

Spring Brakes (S-cam), diaphragm/diaphragm NG4/EnduraSure

Function

This range of **Spring Brakes** is used on axles fitted with drum brakes to provide the service and parking brake functions.

The internal wind off mechanism allows the parking brake force to be removed if air pressure is no longer present.

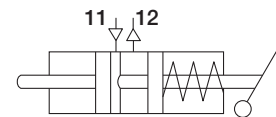
See PD-413-000, Document No. Y115384 for the full range of Spring Brake Actuators for Trailers.



Technical Features

Maximum operating pressure:	8.5 bar
Release pressure:	See chart
Operating temperature range:	- 40 °C to +80 °C
Active range:	See chart
Sealing of the non-pressure housing:	Sealing washer
Push rod stroke:	See chart
Port threads:	M16x1.5
Release device:	Mechanical external system
Weight:	See chart

Standard Symbol as DIN ISO 1219



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NG4/EnduraSure**

Range Overview

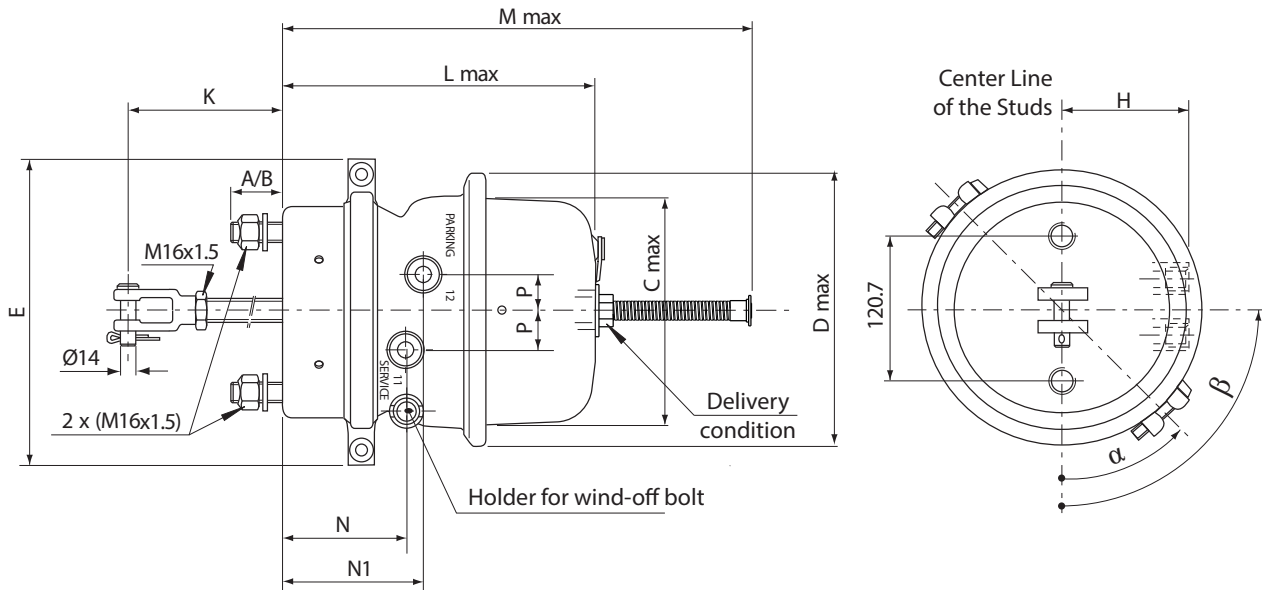
Product Identification		Size			Legislation	Weight approx. [kg]		
Part No. ¹⁾	Type No.	Service Brake Type [inch ²]	Parking Brake Type [inch ²]	Stroke [mm]	TÜV Inspection Report			
K031736N00	BX7401	20	24	63,5	Service Brake 361-0134-05-FBKV Spring Brake 361-0135-05-FBKV	7,8		
K031737N00	BX7402					7,7		
K111753	BX7414					7,8		
K031738N00	BX7516	24				8,2		
K038537N00	BX7545							
K031733N00	BX7408	20		76		8,8		
K165934N00								
K031732N00	BX7406	24		63,5		9,7		
K031748N00	BX7514							
K038535N00	BX7543							
K038536N00	BX7518			30			76	9,4
K031740N00	BX7525							
K037810N00	BX7542							
K037970N00	BX7515							
K031739N00 ²⁾	BX7523	30		63,5		9,3		
K040847N00	BX7526							
K049117N00	BX7547							
K031741N00	BX7528							
K031744N00	BX7611							
K031745N00	BX7612							
K038538N00	BX7618							
K110370N00	BX7619	30			9,4			
STK5000/5047	BX7612							
STK5000/5048								

1) The part number will carry a suffix, "N##" which defines the packaging requirements of different market sectors, e.g. N00, N50. Example: K031736N00 - is supplied without packaging.

2) Replaces BX7515

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Dimensions

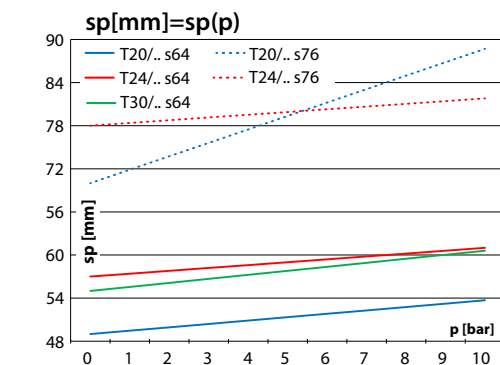
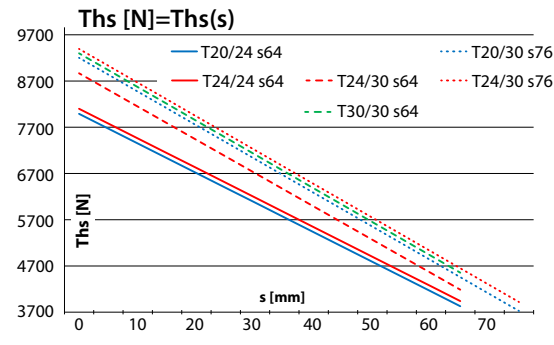
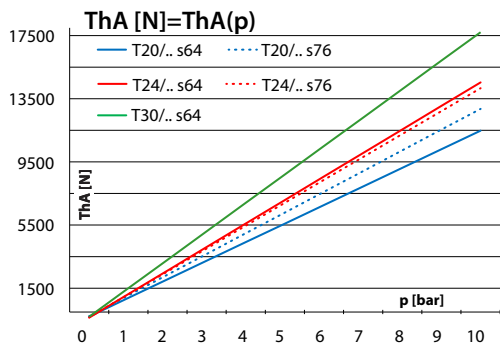


Product Identification		Dimensions																								
Part No.	Type No.	A/B [mm]	C max [mm]	D max [mm]	E [mm]	H [mm]	K [mm]	L max [mm]	M max [mm]	N [mm]	N1 [mm]	P [mm]	α [°]	β [°]	Yoke											
K031736N00	BX7401	38	163	186,7	217,7	85	285	237	340	88,5	104	25,1	0	-90												
K031737N00	BX7402						227																			
K111753	BX7414						288																			
K031738N00	BX7516						280						236			338,7	90,4	105,7	0							
K038537N00	BX7545						288												180							
K031733N00	BX7408						239						181			206	239	94	227	262	392	100	125,2	23	-45	90
K165934N00	BX7406		203																							
K031732N00	BX7406		250																							
K031748N00	BX7514		258	255	364	90	110	25,4	0																	
K038535N00	BX7543		258						180																	
K038536N00	BX7518		227	234	91	234	91	110	25,4	0																
K031740N00	BX7525		227							-45	90															
K037810N00	BX7542		259							135		-90														
K037970N00	BX7515		250							262	392			100					125,2						23	-45
K031739N00	BX7523		227									0														
K040847N00	BX7526		227									90														180
K049117N00	BX7547		155	-45	90	No																				
K031741N00	BX7528		280	240			349	88	101	25,4	0															
K031744N00	BX7611	280	0																							
K031745N00	BX7612	227	0																							
K038538N00	BX7618	288	180		-90	Yes																				
K110370N00	BX7619	227	-45																							
STK5000/5047	BX7612	227	-150																							
STK5000/5048		120																								

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Performance Charts

Product Identification		Service Brake					Parking Brake		
Part No.	Type No.	Type [inch ²]	ThA [N]	p15 [bar]	sp [mm]	smax @ 6.5 bar [mm]	Type [inch ²]	Ths [N]	p10 [bar]
K031736N00	BX7401	20	1177*p-285	0,31	0.47*p+49	61	24	7990-64*s	5,14
K031737N00	BX7402								
K111753	BX7414								
K031738N00	BX7516	24	1490*p-326	0,34	0.48*p+56	67		8100-64*s	5,26
K038537N00	BX7545								
K031733N00	BX7408	20	1313*p-264	0,21	1.87*p+70	82		30	9202-73*s
K165934N00									
K031732N00	BX7406								
K031748N00	BX7514	24	1490*p-357	0,33	0.40*p+57	67	9395-73*s	4,64	
K038535N00	BX7543								
K038536N00	BX7518								
K031740N00	BX7525								
K037810N00	BX7542								
K037970N00	BX7515	30	1451*p-336	0,33	0.38*p+78	80	9300-73*s	4,7	
K031739N00	BX7523								
K040847N00	BX7526								
K049117N00	BX7547								
K031741N00	BX7528								
K031744N00	BX7611	30	1802*p-297	0,23	0.56*p+55	64	9300-73*s	4,7	
K031745N00	BX7612								
K038538N00	BX7618								
K110370N00	BX7619								
STK5000/5047	BX7612								
STK5000/5048									



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Accessories

Spare Parts:	
K037837	Yoke (round)
K040394K50	Release screw kit (release screw, nut, washer)
K050194K50	Plug Spare kit (plug and clip)
K161769	Breathing Plug kit

Mounting kit available comprising 2 off hexagonal lock nuts: Part Number I136860*

* must be ordered separately !

Installation and Mounting instructions

Detail information concerning the Power spring release after installation and dust plug mounting can be found in the NG4 S-Cam/EnduraSure Service manual Y546135 available on mytruckservices.knorr-bremse.com .

Special Note:

If the actuator is supplied with the drain holes plugged, remove lowest plug (as viewed when the actuator is installed).

Note:

When Spring brakes are replaced, ensure that the units on both sides of the axle have the same stroke capability.

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Revision Details

Rev. 006	May 2024	Updated Layout and Range overview
Rev. 005	April 2019	New Layout

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