

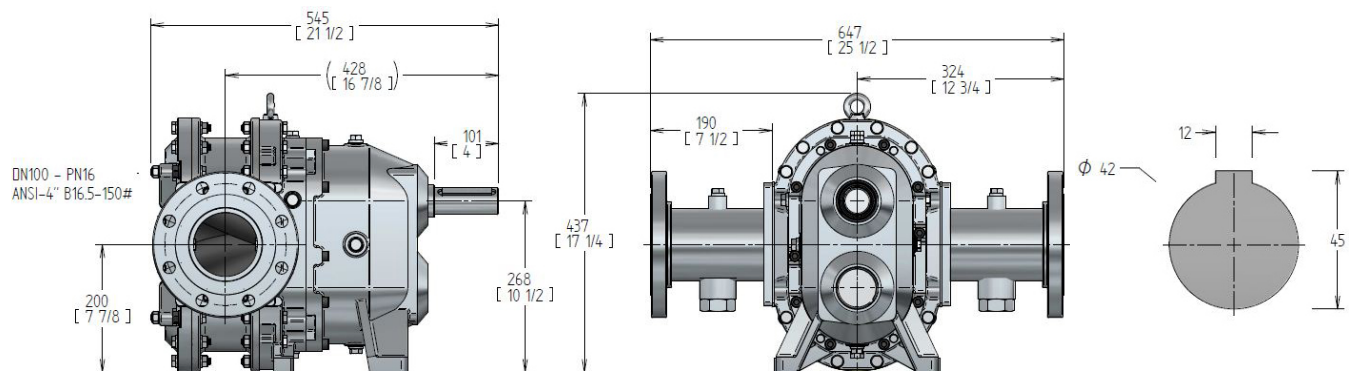
## Positive Displacement Rotary Lobe Pumps

SPECIFICATIONS	US	Metric
Rated Capacity:	0-300 gpm	0-68 m <sup>3</sup> /h
Displacement (per 100 revolutions):	50 gal (US)	189 L
Maximum Continuous Pressure:	125 psi	8.6 bar
Starting Torque:	1,273 in lbf	144 N m
Rated Speed:	0-600 RPM	0-600 RPM
Shaft Diameter:	1.65"	42 mm
Flange Connection Class:	ANSI 16.5-150#	DN - PN 16
Flange Connection Size:	ANSI 4"	DN 100
Weight:	290 lbs	132 kg
Solids Handling:		
Spherical Compressible	1.5"	38 mm
Spherical Hard*	1/8"	3 mm

\* Larger hard solids will pass through but may cause damage.

MODEL >	SM50	CM50	DM50
Service	Sludge, Mud and Slurries*	Chemical/Corrosive	Oil, Gas & Abrasives
<b>WETTED PARTS</b>			
<b>Rotary Lobes</b>			
Elastomer	NBR or HNBR Opt. FKM, EPDM or Eng. Rec.	FKM or HNBR Opt. NBR, EPDM or Eng. Rec.	FKM or HNBR Opt. NBR, EPDM or Eng. Rec.
Lobe Profile	Helix, Opt. Straight	Helix, Opt. Straight	Helix, Opt. Straight
Number of lobe wings	4, Opt. 2	4, Opt. 2	4, Opt. 2
Core	Carbon Steel or Eng. Rec.	Carbon Steel or Eng. Rec.	Carbon Steel or Eng. Rec.
<b>Sealing Elastomers</b>			
O-rings	FKM or Engineer Recommendation	FKM or Engineer Recommendation	FKM or Engineer Recommendation
Lip seals	FKM or Engineer Recommendation	FKM or Engineer Recommendation	FKM or Engineer Recommendation
<b>Mechanical Seals</b>			
Type	LARS, Opt. Tabbed LARS or CART	LARS, Opt. Tabbed LARS or CART	LARS, Opt. Tabbed LARS or CART
Mechanical Seal	Duronit Opt. Tungsten Carbide, Silicon Carbide, or Eng. Rec.	Silicon Carbide Opt. Tungsten Carbide or Engineer Rec.	Tungsten Carbide Opt. Silicon Carbide or Engineer Rec.
Seal Holders	Carbon Steel w/ CR coating Opt. 316SS	Stainless Steel Type 316	Duplex Stainless Steel
<b>Wear Plates</b>	AR500 Steel (Brinell 500)	Duplex Stainless Steel	Duplex Stainless Steel
<b>Housing Segments</b>	ASTM A48 Grey Iron rust primed	Duplex Stainless Steel	Duplex Stainless Steel
<b>Flange Ring</b>	ASTM A36 Carbon Steel	Stainless Steel Type 316L	Duplex Stainless Steel
<b>Strain Bolts</b>	Geomet Coated Steel	Stainless Steel A2-A4	Duplex Stainless Steel
<b>Wear Plate Bolts</b>	Stainless Steel A2-A4	Stainless Steel A2-A4	Duplex Stainless Steel
<b>Pressure Disc</b>	Stainless Steel Type 316L	Stainless Steel Type 316L	Duplex Stainless Steel
<b>LIMITED EXPOSURE PARTS</b>			
<b>Quench /Seal Cooling Chamber</b>	ASTM A48 Grey Iron rust primed Opt. Steel or Duplex SS Adapter / A48 Non-wetted	CIT Coated ASTM Grey Iron Opt. Duplex SS Adapter / A48 Non-wetted	CIT Coated ASTM Grey Iron Opt. Duplex SS Adapter / A48 Non-wetted
<b>Pump Cover</b>	ASTM A48 Grey Iron rust primed	316 Stainless Steel Opt. CIT coated Grey Iron	Duplex Stainless Steel Opt. CIT coated Grey Iron
<b>NON-WETTED PARTS</b>			
<b>Gears</b>	GMA Class 9 AISI 1045 steel	GMA Class 9 AISI 1045 steel	GMA Class 9 AISI 1045 steel
<b>Gear Housing</b>	ASTM A48 Grey Iron rust primed	ASTM A48 Grey Iron rust primed	ASTM A48 Grey Iron rust primed
<b>Shaft</b>	AISI 4140 Alloy Steel	AISI 4140 Alloy Steel	AISI 4140 Alloy Steel
<b>Pump Assembly/External Bolts</b>	Carbon Steel ISO 898-1	Stainless Steel A2-A4	Stainless Steel A2-A4
<b>PAINTING REQUIREMENTS</b>			
<b>Standard Painting</b>	SSPC/SP6 Sandblast Paint	SSPC/SP6 Sandblast Paint	SSPC/SP6 Sandblast Paint
<b>Color</b>	LobePro Blue	LobePro Silver	LobePro Silver

NOTE: Listed above are standard pump assemblies; lobe styles and materials subject to recommendation by LobePro Engineering. A wide range of optional materials are available for each model. Consult LobePro for further information.  
\*Consult Factory for application temperature above 80°C (175°F).



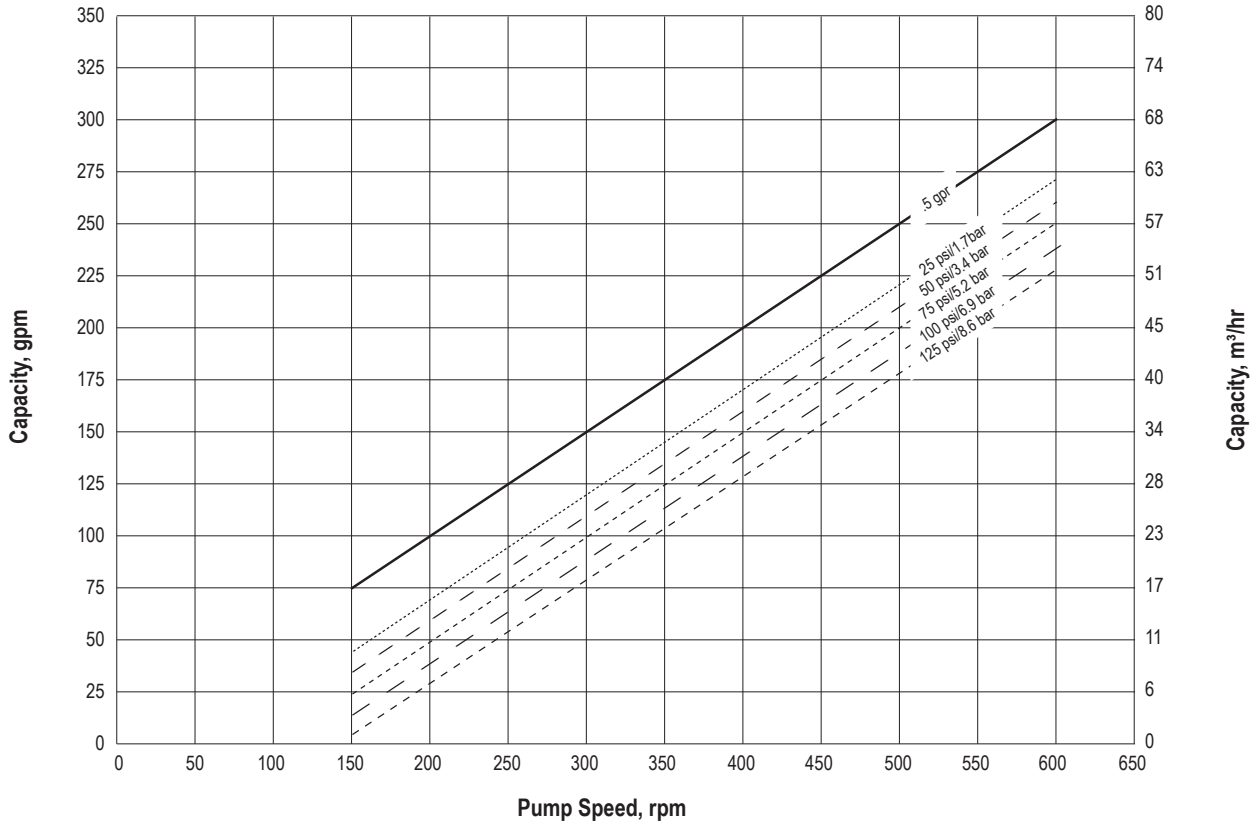
**Section 40-15**

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**M50 CURVES**

**Performance Curve - NBR Lobes\***

Based on 70°F (21°C) fresh water (1 cp) at Sea Level.  
Output will increase as viscosity of the fluid increases from 1.



\*Note: Output from lobes coated with elastomers other than NBR maybe lower. Contact Engineering for further information.

**Horsepower Requirements**

