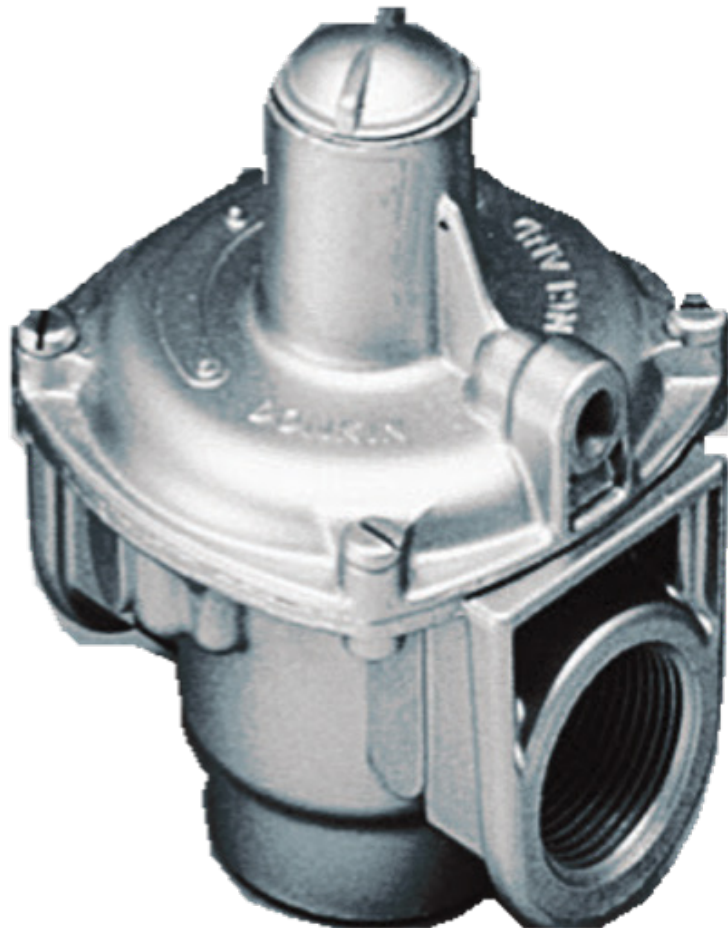


SERVING THE GAS INDUSTRY WORLDWIDE

Safety Relief Valves HON 226R & 226VR/HVR-MK3

Product Information



Honeywell

INTRODUCTION, APPLICATION, FEATURES, TECHNICAL DATA

Introduction

- The HON 226R 1" is a Low Pressure, Direct Acting, diaphragm operated Relief Valves.
- The HON 226VR & 226HVR MK3 are High Pressure Direct Acting, diaphragm operated Relief Valves.
- Use with confidence on natural and manufactured gases of non-aggressive nature, including Nitrogen, Carbon Dioxide, Propane, Butane etc.

Application

- A dependable means of protecting regulator downstream systems, storage vessels and other systems against overpressure by relieving the excess gas pressure.
- Designed to provide protection against excessive pressure in systems and vessels.
- Suitable for use as creep relief and as part of a stream discrimination safety system.

Features

- Light Weight Construction
- Direct-Acting
- Inlet Pressure Test Points
- Installation at any angle
- Size 1"
- Threaded connection to BS EN 10226 (ISO 7, BS21 Rc) or NPT

Installation

- Any orientation, but moisture or debris must not ingress the vent hole.
- Relief pressure must be vented to a safe area.

SERVICE CONDITIONS			
SIZE	MODEL	MAX. INLET PRESSURE	OUTLET PRESSURE RANGE
1"	226R - Mk4	350 mbarg	15 to 300 mbarg
	226VR - Mk3	up to 25 barg	25 to 550 mbarg
	226HVR - Mk3	up to 25 barg	0.5 to 3.5 barg

Temperature Range: -20°C to +60°C

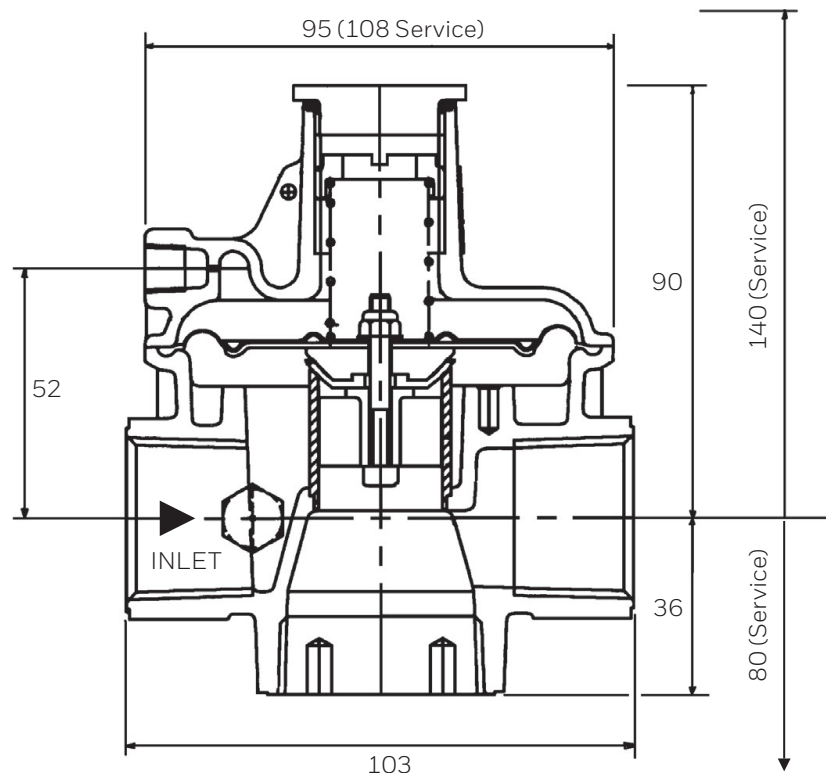
HON 226R MK4: (1")

SPRING SELECTION			
SPRING		RELIEF PRESSURE RANGE	
NUMBER	COLOUR	MBAR	INS WG
859	Red	15 to 45	6 to 18
861	Brown	35 to 85	14 to 34
1307	Blue	85 to 120	34 to 48
1303	Green	125 to 200	50 to 80
869*	Silver	150 to 300	60 to 120

* For special applications contact Honeywell for details

MATERIALS OF CONSTRUCTION	
COMPONENT	MATERIAL
Body & Casings	Aluminium: BS1490 LM24
Diaphragm & Valve Seat	Nitrile Synthetic Rubber EN 549
Valve Orifice	Brass: BS 1449-CZ121
Diaphragm Plates	Carbon Steel: Zinc Plated BS 1449 & BS 1705
Diaphragm Guide	Acetal
Top Cap, Valve Support & Body Plug	Aluminium: BS 1474-2011
Fasteners	Carbon Steel Plated

Dimensions & Weights



Weight : 0.63Kg
 Orifice Size : 25mm
 Vent Connection : Rc 1/8
 Pressure Test Point : Rc 1/8
 All dimensions in mm

RELIEF CAPACITY

INLET PRESSURE IN MBARG	RELIEF CAPACITY IN SMCH (SG 0.6)			
	SPRING NO. 859 SET POINT: 30 MBARG	SPRING NO. 861 SET POINT: 50 MBARG	SPRING NO. 861 SET POINT: 85 MBARG	SPRING NO. 1307 SET POINT: 100 MBARG
35	1.5			
40	12.5			
45	34			
50	49			
55	60	2		
60	69	6		
65	76	25		
70	76	48		
75	83	61		
80	89	74		
85	91	83		
90	93	90		
95	95	93	1	
100	99	97	6	
105	101	99	11	
110	103	102	49	4
115	106	104	71	35
120	109	108	87	60
125	111	110	95	79
130	114	112	104	93
135	116	114	108	101
140	118	118	114	107
145	119	119	118	114
150	120	120	122	118

HON 226VR & HVR MK3: (1")

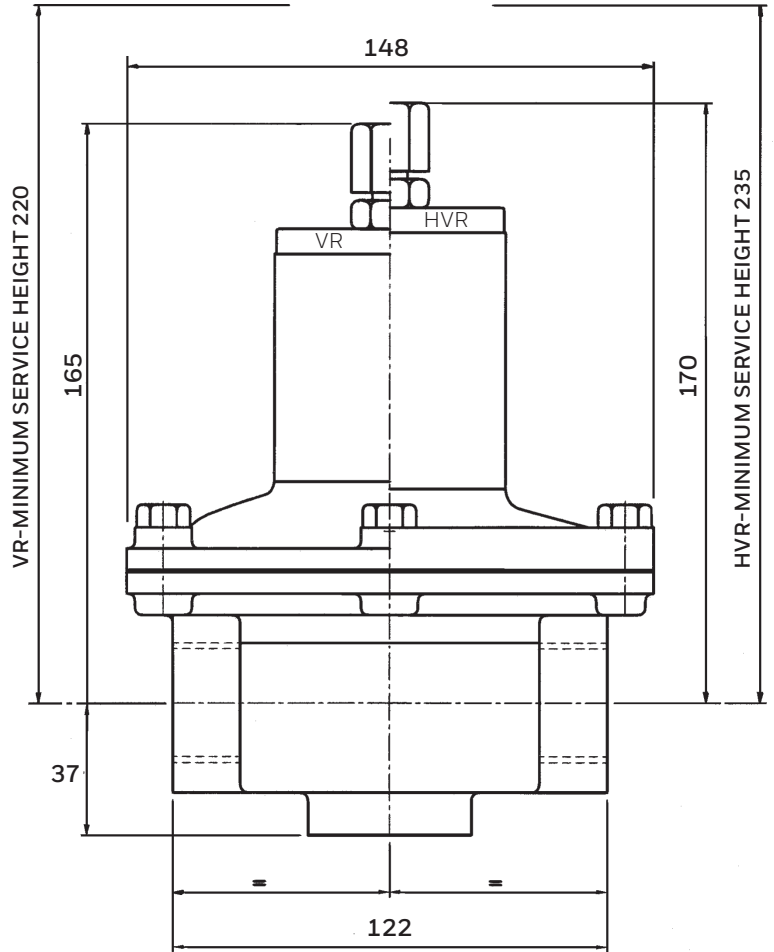
Introduction

- The HON 226VR & HVR-Mk3 are High Pressure, diaphragm operated, internally impulsed Relief Valves, having external relief pressure spring adjustment.
- Both models are available with 7 or 25 barg inlet Pressure Rating.

SPRING SELECTION			
HON 226 VR-MK3			
SPRING		RELIEF PRESSURE RANGE	
NUMBER	COLOUR	MBARG	INS WG
1072	Red (2.18 dia)	25 to 42	10 to 16.5
1090	Red (2.64 dia)	40 to 60	16 to 24
1091	Yellow	55 to 85	22 to 34
1092	Green	80 to 125	32 to 50
1093	Brown	125 to 210	50 to 80
1094	Blue	200 to 325	80 to 130
1095	Black	320 to 550	128 to 220

HON 226 HVR-MK3			
SPRING		RELIEF PRESSURE RANGE	
NUMBER	COLOUR	BARG	PSIG
1094	Blue	0.50 to 0.65	7.25 to 9.4
1095	Black	0.60 to 1.0	8.7 to 14.5
1282	Red/Yellow	1.0 to 2.0	14.5 to 29.0
1283	Red/White	2.0 to 3.5	29.0 to 51.7

Dimensions & Weights



Weights : 226VR Mk3 5.0Kg's
 226HVR Mk3 5.5Kg's

All dimensions in mm

ORIFICE SIZE	
ORIFICE SIZE	VALVE TRAVEL
25mm	7mm max

MATERIALS OF CONSTRUCTION	
COMPONENT	MATERIAL
Body & Spring Housing	Ductile Iron: to BSEN 1563Grade EN-GJS-400-18
Diaphragm & Valve Seating	Nitrile:
Valve Guide	Acetal
Diaphragm Plate, Spring Adjuster & Fasteners	Carbon Steel zinc plated
Seals	Nitrile
Orifice	Brass

RELIEF CAPACITIES: 226VR/HVR-MK3 (1")

HON 226 VR-MK3					
SPRING NUMBER	PRESSURE SETTING	FLOW AT % OVER PRESSURE IN SM ³ /HR (SG 0.6)			
	MBARG	25%	50%	75%	100%
1072	25	34	45	58	70
	40	48	65	85	95
1090	40	40	81	95	114
	60	61	105	130	150
1091	55	50	88	112	132
	85	60	110	150	165
1092	80	60	92	140	165
	125	65	133	181	215
1093	125	110	160	180	205
	210	140	205	251	280
1094	200	145	200	235	270
	325	190	270	320	370
1095	320	145	240	300	340
	550	260	380	480	575

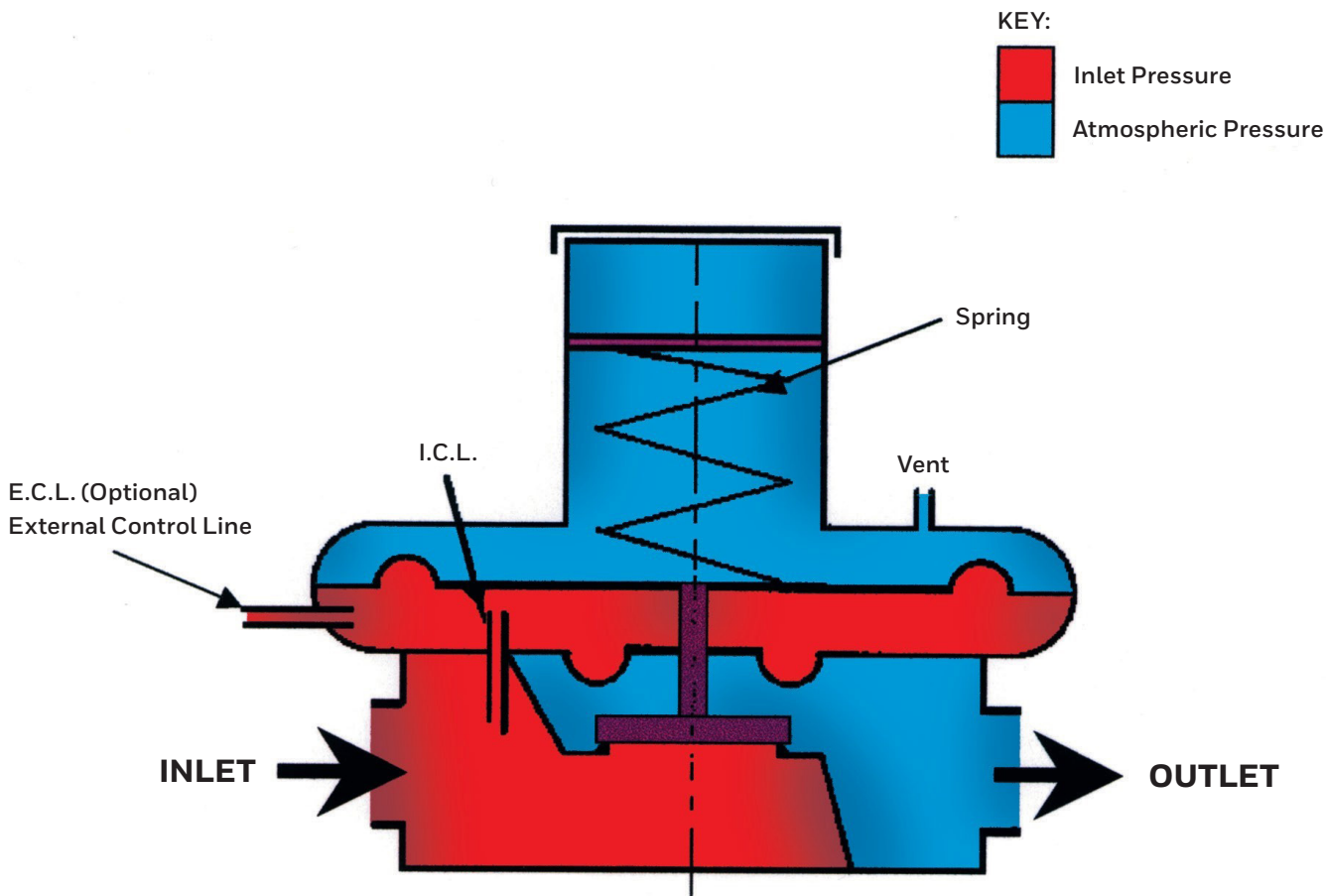
HON 226 HVR-MK3					
SPRING NUMBER	PRESSURE SETTING	FLOW AT % OVER PRESSURE IN SM ³ /HR (SG 0.6)			
	MBARG	25%	50%	75%	100%
1094	0.50	210	300	380	444
	0.65	220	355	450	519
1095	0.60	210	309	390	470
	1.00	330	450	581	670
1282	1.50	305	470	575	700
	2.00	375	600	790	925
	2.50	350	655	800	920
1283	2.00	325	556	724	870
	2.50	370	600	768	955
	3.00	380	705	948	1196
	3.50	400	750	1075	1328

All above values are for relief valves having 1" connections with 1 metre of equal diameter pipe fitted to outlet.

The tabulated values are obtained from test results with an expected accuracy $\pm 20\%$

Note: back pressure from use of extended pipe runs with elbows and bends will reduce the stated flow values.

SECTIONAL ARRANGEMENT



Note: ECL only available on sizes 1¼" and above

SPARES KITS		
SIZE	TYPE	SPARES KIT REFERENCE
3/4" & 1" sc	226R MK4 Relief Valve	200/WS-024
3/4" & 1" sc	226VR MK3 Relief Valve	201/WS-020
3/4" & 1" sc	226HVR MK3 Relief Valve	201/WS-023
1¼" & 1½" sc	226R MK3 Relief Valve	201/WS-001
2" sc	226R MK3 Relief Valve	202/WS-001
1¼" & 1½" sc	226HR MK3 Relief Valve	201/WS-004
2" sc	226HR MK3 Relief Valve	202/WS-002
DN 50 FL	226R MK2 Relief Valve	200/WS-004
DN 50 FL	226HR MK2 Relief Valve	200/WS-015
3" sc & DN 80 FL	226R MK2 Relief Valve	200/WS-005
3" sc & DN 80 FL	226HR MK2 Relief Valve	200/WS-006

For more information

To learn more about Honeywell's Advanced Gas Solutions, visit www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

Honeywell Bryan Donkin Gas Technologies
Ltd. Enterprise Drive, Holmewood
Chesterfield S42 5UZ, England
Tel: +44 (0)1246 501-501
Fax: +44 (0)1246 501-500
www.honeywellprocess.com

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