

#### Function

This range of **Spring Brakes** is used on axles fitted with air disc 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.

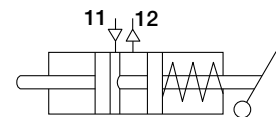
The Spring Brakes have a mounting seal integrated in the non-pressure housing which prevents the entry of dirt or water into the caliper.

#### Technical Features

Maximum operating pressure:	Port 11: 10.2 bar Port 12: 8.5 bar
Release pressure:	See chart
Operating temperature range:	-40 °C to +80 °C +110 °C / 1 hr max for i.e. painting
Active range:	See chart
Sealing of the non-pressure housing:	Rubber boot
Push rod stroke:	57/57 or 64/57 or 64/64 mm
Port threads:	See chart
Release device:	Mechanical short release system (SRS)
Pipe holder:	See chart
Weight:	See chart



#### Standard Symbol as DIN ISO 1219



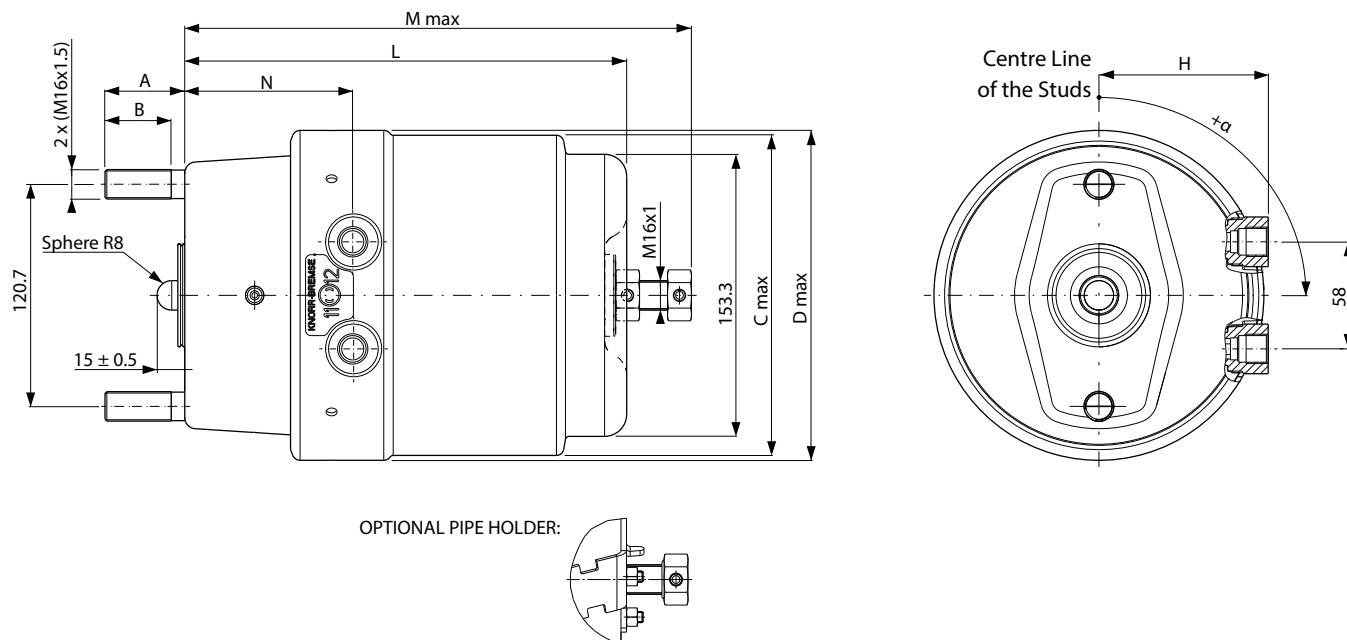
#### Range Overview

Product Identification		Size			Pneumatic Reservoir Air Consumption	Legislation	Weight approx. [kg]	Related PN´s	
Part No. <sup>1)</sup>	Type No.	Service Brake Type [inch <sup>2</sup> ]	Parking Brake Type [inch <sup>2</sup> ]	Stroke [mm]	Required release pressure @ stroke 5 mm	TÜV Inspection Report		Has opposite Part No.	Matching NG3 Part No.
K213604N00	BT4402	18	24	64/64	5.1 +/-0.3	361-0024-18	8.2	-	-
K056917N00	BT5418	20		57/57			8	K056916N00	-
K139550N00	BT5424							-	II31407000
K150645N00	BT7419	24		64/64	8.4		K150644N00	-	
K009969N00	BT4801	18	57/57		8.6		K009968N00	II34184	
K010004N00	BT4804			27	6.1 +/-0.3		7.9	K010005N00	-
K009970N00	BT5800						8.6	K009971N00	II34000
K139570N00	BT5500	24 HF	5.5 +/-0.3					8.4	K149943N00
K010041N00	BS8414	24 HFL1		9	K010039N00			K007669N00	
K139579N00	BT7600				24		-	II38922F	
K146697N00	BT4703	18	24 HFL3S	64/64	6.1 +/-0.3		8.9	K146696N00	-
K010025N00	BS8427	20					9.1	K010024N00	K007678
K010323N00	BT5702						9.2	K010324N00	K004044000
K010324N00	BT5703							K010323N00	K004045000
K146699N00	BT5719						8.9	K146698N00	-
K139548N00	BT7710						24	9.3	K139549N00

<sup>1)</sup> The part number will carry a suffix, "N##" which defines the packaging requirements of different market sectors, e.g. N00, N50.  
Example: K009970N00 - is supplied without packaging.

Spring Brakes (Disc), diaphragm/diaphragm  
NG5

Dimensions



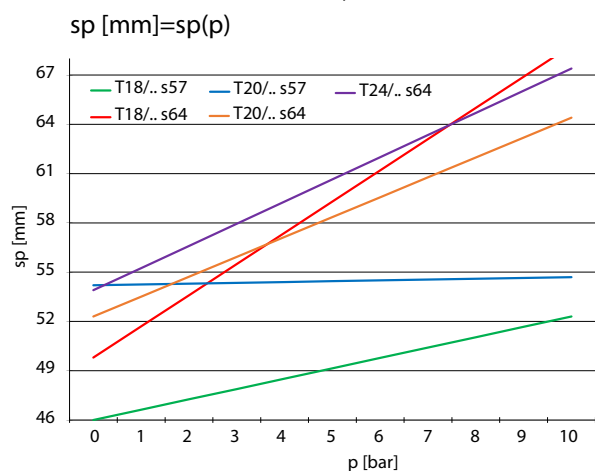
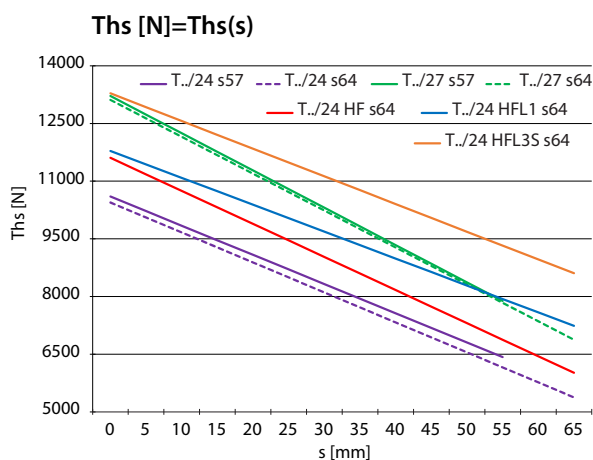
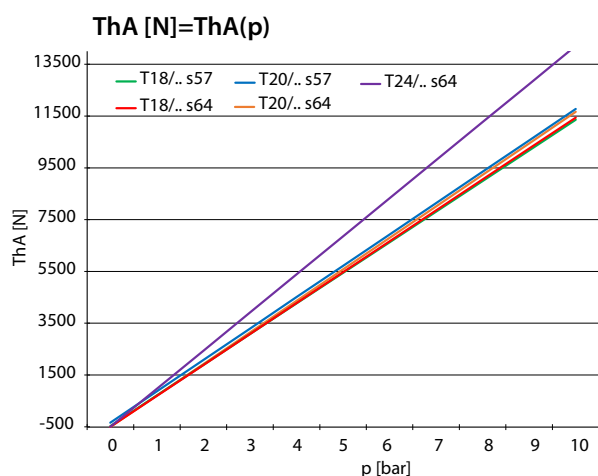
Product Identification		Dimensions										Pipe holder
Part No. <sup>1)</sup>	Type No.	Air Port thread	A [mm]	B [mm]	C max [mm]	D max [mm]	H [mm]	L [mm]	M max [mm]	N [mm]	α [°]	
K213604N00	BT4402	M16x1.5	38	32	174	178.5	87	254	291	98.8	0	No
K056917N00	BT5418		43	36			92	240	275	92.8	270	
K139550N00	BT5424								274	91.8		
K150645N00	BT7419		38	32			254	291	98.8	90		
K009969N00	BT4801									30		
K010004N00	BT4804		43	36			240	275	92.8	315		
K009970N00	BT5800									98.8	309	
K139570N00	BT5500		112									
K010041N00	BS8414		M22x1.5 N10164 - NG12	315								
K139579N00	BT7600		M22x1.5	0								
K146697N00	BT4703	M16x1.5	38	32	97.6	272	309	30	Yes			
K010025N00	BS8427	M22x1.5 N10164 - NG12	43	36				45				
K010323N00	BT5702	VOSS 232			92	273	272	309	213			
K010324N00	BT5703		147									
K146699N00	BT5719	M16x1.5	38	32	97.6	272	30	No				
K139548N00	BT7710	VOSS 232	43	36			333	Yes				

<sup>1)</sup> Other combinations of port orientation and threads are available.

# Spring Brakes (Disc), diaphragm/diaphragm NG5

## Performance Charts

Product Identification		Service Brake					Parking Brake		
Part No.	Type No.	Type [inch²]	ThA [N]	p15 [bar]	sp [mm]	smax @ 6.5 bar [mm]	Type [inch²]	Ths [N]	p10 [bar]
K213604N00	BT4402	18	1194*p-500	0,35	1.9*p+49.8	67	24	10446-78*s	4.7
K056917N00	BT5418	20	1211*p-338	0,29	0.05*p+54.2	61		10603-76*s	
K139550N00	BT5424							10446-78*s	
K150645N00	BT7419	24	1471*p-501	0,30	1.35*p+53.9	67	27	13115-96*s	6.0
K009969N00	BT4801	18	1194*p-500	0,35	1.9*p+49.8			13218-97*s	
K010004N00	BT4804		1183*p-472	0,39	0.63*p+46	61		13115-96*s	5.9
K009970N00	BT5800	20	1217*p-507	0,35	1.21*p+52.3	67	24 HF	13115-96*s	6.0
K139570N00	BT5500							11608-86*s	5.2
K010041N00	BS8414						24 HFL1	11787-70*s	5.3
K139579N00	BT7600	24	1471*p-501	0,30	1.35*p+53.9			24 HFL3S	13286-72*s
K146697N00	BT4703	18	1194*p-500	0,35	1.9*p+49.8				
K010025N00	BS8427	20	1217*p-507	0,35	1.21*p+52.3				
K010323N00	BT5702								
K010324N00	BT5703								
K146699N00	BT5719								
K139548N00	BT7710	24	1471*p-501	0,30	1.35*p+53.9				



Spring Brakes (Disc), diaphragm/diaphragm  
NG5**Accessories**

Mounting kit available comprising 2 off hexagonal lock nuts: Part Number II36860\*

\* must be ordered separately !

**Installation and Mounting instructions**

Detailed information concerning the mounting of brake actuators on disc brakes can be found in the service manual for Pneumatic Disc Brake SN6 - SN7 - SK7 Y006471 available on [truckservices.knorr-bremse.com](http://truckservices.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.

**Winding-off the Power Spring**

In case of failure in the air system, to release the actuator's spring force:

- Ensure wheels are chocked
- Rotate the nut (24 mm AF - across flats) at the rear of the actuator in a counter clockwise direction. Max. torque 45 Nm.

**Attention:**

Use only the correct sized ring or open-ended spanner!

The parking brake portion of the Spring Brake contains a very high spring load and it is strongly recommended that you do not attempt any disassembly of this portion. This should also be taken into consideration when disposing of spring brakes of any type.

**Revision Details**

Rev. 000	March 2023	New Document

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**Note**

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