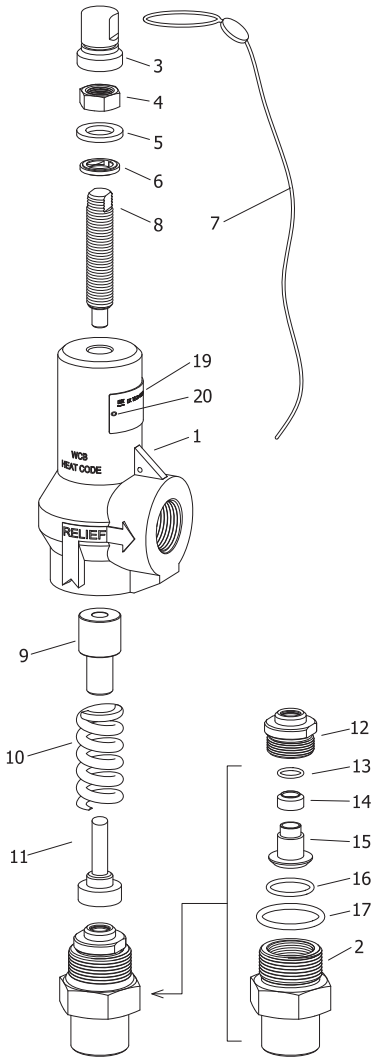




V64 Series

PED Certified Relief Valves

Catalog No. V64-3
May 2011



Valves are supplied with protective painted surface.

Features

- **Wide Media Applications:**
Air, Gases, CNG, and Liquid relief applications.
- **High Performance Soft Seat:**
provides repetitive & reliable bubble-tight seal.
- **Orifice:** 0.404 in. (10.26 mm)
- **Working Pressure:** 6000 psi (413 bar)
- **Cracking Pressure Range:**
15 to 5500 psig (1.03 to 379 bar)

Table 1. Materials of Construction

No.	Component	Valve Body Materials	
		Carbon Steel	Stainless Steel
1	Body	ASTM A216 Gr.WCB	ASTM A351 CF8M
2	Seat Frame	JIS G4051 S20C	SS316 /ASTM A479, A276
3	Cap	JIS G4051 S20C Zinc plated	JIS G4051 S20C Zinc plated
4	Jam Nut	JIS G4051 S20C	
5	Flat Washer		
6	Bonded Seal	NBR inner ring bonded to carbon steel outer ring	FKM inner ring bonded to stainless steel outer ring
7	Lead Seal Wire	Stainless steel	
8	Adjustable Screw	JIS G4051 S20C	SS304
9	Spring Keeper	SS316 /ASTM A479, A276	
10	Spring	17-7PH / AMS 5678 D	
11	Disc	Type 630 ASTM A564	
12	Insert Holder	FKM (See Table 2 for optional O-rings)	
13	Seat O-Ring		
14	Seat	Polycarbonate	
15	Seat Insert	SS316 /ASTM A479, A276	
16	Insert O-Ring	FKM (See Table 2 for optional O-rings)	
17	Body O-Ring		
18	Name Plate		
19	Rivet Bolt	Stainless steel	

● Wetted parts are listed in blue.

V64 Series Technical Data

Working Pressure	Cracking Pressure Range	Orifice	Orifice Area
6000 psig (413 bar)	15 to 5500 psig (1.03 to 379 bar)	0.404 in. (10.26 mm)	0.128 in. ² (82.58 mm ²)

Table 2. Elastomer O-ring Technical Information

Component	Temp. Rating °F (°C)		Recommended Media
	Min.	Max.	
FKM (Viton)	-15 (-26)	400 (204)	Hydrocarbons, H ₂ S, Mineral Oil/Grease, Silicone Oil/Grease, Fuels, Chlorinated Hydrocarbons.
HNBR	-25 (-31)	325 (162)	Hydrocarbons, CO ₂ , Dilute Acids, Water and Steam Less than 300 °F.
EPDM	-70 (-56)	250 (121)	Glycols, Organic Acids, Inorganic Acids, Hydraulic Fluids, Solvents.

Operation

When the inlet pressure overcomes the set spring pressure, it causes the valve to open, releasing flow to bypass and thereby balance the system pressure.

Factory Test

Every valve is factory tested for cracking and reseal performance.

Pressure Equipment Directive 97/23/EC Certifications

Module	B	D
Certificate No	HSBI-10-11-045	HSBI-10-11-046



Ordering Number and Dimensions

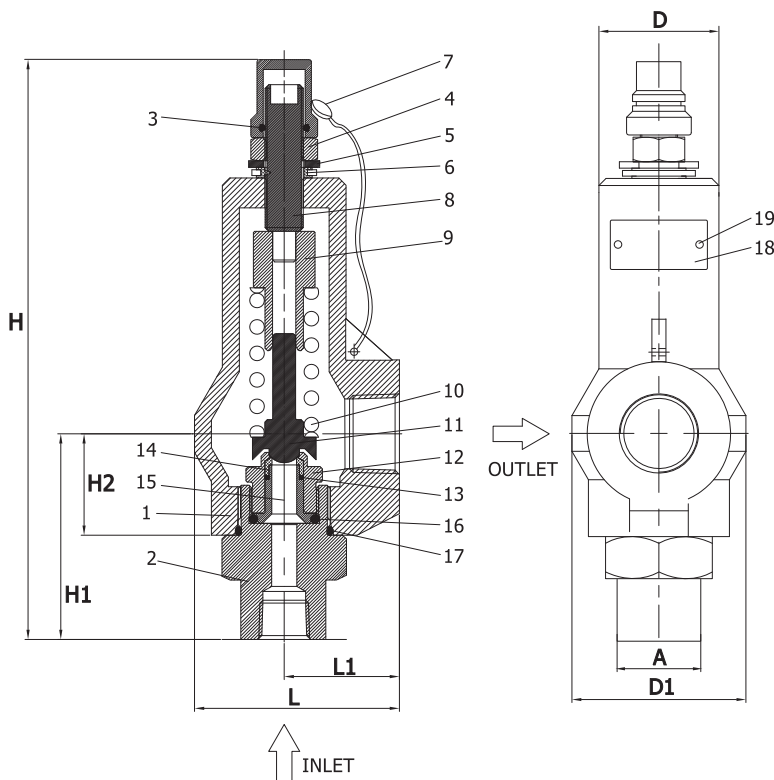


Table 3. Flow Rate

Flow rate measured by overpressure of 110% or 3 psig.

Media	Air	Gas	Water
Density	0.0764	0.0458	62.306
SG	1	0.6	1
Temp.	60 °F	60 °F	70 °F
Factor	Kd Factor 0.838	Kd Factor 0.838	K Factor 0.62
Set Pressure psig (bar)	SCFM	SCFM	GPM
15 (1.03)	64	80	13
20 (1.3)	74	93	14
25 (1.7)	84	105	16
30 (2.0)	94	117	17
50 (3.4)	137	171	22
100 (6.8)	245	306	32
150 (10.3)	353	441	39
200 (13.7)	462	576	45
250 (17.2)	570	711	50
300 (20.6)	678	846	55
400 (27.5)	894	1117	63
500 (34.4)	1111	1387	71
600 (41.3)	1327	1657	77
700 (48.2)	1543	1927	84
900 (62.0)	1976	2467	95
1000 (68.9)	2192	2737	100
1500 (103)	3274	4088	122
1750 (120)	3815	4763	132
2000 (137)	4355	5438	141
2500 (172)	5437	6789	158
3000 (206)	6519	8139	173
4000 (275)	8682	10840	200
4500 (310)	9763	12191	212
5000 (344)	10845	13541	224
5500 (379)	11927	14892	235

Table 4. Basic Ordering Number and Dimensions

Basic Ordering Number	End Connections		Dimensions in. (mm)								
	Inlet	Outlet	H	H1	H2	L	L1	D	D1	A	
V64-	F8N16N-	1/2 in. Female NPT	1 in. Female NPT	9.09 (231)	3.34 (84.80)	1.64 (41.80)	3.32 (84.50)	1.87 (47.50)	2.00 (51.00)	2.36 (60.00)	1.38 (35.00)
	F12N16N-	3/4 in. Female NPT									
	MF8N16N-	1/2 in. Male NPT									
	MF12N16N-	3/4 in. Male NPT									
	MF16N-	1 in. Male NPT									

All dimensions shown are for reference only and are subject to change.

Ordering Information

Select the desired valve basic ordering number in the table 4, applicable O-Ring designator, Spring designator, and Valve body material in the table below.

O-Ring Material Designators	Spring Cracking Pressure Designators Unit : psig	Valve Body Material Designators	Example of a complete ordering Number.
Applicable to components number of 13, 16, and 17 in the table 1. • Nil: Standard FKM O-Ring • HBN: HNBR • EP: EPDM	• 1 : 15-40 • 2 : 41-100 • 3 : 101-215 • 4 : 216-350 • 5 : 351-750	• 6 : 751-1000 • 7 : 1001-1800 • 8 : 1801-3701 • 9 : 3701-5000	• C: Carbon Steel • S: Stainless Steel
			V64-F12N16N-EP-8-C Factory Set Valve To order, specify the set pressure on the valve ordering number. i.e., V64-F-8N16N-1200-C

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. Dk Tech accepts no liability for any improper selection, installation, operation or maintenance.