

# **Reduce Pulsation and Increases Batch Yield**

DBA Series in-line and top-mount dampeners reduce system pulsation, improve flow control, increase yields, protect components, and minimize downtime for repairs. They are capable of up to 7 Bar (100 psi) air pressures and 100°C (212°F).



#### **Features & Benefits**

- · Process-safe PTFE/PFA flow paths
- Up to 93% pulsation reduction minimizes system vibration to protect components, reduce repairs, and increases chip yield
- Top-mount and in-line options in various sizes to increase dampening or reduce footprint
- · Flow-specific models for 30, 60, and 140 lpm pumps
- Auto-leveling provides constant, active adjustment for more system control and increased chip yields
- · Dead-head capable operation
- Metal-free design provides safe, leak-free operation without possibility of contamination
- · Minimal parts for durable design
- Class 100 cleanroom assembly, testing, and packaging
- No preventative maintenance during two-year warranty
- Various liquid connection options

#### · Easy to install and service

#### Compatibility

DBA Series dampeners are designed for PSA, PFA, PXA and PSR Series pumps. DBA030 dampeners fit 30 and 60 lpm pumps. DBA060 dampeners fit 30, 60 and 140 lpm pumps. DBA140 dampeners fit 60 and 140 lpm pumps.

**DBA SERIES DAMPENERS** 



PSA030 with DBA030-T030

PSA030 with DBA030-1030

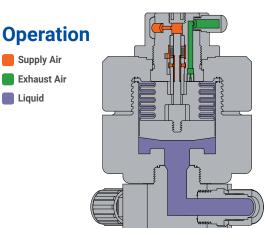
#### https://wkfluidhandling.com/dba-series/

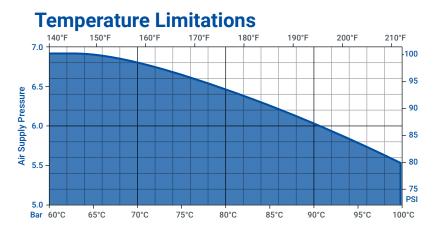


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# **DBA Series Pulse Dampeners**





### **Specifications**

Model	DBA030	DBA060	DBA140
Max Fluid Temperature	100°C (212°F)	100°C (212°F)	100°C (212°F)
Max Supply Air Pressure	7 Bar (100 psi)	7 Bar (100 psi)	7 Bar (100 psi)
Pulsation Removed	≤ 76%	≤ 84%	≤ 93%
Cv (in-line only) -with I030 base -with I060 base -with I140 base	3 14 n/a	3 14 28	n/a 14 28
Air Consumption* Max/Min (SCFM)	3.5 / 0.2	4.0 / 0.2	5.62 / 0.57
Fluid Path Materials	PTFE, PFA	PTFE, PFA	PTFE, PFA

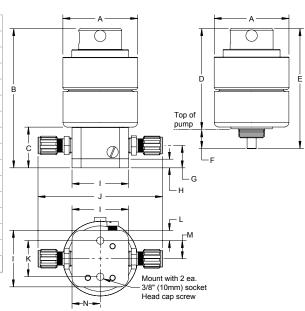
\*Utilizing same size pump at 100 psi / 20 psi

### Dimensions

#### Dimensions: mm (in)

	DBA030	DBA060	DBA140
Α	105 (Ø4.1)	140 (Ø5.5)	222 (Ø8.7)
В	210 (8.3)	220 (8.7)	253 (10.0)
С	57 (2.3)	57 (2.3)	80 (3.2)
D	161 (6.3)	168 (6.6)	188 (7.4)
Е	188 (7.4)	196 (7.7)	230 (9.0)
F	27 (1.1)	28 (1.1)	42 (1.6)
G	31 (1.2)	35 (1.4)	42 (1.6)
Н	13 (0.5)	13 (0.5)	13 (0.5)
L	79 (3.1)	79 (3.1)	79 (3.1)
J	175 (6.9)	198 (7.8)	238 (9.4)
Κ	51 (2.0)	51 (2.0)	51 (2.0)
L	14 (0.6)	14 (0.6)	14 (0.6)
М	25 (1.0)	25 (1.0)	25 (1.0)
Ν	40 (1.5)	40 (1.5)	40 (1.5)
0	111 (4.4)	111 (4.4)	135 (5.3)

\*DBA030 dimensions 'D' and 'E' increase by 0.27 in. when configured to a 60 liter pump (configuration DBA030-T060).



### Configuration

DBA 030 - I 030 - F12 See ordering instructions 2345 1 for details. ① Dampener Type DBA = Capable up to 100°C (See DBH and DBU Series pulsation dampeners for higher temperatures.) 1 Dampener Size 030 = 30 lpm (8 gpm) max flow 060 = 60 lpm (16 gpm) max flow 140 = 140 lpm (36 gpm) max flow (2) Base Options (3) Base Size T = Top-mount 030 = fits 30 lpm pumps I = In-line 060 = fits 60 lpm pumps 140 = fits 140 lpm pumps

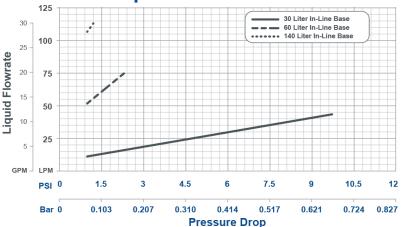
④ Fitting Style	⑤ Fitting Size
F = Flaretek® compatible	04 = 1/4 in
T = Tube Out	06 = 3/8 in
W = Weldable	08 = 1/2 in
P = Pillar S-300®	12 = 3/4 in
N = Female NPT (FNPT)	16 = 1 in
(Leo for in-line models only	20 = 1-1/4 in

(Use for in-line models only) All bases not available with all dampener sizes. All fitting sizes not available with all dampeners. Leak detection and outlet fitting options available.



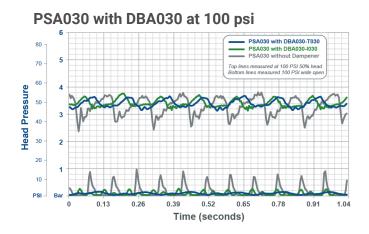
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# Pressure Drop

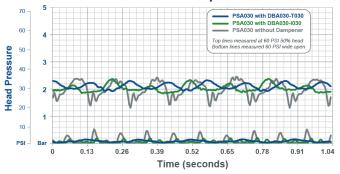




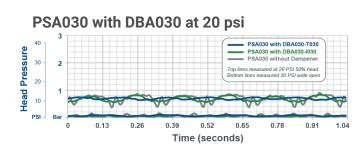
#### **Pulsation Data: DBA Series with PSA030**



PSA030 with DBA030 at 60 psi



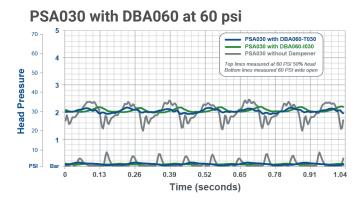
PSA030 with DBA030 at 40 psi PSA030 with DBA030-T030 PSA030 with DBA030-I030 PSA030 without Dampener 50 Head Pressure 40 red at 40 PSI 50% head asured 40 PSI wide ope 30 20 10 PS 0 0.13 0.26 0.39 0.52 0.65 0 78 0.91 1 04 Time (seconds)





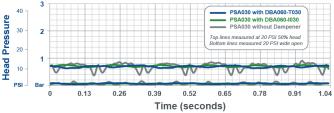
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PSA030 with DBA060 at 100 psi PSA030 with DBA060-T030 80 PSA030 with DBA060-1030 PSA030 without Dampene 70 Top lines measured at 100 PSI 50% head Bottom lines measured 100 PSI wide ope 60 Head Pressure 50 40 30 20 10 PSI 0.13 0.26 0 39 0.52 0.65 0.78 0.91 1 04 Time (seconds)



PSA030 with DBA060 at 40 psi PSA030 with DBA060-T030 PSA030 with DBA060-I030 PSA030 without Dampener Head Pressure 40 Top lines measured at 40 PSI 50% head Bottom lines measured 40 PSI wide ope 30 20 10 PSI 0 0.13 0.26 0.39 0.52 0.65 0 78 0.91 1.04 Time (seconds)

PSA030 with DBA060 at 20 psi



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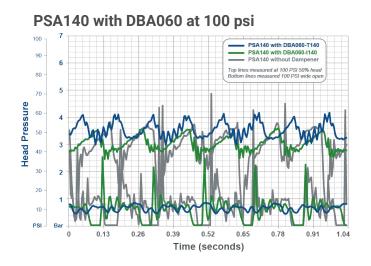
#### Pulsation Data: DBA Series with PSA060



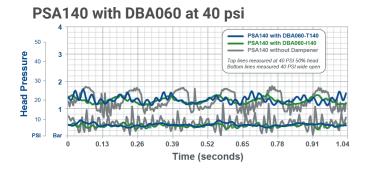
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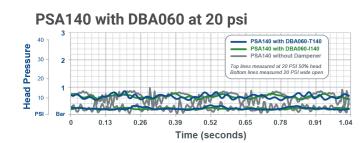


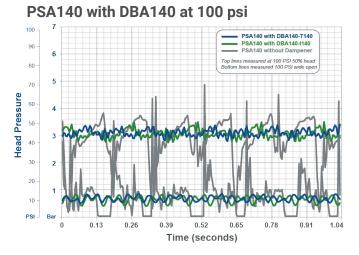
### Pulsation Data: DBA Series with PSA140



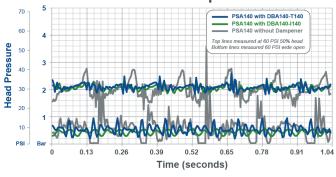
PSA140 with DBA060 at 60 psi 70 PSA140 with DBA060-T140 PSA140 with DBA060-I140 PSA140 without Dampener 60 ed at 60 PSI 50% head sured 60 PSI wide ope Head Pressure 50 40 30 20 10 PSI Bar 0.13 0.26 0.39 0.52 0.65 0.78 0.91 1.04 Time (seconds)



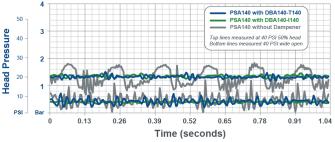




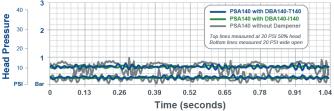
PSA140 with DBA140 at 60 psi



PSA140 with DBA140 at 40 psi



PSA140 with DBA140 at 20 psi



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