

**OPERATION**

This HIC regulates fan speed by controlling pressure drop across the fan motor. It operates in a normally closed configuration in the absence of an electrical signal. The HIC reverses flow to the fan motor to reverse fan direction. It includes a DV15-P5-FD open transition spool valve to reduce pressure spikes during reversals. Internal and external piloting options are available. This HICs trims the maximum motor torque by absorbing pressure spikes at the work ports. An anti-cavitation feature allows additional flow to the motor when the motor over-runs the pump.



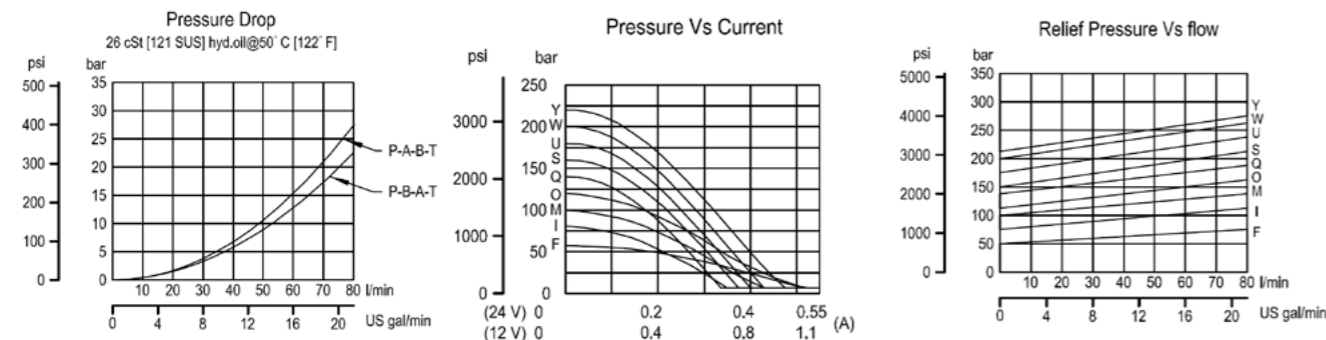
**APPLICATIONS**

This HIC includes an integrated proportional relief valve to modulate fan speed in circuits using a fixed pump. It can also be used for fan reversal. Use this HIC for mobile equipment such as wheel loaders for purging (de-clogging) coolers and radiators to prevent overheating and increase cooling system efficiency. A drain port is included for motor case drain.

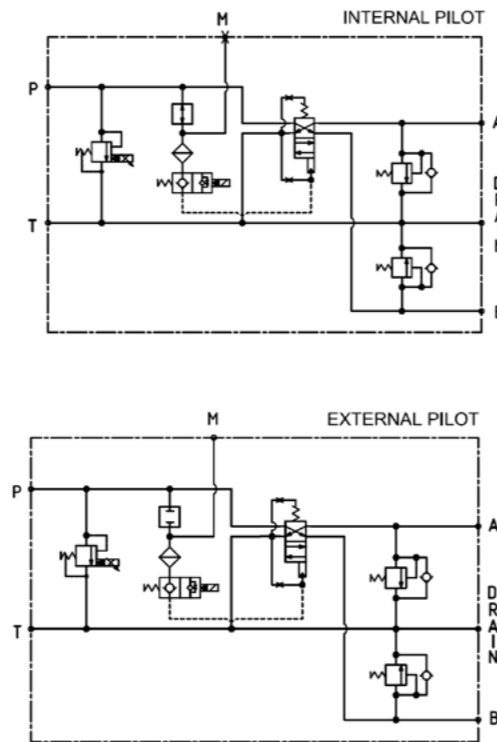
**SPECIFICATIONS**

<b>Rated pressure</b>	210 bar [3045 psi]
<b>Flow range - RFDE-40-PRV</b>	10 - 40 l/min [2.6 - 10.5 US gal/min]
<b>Flow range - RFDE-80-PRV</b>	20 - 80 l/min [5.3 - 21.1 US gal/min]
<b>Weight</b>	4.0 kg [9.0 lb]
<b>Valves</b>	DV15-P5-24-FD, SVP08-NC, PRV10-IS2, PVLP
<b>Minimum pilot pressure</b>	2 bar [29 psi]
<b>Robust Coil (Standard)</b>	R13 16 Watt (IP69K)
<b>Diode (Optional)</b>	Bi-directional (Not available with PRV10-IS2) M19P 22 Watt [IS2] (IP69K)

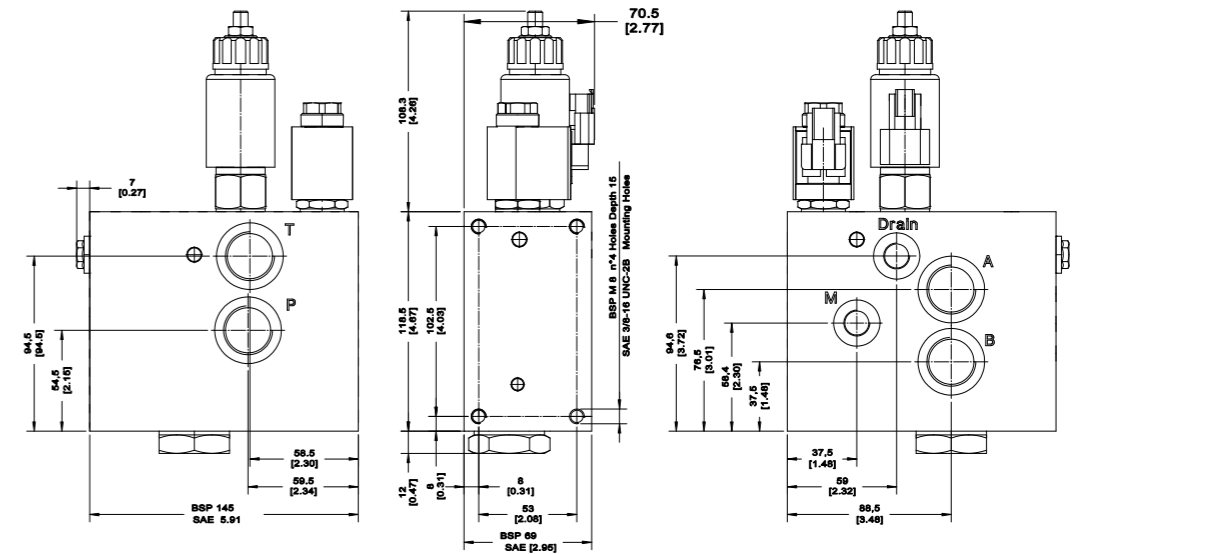
**PERFORMANCE CURVES**



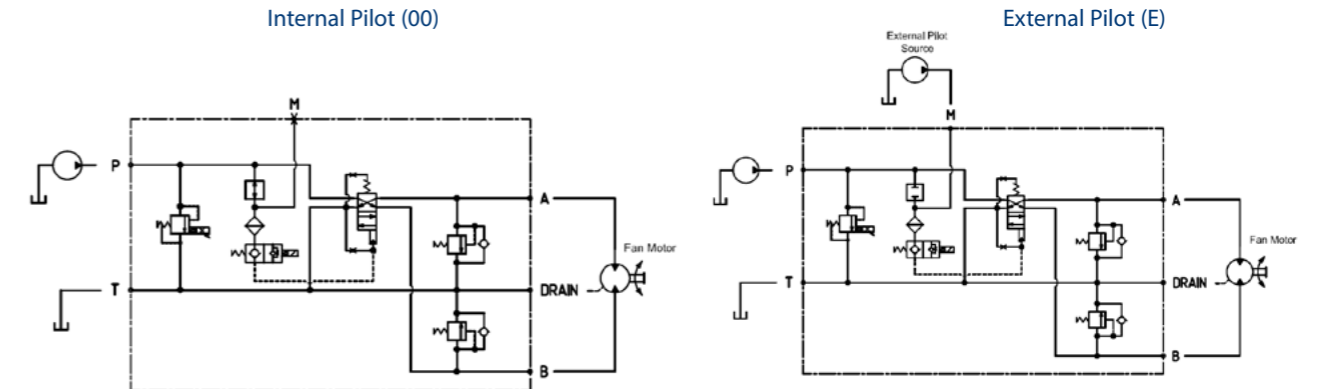
**SCHEMATICS**



**DIMENSION DRAWING**



**EXAMPLE CIRCUITS**



**ORDERING INFORMATION**

RFDE - 80 - PRV - R12D - DE - W - 250 - E - 12S

Reversing Fan Drive, Extended Program

Flow Capacity  
40: 40 LPM [10.5 GPM]  
80: 80 LPM [21.1 GPM]

PRV: Proportional Relief Valve; Fixed Pump Circuit  
CAV: PRV replaced by cavity plug.

Order Code Ports  
6B 3/4 BSP, AL  
12S #12 SAE, AL

Shock valve setting (Keep at least 25 bar higher than maximum control pressure)

80 bar [1160 psi]	180 bar [2755]
100 bar [1450 psi]	210 bar [3045 psi]
125 bar [1813 psi]	230 bar [3335 psi]
150 bar [2175 psi]	240 bar [3480 psi]
175 bar [2538 psi]	250 bar [3635 psi]

Proportional Relief Setting

F 55 bar [799 psi]	S 155 bar [2248 psi]
I 85 bar [1233 psi]	U 185 bar [2683 psi]
M 105 bar [1523 psi]	W 205 bar [2973 psi]
O 125 bar [1813 psi]	Y 225 bar [3263 psi]
Q 135 bar [1958]	NP No Setting (CAV option only)

Voltage Description	Termination Description (Solenoid Valve / Proportional Valve)	Solenoid Valve: Robust Coil (R13) Code	IP Rating
12 VDC	Deutsch / Deutsch*	R12D - DE	IP69K
24 VDC	Deutsch with Diode / Deutsch*	R12D - DEDB	IP69K
	Deutsch / Deutsch*	R24D - DE	IP69K
	Deutsch with Diode / Deutsch*	R24D - DEDB	IP69K

\* Proportional Relief Valve (PRV) coil M19P only available with Deutsch termination

FD - Fan Drive HICs  
RFDE-40-PRV & RFDE-80-PRV

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RFDE-40-PRV & RFDE-80-PRV