

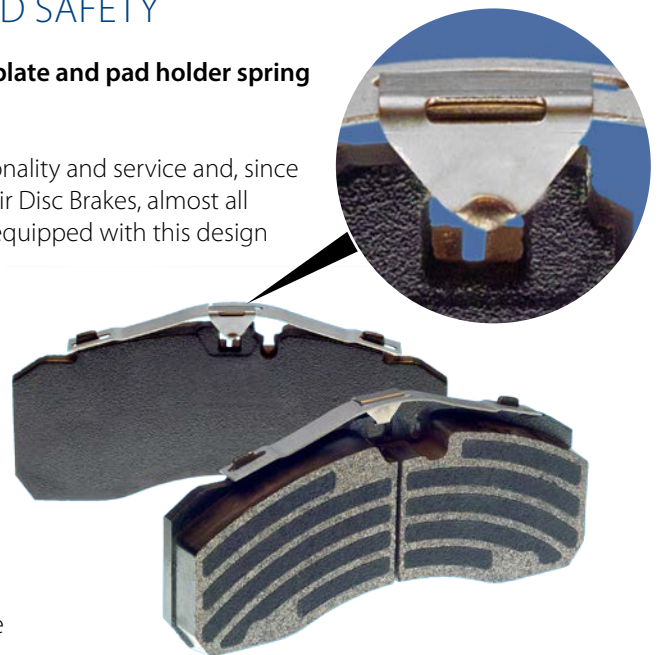
## BRAKE PADS WITH PROTECS® BRAKE PAD SPRING SYSTEM INCREASED OPERATIONAL RELIABILITY AND SAFETY

**The ProTecS® design concept consists of the brake pad back plate and pad holder spring being connected to each other by a welded hood**

Introduced in 2011, the ProTecS® system provides safety in functionality and service and, since the design is also backwards compatible to many Knorr-Bremse Air Disc Brakes, almost all Brake Pad Kits supplied today by Knorr-Bremse TruckServices are equipped with this design standard.

### Design features:

- Direct connection between brake pad back plate and pad holder spring ensures accurate usage of the spring's elasticity and optimal guidance of the Brake Pads
- The construction of the spring increases the life expectancy of the Brake Pads, especially on rough roads
- The welded bracket acts as a slider, protecting the holder spring and the brake pad retainer from excessive wear and tear
- The Brake Pad slides back more easily from Brake Disc contact, reducing the risk of brake pad wear when the brake is released
- The weight reduced cast brake pad back plate, generates less momentum and prevents radial acceleration. This results in reduced noise development and reduced deformation of the Brake Pad when in contact with the Brake Carrier



ProTecS® plays a big role in increasing the operational reliability and safety of commercial vehicle Air Disc Brakes – both as original equipment and as replacement parts. Usage of the ProTecS® system prevents, for example, the risks associated with the re-use of old springs, as the entire brake pad retention system is replaced. Since the ProTecS® brake pad holder spring is a fixed component, potential assembly errors are eliminated.

### At a glance

- › Precise calibration of spring force
- › Minimized noise emissions
- › Reduced deformation of brake pad holder
- › Optimized Brake Pad guidance
- › Secure retention of pad spring
- › No risky re-use of springs
- › Protection against abrasion caused by dirt

## Overview of the main Knorr-Bremse ProTecS® Brake Pads

Vehicle Manufacturer	Brake Type	Knorr-Bremse Part Number	WVA No.	Brake Pad Type	Details
BPW, SAF, SCHMITZ	SB / SN 6...	K078206K50	29287	Jurid 539-39	without pad coding
GIGANT, IVECO, MAN, SMB	SB / SN 6...	K056758K50	29287	Textar T3030	
MERCEDES- BENZ	SB / SN 6...	K115441K50	29341 29287 29320 29361	MB6122-0	
BPW, BOVA, EVO Bus, Jost Werke, MAN, MERCEDES- BENZ, Neoplan, SAF, SCHMITZ	SB / SN 7...	K046771K50	29252 29253	Jurid 539-39	without pad coding
DAF	SB / SN 7...	K107949K50	29253	Textar T7400	
DAF	SB / SN 7...	K159176K50	29253	Textar T7400	incl. wear indicator
EVO Bus, MERCEDES-BENZ. Neoplan, Solaris, ZF	SB / SN 7...	K094436K50	29278	Textar T7400	
GIGANT, IVECO, MERCEDES-BENZ, SMB	SB / SN 7...	K046772K50	29252 29253	Ferodo 4550/X3	
MAN	SB / SN 7...	K059965K50	29253	Ferodo 4567	
Jost Werke, MERCEDES-BENZ, SAF, SCHMITZ	SK 7...	K066608K50	29257	Jurid 539-39	
MERCEDES- BENZ	SL 7... ; HA	K035472K50	29244	MB7211-0	
MERCEDES- BENZ	SL 7... ; HA	K046774K50	29244	MB7221-0	
MERCEDES- BENZ	SM 7... ; VA	K035471K50	29246	MB7111-0	
MERCEDES- BENZ	SM 7... ; VA	K046773K50	29246	MB7121-0	
SCANIA	SN 7 / SN 7-HP	K071018K50	29330 29331	Knorr-Bremse YY	
SCANIA	SN 7 / SN 7-HP	K108461K50	29330 29331	Knorr-Bremse VV	NEW
SAF	ST 7 ...	K108020K50	29318 29319	Jurid 539-39	
SCHMITZ	ST 7 ...	K097533K50	29328 29329	Jurid 539-39	

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Knorr-Bremse Group

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