

MECHANICAL SEAL  
**N3X**



CATO12 ENG REV 01.05

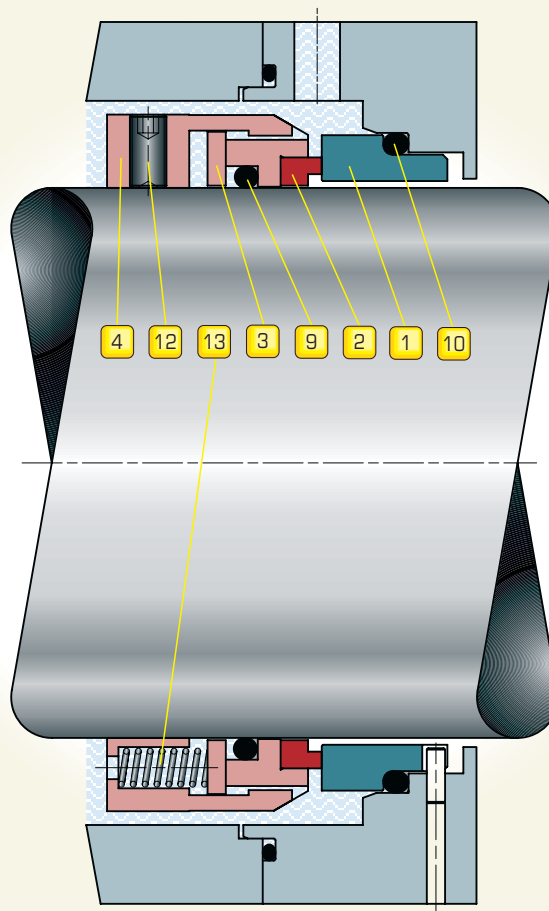
**N3X** is our solution for large diameter equipment on low and medium pressures; it is widely used on large machinery, process pumps, liquid conveying pumps and agitators.

The **N3X** is a single component seal with type X pinned stationary seat, multi-spring, and can rotate in either direction.

Equipped with three drive lugs on the rotating body it can tolerate strong vibration and mechanical stresses.

The "O" ring is easily removed and refitted when assembling the seal on shafts with keyways, threads or sharp edges.

**MECHANICAL SEAL  
N3X**



**ELEMENTS:**

- 1** STATIONARY SEAT
- 2** ROTARY FACE
- 3** THRUST RING
- 4** SEAL BODY
- 9** ROTARY FACE "O" RING
- 10** STATIONARY SEAT "O" RING
- 12** SETSCREW
- 13** SPRING

**OPERATING LIMITS:**

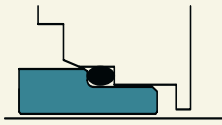
DIAMETER: (mm)	SPEED: (m/sec)	PRESSURE: (bar g)	TEMPERATURE: (°C)
<b>200</b>	<b>20</b>	<b>12</b>	<b>+250</b>
↑	↑	↑	↑
<b>105</b>	<b>0</b>	<b>0</b>	<b>-100</b>
↓	↓	↓	↓

**CHARACTERISTICS:**

-  SINGLE
-  BI-DIRECTIONAL
-  FLUIGAM  
(energized dynamic "O" ring")
-  RESISTANT TO ACIDS & BASES
-  RESISTANT TO MECHANICAL STRESS

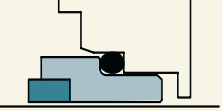
**STATIONARY SEAT: 1**

SOLID TYPE X



Cr-Mo Steel: **Y1**  
Silicon Carbide: **U31**

TYPE X WITH INSERT



AISI 316+Tungsten Carbide: **K22**

**STATIONARY SEAT "O" RING: 10**

- Nitrile Rubber: **G**
- Ethylene Propylene: **D**
- Fluoroelastomer: **V**
- Perfluoroelastomer: **G711**

- PTFE: **T**

**ROTARY FACE: 2**

WITH INSERT



AISI 316+Graphite Resins impreg.: **Z32**  
AISI 316+Silicon Carbide: **U32**  
AISI 316+Tungsten Carbide: **K22**

**ROTARY FACE "O" RING: 9**

- Nitrile Rubber: **G**
- Ethylene Propylene: **D**
- Fluoroelastomer: **V**
- Perfluoroelastomer: **G711**

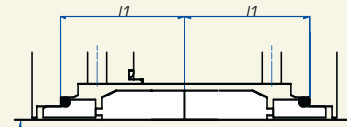
- PTFE with AISI 316 spring: **T3**

**SPRINGS: 13**

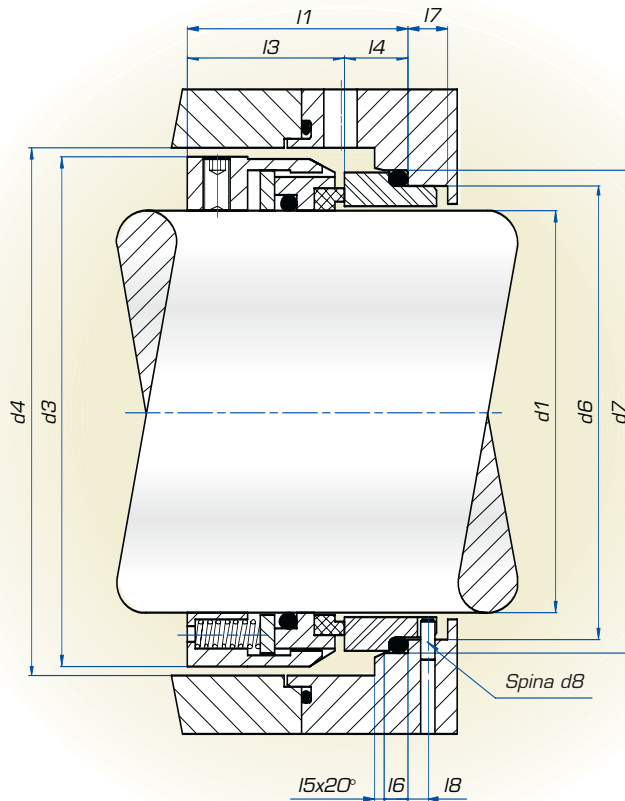
AISI 316: **E**

**OTHER METAL PARTS: 4 12 3**

AISI 316: **E**



Back-to-Back solution. For stationary ring type **W** dimensions see catalogue N3XφN3X



Seal Diameter	d1	d3	d4	d6	d7	d8	l1	l3	l4	l5	l6	l7	l8
	h6		min.	H11	H8	± 0,5	± 0,5						
105	105	137	143	120,5	129	4	61	42	19	3	7	12	6
110	110	142	148	125,5	134	4	66	47	19	3	7	12	6
115	115	147	153	130,5	139	4	66	47	19	3	7	12	6
120	120	152	158	135,5	144	4	66	47	19	3	7	12	6
125	125	157	163	140,5	149	4	66	47	19	3	7	12	6
130	130	162	168	145,5	154	4	66	47	19	3	7	12	6
140	140	172	178	154,5	166	4	69	47	22	3	9	12	6
150	150	190	196	171,5	183	5	73	47	26	3	9	13	7
160	160	200	206	181,5	193	5	78	52	26	3	9	13	7
170	170	210	216	191,5	203	5	78	52	26	3	9	13	7
180	180	220	226	201,5	213	5	78	52	26	3	9	13	7
190	190	230	236	211,5	223	5	78	52	26	3	9	13	7
200	200	240	246	221,5	233	5	78	52	26	3	9	13	7

Dimensions subject to modifications without notice.

**Example:**

To order the seals shown on this page for shaft 120 mm and material shown in the table below:

2	1	9	10	13	4 12 3
Z32	Y1	V	V	E	E

The code will be: N3X120 - Z32Y1VEE <sup>(3)</sup>

**NOTES:**

- 1) The material shown on this page is only part of the available range, for other products stock items, please call our Technical Sales Office.
- 2) The material should be chosen according to the operating conditions. All queries should be sent to our Technical Sales Office.
- 3) When the material of the seal on the stationary seat "O" ring is the same as the seal on the rotary face "O" ring the product code is not repeated.