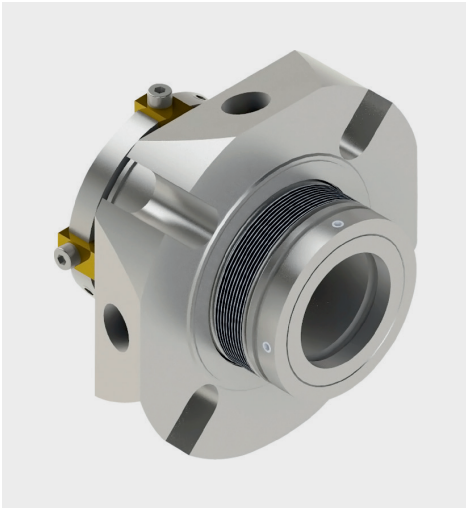


NUY SINGLE SEALS

Standard Cartridge Metal Bellows Seals



Product Description

1. Single seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Cartridge construction
5. Metal bellows design
6. Single seal with quench and lip seal (-QN) or throttle ring (-TN)
7. Connections for flush and quench available
8. Multipoint injection ring design for (-QNM, -TNM)

Technical Features

1. Ideal for use in process pump standardization
2. Dimensional modification of the stuffing box chamber is not required due to short radial installation height
3. Ideal to convert and retrofit pumps with packings and large volume OEM production
4. Cartridge unit factory assembled for easy installation, which reduces down-time
5. Rugged design for long operating life
6. Bellows design efficiently ensure self-cleaning
7. Suitable for high temperature applications

Typical Industrial Applications

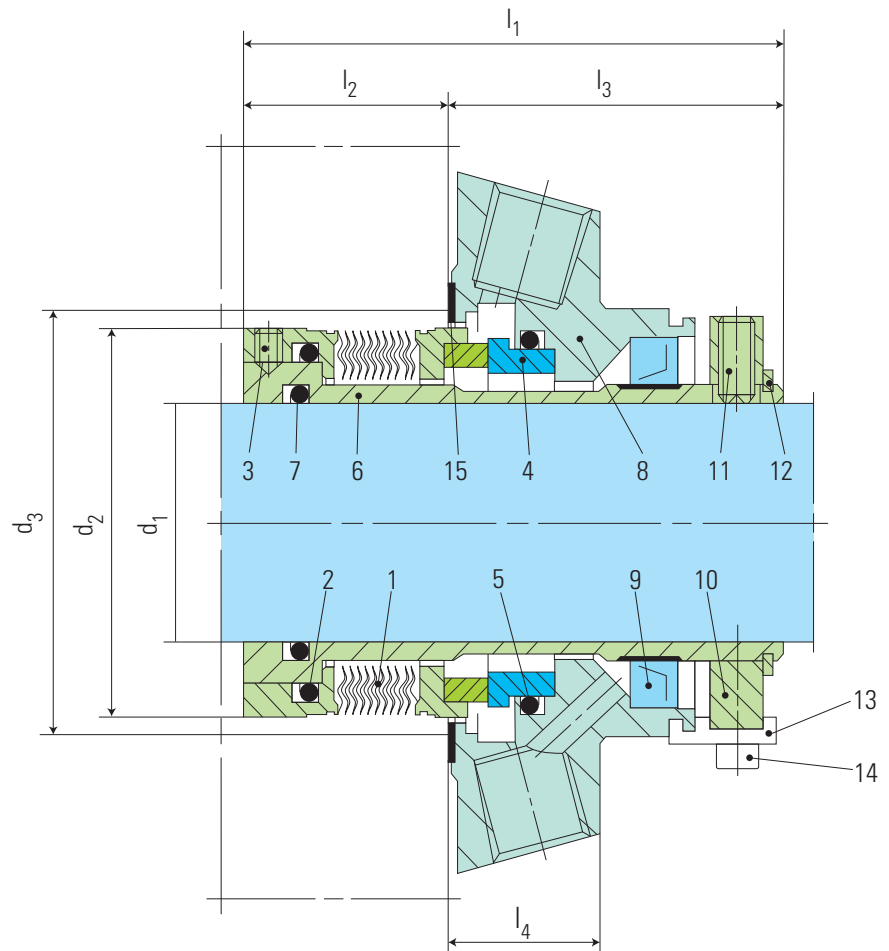
Refining technology
Petrochemical industry
Hot media
Cold media
Highly viscous media
Pumps
Special rotating equipment

Materials

Seal face: Carbon graphite antimony impregnated (A), Silicon carbide (Q1)
Seat: Silicon carbide (Q1)
Secondary seals: FKM (V), EPDM (E), FFKM (K)
Bellows: Inconel® 718 (M6)
Metal parts: CrNiMo steel (G), Duplex (G1)
Throttle ring: PTFE carbon graphite reinforced (T12)
Lip seal: NBR (P), PTFE carbon reinforced (T3)

Performance Capabilities

Shaft diameter: $d_1 = 25 \dots 80 \text{ mm}$ (1" ... 3.15")
Temperature: $t^* = -40 \text{ °C} \dots +220 \text{ °C}$
(- 40 °F ... + 428 °F)
Pressure: $p = 25 \text{ bar}$ (363 PSI)
*)Operating limits of O-rings to be observed



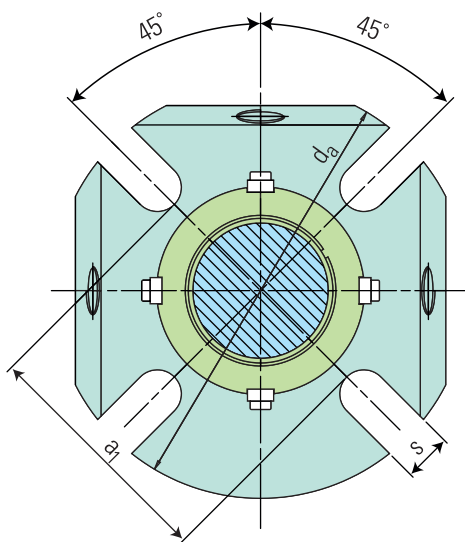
Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Item	Description
1	Bellows unit
2, 5, 7	O-ring
3, 11	Set screw
4	Seat
6	Shaft sleeve
8	Cover

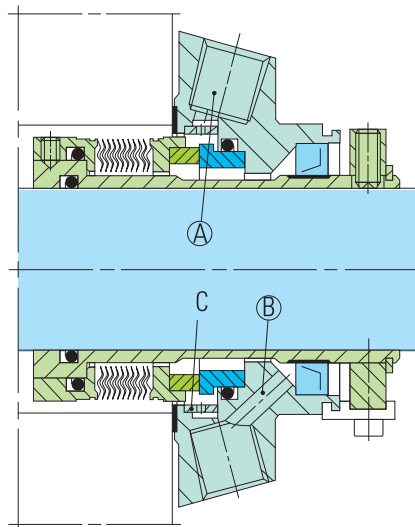
Item	Description
9	Lip seal (-QN) or throttle ring (-TN)
10	Drive collar
12	Retaining ring
13	Assembly fixture
14	HSH Cap Screw
15	Gasket



Installation, Details, Options

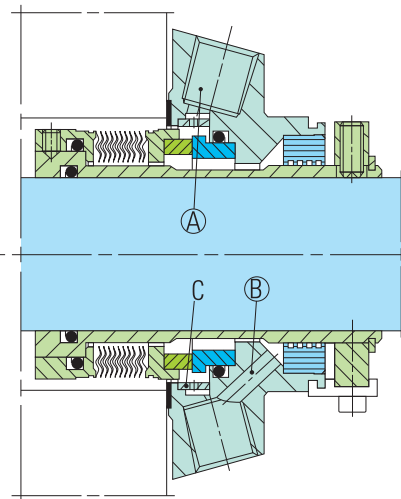


Product Variants



MTX QNM

Single seal, as MTX-QN with additional multipoint injection ring (item C).



MTX TNM

Single seal, as MTX-TN with additional multipoint injection ring (item C).

Dimensional Data

Dimensions in millimeter

d1	d2	d3min.	d3max.	l1	l2	l3	l4	da	a1	s
25	45.0	47.0	51.0	79.5	26.1	53.4	25.4	105.0	62.0	13.2
30	49.4	52.0	56.0	78.4	25.0	53.4	25.4	105.0	67.0	13.2
32	52.3	54.5	57.0	78.4	25.0	53.4	25.4	108.0	70.0	13.2
33	52.3	54.5	57.0	78.4	25.0	53.4	25.4	108.0	70.0	13.2
35	54.8	58.0	61.5	78.4	25.0	53.4	25.4	113.0	72.0	13.2
38	57.5	60.0	66.0	78.4	25.0	53.4	25.4	123.0	75.0	13.2
40	58.8	62.0	68.0	78.2	24.8	53.4	25.4	123.0	77.0	14.2
43	61.9	64.5	70.5	78.4	25.0	53.4	25.4	133.0	80.0	14.2
45	65.0	68.5	73.0	78.4	25.0	53.4	25.4	138.0	82.0	14.2
48	68.4	71.0	75.0	78.7	25.3	53.4	25.4	138.0	85.0	14.2
50	70.0	73.0	78.0	79.1	25.7	53.4	25.4	148.0	87.0	14.2
53	71.9	75.0	87.0	77.8	24.4	53.4	25.4	148.0	97.0	18.0
55	74.6	77.0	83.0	78.9	25.5	53.4	25.4	148.0	92.0	18.0
60	83.9	87.0	91.0	80.1	26.7	53.4	25.4	157.0	102.0	18.0
65	87.5	90.0	98.5	80.0	26.6	53.4	25.4	163.0	109.3	18.0
70	93.0	98.0	108.0	81.5	28.1	53.4	25.4	178.0	118.3	18.0
75	96.8	101.6	118.0	94.4	30.5	63.9	28.0	190.0	129.0	18.0
80	104.7	108.0	124.0	94.4	30.4	64.0	28.0	195.0	135.0	18.0

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