

VARINLINE®

Process Connections

For In-Line Control and Measurement Technology



VARINLINE® Process Connections . . .

. . . are used for the integration of control and measurement instruments to keep your production process transparent. CIP-/SIP capability was imperative when designing the process connection fittings.

VARINLINE®-In-Line Access Unit

The VARINLINE® In-line Access Unit is used for the integration of control and measurement instruments into pipe systems of diameters designed for lowest liquid and gas volumes

up to very large product volumes. Two control and measurement instruments maximum can be incorporated into this type of process connection fitting.

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Range of Applications	Pipes			
	Instrumentation as well as Sight glasses			Sight glasses 100 mm
For the incorporation of				
Nominal width metric DIN 11850	DN 10 DN 15	DN 25	DN 40 – DN 125	DN 100 - DN 125
Nominal width Inch OD		1"	1 1/2" – 4"	4"
Nominal width Inch IPS			2" – 6"	6"
Nominal width ISO DIN EN ISO 1127	ISO 8 ISO 10 ISO 15	ISO 25	ISO 32 – ISO 100	
Material	1.4404 (ISO in 1.4435) 316L			
Process connection, type	B	F	N	G
Weld-in diameter	see nominal width			
Wall thickness max.	see nominal width			
Standard surface finish	inside Ra<=1,2µm / outside matt ISO inside Ra<=1,2µm / outside non-treated*			
Standard component fittings (Connection element)	Clamp-connection	Hinged clamp connection (not illustrated)		
Welding device	cancelled			
Pressure load max.	25 bar	25 bar	10 - 25 bar	10 bar
Delta ferrit	1.4404 upon request / 1.4435 <=1%			
3.1B Certificate for fittings	Metric and Inch upon request; ISO yes			
2.2 Certificate for fittings	yes	yes	yes	yes
Product contacted O-ring seals				
EPDM (FDA conform) Standard	yes	yes	yes	yes
FKM (FDA conform)	yes	yes	yes	yes
PTFE	yes	yes	yes	yes
Standard scope of supply	Housing with connection elements as well as specific seals			
Lockings				
Locking material	1.4404 and 1.4435			1.4404
Locking product contacted	17 mm	50 mm	68 mm	114 mm

* other surface finish upon request

E°-In-Line Connection Flange

VENT® In-Line Connection Flange installation of control and instrument elements also at tanks, using a VARINLINE® Process Connection element.

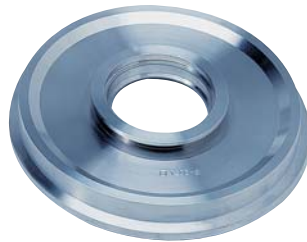
Different types are available to cover almost all applications in different industries.

The connection flange type "P" combines highest hygienic requirements with high safety standards and allows its installation into tank walls of 20 mm thickness.

Connection Flange, type U



Connection Flange, type T



Connection Flange, type P



Types >DN 150		Tank bottom + Tank cover				Tank bottom + Tank cover	
Instrumentation shell as Sight glasses		Instrumentation as well as Sight glasses		Sight glasses 100 mm		Instrumentation	
1.4404 / 316L		1.4404 / 316L				1.4435 / 316L	
N		F		N		F	
85 mm		145 mm		165 mm		130 mm	
4 mm		8 mm		8 mm		20 mm	
inside and outside Ra<=0,8µm*		inside and outside Ra<=0,8µm*				inside and outside Ra<=0,8µm*	
Hinged clamp connection (not illustrated) not required		Hinged clamp connection (not illustrated) required				Pressure relieved - clamps required	
10 bar		10 bar		10 bar		10 bar	
upon request		1.4404 upon request / 1.4435 <= 1%				<=0,5%	
yes		yes		yes		yes	
yes		yes		yes		yes	
yes		yes		yes		yes	
yes		yes		yes		yes	
yes		yes		yes		yes	
yes		yes		yes		yes	
Flange with connection element and specific seal		Flange with connection element and specific seal				Flange with pressure relieved clamps and specific seal	
1.4404 and 1.4435		1.4404 and 1.4435		1.4404		1.4404 and 1.4435	
68 mm		50 mm		68 mm		50 mm	
68 mm		68 mm		114 mm		68 mm	

Standard Component Connections

(Connection elements)



Clamp connection for process connection, type B



Hinged clamp connection for process connection, type F



Hinged clamp connection for process connection, type N

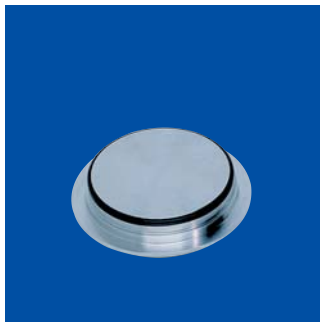


Hinged clamp connection for process connection, type G

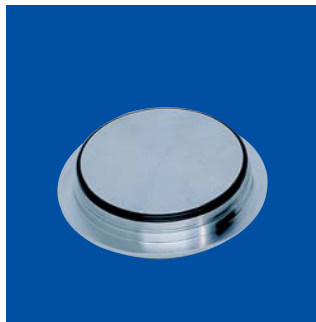
Lockings



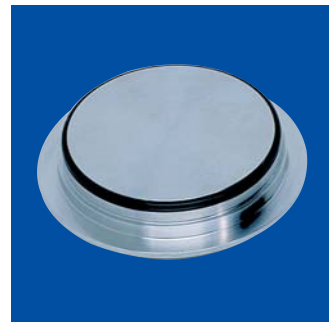
Type B



Type F



Type N



Type G

GEA Tuchenhagen

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