JOHNSON valves
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JV080060
(Waferchek)

**Safety Check Valve
Gas Duty
Swing Type
Check (Non-Return) Valve
Flange Wafer Type**

**Designed specifically for use on
Pressure Reduction Stations only.**

**It can not be used as a standard Non-Return Valve,
since it does not provide a positive seal.**

A JV080060 is a wafer type, self acting offset disc check valve, designed for fitting between flanges.

The valve is primarily intended for use in conjunction with safety cut-off valves (slam-shut) in gas pressure regulator installations feeding a common district network or industrial premises. Its purpose is to automatically identify and initiate the isolation of a faulty (excess throughput) regulator, whilst protecting a healthy regulator against inadvertent shut-off.

The regulator locations may be adjacent, as a twin or multiple streams, or in widely separated single installations, since the incorporation of a wafer check valve at each individual regulator outlet renders each installation self-contained. This enables a common pressure setting to be adopted on all the slam-shut valves incorporated in the same gas supply network.

Features & Benefits

- Suitable for gas duty
- Very low pressure drop
- Nitrile seals
- Wafer type
- Space saving
- Horizontal installation only

Pressure & Temperature

Working pressure max:-

7 Bar

Reverse Pressure Differential:-

1 Bar

Temperature Range:-

-20°C to 60°C

MATERIALS	
Body	Cast Steel
Disc	Aluminium
Spindle	Stainless Steel
Seal	Nitrile

DN	50	80	100	150	200	250	300
A	43.4	66.4	86.7	136.4	181.4	226.4	271.4
B	50	80	100	150	200	250	300
C	106	140	161	216	273	330	384
D	19	19	22	22	22	35	35
E	21	37	50	83	113	140	172
Leakage (SG 0.6) Sm³/hr*	10.6	14.2	19.8	22.7	28.3	31.2	31.2
Leakage (SG 0.6) scfh*	375	500	700	800	1000	1100	1100
Weight Kg	0.9	1.35	2.35	3.62	5.45	26.5	33.5

* Valve does not have a tight seal and a small amount of reverse leakage will take place, this will not exceed the flows given in the table above for reverse pressure differential of up to 1 barg.

Pressure Loss

Due to the light door construction, the pressure drop is very low, e.g., 1.25mbarg (0.5" wg), when the door is in the fully open position after which.

Square Law Flow (approx.) applies. Ht STP conditions the pressure drop may be obtained directly from the graph.

Pressure drop in mbarg

$$H_m \times \frac{1.013}{Pu} \text{ m bar}$$

Pressure drop in ins. w.g.

$$H_i \times \frac{14.7}{Pu} \text{ in w.g.}$$

Where Hm and Hi = pressure drop from graph
Pu = Upstream pressure, bar abs, or p.s.i.a
(dependent upon formula used)

Flow x 1000   Scfh 0.6 Gas

Flow x 1000   M³/Hour 0.6 Gas