

Safety Cut-Off Valve

SERIES 315

Introduction

The Series 315 is a safety cut-off valve, over pressure (OPCO), or under and overpressure (UPCO/OPCO) diaphragm actuated, operated by means of an external impulse signal.

Use with confidence on natural and manufactured gases of non-aggressive nature, including Nitrogen, Carbon Dioxide, Propane, and Butane etc.

Application

Designed as an integral unit on all body sizes of the following regulators.

Series 204
Series 276

Features

- Automatic operation with no external power supply.
- Accurate pressure sensing and repeatability.
- Positive shut-off.
- Cartridge design allows quick removal of unit from the regulator body, minimising maintenance down time.
- Manual reset after normal conditions have been restored.
- Rapid response to pressure load change.

Service Conditions

Valve Chamber Rating (Main line pressure)	70 barg (PN10)
Temperature Range	-20°C to +60°C

Pressure Range

Model	Cut-Off Pressure Range	
	Under Pressure	Over Pressure
315 LP	35 to 200 mbarg	55 to 600 mbarg
315 MP2	0.05 to 1.6 barg	0.5 to 2.9 barg
315 MP4	0.05 to 1.6 barg	2 to 4 barg
315 HP	0.12 to 3.5 barg	3 to 14 barg

Options

- Open/Closed position indicators.
- Proximity or microswitch for remote indication of valve Open/Closed.

Technical Data



SS.315.00.1000

Materials of Construction

Component	Material
Body, Valve Chamber & Top Casing	Plated Carbon Steel: BS 970 220M070
Spindles	Stainless Steel: BS 970 316S31
Valve Seating	Polyurethane
Diaphragm: LP/MP HP	Nitrile EN 278 Epichlorhydrin
Latch & Spring Adjuster	Brass: BS 2874 CZ121
Rollers	Stainless Steel: AISI 440C
Diaphragm Plates	Aluminium: BS 1474 2011
Springs	Coated Spring Steel; BS 5215 HS3

Recommended Settings

Minimum Overpressure (OPCO) setting is - 35 mbarg or 10% above regulator outlet set-point, whichever is the greater value

Maximum Underpressure (UPCO) setting is - 20 mbarg or 10% below regulator setting, whichever is the greater value.

Spring Selection

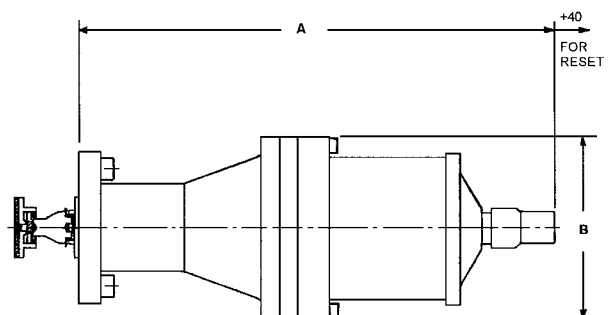
Model	Type	Pressure Range Mbarg	Spring			
			Number	Colour		
LP	OPCO	55 to 100	1158	White		
		100 to 140	1159	Gold		
		130 to 250	1160	Purple		
		250 to 400	1130	White/Yellow		
LP	UPCO	330 to 600	1131	White/Green		
		35 to 150	1269	Plated 1.70dia		
		60 to 200	1270	Plated 1.83dia		
MP2	OPCO	500 to 880	1132	White/Blue		
		700 to 1100	1133	White/Red		
		1000 to 1800	1134	White/Grey		
		1500 to 2900	1135	White/Brown		
	MP2	UPCO	50 to 150	1104	Purple	
			100 to 300	1105	Black	
MP4	UPCO	250 to 700	1255	Green		
		640 to 1600	1028	Black/White		
		2000 to 4000	1192	White/Purple		
		50 to 150	1104	Purple		
MP4	UPCO	100 to 300	1105	Black		
		250 to 700	1255	Green		
		640 to 1600	1028	Black/White		
		3000 to 14000	1197	Blue		
		HP	UPCO	120 to 470	1104	Purple
				450 to 820	1105	Black
600 to 1800	1255			Green		
2000 to 3500	1028			Black/White		

Dimensions & Weights

Model	A	B	Weight Kg's
LP	290	110	7.5
MP2	290	110	7.5
MP4	290	110	7.5
HP	310	110	7.5

All Dimensions in mm

CONNECTIONS:
Control Line (impulse): Rc 1/4
Vent: Rc 1/8



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