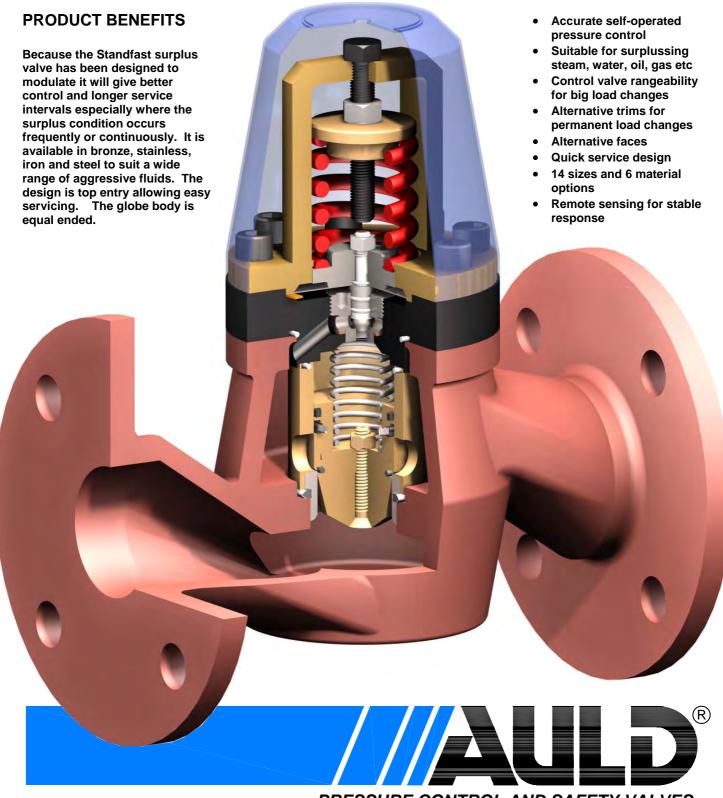
# Standfast<sub>®</sub>Surplus Valve ...to maintain upstream pressure.

The variety of names used to describe the surplus function can be confusing. Pressure maintaining valves, excess flow valves, dump valves and recirculating valves are often used as alternative names for essentially similar functions. Applications should be checked to establish the designers exact purpose.



# STANDFAST<sub>®</sub> SURPLUS VALVE

# **SURPLUS APPLICATIONS**

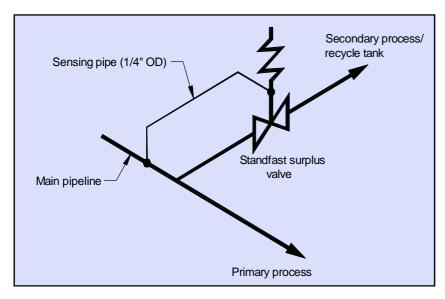
The Standfast surplus valve is often applied in pumped circuits to prevent the pressure rising as process demand falls. To put it simply, the surplus valve opens and passes the flow no longer required by the process. The effect is that the pump sees constant demand and therefore provides constant pressure.

The surplus valve can also be used a rationing device to ensure that a primary process gets priority supply if there is a temporary shortage of steam or air. By installing a surplus valve in the supply line the secondary processes can be cut off or restricted until demand and supply are once again in balance at which point the surplus valve will automatically re-supply all processes.

### **POINTS TO NOTE**

Check that a Pressure Reducing Valve has not been mistakenly specified after a pump and remember that a surplus valve is not a safety valve.

For best performance a strainer should be installed upstream of the valve.



# DATA TABLE

VALVE SIZE (mm)	15	20	25/ 32	40	50	65	80	100	150
A - C/L to top	165	165	165	187	187	241	241	267	330
B - Face to face (flanged & scr)	171	171	171	190	229	292	292	356	445
C - C/L to bottom	64	64	64	79	83	95	95	127	159
Finished weight (kg)	6	7	8	11	13	35	42	57	130

Ask for details of valves over 150mm.

# ...AND LIMITATIONS

The temperature and pressure limits should be observed. The company should be consulted about fluids with high viscosity, entrained solids or classed as dangerous by EC Pressure Equipment Directive.

Maximum temperature	220°C		
Maximum set pressure	25 bar		
Minimum set pressure	1.5 bar		

### **MATERIAL OPTIONS**

M1	Iron	M4	Bronze North Sea spec
M2	Steel	M5	Steel HP copper free
МЗ	Bronze	M7	Stainless steel

# **BACKPRESSURE & SIZING**

In a surplus application the downstream pressure is often referred to as back pressure. In pumped circuits it is usually zero, the flow having been returned to a tank at atmospheric pressure upstream of the pump. Because applications vary the downstream pressure must be stated as the pressure difference affects the capacity of the valve.

The valve will usually be sized to surplus 100% of the flow but if this situation never occurs a smaller proportion of the flow can be used. As in all control valves, accurate sizing gives better control.

The size selection can be made by Auld or alternatively call up the Standfast Technical Brochure and sizing tables. Either way will require inlet and outlet pressures, fluid and flow rate – and pipe sizes and other relevant system detail.

### FOR MORE INFORMATION

Auld Valves Ltd Cowlairs Industrial Estate Finlas Street Glasgow G22 5DQ, Scotland

Tel: +44 (0)141 557 0515 Fax: +44 (0)141 558 1059 E-mail: sales @auldvalves.com Web: www.auldvalves.com

