WHITE KNIGHT®
engineer approved™

DBH SERIES DAMPENERS

Reduce Pulsation and Increases Batch Yield

DBH 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 5.5 Bar (80 psi) air pressures and 145°C (293°F).

Top Mount

In-Line

2 YEAR WARRANTY

PURITY
ULTRA HIGH

RECIRC. / DELIVERY
UP TO 5.5 BAR / 80 PSI

TEMPERATURE
UP TO
145˚C
293˚F

CE

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

DBH Series dampeners are designed for PSH, PFH, and PXH Series pumps. DBH030 dampeners fit 30 and 60 lpm pumps. DBH060 dampeners fit 30, 60 and 140 lpm pumps. DBH140 dampeners fit 60 and 140 lpm pumps.

PSH060 with DBH060-T060

PSH060 with DBH060-I060

https://wkfluidhandling.com/dbh-series/

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WHITE KNIGHT® DBH Series Pulse Dampeners

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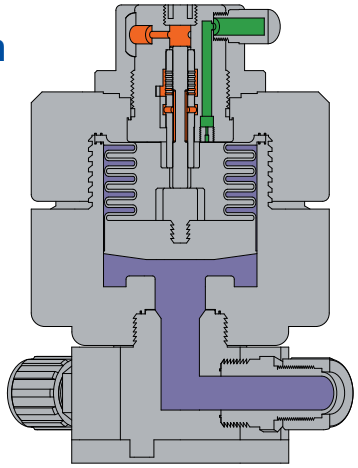
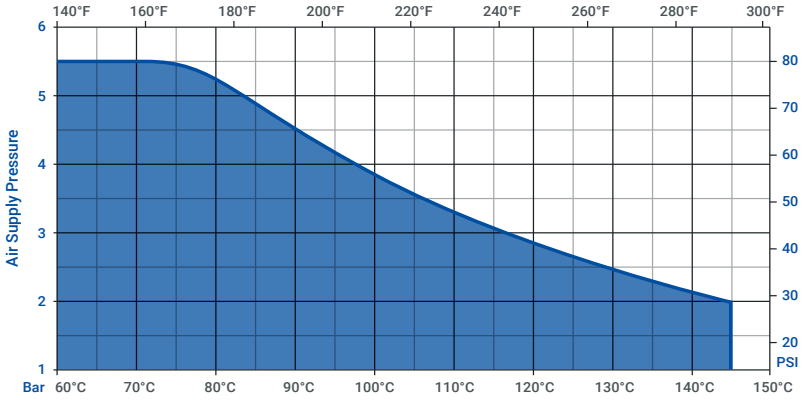
Operation

- Supply Air
- Exhaust Air
- Liquid



Temperature Limitations

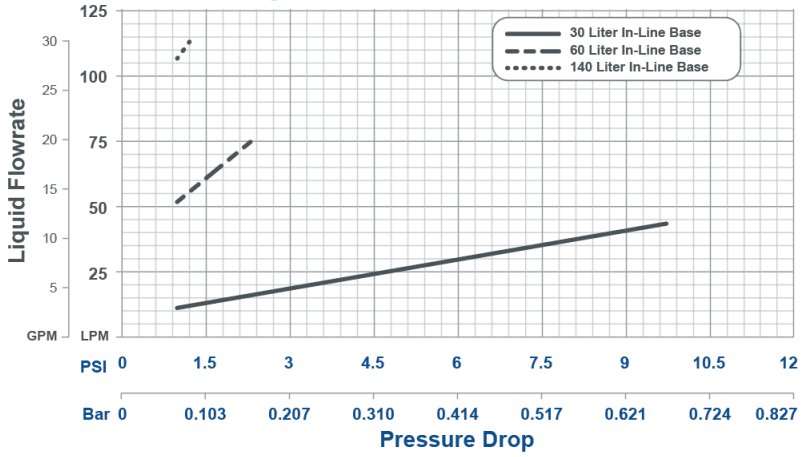


Specifications

Model	DBH030	DBH060	DBH140
Max Fluid Temperature	145°C (293°F)	145°C (293°F)	145°C (293°F)
Max Supply Air Pressure	5.5 Bar (80 psi)	5.5 Bar (80 psi)	5.5 Bar (80 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

Pressure Drop

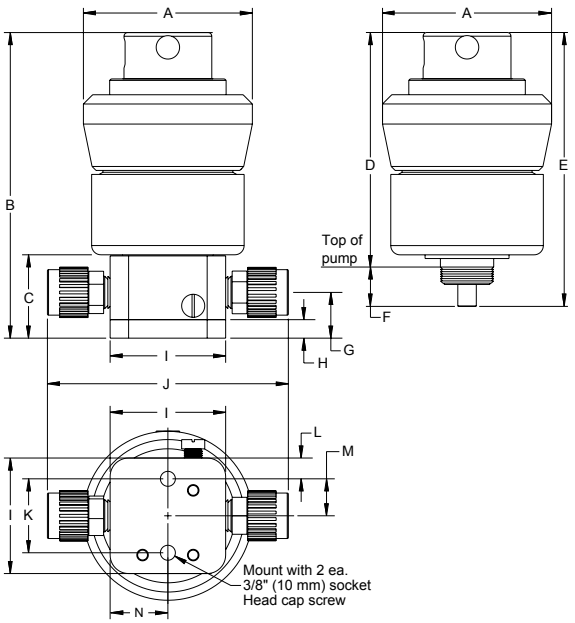


Dimensions

Dimensions: mm (in)

	DBH030	DBH060	DBH140
A	116 (Ø4.6)	146 (Ø5.8)	225 (Ø8.9)
B	210 (8.3)	220 (8.7)	253 (10.0)
C	57 (2.3)	57 (2.3)	80 (3.2)
D	161 (6.3)	163 (6.4)	188 (7.4)
E	188 (7.4)	196 (7.7)	230 (9.0)
F	27 (1.1)	33 (1.3)	42 (1.6)
G	31 (1.2)	35 (1.4)	42 (1.6)
H	13 (0.5)	13 (0.5)	13 (0.5)
I	79 (3.1)	79 (3.1)	79 (3.1)
J	165 (6.5)	196 (7.7)	238 (9.4)
K	51 (2.0)	51 (2.0)	51 (2.0)
L	14 (0.6)	14 (0.6)	14 (0.6)
M	25 (1.0)	25 (1.0)	25 (1.0)
N	40 (1.6)	40 (1.6)	40 (1.6)
O	111 (4.4)	111 (4.4)	135 (5.3)

**DBH030 dimensions 'D' and 'E' increase by 0.27 in when configured to a 60 liter pump (configuration DBH030-T060).*



Configuration

DBH 030 - I 030 - F12
⓪ ① ②③ ④⑤

See ordering instructions for details.

⓪ Dampener Type
DBH = Capable up to 145°C
(See DBA and DBU Series pulsation dampeners for temperature options.)

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
T = Top-mount
I = In-line

③ Base Size
030 = fits 30 lpm pumps
060 = fits 60 lpm pumps
140 = fits 140 lpm pumps

④ Fitting Style
F = Flaretek® compatible
T = Tube Out
W = Weldable
P = Pillar S-300®
N = Female NPT (FNPT)
(Use for in-line models only)

⑤ Fitting Size
04 = 1/4 in
06 = 3/8 in
08 = 1/2 in
12 = 3/4 in
16 = 1 in
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.

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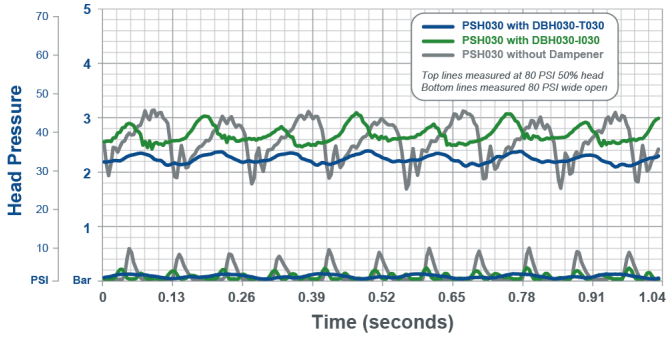
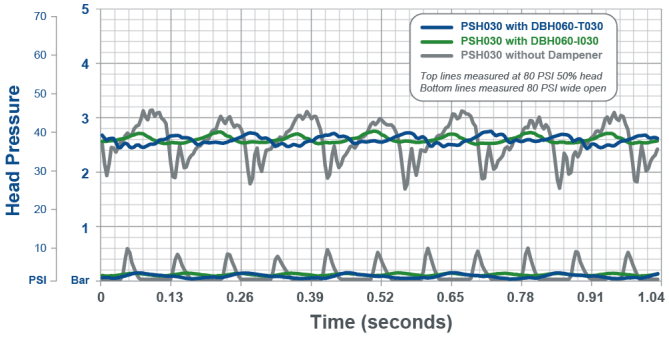
Pulsation Data: DBH Series with PSH030

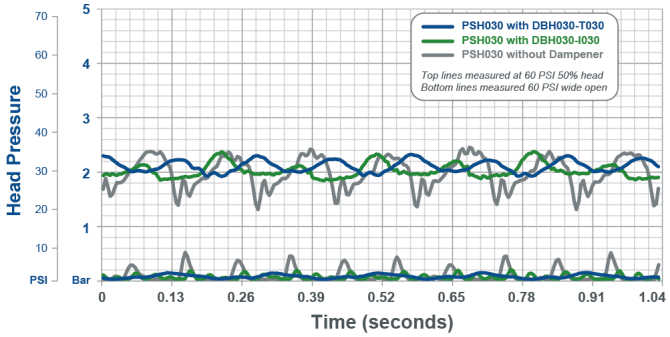
PSH030 with DBH030 at 80 psi



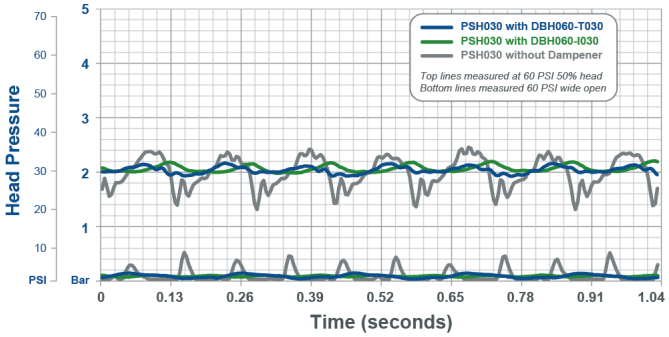
PSH030 with DBH060 at 80 psi



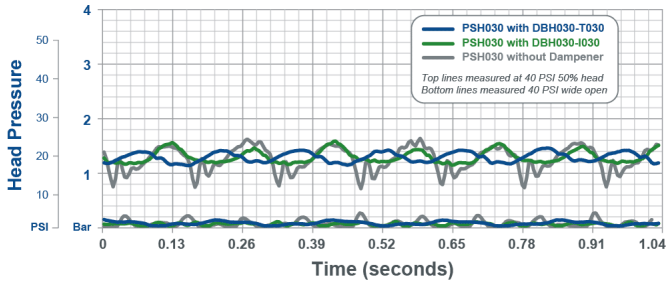
PSH030 with DBH030 at 60 psi



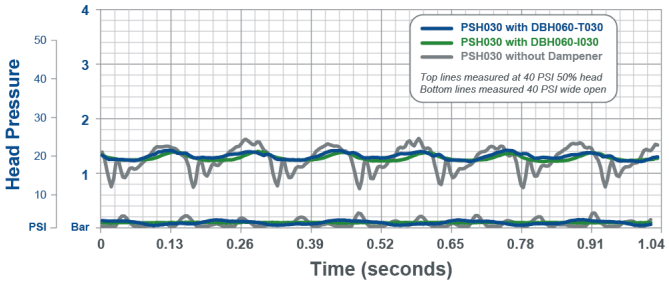
PSH030 with DBH060 at 60 psi



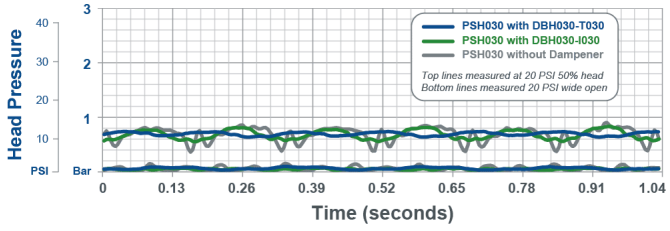
PSH030 with DBH030 at 40 psi



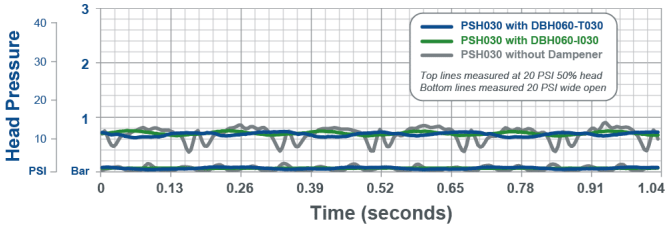
PSH030 with DBH060 at 40 psi



PSH030 with DBH030 at 20 psi

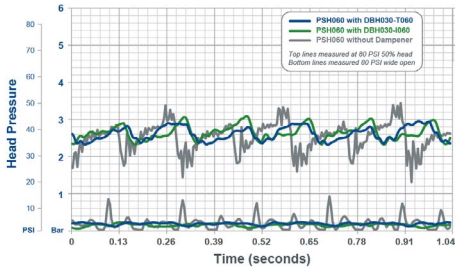


PSH030 with DBH060 at 20 psi

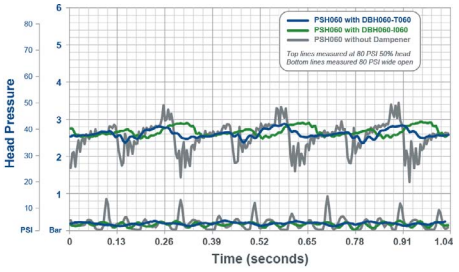


Pulsation Data: DBH Series with PSH060

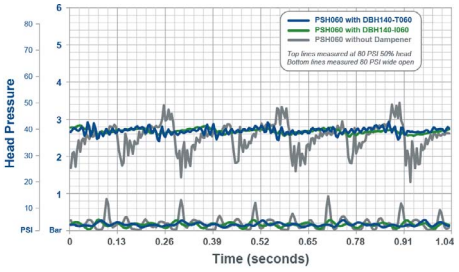
PSH060 with DBH030 at 80 psi



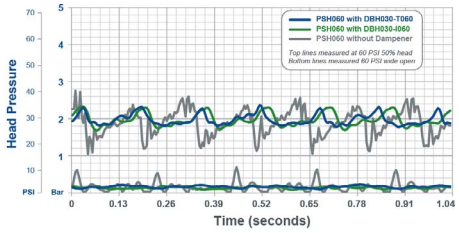
PSH060 with DBH060 at 80 psi



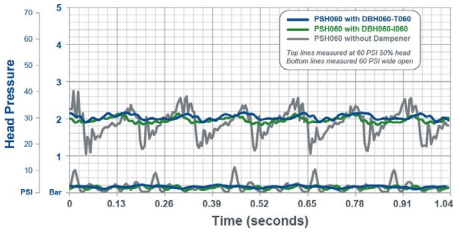
PSH060 with DBH140 at 80 psi



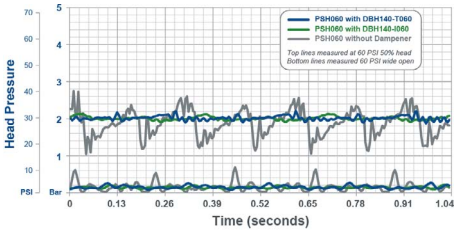
PSH060 with DBH030 at 60 psi



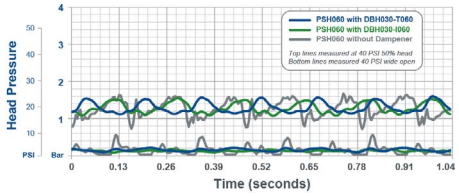
PSH060 with DBH060 at 60 psi



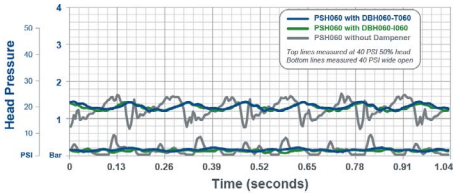
PSH060 with DBH140 at 60 psi



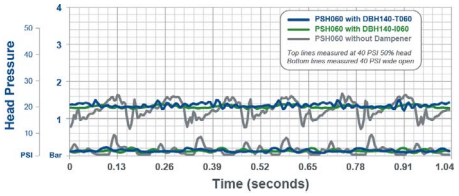
PSH060 with DBH030 at 40 psi



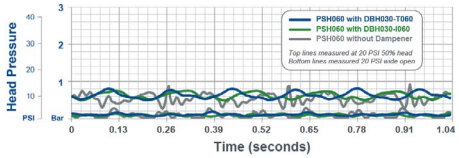
PSH060 with DBH060 at 40 psi



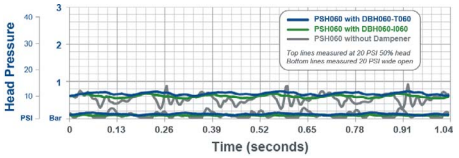
PSH060 with DBH140 at 40 psi



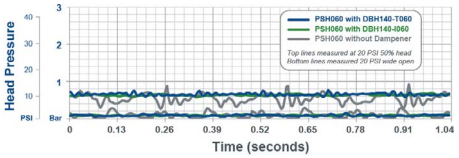
PSH060 with DBH030 at 20 psi



PSH060 with DBH060 at 20 psi

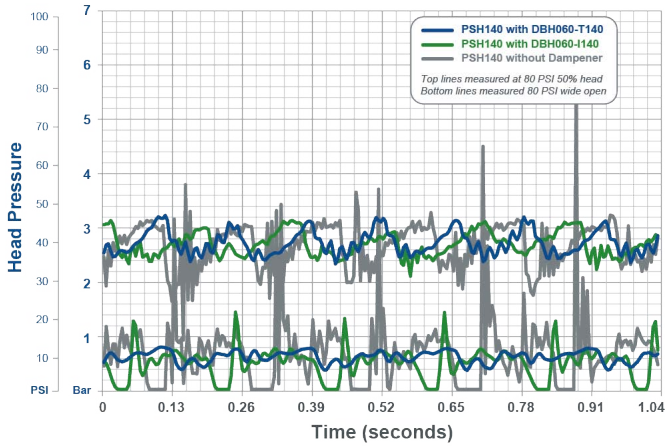


PSH060 with DBH140 at 20 psi

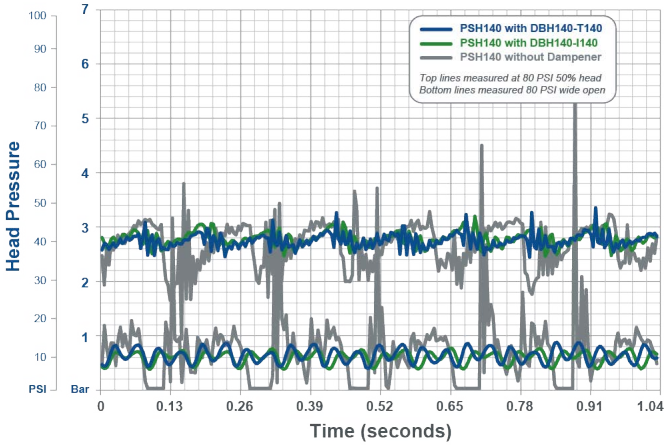


Pulsation Data: DBH Series with PSH140

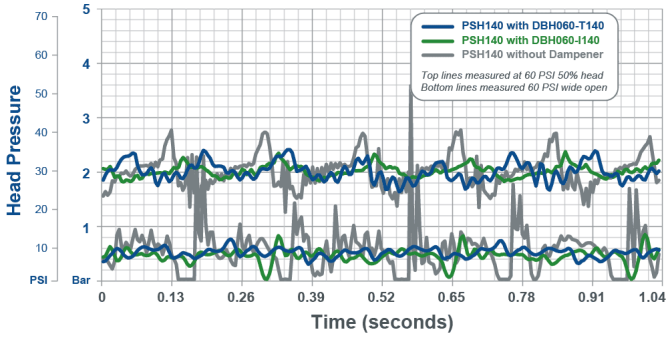
PSH140 with DBH060 at 80 psi



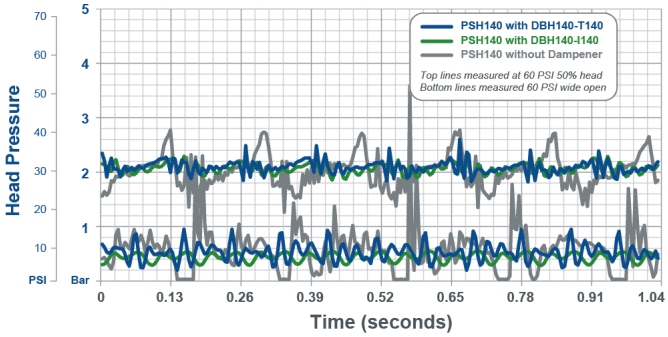
PSH140 with DBH140 at 80 psi



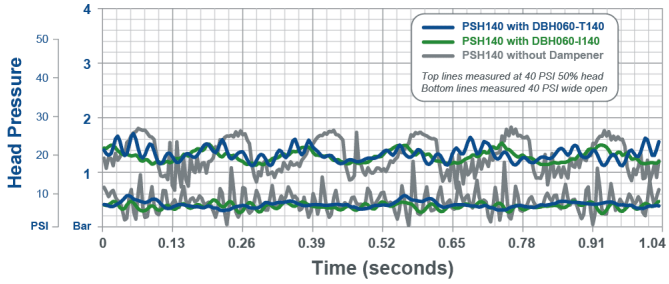
PSH140 with DBH060 at 60 psi



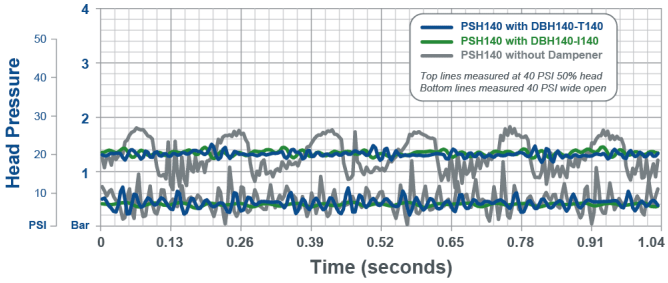
PSH140 with DBH140 at 60 psi



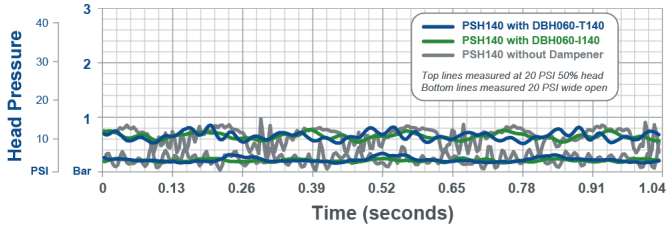
PSH140 with DBH060 at 40 psi



PSH140 with DBH140 at 40 psi



PSH140 with DBH060 at 20 psi



PSH140 with DBH140 at 20 psi