



## ABS Pneumatic Actuated Butterfly Valve.

- Isolating and Regulating Flow
- ABS Disc, Body Glass reinforced Polypropylene
- Liner Material Options, EPDM and FKM.
- 10 Bar Rated on Water at 20°C
- Sizes from 1½" - 8"
- Suitable for Temperatures up to 60°C
- Powerful Pneumatic Actuator Fitted

### > Description

#### Durapipe Type FK Butterfly Valve with HP Actuator

The PA5601 butterfly valve offers high performance and excellent flow characteristics, with minimal pressure drop over a wide range of fluid applications. The body is manufactured from Glass Reinforced Polypropylene and the disc in ABS and offered in sizes from 1½" to 8" DN50-DN200. Options for either EPDM or FKM liners.

The oval holes in the valve body (DN50 to DN200) allow connection to the following flange drilling standards:

BS-EN 1092 PN10 (Formally BS4504 PN10)

ASA B16.5 class 150

BS10, Table D/E

The actuator is our type HP pneumatic, with options for both spring return and double acting and is ideal for use on isolation (open / closed) duty. The actuator is a modular design to ISO 5211 and has Namur mountings for pilot solenoid valves and electrical feedback signaller's. The actuator has ATEX, PED, CE and Sil2 approval/certification.

### > On request

Electric Actuation Available  
PVC Versions



### Description

A combination of a PVC butterfly valve, supplied by Aliaxis (Durapipe), fitted to a powerful pneumatic actuator. Body Glass reinforced Polypropylene and ABS disc with options for both EPDM or FKM liners. Actuator supplied with spring return or double acting option.



### Beschreibung

Eine Kombination aus einer PVC-Absperrklappe von Aliaxis (Durapipe) und einem leistungsstarken pneumatischen Antrieb. Gehäuse aus glasfaserverstärktem Polypropylen und ABS-Scheibe mit Optionen für EPDM- oder FKM-Auskleidungen. Antrieb mit Federrückstellung oder doppelt wirkender Option.



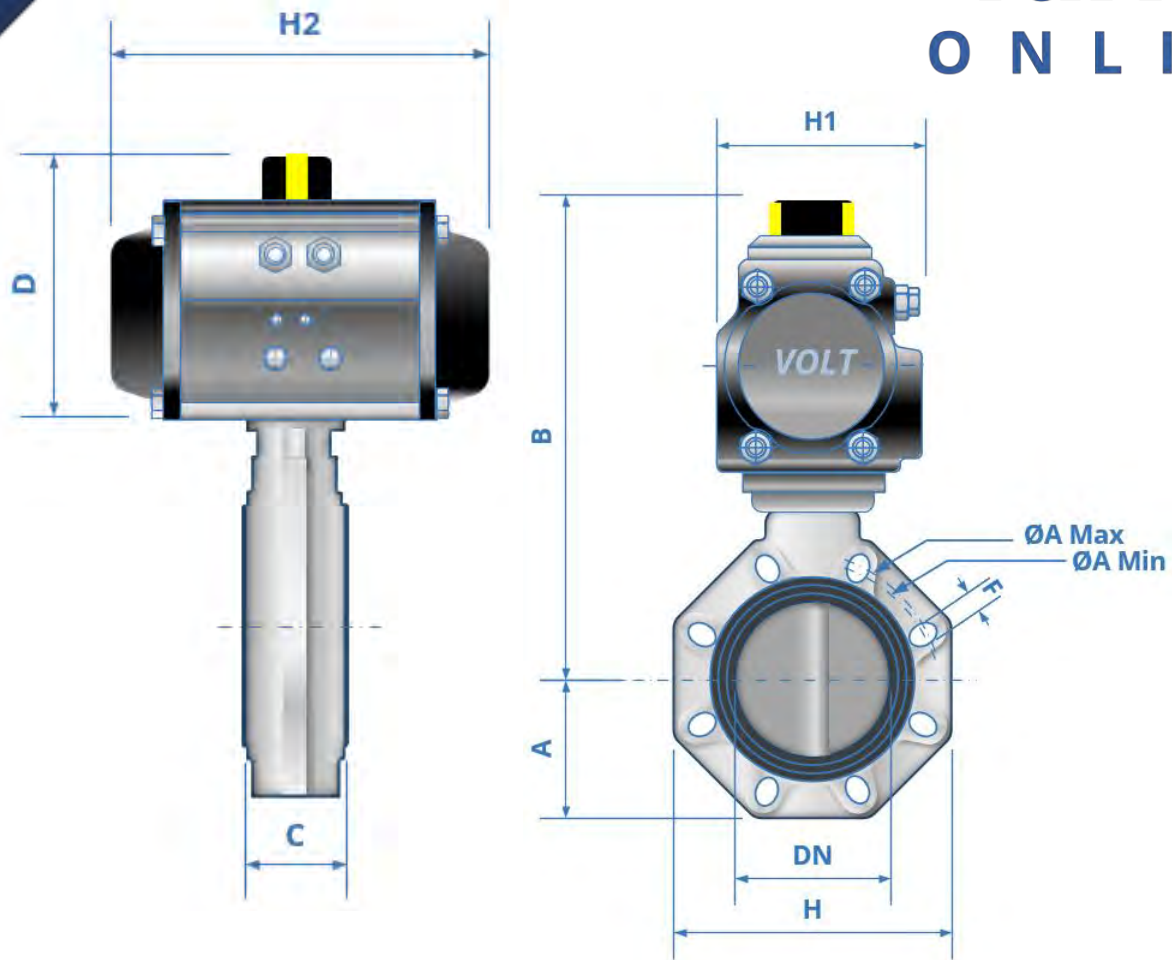
### Descripción

Una combinación de una válvula de mariposa de ABS, suministrada por Aliaxis (Durapipe), acoplada a un potente actuador neumático. Cuerpo Polipropileno reforzado con vidrio y disco de PVC con opciones para revestimientos de EPDM o FKM. Actuador suministrado con retorno por resorte o opción de doble acción.



### Description

Une combinaison d'une vanne papillon en ABS, fournie par Aliaxis (Durapipe), équipée d'un actionneur pneumatique puissant. Corps Disque en polypropylène et PVC renforcé de fibre de verre avec des options pour les revêtements EPDM ou FKM. Actionneur livré avec ressort de rappel ou option double effet.



## > Spring Return Version

### DIMENSIONS

d	DN	PN	Actuator		A	B	C	D	H1	H2	H	A Min	A Max	F	U
			SR												
1 1/2"	50	40	16	HP66S	60	244	33	107	85	202	132	99	109	19	4
2"	63	50	16	HP66S	70	250	43	107	85	202	147	115	126	19	4
2 1/2"	75	65	10	HP75S	80	288	46	124	96	210	165	128	144	19	8
3"	90	80	10	HP88S	93	314	49	136	108	247	185	145	160	19	8
4"	110	100	10	HP100S	107	340	56	148	148	268	211	165	190	19	8
5"	140	125	10	HP115S	120	378	64	166	166	316	240	204	215	23	8
6"	160	150	10	HP125S	124	404	70	179	179	347	268	230	242	23	8
8"	225	200	10	HP145S	161	481	114	209	209	414	323	280	298	23	8

## > Double Acting Version

### DIMENSIONS

d	DN	PN	Actuator		A	B	C	D	H1	H2	H	A Min	A Max	F	U
			DA												
1 1/2"	50	40	16	HP50D	60	230	33	93	72	144	132	99	109	19	4
2"	63	50	16	HP50D	70	236	43	93	72	144	147	115	126	19	4
2 1/2"	75	65	10	HP63D	80	271	46	107	85	163	165	128	144	19	8
3"	90	80	10	HP63D	93	285	49	107	85	163	185	145	160	19	8
4"	110	100	10	HP66D	107	299	56	107	85	202	211	165	190	19	8
5"	140	125	10	HP88D	120	348	64	108	108	247	240	204	215	23	8
6"	160	150	10	HP100D	124	373	70	123	123	268	268	230	242	23	8
8"	225	200	10	HP115D	161	438	114	141	141	316	323	280	298	23	8

All information is sourced from our manufacturer's data and is intended for guidance only - Valves Online can accept no liability for changes, omissions or errors.

## > The HP Actuator

- Powerful quarter turn rack and pinion actuator
- Single acting (spring close or open)
- Double acting
- Namur interfaces

Rack & Pinion pneumatic actuators are specifically designed for use with quarter-turn valves. The wide torque range ensures that our actuators match the operational characteristics of plug, ball or butterfly valves; or any device requiring precise and reliable 90° rotary motion.

Our pneumatic actuators offer a unique design, are constructed of high quality material and undergo 100% pressure, leak and rotation testing before despatch.

The Result? An actuator, which will stand up to the most severe service conditions, and provide you with a reliable and cost effective means of valve operation.

Technical - Actuator	
Body material	Hard anodised extruded aluminium alloy
End Caps	Die cast aluminium epoxy coated
Spring	High tensile steel
Indicator	Open/Closed
Pinion shaft	Alloy steel nickle plated
Pinion Guides	Self Lubricating Polypropylene + GF
Piston seals	NBR steel
Specification	
Pressure range	10 Bar
Double acting	2.5 Bar - 8 Bar pilot pressure
Single acting	2.5 Bar - 8 Bar pilot pressure
Temperature range	minus 20°C - 80°C
Movement	90 Degree adjustable -5-+5 Degree
Lubrication	All moving parts are lubricated
Cycle Life	1,000,000 operations
Approvals	EX, ATEX, CE, PED



## Pilot Solenoid

Port connections are HP50-HP88 1/8" & HP100-HP210 1/4" BSP

Pilot air should be clean filtered air- sized on 5.5 Bar.

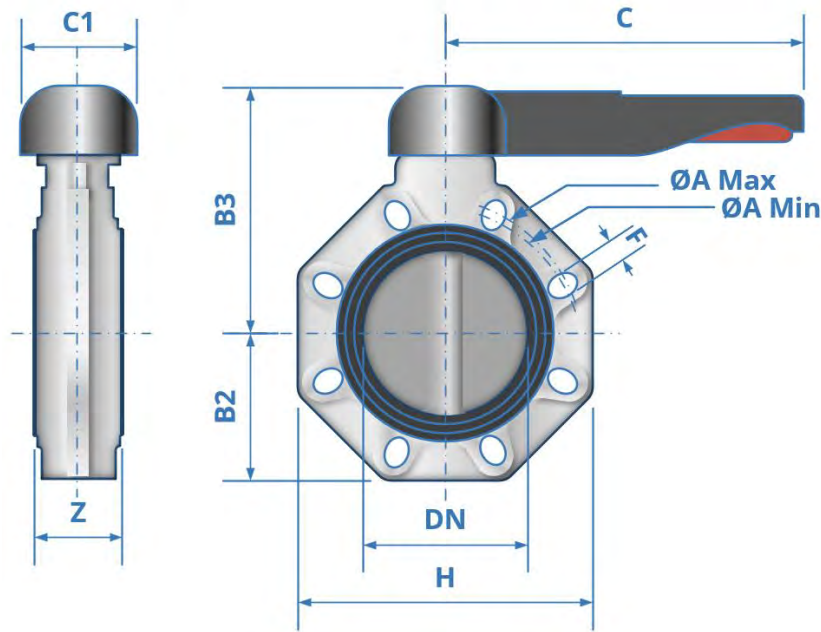
For more information please refer to data sheet.

The AP9001 is a modular design and allows pilot solenoids and position feedback switchboxes to be fitted with ease, allowing simple automation.

For more information on automation and control of your process pipelines please see our blogs and online tuition videos.



## Electric Feedback Signal

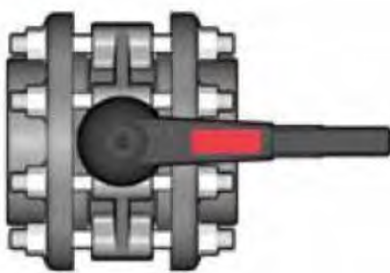


## Dimensions

d	DN	PN	B2	B3	H	Z	A min	A max	F	U	C	C1
1 1/2" - 50	40	16	60	137	132	33	99	109	19	4	175	100
2" - 63	50	16	70	143	174	43	115	126	19	4	175	100
2 1/2" - 75	65	10	80	164	165	46	128	144	19	8	175	110
3" - 90	80	10	93	178	185	49	145	160	19	8	272	110
4" - 110	100	10	107	192	211	56	165	190	19	8	272	110
5" - 140	125	10	120	212	240	64	204	215	23	8	330	110
6" - 160	150	10	124	225	268	70	230	242	23	8	330	110
8" - 225	200	10	161	272	323	114	280	298	23	8	420	122

> PVC-U Disc with choice of EPDM or FPM Liners.

## Flange Bolting

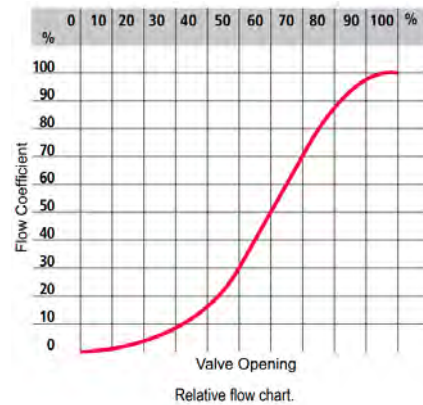
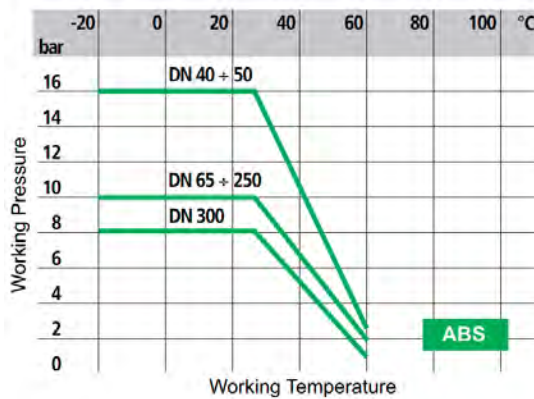


d	DN	J	*Nm
1 1/2" - 50	40	M16	9
2" - 63	50	M16	12
2 1/2" - 75	65	M16	15
3" - 90	80	M16	18
4" - 110	100	M16	20
5" - 140	125	M16	35
6" - 160	150	M20	40
8" - 225	200	M20	55
10" -	250	M24	70
12" -	300	M24	70

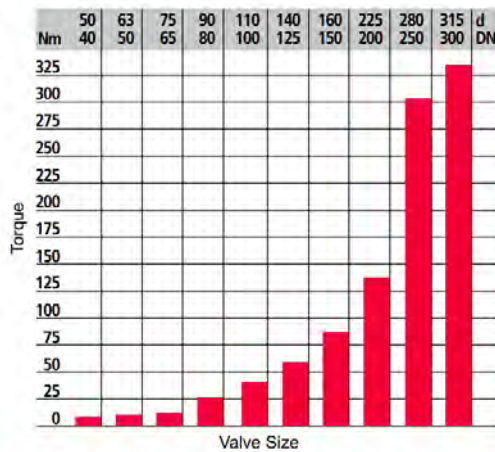
\*Nominal torque required for the tightening of bolts for the flanged joints.  
Torque required for watertight joints (1.5xPN at 20°C)

The overall dimensions of the FK Butterfly valve comply with the following standards:  
 ISO5752 (DN40 to DN200) Medium 25 series  
 ISO5752 (DN250 to DN300) Long 16 series  
 DIN 3202 (DN65 to DN 200) K2  
 DIN 3202 (DN250 to DN3000) K3

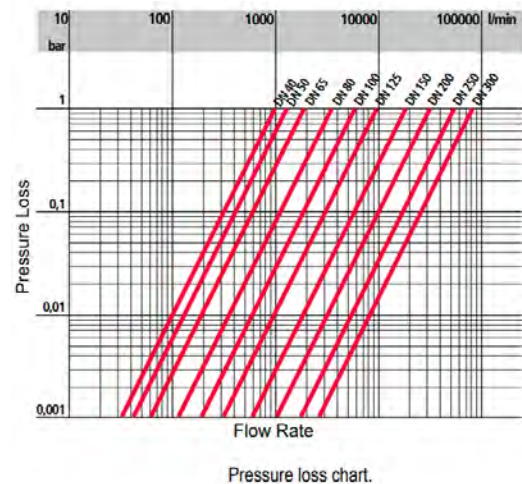
The oval holes in the valve body (DN50 to DN200) allow connection to the following flange drilling standards:  
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 ASA B16.5 class 150  
 BS10, Table D/E



### Technical Data



Maximum torque at maximum working pressure.



Pressure loss chart.

DN	40	50	65	80	100	125	150	200	250	300
bar	1000	1285	1700	3350	5900	9850	18700	30500	53200	81600

### Flow coefficient $k_{v100}$

$k_{v100}$  is the number of litres per minute of water at a temperature of 20°C that will flow through a valve with a one bar pressure differential at a specified rate. The  $k_{v100}$  values shown in the table are calculated with the valve fully open.

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