

GS02 01
GS02 02 UP TO **38 L/MIN** **10 USGPM**
GS02 05 AND **210 BAR** **3000 PSI**
GS02 06



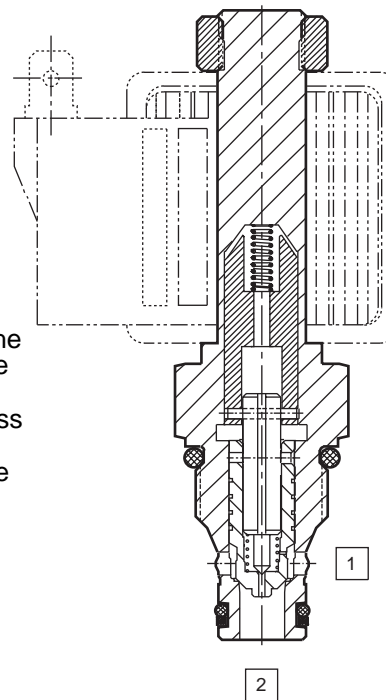
POPPET TYPE

2 Position 2 Way Normally Closed

- High flow capacity with reduced space requirements.
- One piece cartridge housing ensures internal concentricity.
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Interchangeable with 04 and 06 series poppet valves; Symmetrical coil can be reversed without affecting performance.

OPERATION

De-energized the spring holds the pilot against its seat. Pressure on the side port behind the poppet holds it firmly closed. Pressure on the nose port lifts and opens the poppet. **Energized** the pilot is pulled by the armature lifting it off its seat. Side port pressure creates pilot flow across the poppet and a pressure imbalance which allows it to lift. Nose port pressure seats the poppet but allows restricted oil flow (without the free reverse flow feature).



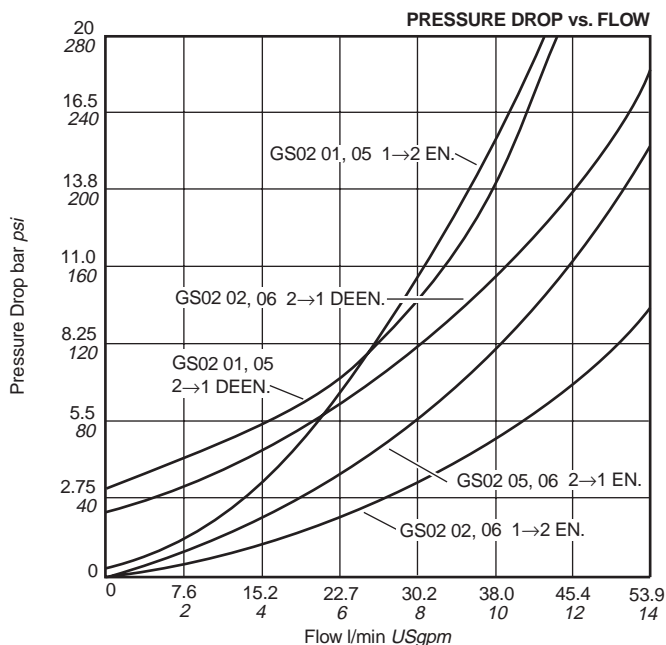
PATENT
#5,002,253
#5,271,599

SPECIFICATIONS

BASIC MODEL NUMBER	RESTRICTED REVERSE FLOW		FREE REVERSE FLOW	
	FAST RESPONSE	HIGH FLOW	FAST RESPONSE	HIGH FLOW
	GS02 01	GS02 02	GS02 05	GS02 06
SYMBOL				
NOMINAL FLOW AT Δp = 5 bar 70 psi	19 l/min 5 USgpm	38 l/min 10 USgpm	19 l/min 5 USgpm	38 l/min 10 USgpm
PRESSURE	210 bar 3000 psi			
FUNCTION	FREE FLOW 1→2 AND RESTRICTED FLOW 2→1 WHEN SOLENOID IS ENERGIZED		FREE FLOW IN BOTH DIRECTIONS WHEN SOLENOID IS ENERGIZED	
RESPONSE TIME AT NOM. FLOW & PRESS.	OPEN 30 m. sec.	CLOSE 30 m. sec.	OPEN 30 m. sec.	CLOSE 40 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)			
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 BUNA-N -20°F to +210°F VITON -20°C to +150°C -4°F to +330°F			
FILTRATION *	25 MICRONS (Nom.) OR BETTER			
CART. WEIGHT	0.14 kg 0.31 lb			
COIL WEIGHT	0.20 kg 0.44 lb			

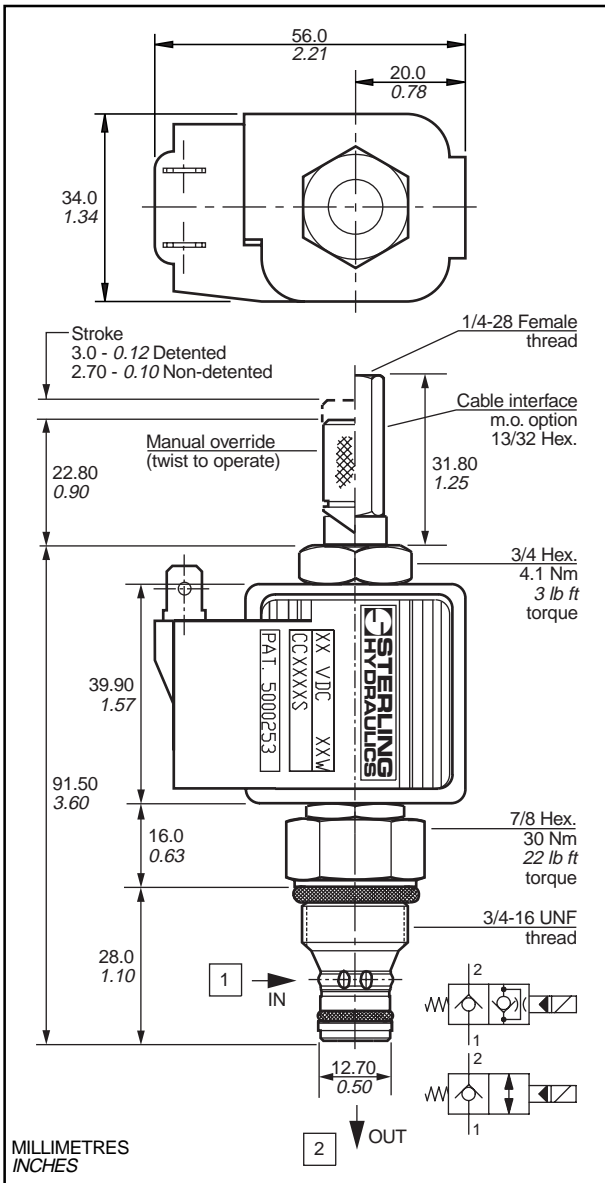
TYPICAL PERFORMANCE

Measured at 30cSt 140 SSU (For cartridge only)

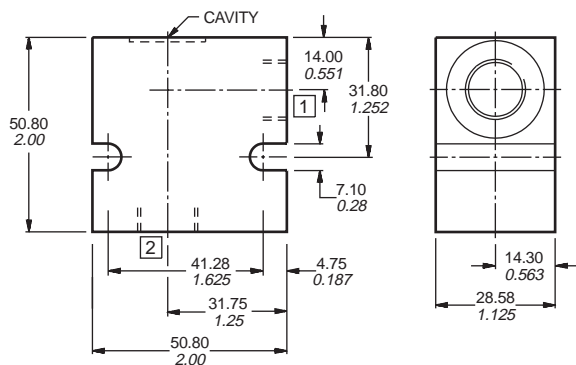


* **IMPORTANT:** See pages 582-583 for additional notes on operating conditions. Specifications may change without notice

DIMENSIONS



LINE BODY CAVITY CAV02-2: 3/4-16 Thread (8-2 Industry common cavity)



CAVITY TOOLING FOR CAV02-2

	MM	INCH	
PILOT DRILL Ø	11.70	0.46	REAMER (STEEL) 8RM31066S
STEP DRILL	8DS31356		COUNTERBORE -
REAMER (ALUM)	8RM31066A		TAP 8TP31202

MACHINING DETAILS PAGE 535

CARTRIDGE

GS02

PRESSURE AND PERFORMANCE FEATURES (Normally Closed)	01	FAST RESPONSE ('S' Coil) Restricted reverse flow
	02	HIGH FLOW ('S' Coil) Restricted reverse flow
	05	FAST RESPONSE ('S' Coil) Free reverse flow
	06	HIGH FLOW ('S' Coil) Free reverse flow
MANUAL OVERRIDE (Option)	0	NOT REQUIRED
	1	DETENTED M.O.
	2	NON DETENTED M.O.
	3	CABLE INTERFACE M.O. (210 bar 3000 psi)
FILTER SCREEN (Option)	0	NOT REQUIRED
	1	60 MESH SCREEN
SEAL MATERIAL	N	NITRILE <i>BUNA-N</i> (Std.)
	V	VITON

COIL

CC

COIL WATTAGE	S P	STANDARD PUISSANT	WATTAGE	
			S	P
COIL VOLTAGE*	012	12V DC	14w	19w
	024	24V DC	16w	19w
	115	115V AC	17w	22w
	230	230V AC		
COIL TERMINAL*	A	AMP JR. (CC Coil Only, DC Only)		
	AD	AMP JR. WITH 3 AMP DIODE (CC Coils only, DC Only)		
	C	DOUBLE LEAD WIRE WITH CONDUIT CONNECTOR (AC Only)		
	D	DIN 43650 (AC or DC, Supplied without DIN Connector)		
	L	DOUBLE LEAD (DC Only)		
	LD	DOUBLE LEAD WITH DEUTSCH CONNECTOR DT04-2P-EP04 (DC Only)		
	LE	DOUBLE LEAD WITH 3 AMP DIODE (DC Only)		
	PF	DOUBLE LEAD WIRE WITH PACKARD FEMALE WEATHER PACK CONNECTOR 1201 5792 (DC Only)		
	PM	DOUBLE LEAD WIRE WITH PACKARD MALE WEATHER PACK CONNECTOR 1201 0973 (DC Only)		
	S	DOUBLE SPADE (DC Only)		
	W	DOUBLE SCREW (DC only)		
WE	DOUBLE SCREW WITH 3 AMP DIODE (DC Only)			
Y	SINGLE SCREW (Internally Grounded, DC Only)			
* ADDITIONAL VOLTAGES AND OTHER TERMINALS ARE AVAILABLE, FOR DETAILS PLEASE CONSULT FACTORY				
COIL DETAILS page 204				

LINE BODY

LB10

PORTING	503	3/8 SAE
	506	3/8 BSP
LINE BODY MATERIAL	A	ALUMINIUM (Anodised) TO 210 bar 3000 psi
	S	STEEL (Zinc plated) TO 420 bar 6000 psi
LINE BODY DETAILS page 511		
SEAL KIT	SK30006N-1 (NITRILE-BUNA N) SK30006V-1 (VITON)	

STERLING HYDRAULICS