

Pipe connections

Pipe connections Features	KF Small flange pipe connection	ISO-K Clamping flange pipe connection	Clamp pipe connection	FLY Clamp pipe connection	FLW Clamp pipe connection	Screwed pipe connection	Welding neck flanges	Tube couplings	Aseptic + Hygienic screwed pipe connection	Aseptic + Hygienic flange pipe connection	Aseptic + Hygienic clamp pipe connection
Standard	DIN 28403 ISO 2861	DIN 28404 ISO 1609	DIN 32676	Own standard	Own standard	DIN 11851	DIN 2527 DIN 2631 - 2635 EN 1092-1 ASME B 16.5	Own standard	DIN 11864-1 DIN 11853-1	DIN 11864-2 DIN 11853-2	DIN 11864-3 DIN 11853-3
Nominal size (DN)	10 up to 50	63 up to 630	DIN: 10 - 300 Zoll: 1/2" - 12" ISO: 8 - 200	DIN: 10 - 200	> DN 200	DIN: 10 - 200 Zoll: 1" - 4" ISO: 10 - 150	DIN: 10 - 500 EN: 10 - 500 ASME: 1/2" - 12"	Ø 34 up to 280	DIN: 10 - 100 ASME: 1/2" - 4" ISO: 8 - 100	DIN: 10 - 150 ASME: 1/2" - 4" ISO: 8 - 100	DIN: 10 - 300 ASME: 1/2" - 4" ISO: 8 - 200
Closure means	Clamping ring	Claw-clamps	Clamping ring	Clamping ring	Clamping ring	Nut	Screws	Metal sleeve with screws	Nut	Screws	Clamping ring
Gasket	O-ring or metal sealing ring	O-ring or metal sealing ring	Bead profile gasket	D-sealing ring	O-ring	D-sealing ring	Flat gasket	Elastomer sleeve	O-ring	O-ring	O-ring
product contacted	no	no	yes	no	no	yes	yes	no	yes	yes	yes
inside backed	yes	yes	no	yes	yes	yes	no	yes	yes	yes	no
outside backed	yes	yes	no	yes	yes	yes	no	yes	yes	yes	no
force-shunt	yes	yes	no	yes	yes	no	no	-	yes	yes	yes
Application (preferred)	Vacuum technology	Vacuum technology	Food industry Chemicals industry Biotechnology Pharmaceutical industry	Vacuum technology Food industry Chemicals industry Pharmaceutical industry	Vacuum technology Chemicals industry Pharmaceutical industry	Food industry Chemicals industry	Food industry Chemicals industry	Food industry Chemicals industry	Food industry Biotechnology Pharmaceutical industry	Food industry Biotechnology Pharmaceutical industry	Food industry Biotechnology Pharmaceutical industry
Medium (preferred)	High vacuum	High vacuum	Liquids Bulk goods	Liquids Bulk goods Gases	Liquids Bulk goods Gases	Liquids Bulk goods	Liquids Bulk goods Gases	Bulk goods	Liquids Bulk goods Gases	Liquids Bulk goods Gases	Liquids Bulk goods Gases
Pressure	High vacuum max. 1,5 bar	High vacuum max. 1,5 bar	Medium vacuum 10 up to 16 bar	High vacuum 20 up to 44 bar	High vacuum No pressure indication	Medium vacuum 10 up to 40 bar	Low vacuum 6 up to 40 bar	Low vacuum 1,5 up to 2 bar	Medium vacuum 16 up to 40 bar	Medium vacuum 10 up to 25 bar	Medium vacuum 10 up to 25 bar
Remark: The indicated overpressure depend on the nominal sizes (DN). The overpressure applies only by use of suitable seals, closures and clamping rings.											
Characteristics			TÜV Type-test for clamping rings	1. Particularly suitable for abrasive media 2. TÜV Type-test	For large nominal sizes			Pipe connection without flanges	For high purity requirements	For high purity requirements	For high purity requirements