

GS02 30
GS02 31
GS02 32

UP TO
AND

19 L/MIN
350 BAR

5 USGPM
5000 PSI



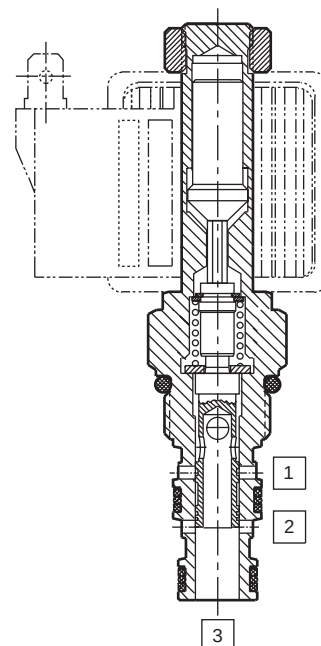
SPOOL TYPE

2 Position 3 Way Bottom Cylinder Port

- High flow capacity.
- One piece cartridge housing ensures internal concentricity.
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.

OPERATION

De-energized, the spool land blocks the annular cross holes in the cage at port 1, and partially blocks the annular holes at port 2. The spring and collet maintain this position. Flow is blocked at port 1 and will flow from port 3 to port 2. **Energized**, the armature pushes the spool against the spring force, blocking port 2 and allowing flow from port 1 through the hollow spool to port 3.



PATENT
#5,002,253

SPECIFICATIONS

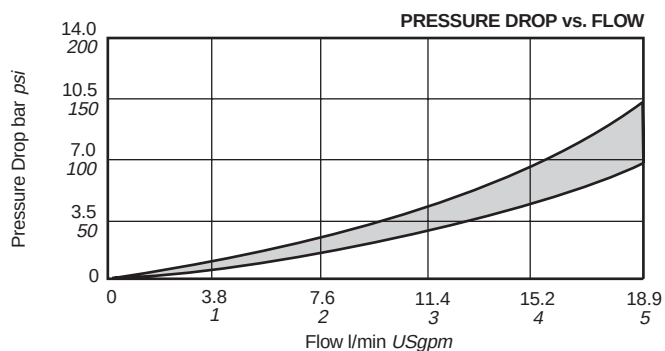
BASIC MODEL NUMBER	STANDARD GS02 30	HIGH FLOW GS02 31	HIGH PRESSURE GS02 32
SYMBOL & CROSSOVER			
NOMINAL FLOW AT $\Delta p = 5 \text{ bar } 70 \text{ psi}$	15 l/min 4 USgpm	19 l/min 5 USgpm	15 l/min 4 USgpm
PRESSURE	210 bar 3000 psi		350 bar 5000 psi
FUNCTION	3→2 WHEN SOLENOID IS DE-ENERGIZED. 1→3 WHEN SOLENOID IS ENERGIZED.		
SERIES CC COIL WATTS. (100% DUTY CYCLE)	14w (‘S’ Coil)	19w (‘P’ Coil)	
MAX INTERNAL LEAK AT 210 bar 3000 psi at 38 cSt 180 SSU	82 cc/min @ 210 bar 3000 psi		
MIN AMPERAGE TO OPERATE VALVE AT MAX RATED PRESSURE & FLOW	75% OF NOMINAL AMPERAGE, DETAILS: COIL DATA SHEET page 204		
PREFERABLE INPUT/OUTPUT PORT LOCATION	1-INPUT, 2-OUTPUT, 3-OUTPUT		
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	0.23 kg 0.51 lb		
COIL WEIGHT	0.20 kg 0.44 lb		

* IMPORTANT: See pages 582-583 for additional notes on operating conditions.

Specifications may change without notice

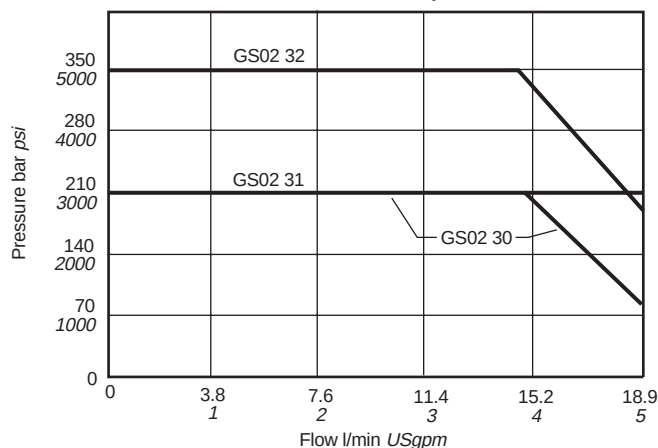
TYPICAL PERFORMANCE

Measured at 30cSt 140 SSU (For cartridge only)

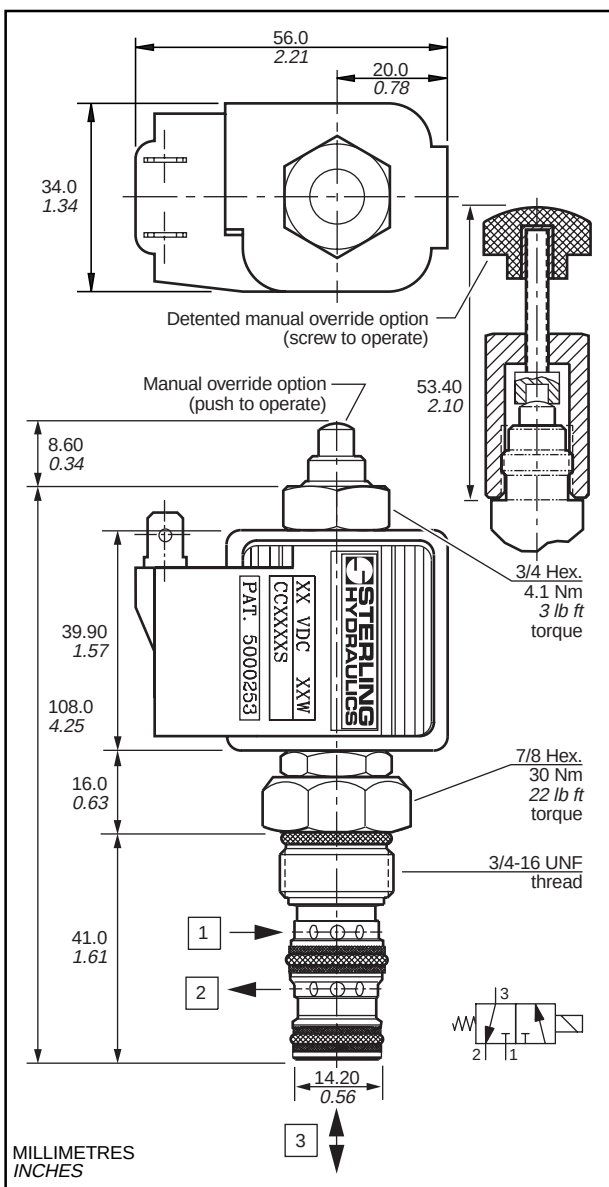


Measured at 75%
of nominal current

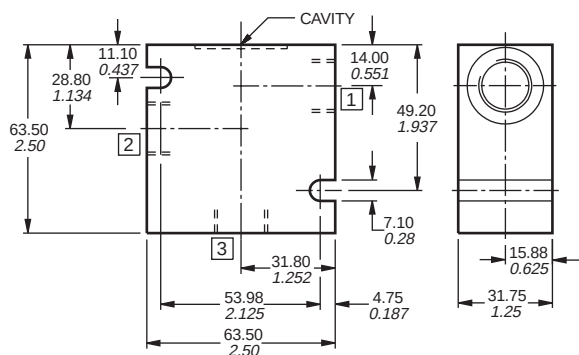
OPERATING LIMITS
Reduce flow by 10% for manual override



DIMENSIONS



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



CAVITY TOOLING FOR CAV02-3

	MM	INCH	
PILOT DRILL Ø	13.00	0.51	REAMER (STEEL) 8RM31058S
STEP DRILL	8DS31345		COUNTERBORE -
REAMER (ALUM)	8RM31058A		TAP 8TP31202

MACHINING DETAILS PAGE 536

CARTRIDGE

GS02

PRESSURE AND PERFORMANCE FEATURES	30	STANDARD ('S' Coil)
	31	HIGH FLOW ('P' Coil)
	32	HIGH PRESSURE ('P' Coil)
MANUAL OVERRIDE (Option)	0	NOT REQUIRED
	1	MANUAL OVERRIDE
	2	DETENTED M.O. Part no. 900690
FILTER SCREEN (Option)	0	NOT AVAILABLE
SEAL MATERIAL	N	NITRILE BUNA-N (Std.)
	V	VITON

COIL

CC

COIL WATTAGE	S P	STANDARD PUISSANT	WATTAGE	
			S	P
COIL VOLTAGE*	012	12V DC	14w	19w
	024	24V DC		
	115	115V AC	16w	19w
	230	230V AC	17w	22w
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	523	3/8 SAE
	525	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	SK30077N-1	(NITRILE-BUNA N)
	SK30077V-1	(VITON)

STERLING HYDRAULICS