



INSTRUMENTATION

ULTRA HIGH PURITY

FITTINGS & VALVES

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Since 1984



INSTRUMENTATION Application

VB1 series



General Ball Valve

- MWP : 1000psig/69bar with PTFE seats, 2000psig/137bar with TFM seats
- MWT : 65°C/150°F with PTFE seats, 170°C/338°F with PEEK seats
- Size : Uni-Lok 1/4"~1" OD, Pipe Thread 1/4"~1" Female
- 316SS
- Lever, Butterfly, Bar Handles

VBM1 series



Master Key Hex Ball Valves

- MWP : 1000 psig / 69 bar with PTFE
- MWT : 65°C (150°F)
- Size : 1/2" ~ 1"
- End Connections : Uni-Lok Tube Fitting, Female NPT or ISO 7/1(PT), Butt Weld, Socket Weld
- Body Materials : 316 SS
- Locking handle on open or Close Positions
- Compact handle design
- Handle Low operating torques

VB3 series



Instrumentation Ball Valves

- MWP : 3000psig/206bar
- MWT : 65°C/150°F
- Size : Uni-Lok 1/8"~3/4" OD & 3~20mm OD, Pipe Thread 1/8"~1/2"
- 316SS, Brass
- Compact designed one piece body
- 2 way shut off and 3 way switching
- Minimized valve (VB3C) with 2,3 way and angle pattern

VB6F series



High Pressure Forged Multi Purpose Ball Valves

- MWP : 6000psig/413bar
- MWT : -54~177°C/-65~350°F
- Size : Uni-Lok 1/4"~1/2" OD & 3~12mm OD, Pipe Thread 1/8"~1/2"
- 316SS, Alloys
- Compact forged body
- Blow out proof design
- 2 way shut off and 3 way switching

VB6B series



High Pressure Bar Stock Ball Valves - CNG

- MWP : 6000psig/413bar
- MWT : -30~180°C/-22~355°F
- Size : Uni-Lok 1/4"~1"OD, Pipe Thread 1/4"~1"
- 316SS
- Robust body with max orifice
- Floating ball and blow out proof design
- 2 way shut off and 3 way switching
- CNG application with CNG compatible materials

INSTRUMENTATION Application

VN5 series



Integral Bonnet Needle Valves

- MWP : 5000psig/340bar
- MWT : -53~232°C/-65~450°F (Optional PEEK packing up to 315°C/600°F)
- Size : Uni-Lok 1/8"~1" OD & 6~25mm OD Pipe Thread 1/8"~1", Welded System
- 316SS, Brass, Alloys
- Compact designed forged body
- Straight and Angle patterns
- Hardened stem for long cycle life

VN6 series



High Pressure Integral Bonnet Bar Stock Needle Valves

- MWP : 6000psig/413bar
- MWT : -53~232°C/-65~450°F (Optional PEEK packing up to 315°C/600°F)
- Size : Uni-Lok 1/4"~1/2" OD & 6~12mm OD, Pipe Thread 1/4"~1/2"
- 316SS, Alloys
- Forged body and hardened stem for long cycle life
- Integral bonnet design eliminating unintentional stem back-out

VU6 series



Severe Service Union Bonnet Valves

- MWP : 6000psig/413bar
- MWT : -53~232°C/-65~450°F (Optional Grafoil packing up to 648°C/1200°F)
- Size : Uni-Lok 1/4"~1" OD & 6~12mm OD, Pipe Thread 1/8"~1", Welded Systems
- 316SS, Alloys
- Integral bonnet design ensuring high integrity seal under severe service
- Panel mounting without packing disruption

VMT series



Metering Valves

- MWP : 2000psig/137bar (VMTS series) 1000psig/69bar (VMTL & VMTM series)
- MWT : -23~204°C/-10~400°F (Optional Buna-N O-ring up to 148°C/300°F)
- Size : Uni-Lok 1/8"~1/4" OD & 3~6mm OD, Pipe Thread 1/8"~1/4", UCR 1/4"
- 316SS
- Fine orifice and close thread tolerance offering accurate control
- Panel mounting for easy installation

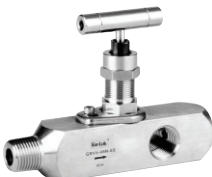
VM series



Manifolds Valves

- MWP : 6000psig/413bar
- MWT : -53~232°C/-65~450°F (Optional Grafoil packing up to 648°C/1200°F)
- 316SS, Alloys
- Remote mounting type
- Direct mounting type with flanged
- Bar stock body and hardened stem for long cycle life
- 2-1/8" (54mm) port centerline ensuring proper instrument alignment

VG series

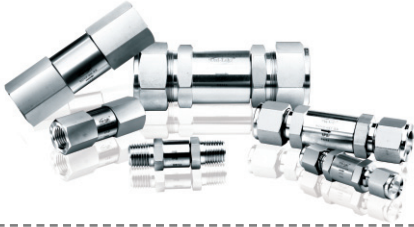


Gauge & Gauge Root Valves

- MWP : 6000psig/413bar
- 316SS, Alloys

INSTRUMENTATION Application

VC series



General, High Pressure, Compact, Adjustable Check Valves

- MWP : 3000psig/207bar (VC3, VC3C, VC3CA series), 6000psig/413bar (VC6 series)
- MWT : -53~232°C/-65~450°F
- Size : Uni-Lok 1/8"~1" OD & 3~25mm OD, Pipe Thread 1/8"~1", UCR 1/4"~1/2"
- 316SS, Brass, Alloys • VC3 3000psig general purpose
- VC6 6000psig high pressure • VC3C 3000psig compact 1 piece body
- VC3CA compact adjustable cracking pressure

VE series



Industrial Excess Flow Valves

- MWP : 6000psig/413bar • MWT : -23~204°C/-10~400°F
- Size : Uni-Lok 1/4"~1/2" OD & 6~12mm OD, Pipe Thread 1/4"~1/2"
- 316SS, Alloys • Two piece body enabling simple spring and seal maintenance
- High flow capacity • Automatic reset by the bleed vent

VR series



Low & High Pressure Relief Valves

- MWP : 3000psig/207bar (VR3 series), 6000psig/413bar (VR6 series)
- MWT : -23~204°C/-10~400°F
- Size : Uni-Lok 1/4"~1/2" OD & 6~12mm OD, Pipe Thread 1/4"~1/2"
- 316SS • VR3 3000psig with CP 10~250psig
- VR6 6000psig with selective CP 350~6000psig
- Low friction bonnets increasing accuracy and improving consistency of cracking & reseal pressure

VF series



Micron In-Line and Tee Filters

- MWP : 3000psig/207bar (VFI series), 6000psig/413bar (VFT series)
- MWT : -28~482°C/-20~900°F Filtration range : 0.5, 2, 7, 15, 60, 90
- Size : Uni-Lok 1/8"~1/2" OD & 3~12mm OD, Pipe Thread 1/8"~1/2"
- 316SS, Brass • VFI series In-line type • VFT series Tee type
- Low friction bonnets increasing accuracy and improving consistency of cracking & reseal pressure

VGT3 series



Instrumentation Gate Valves

- MWP : 3600 psig / 248 bar
- MWT : -23°C~232°C(-65°F~350°F) with PTFE Packing to 648°C (1200°F) with Grafoil Packing • Orifice : 10.0 • Size : 1/2"
- End Connections : Uni-Lok Tube Fitting, Female / Male NPT or ISO 7/1(PT)
- Body Materials : 316 SS, A105, Alloy 400
- Compact forged body desing • Back seat design provides anti-blow out of stem and seal • The hard faced seat ring and wedge enable longer life cycle • Packing bolt allows easy packing adjustment for leak tight seal • Handle Low operating torques

VP3 series



Plug Valves

- MWP : 3000 psig / 206 bar • MWT : -23°C~204°C(-10°F~400°F)
- Orifice : 4.4 / 7.2 • Size : 1/4"~1/2"
- End Connections : Uni-Lok Tube Fitting, Female / Male NPT or ISO 7/1(PT)
- Body Materials : 316 SS
- Simple desing • Quarter-Turn operating • Handle Low operating torques

INSTRUMENTATION Application

VL series



Bleed Valves

- MWP : 10000psig/689bar
- 316SS, Alloys

VPR series



Pressure Reducing Valves

- MWP : 5000psig/340bar
- Ideal valve for sampling lines with VBR

VBR series



Back Pressure Regulator

- Back pressure range : 0~125psig
- Ideal regulator for sampling lines with VPR



Instrumentation Tube Fittings

- Size : 1/16"~2" OD, 2mm~50mm OD
- End Connection : Uni-Lok Port, Pipe Threads, Welded Systems, Stub
- 316SS, Brass, Alloy
- Excellent finish level
- Radius junction in every elbow
- Uni-Lok own special hardening and heat treatment process

PTFE Fittings



- MWP : 125psig/8.6bar
- 1/4"~1/2", 6~12mm

Precision Pipe Fittings



- 1/8"~1"
- 316SS, Alloys

Hose/Push-On Connectors



- 1/8"~1"
- 316SS
- Hose & Push-On

Fusible Connectors



- 1/4"~1/2"
- 316SS
- Plug & Adapter Types
- 160~281°F



Seamless & Welded Tubing

- Size : 1/8"~1-1/2" OD, 6mm~25mmOD
- 304, 316, 317, 321, 904 & Alloys
- Straight and Coiled types
- Excellent finished inner & outer surface
- Exact dimensional tolerance
- Hardness for proper tubing
- Cold drawn and bright annealed process
- 100% ECT (Eddy Current Test)

UHP(Ultra High Purity) Application

VCD series



Diaphragm Valves

- MWP 17bar, 209bar
- Low & High Pressure
- Manual & Pneumatic Operation
- Shut Off & Block Type
- Size : 1/4" ~ 1"
- End Connection : Uni-Lok Port, UCR Butt Weld, Rotatable Male UCR
- UHP Grade 316LSS Materials • Elgiloy diaphragm material
- Minimal particle generation & moisture contribution

VCB series



Bellows Valves

- MWP 17bar
- Low Pressure
- Manual & Pneumatic Operation
- Bar Stock and Forged Body
- Size : 1/4" ~ 1", 15A ~ 50A
- End Connection : Uni-Lok Port, UCR Butt Weld, Flanged
- UHP Grade 316LSS Materials
- Electro-polished bellows
- Minimal particle generation & moisture contribution

VCC series



Welded Check Valves

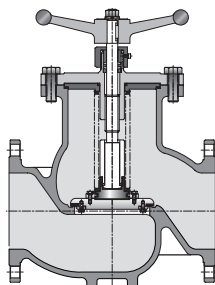
- MWP 206bar
- Fully Welded Construction
- Size : 1/4" ~ 1/2"
- End Connection : Uni-Lok Port, UCR Butt Weld
- UHP Grade 316LSS Materials
- Elgiloy spring material
- Noise free operation

RC series



UHP Regulator

- Max. Inlet Pressure : 600, 3500 psig
- Outlet Pressure : 30, 60, 100, 150 psig
- Size : 1/4" ~ 1/2"
- End Connection : Uni-Lok Port, UCR, Butt Weld
- Body Materials : UHP Grade 316LSS Materials
- Low internal volume
- Minimal particle generation & moisture contribution
- Excellent stability of set pressure with accuracy, sensitivity



Casting Bellows Valves

- MWP : 10 Kgf /cm²
- MWT : -10°C ~ 80°C
- Size : 50A, 65A, 80A, 100A, 125A, 150A~450A
- End Connections : Butt Weld, Flange
- Body Materials : SCS 16 (13)

UHP(Ultra High Purity) Application



Weld & UCR Fittings

- Size : 1/8"~1"
- End Connection : Uni-Lok Port, UCR, Butt Weld, Pipe Threads
- UHP Grade 316LSS Materials
- Superior finished inner surface by Uni-Lok's own EP and special cleaning process



Cylinder Connectors

- CGA, JIS, DISS Types
- Gland Size : 1/4" (standard), 3/8" & 1/2" (option)
- UHP Grade 316LSS Materials
- Patented bearing inclusive design enabling easy and safety installation



Bend Fittings

- Size : Pipe 8A~500A, Tube 1/4"~2"
- 304SS, 316SS, 316LSS
- BA, EP Grades
- Superior surface finished BA & EP grades
- Exact dimensional tolerance

GF series



Ultra High Purity Gas Filter

- Removal Rating : >99.9999999% at 0.003 μm
- Rated Flow : 15 SLPM, 30 SLPM, 60 SLPM
- Max. Working Pressure : 206 bar (3000 psig)
- Max. Operating Temperature : Ambient to 400°C
- External Leakage Allowance - He : $\leq 1 \times 10^{-9}$ atm.cc/s

**WITH THE SAME ATTITUDE OF
THE TIME OF BEGINNING**

UNILOK  **(주) 유니락**

본사 및 제1공장

인천광역시 남동구 고잔동 725-13번지
남동공단 152블럭 12롯데 ☎ 405-822
전화 : 032-822-6600
팩스 : 032-821-6604

Headquarters & 1st Factory

152 Block-12 Lot, Namdong Indus-Park, 725-13,
Gojan-Dong, Namdong-Gu, Incheon, Korea
Tel : +82-32-822-6600
Fax : +82-32-821-6604

제2공장

인천광역시 남동구 고잔동 684-7번지
남동공단 114블럭 8롯데 ☎ 405-818
전화 : 032-433-6601
팩스 : 032-441-7600

2nd Factory

114 Block-8 Lot, Namdong Indus-Park, 684-7,
Gojan-Dong, Namdong-Gu, Incheon, Korea
Tel : +82-32-433-6601
Fax : +82-32-441-7600

<도로명 주소>

본사 및 제1공장

인천광역시 남동구 남동동로 64번길 37
남동공단 152블럭 12롯데

제2공장

인천광역시 남동구 남동서로 83번길 87
남동공단 114블럭 8롯데