**GS04 12****GS04 13****GS04 16****GS04 17**UP TO **68 L/MIN**AND **210 BAR****18 USGPM****3000 PSI**

POPPET TYPE

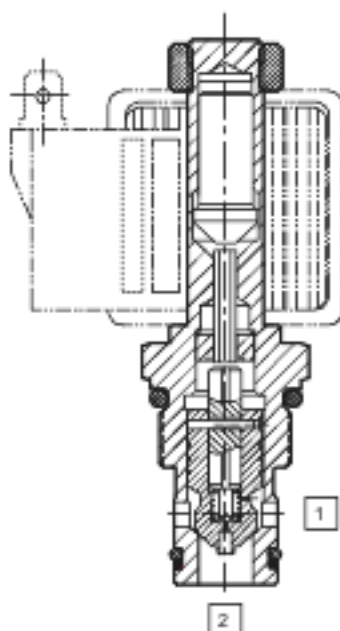
2 Position 2 Way

Normally Open

- High flow capacity with reduced space requirements.
- One piece cartridge housing ensures internal concentricity.
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Interchangeable with 02 and 06 series poppet valves; Symmetrical coil can be reversed without affecting performance.

OPERATION

De-energized the pilot is held off its seat via a light spring and the poppet moves freely to allow flow from the side to nose port. Pressure on the nose port forces the poppet to close giving only restricted flow (without the free reverse flow feature). **Energized** the armature pushes the pilot and poppet onto their seats. Pressure on the side port firmly closes the poppet. Pressure on the nose port lifts the poppet and allows free flow.

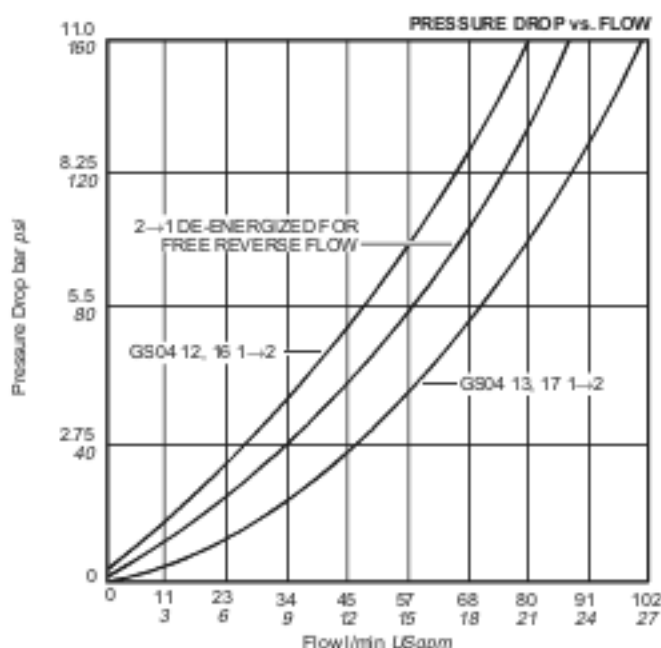
PATENT
#5,002,253

SPECIFICATIONS

BASIC MODEL NUMBER	RESTRICTED REVERSE FLOW		FREE REVERSE FLOW	
	STANDARD GS04 12	HIGH FLOW GS04 13	STANDARD GS04 16	HIGH FLOW GS04 17
SYMBOL				
NOMINAL FLOW AT $\Delta p = 5 \text{ bar } 70 \text{ psi}$	50 l/min 13 USgpm	68 l/min 18 USgpm	50 l/min 13 USgpm	68 l/min 18 USgpm
PRESSURE	210 bar 3000 psi			
FUNCTION	FREE FLOW 1→2 AND RESTRICTED FLOW 2→1 WHEN SOLENOID IS DE-ENERGIZED		FREE FLOW IN BOTH DIRECTIONS WHEN SOLENOID IS DE-ENERGIZED	
RESPONSE TIME AT NOM. FLOW & PRESS.	OPEN CLOSE		100 m. sec. 70 m. sec.	
MAX INTERNAL LEAK AT 210 bar 3000 psi at 38 cSt 180 SSU	0.33 ml/min 5 drops/min			
SERIES CC COIL WATTS. (100% DUTY CYCLE)	14w (S Coil)	19w (P Coil)	14w (S Coil)	19w (P Coil)
MIN AMPERAGE TO OPERATE VALVE AT MAX RATED PRESSURE & FLOW	75% OF NOMINAL AMPERAGE, DETAILS: COIL DATA SHEET page 204			
INSTALLATION	UNRESTRICTED			
FLUID *	MINERAL OIL OR SYNTHETIC FLUID WITH LUBRICANT PROPERTIES			
IDEAL VISCOSITY *	15-50 cSt 80-230 SSU			
SEAL MATERIAL/ TEMPERATURE *	NITRILE (Std.) -30°C to +100°C -20°F to +210°F BUNA-N -20°C to +150°C -4°F to +330°F VITON -20°C to +150°C -4°F to +330°F			
FILTRATION *	25 MICRONS (Nom.) OR BETTER			
CART. WEIGHT	0.15 kg 0.34 lb			
COIL WEIGHT	0.20 kg 0.44 lb			

TYPICAL PERFORMANCE

Measured at 30cSt 140 SSU (For cartridge only)



* IMPORTANT: See pages 582-583 for additional notes on operating conditions. Specifications may change without notice.