

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 |
|-------------|-------------|---------------------|
| AISI 316(L) | AISI 316(L) | top (axial) |
| GASKET | BOLTS | |
| 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

| diaphragm mat. | body material | lowerpart material |
|-----------------|---------------|--------------------|
| AISI 316(L) | AISI 316(L) | AISI 316(L) |
| AISI 304(L) | | |
| AISI 321 | | |
| AISI 316 UG | | |
| Hastelloy C-276 | | |
| Hastelloy C-276 | AISI 316(L) | Hastelloy C-276 |
| Monel 400 | AISI 316(L) | Monel 400 |
| Tantalum | AISI 316(L) | Tantalum* |
| Nickel 201 | AISI 316(L) | Nickel 201 |
| Duplex 2205 | AISI 316(L) | Duplex |
| Inconel 600 | AISI 316(L) | Inconel 600 |
| Titanium Gr. 1 | Titanium Gr.2 | Titanium Gr.2 |

*Note: material AISI316(L) with tantalum treatment

| threads | norms |
|---------|--------------|
| NPT | ANSI B1.20.1 |
| BSP | ISO 228 |
| BSPT | ISO 7 |
| UNF | ANSI 131.1 |
| METRIC | ISO 965 |

COATING AND OTHER OPTIONS

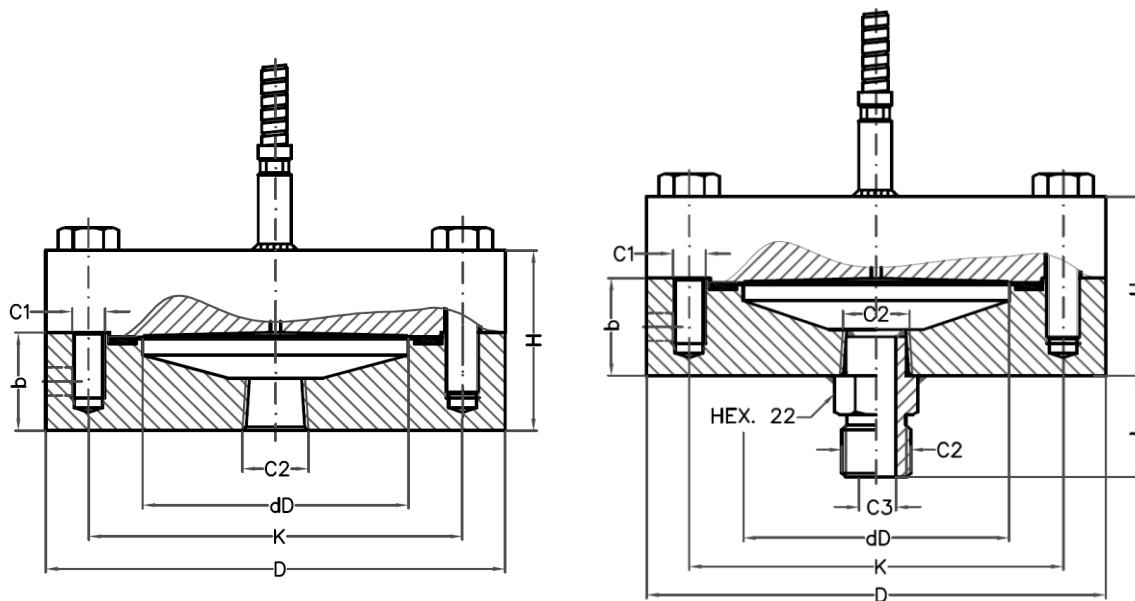
COATINGS

- 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



| C2 | C1 | dD | C3 | D | K | H | b | L |
|-------------|-------------|----|----|-----|-----|-----|----|----|
| 1/2" female | M10 / 8 pcs | 81 | - | 140 | 114 | 55 | 30 | - |
| 3/4" female | M10 / 8 pcs | 81 | - | 140 | 114 | 55 | 30 | - |
| 1" female | M10 / 8 pcs | 81 | - | 140 | 114 | 55 | 30 | - |
| 1/2" male | M10 / 8 pcs | 81 | 12 | 140 | 114 | 86 | 30 | 31 |
| 3/4" male | M10 / 8 pcs | 81 | 12 | 140 | 114 | 89 | 30 | 34 |
| 1 male | M10 / 8 pcs | 81 | 12 | 140 | 114 | 105 | 30 | 50 |

All dimensions in mm



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

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