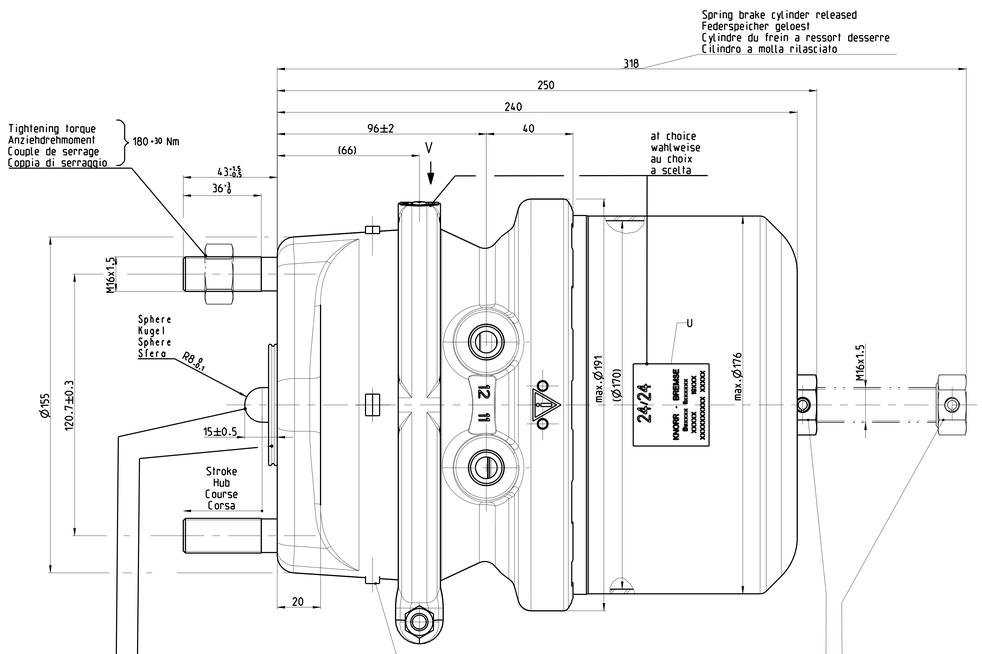
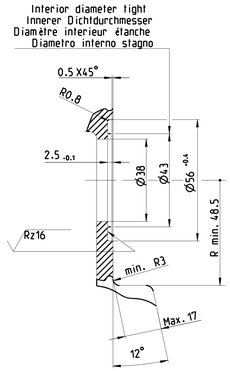
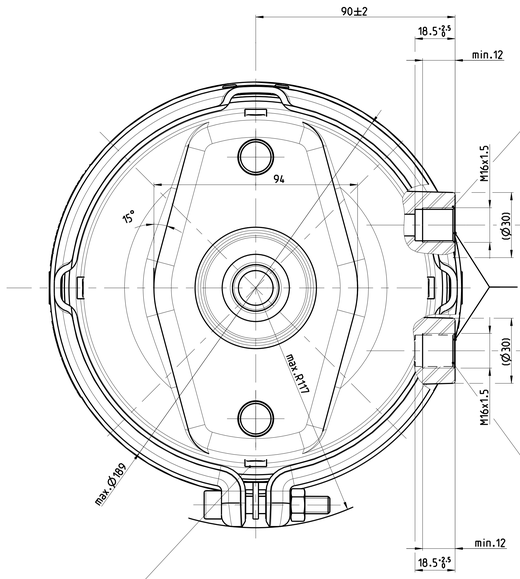
Tolerances/Toleranzen/Tolérances/Tolleranze						
Nominal dimensions in / Nominalmasse in / Cotes nominales en / Dimensioni nominali in — mm						
<6	>6 :30	>30 :80	>80 :120	>120 :315	>315	
±1	±1.5	±2	±2.5	±3	±4	±3°

- General presentation, exact orientation of the components, see below.
- Allgemeine Darstellung, fuer genaue Teileorientierung; siehe Ansicht unten.
- Présentation générale, orientation exacte des pièces, voir vue en bas.
- Presentazione generale. Per l'orientazione correcta dei pezzi, vedere il disegno sotto.





Installation dimension of brake caliper
Anschlssgeometrie des Bremssattels
Bride de fixation de l'étrier de frein
Geometria della flangia sulla staffa



12 Spring-loaded cylinder
Federspeicherzylinder
Cylindre à ressort
Cilindro a molla

Tightening torque
Anziehdrehmoment
Couple de serrage
Coppia di serraggio
40±5Nm

11 Service brake
Betriebsbremse
Frein de service
Freno di servizio

11 Charging and venting of spring portion via connection 11
Be- und Entlueftung des Federraumes ueber Anschluss 11
Alimentation et mise a l'atmosphere de la chambre a ressort par le raccord 11
Alimentazione ed evacuazione della attraverso attacco 11

Sealing:pressure tight against secondary chamber
Abdichtung:druckdicht zum Sekundaerraum
Etancheite: etanche a la chambre secondaire
Tenuta ermetizare la camera secondaria
0.4 bar

Max.pivoting angle of piston rod in all directions
Schwenkbereich der Kolbenstange allseitig max.
Angle de pivotement max. de la tige de piston de tous cotes
Angolo di rotazione dello stelo stantuffo in tutti i direzioni
4°

4 breather hole are plugged
4 Atmungsbohrungen verschlossen
4 trous de respiration sont obturés
4 fori de respirazione sono chuisi

Max. releasing torque
Max. Loesemoment
Couple de desserrage max.
Coppia di rilascio max.
35Nm

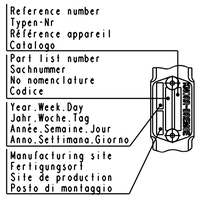
Mechanical releasing device: Spanner width
Mechanische Loesevorrichtung: SW
Dispositif de desserrage mécanique: Cote sur plats
Dispositivo di rilascio meccano.Chiave
24

Tightening torque in operating position
Anziehdrehmoment in Betriebsstellung
Couple de serrage en position de service
Coppia di serraggio nella posizione di servizio
20 - 70 Nm

After installation into the vehicle the lower plug must be removed. Exhaust hole must be directed downwards when mounted
Nach dem Einbau in das Fahrzeug ist der untenliegende Pfropfen zu entfernen. Entlueftung muss im eingebauten Zustand nach unten zeigen
Après montage sur véhicule le bouchon inférieur doit être déposé. L'orifice d'échappement doit être dirigé vers le bas en état monté
Avvenuto il montaggio sul veicolo, il tappo inferiore dev'essere tolto. Installato i fori di scarico dovranno essere rivolti verso il bass

U
2/1

V



24/24

Type / Typ / Type / Tipo — Supplier / Lieferant / Fournisseur / Fornitore

KNORR - BREMSE

BSxxxxlxxxxxxx

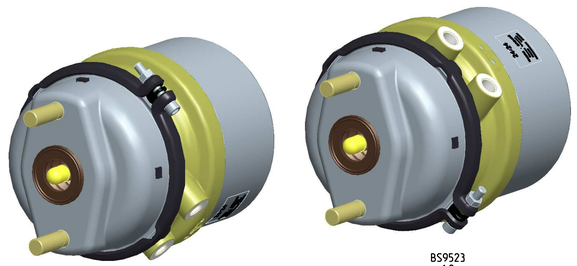
19 xxx

xxxxx

xxxxx

xxxxxxxxxx

- Part list number / Sachnummer / No nomenclature / Codice — optional / optionale / facultatif / facoltativo
- Manufacturing line / Fertigungslinie / Ligne de production / Linea di produzione
- Serial N° / Seriennummer / N° de série du produit / N° di serie del prodotto
- Manufacturing site / Fertigungsort / Site de production / Posto di montaggio
- Manufacturing order number / Nummer Fertigungsauftrag / N° Ordre de fabrication / N° dell'ordine di fabricazione — optional / optionale / facultatif / facoltativo
- Year.Week.Day / Jahr.Woche.Tag / Année.Semaine.Jour / Anno.Settimana.Giorno
- Reference number / Typen-Nr / Référence appareil / Catalogo

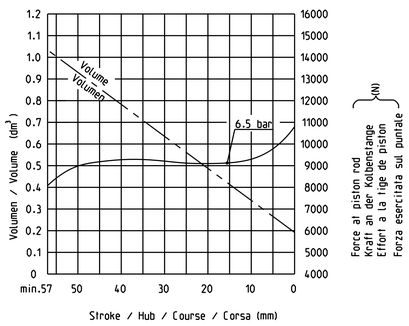


BS9524
1:2

BS9523
1:2

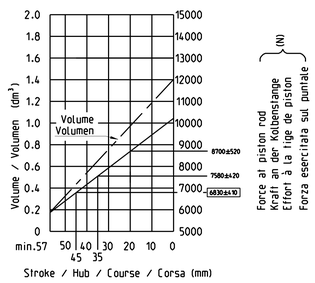
Force of return spring at stroke 20 mm
Kraftabgabe der Rueckholfeder bei Hub 20 mm
Force du ressort de rappel à une course de 20 mm
Forza della molla di ritorno a una corsa di 20 mm
F = 200 N

Diagram of service brake
Diagramm der Betriebsbremse
Diagramme du frein de service
Diagramma del freno di servizio
Type 24



Required release pressure
Erforderlicher Loesedruck
Pression de desserrage nécessaire
Pressione di rilascio necessaria
5.1± 0.3 bar

Diagram of spring loaded cylinder
Diagramm des Federspeichers
Diagramme du cylindre à ressort
Diagramma del cilindro a molla
Type 24



Operationnal uses specifications:

Max. operating pressure / Max. Betriebsdruck / Pression de service max. / Pressione d'esercizio max. — 11 — 10.2 bar

Max. operating pressure / Max. Betriebsdruck / Pression de service max. / Pressione d'esercizio max. — 12 — 8.5 bar

Permissible leakage / Zulaessige Undichtheit / Fuite admissible / Fuga d'aria ammissibile — V_n = 30 cm³ /min

Critical uses specifications without part failure:

Max. pressure / Hoechstdruck / Pression max. / Pressione massima — 11 — 13 bar

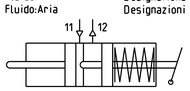
Max. pressure / Hoechstdruck / Pression max. / Pressione massima — 12 — 11 bar

Temperature range / Therm. Anwendungsbereich / Plage de température / Campo termico di applicazione — -40°C bis +80°C / to / à / a

General specifications:

Medium: Air / Medium: Luft / Fluide:Air / Fluido:Aria

Designation of connection threads corresponding to / Anschlussbezeichnungen nach / Désignations des raccords selon / Designazioni degli attachi secondo — DIN-ISO 6786



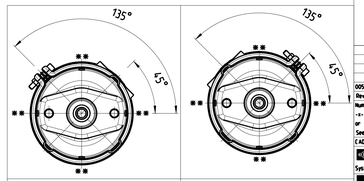
Graphic symbol / Schaltzeichen / Symbole graphique / Simbolo grafico — DIN-ISO 1219

Specifications for service brake actuation in parking position:

Minimum pressure / Minimum Druck / Pression minimale / Pressione minimo — 11 — 2 bar

Pressure rising min. / Druckgradient min. / Montee en pression min. / Aumento della pressione min. — 11 — 3 bar/s

•• Plug
•• Pfropfen
•• Bouchon
•• Tappo



BS9524 - 1135699		8.0
BS9523 - 1135112		8.0
KB-Ref.number / KB-Bestell-Nr. / KB-No de ref. / Codice KB per ordince		Weight / Gewicht / Masse / Massa (kg)

Rev.	Revision Reference	Date	Name
005	C902000A	20.01.2014	SG

Numbers of described parts: -x- / -x- / -x- — See Table
ISO 128-30 — First Angle Proj.
Special Characteristics: 0 S/C, 0 C/C
Surface Treatment:
Length Unit: mm Scale: 1:1
Weight: See table kg
Tolerancing Principle: General Tolerances
Material: -x-
Made from: -x-
CAD Model No.: C0902
Camera
CAD Sys.: PRO/ENGINEER Format A0
Responsible Dept./Team: LDA1
Supplier: Knorr-Bremse Group
Release Process Documentation in EDM. Level and Status information in Watermark.
Drawing Number: C69612
Doc-Type: CD Language: ZZ
Dru-Rev: 005
Sheet: 1

KNORR-BREMSE
Systèmes pour Véhicules Utilitaires France S.A.
Groupe: ZKN/KVUF Sporgen

Knorr-Bremse Group

Type 24/24

Spring Brake (Disc)
Kombizylinder (Scheibe)
Cyl. frein double (disque)
Bremsenzylinder (disc)

This document contains proprietary and confidential information and shall not be reproduced or disclosed to others for any purpose without written consent of Knorr-Bremse AG, Munich.

100 mm