# Proportional Relief Valve Series AP04G2YP 21C, 35C

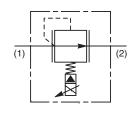
## **General Description**

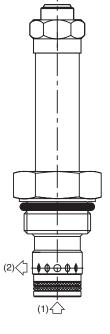
Proportional Relief Valve. Increasing Pressure With Increasing Current. For additional information see Technical Tips on pages PV2-PV5.

#### **Features**

- Pilot operated spool-type design fits industry common cavity (10-2)
- Relieving pressure output is proportional to DC current input
- Precise setting of factory preset pressure in energized mode
- One piece cartridge housing ensures internal concentricity
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.





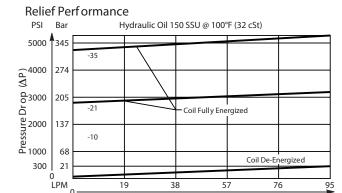


# **Specifications**

opcomoduciono .			
Rated Flow (At 300 PSI ΔP) When Coil is Fully De-Energized	95 LPM (25 GPM)		
Factory Set Relief Pressure When Coil De-Energized Measured at 45 LPM (12 GPM)	21C 210 Bar (3000 PSI) 35C 350 Bar (5000 PSI)		
Port 2 Pressure Limit	103 Bar (1000 PSI)		
Hysteresis @ 200 Hz PWM	< 7% of Maximum Pressure Setting		
Response Time At 75% of Nominal Voltage Change (Measured To 90% of Press. Change)	To Unload 10ms To Load 21C 60 ms 35C 80 ms		
Cartridge Material	All parts steel. All operating parts hardened steel.		
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile Buna-N) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)		
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)		
Filtration	ISO-4406 18/16/13, SAE Class 4		
Approx. Weight	0.14 kg (0.31 lbs.)		
Cavity	C10-2 (See BC Section for more details)		

### **Performance Curves**

#### **▲ PWM Current Regulator Recommended**

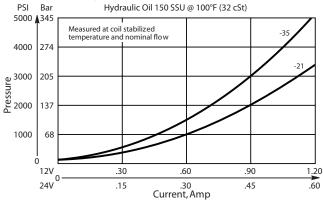


10 15 Flow (Q ) 20

#### Pressure vs. Input Current

5

GPM





Shuttle Valves

Load/Motor Controls

LM

Flow Controls

FC

PC

Pressure Controls

Logic Elements **T** 

Directional Controls E

SV

Solenoid Valves

Proportional Valves

Coils & Electronics

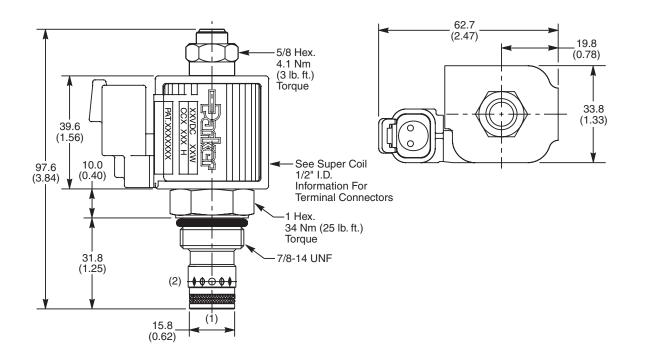
se B

Bodies & Cavities

Technical Data



## **Dimensions** Millimeters (Inches)



# **Ordering Information**

AP04G2YP



10 Size **Proportional** Relief Valve **Max Relief** Setting

Seals

**Highlighted** represents preferred options that offer the shortest lead times. Other options may be available, but at extended lead times.

Code	Max Relief Setting
21C	210 Bar (3000 PSI)
35C	350 Bar (5000 PSI)

Coil(s) sold separately. Please see section CE of this catalog, 1/2" Super-Coil (CC series), for ordering information.

Code	Seals
N	Nitrile

Kit	Part Number	l
Nitrile Seal	SK30503N-1	
Fluorocarbon Seal	SK30503V-1	l

**Order Bodies Separately** See section BC



CV

SH

LM

FC

PC

LE

DC

SV

Load/Motor Controls

Flow Controls

Pressure Controls

Logic Elements

Directional Controls

Solenoid Valves

Proportional Valves

Coils & Electronics

Bodies & Cavities

CE

BC

TD

Check Valves

Code	Porting / Body Material
8T	SAE-8 / Steel (5000 PSI)

PV9