



WHITE KNIGHT®

.....engineer approved™

DBU SERIES DAMPENERS

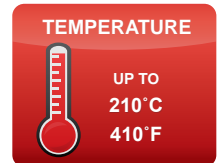
Reduce Pulsation and Increases Batch Yield

DBU 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 210°C (410°F).



Top Mount

In-Line

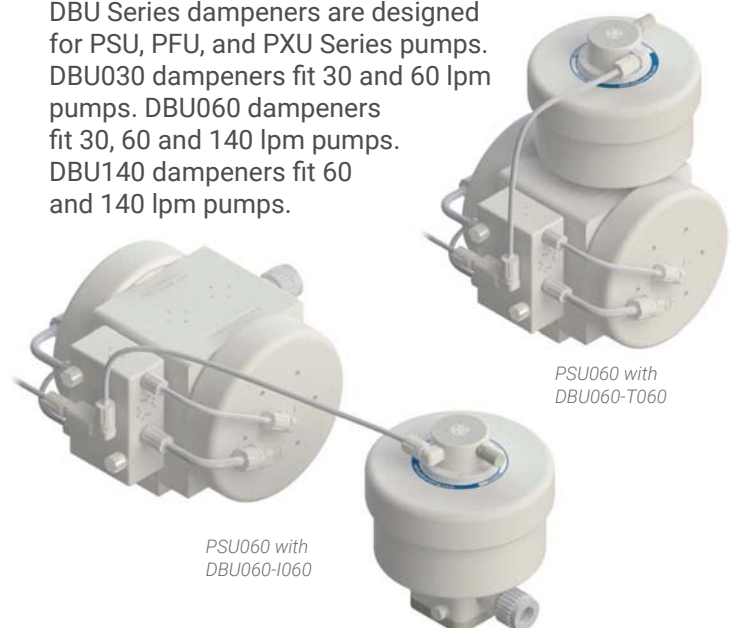


Features & Benefits

- Process-safe PTFE/PFA flow paths
- Up to 84% 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

DBU Series dampeners are designed for PSU, PFU, and PXU Series pumps. DBU030 dampeners fit 30 and 60 lpm pumps. DBU060 dampeners fit 30, 60 and 140 lpm pumps. DBU140 dampeners fit 60 and 140 lpm pumps.



PSU060 with DBU060-T060

PSU060 with DBU060-I060

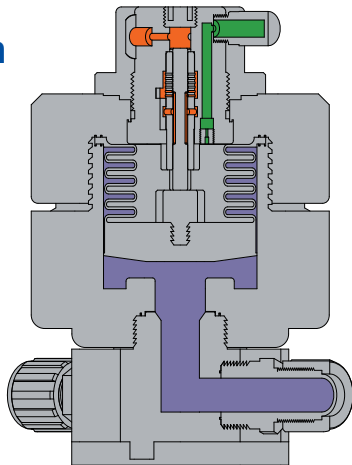
<https://wkfluidhandling.com/dbu-series/>



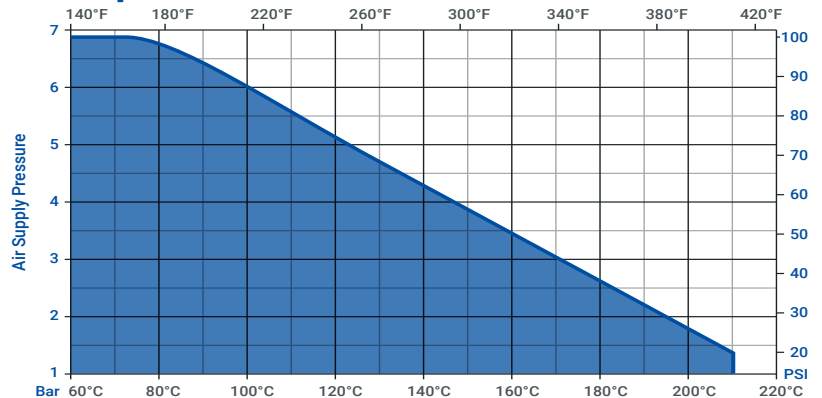


Operation

- Supply Air
- Exhaust Air
- Liquid



Temperature Limitations

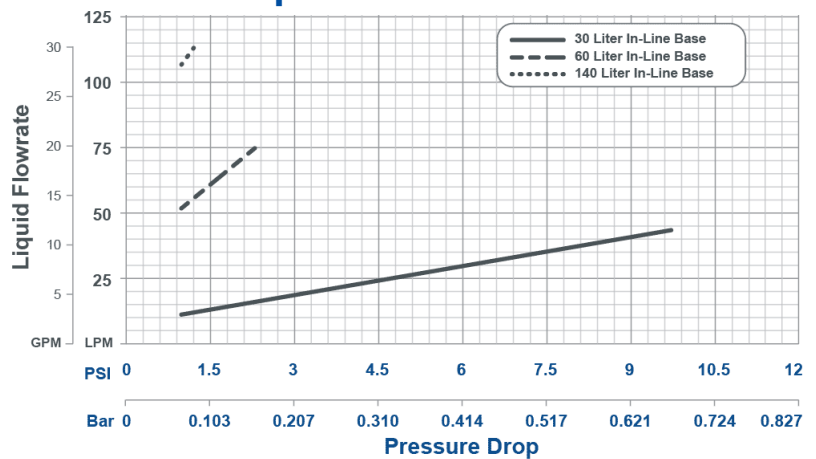


Specifications

Model	DBU030	DBU060
Max Fluid Temperature	210°C (410°F)	210°C (410°F)
Max Supply Air Pressure	7 Bar (100 psi)	7 Bar (100 psi)
Pulsation Removed	≤ 76%	≤ 84%
Cv (in-line only)		
-with I030 base	3	3
-with I060 base	14	14
-with I140 base	n/a	28
Max/Min Air Consumption*	3.5 / 0.2	4.0 / 0.2
Fluid Path Materials	PTFE, PFA	PTFE, PFA

*Utilizing same size pump

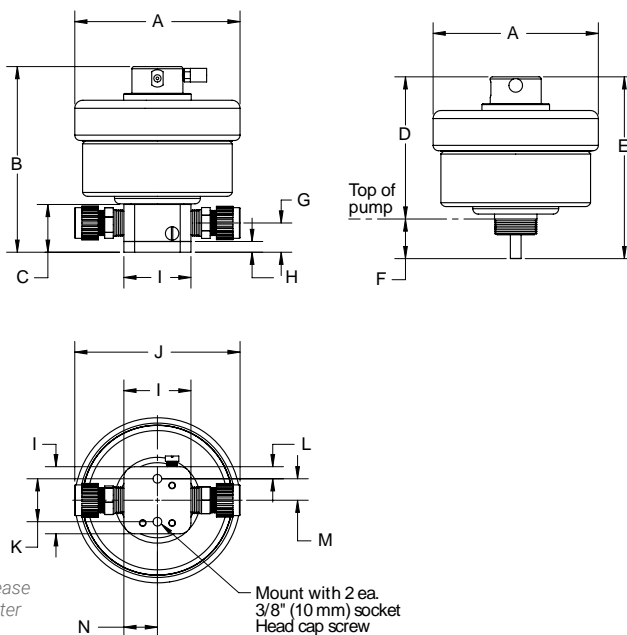
Pressure Drop



Dimensions

Dimensions: mm (in)

	DBU030	DBU060
A	140 (Ø5.5)	196 (Ø7.7)
B	211 (8.3)	220 (8.7)
C	57 (2.3)	57 (2.3)
D	163 (6.4)	168 (6.6)
E	198 (7.8)	215 (8.5)
F	35 (1.4)	47 (1.8)
G	31 (1.2)	35 (1.4)
H	13 (0.5)	13 (0.5)
I	79 (3.1)	79 (3.1)
J	166 (6.5)	196 (7.7)
K	51 (2.0)	51 (2.0)
L	14 (0.6)	14 (0.6)
M	25 (1.0)	25 (1.0)
N	40 (1.6)	40 (1.6)



*DBU030 dimensions 'D' and 'E' increase by 0.27 in. when configured to a 60 liter pump (configuration DBU030-T060).

Configuration

DBU 030 - I 030 - F12 See ordering instructions for details.

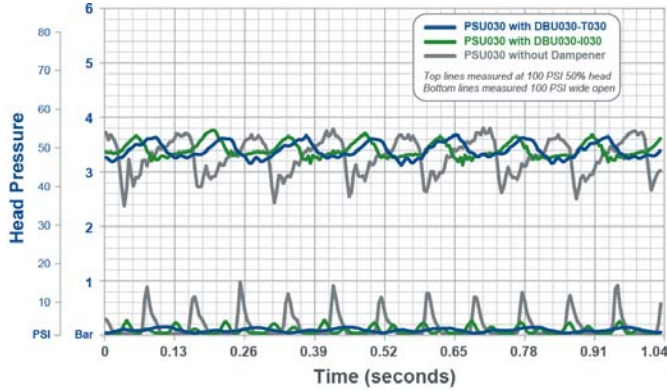
- ① Dampener Type
DBU = Capable up to 210°C
(See DBA and DBH Series pulsation dampeners for temperature options.)
- ② Dampener Size
030 = 30 lpm (8 gpm) max flow
060 = 60 lpm (16 gpm) max flow
- ③ Base Options ④ Base Size
T = Top-mount 030 = fits 30 lpm pumps
I = In-line 060 = fits 60 lpm pumps
140 = fits 140 lpm pumps
- ⑤ Fitting Style ⑥ 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
(Use for in-line models only) 20 = 1-1/4 in

All bases not available with all dampener sizes. All fitting sizes not available with all dampeners. Leak detection and outlet fitting options available.

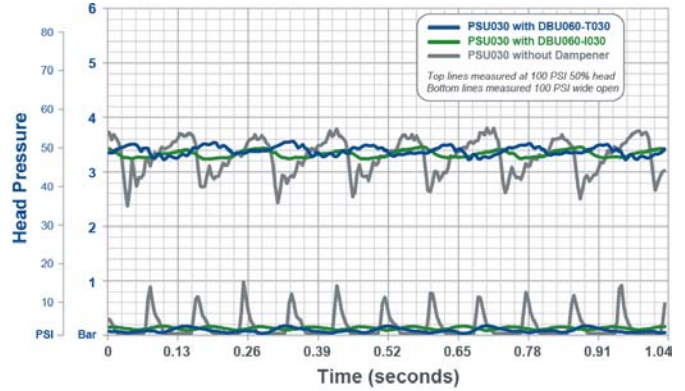


Pulsation Data: DBU Series with PSU030

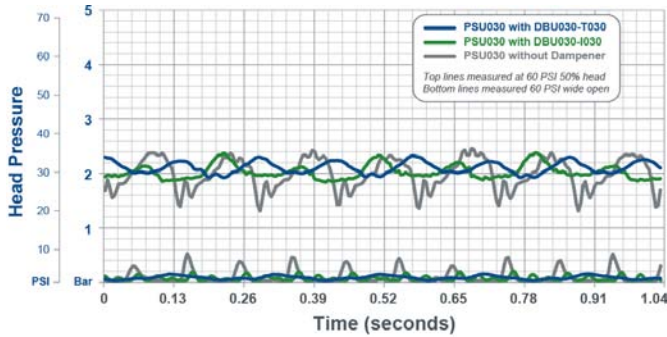
PSU030 with DBU030 at 100 psi



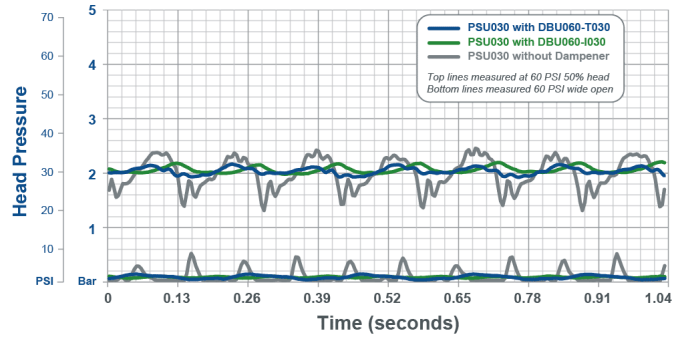
PSU030 with DBU060 at 100 psi



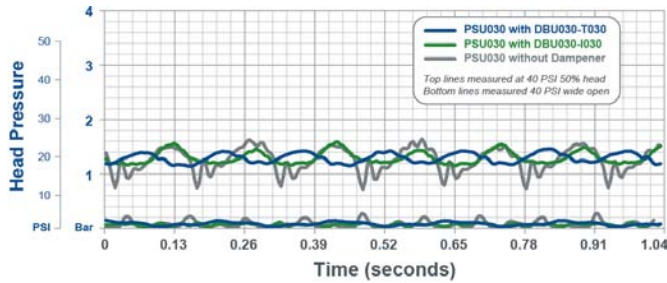
PSU030 with DBU030 at 60 psi



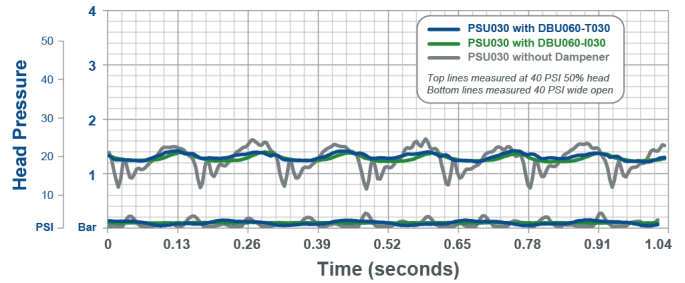
PSU0360 with DBU060 at 60 psi



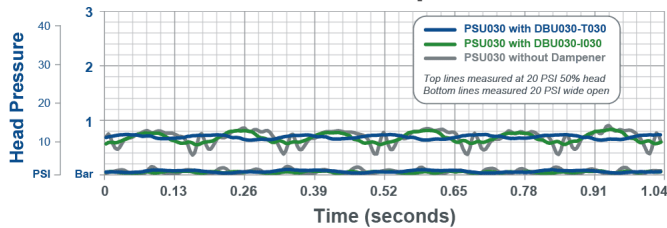
PSU030 with DBU030 at 40 psi



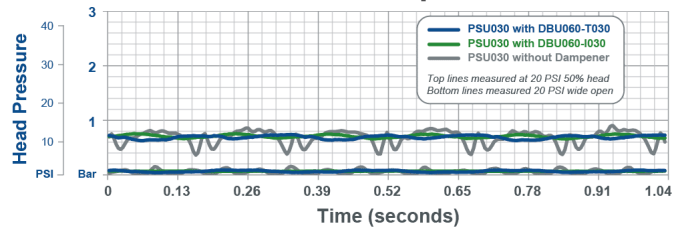
PSU030 with DBU060 at 40 psi



PSU030 with DBU030 at 20 psi



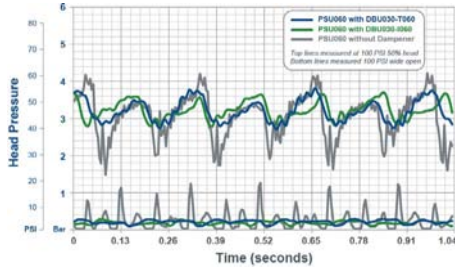
PSU030 with DBU060 at 20 psi



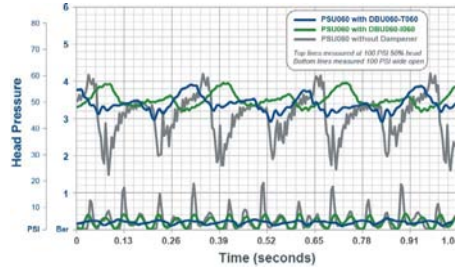


Pulsation Data: DBU Series with PSU060 & PSU140

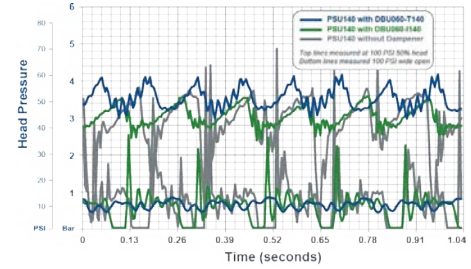
PSU060 with DBU030 at 100 psi



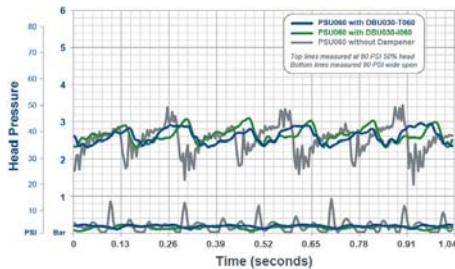
PSU060 with DBU060 at 100 psi



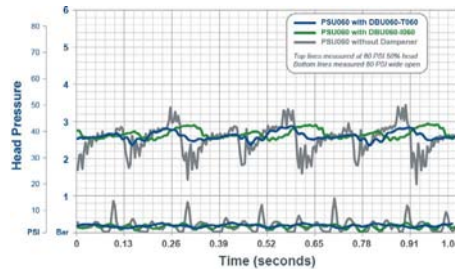
PSU140 with DBU060 at 100 psi



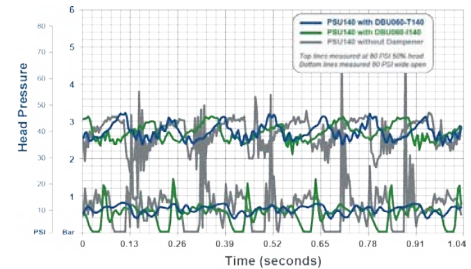
PSU060 with DBU030 at 80 psi



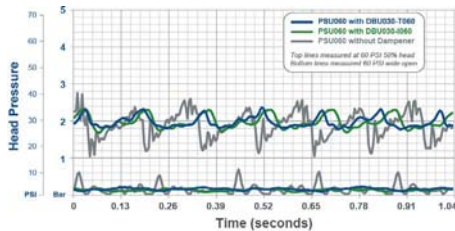
PSU060 with DBU060 at 80 psi



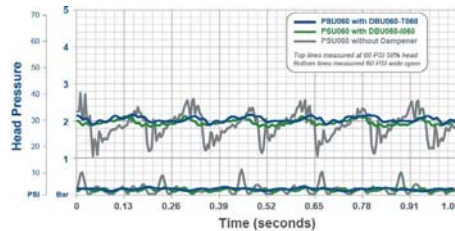
PSU140 with DBU060 at 80 psi



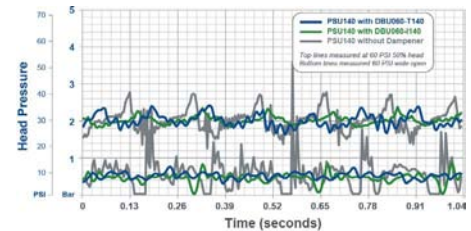
PSU060 with DBU030 at 60 psi



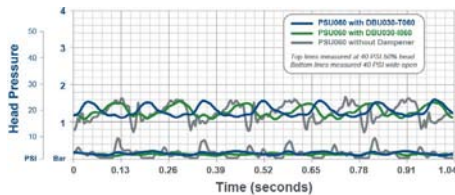
PSU060 with DBU060 at 60 psi



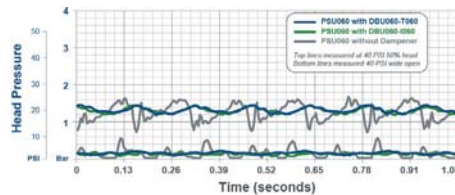
PSU140 with DBU060 at 60 psi



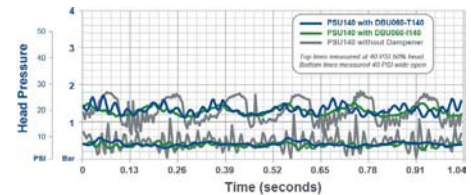
PSU060 with DBU030 at 40 psi



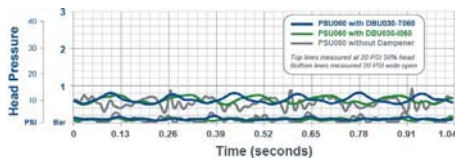
PSU060 with DBU060 at 40 psi



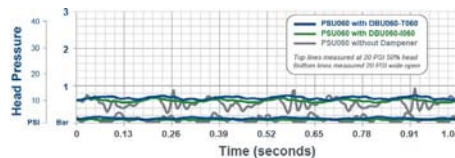
PSU140 with DBU060 at 40 psi



PSU060 with DBU030 at 20 psi



PSU060 with DBU060 at 20 psi



PSU140 with DBU060 at 20 psi

