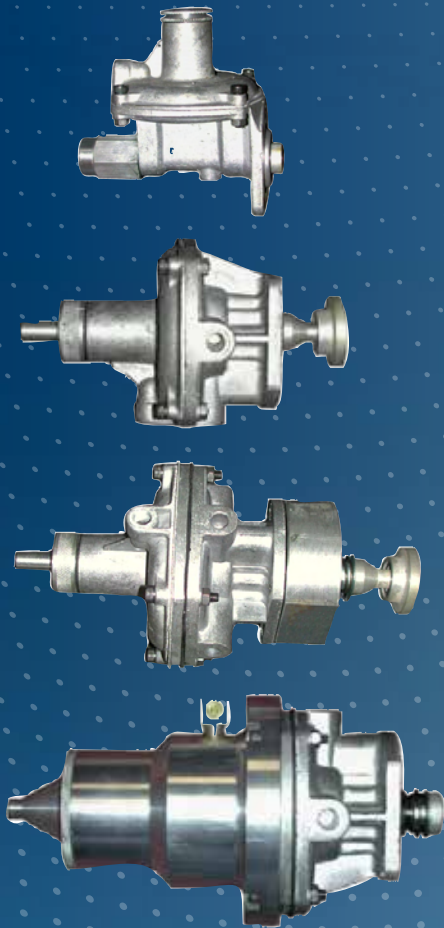


Technical Bulletin

SAFETY SLAM-SHUT VALVES - MODELS 290/309LP/309LP2/309LP4



MODEL 290-309LP-309LP2-309LP4 SAFETY SLAM-SHUT VALVES

Introduction, Characteristics, Constructions, Technical Data

Introduction

- Specifically designed to protect the downstream system or equipment from either under and/or over pressure conditions
- Special models for protection against fire or high temperatures
- Use with confidence on natural and manufactured gases of non-aggressive nature, including nitrogen, carbon dioxide, propane, butane, etc.
- Versions available for special applications like indoor applications with no requirement for vent-line
- Can be incorporated with any of our pressure regulators for additional safety protection or can be fitted to an independent body

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Characteristics

- Specifically designed to measure downstream pressure and 100% completely shut-off the forward flow of gas if a pre-determined pressure limit is reached
- Wide inlet pressure range 0.5-275 psi (0.035-19.0 bar) if independent of regulator
- Maximum inlet pressure 150 psi (10.3 bar) with incorporated regulator
- Model 290 Safety Slam-Shut Valve is available in Over-Pressure Cut-Off (OPCO) feature only
- Under Pressure Cut-Off (UPCO) shut off range from 4" wc - 4.5 psi (10 - 315 mbar)
- Over Pressure Cut-Off (OPCO) shut off range from 14" wc - 72 psi (35 mbar - 5.0 bar)
- T-Type thermal protection version shuts the gas supply off if the assembly is engulfed in a fire or is subject to an ambient temperature of above 212°F (100°C)
- Available with or without incorporated body for mounting
- 1" or 2" flanged connections (180°) in ANSI150 RF/FF or PN16 RF/FF. Flanged body material available in cast iron, ductile iron or cast steel
- Available with internal (I.C.L.) or external (E.C.L.) impulse
- Ease of maintenance due to interchangeable diaphragm casing cartridge
- Custom designed and pre-fabricated regulator meter set assemblies available

Available Constructions

- 290-OPCO - over pressure slam-shut device
 - over pressure range 14" wc - 8 psi (35 - 560 mbar)
- 309LP OPCO - over-pressure slam-shut device
 - over pressure 4" - 60" wc (10 - 150 mbar)
- 309LP UPCO/OPCO - under and over-pressure slam-shut device
 - under pressure 4" - 60" wc (10 - 150 mbar)
 - over pressure 20" wc - 8 psi (50 - 560 mbar)
- 309LP2 OPCO - over-pressure slam-shut device
 - over pressure 6.0 - 22.0 psi (0.42 - 1.5 bar)
- 309LP2 UPCO/OPCO - under and over-pressure slam-shut device
 - under pressure 8" wc - 4.5 psi (20 - 315 mbar)
 - over pressure 6.0 - 22.0 psi (0.42 - 1.5 bar)
- 309LP4 OPCO - over-pressure slam-shut device
 - over pressure 15.0 - 72.0 psi (1.0 - 5.0 bar)
- 309LP4 UPCO/OPCO - under and over-pressure slam-shut device
 - under pressure 8" wc - 4.5 psi (20 - 315 mbar)
 - over pressure 15.0 - 72.0 psi (1.0 - 5.0 bar)
- T-TYPE Thermal Protection - safety slam-shut valve with safety diaphragms for indoor installation and no requirement for vent-line to atmosphere. Available with UPCO or UPCO/OPCO features. Shut down protection if assembly is engulfed in fire or ambient temperature reached pre-determined limit. Only available with over pressure protection up to 12 psi
- IMPULSE - available with I.C.L. (internal impulse) measuring pressure internally in the body or E.C.L. (external impulse) measuring pressure via a downstream sensing control line
- F VERSION - complete with inlet mess filter