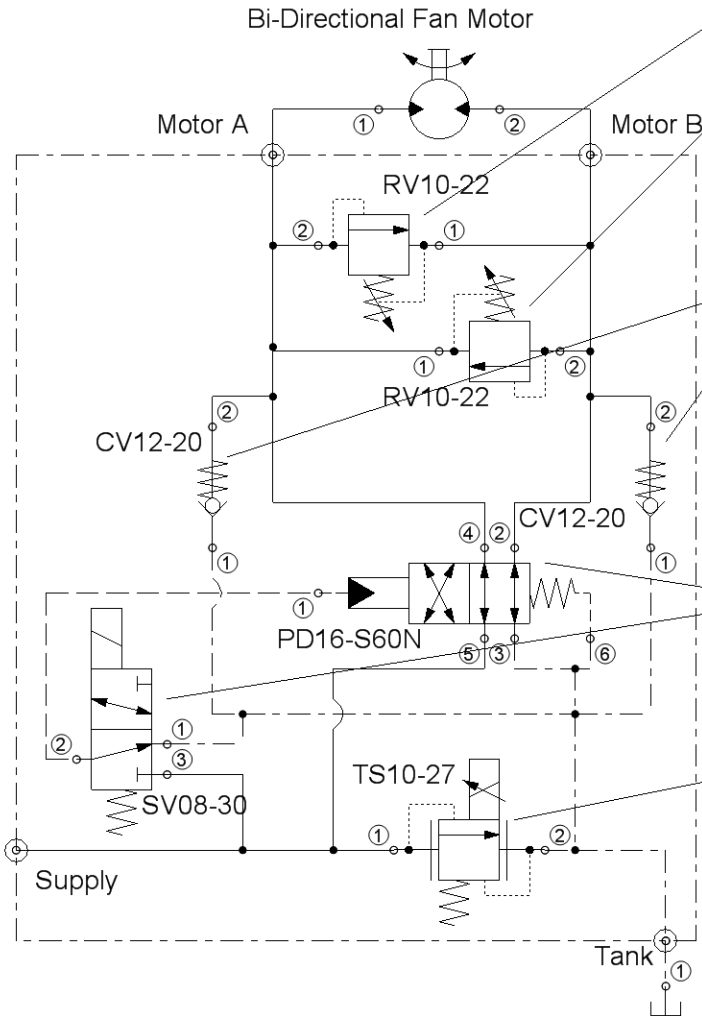


# 0-20 GPM, Reversing Fan Drive with Cross-Over Relief and Anti-Cavitation Protection, Fail High



## Application Notes:



**Motor Relief Protection:** Single Cartridge, Relief Valves to Protect Fan Drive Motor from Pressure Spikes Which Can Damage or Destroy Fan Drive Motor as well as other Fan Drive System Components (OPTIONAL - See "Notes" Section)

**Anti-Cavitation Check Valves:** Cartridge Check Valves with 5 psi Spring Bias Protect Fan Drive Motor from Cavitation During Over-Speeding/ Loss of Inlet Pressure Conditions. This prevents Cavitation which can Damage, Destroy, as well as Shorten the Fan Drive Motor's Life (OPTIONAL - See "Notes" Section)

**Reversing Function:** SV08-30 is used to shift the Pilot actuated, 2 Position 4 Way Valve. In the SV08-30's normal condition the PD16-S60N's pilot section will drain to tank. When the SV is actuated pilot pressure will shift the Pilot valve and Fan Direction Reverses which Pressurizes the Air Intake, "Blowing Out" Contamination, Dust, Particles, etc. which Compromise the Fan Drives Efficiency, Effectively Keeping the Fan Drive Clean and in Proper Operation (OPTIONAL - See "Notes" Section)

**Proportional Fan Drive Valve:** Cartridge Proportional Relief Valve Solenoid Actuated. When De-Energized, Fan Drive Motor will see Full Pressure Driving the Fan Speed to Maximum RPM, With an Increasing Command Signal, Available Inlet Pressure Reduces to Proportionally Decrease Fan Speed. Upon Loss of Command Signal, Fan Speed will go to Maximum RPM (REQUIRED)

**\*Notes:** Fan Speed Is Typically Reduced Before Reversing which may Eliminate the Need for Cross-Over Relief Protection

Because Oil Typically Saturates the Tank Line, One Anti-Cavitation Check May be eliminated and Anti-Cavitation May be Accomplished by connecting the check valve directly between the Tank and Pressure lines at the inlet and outlet of the Reversing Valve- This Should be Determined by the End User's System Engineer

If Anti-Cavitation Protection is Determined to Unnecessary, Both CV08-20's May be Eliminated

If Fan Drive Does Not Require Reversing, The SV10-30 and PD16-S60N May be Eliminated

**VALVES HAVE BEEN CONFIGURED FOR VISUAL PURPOSES. THE USER IS EXPECTED TO RECONFIGURE CARTRIDGES AS THEY SEE FIT FOR THEIR INDIVIDUAL FAN DRIVE APPLICATION**

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0-20 GPM Fan Drive

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Date: