

# E0089 Dampeners • Relief & Pop-Off Valves



6028 & 686028

## Pulsation Dampeners

For reducing vibration and pulsation in pumping systems. Prolongs pump and component life. Available in rechargeable or sealed models.

**Standard Features include:** Buna-N Bladder • Nitrogen pre-charge • Bottom port for easy mounting • Sealed valve for positive pressure lock • Maximum operating temperature is 180° • Standard pre-charge is 550 PSI.

**Note:** Ideal pre-charge is 1/2 of the operating pressure of the pump but should not exceed 50% of the maximum operating pressure of the dampener.

| Part-NO   | Max. GPM | Max. PSI | MPT Inlet | Make    | Lower Body      |
|-----------|----------|----------|-----------|---------|-----------------|
| CC 6028   | * 15     | 1000     | 1/2"      | Cat     | Coated Steel    |
| IP 686028 | * 10     | 3000     | 1/2"      | General | Coated Steel    |
| CC 6029   | 15       | 3000     | 1/2"      | Cat     | Stainless Steel |
| CC 6011   | 25       | 7200     | 1/2"      | Cat     | Coated Steel    |
| CC 6018   | 40       | 3000     | 1"        | Cat     | Coated Steel    |
| IP 686010 | 40       | 3000     | 1"        | General | Coated Steel    |
| CC 6012   | 70       | 1500     | 1-1/4"    | Cat     | Coated Steel    |

\* Model 6028 and 686028 are sealed & not rechargeable.

## GIANT Pulsation Dampeners

Helps to Minimize Pulsation in Piston & Plunger Pumps. Protects Pump & System from Hydraulic Shock.



22050 & 22155

**Heavy-Duty Pulsation Dampeners.** Pre-charged with dry nitrogen. Assures smooth discharge from high pressure pumps. Reduces vibration and wear on pump parts and accessories. Diaphragms are Buna-N.

**Model 22050 & 22155** is GIANT brand and features 303SS Steel housing. Rated to 200° F.

| Part-No.  | Ports    | Maximum Capacity | * Maximum Pressure | PreCharge |
|-----------|----------|------------------|--------------------|-----------|
| GU 22050  | 3/8" FPT | 12 GPM           | 3000 PSI           | 600 PSI   |
| GU 22155  | 3/8" FPT | 30 GPM           | 3000 PSI           | 600 PSI   |
| GU 22155A | 3/4" MPT | 30 GPM           | 3000 PSI           | 600 PSI   |

\* Note: Pre-charge should not exceed 50% of Maximum pressure.

## Pulse Hoses

Reduces Vibration & Pulsation in Pumping Systems



3/8" MPT Inlet x 3/8" Plug Outlet

| Part No.   | Length | Rated to         |
|------------|--------|------------------|
| HY 3375-12 | 24"    | 3 gpm @ 1500 PSI |
| HY 3375-11 | 40"    | 5 gpm @ 1500 PSI |

**NOTE:** Multiple hoses can be used to increase flow capacities.

## Stainless Steel Pop-Off Valves

**Stainless Steel, High Temperature Pop-Off Valves** are designed to protect pumps and plumbing systems from failure of main relief or unloader valves. **Cat Pumps** valves are rated to 240° F. **General Pump** valves are rated to 284° F.



100971

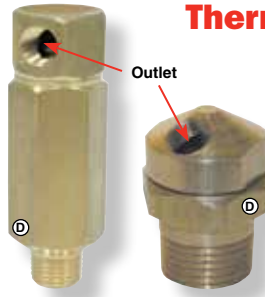
| Part-No.  | Inlet    | Flow Rate | Mfr.      | Max. PSI |
|-----------|----------|-----------|-----------|----------|
| CC 9960   | 1/4" MPT | 6 GPM     | Cat Pumps | 1500     |
| CC 9962   | 1/4" MPT | 6 GPM     | Cat Pumps | 4000     |
| IP 100971 | 3/8" MPT | 7 GPM     | General   | 4500     |
| IP 100982 | 3/8" MPT | 12 GPM    | General   | 4500     |
| IP 100972 | 1/2" MPT | 7 GPM     | General   | 4500     |
| CC 890710 | 1" MPT   | 100 GPM   | Cat Pumps | 1500     |
| CC 890711 | 1" MPT   | 50 GPM    | Cat Pumps | 6000     |



9960

We appreciate **YOUR BUSINESS!**

## Thermal Relief Valves



Outlet

**Thermo-Valves** protect pumps from premature failure of seals, packing and cups by eliminating heat build-up in closed loop by-pass systems. Automatically seats during unloader/regulator pressure spikes to prevent fluid bleed.

7100 Series

3312 Series

23422A

100558

Valves open when temperature exceeds temperatures shown. Provides high temperature protection without interruption in flow. Compatible with systems using either unloader or regulator valves.

| Part No.  | Max. Flow | Max. Press. | Maximum Temperature | Inlet    | Outlet   |
|-----------|-----------|-------------|---------------------|----------|----------|
| NP 9063   | 6-GPM     | 200 PSI     | 140° F.             | 3/8" MPT | -        |
| GU 23421A | 8-GPM     | 90 PSI      | 140° F.             | 3/8" MPT | -        |
| GU 23422A | 8-GPM     | 90 PSI      | 140° F.             | 1/2" MPT | -        |
| IP 100558 | 8-GPM     | 200 PSI     | 145° F.             | 1/2" MPT | 1/4" FPT |
| HY 3312-4 | 10-GPM    | 200 PSI     | 145° F.             | 1/2" MPT | 1/4" FPT |
| CC 7140   | 25-GPM    | 125 PSI     | 145° F.             | 1/4" MPT | 1/8" FPT |
| CC 7141   | 25-GPM    | 125 PSI     | 145° F.             | 3/8" MPT | 1/8" FPT |
| CC 7142   | 25-GPM    | 125 PSI     | 145° F.             | 1/2" MPT | 1/8" FPT |
| CC 7170   | 25-GPM    | 125 PSI     | 180° F.             | 1/4" MPT | 1/8" FPT |
| CC 7171   | 25-GPM    | 125 PSI     | 180° F.             | 3/8" MPT | 1/8" FPT |
| CC 7172   | 25-GPM    | 125 PSI     | 180° F.             | 1/2" MPT | 1/8" FPT |

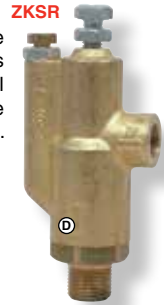
## Pop-off Relief Valves



100534

**Safety Relief "Pop-Off" Valves.** For use as safety back-up valves to your unloaders or regulators. Brass and stainless steel construction. **ZKSR** and **100534** have 3/8" MPT inlet. **SV1200** has 1/2" MPT inlet. **ZKS3** has 1/2" MPT inlet.

| Part No.  | Max. Flow | Max. PSI |
|-----------|-----------|----------|
| IP 100534 | 6 GPM     | 6,000    |
| IP ZKSR   | 11 GPM    | 3,000    |
| IP ZKS3   | 21 GPM    | 10,000   |
| IP SV1200 | 50 GPM    | 2,900    |
| IP SV1500 | 50 GPM    | 7,250    |



ZKSR

## SUTTNER Pop-Off Relief Valves GIANT

Reduce system pressure upon even a partial obstruction. Used in conjunction with an unloader valve, your pumping system actually has two safety relief valves. Brass construction. Inlet ports are 1/4" or 3/8" MPT. Valves can be reset in the field if necessary. 160° F. maximum temperature. Outlet is 3/4" FPT.



| Part No.  | MPT Size | Max. Flow | Mfg.    | Max. PSI |
|-----------|----------|-----------|---------|----------|
| NP 9069   | 3/8"     | 6 GPM     | Suttner | 4000     |
| GU 22568  | 1/4"     | 10 GPM    | Giant   | 5000     |
| GU 22531A | 3/8"     | 10 GPM    | Giant   | 2400     |
| GU 22533A | 3/8"     | 10 GPM    | Giant   | 5000     |



## Safety Pop-Off Valves

**Safety Pop-Off Valves** are designed to protect pumps in the event an unloader or regulator valve fail. Should be used in conjunction with a regulator or unloader valve. Brass Body, hardened stainless seat, lightweight and compact design. Rated to 180° F.

| Part No. | Maximum Flow | Pressure Adjustment Range | MPT Inlet |
|----------|--------------|---------------------------|-----------|
| CC 33960 | 6-GPM        | 300 to 1500 PSI           | 3/8"      |
| CC 30961 | 6-GPM        | 1000 to 3000 PSI          | 1/4"      |
| CC 33961 | 6-GPM        | 1000 to 4000 PSI          | 1/4"      |
| CC 9940  | 25-GPM       | 1000 to 4000 PSI          | 3/4"      |

