



## BPB Series Precise Flow Control



Zenith BPB Series pumps allow dependable control of critical process streams or additives. High accuracy eliminates costly overdosing associated with less accurate methods, and the pumps often pay for themselves in savings in one year or less. Concentrated solutions can be precisely metered pulse-free without dilution.

### Benefits and Features

- **High Accuracy** – stable, repeatable flow control despite process variations in temperature, viscosity, and pressure.
- **High Pressure** – precision manufacturing techniques hold tolerances to + .00005" (1.25 micron), allowing gear clearances to be kept to a minimum and high process pressures to be achieved.
- **Pulseless** – precise, rotary spur gears provide smooth, continuous, pulseless flow.
- **Valveless** – precision metering gears eliminate troublesome check valves used in reciprocating pumps.
- **Active Flowmeter** – unparalleled mechanical precision combined with a closed-loop Zenith ZeDrive™ controller ensures exact flow control without the addition of expensive flowmeters.
- **Long Life** – only three moving parts – components through hardened to Rc-54 or higher for wear resistance and strength.
- **Multi-pump Ratio Capability** – outer drive gear allows multiple pumps to be driven at different gear ratios by a single motor.

## >> Applications

Designed to provide stable, precise, repeatable flow control of process fluids despite variations in temperature, viscosity, and pressure. The Zenith BLB Series pumps are broadly applied to metering services such as colorings, catalysts, resins, flavorings, perfumes, vitamins, oils, binders, adhesives, coatings, inhibitors, paints/varnishes, polymers, lubricants, dyes, defoamers, pharmaceuticals, urethanes, fuels, viscose, and many others for the world's top industrial companies.

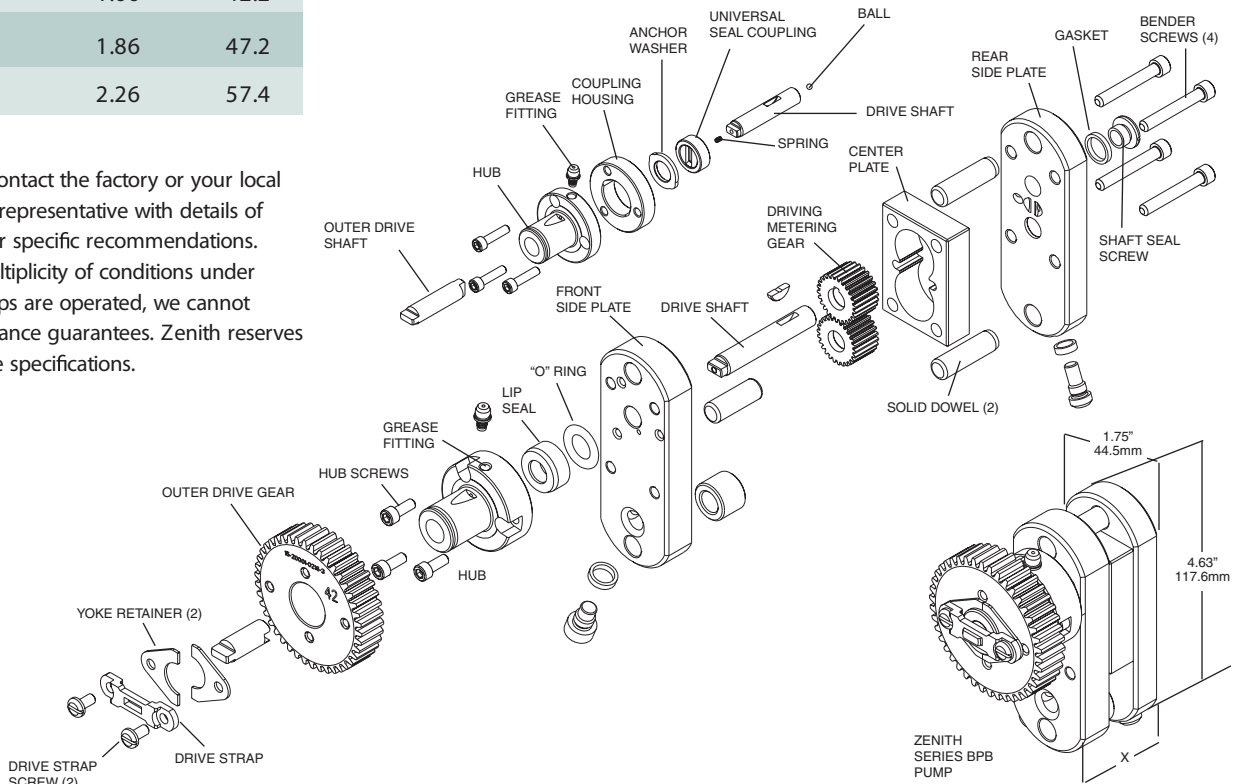
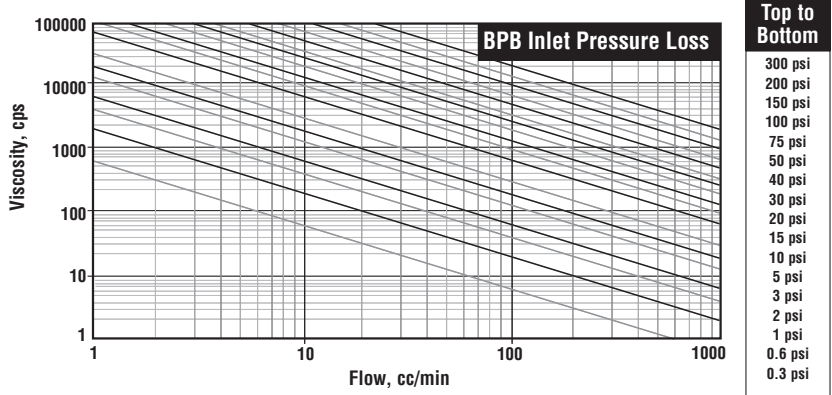
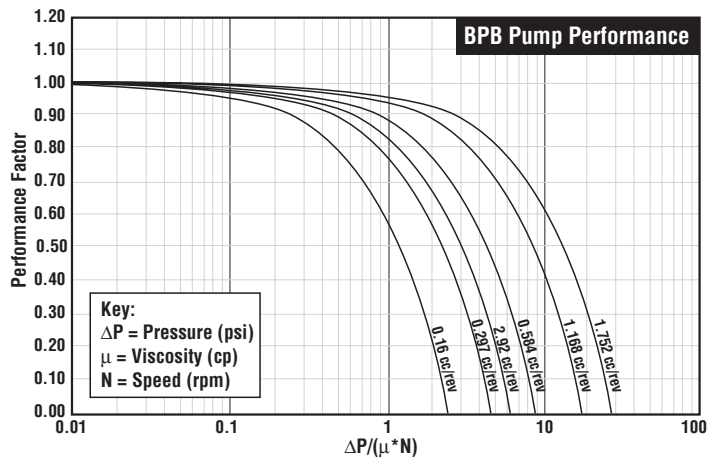
### Specifications

Model	4391	4407	4776	5411	5596
Available Capacities	0.16, 0.297, 0.584 (cc/rev)	0.16, 0.297, 0.584 (cc/rev)	0.16, 0.297, 0.584, (cc/rev)	0.16, 0.297, 0.584, (cc/rev)	0.16, 0.297, 0.584 (cc/rev)
Flow Rate	0.025-8.3 GPH 1.6-525 cc/min	0.025-8.3 GPH 1.6-525 cc/min	0.025-8.3 GPH 1.6-525 cc/min	0.025-8.3 GPH 1.6-525 cc/min	0.025-8.3 GPH 1.6-525 cc/min
Temperature Limit	300°F (150°C)	300°F (150°C)	300°F (150°C)	300°F (150°C)	300°F (150°C)
Recommended Speed Range	10-180 rpm	10-180 rpm	10-180 rpm	10-180 rpm	10-180 rpm
Pump Rotation (Facing Outer Drive Gear)	CCW	CCW	CCW	CCW	CCW
Inlet Pressure Range	0-300 psi 2068 kPa	40-500 psi 275-3447 kPa	40-500 psi 275-3447 kPa	0-300 psi 2068 kPa	0-300 psi 2068 kPa
Discharge Pressure Limit	750 psi 5171 kPa	750 psi 5171 kPa	1500 psi 10342 kPa	1500 psi 10342 kPa	750 psi 5171 kPa
Viscosity Range	1-100000 cp	1-100000 cp	1-100000 cp	1-100000 cp	1-100000 cp
Inlet/Outlet Port Connections	1/4" or 1/8" NPT female or 1/2" OD tube w/37° flare 300 Series SS Trunnions	1/4" or 1/8" NPT female or 1/2" OD tube w/37° flare 300 Series SS Trunnions	1/4" or 1/8" NPT female or 1/2" OD tube w/37° flare 300 Series SS Trunnions	1/4" or 1/8" NPT female or 1/2" OD tube w/37° flare 300 Series SS Trunnions	1/4" or 1/8" NPT female or 1/2" OD tube w/37° flare 300 Series SS Trunnions
Mounting	Pivot Mount to non-wetted L-5677 Saddle	Pivot Mount to non-wetted L-5677 Saddle	Pivot Mount to non-wetted L-5677 Saddle	Pivot Mount to non-wetted L-5677 Saddle	Pivot Mount to non-wetted L-5677 Saddle
Materials of Construction	400 Series Stainless Steel	400 Series Stainless Steel	400 Series Stainless Steel	400 Series Stainless Steel	400 Series Stainless Steel
Seals	PTFE Lip with fluoro elastomers (Viton) O-ring	D2 Universal Face Seal	D2 Universal Face Seal	PTFE Lip with fluoro elastomers (Viton) O-ring	PTFE Lip with fluoro elastomers (Viton) O-ring

Model	Summary	Drawing No.
BPB-4391	Standard Materials, Trunnion Porting, Lip Seal	30C-14366
BPB-5596	As 4391 except Rear Plate Porting	30C-1499
BPB-4407	As 4391 except All Metal Face Seal	30C-2472
BPB-4776	As 4407 except 6 Binder Screws	30C-7848
BPB-5411	As 4391 except 6 Binder Screws	30A-14499

Capacity (cc/rev)	X	
	in	mm
0.160/0.297	1.37	34.8
0.584	1.47	37.3
1.168	1.66	42.2
1.752	1.86	47.2
2.920	2.26	57.4

**Important Note:** Contact the factory or your local authorized Zenith representative with details of your application for specific recommendations. Because of the multiplicity of conditions under which Zenith pumps are operated, we cannot make any performance guarantees. Zenith reserves the right to change specifications.



## Zenith® Pumps

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