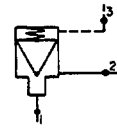


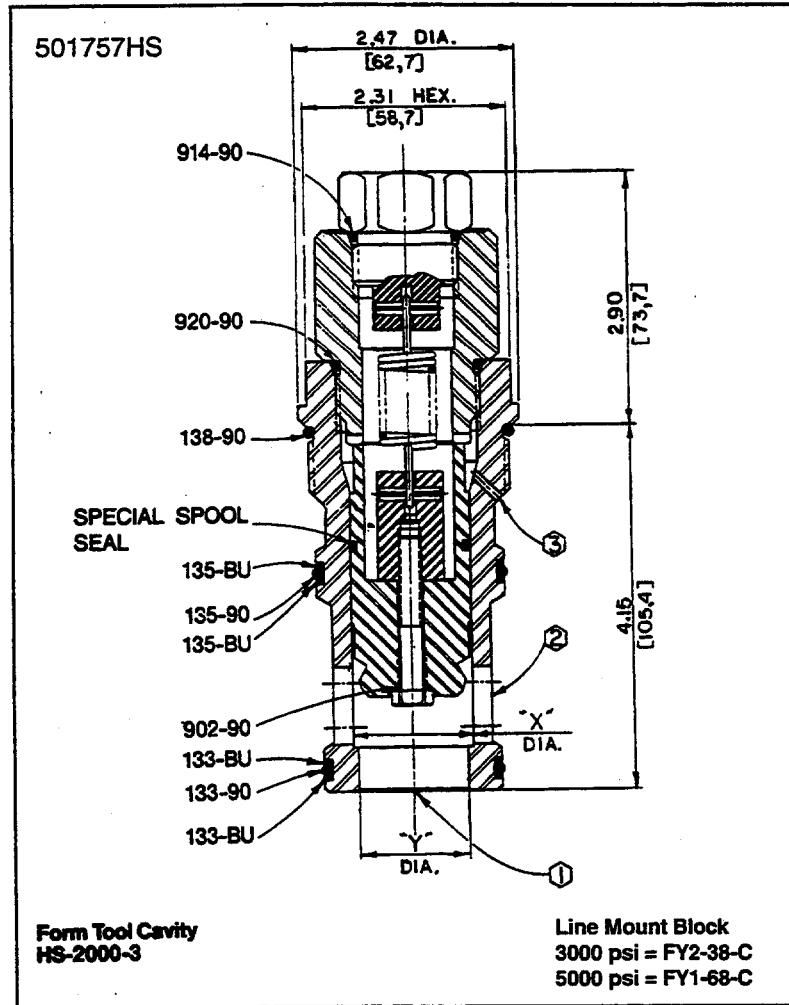
230 USGPM  $\Delta$  100 PSI  
(871,7 LPM  $\Delta$  6,9 Bar)

### HSPO2001



Data Sheet

Normally Open Poppet Valve



### Application

The HSPO normally open cartridge type poppet valve can be used as a pilot operated check valve, a directional control valve (one or more cartridges can be used to provide 2-, 3-, and 4-way functions), or a prefill valve.

### Operation

The main spool (poppet) is held open by tensions hook type spring suspended between the bonnet and the spool. Opening and closing of the valve is a function of force balance in three areas: diameter "X" (port 3), diameter "X-Y" (port 2) and diameter "Y" (port 1). Pilot pressure acting on top of main spool tends to close the poppet. NOTE: Port 1 and 2 areas are smaller than 3 but if higher pressure is present at those ports it may cause the poppet to open.

### Features

Availability of two (different) ratio poppets (spools) and springs provides a variety of closing/cracking (opening) ratios. The valve is constructed of steel parts, operating parts are hardened and ground as required. Cartridge is designed for easy service or field repair.

### Specifications

Ratio (Y to X) HSPO2021=1:1.25  
HSPO2041=1:1.67

Rated flow,

HSPO2021—0 to 230 USgpm  $\Delta$  100 psi  
(0 to 871,7 lpm  $\Delta$  6,9 bar)

HSPO2041—0 to 210 USgpm  $\Delta$  100 psi  
(0-795,9 lpm  $\Delta$  6,9 bar)

Maximum operating pressure—  
5000 psi (345 bar)

Closing pilot pressure—See "How To Order"

Pilot displacement—1.51 in.<sup>3</sup>/m (24,7 cm<sup>3</sup>/m)

Viscosity range—27-30 SSU at 100°F  
35-2000 SSU at 100°F

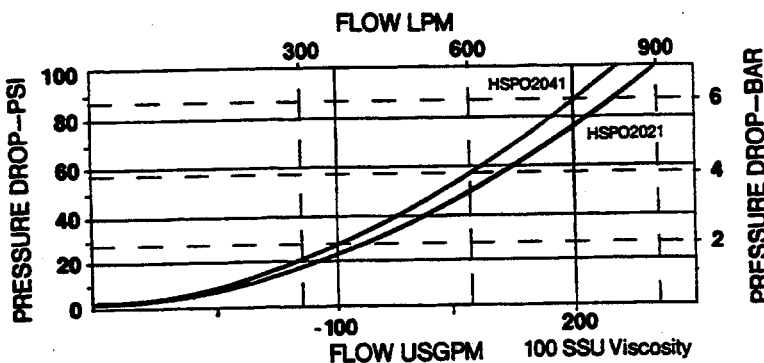
Seals—Viton

Operating temperature—-40°F to 350°F  
(-39,6°C to 175°C)

Filtration—Maintain SAE Class 6, ISO 18/15

Seal kit, standard—HSSK-2000-F  
w/spool seal option—HSSK-2000-G

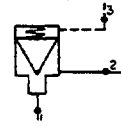
### Performance Curve





230 USGPM  $\Delta$  100 PSI  
(871,7 LPM  $\Delta$  6,9 Bar)

## HSPO2001



### Data Sheet

### Normally Open Poppet Valve

#### Cartridge Must Have Pilot Control Module

This cartridge valve requires pilot logic to offer added flexibility in providing maximum pressure consistently and smoothly. At least one pilot control module must be added to the valve.

#### Typical HSPO2001 How To Order Example

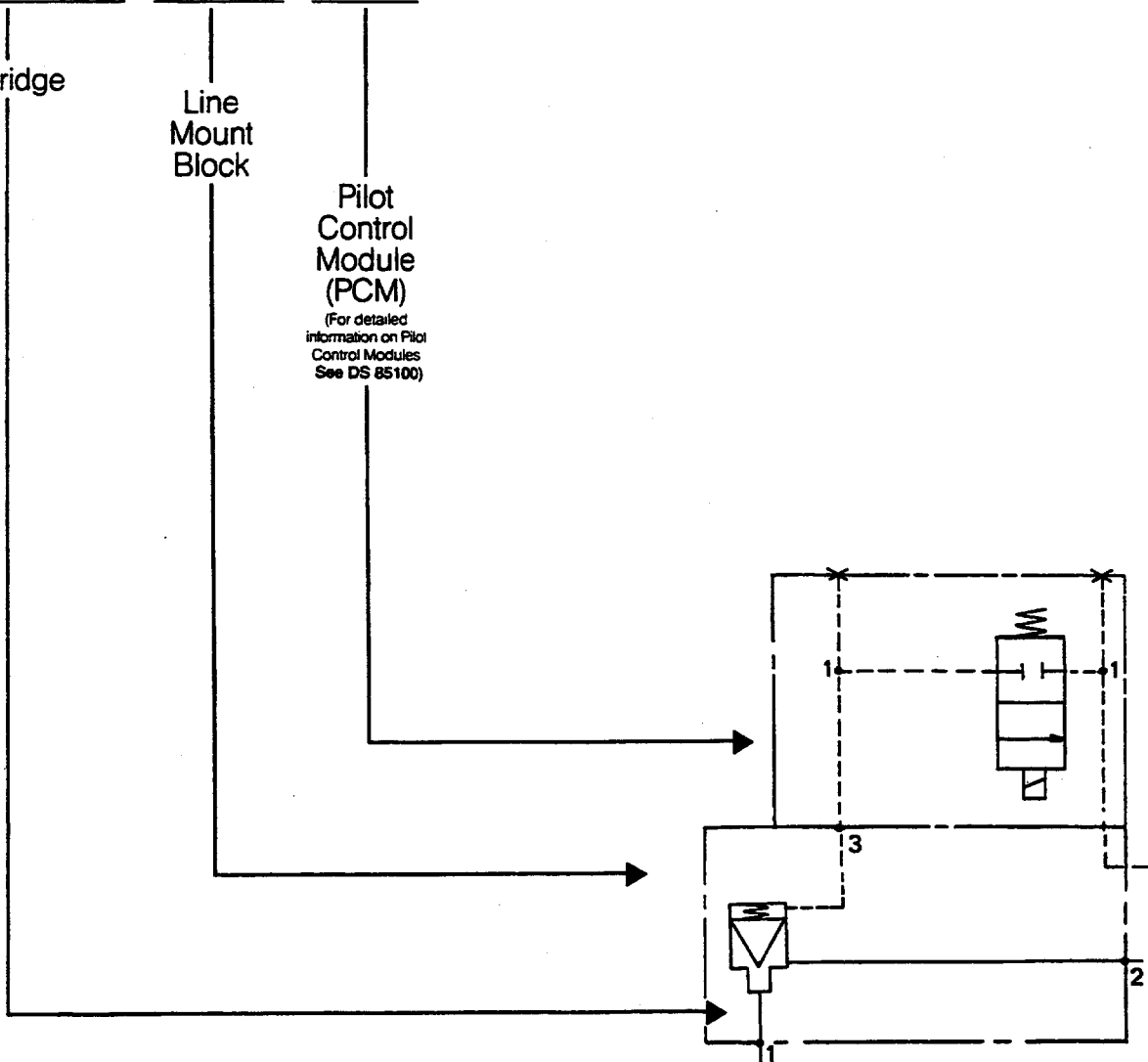
HSPO2021-2-P / FY2-38-C/ 2-0-S-C

Cartridge

Line  
Mount  
Block

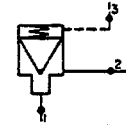
Pilot  
Control  
Module  
(PCM)

(For detailed  
information on Pilot  
Control Modules  
See DS 85100)



230 USGPM  $\Delta$  100 PSI  
(871,7 LPM  $\Delta$  6,9 Bar)

### HSPO2001



Data Sheet

Normally Open Poppet Valve

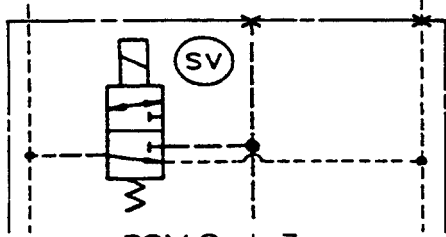
## How To Order

Typical PCM How To Order Example:

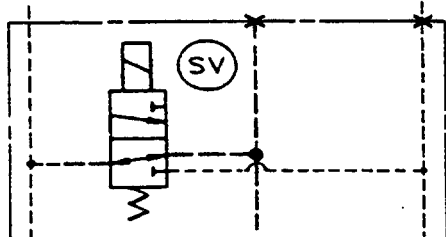
/ 20 - 0 - S - C

### PCM Code

PCM Code 20



PCM Code 7



PCM Code 70

### Solenoid Voltage (if required)

- 0 = 115 V.A.C./60 HZ. or 110 V.A.C./50 HZ. Solenoid
- 1 = 230 V.A.C./60 HZ. or 220 V.A.C./50 HZ. Solenoid
- 2 = 12 V.D.C. Solenoid
- 3 = 24 V.D.C. Solenoid

Other voltages are available, consult factory

### Electrical Connector (if required)

- S = Cable connector w/o indicator light (standard)
- L = Cable connector with indicator light (115 V.A.C. only)
- R = .500 NPTF connector w/o indicator light
- W = .500 NPTF connector w/indicator light
- C = Three pin Brad Harrison/DIN 43650 connector w/mating plug

### Block Material

- C = Nodular Iron (standard)

See DS 85100 for additional information on pilot controls.