



# VARINLINE® Process Connections

For In-Line Control and Measurement Technology

Made by GEA Tuchenhagen



Process Equipment

**GEA Tuchenhagen**

## 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® Access Unit

The VARINLINE® 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				Tan as
	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				70
Wall thickness max.	see nominal width				4
Standard surface finish	inside Ra ≤ = 0.8µm / outside matt* ISO inside Ra ≤ = 0.8µm / outside non-treated**				
Standard component fittings (Connection element)	Clamp-connection	Hinged clamp connection (not illustrated)			
Pressure load max.	25 bar	25 bar	10 - 25 bar	10 bar	10
Delta ferrit	1.4404 upon request / 1.4435 ≤1%				
3.1 Certificate for fittings	Metric and Inch upon request; ISO yes				y
2.2 Certificate for fittings	yes	yes	yes	yes	y
Product contacted O-ring seals					
EPDM (FDA conform) Standard	yes	yes	yes	yes	y
FKM (FDA conform)	yes	yes	yes	yes	y
PTFE	yes	yes	yes	yes	y
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	50

\* other surface finish upon request, \*\* DN 125 on request

## LINE® Connection Flange

RIVENT® Connection Flange allows the connection of control and measurement instruments also at tanks, using the proven LINE® Process Connection as 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



Pipes >DN 150  
Tank shell + Tank cover  
Instrumentation  
as well as Sight glasses

### Connection Flange, type T



Tank bottom + Tank cover  
Instrumentation  
as well as Sight glasses

### Connection Flange, type P



Tank bottom + Tank cover  
Instrumentation

1.4404 / 316L		1.4404 / 316L			1.4435 / 316L	
F	N	F	N	G	F	N
85 mm	85 mm	145 mm	165 mm	225 mm	130 mm	150 mm
4 mm	4 mm	8 mm	8 mm	8 mm	20 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)		Hinged clamp connection (not illustrated)			Pressure relieved - clamps	
10 bar	10 bar	10 bar	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	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes	yes
Flange with 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 and 1.4435	
68 mm	68 mm	50 mm	68 mm	114 mm	50 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



Process Equipment

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639e-08/09