

# Safety Shutoff Valves

Tobul Safety Shutoff Valves (TSV30/50) are designed to protect hydraulic systems from excess pressure; shut off hydraulic flow and isolate accumulators from the hydraulic system; and bleed off/discharge system pressure from accumulators and associated equipment. The optional electrical solenoid cartridge valve allows for the automatic release/bleed off of accumulator/system fluid pressure in the case of an emergency shutdown or loss of electrical power.

The Tobul TSV30/50 consists of a main ball valve shutoff in an all steel body; a manually operated needle-type pressure bleed cartridge valve; and an automatic overpressure relief cartridge valve, with various models designed for use in 3000 PSI or 5000 PSI systems. Additional porting is provided for a drain to reservoir/tank, and an optional sensor/gauge.

With a straight-through, free flow manual ball valve of 1/2" to 2" diameter (SAE O-ring style), the Tobul TSV has the capability to meet industries' diverse requirements for a durable, adaptable, cost-effective safety shutoff valve series for use with many types of accumulators and hydraulic systems.

- Safety shutoff valve provides manual isolation of the accumulator from the hydraulic system
- All valves have a straight-through, unrestricted full-flow opening
- Each valve incorporates a safety lock-out feature to prevent unauthorized operation; this conforms to OSHA's "Lock Out-Tag Out" program
- Non adjustable factory pre-set pressure relief valve prevents over pressurization of isolated accumulator
- Easy one hand operation
- Optional Electric solenoid pressure relief valve can be ordered normally open or normally closed to meet system requirements
- Machined from high grade steel with black oxide coating





# TSV Series - Safety Shutoff Valve

**3,000 PSI (207 Bar) and 5,000 PSI (340 Bar) Hydraulic Systems**



## Part Number Construction

**TSV**



**Pressure**

30 = 3,000 PSI (207 Bar)  
50 = 5,000 PSI (340 Bar)

**Solenoid Function**

0 = None  
1 = Normally Open (NO)\*  
2 = Normally Closed (NC)\*  
\*NOTE: Only available with (S) solenoid valve and manual valve

**Pressure Release**

M = Manual Valve  
S = Solenoid Valve\*\* and Manual Valve  
\*\*NOTE: Must specify NO or NC solenoid function

**Size**

05 = 0.50 (SAE10)  
07 = 0.75 (SAE12)  
10 = 1.00 (SAE16)  
15 = 1.50 (SAE24)  
20 = 2.00 (SAE32)

**Seal Material**

N = Buna-N  
V = Viton

**Voltage**

0 = None  
1 = AC115 - 60 Hz  
2 = AC220 - 60 Hz  
3 = DC12V  
4 = DC24V  
5 = Other

**Pressure Release**

Valve Setting  
33 = 3,300 PSI (Bar 227.5)  
53 = 5,300 PSI (Bar 365.4)

Example:

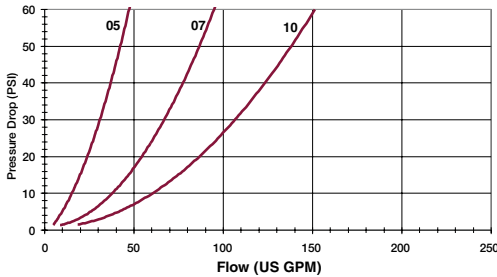


Description: 3,000 PSI (207 Bar) Safety Shutoff Valve, No Solenoid, Manual Valve, 1 inch (SAE16) System and Accumulator Ports, Viton Seal Material, 3,300 Pressure Release

## Pressure Drop Charts

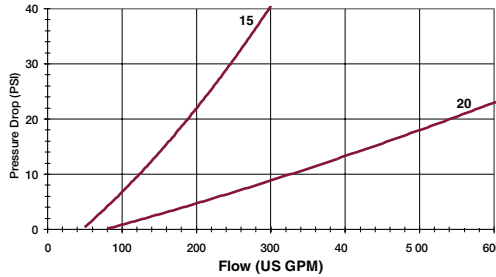
### Through Safety Shutoff Valve

Small Valve Sizes, 1/2" to 1"

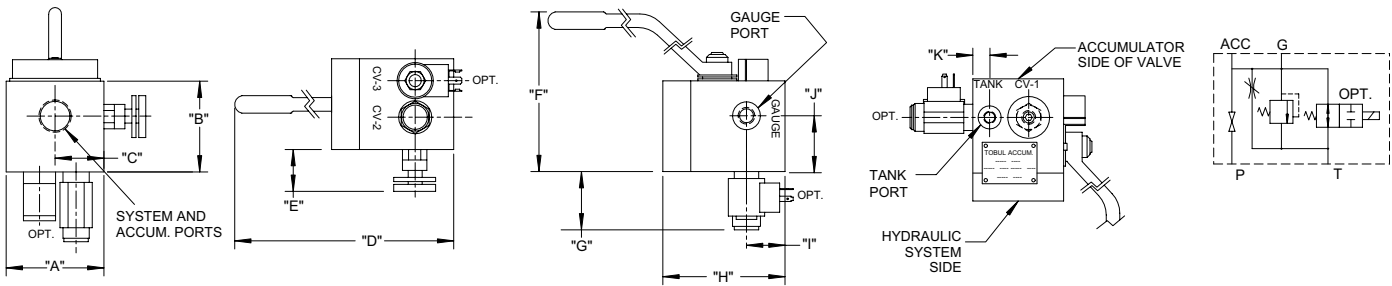


### Through Safety Shutoff Valve

Large Valve Sizes, 1 1/2" to 2"



## Dimensional Information



## Dimensions

SYSTEM & ACCUMULATOR PORT SIZE	A		B		C		D		E		F		G		H		I		J		K		GAUGE PORT	TANK PORT
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		
1/2 (SAE 8)	3.5	88.9	3.25	82.5	1.75	44.5	9.5	241	1.38	35.1	5.75	144.7	2.25	57.2	4.34	110.2	1.38	35.1	2	50.8	0.6	15.2	SAE 4	SAE 4
3/4 (SAE 12)	3.5	88.9	3.25	82.5	1.75	44.5	9.5	241	1.38	35.1	5.75	144.7	2.25	57.2	4.34	110.2	1.38	35.1	2	50.8	0.6	15.2	SAE 4	SAE 4
1 (SAE 16)	3.75	99.3	3.5	88.9	1.88	47.8	9.5	241	1.38	35.1	6	152.4	2.25	57.2	4.34	110.2	1.25	31.8	2.14	54.4	0.61	15.5	SAE 4	SAE 4
1-1/2 (SAE 24)	4.25	114.3	4.25	107.9	2.25	57.2	12.5	319	1.38	35.1	7.38	187.3	2.25	57.2	5.46	138.6	1.25	31.8	2.14	54.4	0.61	15.5	SAE 4	SAE 4
2 (SAE 32)	5.5	139.7	5	127	2.75	69.8	12.75	324	1.38	35.1	8.13	206.3	2.25	57.2	6.21	157.7	1.25	31.8	2.5	63.5	0.61	15.5	SAE 4	SAE 4

Dimensions are for reference only, all critical dimensions should be verified - consult factory for certified drawings

NOTE: **Port Adapters** – Consult Factory For Details: 803.245.5111