

# 50B-4KG1KOL Globe 2050B-4KG1KOL Angle

# Pressure Relief Valve with Anti-Cavitation Trim



Sizes 3" thru 8"



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2050B-4KG1KOL (Angle)

- For Onshore and Offshore Applications
- KOL Anti-Cavitation Trim Seat:
  - Protects Against Cavitation
  - Reduces Noise and Vibration
  - Extends Valve Life
- Compliant with NFPA 20 Standards

The Cla-Val Globe Pattern Model 50B-4KG1KOL and Angle Pattern Model 2050B-4KG1KOL relief valve is designed to relieve excess pressure in a fire protection system, while eliminating the damaging effects of cavitation.

The valve features an adjustable pressure setting, fast opening to maintain steady line pressure, and gradual closing for surge free operation.

### **KOL Anti-Cavitation Seat Features & Benefits**



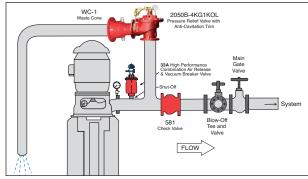
- Ideal for applications with high pressure differentials
- Meets flow requirements set forth by applicable approval agencies
- Provides a safer work environment by preventing valve damage
- Teflon-Coated Seat available in 316 Stainless Steel, Monel and Super Duplex Stainless Steel

### **Typical Applications**

### Offshore Platform Pump Relief

# Model 403-11 Todel 20 B-4KG1KOL Model X43HL

### **Onshore Fire Pump Relief**



# Optional UL Listed Materials for Seawater and Severe Service Applications:

- Nickel Aluminum Bronze (NAB) ASTM B148 Alloy C95800
- Monel QQ-N-288 Comp B ASTM A494 Grade M30H
- · Cast Steel ASTM A216 Grade WCB
- 316 Stainless Steel ASTM A743 Grades CF3M and CFM8
- Super Austenitic Stainless Steel ASTM A351 Grade CK3MCuN (SMO 254)
- Super Duplex Stainless Steel ASTM A890 Grade 5A (CE3MN)

### **Specifications**

Globe: 3" - 8" flanged; Angle: 3" - 8" flanged

FM Approved, UL and ULC Listed

**End Details** 150 and 300 ANSI B16.42

Class 150 - 250 psi Max; Class 300 - 300 psi Max **Pressure Ratings** 

Water, to 180°F Max.

Adjustment Range Available in the following relief pressure ranges:

20-200 psi (150 Class) 100-300 psi (300 Class)

**Optional Coating** 

Protective epoxy resin coating of wetted surfaces

of main valve iron components

UL listed HNFX EX2855)

### **Standard Valve Materials**

Main Valve Body & Cover: Ductile Iron ASTM A536 Grade 65-45-12 Main Valve Trim: Teflon Coated Stainless Seat, Stainless Steel Stem Pilot Control System: Cast Bronze with Stainless Steel Trim

### **Materials for Seawater and Severe Service Applications**

### Optional UL Listed Materials:

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Trim and pilot control system material options available to suit specific applications

### **Purchase Specifications**

The Fire Pump Pressure Relief Valve shall modulate to relieve excess pressure in a fire protection system, maintaining constant pressure in the system regardless of demand changes. It shall be pilot controlled and back pressure shall not affect its set point. It shall be actuated by line pressure through a pilot control system and open fast in order to maintain steady system pressure as system demand decreases. It shall close gradually to control surges and shall re-seat drip-tight within 5% of its pressure setting.

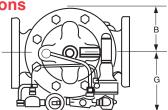
The main valve shall be of the hydraulically-operated, pilot-controlled, diaphragm-type, globe or angle valve. It shall be equipped with a tefloncoated anti-cavitation seat, a grooved stem guided at both ends, and a resilient disc with a rectangular cross section, being contained on 3-1/2 sides. No external packing glands shall be permitted and the diaphragm shall not be used as a seating surface. The pilot control shall be a directacting, adjustable, spring-loaded, diaphragm-type valve designed for modulating service to permit flow when controlling pressure exceeds spring setting. This valve shall be UL Listed and Factory Mutual approved. It shall be the Model 50B-4KG1KOL (globe) or Model 2050B-4KG1KOL (angle) Pressure Relief Valve as manufactured by Cla-Val Newport Beach, California.

### \*Special Note:

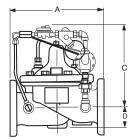
The Model 50B-4KG1KOL/2050B-4KG1KOL Pressure Relief Valve is available with 300# ANSI inlet flange and 150# ANSI outlet flange for high pressure systems where 300# flange connections are required, to allow for adapting of a discharge cone (generally supplied with 150# flange) to accommodate "atmospheric break" at relief valve discharge.

This relief valve, with 300# / 150# flanges is available on special order, and is UNDERWRITERS LABORATORIES LISTED AND FACTORY MUTUAL APPROVED.

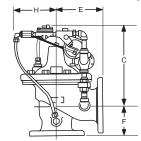
### **Dimensions**



Model 50B-4KGKOL Globe



Model 2050B-4KG1KOL Angle



We recommend providing adequate space around valve for maintenance work.

Valve Size (Inches)	3"	4"	6"	8"	10"	
Threaded Ends	12.50					
A 150 Flanged	12.00	15.00	20.00	25.38	29.75	
300 Flanged	13.25	15.62	21.00	26.38	31.12	
300 X 150	12.88	15.31	20.56	25.88	30.44	
В	4.56	5.75	7.88	10.00	11.81	
С	12.50	13.00	14.31	16.31	18.00	
D	2.66	3.19	4.31	5.31	9.25	
Threaded Ends	6.25					
E 150 Flanged	6.00	7.50	10.00	12.75	14.88	
300 Flanged	6.38	7.88	10.50	13.25	15.56	
Threaded Ends	4.50					
F 150 Flanged	4.00	5.00	6.00	8.00	8.62	
300 Flanged	4.38	5.31	6.50	8.50	9.31	
G & H	7.75	7.88	8.50	9.75	13.25	

Valve Size (mm)	80	100	150	200	250
Threaded Ends	318				
A 150 Flanged	305	381	508	645	756
300 Flanged	337	397	533	670	790
300 X 150	327	389	522	657	773
В	116	146	200	254	300
С	1318	330	363	414	457
D	65	81	109	135	235
Threaded Ends	159				
E 150 Flanged	152	191	254	324	378
300 Flanged	162	200	267	337	395
Threaded Ends	114				
F 150 Flanged	102	127	152	203	219
300 Flanged	111	135	165	216	236
G & H	197	200	216	248	337

### Valve Capacity

Valve Sizes in Inches:	3"	4"	6"	8"	10"
NFPA 20 Maximum Recommended GPM	500	1000	2500	4000	11000

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