

ISO Flange system

The ISO flange, defined by ISO 1609 (1986) and DIN 28404, has the same principle as the NW flange with two basic type of smooth faced sexless flanges, an “O”ring, a center ring and several fastening methods.

Some of them are showed below.

Manufacturers of ISO components machine flanges with interface dimensions in complain to the standards and they are interchangeable. Fittings and adapters, however, have not international standards and they dimension change with manufacturers. All Vaqtec components dimensions are shown in this catalogue. All welded assembly is helium leak checked and can be certified to have a leak rate of less than $1 \cdot 10^{-9}$ mbar³/s.

The ISO sealing mechanism are totally reliable in vacuum system from atmosphere to 10⁻⁶ mbar

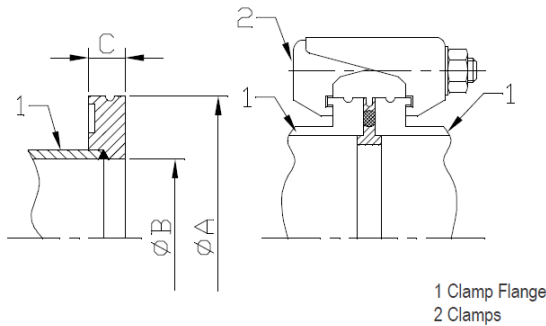
without baking and down to the 10⁻⁸ range, with Viton “O”ring baked up to 180°C.

In this system the clamping mechanism is either bolts through holes in flanges (ISO-F styles) or a number of individual clamps that are spaced around and hook over, the outer edge of the mating flanges (ISO-K) styles.

ISO-K flanges, sexless, infinitely rotatable, self-centering, are usually less expensive and better suited to restricted space with less clearance than is needed for the ISO-F.

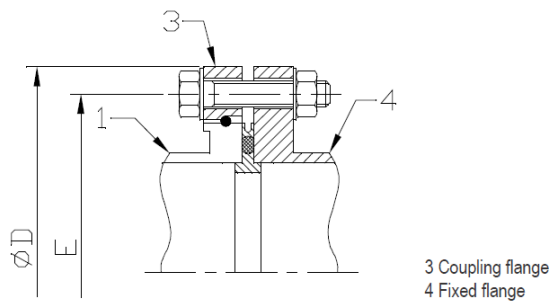
ISO-F flanges, sexless, self-centering, are stronger and are preferred when vacuum piping is used as a structural element of the system.

ISO-K flanges can be converted to an infinitely rotatable ISO-F by adding a bolt ring and a wire snap ring (rotatable kit).

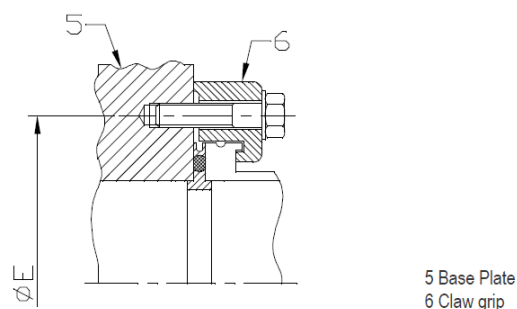


Clamp flange component to DIN 28404 or Pneurop 6606 standard

	A	B	C	Number clamps
DN 63 ISO	95	70	12	4
DN 100 ISO	130	102	12	4
DN 160 ISO	180	153	12	4
DN 200 ISO	240	213	12	6
DIN 250 ISO	290	261	12	6
DN 320 ISO	370	318	17	8
DN 400 ISO	450	400	17	8
DN 500 ISO	550	501	17	12
DN 630 ISO	690	651	22	12



	D	E	Number of holes	Screws
DN 63 ISO	130	110	4	M8x40
DN 100 ISO	165	145	8	M8x40
DN 160 ISO	225	200	8	M10x50
DN 200 ISO	285	260	12	M10x50
DN 250 ISO	335	310	12	M10x50
DN 320 ISO	425	395	12	M12x60
DN 400 ISO	510	480	16	M12x60
DN 500 ISO	610	580	16	M12x60
DN 630 ISO	750	720	20	M12x70



	E	Screws	Number of claw grips
DN 63 ISO	110	M8x35	4
DN 100 ISO	145	M8x35	8
DN 160 ISO	200	M10x40	8
DN 200 ISO	260	M10x40	12
DN 250 ISO	310	M10x40	12
DN 320 ISO	395	M12x50	12
DN 400 ISO	480	M12x50	16
DN 500 ISO	580	M12x50	16
DN 630 ISO	720	M12x55	20