WHY TRUST A SPECIAL SPRINGS CYLINDER?

WHY YOU SHOULD TRUST IN A CYLINDER WITH USAS?

USAS
Uncontrolled Speed Active Safety
SPECIAL SPRINGS HAS IT.

What is it?
USAS are 3 unique Special Springs safety solution devices, which exhaust pressure in a controlled and complete mode, without ejection of parts when the cylinder has been stressed by uncontrolled return of the piston rod.
This is typically caused by the seizure and jam of the die plates or stamped parts that, subjected to pressure thrust, are released in an uncontrolled manner.

How is it made?

1. Body - bush design
USAS is the combination of a deformable part of the bushing in contact with the retaining C-ring and the discontinuities on the wall of contact of the body-bush seal.
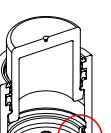USAS self activates without causing structural damages to the cylinder, further improving safety for users.
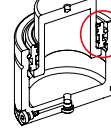
2. Body - bottom plate design
USAS is the combination of a deformable part of the bottom plate in contact with the retaining C-ring and the discontinuities on the wall of contact of the body-bottom plate.
USAS self activates without causing structural damages to the cylinder, further improving safety for users.

3. Body - piston design
USAS is the combination of a deformable part of the bushing in contact with the retaining C-ring and the discontinuities on the wall of contact of the piston seal. USAS self activates without causing structural damages to the cylinder, further improving safety for users.
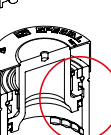
USAS' Benefits
- Exhausts pressure in a controlled and complete manner when the cylinder has been stressed by uncontrolled returns.
- Reduces the risk of tool damage or injury due to ejection of parts under pressure.
- Self activates automatically regardless of users' intervention.
- Does not increase the cost of the cylinders.

USAS

WHY YOU SHOULD TRUST IN A CYLINDER WITH OSAS?

OSAS
Over Stroke Active Safety
SPECIAL SPRINGS HAS IT.

What is it?
OSAS are 3 unique Special Springs safety solution devices, which exhaust pressure in a controlled and complete mode, when working stroke exceeds the nominal value.

How is it made?

1. Body - bush design
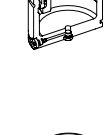OSAS is the combination of an outward extension of the bush with discontinuity groove on the body-bush sealing wall.
OSAS self activates without deforming the body of the cylinder, further improving safety for users.

2. Body - bottom plate design
OSAS is the combination of a deformable body skirt with discontinuity groove on the body-bottom plate sealing wall.
OSAS self activates without causing structural damages to the cylinder, further improving safety for users.

3. Body - piston design
OSAS are discontinuity grooves on the body-piston sealing wall.
OSAS self activates without deforming the body of the cylinder, further improving safety for users.
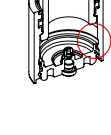
OSAS' Benefits
- Exhausts pressure in a controlled and complete mode, when the cylinder has been overstroked.
- Reduces the risk of tool damage or injury due to ejection of parts under pressure.
- Self activates automatically regardless of users' intervention.
- Does not increase the cost of the cylinders.

OSAS

WHY YOU SHOULD TRUST IN A CYLINDER WITH OPAS?

OPAS
Over Pressure Active Safety
SPECIAL SPRINGS HAS IT.

What is it?
OPAS are 2 unique Special Springs safety solution devices, built or mounted on the bottom of the cylinders, which exhaust pressure in a controlled and complete manner when the latter exceeds maximum allowed.
This is typically caused when stamping contaminants get into the gas room reducing its volume.

How is it made?
OPAS is either the combination of a rupture septum or a rupture plug positioned in the bottom of the cylinders, with an exhaust milling on the bottom contact surface.
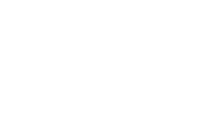
OPAS' Benefits
- Exhausts the pressure in a controlled and complete manner when it exceeds the maximum value allowed.
- Reduces the risk of tool damage or injury due to ejection of parts under pressure.
- Self activates automatically regardless of users' intervention.
- Does not increase the cost of the cylinders.

OPAS

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