FLUID CONTROL
Product catalogue
OUR COMPANY

HISTORY

The group of Independent KLINGER Companies has its origins in 1886, founded by Austrian engineer Richard Klinger who pioneered compressed asbestos gasket materials. Product innovation and a problem solving philosophy have been the cornerstones of KLINGER operating policy since its inception. The constant development of new products and technical services to meet the demand of the Fluid Sealing and Fluid Control industries has resulted in KLINGER becoming a global player and market leader in almost every industry sector, with Global Group sales exceeding €420 million. Today KLINGER has production plants and service organisations in almost every industrialised country in the world with extensive research and development facilities in Switzerland and Austria.

The Richard KLINGER SA (Pty) Limited operation was commissioned in May 1968 to produce sheet jointing for the fast-developing Southern African industrial and mining markets. From humble beginnings, and with National Trading Company (Pty) Limited as their partners, KLINGER products soon became synonymous with quality and innovation in the petrochemical, mining, pulp and paper, pharmaceutical, and metal melting industries in the Southern African region. With South Africa becoming part of the global economy after the first democratic elections in 1994, the Directors of both companies saw a need to further develop the product range and capacity of KLINGER and so established a joint venture aptly named KLINGER NTC (Pty) Limited. At the same time, KLINGER's largest competitor, T&N Industrial Products, was acquired and the entire operation relocated to the 14000m² premises currently occupied in Wadeville, Gauteng.

In January 1999, KLINGER exercised its option to repurchase the 50% share owned by National Trading Company in KLINGER NTC, thus resulting in KLINGER (Pty) Limited becoming a wholly owned subsidiary of the Group of Independent KLINGER Companies. This development held a number of lucrative opportunities for the South African subsidiary, not least of which was the opportunity to supply large format sheet jointing to Group companies on a global basis. Today, South Africa also provides gland packings to KLINGER group companies internationally and as a result of its export drive, is a substantial generator of foreign exchange and has witnessed volumes increasing almost two-fold through its Wadeville plant.

KLINGER Mzansi was formed in 2003 in support of Government's empowerment drive, and is now a level 5 BBBEE accredited company. In 2006, Wright-Seal and Plastics, based in Cape Town, were acquired in order to secure a national footprint. A further development resulted from a need to differentiate KLINGER and KLINGER Mzansi from their competition and to add value to the sales and marketing of their range of products. Customers were demanding a service which inevitably led to the training of end-user staff on gasket installation, best practices and eventually to the supervised fitment of gaskets within bolted connections. Allied to this concept, was the move towards joint integrity management. Through the Group acquisition of Australian based ATMECO, KLINGER Mzansi has been able to expand their service offering with the addition of a leak detection and repair capability.

To further develop and support the International KLINGER Fluid Control product ranges, in 2013, KLINGER SA acquired local valve company GC Baars. In a move to further improve customer experience and create easier access to its products and services, the group was restructured in 2016. The Group was reduced from the four organisations, namely, KLINGER Mzansi, GC Baars, KLINGER SA and Wright-Seal and Plastics, into two divisions - comprising Fluid Control and Fluid Sealing. The new arrangement reduces product overlap and will result in a higher level of service, less confusion and easier access for our customers.

QUALITY

KLINGER Mzansi has implemented a documented Quality Management System throughout all of its operations that complies with the requirements of ISO 9001 : 2015. Accreditation of the Quality Management System is provided by Lloyds Register and is subjected to audits on a regular basis.

HEALTH AND SAFETY

Written policies and procedures are followed to ensure the continued wellbeing of all of our personnel. As a minimum, the standards required by the Occupational Health and Safety Act and associated Regulations are complied within our manufacturing facilities and office environments. A formal Health and Safety Committee, comprising representatives from all our divisions, facilities and branches, meets on a regular basis to assess the effectiveness of the management systems that are utilised.
APPLICATIONS AND INDUSTRIES

With a head office situated in Wadeville (Fluid Sealing) and offices in Sunnyrock (Fluid Control), and distribution networks throughout Southern Africa, KLINGER is well positioned to supply Fluid Sealing and Fluid Control products as well as Field Services to our clients throughout South Africa and Africa.

KLINGER supplies products and services from the following divisions:

Fluid Control
- Wedge Gate Valves
- Knife Gate Valves
- Globe Valves
- Needle Valves
- Bottom Outlet Valves
- Check Valves
- Wafer Check Valves
- Foot Valves
- Ball Valves
- Butterfly Valves
- Pressure Reducing Valves
- Boiler Controls
- Level Gauges
- Safety Relief Valves
- Y-Strainers
- Pneumatic Actuators & Accessories
- Resilient Seal Gate Valves
- Piston Valves
- Rupture Discs

Fluid Sealing
- Soft Cut Gaskets/ Sheeting
- Semi-Metallic/ Metallic Gaskets
- Mechanical Packing
- Engineering Plastics
- Related Products

Field Services
- Leak Risk Management
- Joint Integrity Services
- Training

INDUSTRIAL APPLICATIONS

KLINGER products are used in industrial applications within the following sectors:

- Petrochemical
- Sugar
- Refining
- Farming & Irrigation
- Steel Industry
- Metal & Mineral Extraction & Processing
- Transportation
- Power Generation
- Shipping
- Chemical
- Food & Beverage
- Pulp and Paper
- Original Equipment Manufacturers
- Pharmaceutical
- Vehicle Manufacturing
- Bulk Storage & Handling

OUR CUSTOMERS

Some of the major companies that currently make use of KLINGER Mzansi’s products and services are:

- Alusaf
- Impala Platinum
- Anglo Gold
- Arcelor Mittal
- Anglo Platinum
- Mondi
- BHP Billiton
- Natref
- Chevron
- Petro SA
- Columbus
- AB InBev
- Engen
- Sappi
- Eskom
- Sasol
- Goldfields
- Tongaat Hulett
- Illovo
- Xstrata
- Mpact
- SAPREF
- Omnia
- Karbochem
- Exxaro
- Continental
- Bridgestone/ Firestone
- Transnet
- First Quantum Minerals
- Glencore
- Vedanta Resources
- Freeport McMoRan
FLUID CONTROL PRODUCTS

WEDGE GATE VALVES

BRASS GATE VALVES

156 Brass gate valve, suitable for 16 bar at 100°C.
Non-rising stem, screwed bonnet, screwed BSP.
15mm to 100mm

151A DZR Brass gate valve, PN 20/Class 125, suitable for 20 bar at 100°C/9 bar at 180°C.
NRS, screwed bonnet, DZR brass wedge disc, screwed BSP.
8mm to 80mm

BRONZE GATE VALVES

D151X Bronze gate valve, PN 25/Class 150, suitable for 25 bar at 100°C/10.5 bar at 186°C.
NRS, screwed bonnet, bronze wedge disk, screwed BSP.
8mm to 80mm

D159 Bronze gate valve, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C.
NRS, screwed bonnet, bronze wedge disk, screwed BSP.
15mm to 50mm

D166 Bronze gate valve, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C.
Rising stem, screwed bonnet, bronze wedge disk, screwed BSP.
15mm to 50mm

D180 Bronze gate valve, PN 32/Class 200, suitable for 32 bar at 120°C/14 bar at 260°C.
Rising stem, union bonnet, bronze wedge disc, screwed BSP.
15mm to 50mm

CAST IRON GATE VALVES

F52 Cast iron gate valve, Class 100, suitable for 14 bar at 38°C/7 bar at 170°C.
Non-rising stem, inside screw, bronze trim, flanged BST10 Table 'D or E'.
50mm to 200mm

VT68 Cast iron gate valve, Class 125, suitable for 13.8 bar at 65°C/8.6 bar at 230°C.
Non-rising stem, inside screw, 13Cr trim, flanged ANSI 125.
50mm to 600mm

VT84 Cast iron gate valve, Class 125, suitable for 13.8 bar at 65°C/8.6 bar at 230°C.
Rising stem, OS&Y, 13Cr trim, flanged ANSI 125.
50mm to 600mm

CAST STEEL GATE VALVES

5.150 Cast steel 150LB gate valve, suitable for 19.6 bar at 38°C/5.6 bar at 425°C.
Flexi wedge disc, OS&Y, WCB/Trim 8, flanged ANSI 150RF. Enclosed bevel gearbox operated 300mm and above.
50mm to 600mm

5.300 Cast steel 300LB gate valve, suitable for 51.1 bar at 38°C/27.2 bar at 425°C.
Flexi wedge disc, OS&Y, WCB/Trim 8, flanged ANSI 300RF. Enclosed bevel gearbox operated 200mm and above.
50mm to 300mm

5.600 Cast steel 600LB gate valve, suitable for 102.1 bar at 38°C/54.5 bar at 425°C.
Flexi wedge disc, OS&Y, WCB/Trim 8, flanged ANSI 600RF. Enclosed bevel gearbox operated 150mm and above.
50mm to 200mm

E&OE
FLUID CONTROL PRODUCTS

WEDGE GATE VALVES

FORGED STEEL GATE VALVES

HL-100  Forged steel 800LB gate valve, suitable for 136 bar at 38°C/76 bar at 427°C. Bolted bonnet, OS&Y, A105N/Trim 8, screwed NPT or SW. 15mm to 50mm

WL-100  Forged steel 800LB gate valve, suitable for 136 bar at 38°C/76 bar at 427°C. Welded bonnet, OS&Y, A105N/Trim 5, screwed NPT or SW or BW. 15mm to 50mm

9HL-100  Forged steel 1500LB gate valve, suitable for 255 bar at 38°C/142 bar at 427°C. Bolted bonnet, OS&Y, A105N/Trim 8, screwed NPT or SW or BW. 15mm to 50mm

L1-100  Forged steel 150LB gate valve, suitable for 19.6 bar at 38°C/5.5 bar at 427°C. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 150RF. 15mm to 50mm

L3-100  Forged steel 300LB gate valve, suitable for 51.0 bar at 38°C/28.2 bar at 427°C. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 300RF. 15mm to 50mm

L6-100  Forged steel 600LB gate valve, suitable for 102 bar at 38°C/56.9 bar at 427°C. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 600RF. 15mm to 50mm

6HWL-100  Forged steel 600LB gate valve, suitable for 102 bar at 38°C/56.9 bar at 427°C. Welded bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 600RF. 15mm to 50mm

Details of valves with different material combinations available on request, i.e. A105N/Trim 9, LF2N/Trim 2, F11/Trim 5, F304L/Trim 2, F316L/Trim 10, F316L/Trim 16, etc.

CAST STAINLESS STEEL GATE VALVES

KG-200  Stainless steel 200lb/in² gate valve, suitable for 13.8 bar up to 177°C. Solid wedge disc, non-rising stem, screwed bonnet, in CF8M/316SS, screwed BSP. 15mm to 50mm

KG-150  Stainless steel 150LB gate valve, suitable for 19.0 bar at 38°C/12 bar at 250°C. Flexi wedge disc, OS&Y, CF8M/316SS, flanged ANSI 150RF. 25mm to 200mm
FLUID CONTROL PRODUCTS

KNIFE GATE VALVES

EX-IM  Knife gate valve with metal seat, suitable for up to 10 bar (size determined). Max temperature 120°C. Cast iron body, 304SS gate, type ST packing. Semi-lugged wafer body drilled & tapped to suit PN 10RF flanges. 50mm to 600mm

EX-IR  Knife gate valve with EPDM seat, suitable for up to 10 bar (size determined). Max temperature 120°C. Cast iron body, 304SS gate, type ST packing. Semi-lugged wafer body drilled & tapped to suit PN 10RF flanges. 50mm to 600mm

EX-SM  Knife gate valve with metal seat, suitable for up to 10 bar (size determined). Max temperature 120°C. CF8M body, 316SS gate, type ST packing. Semi-lugged wafer body drilled & tapped to suit PN 10RF flanges. 50mm to 600mm

EX-SR  Knife gate valve with EPDM seat, suitable for up to 10 bar (size determined). Max temperature 120°C. CF8M body, 316SS gate, type ST packing. Semi-lugged wafer body drilled & tapped to suit PN 10RF flanges. 50mm to 600mm

VG  Slurry Knife gate valve with natural rubber sleeves, suitable for 10 bar (size determined) max temperature 75°C. Ductile iron body, 304SS gate, EPDM packing. Semi-lugged wafer body drilled & tapped to suit PN 10RF flanges, gearbox operated from 250mm. 50mm to 600mm

Optional sleeves in EPDM and polyurethane, blacking plates and splash guards.

GLOBE VALVES

BRONZE GLOBE VALVES

D4  Bronze globe valve, PN 20/Class 125, suitable for 20 bar at 100°C/9 bar at 180°C. Screwed bonnet, bronze spherical disc, screwed BSP. 15mm to 50mm

D7  Bronze globe valve, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C. Union bonnet, renewable R-PTFE disc, screwed BSP. 15mm to 50mm

D15  Bronze globe valve, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C. Screwed bonnet, renewable R-PTFE disc, screwed BSP. 15mm to 50mm

D16  Bronze globe valve, PN 32/Class 200, suitable for 32 bar at 120°C/14 bar at 260°C. Screwed bonnet, renewable 13Cr disc and seat, screwed BSP. 8mm to 80mm

CAST IRON GLOBE VALVES

VT372  Cast iron globe valve, Class 125, suitable for 13,8 bar at 65°C/8,6 bar at 230°C. Angle disc, rising stem, OS&Y, 13Cr trim, flanged ANSI 125. 50mm to 300mm

E&OE
FLUID CONTROL PRODUCTS

GLOBE VALVES

CAST STEEL GLOBE VALVES

6.150 Carbon steel 150LB globe valve, suitable for 19.6 bar at 38ºC/5.6 bar at 425ºC. Swivel plug disc, OS&Y, WCB/Trim 8, flanged ANSI 150RF. 15mm to 50mm

6.300 Carbon steel 300LB globe valve, suitable for 51.1 bar at 38ºC/27.2 bar at 425ºC. Swivel plug disc, OS&Y, WCB/Trim 8, flanged ANSI 300RF. 50mm to 150mm

6.600 Carbon steel 600LB globe valve, suitable for 102.1 bar at 38ºC/54.5 bar at 425ºC. Swivel plug disc, OS&Y, WCB/Trim 8, flanged ANSI 600RF. 50mm to 100mm

FORGED STEEL GLOBE VALVES

HL-300 Carbon steel 800LB globe valve, suitable for 136 bar at 38ºC/76 bar at 425ºC. Bolted bonnet, OS&Y, A105N/Trim 8, screwed NPT or SW. 15mm to 50mm

WL-300 Carbon steel 800LB globe valve, suitable for 136 bar at 38ºC/76 bar at 425ºC. Welded bonnet, OS&Y, A105N/Trim 5, screwed NPT or SW or BW. 15mm to 50mm

9HL-300 Carbon steel 1500LB globe valve, suitable for 255 bar at 38ºC/142 bar at 425ºC. Bolted bonnet, OS&Y, A105N/Trim 8, screwed NPT or SW or BW. 15mm to 50mm

L1-300 Carbon steel 150LB globe valve, suitable for 51.1 bar at 38ºC/28.2 bar at 425ºC. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 150RF. 15mm to 50mm

L3-300 Carbon steel 300LB globe valve, suitable for 102.1 bar at 38ºC/56.9 bar at 425ºC. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 300RF. 15mm to 50mm

L6-300 Carbon steel 600LB globe valve, suitable for 193 bar at 38ºC/107 bar at 425ºC. Bolted bonnet, OS&Y, A105N/Trim 5, integral flanged ANSI 600RF. 15mm to 50mm

Details of valves with different material combinations available on request, i.e. A105N/Trim 9, LF2N/Trim 2, F11/Trim 5, F304L/Trim 2, F316L/Trim 10, F316L/Trim 16, etc.

CAST STAINLESS STEEL GLOBE VALVES

KL-200 Stainless steel 200lb/in² globe valve, suitable for 13.8 bar up to 177ºC. Swivel plug disc, screwed bonnet, in CF8M/316SS, screwed BSP. 15mm to 50mm

KL-150 Stainless steel 150LB globe valve, suitable for 19.0 bar at 38ºC/12 bar at 250ºC. Swivel plug disc, OS&Y, in CF8M/316SS, flanged ANSI 150RF. 25mm to 100mm

E&OE
NEEDLE VALVES

**D71 Bronze needle valve**, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C. Screwed bonnet, bronze needle point disc, screwed BSP. 8mm to 20mm

**147C Carbon steel needle valve**, suitable for 250 bar at 120°C/165 bar at 400°C. 316SS internals, graphite packing, metal seat, screwed BSP. 8mm to 25mm

**147S Stainless steel needle valve**, suitable for 250 bar at 120°C/165 bar at 400°C. 316SS internals, graphite packing, metal seat, screwed BSP. 8mm to 25mm

BOTTOM OUTLET VALVES

**BOVR Bottom outlet valve**, rising spherical disc, fabricated in CF8M/316SS, 16 bar WOG. 60° outlet, flanged PN 16RF. Also available with 45° or 90° outlets, conical disc profile and other flange connections. Optional materials include stellited surfaces, various elastomeric seats such as PTFE, Viton, etc. 50mm to 200mm

CHECK VALVES

**BRASS CHECK VALVES**

**100 EUROPA brass check valve**, suitable for 25 to 12 bar (size determined) at 100°C maximum. Piston type, spring loaded 304SS disc, NBR seat, screwed BSP. 10mm to 100mm

**101 BLOCK brass check valve**, suitable for 12 to 10 bar (size determined) at 100°C maximum. Piston type, spring loaded Polymer disc, NBR seat, screwed BSP. 15mm to 50mm

**103 YORK brass check valve**, suitable for 12 to 8 (size determined) bar at 100°C maximum. Piston type, spring loaded Polymer disc, NBR seat, screwed BSP. 15mm to 100mm

**104 ROMA brass check valve**, suitable for 25 to 18 bar (size determined) at 150°C maximum. Piston type, spring loaded 304SS disc, Viton seat, ¼” gas gauge connections, screwed BSP. 10mm to 50mm

**130 Brass check valve**, suitable for 16 to 8 bar (size determined) at 90°C maximum. Swing type, screwed BSP. NBR seat, (sizes 10mm to 50mm), metal seat (sizes 65mm to 100mm). 10mm to 100mm
FLUID CONTROL PRODUCTS

CHECK VALVES

BRONZE CHECK VALVES

D104  
Bronze check valve, PN 20/Class 125, suitable for 20 bar at 100°C/9 bar at 180°C. Straight pattern, lift type, screwed cap, brass/bronze disc, screwed BSP. 15mm to 50mm

D116  
Bronze check valve, PN 32/Class 200, suitable for 32 bar at 100°C/14 bar at 198°C. Straight pattern, lift type, union cap, renewable R-PTFE disc, screwed BSP. 8mm to 50mm

D138  
Bronze check valve, PN 25/Class 150, suitable for 25 bar at 100°C/10,5 bar at 186°C. Straight pattern, swing type, screwed cap, bronze disc, screwed BSP. 10mm to 50mm

D142  
Bronze check valve, PN 32/Class 200, suitable for 32 bar at 120°C/14 bar at 260°C. Y-pattern, swing type, screwed cap, regrindable bronze disc, screwed BSP. 15mm to 50mm

CAST IRON CHECK VALVES

VT493  
Cast iron check valve, Class 125, suitable for 13,8 bar at 65°C/8,6 bar at 230°C. Swing type, 13Cr trim, flanged ANSI 125. 50mm to 300mm

CAST STEEL CHECK VALVES

7.150  
Carbon steel 150LB check valve, suitable for 19,6 bar at 38°C/5,6 bar at 425°C. Swing type, internal hinge pin, bolted cap, WCB/Trim 8, flanged ANSI 150RF. 50mm to 250mm

7.300  
Carbon steel 300LB check valve, suitable for 51,1 bar at 38°C/27,2 bar at 425°C. Swing type, internal hinge pin, bolted cap, WCB/Trim 8, flanged ANSI 300RF. 50mm to 200mm

7.600  
Carbon steel 600LB check valve, suitable for 102,1 bar at 38°C/54,5 bar at 425°C. Swing type, internal hinge pin bolted cap, WCB/Trim 8, flanged ANSI 600RF. 50mm to 150mm

FORGED STEEL CHECK VALVES

HL-400  
Carbon steel 800LB check valve, suitable for 136 bar at 38°C/76 bar at 427°C. Piston type disc, bolted cap, A105N/Trim 5, screwed NPT or SW or BW. 15mm to 50mm

HL-500  
Carbon steel 800LB check valve, suitable for 136 bar at 38°C/76 bar at 427°C. Ball type disc, bolted cap, A105N/Trim 8, screwed NPT or SW or BW. 15mm to 50mm

HL-600  
Carbon steel 800LB check valve, suitable for 136 bar at 38°C/76 bar at 427°C. Swing type disc, bolted cap, A105N/Trim 8 or 5, screwed NPT or SW or BW. 15mm to 50mm

9HL-400  
Carbon steel 1500LB check valve, suitable for 255 bar at 38°C/142 bar at 427°C. Piston type disc, bolted cap, A105N/Trim 8, screwed NPT or SW or BW. 15mm to 50mm

Details of valves with different material combinations available on request, i.e. A105N/Trim 9, LF2N/Trim 2, F11/Trim 5, F304L/Trim 2, F316L/Trim 10, F316L/Trim 16, etc.
FLUID CONTROL PRODUCTS

CHECK VALVES

CAST STAINLESS STEEL CHECK VALVES

KC-200  Stainless steel 200lb/in² check valve, suitable for 13.8 bar up to 177°C. Swing type, screwed cap, in CF8M/316SS, screwed BSP. 15mm to 50mm

KC-150  Stainless steel 150LB check valve, suitable for 19.0 bar at 38°C/12 bar at 250°C. Swing type, bolted cap, CF8M/316SS, flanged ANSI 150RF. 25mm to 200mm

WAFFER CHECK VALVES

DUAL PLATE CHECK

200EN  Cast iron dual plate check valve, PN 16, suitable for 16 bar up to 100°C. Nickel plated ductile iron plates, vulcanised EPDM seat, 316SS pins and springs. 50mm to 600mm

200ES  Cast iron dual plate check valve, PN 16, suitable for 16 bar up to 100°C. CF8M stainless steel plates, vulcanised EPDM seat, 316SS pins and springs. 50mm to 600mm

200NS  Cast iron dual plate check valve, PN 16, suitable for 16 bar up to 100°C. CF8M stainless steel plates, vulcanised NBR seat, 316SS pins and springs. 50mm to 600mm

200SES  Cast CF8M dual plate check valve, PN 16, suitable for 16 bar up to 100°C. CF8M stainless steel plates, vulcanised EPDM seat, 316SS pins and springs. 50mm to 600mm

200LES  Cast iron dual plate check valve, PN 16, suitable for 16 bar up to 100°C. CF8M stainless steel plates, EPDM cartridge liner, 316SS pin and springs. 50mm to 600mm

DISCO CHECK

170B  Bronze check valve, PN 16, suitable for 16 bar at 120°C/13 bar at 250°C. 316SS disc & spring, metal to metal seat. 15mm to 100mm

170C  Carbon steel check valve, PN 40, suitable for 40 bar at 120°C/21 bar at 400°C. 316SS disc & spring, metal to metal seat. 15mm to 200mm

170S  Stainless steel check valve, PN 40, suitable for 40 bar at 120°C/29 bar at 400°C. 316SS disc & spring, metal to metal seat. 15mm to 150mm

E&OE
FLUID CONTROL PRODUCTS

FOOT VALVES

066 LONDON ‘GAS’ nickel plated brass ball valve, suitable for up to 5 bar at 60ºC. Full bore, chrome plated brass ball, PTFE seats, standard lever, screwed BSP (Fx/F). 8mm to 50mm

067 LONDON ‘GAS’ nickel plated brass ball valve, suitable for up to 5 bar at 60ºC. Full bore, chrome plated brass ball, PTFE seats, standard lever, screwed BSP (MxF). 8mm to 50mm

068 LONDON ‘GAS’ nickel plated brass ball valve, suitable for up to 5 bar at 60ºC. Full bore, chrome plated brass ball, PTFE seats, T-handle, screwed BSP (Fx/F). 8mm to 25mm

069 LONDON ‘GAS’ nickel plated brass ball valve, suitable for up to 5 bar at 60ºC. Full bore, chrome plated brass ball, PTFE seats, T-handle, screwed BSP (MxF). 8mm to 25mm

090 IDEAL nickel plated brass ball valve, suitable for up to 18 bar at 20ºC. Full bore, chrome plated brass ball, PTFE seats, standard lever, screwed BSP (Fx/F). 65mm to 100mm

116 VIENNA nickel plated brass ball valve, suitable for up to 50 bar at 20ºC/12 bar at 150ºC. Standard bore, chrome plated brass ball, PTFE seats, standard lever, screwed BSP (Fx/F). 8mm to 50mm

117 VIENNA nickel plated brass ball valve, suitable for up to 50 bar at 20ºC/12 bar at 150ºC. Standard bore, chrome plated brass ball, PTFE seats, standard lever, screwed BSP (MxF). 8mm to 50mm

118 VIENNA nickel plated brass ball valve, suitable for up to 50 bar at 20ºC/12 bar at 150ºC. Standard bore, chrome plated brass ball, PTFE seats, T-handle, screwed BSP (Fx/F). 8mm to 25mm

BALL VALVES

BRASS BALL VALVES

105 EUROPA brass foot valve, suitable for 25 to 12 bar (size determined) at 100ºC maximum. Piston type, stem and disc 304SS, NBR seat, 304SS strainer, screwed BSP. 10mm to 100mm

106 BLOCK brass foot valve, suitable for 12 to 10 bar (size determined) at 100ºC maximum. Piston type, Polymer disc, NBR seat, Polymer strainer, screwed BSP. 15mm to 50mm

108 YORK brass foot valve, suitable for 12 to 8 (size determined) bar at 100ºC maximum. Piston type, spring loaded Polymer disc, NBR seat, 304SS strainer screwed BSP. 15mm to 100mm

140 Brass foot valve, suitable for 10 to 6 bar (size determined) at 90ºC maximum. Piston type, NBR seat, brass strainer, screwed BSP. 15mm to 100mm

London 066/067/068/069 are EN 331 & SAGA Approved

E&OE
FLUID CONTROL PRODUCTS

BALL VALVES

BRASS BALL VALVES

119 VIENNA nickel plated brass ball valve, suitable for up to 50 bar at 20ºC/12 bar at 150ºC. Standard bore, chrome plated brass ball, PTFE seats, T-handle, screwed BSP (MxF).
8mm to 25mm

125 MINI chrome plated brass ball valve, suitable for up to 15 bar at 20ºC. Reduced bore, chrome plated ball, PTFE seats, Nylon handle, screwed BSP (FxF).
8mm to 20mm

126 MINI chrome plated brass ball valve, suitable for up to 15 bar at 20ºC. Reduced bore, chrome plated ball, PTFE seats, Nylon handle, screwed BSP (MxF).
8mm to 20mm

128 THREEWAY nickel plated brass ball valve, suitable for up to 55 bar at 20ºC. Standard bore, chrome plated ball, PTFE seats, standard lever, screwed BSP (Fx/F).
Available in L-Port: 128L & T-Port: 128T.
8mm to 50mm

132 Nickel plated brass ball bibcock, suitable for 15 to 12 bar at 20ºC. Full bore, chrome plated ball, PTFE seats, standard lever, screwed BSP x hose end.
15mm to 25mm

CAST IRON BALL VALVES

CBF-13 Cast iron ball valve, suitable for up to 16 bar and up to 100ºC. Full bore, 304SS hollow ball & stem, PTFE seats, lever operated, flanged PN 16FF.
15mm to 250mm

STEEL BALL VALVES

300S Stainless steel ball valve, suitable for 69 bar at 38ºC/5 bar at 200ºC. Reduced bore, 1-piece CF8M body, PTFE seats, lockable lever, screwed BSP.
8mm to 50mm

BV3PS Stainless steel ball valve, suitable for 69 bar at 38ºC/5 bar at 200ºC. Full bore, 3-piece CF8M body, non ISO, PTFE seats, lockable lever, screwed BSP, SW or BW.
8mm to 80mm

BV3PS-DM Stainless steel ball valve, suitable for 69 bar at 38ºC/5 bar at 200ºC. Full bore, 3-piece CF8M body, ISO direct mount, PTFE seats, lockable lever, screwed BSP or BW.
8mm to 100mm

90-100 Cast ball valve, Class 150, suitable for 19 bar at 38ºC/10 bar at 200ºC. Full bore, 2-piece body, PTFE seats, lockable lever, flanged ANSI 150RF.
Available in carbon steel: WCB and stainless steel: CF8M.
150mm to 200mm

KV-L50 Stainless steel 3-way ball valve, suitable for 69 bar at 38ºC/5 bar at 200ºC. Reduced bore, PTFE seats, lockable lever, L port, screwed BSP.
15mm to 50mm

KV-T50 Stainless steel 3-way ball valve, suitable for 69 bar at 38ºC/5 bar at 200ºC. Reduced bore, PTFE seats, lockable lever, T port, screwed BSP.
15mm to 50mm

E&OE
FLUID CONTROL PRODUCTS

BALL VALVES

STEEL BALL VALVES

225SGS  Carbon steel 800LB ball valve, suitable for 136 bar at 38°C/10 bar at 200°C. Reduced bore, 3-piece LF2 body, 316SS ball and stem, R-PTFE seats, screwed BSP or SW. 15mm to 50mm

226SGS  Stainless steel 800LB ball valve, suitable for 136 bar at 38°C/10 bar at 200°C. Reduced bore, 3-piece 316 body, 316SS ball and stem, R-PTFE seats, screwed BSP or SW. 8mm to 80mm

BAC FB & PQRI are SAGA Approved

PQRI-150  Cast ball valve, Class 150, fire safe, suitable for 19 bar at 38°C/10 bar at 200°C. Reduced bore, 1-piece body, PTFE MOD seats, lockable lever, flanged ANSI 150RF. Available in carbon steel: WCC and stainless steel: CF8M. 15mm to 300mm

FB-150  Cast ball valve, Class 150, fire safe, suitable for 19 bar at 38°C/10 bar at 200°C. Full bore bore, 2-piece body, PTFE MOD seats, lockable lever, flanged ANSI 150RF. Available in carbon steel: WCC and stainless steel: CF8M. 15mm to 300mm

PQRI-300  Cast ball valve, Class 300, fire safe, suitable for 50 bar at 38°C/10 bar at 200°C. Reduced bore, 1-piece body, PTFE MOD seats, lockable lever, flanged ANSI 300RF. Available in carbon steel: WCC and stainless steel: CF8M. 15mm to 300mm

FB-300  Cast ball valve, Class 300, fire safe, suitable for 50 bar at 38°C/10 bar at 200°C. Full bore, 2-piece body, PTFE MOD seats, lockable lever, flanged ANSI 300RF. Available in carbon steel: WCC and stainless steel: CF8M. 15mm to 300mm

KLINGER BALL VALVES

KHA  KLINGER 3-piece floating ball valves, PN 16 to PN 100, -196°C to +400°C. Full or reduced bore bodies in carbon or stainless steel. End connections available in flanged (long/ short), threaded or welded ends (long/ short). 15mm to 150mm

KHE  KLINGER 2-piece floating ball valves, PN 16/40 ANSI 150/300, -60°C to +300°C. Full bore bodies in carbon or stainless steel. End connections flanged (long/ short). 15mm to 200mm

KHI  KLINGER 2-piece trunnion mounted ball valves, PN 16/40, -45°C to 260°C. Full or reduced bore bodies in carbon or stainless steel. End connections available in flanged or welded ends. 150mm to 1000mm
FLUID CONTROL PRODUCTS

BUTTERFLY VALVES

310
Stainless or cast iron butterfly valve, PN 16, suitable for up to 16 bar. Max temperature 80°C-100°C dependant on replaceable EPDM/ NBR/ PTFE liner. Wafer type body, pinless disc lockable trigger lever operated. 50mm to 300mm

320
Stainless or cast iron butterfly valve, PN 16, suitable for up to 16 bar. Max temperature 80°C-100°C dependant on replaceable EPDM/ NBR/ PTFE liner. Wafer type body, pinless disc lockable gearbox operated. 50mm to 600mm

PRESSURE REDUCING VALVES

BRASS PRESSURE REDUCING VALVES

361 MINIPRESS nickel plated brass pressure reducing valve, suitable for 15 bar max inlet & adjustable between 1-4 bar outlet, min/max temperature of 0ºC/+80ºC. 8mm outlet pressure gauge connection, ends screwed BSP. 15mm to 20mm

143 EUROPRESS nickel plated brass pressure reducing valve, suitable for 25 bar max inlet & adjustable between 1-6 bar outlet, min/max temperature of 0ºC/+80ºC. 8mm outlet pressure gauge connection on both sides, ends screwed BSP. 15mm to 100mm

CAST IRON PRESSURE REDUCING VALVES

P3-A Cast iron pressure reducing valve, suitable for 10 bar max inlet & adjustable between 1-4 bar outlet, min/max temperature of 0ºC/+200ºC. Ends screwed BSP. 15mm to 20mm
FLUID CONTROL PRODUCTS

BOILER CONTROLS

STEAM TRAPS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>041/042</td>
<td>Stainless steel, PN 63</td>
<td>Thermodynamic steam trap, suitable for up to 42 bar, max temperature 400°C (version determined), stainless steel trim with optional integral strainer, available with screwed, SW or flanged ends.</td>
</tr>
<tr>
<td>043/044</td>
<td>Carbon steel, PN 40/100</td>
<td>Bimetallic steam trap, suitable for up to 80 bar, max temperature 450°C (version determined), stainless steel trim, available with screwed, SW or flanged ends.</td>
</tr>
<tr>
<td>143/144</td>
<td>Cast iron, PN 16</td>
<td>Inverted bucket steam trap, suitable for up to 16 bar, max temperature 220°C (version determined), stainless steel trim, available with screwed ends.</td>
</tr>
<tr>
<td>241/243</td>
<td>Carbon steel/iron, PN 16</td>
<td>Float &amp; thermostatic steam trap, suitable for up to 14 bar, max temperature 220°C (version determined), stainless steel trim, available with screwed, SW or flanged ends.</td>
</tr>
<tr>
<td>443/444</td>
<td>Stainless steel, PN 40</td>
<td>Thermostatic steam trap, suitable for up to 22 bar, max temperature 250°C (version determined), stainless steel trim, available with screwed, SW or flanged ends.</td>
</tr>
</tbody>
</table>

BLOWDOWN VALVES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>460</td>
<td>Carbon steel, PN 40</td>
<td>Blowdown valve for desludging, suitable for up to 40 bar, max temperature 250°C (version determined), stainless steel trim, lever operated, available with flanged ends.</td>
</tr>
<tr>
<td>260</td>
<td>Cast steel, PN 40</td>
<td>Blowdown valve for desludging, suitable for up to 40 bar, max temperature 250°C (version determined), stainless steel trim, pedal and handwheel operated, available with flanged ends.</td>
</tr>
</tbody>
</table>

SIGHT GLASSES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>265/365/6</td>
<td>Stainless/ carbon steel, PN 16/40</td>
<td>Window sight glasses, suitable for up to 40 bar, max temperature -60 to 250°C (version determined), borosilicate glass, available with screwed, SW or flanged ends.</td>
</tr>
</tbody>
</table>
LEVEL GAUGES

**Transparent**  The medium is contained within two glasses whose surfaces are both smooth.
Pressure rating: Up to 250 bar process or up to 120 bar steam.
Materials: Forged steel or stainless steel.
Tank connections: Screwed, flanged or butt-weld.
**Sizes:** Up to 3000mm centre to centre

**Reflex**  The medium is viewed through a reflex glass and the side of the glass which is exposed to the medium has a prismatic surface.
Pressure rating: Up to 250 bar process or up to 32 bar steam.
Materials: Forged steel or stainless steel.
Tank connections: Screwed, flanged or butt-weld.
**Sizes:** Up to 3000mm centre to centre

**Bi-colour**  A variation of transparent level gauges and are mainly used to measure very high-pressure steam.
Pressure rating: Up to 225 bar steam.
Materials: Forged steel or stainless steel.
Tank connections: Screwed or flanged.
**Sizes:** Up to 1500mm centre to centre

**Magnetic**  Suitable for duties involving dangerous and toxic liquids or gases.
Pressure rating: Up to 400 bar process or up to 180 bar steam.
Materials:
» Stainless steel (chamber, float, indicator)
» Aluminium (indicator)
» Titanium (float)
» Exotic plastics (chamber, float)
» Special materials on request (chamber)
Tank connections: Flanged.
**Sizes:** Up to 6000mm centre to centre

**Shut Off**  Various shut off cock valves are available, medium, pressure, temperature dependent.
Pressure rating: Up to 250 bar
Materials: Forged steel or stainless steel
Tank connections: Screwed, flanged or butt-weld.
**Sizes:** 15mm to 40mm

**Glass**  KLINGER gauge glasses are made of high quality, extra-hard borosilicate glass which is subsequently heat-treated.
In accordance with MIL16356-D specification.
**Sizes:**
Round: 40mm to 250mm
Transparent: I to X, A, B, H, TA28
Reflex: I to X, A, B, H

SAFETY RELIEF VALVES

| 095/096 | **Bronze/ stainless steel**, PN 16/25, proportional lift safety valve, suitable for up to 25 bar, max temperature 250°C (version determined), PTFE, Silicone or Viton seal, construction **AP**: open cap with lever or **ES**: closed cap without lever available with male inlet x female screwed outlet or flanged inlet x screwed outlet.
| 8x8mm to 25x25mm |

E&OE
FLUID CONTROL PRODUCTS

SAFETY RELIEF VALVES

295/296  Bronze, carbon or stainless steel, PN 25, normal lift safety valve, suitable for up to 25 bar, max temperature 250°C (version determined), PTFE, Silicone or Viton seal, construction AP: open cap with lever or ES: closed cap without lever available with male inlet x female screwed outlet or flanged inlet x flanged outlet. 15x25mm to 32x50mm

495/496  Cast & nodular iron or stainless & carbon steel, PN 16/40, full lift safety valve, suitable for up to 40 bar, max temperature 450°C (version determined), stainless trim, construction AP: open cap with lever or ES: closed cap without lever or construction EP: closed cap with lever or CP: enclosed spring with lever available with male inlet x female screwed outlet or flanged inlet x flanged outlet. 20x32mm to 25x40mm - screwed 20x25mm to 200x300mm - flanged

596/696  Stainless or carbon steel, PN 25/160, full lift safety valve, suitable for up to 95 bar, max temperature 450°C (version determined), stainless steel trim, construction AP: open cap with lever or ES: closed cap without lever or construction EP: closed cap with lever or CP: enclosed spring with lever available with flanged inlet x flanged outlet. 25x32mm to 400x500mm - 596 model 25x40mm to 300x400mm - 696 model

A = open cap   E = closed cap   P = with lever   S = without lever   C = enclosed spring

STRAINERS

BRASS Y-TYPE STRAINERS

192  Brass Y-type strainer, suitable for 16 to 20 bar (size determined) at 100°C. 304 Stainless steel screen with 500-800µm holes, screwed BSP. 8mm to 100mm

BRONZE Y-TYPE STRAINERS

D297  Bronze Y-type strainer, PN 32, suitable for 32 bar at 100°C/14 bar at 260°C. 304 Stainless steel screen with 0,75mm holes, screwed BSP. 15mm to 50mm

CAST IRON Y-TYPE STRAINERS

400  Cast iron Y-type strainer, PN 16, suitable for up to 16 bar and up to 100°C. 304 Stainless steel screen with 0.6 to 2mm holes, screwed BSP. 15mm to 80mm

401  Cast iron Y-type strainer, PN 16, suitable for up to 16 bar and up to 100°C. 304 Stainless steel screen with 1-3mm holes, flanged PN 10/16 FF. 50mm to 250mm

STAINLESS STEEL Y-TYPE STRAINERS

KY-800  Stainless steel 800lb/in² Y-type strainer, suitable for 20 bar up to 230°C. 316 Stainless steel screen with 1.7 mm holes, screwed BSP. 15mm to 50mm
PNEUMATIC ACTUATORS & ACCESSORIES

Specialist service is available for the sizing, fitting and bench testing of pneumatic actuators and accessories to all types of valves.

Air Torque 4th Generation Upgrade series 90° rack and pinion pneumatic actuators for quarter turn valves with PTFE coated Alodur anodized body and anodized + Polyester coated end caps, suitable for 15 to 10,000Nm output torque requirements. External travel stops and Namur air supply connections on all models (VDI/VDE 3845). ISO 5211 base mounting permits an easy installation of the actuator directly on to a compatible valve or it can interface through an ISO bracket and coupling.

DOUBLE ACTING ACTUATORS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Torque output (Nm) at operating air pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 bar</td>
</tr>
<tr>
<td>AT 051U DA</td>
<td>13.3</td>
</tr>
<tr>
<td>AT 101U DA</td>
<td>23.5</td>
</tr>
<tr>
<td>AT 201U DA</td>
<td>46.5</td>
</tr>
<tr>
<td>AT 251U DA</td>
<td>73.2</td>
</tr>
<tr>
<td>AT 301U DA</td>
<td>106</td>
</tr>
<tr>
<td>AT 351U DA</td>
<td>172</td>
</tr>
<tr>
<td>AT 401U DA</td>
<td>222</td>
</tr>
<tr>
<td>AT 451U DA</td>
<td>348</td>
</tr>
<tr>
<td>AT 501U DA</td>
<td>454</td>
</tr>
<tr>
<td>AT 551U DA</td>
<td>613</td>
</tr>
<tr>
<td>AT 601U DA</td>
<td>851</td>
</tr>
<tr>
<td>AT 651U DA</td>
<td>1430</td>
</tr>
<tr>
<td>AT 701U DA</td>
<td>2075</td>
</tr>
<tr>
<td>AT 751U DA</td>
<td>2872</td>
</tr>
<tr>
<td>AT 801U DA</td>
<td>3604</td>
</tr>
<tr>
<td>AT 1001U DA</td>
<td>6671</td>
</tr>
</tbody>
</table>

SPRING RETURN FAILSAFE ACTUATORS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Torque (Nm) from air @ 5.0 bar</th>
<th>Torque (Nm) from air @ 6.0 bar</th>
<th>Torque (Nm) from springs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
<td>Start</td>
</tr>
<tr>
<td>AT 051U SR08</td>
<td>-</td>
<td>-</td>
<td>12.0</td>
</tr>
<tr>
<td>AT 101U SR10</td>
<td>18.2</td>
<td>12.4</td>
<td>24.1</td>
</tr>
<tr>
<td>AT 201U SR10</td>
<td>36.1</td>
<td>23.6</td>
<td>47.7</td>
</tr>
<tr>
<td>AT 251U SR10</td>
<td>54.8</td>
<td>33.8</td>
<td>73.1</td>
</tr>
<tr>
<td>AT 301U SR10</td>
<td>82.3</td>
<td>54.2</td>
<td>109</td>
</tr>
<tr>
<td>AT 351U SR10</td>
<td>133</td>
<td>83.9</td>
<td>176</td>
</tr>
<tr>
<td>AT 401U SR10</td>
<td>172</td>
<td>112</td>
<td>227</td>
</tr>
<tr>
<td>AT 451U SR10</td>
<td>270</td>
<td>177</td>
<td>357</td>
</tr>
<tr>
<td>AT 501U SR10</td>
<td>343</td>
<td>235</td>
<td>456</td>
</tr>
<tr>
<td>AT 551U SR10</td>
<td>450</td>
<td>292</td>
<td>603</td>
</tr>
<tr>
<td>AT 601U SR10</td>
<td>638</td>
<td>434</td>
<td>851</td>
</tr>
<tr>
<td>AT 651U SR10</td>
<td>1066</td>
<td>745</td>
<td>1423</td>
</tr>
<tr>
<td>AT 701U SR10</td>
<td>1500</td>
<td>992</td>
<td>2021</td>
</tr>
<tr>
<td>AT 751U SR10</td>
<td>2128</td>
<td>1407</td>
<td>2846</td>
</tr>
<tr>
<td>AT 801U SR10</td>
<td>2965</td>
<td>2028</td>
<td>3966</td>
</tr>
<tr>
<td>AT 1001U SR10</td>
<td>4949</td>
<td>3389</td>
<td>6616</td>
</tr>
</tbody>
</table>

Please contact us for any other requirements (fast acting, 120°, 135°, 180°, low & high temp constructions, Scotch & Yoke design).

E&OE
FLUID CONTROL PRODUCTS

PNEUMATIC ACTUATORS & ACCESSORIES

POSITION INDICATORS AND SWITCHBOXES

ATTFV3  IP68 position indicator/switchbox, adjustable S.P.D.T (single pole double throw) switches, VDI/VDE 3845 Namur interface for direct mounting.

ATTFPS  IP68 position indicator/switchbox, 3-wire P+F inductive proximity sensors 24V DC, VDI/VDE 3845 Namur interface for direct mounting.

SOLENOID VALVES AND ACCESSORIES

WP4  Solenoid valve, for Double Acting or Spring Return pneumatic actuators, anodised aluminium housing, IP65/NEMA 4 enclosure, NAMUR mounting, 1,5 to 8 bar (22 to 118 psi) pressure range, 0 to 50ºC service temperature range. Standard coil voltage 24V AC, 24V DC, 110V AC and 220V AC.

AISPEEDREG  Brass, air adjustable Speed Regulator to control the opening/closing stroke of the actuator.

AISILEX  Brass, air exhaust silencer.

POSITIONERS

SR/CCK  Pneumatic positioner, suitable for 90º maximum operation, 2 to 6,9 bar air supply. Standard cam with 3 pressure ranges (linear characteristics), direct and reverse actions. 0,2 - 1 bar : 0º to 90º/ 0,2 - 1 bar : 0º to 65º/ 0,2 - 0,6 or 0,6 - 1 bar : 0º to 65º.

CRP3M-EP  Electro-pneumatic rotary positioner, double acting, Namur shaft and holes, counter clockwise rotation, 4-20mA input.

RSV GATE VALVES

665RS  Ductile iron, PN 16, RSV gate valve, suitable for up to 16 bar. Max temperature -20ºC to 100ºC, bolted bonnet, rising spindle, EPDM encapsulated gate, hand wheel operated, flanged PN 16. 50mm to 400mm

665NRS  Ductile iron, PN 16, RSV gate valve, suitable for up to 16 bar. Max temperature -20ºC to 100ºC, bolted bonnet, non-rising spindle, EPDM encapsulated gate, hand wheel operated, flanged PN 16. 50mm to 400mm
FLUID CONTROL PRODUCTS

PISTON VALVES

KVN  PN 16/PN 40 piston valve, suitable for -10°C to 400°C. Bolted bonnet, OS&Y, KX-GT graphite rings, handwheel operated, flanged RF. Materials: Cast iron, spheroidal cast iron, cast steel, stainless steel (PN 40 only). Above valves available in ANSI ratings Class 150 & 300. 15mm to 200mm

KVMN  PN 16/PN 63 piston valve, suitable for -10°C to 400°C. Bolted bonnet, OS&Y, KX-GT graphite rings, handwheel operated, screwed BSP/ NPT. Materials: Cast iron (PN 16 only), cast steel (PN 63), stainless steel (PN 63). 15mm to 50mm

KVSN  PN 63 piston valve, suitable for -10°C to 400°C. Bolted bonnet, OS&Y, KX-GT graphite rings, handwheel operated, butt-weld & socket weld ends. Material: Cast steel. 15mm to 50mm
RUPTURE DISCS

DIF  Forward-acting rupture disc – Static conditions
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Standard membrane material PTFE, PFA, Aluminium. Designed to fit directly between flanges. Burst pressure from 0.05 bar to 5 bar for low pressure liquid or gas service. 265°C. Tolerance from ±5% to ±20%.
50mm to 1000mm

LPD  Forward-acting rupture disc – Processing and storage tanks
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Standard membrane material PTFE, PFA. Designed to fit directly between flanges. Burst pressure from 5 millibar to 500 millibar for low pressure liquid or gas service. 265°C. Tolerance from ±5% to ±20%.
50mm to 500mm

DCD  Forward-acting rupture disc – Valve protection
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Standard membrane material PTFE, PFA, Aluminium. Designed to fit in a holder. Burst pressure from 0.05 bar to 110 bar for liquid or gas service. 265°C. Tolerance from ±5% to ±20%.
15mm to 1000mm

TCD  Forward-acting rupture disc – Static, cycling and pulsating conditions
Standard material of construction 316SS, Alloy. Standard membrane material PTFE, PFA. Designed to fit directly between flanges. Burst pressure from 3 bar to 5 bar for liquid or gas service. 265°C. Tolerance ±5%.
50mm to 80mm

STD  Forward-acting rupture disc – Concave solid disc for cycling and pulsating conditions
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Designed to fit in a holder. Burst pressure from 5 bar to 1150 bar for liquid or gas service. 480°C. Tolerance from ±5% to ±20%.
15mm to 600mm

Y90  Reverse-acting rupture disc – Large temperature variations
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Designed to fit in a holder. Burst pressure from 0.2 bar to 70 bar for liquid or gas service. -196°C to 480°C. Tolerance from ±5% to ±20%.
25mm to 200mm

ASME Certified (UD Stamp)

KRD  Reverse-acting micro-scored rupture disc – Liquids only
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Designed to fit in a holder. Burst pressure from 0.41 bar to 137 bar for liquid service. -196°C to 480°C. Tolerance from ±5% to ±20%.
15mm to 900mm

SCR  Reverse-acting micro-scored rupture disc – Gas only – Absolute vacuum without support
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Designed to fit in a holder. Burst pressure from 0.41 bar to 137 bar for gas service. -196°C to 480°C. Tolerance from ±5% to ±20%.
15mm to 900mm

SCD  Forward-acting micro-scored rupture disc – Absolute vacuum without support
Standard material of construction 316SS, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276, Titanium, Tantalum. Designed to fit in a holder. Burst pressure from 2 bar to 413 bar for liquid and gas service. -196°C to 480°C. Tolerance from ±5% to ±20%.
15mm to 900mm
## FLANGE DRILLING TABLE

### Valve sizes in inches and mm

<table>
<thead>
<tr>
<th>Valve sizes in inches and mm</th>
<th>BS 10 Table 'D'</th>
<th>BS 10 Table 'E'</th>
<th>BS 10 Table 'F'</th>
<th>BS 10 Table 'H'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
</tr>
<tr>
<td>1&quot;</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>6</td>
<td>143</td>
<td>6</td>
<td>143</td>
</tr>
<tr>
<td>2&quot;</td>
<td>5</td>
<td>161</td>
<td>5</td>
<td>161</td>
</tr>
<tr>
<td>3&quot;</td>
<td>4</td>
<td>179</td>
<td>4</td>
<td>179</td>
</tr>
</tbody>
</table>

### Valve sizes in inches and mm

<table>
<thead>
<tr>
<th>Valve sizes in inches and mm</th>
<th>BS 4504 Table 10</th>
<th>BS 4504 Table 16</th>
<th>BS 4504 Table 25</th>
<th>BS 4504 Table 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
</tr>
<tr>
<td>1&quot;</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>6</td>
<td>143</td>
<td>6</td>
<td>143</td>
</tr>
<tr>
<td>2&quot;</td>
<td>5</td>
<td>161</td>
<td>5</td>
<td>161</td>
</tr>
<tr>
<td>3&quot;</td>
<td>4</td>
<td>179</td>
<td>4</td>
<td>179</td>
</tr>
</tbody>
</table>

### Valve sizes in inches and mm

<table>
<thead>
<tr>
<th>Valve sizes in inches and mm</th>
<th>ANSI 150</th>
<th>ANSI 300</th>
<th>ANSI 600</th>
<th>ANSI 600/1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
</tr>
<tr>
<td>1&quot;</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
</tr>
</tbody>
</table>

### Valve sizes in inches and mm

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
<td>10</td>
<td>105</td>
</tr>
<tr>
<td>1&quot;</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
<td>8</td>
<td>125</td>
</tr>
</tbody>
</table>

*Adjacent "TABLES" with colour shading in the same row indicates identical dimensions.*
WADEVILLE (Gauteng)
T: 011 842 8300
E: sales@klinger.co.za

DURBAN (Kwazulu Natal)
T: 031 579 1041

RICHARDS BAY (Kwazulu Natal)
T: 035 789 0595

CAPE TOWN (Western Cape)
T: 021 511 1337

MOSSEL BAY (Western Cape)
T: 010 010 0797

PORT ELIZABETH (Eastern Cape)
T: 041 484 2107

NELSPRUIT (Mpumalanga)
T: 013 010 0092

MIDDELBURG (Mpumalanga)
T: 010 200 9814

SECUNDA (Mpumalanga)
T: 017 639 1582

SASOLBURG (Free State)
T: 016 976 2952