



# WESMAN

## 1813 SENSITROL™ OIL VALVES

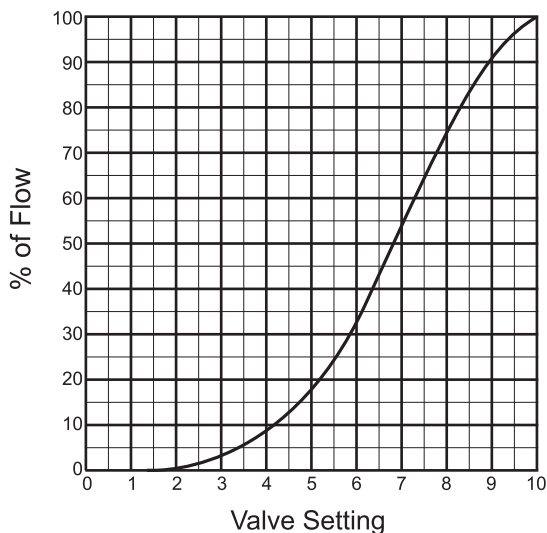
**1813 SENSITROL OIL VALVES** are precision built factory-calibrated valves for manual or motorized control of oil flow to industrial burners.

**1813 Sensitrols** are manual valves used as limiting orifices in setting oil/air ratio and as tight shutoff valves to prevent oil dribbling into burners during shutdown. An additional shutoff valve in the line which permits shutting off the burner without disturbing the Sensitrol's ratio setting position is recommended.

These valves have an adjustable detent mechanism that provides memory for desired valve operating position. A spring-loaded steel ball fits into a hollow in an adjustable collar, whose position is secured by a setscrew.

The handle can be pushed past the detent position easily to temporarily open the valve wide for light-off or clean-out.

**1813M Motorized Sensitrols**, for automatic control of oil flow, are available with brackets and linkage for most standard control motors. Although these valves have ten dial positions, linkage geometry limits valve travel to seven positions (e.g., 0-7, 2-9 or 3-10)



**Figure 1. Typical oil flow vs. valve handle position at constant pressure drop. This generalized curve will not predict exact flow rates at handle positions other than #7, so do not use chart to set burner ratios.**



### CAPACITY

1813 Valves are factory calibrated for rated flow at No.7 indicator position and can be used for metering at that setting only.

### Sensitrol Valve Capacities at #7 Indicator Position 10 PSI Pressure Drop

	Valve Size Designation					
	-03	-02A	-02B	-02C	-02D	-01
<b>LPH #2 oil (40 SSU) at 10 PSI ΔP</b>	11	30	63	122	203	518
<b>Dial Color</b>	Black	Red	Blue	Green	Brown	White

Flow at #10 (wide open) position is about twice the #7 position capacity. Shutoff occurs between positions #1 and #2 (see Figure 1).

Capacities are listed for 40 SSU #2 oil. They are somewhat less for higher viscosity oils but well within suitable ranges for oil burners (varying less than 10% from figures shown).