

SUITABILITY GENERAL



MATERIALS OF CONSTRUCTION

1. LIQUID CONTACT METAL PARTS FOUND TO BE COMPATIBLE

2. LIQUID CONTACT GASKET, SEALS, DIAPHRAGMS, MEMBRANES ELASTOMERIC AND PLASTOMERIC MATERIALS FOUND TO BE COMPATIBLE

---- and ----

OTHER ESSENTIALS

- 1. MINIMUM DESIGN METAL TEMPERATURE _____
- 2. DESIGN TEMPERATURE _____ AT DESIGN PRESSURE _____
- 3. CONNECTIONS SIZE _____ TYPE Ex ANSIB16.5, DIN, NPT _____
- 4. IF KNOWN, LIQUID COMPRESSIBILITY, MODULUS, Liters per Bar Volume change, or Change in SG per pressure change at system temp. _____

FOR YOUR PUMP SUCTION ACCELERATION HEAD LOSS RECOVERY OR REMOVAL

- 1. LENGTH OF SUCTION PIPE, TUBE OR HOSE _____
- 2. INSIDE DIAMETER OF CONDUIT above _____
- 3. VISCOSITY OF LIQUID cP AT SUCTION TEMPERATURE _____
- 4. SPECIFIC GRAVITY OF LIQUID "SG" @ " _____
- 5. LOWEST LIQUID HEAD (HEIGHT) ABOVE POINT OF SUPPLY _____
- 6. PRESSURE OF ANY AIR, NITROGEN, VAPOR IN SUPPLY TANK _____
- 7. RELATIVE HEIGHT OF CENTERLINE OF PUMP BEING SUPPLIED _____
- 8. MINIMUM PRESSURE REQUIRED BY THE PUMP AT ITS INLET _____
- 9. NUMBER OF VOLUME DISPLACEMENTS PER COMPLETE PUMP CYCLE _____
- 10. PUMP RPM or CYCLES PER MINUTE _____

FOR PREVENTING SYSTEM RESITANCE FROM CAUSING YOUR PUMP TO HAVE TO GENERATE DISCHARGE ACCELERATION HEAD "Pulsation".

Pumps make flow, systems make pressure, pulsation is a system problem, not a pump problem. How much pulsation you have depends on system characteristics.

- 1. AS A %age OF THEORETICAL STEADY STATE SYSTEM PRESSURE, HOW LITTLE PULSATION DO YOU WISH TO HAVE? _____%
- and/or ----
- 2. HOW LITTLE FLOW FLUCTUATION DO YOU WISH TO HAVE AFTER INSTALLING A VOLUME ACCUMULATOR? _____%
- 3. LENGTH OF DISCHARGE PIPE, TUBE OR HOSE _____
- 4. INSIDE DIAMETER OF CONDUIT, above _____
- 5. VISCOSITY OF LIQUID cP AT DISCHARGE TEMPERATURE _____
- 6. SPECIFIC GRAVITY OF LIQUID "SG" @ " _____
- 7. NUMBER OF VOLUME DISPLACEMENTS PER COMPLETE PUMP CYCLE _____
- 8. PUMP RPM or CYCLES PER MINUTE _____
- 9. BACK PRESSURE FORM RECEIVING VESSEL, NOZLE, OR OTHER RESTRICTION. _____

FOR CENTRIFUGAL, TURBINE, PITOTUBE (etc non positive displacement)
 PUMP START UP SURGE, SHUTDOWN BACK FLOW HAMMER, FAST CLOSING VALVE
 MASS DECELERATION SHOCK and THERMAL EXPANSION – CONTRACTION COMPENSATION
 ---- PLEASE SEE www.shock-guard.com and www.shock-alleviators.co.uk