

**CRYOGENIC VACUUM JACKETED  
CHECK VALVE**

**CK8082 CHECK  
VALVE**

0 to 300 PSIG



**Valve Size:**  
Standard: 1/2" to 4"



**APPLICATIONS**

- Cryogenic Storage Tanks
- Cryogenic Transportation Trailers
- Cryogenic Vacuum Jacketed Piping Systems
- Cryogenic Processing Plants
- Vacuum Insulated Piping Systems
- Cryogenic Over-Road Trailers



**FEATURES**

- Vacuum Jacketed or Non-Jacketed
- Bubble Tight Shut-Off
- Redundant Packing Seals
- Axially Bolted Bonnet or High Seat Loading
- Low Heat Leak Extension
- Self-Centering Plug Seal
- Quality Investment Cast Body for High Flow Values
- Easy In-line Maintenance



**TECHNICAL DATA**

**Materials of Construction:**

All Major Structural Components are 300 Series Stainless Steel

Seat Seal .....	PCTFE
Packing .....	PTFE or Graphite
Gasket .....	Glass Filled PTFE

**Testing:**

External Leakage .....	Mass spec. to 1x10-9 scc GHe/sec
Seat Leakage .....	Bubble Tight to 150 PSIG
Proof Pressure .....	330 PSIG (ambient)



**OPERATING RANGES**

Temperature..... -456° F to +300° F  
(-273° C to +149° C)

Max. Operating Pressure 300 PSIG

# CV8082 CHECK VALVE

## ORDERING GUIDE

CK8082 - 088 - O WPG 1 - LJ

**BASE MODEL NUMBER**

CK8082 Check Valve

**VALVE SIZE**

084 - 1/2"  
086 - 3/4"  
088 - 1"  
812 - 1-1/2"  
816 - 2"  
824 - 3"  
832 - 4"

**CLEANING**

O - Oxygen (CGA G-4.1)  
C - Standard

**CONFIGURATION**

WPG - Pipe Size, Globe  
WTG - Tube Size, Globe

**SPECIAL ADD ON**

S10 - Schedule 10  
316 - SS Jacket  
NJ - Non-Jacketed  
LJ - Loose Jacket  
CE - PED  
TPED - PED  
KGS - Upon Request  
TR - Material Traceability

**PACKING**

1 - PTFE  
6 - Graphite

All vacuum jacketed valves are insulated with four layers of radiation shielding.

Example: CK8082-088-OWPG1-LJ



## PERFORMANCE CHARACTERISTICS

Valve Size	Conductive Heat Leak (BTU/HR to 20°K)	Cooldown Weight (#)	Flow Coefficient (C <sub>v</sub> )		
			Globe	Y	Angle
1/2"	5.9	2.7	6.6	9	8
3/4"	6.6	3.3	8	12	10
1"	10.4	3.8	14	22	17
1-1/2"	21.8	7.0	34	47	41
2"	27.3	10.2	50	96	60
3"	68.1	30.8	139	162	145
4"	79.9	51.2	182	288	248