



## Model: 93

The model 93 is a range of high specification yet low cost Double Block & Bleed Valves for instrumentation applications that are available in any combination of Ball or Needle Valve assemblies.

The units are available in a full range of materials and options to meet the individual user requirements. The compact slim line design enable them to be used in wide range of applications particularly where space and weight must be kept to an absolute minimum.

All valve assemblies are housed within the single forged barstock body whilst the end connections incorporate the valve sealing face to ensure a single piece of material up to and including the first Primary Isolation Valve.

The end connectors are available in choice of screwed, weld or custom connections that are pinned to prevent accidental removal. A full range of testing, certification and documentation can be provided to suit the individual project requirement.

### Construction

Modular construction comprising of a central barstock body housing all the valve assemblies in to which a choice of screwed or welded connections can be fitted.

### Configurations

Double Block

Double Block & Bleed

### Inlet / Outlet

Type 93 units can be manufactured with any standard end connections including:

- \* Screwed connections up to 1" NPT
- \* Butt or Socket weld connections are available but the end connections may be extended to protect internal components within the valve head assembly during the welding operation

All inlet and outlet connections are secured to prevent accidental dis-assembly.

### Vent

Standard Vent connection is 1/2" NPT f screwed connection but this can be changed to suit the customer requirement

### Mounting

Units can have both threaded and clearance holes machined into the body to allow units to be mounted onto or into any panel or enclosure

### Bore

Standard units have 10mm through bore their design does not facilitate rodding out.

## DOUBLE BLOCK & BLEED VALVE



### Ball Valve Assemblies

Fully Floating Ball Valve Assemblies with cavity relief through the seats. Seat material is PTFE as standard and PEEK™ as an option

### Needle Valve Assemblies

Heavy Duty Needle Valve Head Assemblies that incorporate a full range of features including:

- \* Anti static , anti blow-out stems
- \* Self centring, 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
- \* Seats can be hard faced with a choice of materials including Stellite and Tungsten

### No Threads In the process stream

Both Ball and Needle valve assemblies incorporate a 'soft' parent metal sealing rings that are located directly below the head and connection adaptors to ensure that no threads are directly in the process stream

### Stem Packing

Fully adjustable, dynamically responsive multi ring gland sandwich', in either PTFE or Graphoil, resist all operating pressures and processes. Budenberg offer 100% gland integrity for the lifetime of every valve

### Other Features

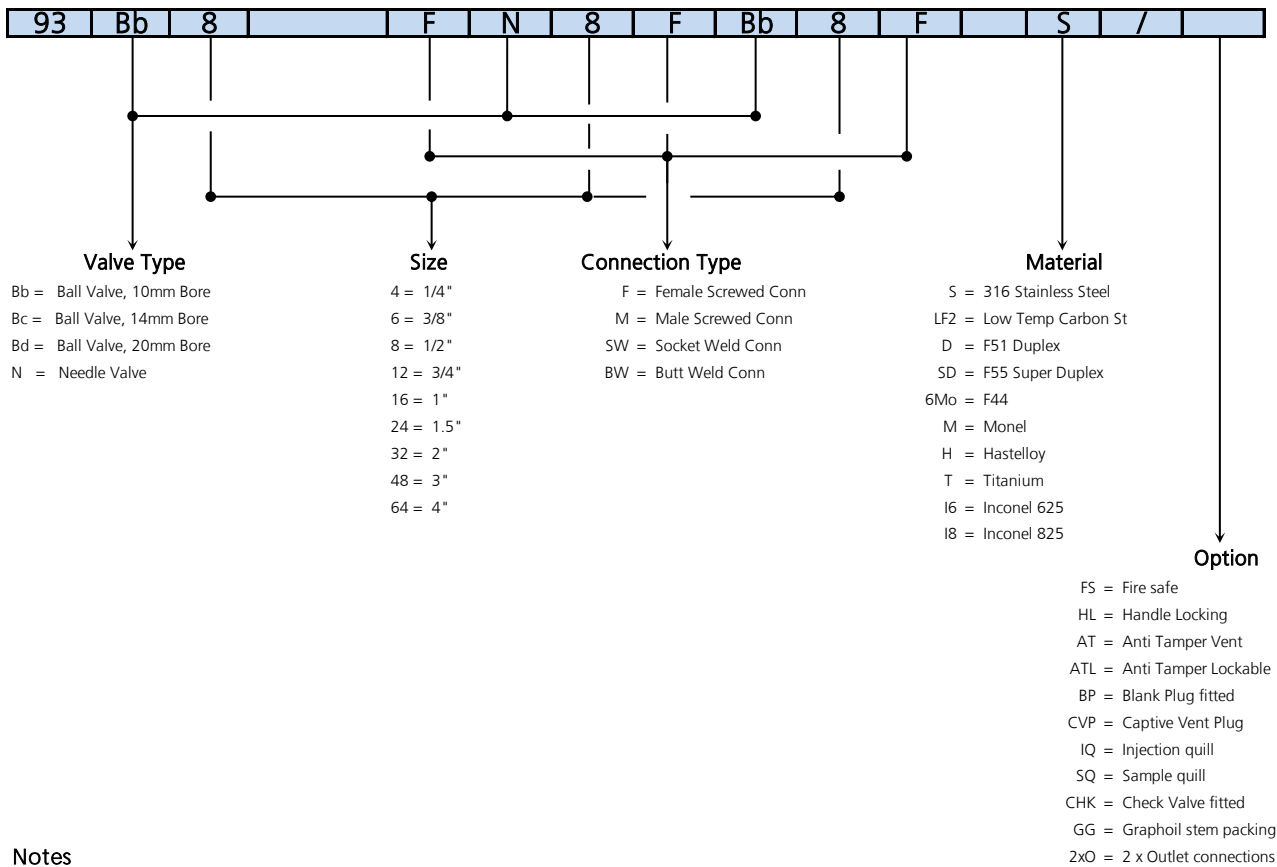
- \* Hydro static and or Gas Pressure Testing to BS 6755 Pt 1
- \* Fire safe to BS 6755 Pt 2, ISO 10497, API 607
- \* Material thickness as defined in ANSI / ASME B16.34
- \* Standard Material Certification to EN 10204 3.1b
- \* Can be manufactured in a full range of standard and special materials to suit the application

# How to specify Type 93 DBB Valves.

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, Vent Valve and the Secondary Isolation Valve in sequence thereafter the material and options are then defined.

**Typical definition:**

DBB Valve, 1/2" NPT f screwed process inlet and outlet, needle valve vent, 10mm bore primary & secondary isolation valves, Needle Vent Valve, 316 Stainless Steel construction



**Notes**

- 1) The above is merely representative of standard configurations and options. For other options, configurations or materials contact our sales department
- 2) Bore sizes relate to the primary and secondary isolation valves only and not the vent valve.
- 3) Socket and Butt weld connections may be extended to protect valve internals that may be subject to excessive heat during the welding process
- 4) Valves may be subject to a wide range of protective finishes and painting processes as defined by the project. Please contact our sales department to discuss.