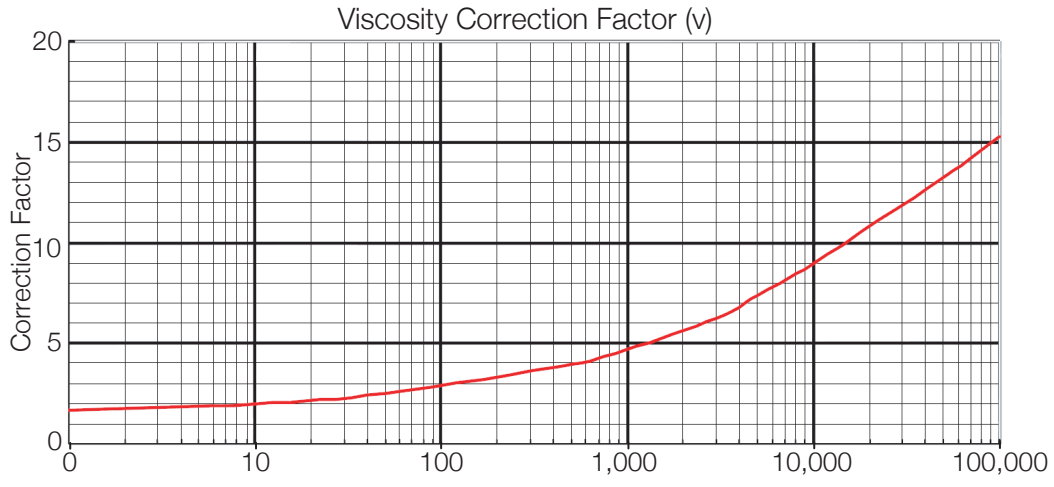
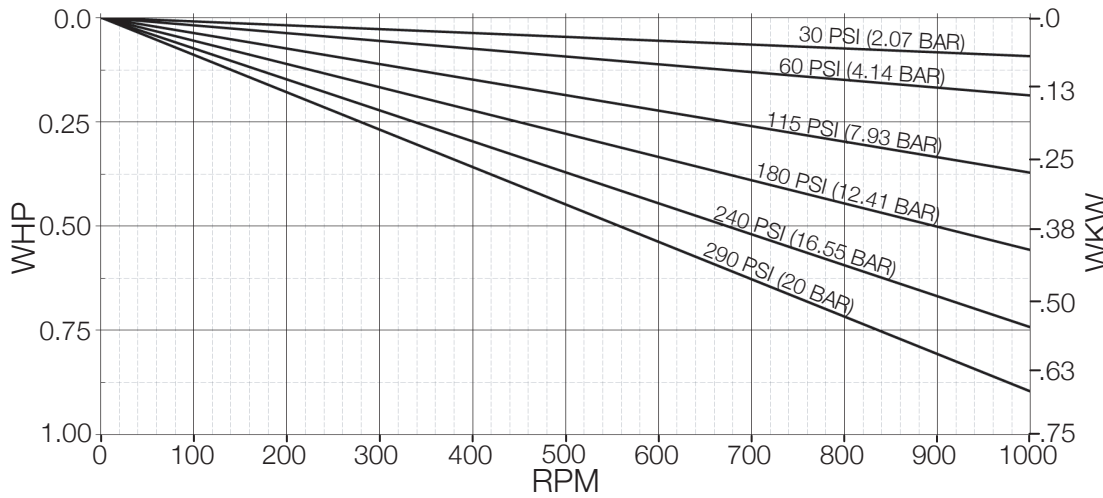
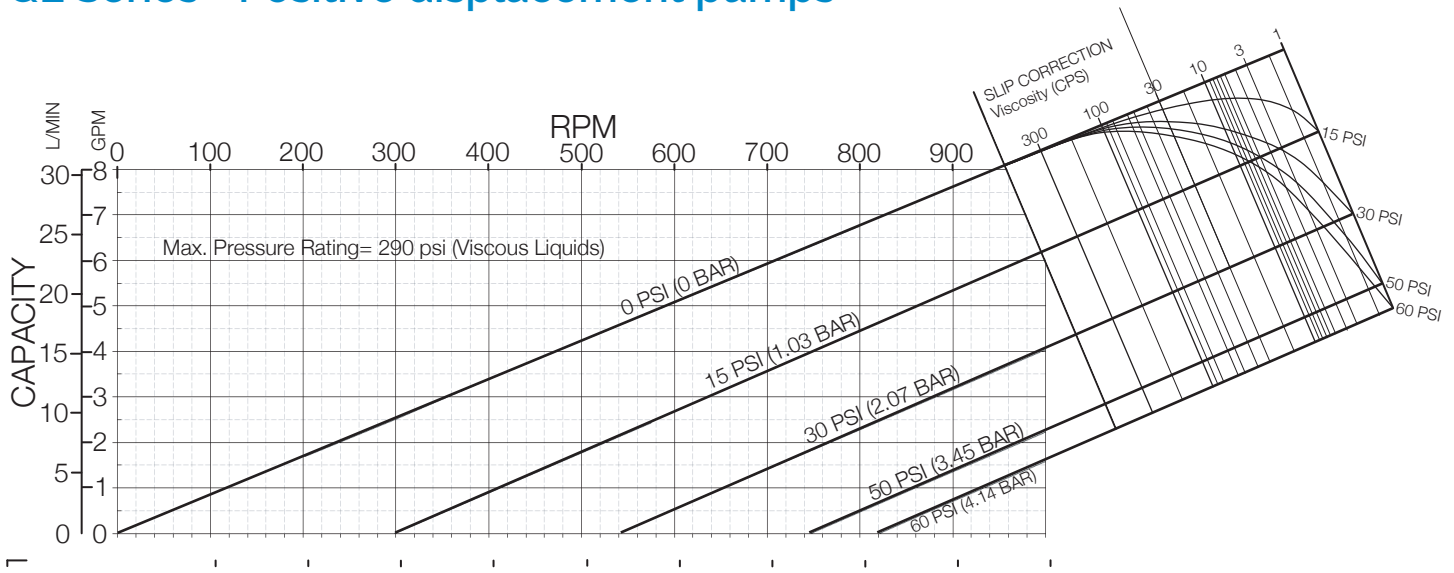


QL Series - Positive displacement pumps



QL Series Model QL110

Standard Clearances
 Standard Port Size = 1.0"
 Displacement =
 0.013 Gal/Rev
 (0.050 L/Rev)

- Operating Specifications:
- 0-1000 RPM Range
 - 290 PSI (20 bar) Max. Pressure
 - Temperature Range
 -40 °F (-40°C) to
 250 °F (121 °C)

Subject to change without notice

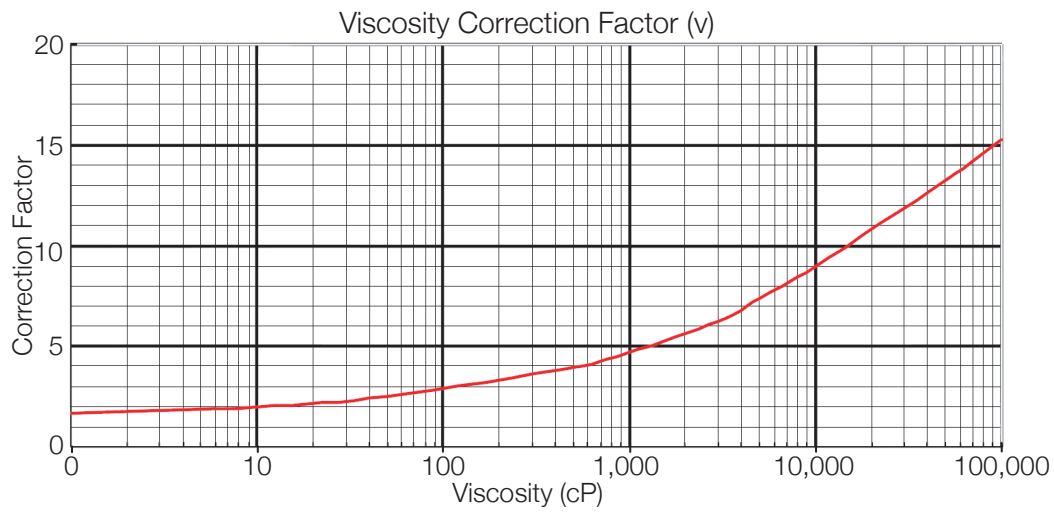
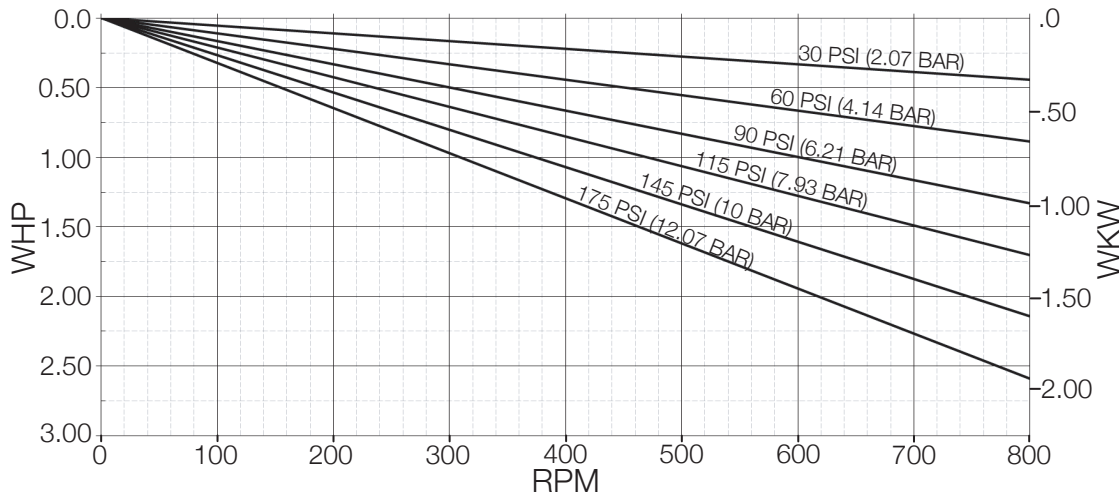
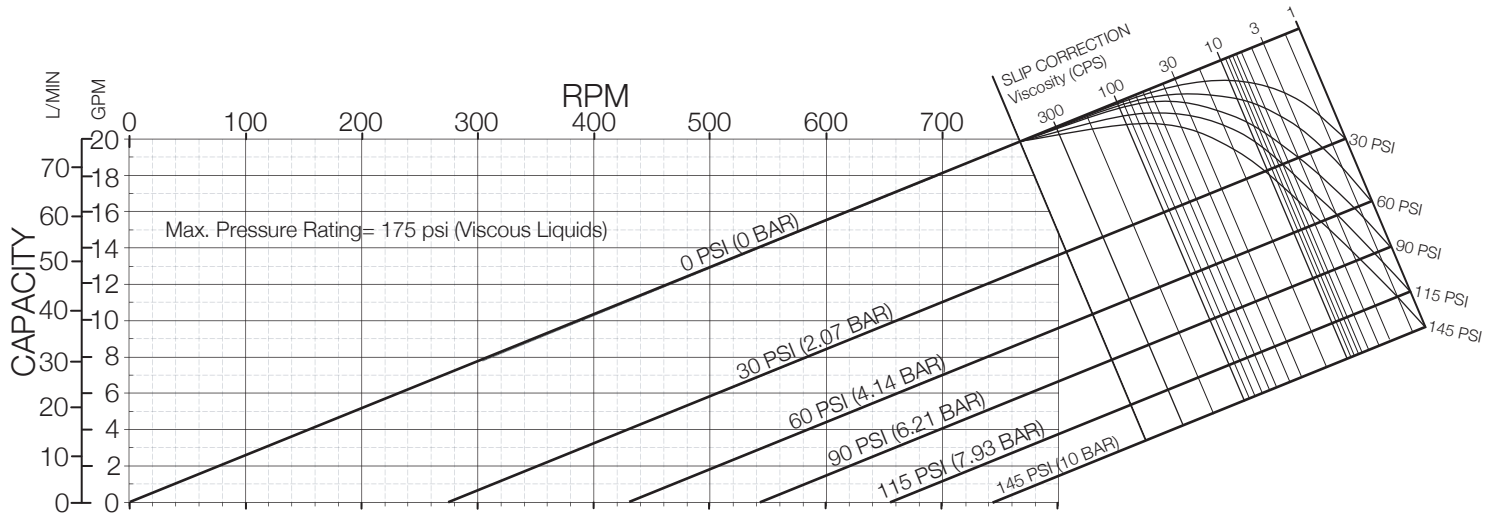
QL Series Model	110
C (G/rev)	.013
C (L/rev)	.050

Where: p = pressure (psi or bar)
 v = viscosity correction factor (from graph)
 n = speed (RPM)
 c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)

(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \cdot n \cdot c$
 (Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \cdot n \cdot c}{1000}$

QL Series - Positive displacement pumps



QL Series
Model QL115

Standard Clearances
Standard Port Size = 1.5"
Displacement =
0.032 Gal/Rev
(0.121 L/Rev)

- Operating Specifications:
- 0-800 RPM Range
 - 175 PSI (12.07 bar) Max. Pressure
 - Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

Subject to change without notice

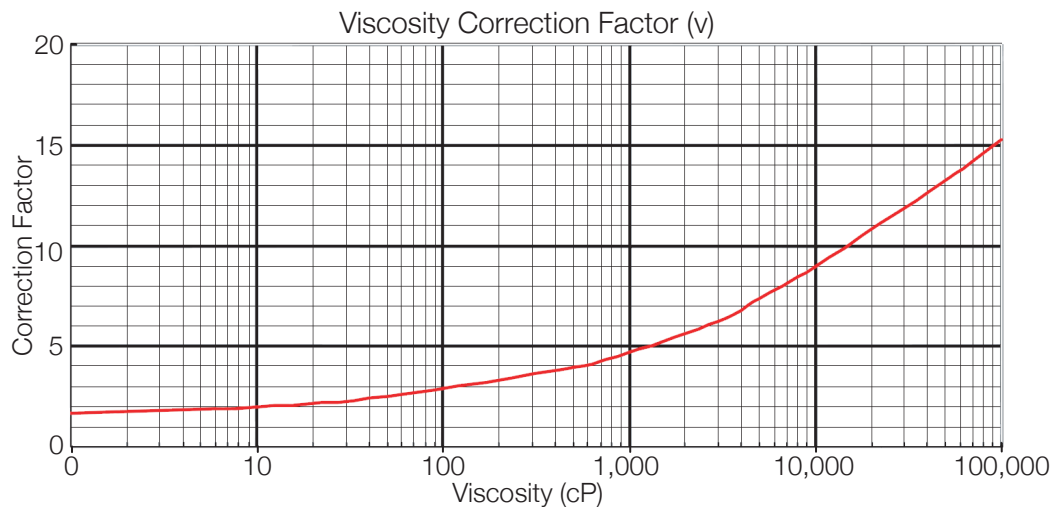
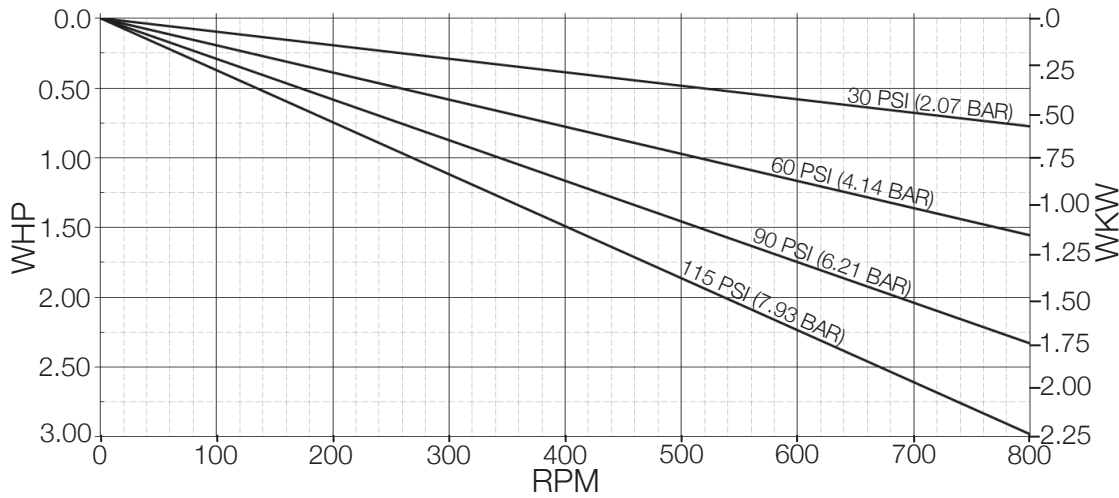
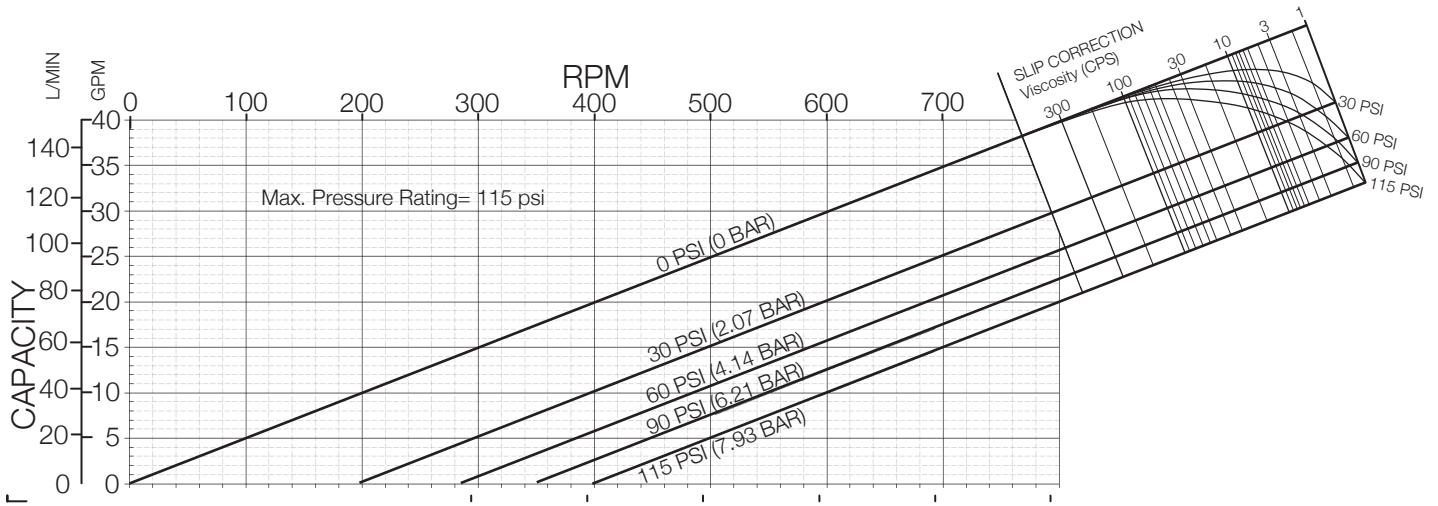
QL Series Model	115
C (G/rev)	.032
C (L/rev)	.121

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)

(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \cdot n \cdot c$
(Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \cdot n \cdot c}{1000}$

QL Series - Positive displacement pumps



QL Series Model QL120

Standard Clearances
Standard Port Size = 2.0"
Displacement =
0.056 Gal/Rev
(0.212 L/Rev)

- Operating Specifications:
- 0-800 RPM Range
 - 115 PSI (7.93 bar) Max. Pressure
 - Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

Subject to change without notice

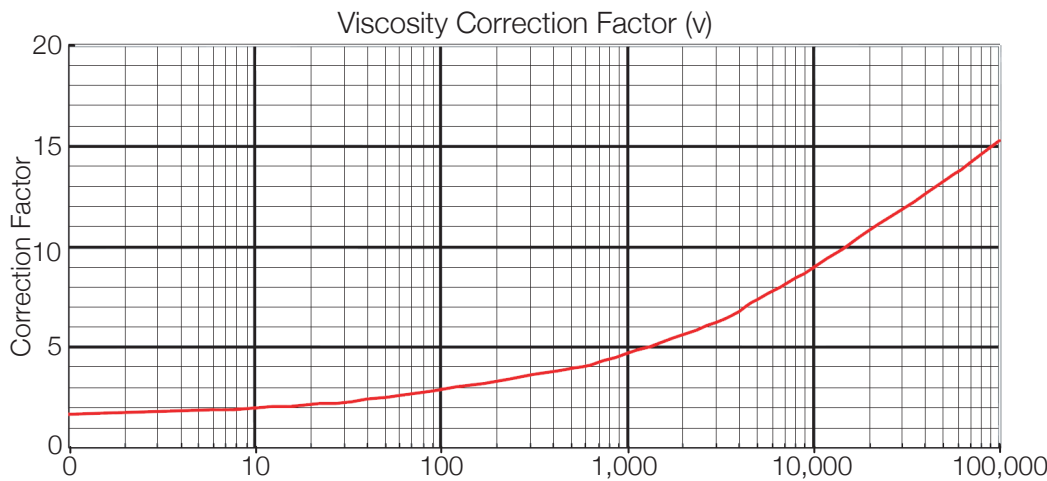
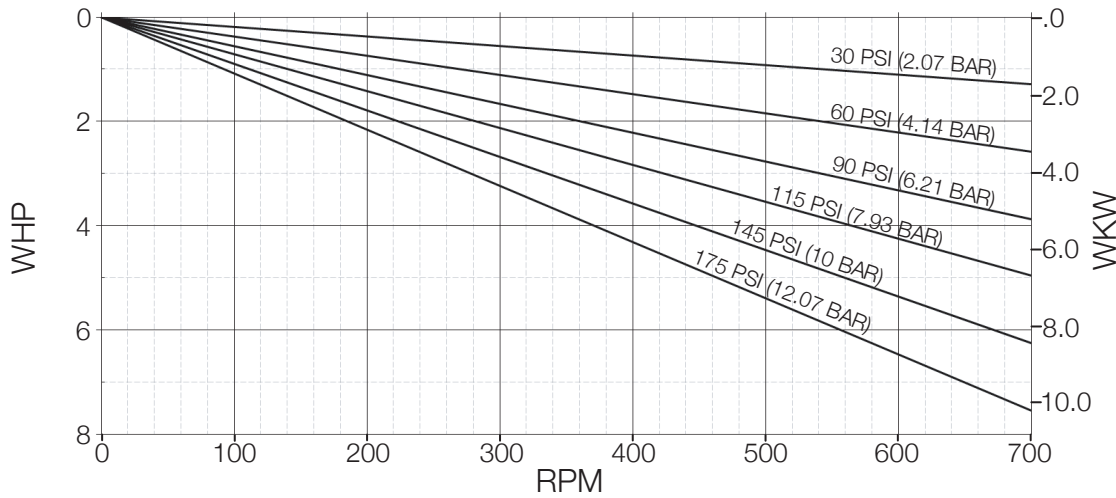
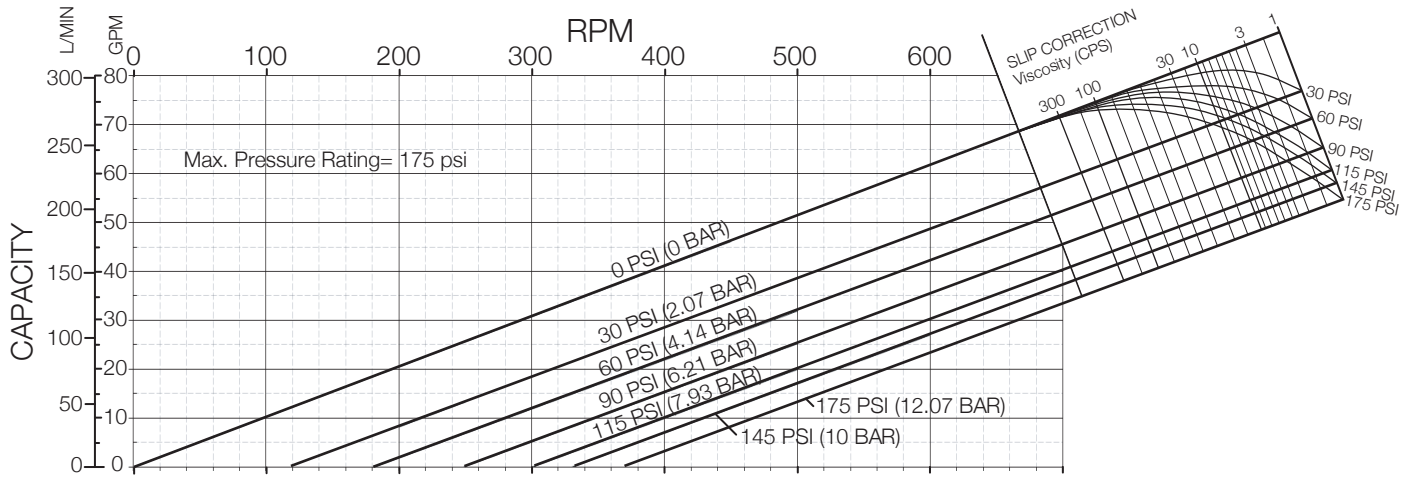
QL Series Model	120
C (G/rev)	.056
C (L/rev)	.212

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)

(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \cdot n \cdot c$
(Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \cdot n \cdot c}{1000}$

QL Series - Positive displacement pumps



QL Series Model QL220

Standard Clearances
Standard Port Size = 2.0"
Displacement =
0.106 Gal/Rev
(0.401 L/Rev)

Operating Specifications:
• 0-700 RPM Range
• 175 PSI (12.07 bar) Max. Pressure
• Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

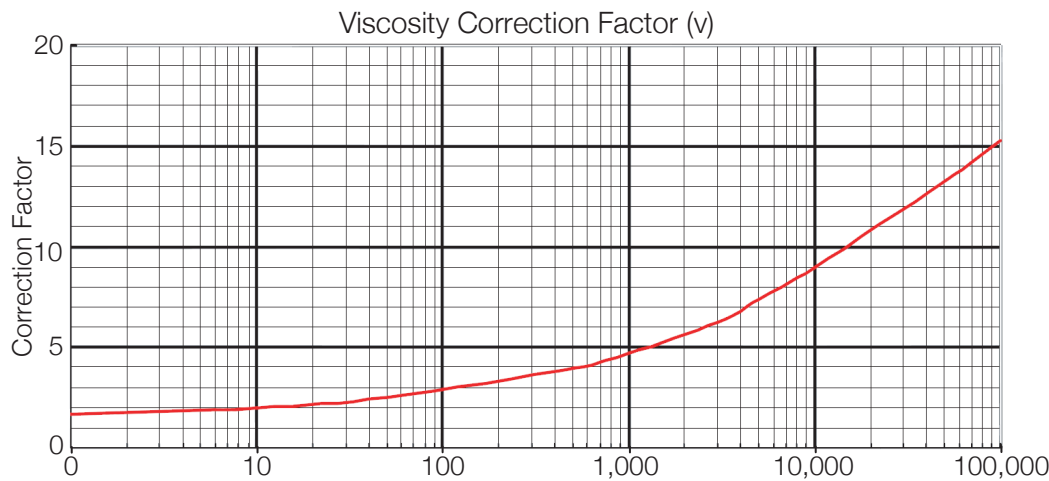
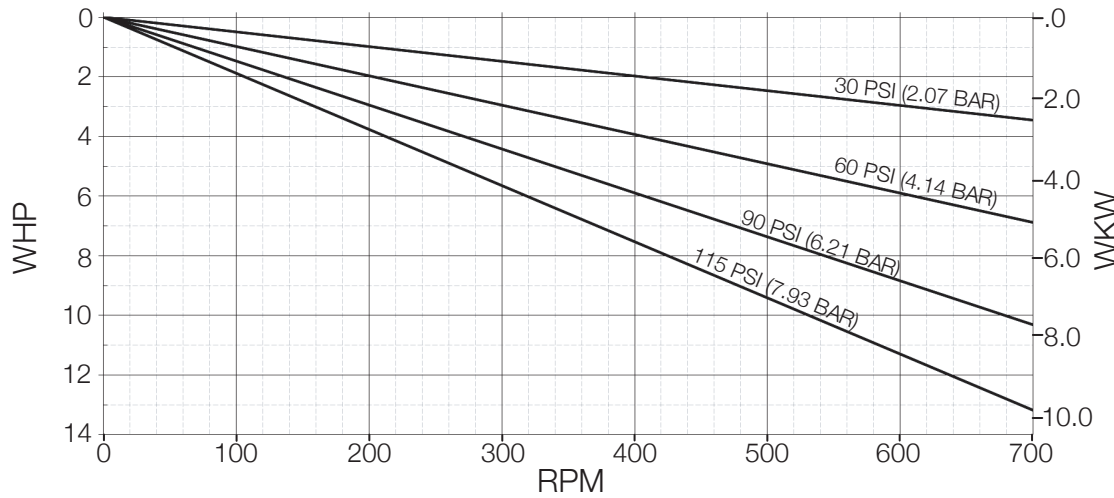
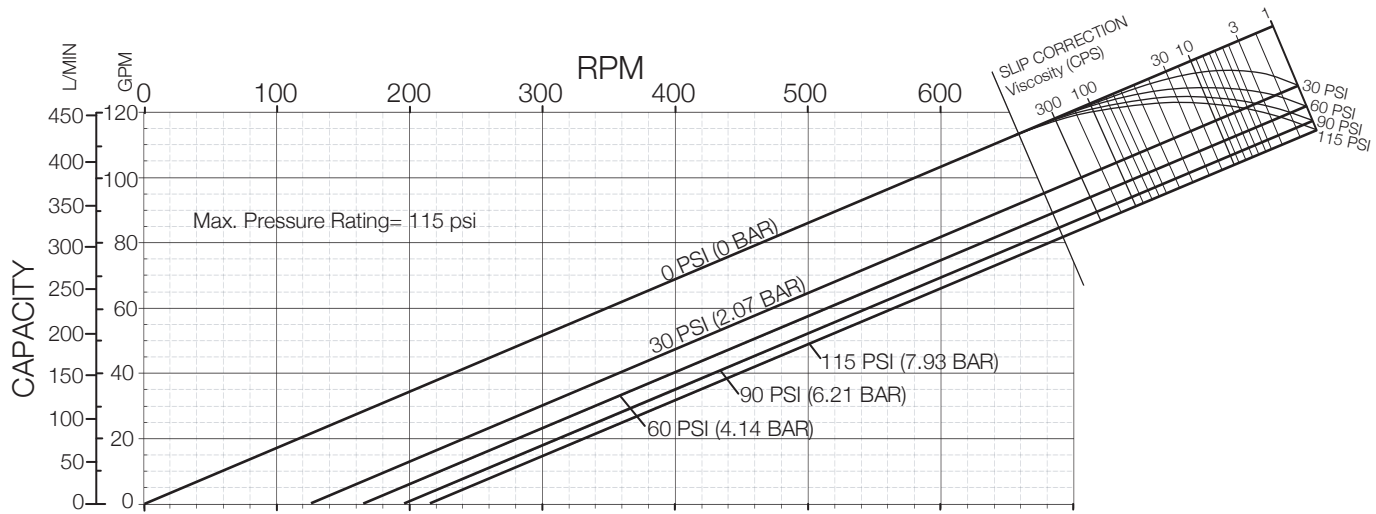
Subject to change without notice

QL Series Model	220
C (G/rev)	.106
C (L/rev)	.401

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)
(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \times n \times c$
(Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \times n \times c}{1000}$

QL Series - Positive displacement pumps



QL Series Model QL225

Standard Clearances
Standard Port Size = 2.5"
Displacement =
0.164 Gal/Rev
(0.621 L/Rev)

Operating Specifications:
0-700 RPM Range
115 PSI (7.93 bar) Max.
Pressure
Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

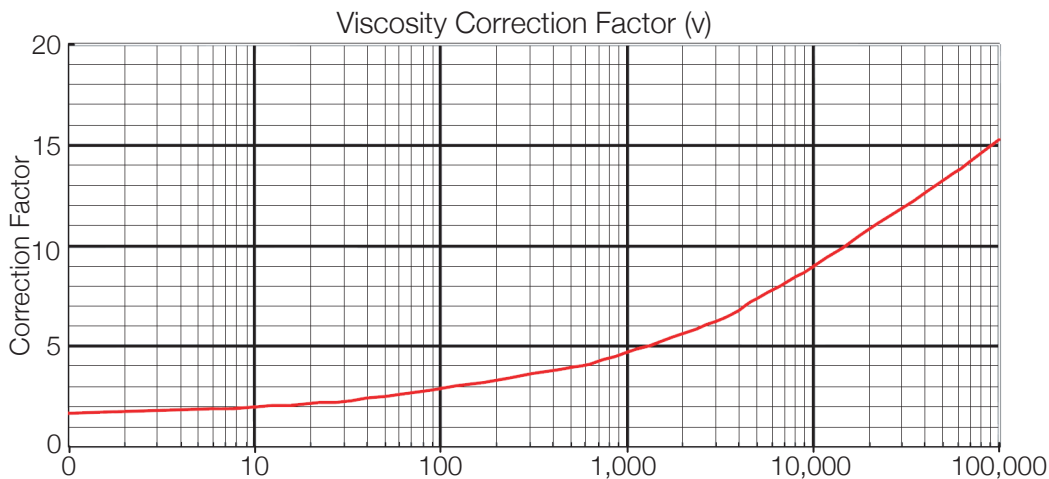
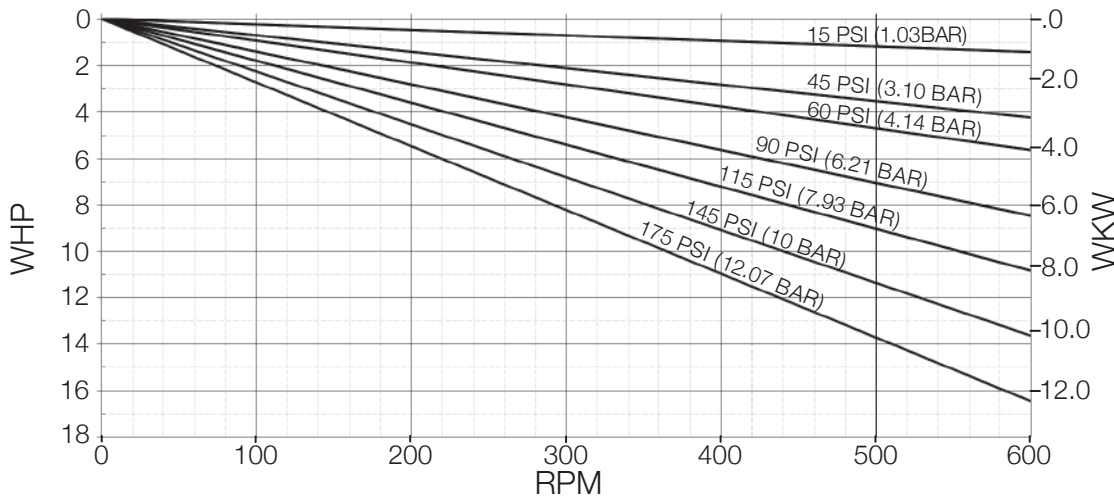
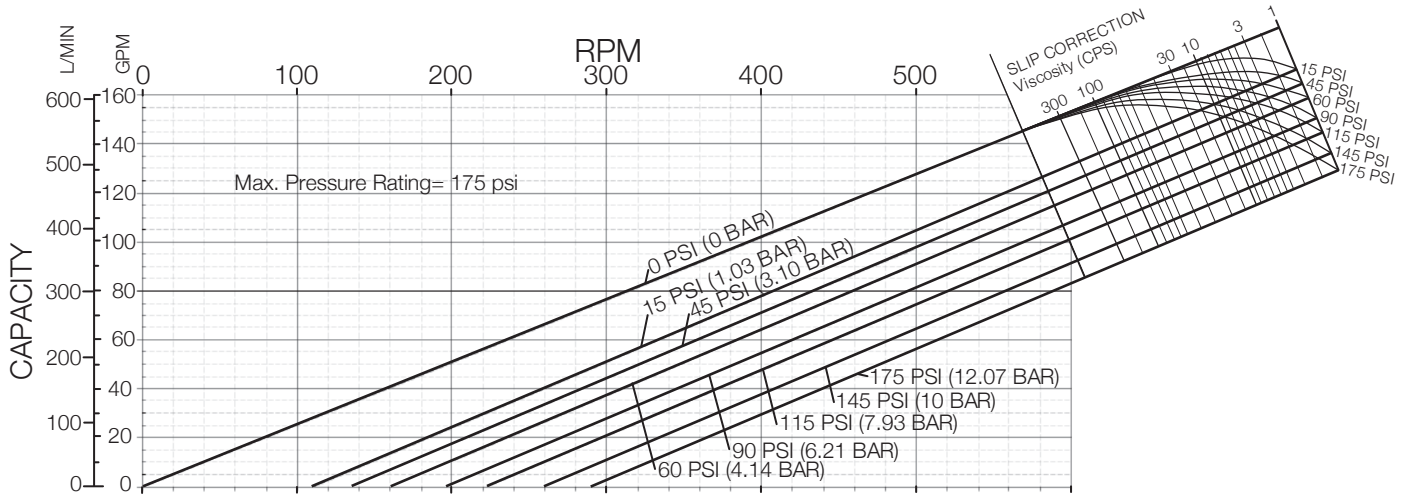
Subject to change without notice

QL Series Model	225
C (G/rev)	.164
C (L/rev)	.621

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)
(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \times n \times c$
(Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \times n \times c}{1000}$

QL Series - Positive displacement pumps



QL Series Model QL330

Standard Clearances
Standard Port Size = 3.0"
Displacement =
0.269 Gal/Rev
(1.018 L/Rev)

- Operating Specifications:
- 0-600 RPM Range
 - 175 PSI (12.07 bar) Max. Pressure
 - Temperature Range
-40 °F (-40 °C) to
250 °F (121 °C)

Subject to change without notice

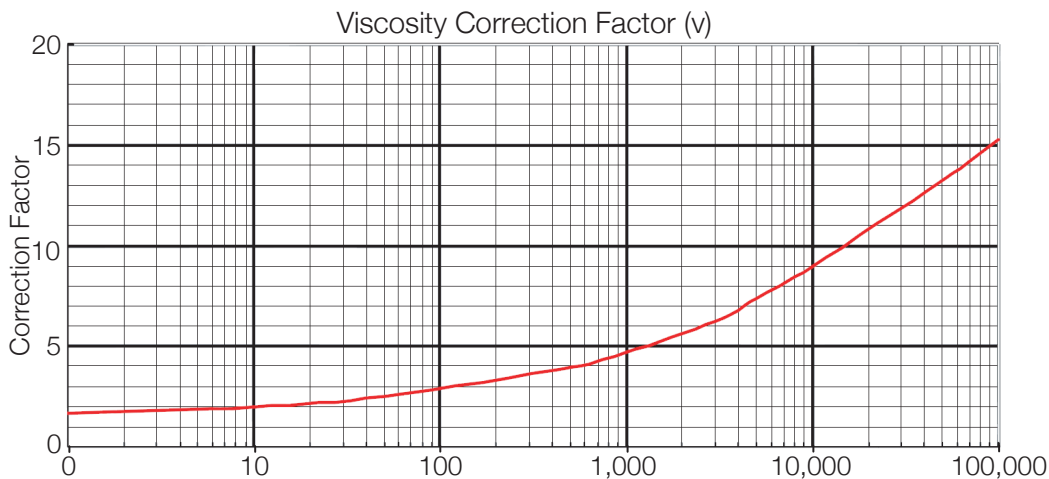
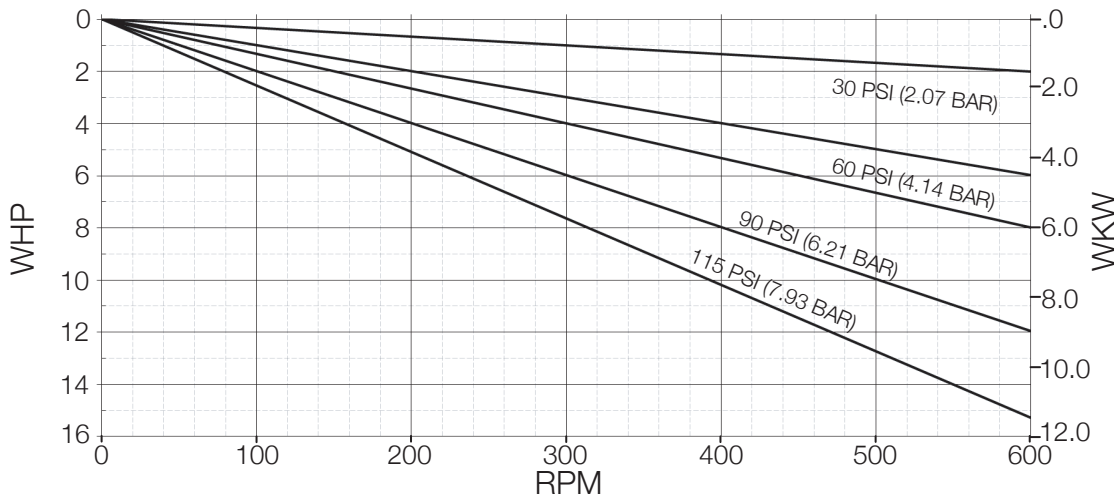
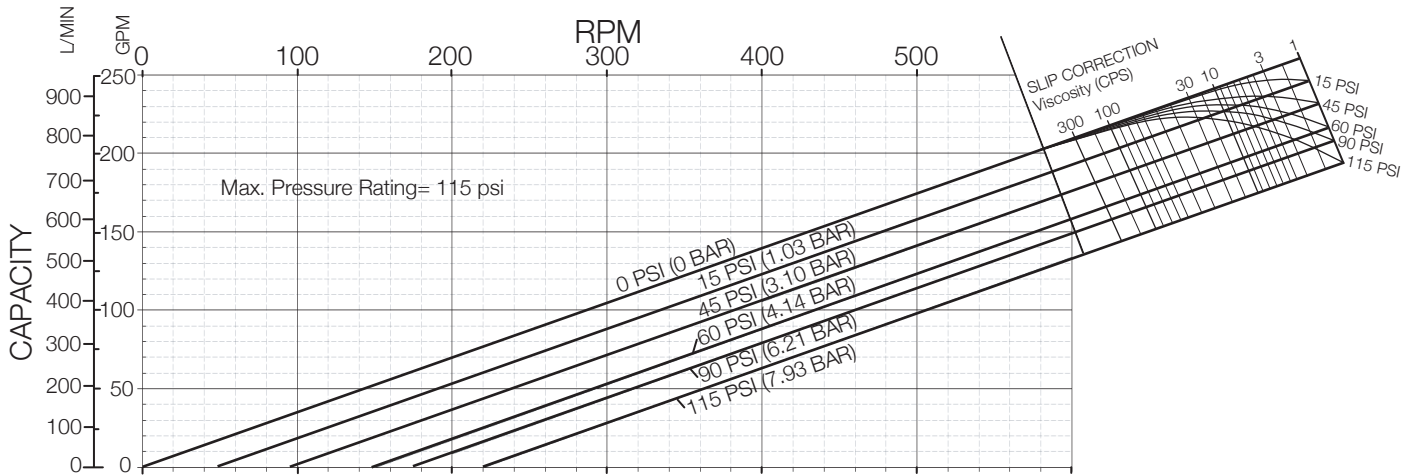
QL Series Model	330
C (G/rev)	.269
C (L/rev)	1.018

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)

(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \times n \times c$
 (Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \times n \times c}{1000}$

QL Series - Positive displacement pumps



QL Series Model QL340

Standard Clearances
Standard Port Size = 4.0"
Displacement =
0.380 Gal/Rev
(1.438 L/Rev)

Operating Specifications:

- 0-600 RPM Range
- 115 PSI (7.93 bar) Max. Pressure
- Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

Subject to change without notice

QL Series Model	340
C (G/rev)	.380
C (L/rev)	1.438

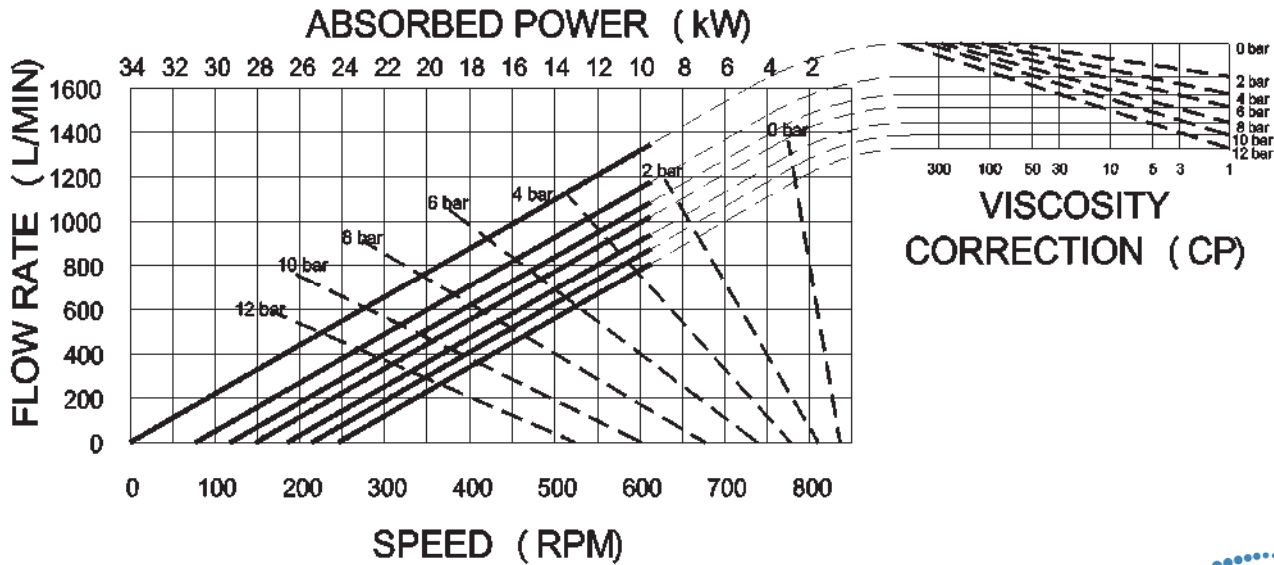
Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)

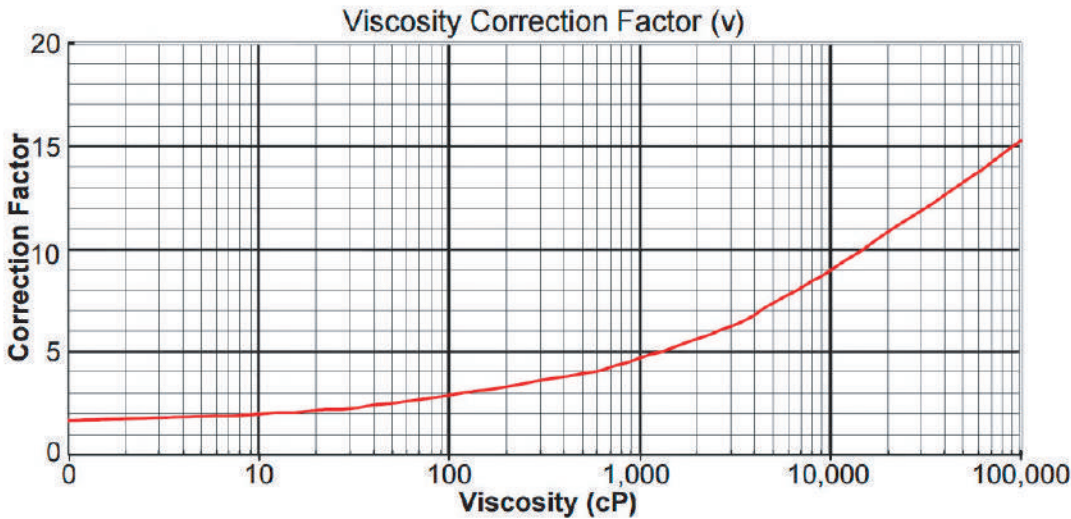
(English units) Total Power (HP) = $(.0007 \times p + .0051 \times v) \times n \times c$
(Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \times n \times c}{1000}$

QL Series - Positive displacement pumps

WATER CAPACITY AND ABSORBED POWER GRAPH



ABSORBED kW FIGURES ARE FOR 1 CP VISCOSITY



QL Series
Model QL440

Standard Clearances
Standard Port Size = 4.0"
Displacement =
0.60 Gal/Rev
(2.27 L/Rev)

Operating Specifications:
• 0-500 RPM Range
• 175 PSI (21.00 bar) Max. Pressure
• Temperature Range
-40 °F (-40°C) to
250 °F (121 °C)

Subject to change without notice

QL Series Model	440
C (G/rev)	.60
C (L/rev)	2.27

Where: p = pressure (psi or bar)
v = viscosity correction factor (from graph)
n = speed (RPM)
c = displacement (G/rev. or L/rev from table below)

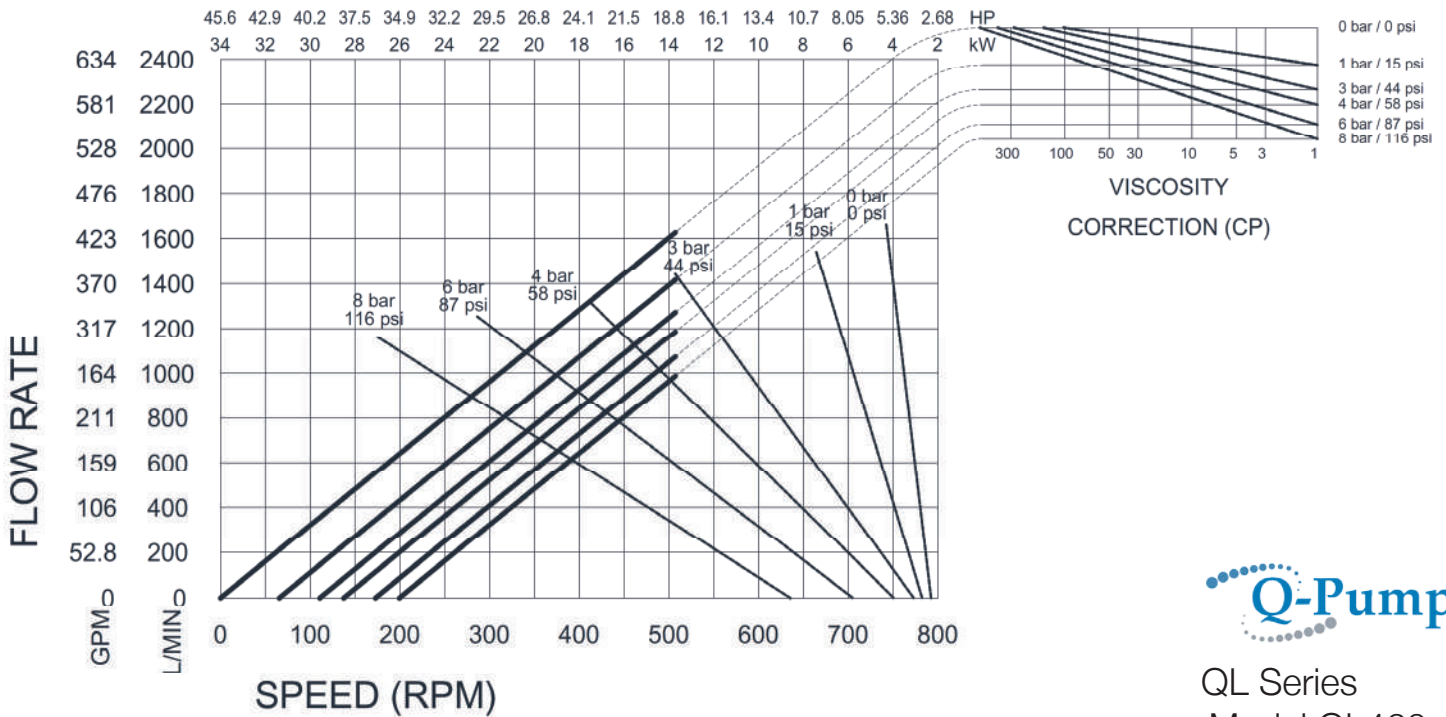
Viscosity (cP)

$$\text{(English units) Total Power (HP)} = (.0007 \times p + .0051 \times v) \times n \times c$$

$$\text{(Metric units) Total Power (Kw)} = \frac{(2 \times p + v) \times n \times c}{1000}$$

QL Series - Positive displacement pumps

ABSORBED POWER ABSORBED POWER FIGURES ARE FOR 1 CP VISCOSITY



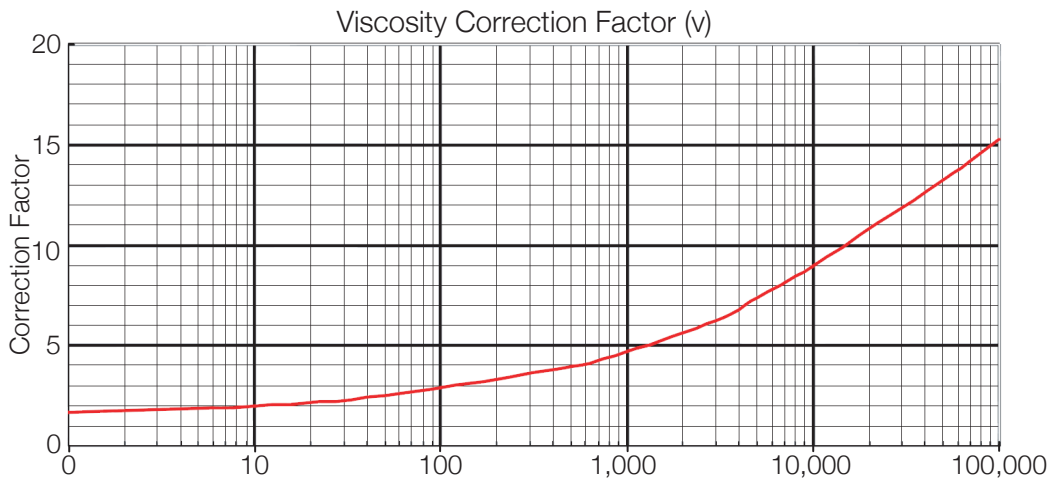
QL Series
Model QL460

Standard Clearances
Standard Port Size = 6.0"
Displacement =
0.88 Gal/Rev
(3.34 L/Rev)

Operating Specifications:
 • 0-500 RPM Range
 • 116 PSI (8.00 bar) Max. Pressure
 • Temperature Range
 -40 °F (-40 °C) to
 250 °F (121 °C)

Subject to change without notice

QL Series Model	460
C (G/rev)	.88
C (L/rev)	3.34



Where: p = pressure (psi or bar)
 v = viscosity correction factor (from graph)
 n = speed (RPM)
 c = displacement (G/rev. or L/rev from table below)

Viscosity (cP)
 (English units) Total Power (HP) = (.0007 × p + .0051 × v) × n × c
 (Metric units) Total Power (Kw) = $\frac{(2 \times p + v) \times n \times c}{1000}$