



## Flexible vacuum connections

### BOA ISO-KF (TORRI) with flanges acc. to DIN 28403

#### Description

These flexible connectors specially designed by BOA AG comply with the highest quality requirements of the Vacuum Industry from gross to ultra-high vacuum levels. Their special design ensures that only smallest loads are transferred to the end connectors, maintaining nevertheless stability when put under pressure. Fitted with ISO-KF flanges, these flexible connectors provide a fast and economic solution.

Up to 150 mm, the flexible element consists of BOA instrument bellows, longer units use annularly (parallel) corrugated BOA metal hoses. Both executions are designed to compensate for axial, lateral and angular movement and to absorb vibration. BOA AG provide short-term delivery for a complete standard range **from DN 10 to DN 50**.

#### Construction characteristics

Bellows and hose construction according to proven BOA methods and procedures, single-ply, completely made of high level chrome-nickel steel, with **flanges ISO-KF according to DIN 28403** welded on both sides.

#### Material

The bellows or hose unity is made of stainless steel DIN 1.4571 (AISI 316 Ti). This 18-8 austenitic type stainless steel is titanium stabilized and has molybdenum content giving it better corrosion resistance to pitting, stress crack and intercrystalline attack up to a working temperature of 550°C.

#### Temperature resistance

From -200°C up to +550°C. For higher temperatures please ask.

#### Leak-tightness

Mass spectrometer tested with helium. Leakage  $<1 \times 10^{-9}$  mbar · l/s.

#### Delivery status

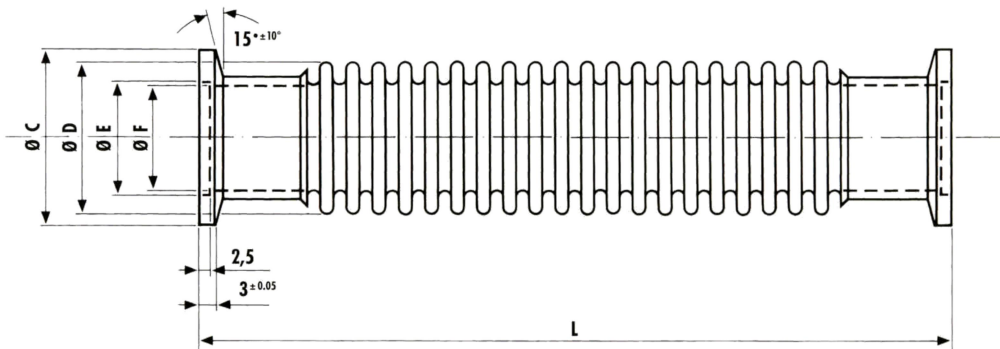
Sealing areas on flanges protected by plastic caps. Dust-free sealed in plastic bag.

#### Quality management

Design, dimensioning, manufacturing and final tests of BOA products follow latest professional and state-of-the-art procedures. Regular controls and tests executed by accredited authorities for enterprise and product certification confirm the efficient and professional continuity of BOA process management. **BOA AG is certified according to EN ISO 9001:2000 and 14001:2004.**



## Flexible vacuum connection with clamped flanges ISO-K



### made of BOA Metal Bellows

DN	L mm	ØD mm	ØC mm	ØE mm	ØF mm	Axial movement** max. ± mm	Lateral movement** max. ± mm	Angular movement** max. ± °	BOA item n°
16	70	21	30	17.2	16	6	4	35	F-0001147
16	80	21	30	17.2	16	8.5	7	50	F-0001148
16	120	21	30	17.2	16	16	27	100	F-0002497
25	80	35.5	40	26.2	25	12.5	7	48	F-0001152
25	120	35.5	40	26.2	25	26	30	100	F-0002331
40	100	55	55	41.2	40	20	10	50	F-0001156
40	150	55	55	41.2	40	40	40	100	F-0002498
50	100	66	75	52.2	50	18	7	36	F-0001160
50	150	66	75	52.2	50	36	29	72	F-0002499

\*\* Movement value not cumulative

Additional lengths on request

Subject to change

### made of parallel corrugated BOA Metal Hoses

DN	L mm	ØA mm	ØB mm	ØC mm	AL mm	Bend radius mm	BOA item n°
10	250	14.9	30	12.2	10	32	F-0001140
10	500	14.9	30	12.2	10	32	F-0001141
10	750	14.9	30	12.2	10	32	F-0001985
10	1000	14.9	30	12.2	10	32	F-0001142
16	250	23	30	17.2	16	50	F-0001149
16	500	23	30	17.2	16	50	F-0001150
16	750	23	30	17.2	16	50	F-0001798
16	1000	23	30	17.2	16	50	F-0001151
25	250	34	40	26.2	25	103	F-0001153
25	500	34	40	26.2	25	103	F-0001154
25	750	34	40	26.2	25	103	F-0001890
25	1000	34	40	26.2	25	103	F-0001155
40	250	53	55	41.2	40	129	F-0001157
40	500	53	55	41.2	40	129	F-0001158

#### Orders:

Please state the following with your order:

---



---



---

- ← Nominal size, DN
- ← Length, L
- ← BOA item n°
- ← Quantity, needs

40	750	53	55	41.2	40	129	F-0001904
40	1000	53	55	41.2	40	129	F-0001159
50	250	66	75	52.2	50	198	F-0002493
50	500	65	75	52.2	50	198	F-0001162
50	750	65	75	52.2	50	198	F-0001988
50	1000	65	75	52.2	50	198	F-0001163

Additional lengths on request

Subject to change

Subject to change without notice