

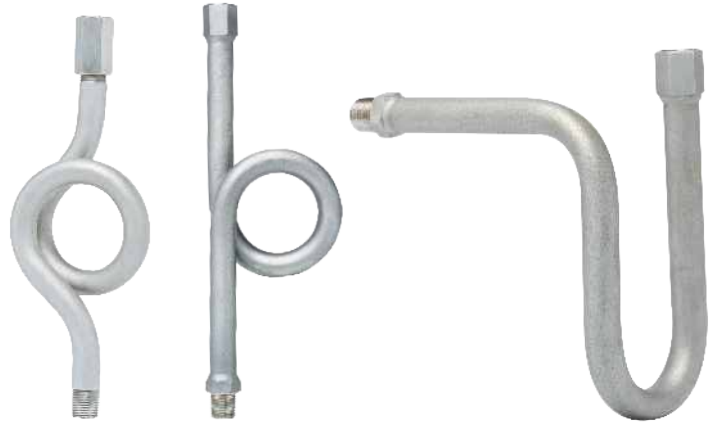
## FEATURES

- 3 different loop designs
- Tig welded & hydro-tested
- Seamless pipes construction
- Threads welded
- Max working pressure 160 bar
- Max working temperature 400°C

## APPLICATION

- Heat dispenser for gauges, switches & transmitters
- Boilers

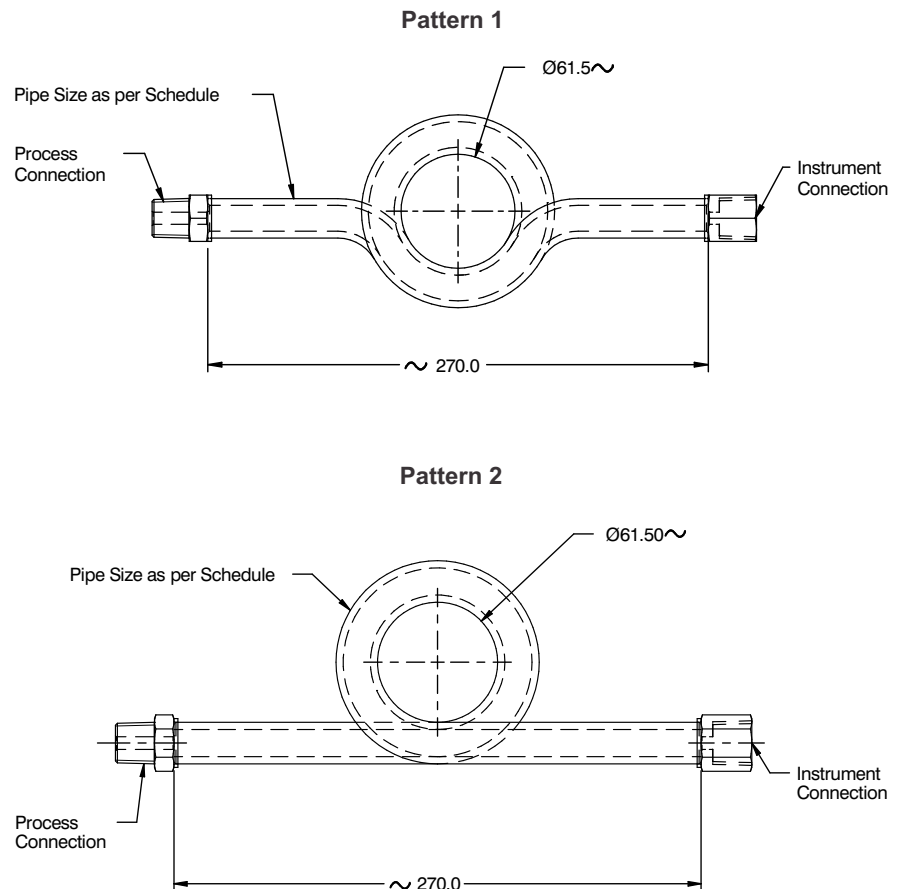
### Rigid Construction



### STANDARD SPECIFICATIONS

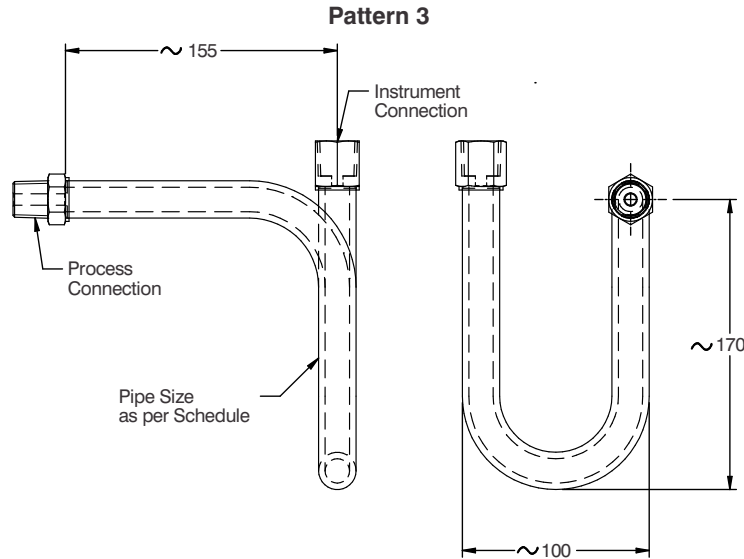
Type	: Pattern 1 (Coiled type)
Material	: AISI 316 SS
Instrument connection	: 1/2" Pipe-end
Pipe size & schedule	: Pipe 1/2" Sch 40
Connection type	: Weld-in connection
Process connection	: 1/2" Pipe-end
Maximum working pressure	: As per PT chart
Maximum working temperature	: As per PT chart

### DIMENSIONAL DRAWING



All dimensions are in mm.

## DIMENSIONAL DRAWING



All dimensions are in mm.

## ORDERING CODES

### 1. TYPE

- 1 Pattern 1 (Coiled type)
- 2 Pattern 2 (Pigtail type)
- 3 Pattern 3 ("U" type)

1

### 2. MATERIAL

- MB ASTM A105 / Carbon Steel<sup>2</sup>
- MC AISI 304SS
- MF AISI 316 SS
- MG AISI 316L SS

MF

### 3. INSTRUMENT CONNECTION

- |                   |                    |
|-------------------|--------------------|
| 12B 1/4" BSP (M)  | 13B 3/8" BSP (M)   |
| 14B 1/2" BSP (M)  | 12N 1/4" NPT (M)   |
| 13N 3/8" NPT (M)  | 14N 1/2" NPT (M)   |
| 02B 1/4" BSP (F)  | 03B 3/8" BSP (F)   |
| 04B 1/2" BSP (F)  | 02N 1/4" NPT (F)   |
| 03N 3/8" NPT (F)  | 04N 1/2" NPT (F)   |
| I14 1/4" Pipe-end | I38 3/8" Pipe-end  |
| I12 1/2" Pipe-end | 04M M20x1.5 mm (F) |

I12

### 4. PIPE SIZE & SCHEDULE

- |                      |                     |
|----------------------|---------------------|
| U3 Pipe 3/8" Sch 40  | U4 Pipe 3/8" Sch 80 |
| U5 Pipe 1/2" Sch 40  | U6 Pipe 1/2" Sch 80 |
| UA Pipe 1/4" Sch 40  | UB Pipe 1/4" Sch 80 |
| UC Pipe 1/2" Sch 160 |                     |

U5

### 5. CONNECTION TYPE

- C0 Weld-in connections
- C1 Thread on pipe, male
- C2 Connection through adaptors
- C3 Swivel female

C0

### 6. PROCESS CONNECTION

- |                    |                   |
|--------------------|-------------------|
| 12B 1/4" BSP (M)   | 13B 3/8" BSP (M)  |
| 14B 1/2" BSP (M)   | 12N 1/4" NPT (M)  |
| 13N 3/8" NPT (M)   | 14N 1/2" NPT (M)  |
| 02B 1/4" BSP (F)   | 03B 3/8" BSP (F)  |
| 04B 1/2" BSP (F)   | 02N 1/4" NPT (F)  |
| 03N 3/8" NPT (F)   | 04N 1/2" NPT (F)  |
| I14 1/4" Pipe-end  | I38 3/8" Pipe-end |
| I12 1/2" Pipe-end  |                   |
| 14M M20x1.5 mm (M) |                   |

I12

### 7. OTHER OPTIONS

- TC Material test certificate 3.1
- TM Material test certificate 2.2
- TN Tested to NACE standards
- TO Certification for Oxygen service
- TI IBR Certification
- XM Marking by engraving
- XL Marking by laser
- P8 Epoxy coating

XM

**Ordering Example : A102-1-MF-I12-U5-C0-I12-XM**

#### NOTES:

1. Other process connections are available through adaptors.
2. Red oxide painted.
3. General Tolerance in total length :  $\pm 10$  mm,  $\varnothing$  :  $\pm 2$  mm
4. NACE testing is applicable upon minimum quantity, please contact factory.