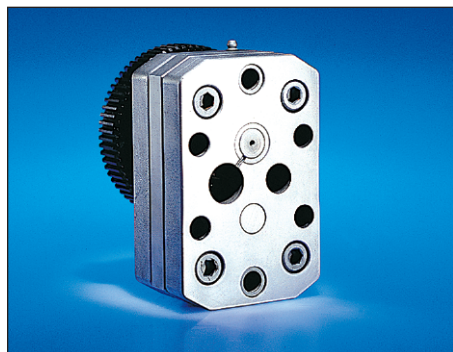




BLB Series Precise Flow Control



Zenith BLB Series metering pumps deliver precise, pulseless, and repeatable flow control performance. Zenith precision metering pumps greatly improve product quality while eliminating costly overdosing

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.

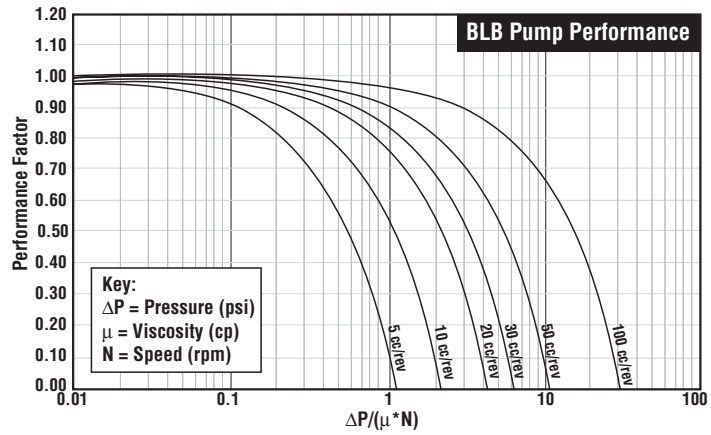
Specifications

Model	5456	5530	4714
Available Capacities	5, 10, 20, 30, 50, 100 (cc/rev)	5, 10, 20, 30, 50, 100 (cc/rev)	5, 10, 20, 30, 50, 100 (cc/rev)
Flow Rate	0.8-285 GPH (50-18000 cc/min)	0.8-285 GPH (50-18000 cc/min)	0.8-285 GPH (50-18000 cc/min)
Temperature Limit	300°F (150°C)	300°F (150°C)	300°F (150°C)
Recommended Speed Range	10-180 rpm	10-180 rpm	10-180 rpm
Pump Rotation (Facing Outer Drive Gear)	CCW	CCW	CCW
Inlet Pressure Range	0-300 psi 2068 kPa	0-300 psi 2068 kPa	40-500 psi 275-3447 kPa
Discharge Pressure Limit	1000 psi 6895 kPa	1000 psi 6895 kPa	3000 psi 20685 kPa
Viscosity Range	1-500000 cp 0.001-500 Pa-s	1-500000 cp 0.001-500 Pa-s	1-500000 cp 0.001-500 Pa-s
Inlet/Outlet Port Connections	Saddle Ported 1" Female NPT Inlet 3/4" Female NPT Outlet	Saddle Ported 1" Female NPT Inlet 3/4" Female NPT Outlet	Saddle Ported 1" Female NPT Inlet 3/4" Female NPT Outlet
Mounting	Fixed mount to L-shaped (wetted) saddle	Fixed mount to L-shaped (wetted) saddle	Fixed mount to L-shaped (wetted) saddle
Materials of Construction	400 Series Stainless Steel	400 Series Stainless Steel	400 Series Stainless Steel
Shaft Seals	Double PTFE Lip Seals with SS spring	Double PTFE Lip Seals with SS spring	D2 Universal face seal
Outer Drive Gear	70 Teeth others available	70 Teeth others available	70 Teeth others available

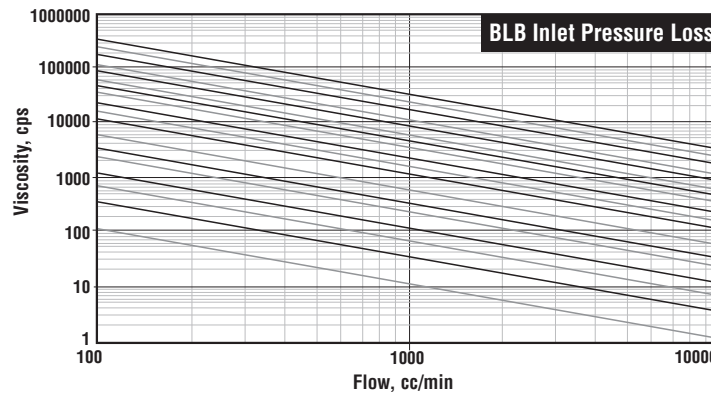
Capacity (cc/rev)	X		Gear Data
	in	mm	
10	2.38	60.5	Precision Ground Zenith 22T Metering Gear
20	3.02	76.7	
30	3.66	92.7	
50	4.92	125.0	Precision Ground Zenith 11T Metering Gear
100	4.92	125.0	

Model	Summary	Drawing No.
BLB-5456	2 Lip Seals	30C-14657
BLB-5456-100cc	2 Lip Seals	30C-15598
BLB-5530	As 5456 except with flushing between Lip Seals	30C-14929
BLB-4714	As 5456 except all metal FaceSeal	30C-6699

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.



Flowrate = pump capacity (cc/rev) x rpm x performance factor



- Top to Bottom**
- 300 psi
 - 200 psi
 - 150 psi
 - 100 psi
 - 75 psi
 - 50 psi
 - 40 psi
 - 30 psi
 - 20 psi
 - 15 psi
 - 10 psi
 - 5 psi
 - 3 psi
 - 2 psi
 - 1 psi
 - 0.6 psi
 - 0.3 psi
 - 0.1 psi

