

# TK CONN Aseptic Connection

Serge

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### TK CONNECTION FLUSH MOUNTED TC CONNECTION

### Function:

Hygienic device features a compact design that allow the installation of typical. Clamp-connections on top, bottom or side wall of a tank. Once installed, the clamp gasket shuts off flush with the inside tank wall with a zero dead leg.

It gives better CIP/SIP (Cleaning In Place/Sterilisation In Place) performance. Fit for clamped valves, sight glasses, sampling devices, manometer, tank bottom valves.

The equipment can be removed and the TK sealed with a standard blind cap.

### **Design:**

The TK-Connection consist in:

- WELDING FLANGE drainable, in accordance with PED directive available in different thickness and complete with BOLTS
- LOCKING RING split in two parts for easier mounting of the equipments and double safety.
- NUTS in quantity of 4, 6, 8 (size depending)

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### **Requirement:**

The TK-Connection meets the followings:

- ASTM A270 for pipe standard
- SMS 3008 for tube standard
- ISO 1127 serie 1 for tube standard

### Feature:

- eliminates dead leg
- no product entrapment
- ensures quality of CIP/SIP procedure
- no air pockets during sterilisation
- flexible, fast and easy to adjust different equipment
- full material traceability
- PED 97/23/CE certified product
- customized for your needs

Syringe device on TK connection



sampling valve on TK Connection Typ. installation

## **TK IN-LINE**

### **Pressure directive:**

The TK-Connection are designed according to directive PED 97/23/CE for Europe, ASME VIII Div.2 for US and F.E.M. (Finite Element Method) calculated, approved and certified by notified body.

### **Operating corionspns:**

Design Pressure

**Design Temperature** 

: -1 bar to 7 bar g (-14,5 psi to 101,5 psi) : -80°C to 200°C (-112°F to 392°F)

### **Material:**

welding flange ASTM A 479 / ASTM A 182 - 316L
locking ring ASTM A 479 / ASTM A 182 - 316L
bolts ASTM A 193 B8 - 304
nut ASTM A 194 8 - 304

### Surface Finish:

Product contact surface are finished to Ra<0,5 mm or better

### **Documentation:**

TK-Connection supply include the following documentations:

- PED conformity certificate
- welding guideline
- 3.1B certificate on wetted parts

### Marking:

Each TK-Connection is market with Heat No. for full lot traceability  $\pi^*$ 







## **TK IN-LINE**

### Fig. 6 TK IN-LINE HOUSING

Available with clamped or butt weld ends for pipe standard according to ASTM A269 /270, ISO 1127or DIN 11851. Special extended tube for orbital welding on request.



### Fig. 7 TK IN-LINE ANGLE HOUSING

90° Angle in-out. Available with clamped or butt weld ends for pipe standard according to ASTM A269 /270, ISO 1127 or DIN 11851.

### Fig. 8 TK IN-LINE THREE WAY HOUSING

Three way equal (drain reduct available). Available with clamped or butt weld ends for pipe standard according to ASTM A269 /270, ISO 112 or DIN 11851.

**Fig. 9 TK IN-LINE DOUBLEX HOUSING** In-line version completely open on both sides.



### **Ordering information**

To specify the part completely, start with the product description and select the additional options as shown below:

TK for Tank connection		n	size thick		is fin	finish mate		Standard Connection				Thickness		Materials	
TKC-	Α		Μ	017	7 -1	2	A			Clamp	ButtWeld	025	025		AISI 316L-1.4404
									ASME / BS		В	038		В	1.4435
	Housing		Line	Lin	-			DIN	DIN C F				С	C22 Hastelloy	
	onnection	size	connecti	on siz			material	ISO		Н	I	051		D	C276 Hastelloy
TKL-	A	Μ	B	H	ł  -′	-12 A		SMS		J	К	on request		on request	
									Surf				ace Finish		
		G	Н	J	М	N	0	Р	R	V	W	Х	12	≤ 0,5 µm	
Size Connection		1/2"	3/4"	1"	1"1/2	2"	2"1/2	3"	4"	6"	8"	10"	82	≤ 0,2 µm	
		DN15	DN20	DN25	DN40	DN50	DN65	DN80	DN100	DN150	DN200	DN250	52	≤ 0	≤ 0,5 µm + Electropolish
Standard Thickness		015	015	017	017	017	017	020	020	030	035	045	on re	eque	st

### TK CONN ASEPTIC TANK CONNECTION, WITH BOLTED SPLIT RINGS

#### Fig. 1 TK- CONNECTION

Available in size from <sup>3</sup>⁄<sub>4</sub>" up to 4", DN10 up to DN100 in four different thikness : std, 25 mm, 38 mm, 51 mm According to ASTM A269 /270, ISO 1127or DIN 11851. Material 1.4404 – 1.4435 – Hastelloy C22 – C276 on request. Designed for use of standard clamp gaskets. According to PED 97/23/CE directive and ASME VIII Div.2



### Fig. 2 TK- CONN BLOCK HOUSING

For special applications onto tank welding. According to ASTM A269 /270, ISO 1127 or DIN 11851. Material 1.4404 – 1.4435 - Hastelloy C22 – C276 on request. Non-standard product, custom thicknesses, avoids warping.



### Fig. 3 TK- CONN ANGLED HOUSING

Angle profile cutted TK-Connections customized. For tank welding where orthogonal connections required Special execution High/angle as to be agree. Material 1.4404 – 1.4435 - Hastelloy C22 – C276 on request

### Fig. 4 TK- CAP

Standard TK-Connections in various size machined directly in a special 8 -10 or 12" clamp tank cover cap for pharma and biotechnology applications, custom made on request Std. material 1.4404, 1.4435 on request

### Fig. 5 TK- CONN JACKET HOUSING

TK-Connections with special profile dedicated for pharmaceutical reactors with cool/heat jacket or thermal insulation cladding.







For non-standard TK-CONN options please contact: info@aerreinox.it



ASEPTIC SAMPLING VALVES



SPRING CHECK VALVES



SIGH GLASS-FLOW INDICATOR



MAGNETIC MIXER



SANITARY SAMPLING VALVES

HIGH PURITY BALL VALVES

mp

**CLAMP FITTINGS** 

RR

**DIAPHRAGM VALVES** 

Sanita

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SANITARY SAMPLING BOTTLE



**BUTTERFLY VALVES** 



TANK CONNECTIONS



WASHING DEVICES



Grafinart Crema (CR)

TANK BOTTOM ASEPTIC VALVE



**DTS HEAT EXCHANGERS** 



SILICONE HOSE & FITTINGS



AERRE INOX s.r.l. Via Gerola, 4 I-26010 Fiesco (Cremona)

Tel. +39 0374 370 828 Fax +39 0374 370 833 www.aerreinox.it

Get the information you need and more at info@aerreinox.it