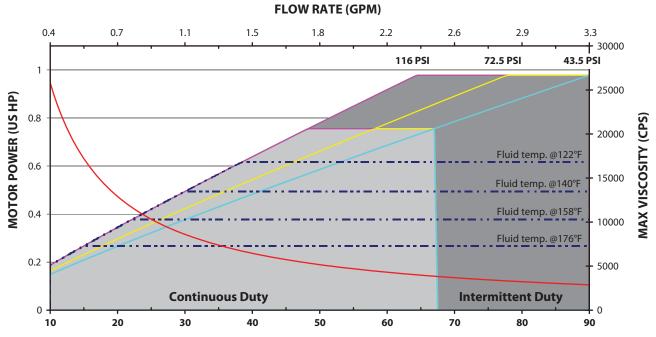


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Effective: May 2016 Replaces: May 2009 Section: 1103

Characteristic Curves Model HDN20 Peristaltic Hose Pump



HDN20 Pump Performance Data	
Maximum Flow	3.3 gpm
Displacement:	0.0366 gal./rev
Max. Discharge Pressure:	116 psi
Max. Solid Particle Size:	0.12"
Max. Soft Particle Size:	0.20"
Max. Viscosity:	30,000 cps
Inlet/Outlet Connection	1" hose barb
Pump Weight:	60-70 lbs.

Instructions for use of this curve

Does the pumped fluid viscosity exceed 2,800 cps? If yes, proceed to step 1; if no, skip to step 5.

- 1. Select the appropriate viscosity line and move left until the red viscosity curve is intersected.
- 2. Move straight down to read the rpm. This is the maximum allowable rpm based on fluid's viscosity.
- 3. Move straight up to read the maximum flow rate.
- **4.** Move left on max. viscosity line to determine the required motor power (hp).
- 5. Determine desired flow rate (gpm) on top line and move straight down to read rpm necessary to achieve that capacity.

ROTATION SPEED (RPM)

- 6. Determine desired maximum operating pressure and follow the appropriate line diagonally to point the pressure line and flow rate/rpm line intersect.
- **7.** Move left to determine the required motor power (hp) for the application.

Temperature Notes

For fluid temperatures above 104°F select the appropriate fluid temperature line and move left to desired pressure line. Move straight down to the rpm line. This is the maximum allowable rpm for continuous duty at this temperature.

Examples:

Maximum continuous duty at 116 psi is 48 rpm Maximum continuous duty at 72.5 psi is 58 rpm At 140°F fluid temp and 72.5 psi maximum continuous duty is 35 rpm

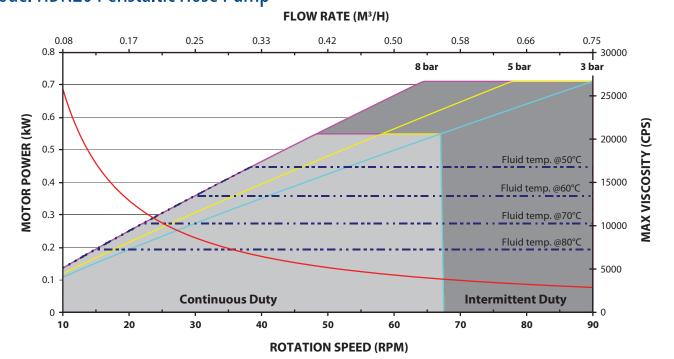
Continuous vs. Intermittent Duty

Intermittent duty is defined as a pump that operates for no more than 2 hours and is stopped for at least 1 hour.

Motor Horsepower

When the curve falls between motor power (hp) listings always select the higher horsepower.

Characteristic Curves (Metric) Model HDN20 Peristaltic Hose Pump



HDN20 Pump Performance Data		
Maximum Flow	750 lph	
Displacement:	0.1385 liter/rev	
Max. Discharge Pressure:	8 bar	
Max. Solid Particle Size:	3 mm	
Max. Soft Particle Size:	5 mm	
Max. Viscosity:	30,000 cps	
Inlet/Outlet Connection	25 mm hose barb	
Pump Weight:	26-32 kg.	

Instructions for use of this curve

Does the pumped fluid viscosity exceed 2,800 cps? If yes, proceed to step 1; if no, skip to step 5.

- 1. Select the appropriate viscosity line and move left until the red viscosity curve is intersected.
- 2. Move straight down to read the rpm. This is the maximum allowable rpm based on fluid's viscosity.
- 3. Move straight up to read the maximum flow rate.
- **4.** Move left on max. viscosity line to determine the required motor power (kW).
- 5. Determine desired flow rate (m³/h) on top line and move straight down to read rpm necessary to achieve that capacity.



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- 6. Determine desired maximum operating pressure and follow the appropriate line diagonally to point the pressure line and flow rate/rpm line intersect.
- **7.** Move left to determine the required motor power (kW) for the application.

Temperature Notes

For fluid temperatures above 40°C select the appropriate fluid temperature line and move left to desired pressure line. Move straight down to the rpm line. This is the maximum allowable rpm for continuous duty at this temperature.

Examples:

Maximum continuous duty at 8 bar is 48 rpm Maximum continuous duty at 5 bar is 58 rpm At 60°C fluid temp and 5 bar maximum continuous duty is 35 rpm

Continuous vs. Intermittent Duty

Intermittent duty is defined as a pump that operates for no more than 2 hours and is stopped for at least 1 hour.

Motor Horsepower

When the curve falls between motor power (kW) listings always select the higher horsepower.

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