



Dynamic Fluid Products Inc.

Hydraulic & Pneumatic Sales & Service

ISO 9001:2000 REGISTERED



<p>Torque and Horsepower Relations: $T = HP \times 5252 / RPM$ $HP = T \times RPM / 5252$ $RPM = HP \times 5252 / T$ Torque in foot pounds</p>	<p>Fluid Power Horsepower: $HP = PSI \times GPM / 1714$ PSI is taken from gauge pressure</p>
<p>Velocity of Oil Flow: $V = GPM \times 0.3208 / A$ V is oil velocity in feet per second. A is inside area of pipe</p>	<p>Burst Pressure of Pipe or Tubing: $P = 2t \times S / O$ P is burst pressure in PSI t is wall thickness in inches S is the tensile strength of the material O is the outside diameter of the pipe or tube</p>
<p>Charles' Law for Behavior of Gases: $T1V2 = T2V1$, or $T1P2 = T2P1$ T1, P1 and V1 are initial temp, pressure and volume measurements T2, P2 and V2 are the final measurements</p>	<p>Boyles' Law for Behavior of Gases: $P1V1 = P2V2$ P1 and V1 are initial pressure and volume measurements P2 and V2 are final measurements</p>
<p>Heat Equivalent of Fluid Power: BTU per hour = $PSI \times GPM \times 1 \frac{1}{2}$</p>	<p>Pressure Loss Per Foot of Pipe: $P = V \times Q / 18,300 D^4$ P is pressure loss per foot in PSI V is the SSU viscosity at temp Q is GPM flow D is the inside diameter of the pipe in inches</p>
<p>Hydraulic Cylinder Piston Travel Speed: $S = CIM / A$ S is piston speed in inches per minute CIM is oil flow into cylinder in cubic inches per minute A is the piston area in square inches</p>	<p>Thrust Force of a Cylinder: $T = A \times PSI$ T is the thrust measured in pounds A is the piston net area in square inches PSI is taken from gauge</p>
<p>Force for Piercing of Shearing Sheet Metal: $F = P \times T \times PSI$ F is force required in pounds P is perimeter of the area surrounding the area to be sheared PSI is the shear strength rating of the material in PSI</p>	<p>Force of a Cylinder at an Angle to the Direction of Load: $F = T \times \sin A$ F is the effective force on the load T is total cylinder force, in pounds A is the smallest angle between cylinder axis and load direction</p>

Notes: _____



P.O. Box 220
40 Cedar Street
Tillsonburg, ON
N4G 4H5

free (800)265-2656
toll (519)688-0337
fax (519)688-0893
www.dynamicfluid.com

Monday to Friday
7am-5pm
Saturday
8am-noon



Dynamic Fluid Products Inc.

Hydraulic & Pneumatic Sales & Service

ISO 9001:2000 REGISTERED



Hose / Tubing

Polyurethane
Polyethylene
Teflon
Nylon
PVC Braided
Multipurpose
Food Grade
PVC Clear
Hydraulic Hose
Self Retracting
Stainless Braided
Steel / SS Tubing
Flaring Tools
Tube Benders
Hose Assemblies
Pressure Washer
Chemical
Suction
Water



Pneumatic

Quick Couplings
Cylinders
Rotary Actuators
Control Valves
Limit Switches
Breathers
Control Panel Prod.
Grippers Thrust Slides
Filters
Regulators
Lubricators
Seal Kits
Coalescers



Structural ParFrame

Extrusion Profiles
Connections & Fasteners
Enclosure / Guarding
- Accessories
Floor Accessories
ParGlide Linear
- Motion
ParRail Linear Rail
Accessories and
Tooling



Fittings / Adapters

JIC
O-Ring Face Seal
NPTF
D.O.T. Air Brake
BSP / BSPT
Metric
Compression
Polytite
SAE Flange
Brass
Plastic
Black Pipe
Galvanized
Copper Compression



Hydraulic

Quick Couplings
Control Valves
Rotary Actuators
Cartridge Valves
Servo Valves
Cylinders
Filtration
Pumps



Motors
Seal Kits
Live Swivels

Valves

isys
Ball (Brass, S.S., C.S.)
Check
Relief
Lockout
Needle
Flow Control
Forged
Solenoid
High Pressure
Directional Control
Lever
Pilot Operated
Plug
Press Safety



Industrial Magnetics

Transporters
Conveyors
Lift Magnets
Sweepers
Electro/Rare Earth
In-Line Vac Magnets
Grate Magnets



Loctite

Pipes and Thread Sealants
Threadlockers
Adhesives
Lubricants
Floor Fill



Services Offered:

Installation, Troubleshooting, Custom Power Unit Manufacturing, Pump Repairs, Cylinder Repairs, System Design, Structural Safety System Design, **24 Hour Emergency Service**



P.O. Box 220
40 Cedar Street
Tillsonburg, ON
N4G 4H5

free (800)265-2656
toll (519)688-0337
fax (519)688-0893
www.dynamicfluid.com

Monday to Friday
7am-5pm
Saturday
8am-noon