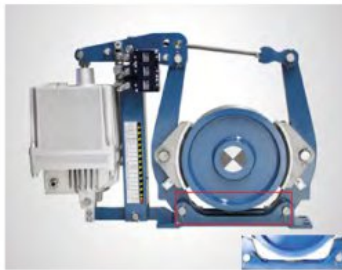


# Industrial brakes: Drum brakes

According to DIN 15435: Worldwide interchangeability

RÖMER-brakes are built to DIN 15435 standard and therefore interchangeability is guaranteed. All steel components are made from solid material. German production!

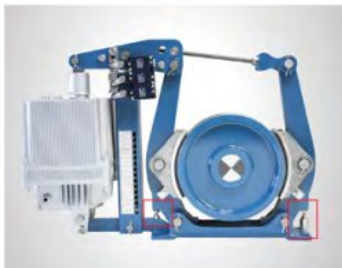


Synchro-lifting-mechanism (spring) at drum brake type RT guarantees automatically an uniform lifting gap between brake lining and brake drum. Optimal when using an automatic wear adjustment (AVN).

## Type RT

1. Single-bar brake lever
- 2. Synchro-lifting-mechanic**
3. Brake-shoe holding clip

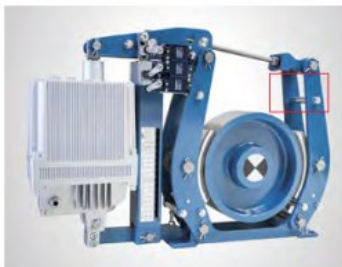
Braking torques: up to 10.000 Nm (standard version)  
 Standard sizes: 200, 250, 315, 400 L, 400 V, 500, 630, 710 according to DIN 15435 / interchangeability  
 Standard drum diameter: 160, 200, 250, 315, 400, 500, 630, 710 mm  
 ( larger sizes on request )



## Type EB

1. Single-bar brake lever
- 2. Adjustable Stops for brake levers**
3. Brake shoe holding clip

Braking torques: up to 10.000 Nm (standard version)  
 Standard sizes: 200, 250, 315, 400 L, 400 V, 500, 630, 710 according to DIN 15435 / interchangeability  
 Standard drum diameter: 200, 250, 315, 400, 500, 630, 710 mm  
 ( larger sizes on request )



## Type TB

- 1. Twin-bar brake lever**
2. Brake shoe holding clip
3. Adjustable stops for brake levers

Braking torques: up to 10.000 Nm (standard version)  
 Standard sizes: 200, 250, 315, 400 L, 400 V, 500, 630, 710 according to DIN 15435 / interchangeability  
 Standard drum diameter: 200, 250, 315, 400, 500, 630, 710 mm  
 ( larger sizes on request )

### All types of brakes (RT, EB, TB) can be operated:

- **Electro-hydraulically (thruster)**
- **Hydraulically**
- **Magnetically**
- **Pneumatically**
- **Manually**
- **Electro-mechanically**
- **Combined operation**
- **Custom design**



## Optional equipment for brakes

### Options / features:

- Monitoring limit switches for:
  - „Brake opened“
  - „Brake closed“
  - „Check lining wear“
- Manual lifting device
- Automatic wear adjustment (AVN)
- Brake lining riveted and/or bonded
- Cooling system for thrusters against overheating
- Thruster TURBO Controller (Quicker braking times)
- Bolts with grease nipples
- Special construction for horizontal or suspended mounting with support
- Brake retarder / Time-delayed braking
- Heating system
- Special design

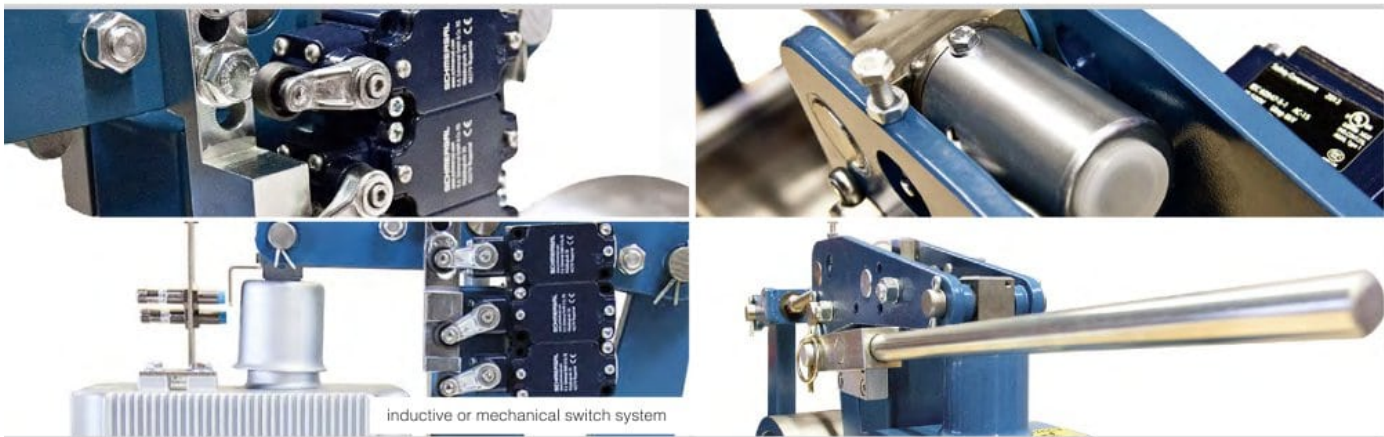
### RFT Control System type RCS

RCS as STANDARD or PRO version is a universal monitoring system to control brake system (Drum brakes, Disc brakes, Storm brakes).

#### Monitoring of:

- Run time control (control opening and closing times)
- Wear control
- Temperature control (on brake drum, brake pads, thruster, bearing control,...)
- Broken spring control
- Alarm signals in case of unwanted brake adjustments  
Signals: 1. Information, 2. Warning, 3. Fatal error
- Force measurements
- Speed control
- Higher-level control
- Profibus
- GSM/GPRS (online signals / e.g. for mobile systems)
- ETHERNET (remote web control)

Control system  
Type RCS:



inductive or mechanical switch system

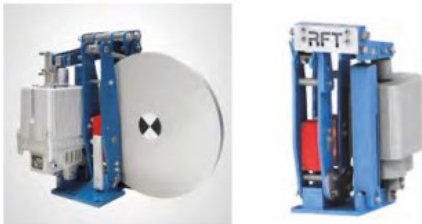
# Industrial brakes: Disc brakes, Band brakes, Block-/ Parking brakes

Different versions for your application.  
High or low speed brake.

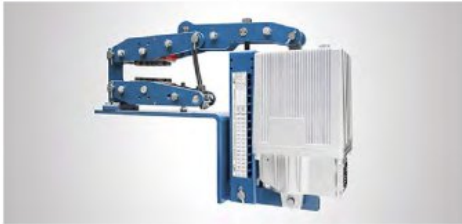
The geometrically optimized caliper system guarantees a constant brake torque independent of direction of rotation. Using standardized components, manufactured in-house, we can offer various brake series with different function, with economical prices and short delivery times. All steel components are made from solid material. German quality!

## Type RST:

High speed brake, fail safe principle



- Types: RST-0, RST-0-L, RST-1, RST-2, RST-3, RST-4
- Vertical and horizontal versions
- Torque adjustable
- For brake disc  $\varnothing$  250 mm to  $\varnothing$  1250 mm
- Braking torques from 200 Nm up to 22000 Nm
- Sintered brake linings as standard for higher friction speeds



### Options:

- Limit switches, hand lifting devices, automatic wear adjustment, ...

**NEW: Synchro lifting mechanism (SLM) at disc brake type RST-SLM guarantees automatically an uniform lifting gap between brake lining and brake disc.**

## Type SCFH Caliper safety disc brake:

Low speed brake, fail safe principle



- Safety disc brake mounted on the flanged wheel of the rope drum
- Pad forces up to 400 kN per clamp system  
Clamp variations on one brake disc (e.g: 4 x SCFH-4 = 1600 kN)
- Direct-acting - without lever transmission
- High + independent direction of rotation braking torque
- Two identical clamp halves
- Manual adjustment of brake lining wear
- Lifting gap adjustable from 1 mm to 3 mm
- Completely encapsulated hydraulic system
- Sintered brake linings as standard for high performance



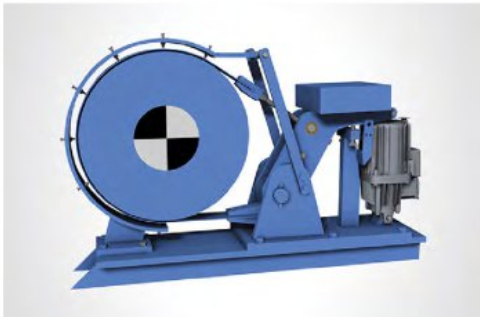
### Options:

- Monitoring equipment for brake opened / closed
- Hand lifting via hand pump on the hydraulic power unit
- Hydraulic power units are suitable for parallel operations of clamps
- Special design for increased or lower ambient temperatures
- Hydraulic system with hardly inflammable hydraulic liquid
- Brake discs with hub or in flange-mounted



Band brakes are dry friction brakes. Based on possible braking torques, band brakes are the most cost-effective of all friction brakes. Typically used for winches and hoists (mineral oil extraction, windlass and metallurgy).

**Type RFT band brakes**



- A low actuating force can excite a huge braking torque
- Bespoke manufactured by RFT according to customers requirements
- With or without electronic control system

Thruster TURBO control system:

- Faster reaction time of thrusters up to <150 ms.

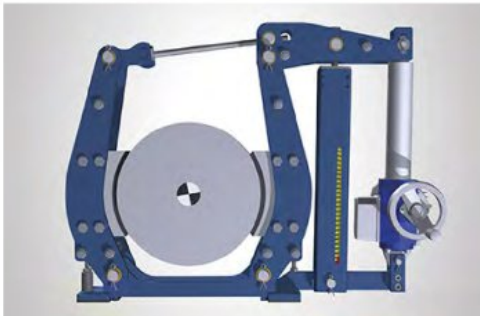
Different types:

- |                      |                            |
|----------------------|----------------------------|
| 1. Single band brake | 3. Multiple band brake     |
| 2. Sling band brake  | 4. Differential band brake |

By using this method the band brake has a similar reaction time as a disc brake. This allows RFT band brakes to be integrated as safety brakes at hoists, operating directly on the rope drum.

**Type Block brake / Parking brake**

Type „TB-KB“ Static brake, No Fail-Safe-Principle!



- Block / Parking brake (not suitable for dynamic braking)
- Adapted brake shoes / can be adjusted to **any certain diameter**
- No dynamic brake, static holding brake
- For maintenance or holding position
- To guarantee a standstill of the system
- Operated by actuator or manually!

Safety brake for following application:

- As shaft brake for ship shafts/waves
- As shaft brake for large fans
- As shaft brake for wind turbines



Possible variations:

