# Budenberg 

The 6MBB is a range of lightweight Monoflange isolation valves that incorporates an Outside Screw and Yoke bolted bonnet Primary Isolation valve together with heavy duty Needle Heads for the Secondary Isolation and Vent Valves.

The compact one piece design not only ensures that potential leakage paths are kept to an absolute minimum but offers significant weight and component cost savings when compared to other conventional installation solutions.

The Budenberg 60 Heavy Duty OS\&Y Valve is designed to meet the requirements of piping class installations in accordance with ASME/ANSI standards that features all metal seating and metal to metal body / bonnet connections.

Monoflanges are manufactured in a full range of materials, flange types and ratings as well as having a choice of flange, screw or kidney flange outlets.

## Construction

Manufactured from a single piece forging or forged barstock that incorporates the OS\&Y Primary Isolation Valve and Heavy Duty Needle Valves for Secondary Isolate and Vent.

## Configuration

Double Block / Isolation and Vent / Bleed Valve

## Inlet

The flanged process connection can be made to suit any International size or rating including, but not restricted to:

* ANSI B16.5 Flanges from $1 / 2$ " to 4 " in ratings from 150 to

2500 lbs in RF, FF, SRF and RTJ flange face styles.

* API Flanges up to $2.1 / 16$ " $, 3000,5000 \& 10,000 \mathrm{lbs}$
* Norsok L-100 Compact flange design


## Vent

1/4" NPT female vent as standard, others available upon request Blank and Vent plugs are available (see DSheet VAC-048)

## Outlet

In Flange by Flange variants the outlet flange is identical to the inlet process flange as listed above.
Alternatively the output can be:

* Screwed female connections, (1/2" NPT standard)
* Kidney Flanges for direct connection onto transmitters
* Quick release compression fittings

Bore Sizes
6 mm (standard), 8 mm can be provided dependant upon the flange size and rating

Fire safe
Fire safe to BS 6755 Pt 2, ISO 10497, ANSI / API 607

## NACE

All body \& wetted parts materials comply with the requirements of NACE MR 1705 / EN15156 or MR 0103 dependent upon the environmental or application requirement


Pressure Rating
Operating pressure rating up to $10,000 \mathrm{psi}(690 \mathrm{barg})$

## Temperature Rating

-54 to +538 Deg C dependant upon the stem packing material and pressure rating in use. Special Cryogenic Heads can be specified for temperatures down to -200 Degrees Celcius.

OS\&Y and Needle Valve Assemblies
OS\&Y and Heavy Duty Needle Valve Head Assemblies incorporate a full range of features including:

* Anti static, anti blow-out stems
* Self centering, non-rotating stem tips provide a true metal to metal valve seat whereby the material of the stem tip is one grade harder than the body thus resisting over tightening, preventing wear and guaranteeing a 100\% bubble tight seat closure, first time, every time

No Threads in the process stream
All Needle Valve assemblies incorporate 'soft' parent metal sealing rings that are located directly below the head to ensure that no threads are directly in the process stream

## Stem Packing

Fully adjustable, dynamically responsive multi ring gland packing, in either RPTFE/PTFE or Graphoil, resists all operating pressures and processes.

Other Features

* Hydro static and Gas Pressure Testing to BS 6755 Pt 1 or API 6A
* Material thickness as defined in ANSI / ASME B16.34
* Flange Dimensions as defined in ANSI / ASME B16.5
* Heat code traceable Material Certification to EN 10204 3.1b
* Full range of testing, certification and documentation can be supplied including PMI and a full range of NDE Testing
* Pressure boundary designs calculated to ASME VIII Div 1
* Designed with 4:1 safety factor
* Optional locking and anti tamper head assemblies


## How to specify Type 6MBB Monoflanges

The part number is compiled from a series of generic and alphanumeric codes that define the base unit and options. The structure of the part number is compatible with other range of Budenberg Valves and follow the definition of the valve by defining the Primary Isolation Valve and the Output connection thereafter the material and options are then defined

Typical definition:
Double Block \& Bleed Monoflange, Flange x Screw, 1.5" 600RTJ Flange, 1/2" NPT f outlet, 316 Stainless Steel, fitted with Blank Plug


## Contact our sales office for:

1 Units for special service applications i.e cryogenic, oxygen etc or other special requirements.
2 Units with special protective finishes or painting processes.
3 Wide range of optional features and accessories
Specifications and dimensions in this leaflet, are subject to change without prior notice.


| Size | Rating | 'A' Dia | B | C | D | F | 'G' Dia | 'H' PCD | 'J' Dia | 'K' Dia | 'L' Dia | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/2" | 150 | 98 | 60 | 1.6 | 3.0 | 4 | 15.9 | 60.3 | 34.9 | N/A | N/A | N/A |
| 1/2" | 300 | 98 | 60 | 1.6 | 3.0 | 4 | 15.9 | 66.7 | 34.9 | 50.8 | 34.13 | 1.6 |
| 1/2" | 600 | 98 | 60 | 6.4 | 3.0 | 4 | 15.9 | 66.7 | 34.9 | 50.8 | 34.13 | 6.4 |
| 1/2" | 1500 | 121 | 60 | 6.4 | 15.5 | 4 | 22.2 | 82.6 | 34.9 | 60.3 | 39.69 | 6.4 |
| 1/2" | 2500 | 133 | 60 | 6.4 | 8.5 | 4 | 22.2 | 88.9 | 34.9 | 65.1 | 42.86 | 6.4 |
| 3/4" | 150 | 98 | 60 | 1.6 | 3.0 | 4 | 15.9 | 69.8 | 42.9 | N/A | N/A | N/A |
| 3/4" | 300 | 117 | 60 | 1.6 | 15.5 | 4 | 19.0 | 82.6 | 42.9 | 63.5 | 42.86 | 1.6 |
| 3/4" | 600 | 117 | 60 | 6.4 | 15.5 | 4 | 19.0 | 82.6 | 42.9 | 63.5 | 42.86 | 6.4 |
| 3/4" | 1500 | 130 | 60 | 6.4 | 8.5 | 4 | 22.2 | 88.9 | 42.9 | 66.7 | 44.45 | 6.4 |
| 3/4" | 2500 | 140 | 60 | 6.4 | 8.5 | 4 | 22.2 | 95.2 | 42.9 | 65.1 | 50.80 | 6.4 |
| 1" | 150 | 108 | 60 | 1.6 | 15.5 | 4 | 15.9 | 79.4 | 50.8 | 63.5 | 47.63 | 1.6 |
| 1" | 300 | 124 | 60 | 1.6 | 15.5 | 4 | 19.0 | 88.9 | 50.8 | 69.8 | 50.80 | 1.6 |
| 1" | 600 | 124 | 60 | 6.4 | 15.5 | 4 | 19.0 | 88.9 | 50.8 | 69.8 | 50.80 | 6.4 |
| 1" | 1500 | 159 | 60 | 6.4 | 8.5 | 4 | 25.4 | 101.6 | 50.8 | 71.4 | 50.80 | 6.4 |
| 1" | 2500 | 159 | 60 | 6.4 | 6.0 | 4 | 25.4 | 107.9 | 50.8 | 73.0 | 50.80 | 6.4 |
| 1.5" | 150 | 127 | 60 | 1.6 | 15.5 | 4 | 15.9 | 98.4 | 73.0 | 82.4 | 65.09 | 1.6 |
| $1.5{ }^{\prime \prime}$ | 300 | 156 | 60 | 1.6 | 12.0 | 4 | 22.2 | 114.3 | 73.0 | 90.5 | 68.26 | 1.6 |
| 1.5" | 600 | 156 | 60 | 6.4 | 12.0 | 4 | 22.2 | 114.3 | 73.0 | 90.5 | 68.26 | 6.4 |
| 1.5" | 1500 | 178 | 60 | 6.4 | 6.0 | 4 | 28.6 | 123.8 | 73.0 | 92.1 | 68.26 | 6.4 |
| 1.5" | 2500 | 203 | 60 | 6.4 | 13.5 | 4 | 31.8 | 146.0 | 73.0 | 114.3 | 82.55 | 6.4 |
| 2" | 150 | 152 | 60 | 1.6 | 8.5 | 4 | 19.0 | 120.6 | 92.1 | 101.6 | 82.55 | 1.6 |
| 2" | 300 | 165 | 60 | 1.6 | 12.0 | 8 | 19.0 | 127.0 | 92.1 | 108.0 | 82.55 | 1.6 |
| 2" | 600 | 165 | 60 | 6.4 | 12.0 | 8 | 19.0 | 127.0 | 92.1 | 108.0 | 82.55 | 6.4 |
| 2" | 1500 | 216 | 80 | 6.4 | 19.5 | 8 | 25.4 | 165.1 | 92.1 | 123.8 | 95.25 | 6.4 |
| 2" | 2500 | 235 | 80 | 6.4 | 7.0 | 8 | 28.4 | 171.4 | 92.1 | 133.4 | 101.60 | 6.4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

All dimensions are in mm .

