PLAST-O-MATIC **RELIEF VALVES SERIES "RVDM"**

PRESSURE SETTING AND INSTALLATION INSTRUCTIONS

The Series "RVDM" relief valve, when properly adjusted and installed, will eliminate the development of abnormal overpressures in piping systems and play an important part in the promotion of uninterrupted equipment service.

CAUTION: The Series "RVDM" relief valve is not a "Pop Safety" valve and should not be used in applications requiring such a valve. The Series "RVDM" relief valve will open gradually as the set pressure is reached and as the pressure drops it will gradually close and shut at approximately the set pressure.

SPRING **ADJUSTING END CAP** ADJUSTMENT STOP RING UPPER SPRING GUIDE (4) ASSEMBLY **SCREWS SPRING SPRING** HOUSING FLANGE SPRING HOUSING LOWER SPRING GUIDE DIAPHRAGM SHAFT DIAPHRAGM HOUSING **O-RING O-RING** ROLLING DIAPHRAGM DIAPHRAGM Ф SUPPORT WASHER THREADED STUD SEAT RETAINER, SEAT & CONE BODY

PRESSURE SETTING INSTRUCTIONS

If a specific pressure rating is specified on the Series "RVDM" relief valve order. the valve will be preset and labeled accordingly at the factory.

If a specific pressure rating is specified on the Series "RVDM" relief valve order. the valve will be pre-set accordingly. The spring can be changed to achieve a higher range. From the enclosed tagged springs choose the correct spring for the relief requirements before assembly.

To set the relief pressure, attach a pressure line with gauge and regulator, with the pressure regulator adjusted to the required relief pressure to the inlet of the Series "RVDM" relief valve.

Apply the required pressure to the Series "RVDM" valve and if the valve relieves prematurely, turn the spring adjusting end cap down to increase the relief setting. If the valve does not relieve at the desired pressure, turn the spring adjusting end cap up to decrease the relief setting.

If air is used as the pressure line, water should be placed in the outlet port of the valve to accurately detect relief. When properly adjusted the valve should emit a steady stream of air bubbles, about 2 every second, at the desired pressure setting.

INSTALLATION INSTRUCTIONS

The Series "RVDM" relief valve should always be installed as near as possible to the line or vessel being protected.

Refrain from attaching a Series "RVDM" relief valve to metal threads wherever possible. Metal tapered pipe threads are often very sharp and tend to expand the valve's thermoplastic body which will create stress points or cracks contributing to the failure of the valve.

Since the thermoplastic body of the Series "RVDM" relief valve can be marred by pipe wrenches, it is recommended that strap wrenches be used for installing this valve in piping systems. It is not necessary to use much force in making a tight joint — little more than hand tight on the threads is usually sufficient. Forcing the threads is not necessary and should be avoided.

Apply a suitable thread sealant (such as compatible tape) to male tapered threads to assure a "leak-tight" seal. Note that sealing tape will "string" as pipe threads are joined. Loose "strings" could lie across the seating surface and prevent the valve from completely closing. To avoid this problem, clean out old tape, and do not apply tape to the first thread. THERMOPLASTIC

COMPONENTS CAN BE DAMAGED by contact with chemicals found in some thread sealing compounds (Pastes, Caulks, Tape, Dope, Lubricants, etc.) Reasonable care needs to be taken to ensure that products coming into contact with thermoplastic systems are compatible. Plast-O-Matic recommends confirming chemical compatibility with the manufacturer of the thread sealing product.

Never install a Series "RVDM" relief valve in such a manner where the outlet will be subjected to a back pressure from a pressure line or a pressure vessel.