

The USLT construction is designed for those applications where the existing threaded process connection is too small to use a flush diaphragm seal. The USLT consists of an upper and lower housing, the upper is the actual seal part with a diaphragm size that allows for measurement of relatively low ranges (10 mbar 2 seals attached (dP); 80 mbar single seal attached). The lower housing creates the transition from the diaphragm size to the smaller process connection. USLT is used in combination with (differential) pressure transmitters for applications such as level, flow and pressure measurement; also the USLT is often combined with pressure gauges.



STANDARD EXECUTION

DIAPHRAGM	BODY	MOUNTING CONNECTION	GASKET	BOLTS
AISI 316(L)	AISI 316(L)	top (axial)	PTFE	M10 – A2-70

THREADED PROCESS CONNECTIONS

NPT

size		dD
1/2"	Male or female	81mm
3/4"	Male or female	81mm
1"	Male or female	81mm

BSP – ISO 228

size		dD
1/2"	Male or female	81mm
3/4"	Male or female	81mm
1"	Male or female	81mm

UPPER AND LOWER PART ASSEMBLY

BOLTING

thread	material	mwp	pcs
M10	A2-70	100 bar	8
M10	8.8	120 bar	8

Note: mwp (maximum working pressure) at 20 °C with AISI 316(L) body material

GASKET

material	Operating temperature
PTFE	-200 / +260°C
Garfite N	-73 / +343°C
Camprofile ¹	-200 / 500°C

¹ for steam applications

WETTED PARTS, BODY MATERIALS, AND THREADS

upper part material	lower part material	diaphragm material	threads	norms
AISI 316(L)	AISI 316(L)	AISI 316(L) AISI 304(L) AISI 316 UG AISI 321 Hastelloy C-276	NPT	ANSI B1.20.1
AISI 316(L)	AISI 310 MoIn	25-22-2 LMN	BSP	ISO 228
AISI 316(L)	Duplex F44	254 SMO (6Mo)	BSPT	ISO 7
AISI 316(L)	Duplex F51/F60	Duplex 2205	UNF	ANSI 131.1
AISI 316(L)	Duplex F53	Super Duplex 2507	METRIC	ISO 965
AISI 316(L)	Duplex F55	Super Duplex 2507		
AISI 316(L)	Hastelloy B2	Hastelloy B2		
AISI 316(L)	Hastelloy C-276	Hastelloy C-276		
AISI 316(L)	Alloy 20	Alloy 20		
AISI 316(L)	Inconel 600	Inconel 600		
AISI 316(L)	Inconel 625	Inconel 625		
AISI 316(L)	Inconel 825	Inconel 825		
AISI 316(L)	Monel 400	Monel 400		
AISI 316(L)	Nickel 201	Nickel 201		
AISI 316(L)	Tantalum ¹	Tantalum		
Titanium Gr.2	Titanium Gr.2	Titanium Gr.1		

*Note: material AISI316(L) with tantalum treatment

COATING AND OTHER OPTIONS

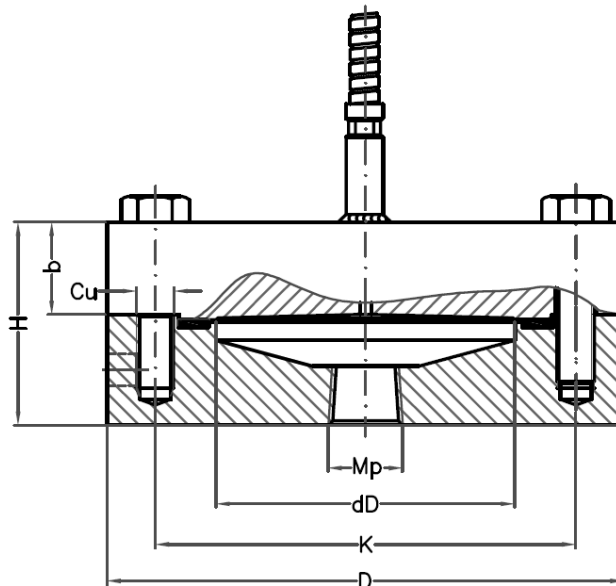
COATINGS

- gold: 25 μm / 40 μm chemical resistance and/or hydrogen permeation protection (facing and/or diaphragm – page 120)
- PTFE / ECTFE for anti stick purpose only (upper part)
- FEP / PFA (upper part)
- Tantaline lower part
- PTFE lining (lower part; BSP male only)

OTHER OPTIONS

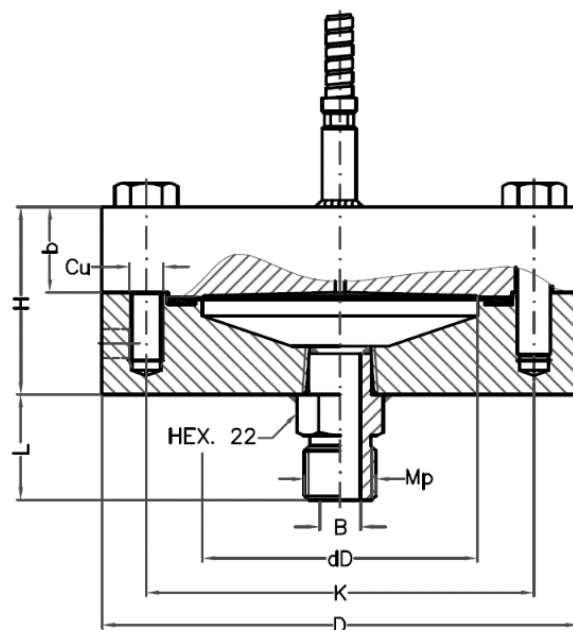
- heavy duty capillary tube page 113/123
- TR - temperature reducer page 114
- TC - temperature compensator page 114/121
- PTFE sheet for anti-stick purpose only (no vacuum)
- flushing ports in lower part (not in combination with lining)
- LGP – execution for low pressures page 119
- degreasing of wetted parts

DRAWING AND DIMENSIONS STANDARD EXECUTIONS



Mp	dD	b	D	H	K	Cu
1/4" NPT-f	81.0	25.0	140.0	55.0	114.0	M10 / 8x
1/2" NPT-f	81.0	25.0	140.0	55.0	114.0	M10 / 8x
3/4" NPT-f	81.0	25.0	140.0	55.0	114.0	M10 / 8x
1" NPT-f	81.0	25.0	140.0	55.0	114.0	M10 / 8x

All dimensions in mm



Mp	dD	b	D	H	K	L	Cu	
1/4" NPT-m	81.0	6.0	25.0	140.0	55.0	28.0	M10	hex 22
1/2" NPT-m	81.0	12.0	25.0	140.0	55.0	31.0	M10	hex 22
3/8" NPT-m	81.0	6.0	25.0	140.0	55.0	28.0	M10	hex 27
3/4" NPT-m	81.0	8.0	25.0	140.0	55.0	34.0	M10	hex 27
1" NPT-m	81.0	12.0	25.0	140.0	55.0	50.0	M10	hex 36
1.5" NPT-m	81.0	8.0	25.0	140.0	55.0	51.0	M10	SW 50
1/4" BSP-m	81.0	6.0	25.0	140.0	55.0	24.0	M10	hex 22
1/2" BSP-m	81.0	12.0	25.0	140.0	55.0	31.0	M10	hex 22
3/8" BSP-m	81.0	6.0	25.0	140.0	55.0	25.0	M10	hex 27
3/4" BSP-m	81.0	8.0	25.0	140.0	55.0	34.0	M10	hex 27
M20 x 1.5	81.0	8.0	25.0	140.0	55.0	31.0	M10	hex 22

All dimensions in mm



Holland – United Kingdom – Romania – India – Thailand – Dubai – USA

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