









# **2021**Featured Cryogenic Product Information

Stainless Steel Globe Valves

Stainless Steel Relief Device Diverter Valves

Brass High Pressure ASME Relief Valves

Brass ½" Pressure Build Regulator

Scan Below for The Complete RegO IG Literature Selection



#### **The Tradition Continues**





#### **History**

From the company that pioneered gas regulators, you expect nothing less than products that lead the industry. For over 100 years, we have been manufacturing gas regulating equipment to the highest standards of precision and durability—standards that we set.



#### **Quality Design & Manufacturing**

Our regulators have stood the test of time. The basic design is ingenious. The materials are top quality. The robot-assisted manufacturing is precise. RegO values the relationships we have with our customers, and we stand behind our products.



#### **Industries Best Partners to Help Support You**

Our distributors are the best in the industry. Distributors are indispensable contributors to our success and we treat them as the valuable partners they are. We support our distributors and OEMs with training, inventory and technical support around the world.



#### **10 Year Warranty on All Products**

Quality materials, innovations and long lasting design are built into every product we manufacture. That's how we can offer the RegO 10 Year Warranty, double that offered by most manufacturers.



#### **Cleaned for Oxygen Service**

All Industrial Gas products are cleaned for oxygen use according to CGA G-4.1 and EIGA Doc 200/17 to guarantee the highest possible safety level for use in oxygen and any cryogenic gas application.

#### **Built to Stand the Test of Time**



#### **Long Lasting Product**

With the largest installed base in the industry, RegO has over 110 years of field proven track record of long lasting service.

#### **Supply Chain Management**

RegO utilizes the Production Part Approval Process (PPAP) in our supply chain. Critical measurements are taken of all components parts to ensure quality and reliability.

### World-class quality—but don't just take our word for it.

RegO builds products that last. Our durable materials, proven designs, and rigorous testing, all add up to products designed for years of operations under harsh conditions. With internal standards like these, it's no wonder that RegO quality is recognized the world over.

#### 100% Testing

All our products are 100% tested at multiple steps in the process from incoming component quality to final assembly testing for leakage, lock up and set pressure.

#### **Manufacturing Excellence**

RegO uses top quality materials and precise robot-assisted manufacturing in our factories. That means every product has consistent quality.

#### **We Stand Behind Our Products**

RegO values the relationships we have with our customers, and we stand behind our products. In addition to an industry leading 10 year warranty on our products, we support our channel partners with ongoing training and technical assistance.







#### **8D Quality Metric Tracking**

D0 Plan

D1 Create A Team

D2 Define & Describe the Problem

D3 Contain the Problem

D4 Identify, Describe & Verify Root Causes

D5 Choose Corrective Actions

D6 Implement & Validate Corrective Actions

D7 Take Preventative Measures

D8 Congratulate Your Team

#### **Stainless Steel Globe Valves for Cryogenic Service SK Advantage Series Long Stem Threaded Connection**

#### **Application**

The SK Advantage Series of Stainless Steel Globe Valves are designed for handling cryogenic liquids through trailer, bulk vessels and piping configurations. Ideal service medium includes oxygen, nitrogen, krypton, carbon dioxide, dinitrogen monoxide, carbon dioxide, methane, ethane, ethylene, argon and LNG. Our Kold-Seal stem seal technology assures a tight seal preventing cryogen gas loss. The conical seat design allows exceptional flow, positive shutoff and less chance of debris accumulation in the flow path, all resulting in an overall longer service life. Maintenance on the packing and seat is quick and easy.

- Soft Seat: PCTFE material which is the most widely specified cryogenic seat material in the industry
- Construction: Bolted bonnet allows easy access to the valve internals for servicing
- Stem Packing: Proven Kold-Seal technology, Live Loaded PTFE
- Sizes: 1/2" through 2"

  Connection: Threaded NPT

- Service: Liquefied and vaporized atmospheric gases, LNG
  Temperature Rating: -320°F to +150°F (-198°C to +65°C)
  Pressure Rating: Cold, Non-Shock, 725 psig (50 barg) Class 300 (PN 50)
- Cleaned and packaged for oxygen service per CGA G-4.1
- Application: Multiple stem lengths available for selected service
- Packaging: Each valve is individually bagged and boxed to arrive in factory new condition until installation

#### **Materials**

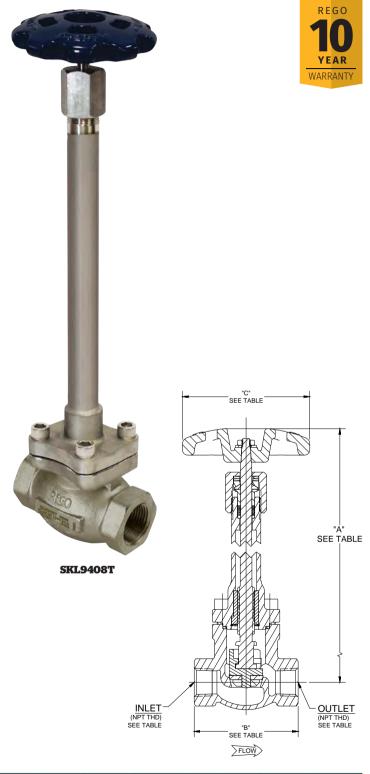
Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless Stee	el ASTM A351 CF8/ASTM A479 type
304	
Stem	Stainless Steel ASTM A582 S30300
SpringS	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality / Facility Features**

- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive

**TPED & PED Certified** 





Part Number	Size Inches	Size DN	Connection	A Inches	A mm	B Inches	B mm	C Inches	C mm	Cv	Kv	Weight lbs	Weight kg
SKL9404T	1/2"	15				3.09	78.48	4	102	5	4.30	3.47	1.68
SKL9408T	1"	25	Threaded	14.6	370	3.95	100.33	4	102	14	1.16	5.34	2.42
SKL9412T	1½"	40	NPT			5.00	127	-	127	28.3	21.9	9.48	4.30
SKL9416T	2"	50		14.5	368	5.92	150.37	5		53	45.8	16.3	7.39

## Stainless Steel Globe Valves for Cryogenic Service SK Advantage Series Medium Stem Threaded Connection

#### **Application**

The SK Advantage Series of Stainless Steel Globe Valves are designed for handling cryogenic liquids through trailer, bulk vessels and piping configurations. Ideal service medium includes oxygen, nitrogen, krypton, carbon dioxide, dinitrogen monoxide, carbon oxide, methane, ethane, ethylene, argon and LNG. Our Kold-Seal stem seal technology assures a tight seal preventing cryogen gas loss. The conical seat design allows exceptional flow, positive shutoff and less chance of debris accumulation in the flow path, all resulting in an overall longer service life. Maintenance on the packing and seat is quick and easy.

#### **Features**

- Soft Seat: PCTFE material which is the most widely specified cryogenic seat material in the industry
- Construction: Bolted bonnet allows easy access to the valve internals for servicing
- Stem Packing: Proven Kold-Seal technology, Live Loaded PTFE
- Sizes: ¼" through 2"
- Connection: Threaded NPT
- Service: Liquefied and vaporized atmospheric gases, LNG
- Temperature Rating: -325°F to +150°F (-198°Č to +65°C)
- Pressure Rating: Cold, Non-Shock, 725 psig (50 barg) Class 300 (PN 50)
- Cleaned and packaged for oxygen service per CGA G-4.1
- · Application: Multiple stem lengths available for selected service
- Packaging: Each valve is individually bagged and boxed to arrive in factory new condition until installation

#### **Materials**

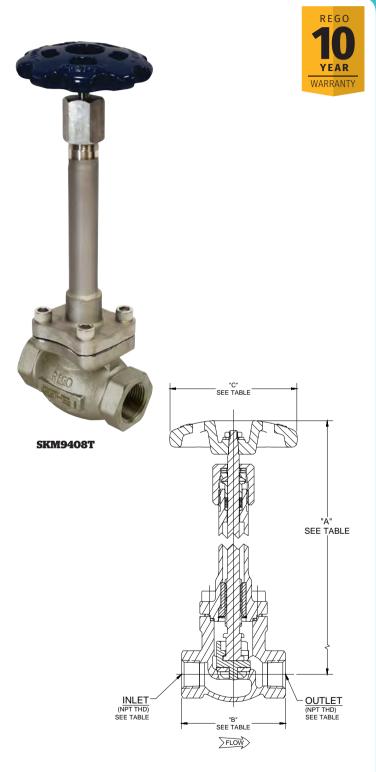
Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless Stee	el ASTM A351 CF8/ASTM A479 type 304
Stem	Stainless Steel ASTM A582 S30300
Spring	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality / Facility Features**

- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive



#### **TPED & PED Certified**



Part Number	Size Inches	Size DN	Connection	A Inches	A mm	B Inches	B mm	C Inches	C mm	Cv	Kv	Weight lbs	Weight kg
SKM9404T	1/2"	15				3.09	78.48	4	102	5	4.30	3.29	1.48
SKM9408T	1"	25	Threaded	10.6	070	3.95	100.33	4	102	14	12.10	5.02	2.27
SKM9412T	1½"	40	NPT	10.6	270	5.00	127.00	-	127	28.3	21.60	8.92	4.04
SKM9416T	2"	50				5.92	150.37	5	127	53	45.80	15.30	6.94



### **Stainless Steel Globe Valves for Cryogenic Service** SK Advantage Series Short Stem Threaded Connection

#### **Application**

The SKS Series globe valves short stem are designed for handling of vapor phase and cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Our time tested spring loaded stem packing and superior seat design provide for long life and easy maintenance. Recommended for vapor phase and intermittent cryogenic liquid use.

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
- Designed with the unique Kold-Seal™
  Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life
- Connections: Socket Weld & Butt Weld
- Sizes: 1/4" to 11/2"
- Bonnet Type: Bolted

- Pressure Rating: 720 psig (50 barg)
  Temperature Rating: -320°F (-196°C) to +150°F (+65°C)
  Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations Cleaned for Oxygen Service per CGA G-4.1



Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless Ste	eel ASTM A351 CF8/ASTM A479 type 304
Stem	Stainless Steel ASTM A582 S30300
Spring	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality/Facility Features**

- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive

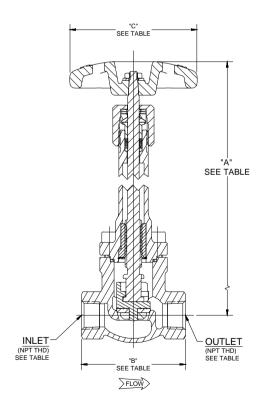
#### **PED Certified**







#### **SKS9408T**



Part Number	Size Inches	Size DN	Connection	A Inches	A mm	B Inches	B mm	C Inches	C mm	Cv	Kv	Weight lbs	Weight kg
SKS9404T	1/2"	15		0.7	470	3.09	78.48	4	400	5	4.30	2.62	1.19
SKS9408T	1"	25	Threaded NPT	6.7	170	3.95	100.33	4	102	14	12.10	4.10	1.86
SKS9412T	1½"	40		7.0	178	5.00	127.00	5	127	28.3	21.60	7.16	3.25

#### Stainless Steel Globe Valves for Cryogenic Service SK Advantage Series Long Stem, Inlet Socket Weld, Outlet Threaded NPT

#### **Application**

The SK Advantage Series of Stainless Steel Globe Valves are designed for handling cryogenic liquids through trailer, bulk vessels and piping configurations. Ideal service medium includes oxygen, nitrogen, krypton, carbon dioxide, dinitrogen monoxide, carbon dioxide, methane, ethane, ethylene, argon and LNG. Our Kold-Seal stem seal technology assures a tight seal preventing cryogen gas loss. The conical seat design allows exceptional flow, positive shutoff and less chance of debris accumulation in the flow path, all resulting in an overall longer service life. Maintenance on the packing and seat is quick and easy.

#### **Features**

- Soft Seat: PCTFE material which is the most widely specified cryogenic seat material in the industry
- Construction: Bolted bonnet allows easy access to the valve internals for servicing
- Stem Packing: Proven Kold-Seal technology, Live Loaded PTFE
- Sizes: ¼" through 2"
- Connection: Threaded NPT
- Service: Liquefied and vaporized atmospheric gases, LNG
- Temperature Rating: -320°F to +150°F (-198°Č to +65°C)
- Pressure Rating: Cold, Non-Shock, 725 psig (50 barg) Class 300 (PN 50)
- Cleaned and packaged for oxygen service per CGA G-4.1
- · Application: Multiple stem lengths available for selected service
- Packaging: Each valve is individually bagged and boxed to arrive in factory new condition until installation

#### **Materials**

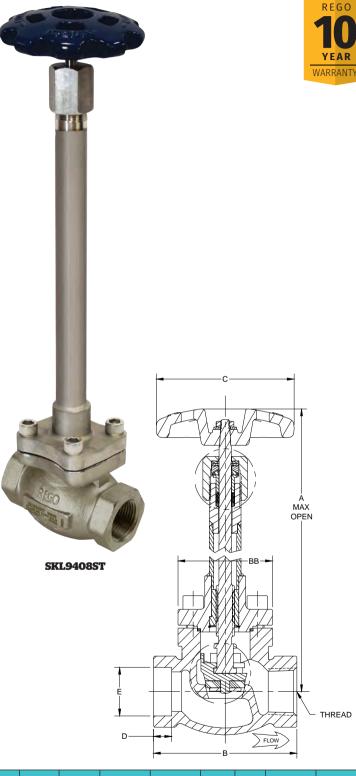
Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless Stee	el ASTM A351 CF8/ASTM A479 type
304	
StemS	Stainless Steel ASTM A582 S30300
Spring	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality / Facility Features**

- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive

**TPED & PED Certified** 





Part Number	Size Inches	Size	Connection		A A		В	В	С	С	Cv	17	TAToight lbg	Taloicht lea
		DN	Inlet	Outlet	Inches	mm	Inches	mm	Inches	mm	CV	Kv	weightins	Weight kg
SKL9404ST	1/2"	15					3.09	78.48	4	102	5	4.30	3.47	1.68
SKL9408ST	1"	25	Socket	Threaded	14.6	6 370	3.95	100.33	-	102	14	1.16	5.34	2.42
SKL9412ST	1½"	40	Weld	NPT			5.00	127	_	127	28.3	21.9	9.48	4.30
SKL9416ST	2"	50			14.5	368	5.92	150.37			53	45.8	16.3	7.39



#### **Stainless Steel Globe Valves for Cryogenic Service** SK Advantage Series Medium Stem, Inlet Socket Weld, Outlet Threaded NPT

#### **Application**

The SK Advantage Series of Stainless Steel Globe Valves are designed for handling cryogenic liquids through trailer, bulk vessels and piping configurations. Ideal service medium includes oxygen, nitrogen, krypton, carbon dioxide, dinitrogen monoxide, carbon oxide, methane, ethane, ethylene, argon and LNG. Our Kold-Seal stem seal technology assures a tight seal preventing cryogen gas loss. The conical seat design allows exceptional flow, positive shutoff and less chance of debris accumulation in the flow path, all resulting in an overall longer service life. Maintenance on the packing and seat is quick and easy.

#### **Features**

- Soft Seat: PCTFE material which is the most widely specified cryogenic seat material in the industry
- Construction: Bolted bonnet allows easy access to the valve internals for servicing
- Stem Packing: Proven Kold-Seal technology, Live Loaded PTFE Sizes: ¼" through 2"
- Connection: Threaded NPT
- Service: Liquefied and vaporized atmospheric gases, LNG Temperature Rating: -325°F to +150°F (-198°C to +65°C)
- Pressure Rating: Cold, Non-Shock, 725 psig (50 barg) Class
- Cleaned and packaged for oxygen service per CGA G-4.1
- Application: Multiple stem lengths available for selected service
- Packaging: Each valve is individually bagged and boxed to arrive in factory new condition until installation

#### **Materials**

Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless S	iteel ASTM A351 CF8/ASTM A479 type 304
Stem	Stainless Steel ASTM A582 S30300
Spring	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality/FacilityFeatures**

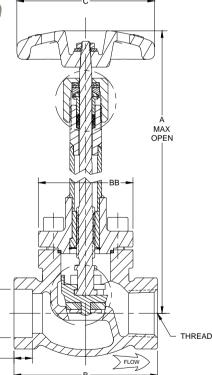
- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive



#### **TPED & PED Certified**







Davit Marcels on	art Number Size Size Connection	A A		В	В	С	С	Cv	Kv	Weight lbs	Weight kg			
Part Number	Inches	DN	Inlet	Outlet	Inches	mm	Inches	mm	Inches	mm	CV	KV	vveight ibs	weight kg
SKM9404ST	1/2"	15					3.09	78.48	4	102	5	4.30	3.29	1.48
SKM9408ST	1"	25	Socket	Threaded	10.6	270	3.95	100.33	4	102	14	12.10	5.02	2.27
SKM9412ST	1½"	40	Weld	NPT	10.6	10.6 270	5.00	127.00	-	127	28.3	21.60	8.92	4.04
SKM9416ST	2"	50					5.92	150.37	5		53	45.80	15.30	6.94

#### **Stainless Steel Globe Valves for Cryogenic Service** SK Advantage Series Short Stem, Inlet Socket Weld, Outlet Threaded NPT

#### **Application**

The SKS Series globe valves short stem are designed for handling of vapor phase and cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Our time tested spring loaded stem packing and superior seat design provide for long life and easy maintenance. Recommended for vapor phase and intermittent cryogenic liquid use.

#### **Features**

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
  Designed with the unique Kold-Seal™
  Conical PCTFE Seat: provides exceptional flow; bubble tight seal;
- less chance of debris trapped in the seat and longer service life
- Connections: Socket Weld & Butt Weld

- Connections: Socket Weld & Butt Weld
  Sizes: ¼" to 1½"
  Bonnet Type: Bolted
  Pressure Rating: 720 psig (50 barg)
  Temperature Rating: -320°F (-196°C) to +150°F (+65°C)
  Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations
  Cleaned for Oxygen Service per CGA G-4.1



Body	Stainless Steel ASTM A351 CF8
Bonnet and Tube Stainless St	teel ASTM A351 CF8/ASTM A479 type 304
Stem	Stainless Steel ASTM A582 S30300
Spring	Stainless Steel ASTM A313 S30200
Packing	Live Loaded PTFE Packing
Gasket	PTFE 25% Glass Fill
Seat Disc	PCTFE ASTM D1430
Seat Retainer	Brass ASTM B16
Bonnet Screws	ASTM B16 C36000
Handwheel	Painted Aluminum

#### **Quality/FacilityFeatures**

- Material traceability in accordance with BS EN 10204 3.1
- CE Marking per European Pressure Equipment Directive

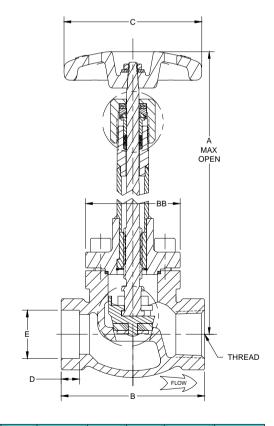
#### **PED Certified**







#### SKS9408T



	Size	Size	Connection		A	A	В	В	С	С				
Part Number	Inches	DN	Inlet	Outlet	Inches	mm	Inches		Inches	mm	Cv	Kv	Weight lbs	Weight kg
SKS9404ST	1/2"	15			6.7	170	3.09	78.48	4	100	5	4.30	2.62	1.19
SKS9408ST	1"	25	Socket Weld	Threaded NPT	6.7		3.95	100.33	4	102	14	12.10	4.10	1.86
SKS9412ST	1½"	40			7.0	178	5.00	127.00	5	127	28.3	21.60	7.16	3.25



## Stainless Steel Globe Valves for Cryogenic Service ESK Advantage Series

#### **Application**

ESK series cryogenic emergency shutoff valves are designed for handling cryogenic liquids through ISO tanks, trailers and piping configurations. Ideal service medium includes oxygen, nitrogen, krypton, carbon dioxide, dinitrogen monoxide, carbon dioxide, methane, ethane, ethylene, argon and LNG. In the event of a fire or manual trigger, the safety valve automatically closes to prevent product spillage to the environment.

#### **Features**

- Innovative RegO design builds upon years of proven experience with SK Advantage Globe Valve series to provide all of the benefits of the SK Advantage series and ensure the safest possible operation and longevity of transport equipment
- Cable attached to locking mechanism allows for remote, easy shutoff in the event of emergency
- When exposed to fire, thermal fuse (optional) triggered to shutoff valve automatically
- Operating lever with low torque design enables easy reopening of valve following shutoff
- Actuator position can be quickly and easily changed to accommodate any installation
- Compact, light weight design very suitable for installation in the limited space available in transport equipment and reduces overall payload
- One piece body globe valve design avoids leakage both externally and internally
- Soft Seat: PCTFE material, which is the most widely specified cryogenic seat material in the industry, reduces contraction to ensure zero leakage under cryogenic temperatures
- Construction: Bolted bonnet design allows easy access to the valve internals for faster, easier serviceability
- Stem Packing: Proven Kold-Seal technology, Live Loaded PTFE
- Sizes: 1" to 2"
- Connection: Socket Weld & Butt Weld that can be welded in place without removal of topworks to save installation time, labor, and cost
- Temperature Rating: -320°F to +150°F (-198°C to +65°C)
- Pressure Rating: Cold, Non-Shock, 725 psig (50 barg)
   Class 300 (PN 50)
- Cleaned and packaged for oxygen service per CGA G-4.1
- 100% factory tested

#### **Materials**

Body	Stainless Steel CF8
Cover	Stainless Steel CF8/304
Stem	Stainless Steel S30300
Packing	PTFE
Seat Seal	PCTFE
Seat Cage	Brass B16

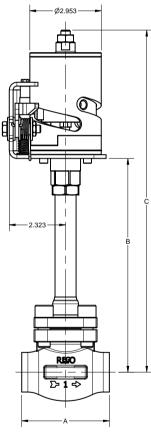
#### **Quality / Facility Features**

Material traceability in accordance with BS EN 10204 3.1



**ESK Series** 

\*Patent Pending



#### **Ordering Information**

Part Number	Size Inches	Size DN	Connection	A Inches	A mm	B Inches	B mm	C Inches	C mm	Cv	Kv	Weight lbs	Weight kg
ESK9408SW	1"	25		3.6	92	8.8	224	14.7	373	14	12.1	10.18	4.62
ESK9412SW	1½"	40	Socket Weld	4.7	121	8.3	85	14.2	360	28.3	21.6	13.87	6.39
ESK9416SW	2"	50		5.7	147	7.5	191	13.4	340	53	45.8	20.48	9.29
ESK9408BW	1"	25		3.6	92	8.8	224	14.7	373	14	12.1	10.18	4.62
ESK9412BW	1½"	40	Butt Weld	4.7	121	8.3	85	14.2	360	28.3	21.6	13.87	6.39
ESK9416BW	2"	50		5.7	147	7.5	191	13.4	340	53	45.8	20.48	9.29

SW =Socket Weld; BW = Butt Weld



<sup>\*</sup>Please consult the factory for additional options

# Brass High Pressure ASME Relief Valves PRV19534K Series

#### **Application**

The RegO PRV19534 Series relief valves are designed for CO2 and other industrial gases and for cryogenic service in the vapor space. Apply on piping systems, liquid cylinders or mini-bulk cryogenic containers where an ASME relief valve is required. Compatible with all oxygen, nitrogen, argon, helium, LNG and CO2.

#### **Features**

- All valves are cleaned and packaged for oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure
- Full flow at 110% of set pressure
- Temperature range -320°F to +165°F (-196°C to +74°C)
- · Rated for gas service only, not liquid
- Setpoint tolerance +/- 3%
- Available in brass with settings from 800 to 1,000 psig
- Builds off proven experience of and further extends PRV9400 series offerings
- ASME rated National Board Certified
- Easy to read color coded psig / bar labels
- Tamper resistant
- Adapters provide standard pipe thread connections for venting gas to the outdoors (B-9412-4, sold separately)
- Repeatable performance
- 100% factory tested
- In liquid service be sure to use with a candy cane riser (sold separately)
- In liquid service be sure to use with a candy cane riser (Sold Separately)

#### **Flow Performance**

For set pressures 800-1000 psig, capacity is 0.805 SCFM of air per PSIA of flow pressure. Flow pressure per ASME is 10% above set pressure or +3 PSIG, whichever is greater.

#### **Materials**

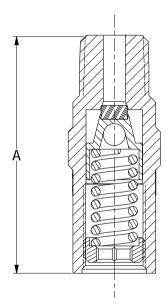
Body	Brass ASTM B16 UNS C36000
Spring	Stainless Steel ASTM A313
Seat Retainer	Brass ASTM B16 UNS C36000
Seat	PCTFE (Kel –F)
Pipe-Away Adapter	Brass ASTM B16 UNS C36000

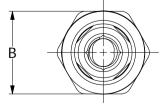
The use of a candy cane riser is recommended for liquid phase installation of these PRVs.



WARRANTY







Part Number	Material	Pressure Setting Range psig (barg)	Inlet M.NPT	"A" Inches (mm)	"B" Inches (mm)	Orifice Size Inch² (mm²)	Kd Value	Pipe-Away Adapter P/N
PRV19534K	Brass	800- 1000 (55.1 - 68.9)	1/2"	2.9 (73.1)	1.0 (25.4)	0.266 (171.6)	0.79	B-9412-4





## RegO<sup>®</sup> Stainless Steel Relief Device Diverter (3-Way) Valve DV4108 Series

#### **Application**

The DV4108 Diverter Valve Series provides a lightweight, simplified solution for the isolation of pressure relief valves during testing and change out of relief valves and burst discs without requiring evacuation of the vessel and guaranteeing that one port will be available to work during the operation. This all stainless steel diverter valve is ideal for use with oxygen, nitrogen, krypton, carbon dioxide, nitrous oxide, dinitrogen monoxide, carbon oxide, methane, ethane, ethylene, argon, and LNG.

#### **Features**

- High flow rates complement the RegO AR and PRV series pressure relief valves
- Outlet ports sufficiently spaced to allow AR and PRV series relief valves as well as burst discs to be easily installed and removed
- · Compact, lightweight design
- Unique resilient seat design with Dyneon<sup>™</sup> TFM 1600 material provides smooth operation and bubble tight seal in cryogenic conditions
- Special seal design using proven Kold-Seal technology, live loaded PTFE in conjunction with wave springs and added sealing protection prevent internal and external leakage (EN 1626:2008 compliant)
- Clearly labeled, heavy duty lever arm and locking pin provide positive isolation verification
- · Various connection and configuration options available
- · Bracket included for easy installation
- Service: Liquefied and vaporized atmospheric gases, LNG
- Temperature rating: -320°F to +150°F (-196°C to +65°C)
- Pressure rating: Cold, non-shock, 720 PSIG (50 BAR) Class 300 (PN 50)
- 100% factory tested; each valve is individually bagged and boxed to arrive in factory new condition until installation
- Cleaned and packaged for oxygen service per CGA G-4.1

### PED Certified **(**



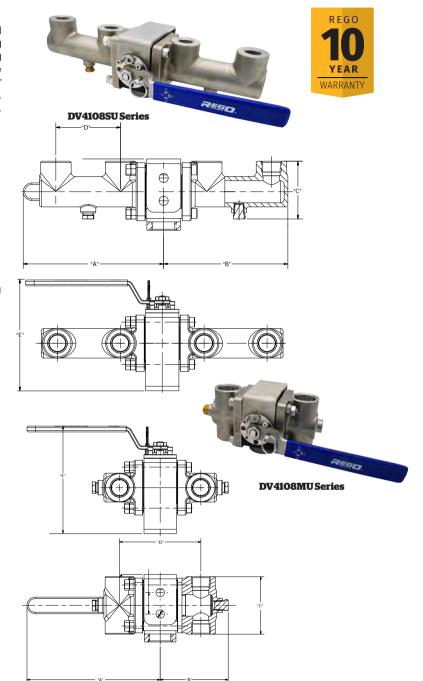
#### **Materials**

Body	. 316 Stainless Steel ASTM A351-CF-8M (DIN 1.4408)
Ball	316L Stainless Steel ASTM A276 (DIN 1.4006)
Seat	Dyneon TFM 1600
End caps	304 Stainless Steel ASTM A743 (DIN 1.4027)
Wave springs	Stainless Steel ASTM A313 (DIN 1.4544)
Wave spring v	vashers 304 Stainless Steel ASTM A182 (DIN 1.5415)
Packing	Live Loaded PTFE
Stem	316L Stainless Steel ASTM A276 (DIN 1.4006)
Lever	304 Stainless Steel ASTM A182 (DIN 1.5415)
Bracket	304 Stainless Steel ASTM A182 (DIN 1.5415)

#### **Ordering Information**

Part Number	Inlet Inches (mm)	Outlet Inches (mm)	Outlet Connection Type	Outlet Port Orientation	Bleeder Connection	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	E Inches (mm)	Open Port	Cv (Kv)
DV4108SU04		1/2									One Side	12.0 (10.4)
<b>D</b> 1.100000		(DN15)		4 ports, all	1/4" NPTF.						Both Sides	21.7 (18.8)
DV4108SU06		3/4		opposite of	same side as		6.42	2.98	3.34		One Side	13.3 (11.5)
DV41000000		(DN20)		Inlet	inlet		(163)	(76)	(85)		Both Sides	22.5 (19.5)
DV4108SU08		1		linet	IIIICt						One Side	16.0 (13.8)
DV41003000	1	(DN25)	Thread			7.29				5.90	Both Sides	25.3 (21.9)
DV4108SM04	(DN25)	1/2	NPTF			(185)				(150)	One Side	11.0 (9.5)
DV41003W04		(DN15)									Both Sides	20.0 (17.3)
DVAAOOCMOC		3/4		1 port up, 1	1/4" NPTF,		3.72	3.2	4.45		One Side	12.7 (11.0)
DV4108SM06		(DN20)		port down on	90° from inlet		(95)"	(80)	(113)		Both Sides	21.6 (18.7)
DV4400CM00		1		each side		İ					One Side	14.1 (12.2)
DV4108SM08		(DN25)									Both Sides	23.2 (20.1)

Other outlet port orientation options available; please contact your Sales representative with inquiries.



#### RegO® Stainless Steel Relief Device Diverter (3-Way) Valve **DV4108SD Series for PRVs**

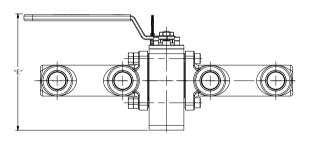
**Application**The DV4108SD04 Diverter Valve Series provides a lightweight, simplified solution for the isolation of pressure relief valves during testing and change out of pressure relief valves and burst discs without requiring evacuation of the vessel and guaranteeing that one port will be available to work during the operation. This all stainless steel diverter valve is ideal for use with oxygen, nitrogen, krypton, carbon dioxide, nitrous oxide, dinitrogen monoxide, carbon oxide, methane, ethane, ethylene, argon, and LNG.

The DV4108SD04 has the inlet port in the upper position for the easy installation of the Micro-Bulk's relief pressure line, and the four-outlet port oriented at down position to avoid the humidity going into the PRVs and guarantee proper operation.

### PED Certified ( )

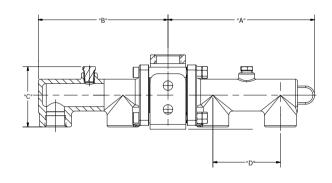
#### **Materials**

Body 316 Stainless Steel ASTM A351-CF-8M (DIN 1.4408)
Ball316L Stainless Steel ASTM A276 (DIN 1.4006)
Seat Dyneon TFM 1600
End caps304 Stainless Steel ASTM A743 (DIN 1.4027)
Wave springsStainless Steel ASTM A313 (DIN 1.4544)
Wave spring washers 304 Stainless Steel ASTM A182 (DIN 1.5415)
PackingLive Loaded PTFE
Stem316L Stainless Steel ASTM A276 (DIN 1.4006)
Lever304 Stainless Steel ASTM A182 (DIN 1.5415)
Bracket304 Stainless Steel ASTM A182 (DIN 1.5415)









#### **Ordering Information**

Part Number	Inlet Inches (mm)	Outlet Inches (mm)	End Connection Type	Outlet Port Orientation	Bleeder Port Orientation	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)	E Inches (mm)	Open Port	Cv (Kv)
DV4108SD04		1/2									One Side	12.0 (10.4)
DV41065D04		(DN15)									Both Side	21.7 (18.8)
DV44095D06	1"	3/,"	Thread	4 ports, all	1/4" NFPT,	7.29	6.42	2.98	3.34	5.90	One Side	13.3 (11.5)
DV4108SD06	(DN25)	(DN20)	NPTF	opposite of inlet	same side as inlet	(185)	(163)	(76)	(85)	(150)	Both Side	22.5 (19.5)
DV44095D09		1"									One Side	16.0 (13.8)
DV4108SD08		(DN25)									Both Side	25.3 (21.9)

Other outlet port orientation options available; please contact your Sales representative with inquiries.



### Cryogenic ½" Pressure Builder PB504 Series

#### **Application**

PB series cryogenic regulators are primarily designed to maintain the pressure in cryogenic containers; they may also be used as a line regulator for cryogenic lines and cold gas lines. They are specifically useful in installations where the precision in pressure control and flow capability are important. For use with oxygen, nitrogen, argon, LNG and CO<sub>2</sub>.

#### **Features**

- All parts are copper alloy (brass), PTFE and stainless steel—materials selected specifically for compatibility with cryogenic temperatures down to -320°F. (-196° C)
- One-piece PTFE Poppet seat design eliminates possible leak paths at cryogenic temperatures and provides better guidance for improved seating, ensuring a positive shutoff.
- High and low pressure regulators are the same compact size designed to fit in close quarters
- Customizable pressure settings between 20 550 psig (1.4 37.9 barg)
- · Interchangeable with existing cryogenic regulator units
- Inlet filter (150 Mesh) helps prevent foreign material from entering the regulator
- Easier to service, use an allen wrench versus large crescent wrench
- Less field repair because diaphragm is squeezed versus twisted
- Locknut is provided to maintain adjusting screw setting
- Maximum inlet pressure of 600 psig (41.4 barg)
- Cleaned for oxygen service per CGA G-4.1
- 100% Factory Tested
- Copper Backcap Gasket reduces the possibility of external leakage at cryogenic temperatures, as the contraction coefficient is similar to that of brass

#### **Materials**

Brass
Brass
PTFE
Stainless Steel
PTFE
Bronze

#### PB504 Series part number configuration



#### **Ordering Information**

Ordering mitorinati		
Part Number	Inlet / Outlet Connections (F.NPT) A Inches (mm)	Delivery Pressure Setting Range psig (barg)
PB504-020 to 070		20 - 75 psig (1.4 - 5.2 barg)
PB504-071 to 175		50 - 180 psig (3.4 - 12.4 barg)
PB504-176 to 300	½" (12.70)	150 - 300 psig (10.3 - 20.7 barg)
PB504-301 to 465		250 - 465 psig (17.2 - 32.1 barg)
PB504-466 to 550		400 - 550 psig (27.6 - 37.9 barg)

Delivery pressure setting psig specified by suffix in PB regulator number. Example: An order for PB504-125 has a maximum inlet pressure rating of 600 psig (41.3 barg) and is set at an outlet pressure of 125 psig (8.6 barg).

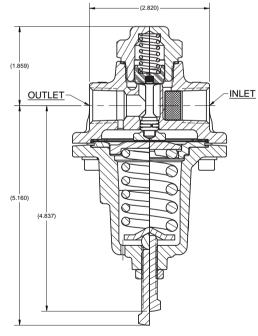


REGO 10 YEAR WARRANTY

**PB504** 

#### NEW! FLOW CALCULATOR TOOL AVAILABLE

Contact your local sales representative for more information.





# RegO® brings decades of cryogenic experience to liquid and gas hydrogen applications.

When you partner with RegO, you get 100% tested products backed by our global support network and our industry-leading 10-year warranty. From regulators to valves, our products are easy to use, and designed for maximum performance and long life.









### In the past year RegO launched more than 30 cryogenic product innovations.

Every year we improve our products to make them easier to use, last even longer, work even better, and lower your cost of ownership.









See the complete line at regoproducts.com/cryo

Or call us at: 1.336.226.3244







DIVERTER VALVES



ANGLED RELIEF VALVES



REGULATORS



MANIFOLDS



