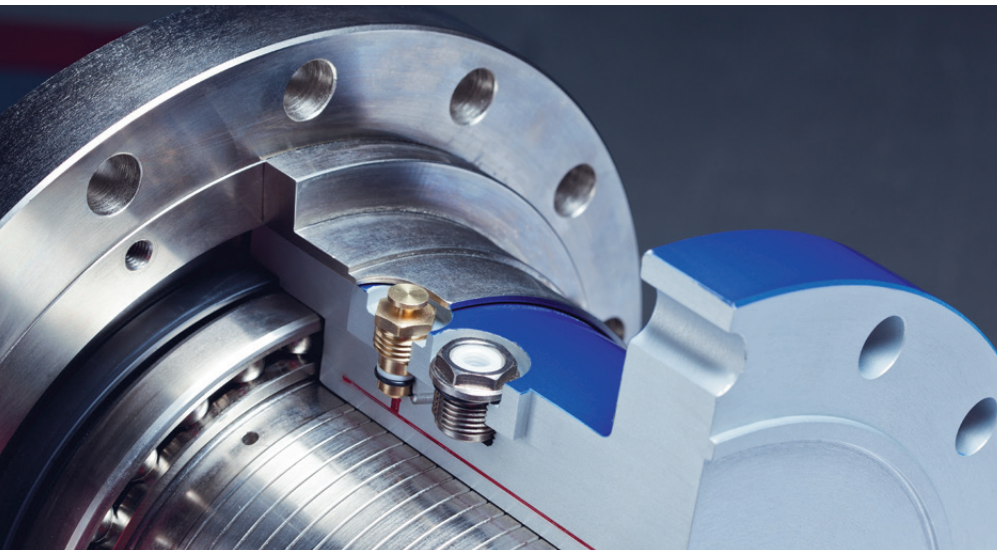


## Torque Limiting Coupling With Instant Release. SafeSet



**SafeSet torque limiting couplings prevent machine damage in high value rotating equipment. They work like a mechanical fuse in the driveline by protecting the system from costly breakdowns.**

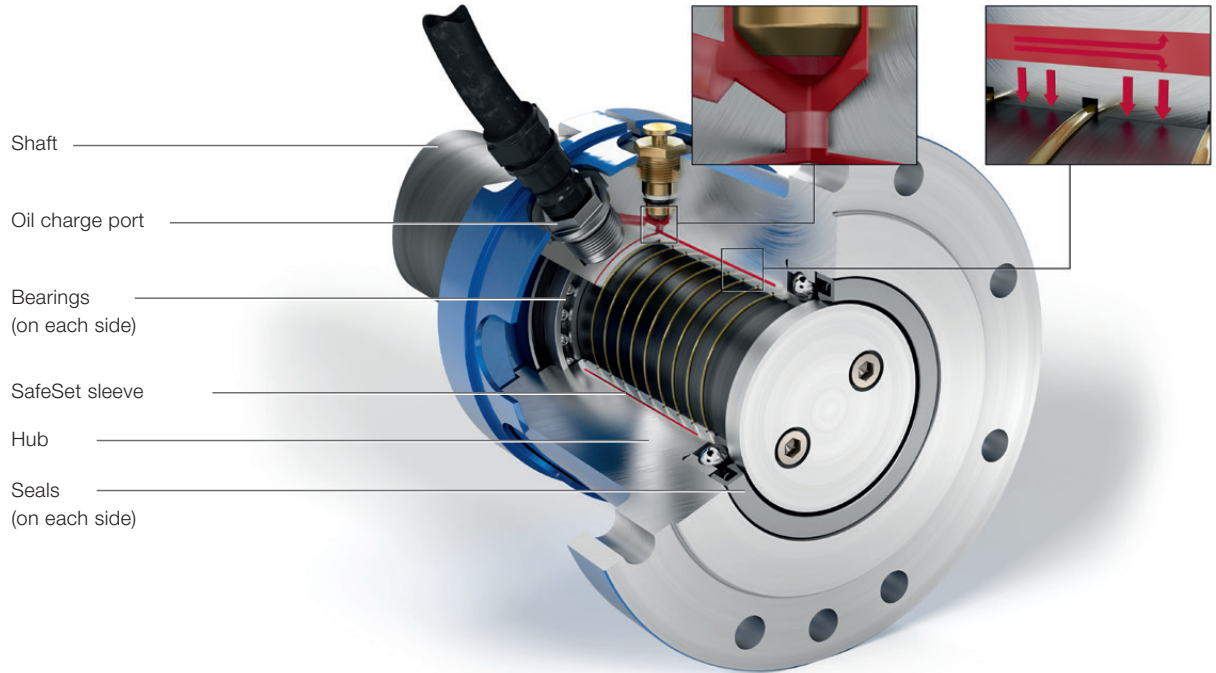
SafeSet only releases when the set torque is really exceeded. This allows your driveline to always operate at the maximum level, without risking damage from overload. The set release torque remains constant over time, regardless of the number of load cycles. SafeSet provides accurate protection throughout the life span of the driveline, and avoids unnecessary downtime and repairs.

### **Operation**

The SafeSet principle is simple: friction and flexibility. No material fatigue, a constant torque transmission and adaptability. The SafeSet coupling includes a twin-walled hollow sleeve. Friction is generated upon expansion by pressurized hydraulic oil. The integrated shear tube holds pressure to ensure a constant but easy adaptable torque transmission. In an overload situation the SafeSet slips and the shear tube shears off. Oil pressure drops and the frictional surfaces separate. Then the SafeSet rotates on the bearings without transmitting any torque. Torque capacity available between 1 and 20 000 kNm.

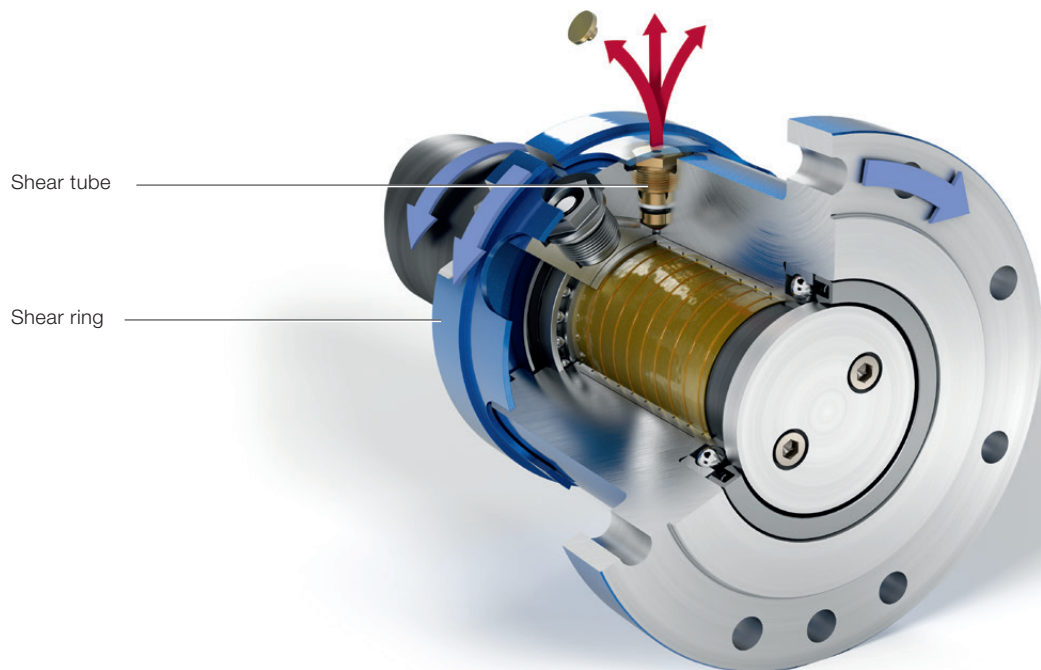
## SafeSet being pressurized

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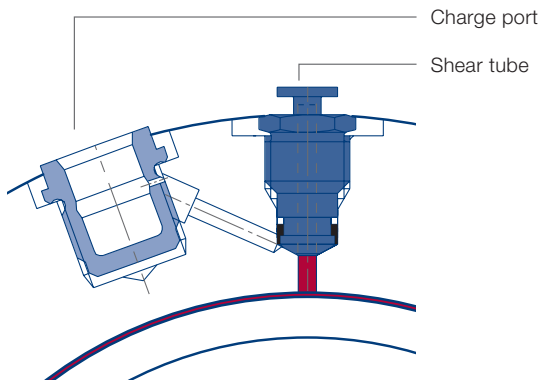


## SafeSet following a release

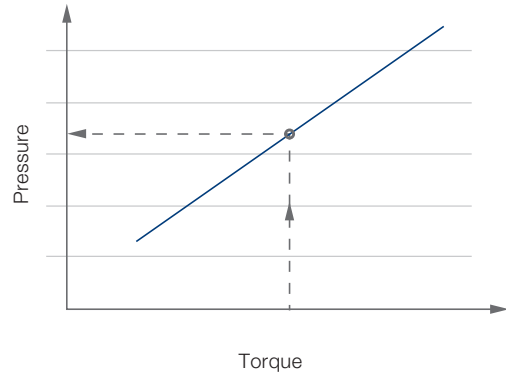
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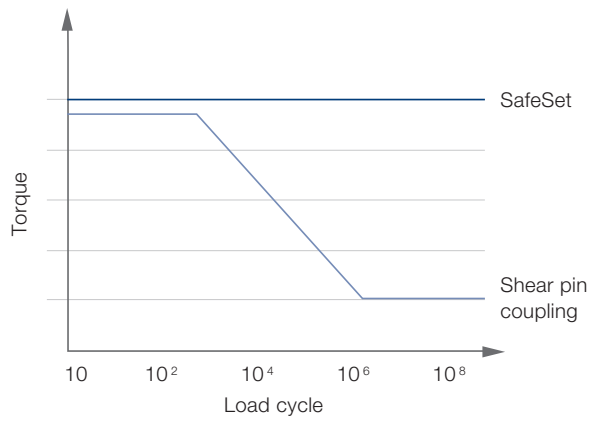
### Shear tube illustration



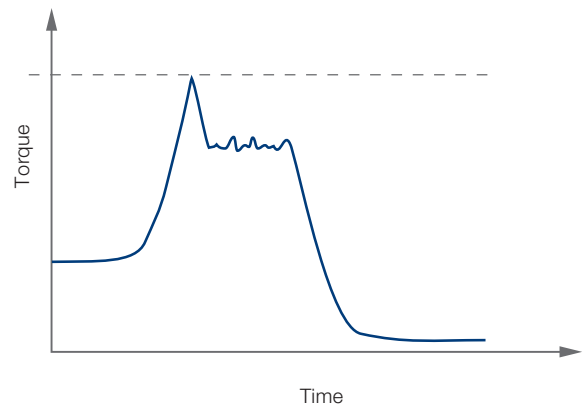
### Calibration curve (Calibration diagram)



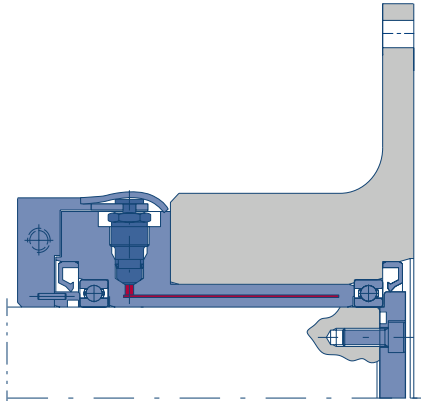
### Fatigue curve (S-N curve)



### Typical release curve



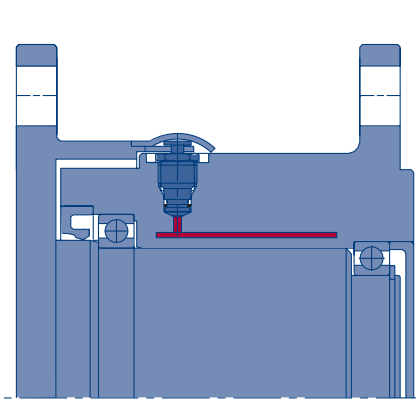
### SafeSet ST



SafeSet for shaft to hub connection

- ST-B for plain shaft
- ST-KB for key-wayed shaft

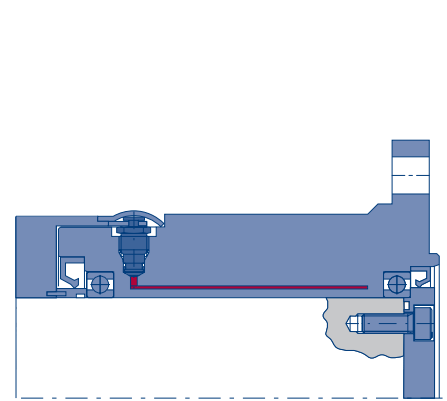
### SafeSet SR-P



SafeSet for flange to flange connection

- SR-P for low/medium duty
- SR-PF for heavy duty

### SafeSet SR-N



SafeSet for shaft to flange connection

- SR-N for low/medium duty
- SR-F for heavy duty

### Coupling and function Features

### Benefits

<b>SafeSet</b> Torque limiting coupling with instant release	<b>Accurate release torque</b>	<b>Increases production uptime</b> Due to precise point of release that gives higher safety margins in the production level, higher out put of the driveline and less repair of drive equipment
	<b>Compact and flexible design</b>	<b>High utilization of investment</b> Due to optimized driveline design – no need of changes in your existing driveline and can be positioned anywhere to maximize the driveline
	<b>Instant torque limitation in overload situations</b>	<b>Protects your driveline from expensive standstill costs</b> Due to minimized risk of overload and minimized delay time in production
	<b>Adjustable release torque</b>	<b>Minimizes additional cost in the event of a upgrade of the driveline</b> Due to adaptability to the existing driveline design and specific application requirements
	<b>Back-lash free power transmission</b>	<b>Minimizes cost of repair</b> Due to protection against wear on other parts in the driveline
	<b>Set torque remains constant over time</b>	<b>Continous production process</b> Due to no unwanted releases and reduced repair time
	<b>Quick and easy resetting</b>	<b>Minimizes standstill and downtime</b>

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 Engineered Reliability