

# Biffi Pneumatic Quick Exhaust Valve

The Pneumatic Quick Exhaust Valve (QEV) is a 3/2 valve with high exhaust capacity, fast response and stability, featuring one inlet port (P), one cylinder port (A) and one exhaust port (R).



## Product Data Sheet

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# Pneumatic Quick Exhaust Valve

## Product Overview

When the pneumatic QEV is fed with proper air pressure, the exhaust port is closed by internal diaphragm and the inlet port is connected to cylinder by flexure of internal diaphragm.

When the pneumatic QEV is not fed, the cylinder port is connected to the exhaust port and the cylinder is quickly depressurized. In the Bypass version, the cylinder port is in communication with the supply port. The Bypass function prevents hunting on actuator operation for modulating application. The Bypass can be excluded.

## General Application

Highly reliable and field proven components for low pressure applications.

## Approvals

IEC 61508-1 to 7:2010	- suitable for use in SIL 3
CU TR 012/2011	- certification for the safety of the equipment in explosionproof environment
CU TR 010/2011	- certification for the safety of machinery
Machinery Directive 2006/42/EC	
PED Directive 2014/68/EU	
ATEX Directive 2014/34/UE	



## Technical Data

Supply Pressure:	0 - 12 barg
■ Working Medium:	Instrument air, sweet gas Special version for sour gas
■ Seal Materials according to DIN/ISO 1629:	
– FKM/FPM (Viton®)	with a working temperature from -20 °C to +180 °C
– MFQ (Fluorosilicone)	with a working temperature from -60 °C to +100 °C
– Special version (ask to factory)	

## Performances

Table 1. CV values in accordance to EN1267 performed with water

Model	CV supply	CV exhaust
2P.28.J.3.A.3.5.Y.Z	2.20	6.60
2P.28.J.3.A.4.5.Y.Z	2.20	18.8
2P.28.J.3.A.5.5.Y.Z	9.72	18.8

Table 2. Exhaust Capacity

Model	Exhaust time (s) 500 l tank (from 6 to 0.5 bar)
2P.28.J.3.A.3.x.y.z	50 s
2P.28.J.3.A.4.x.y.z	27 s
2P.28.J.3.A.5.x.y.z	27 s



## Product Data Sheet

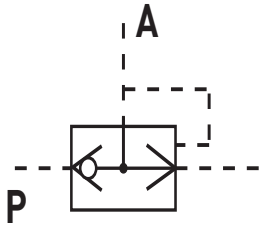
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# Pneumatic Quick Exhaust Valve

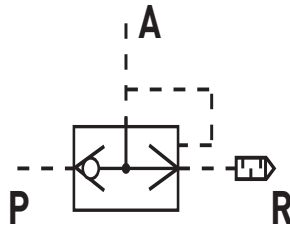
## Accessories

The pneumatic quick exhaust valve can be supplied, on request, complete with dust excluder and with exhaust flow regulator.

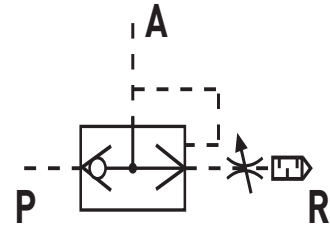
### Without By-Pass



2P . 283 . A - Standard Version

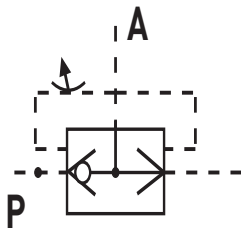


2P . 283 . F - With Filter

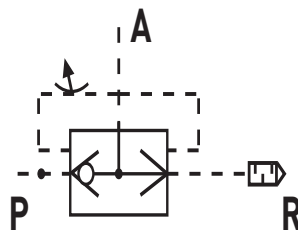


2P . 283 . D - With Exhaust  
Flow Regulator + Filter

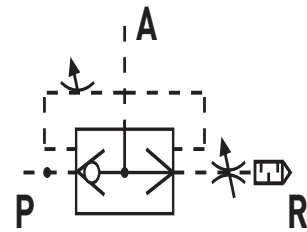
### With By-Pass



2P . 287 . A - Standard Version



2P . 287 . F - With Filter



2P . 287 . D - With Exhaust  
Flow Regulator + Filter



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# Pneumatic Quick Exhaust Valve

## Dimensional

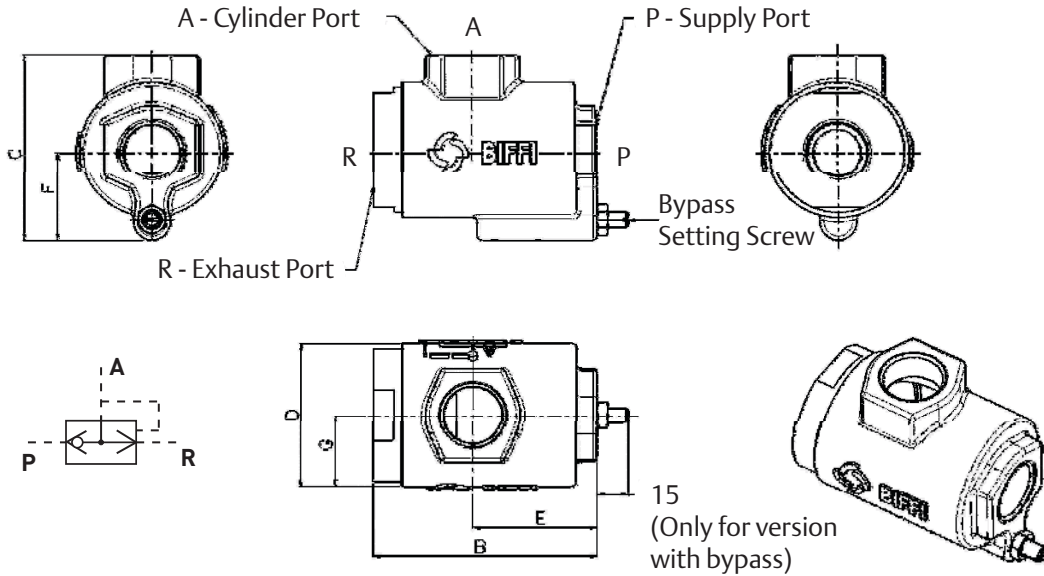


Table 3.

Size (refer to coding column W)	P	A	R	B	C	D	E	F	G	Weight
3	1/2" NPT	1/2" NPT	1/2" NPT	69 mm	50.5 mm	42 mm	36 mm	21 mm	21 mm	0.7 Kg
3 with bypass	1/2" NPT	1/2" NPT	1/2" NPT	80 mm	60 mm	40 mm	47 mm	30 mm	20 mm	0.7 Kg
4	1/2" NPT	1" NPT	1" NPT	108 mm	94 mm	70 mm	60 mm	46 mm	35 mm	1.82 Kg
5	1" NPT	1" NPT	1" NPT	108 mm	94 mm	70 mm	60 mm	46 mm	35 mm	1.82 Kg
5 with bypass	1" NPT	1" NPT	1" NPT	108 mm	94 mm	70 mm	60 mm	46 mm	35 mm	1.82 Kg



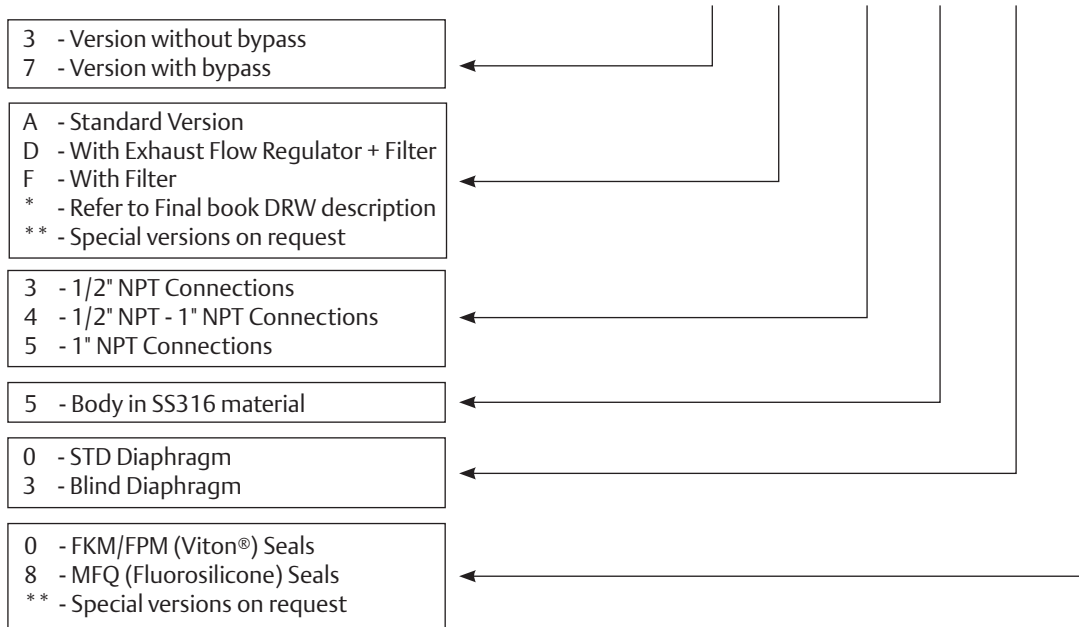
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# Pneumatic Quick Exhaust Valve

## Ordering Code

### Model 2 P . 2 8 J . K . W . X . Y . Z



#### Note:

- Coding Chart K and Z

Option \*\*, please contact factory if you have specific needs or clarifications not covered by the PDS.

- Coding Chart Y

Option 0, normally used as a general purpose (standard air discharge action)

Option 3, normally used when present Positioner and/or double exhaust stroking time capability.

