

# EXPANSION JOINT

## GIMBAL TYPE / EXTERNAL PRESSURIZED TYPE

### STAINLESS STEEL



Tel: 03-5569 2933 (6 Lines) Fax: 03-5569 2588, 5569 2788  
Email: mercroid@mercroid.com.my, valmicro@valmicro.com.my  
http://www.mercroid.com.my

**VARIMEX** valves®  
CO. LTD.

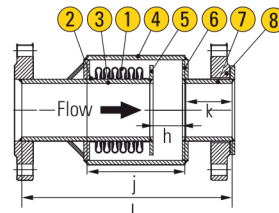
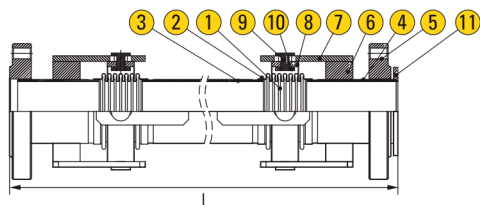
**HELS**  
HOSE-EXPANSION JOINT-LEVEL CONTROL-STEAM TRAP



Gimbal Type



External Pressurized Type



## APPLICATION

Suitable for water, steam, oil, gases and others non-abrasive media  
(Refer to corrosion resistance table for valve materials selection).

## SPECIFICATION

Size Range

25mm to 600mm (1" to 24")

Material

Stainless steel AISI 321

Connection

Welding end, Flanged end to DIN, ANSI B16.5 and JIS standards

Working Pressure

Up to 45 Bar

Working Temperature

Up to 400°C

## MATERIAL - GIMBAL TYPE

| Parts               | Material |
|---------------------|----------|
| 1 Bellow            | AISI 304 |
| 2 Band              | AISI 304 |
| 3 Intermediate Pipe | St. 37.2 |
| 4 Butt Weld         | St. 37.2 |
| 5 Flange            | St. 37.2 |
| 6 Short Blade       | St. 37.2 |
| 7 Long Blade        | St. 37.2 |
| 8 Gimbal            | St. 37.2 |
| 9 Gib               | St. 37.2 |
| 10 Washer           | St. 37.2 |
| 11 Collar           | St. 37.2 |

## MATERIAL - EXTERNAL PRESSURIZED TYPE

| Parts               | Material |
|---------------------|----------|
| 1 Bellow            | AISI 304 |
| 2 Band              | AISI 304 |
| 3 Inner Pipe        | St. 37.2 |
| 4 Outer Pipe        | St. 37.2 |
| 5 Centering Flange  | St. 37.2 |
| 6 Outer Pipe Flange | St. 37.2 |
| 7 Butt Weld         | St. 37.2 |
| 8 Flange            | St. 37.2 |

## DIMENSIONS - GIMBAL TYPE

Unit : mm

| Size (DN) | Movement |    |    | 100 KMF |     | 100 KMF |      | 300 KMF |     |      | 400 KMF |     |      |
|-----------|----------|----|----|---------|-----|---------|------|---------|-----|------|---------|-----|------|
|           | ±X       | ±Y | ±Z | L       | ±Y  | ±Z      | L    | ±Y      | ±Z  | L    | ±Y      | ±Y  | L    |
| 25        | 50       | 50 | 50 | 720     | 100 | 100     | 920  | 150     | 150 | 1120 | 200     | 200 | 1320 |
| 32        | 50       | 50 | 50 | 720     | 100 | 100     | 920  | 150     | 150 | 1120 | 200     | 200 | 1320 |
| 40        | 50       | 50 | 50 | 720     | 100 | 100     | 920  | 150     | 150 | 1120 | 200     | 200 | 1320 |
| 50        | 50       | 50 | 50 | 800     | 100 | 100     | 1000 | 150     | 150 | 1200 | 200     | 200 | 1420 |
| 65        | 50       | 50 | 50 | 800     | 100 | 100     | 1000 | 150     | 150 | 1250 | 200     | 200 | 1500 |
| 80        | 50       | 50 | 50 | 830     | 100 | 100     | 1030 | 150     | 150 | 1270 | 200     | 200 | 1500 |
| 100       | 50       | 50 | 50 | 850     | 100 | 100     | 1050 | 150     | 150 | 1300 | 200     | 200 | 1550 |
| 125       | 50       | 50 | 50 | 980     | 100 | 100     | 1180 | 150     | 150 | 1480 | 200     | 200 | 1780 |
| 150       | 50       | 50 | 50 | 980     | 100 | 100     | 1180 | 150     | 150 | 1480 | 200     | 200 | 1780 |
| 200       | 50       | 50 | 50 | 1140    | 100 | 100     | 1340 | 150     | 150 | 1700 | 200     | 200 | 2050 |
| 250       | 50       | 50 | 50 | 1140    | 100 | 100     | 1340 | 150     | 150 | 1700 | 200     | 200 | 2100 |
| 300       | 50       | 50 | 50 | 1200    | 100 | 100     | 1400 | 150     | 150 | 1760 | 200     | 200 | 2106 |

## DIMENSIONS - EXTERNAL PRESSURIZED TYPE

Unit : mm

| Size (DN) | Design Pressure : PN16<br>Axial Movement : -20mm + 10 |    |     |     | Design Pressure : PN16<br>Axial Movement : -40mm + 20 |    |     |     | Design Pressure : PN16<br>Axial Movement : -70mm + 20 |     |     |     |
|-----------|-------------------------------------------------------|----|-----|-----|-------------------------------------------------------|----|-----|-----|-------------------------------------------------------|-----|-----|-----|
|           | h                                                     | k  | j   | L   | h                                                     | k  | j   | L   | h                                                     | k   | j   | L   |
| 25        | 30                                                    | 80 | 180 | 360 | 50                                                    | 80 | 300 | 490 | 80                                                    | 80  | 300 | 520 |
| 32        | 30                                                    | 80 | 180 | 360 | 50                                                    | 80 | 300 | 490 | 80                                                    | 80  | 300 | 520 |
| 40        | 30                                                    | 80 | 200 | 380 | 50                                                    | 80 | 310 | 500 | 80                                                    | 80  | 310 | 530 |
| 50        | 30                                                    | 80 | 190 | 370 | 50                                                    | 80 | 290 | 480 | 80                                                    | 80  | 290 | 510 |
| 65        | 30                                                    | 80 | 190 | 370 | 50                                                    | 80 | 280 | 470 | 80                                                    | 80  | 280 | 500 |
| 80        | 30                                                    | 80 | 190 | 370 | 50                                                    | 80 | 280 | 470 | 80                                                    | 80  | 280 | 500 |
| 100       | 30                                                    | 80 | 200 | 380 | 50                                                    | 80 | 290 | 480 | 80                                                    | 80  | 290 | 510 |
| 125       | 30                                                    | 80 | 180 | 380 | 50                                                    | 80 | 290 | 490 | 80                                                    | 80  | 290 | 520 |
| 150       | 30                                                    | 80 | 210 | 400 | 50                                                    | 80 | 310 | 510 | 80                                                    | 80  | 310 | 540 |
| 200       | 30                                                    | 80 | 200 | 420 | 50                                                    | 80 | 300 | 530 | 80                                                    | 100 | 300 | 560 |
| 250       | 30                                                    | 80 | 210 | 440 | 50                                                    | 80 | 300 | 540 | 80                                                    | 100 | 300 | 570 |
| 300       | 30                                                    | 80 | 230 | 460 | 50                                                    | 80 | 330 | 570 | 80                                                    | 100 | 330 | 600 |

\*Specification given are subject to changed without further notice.