

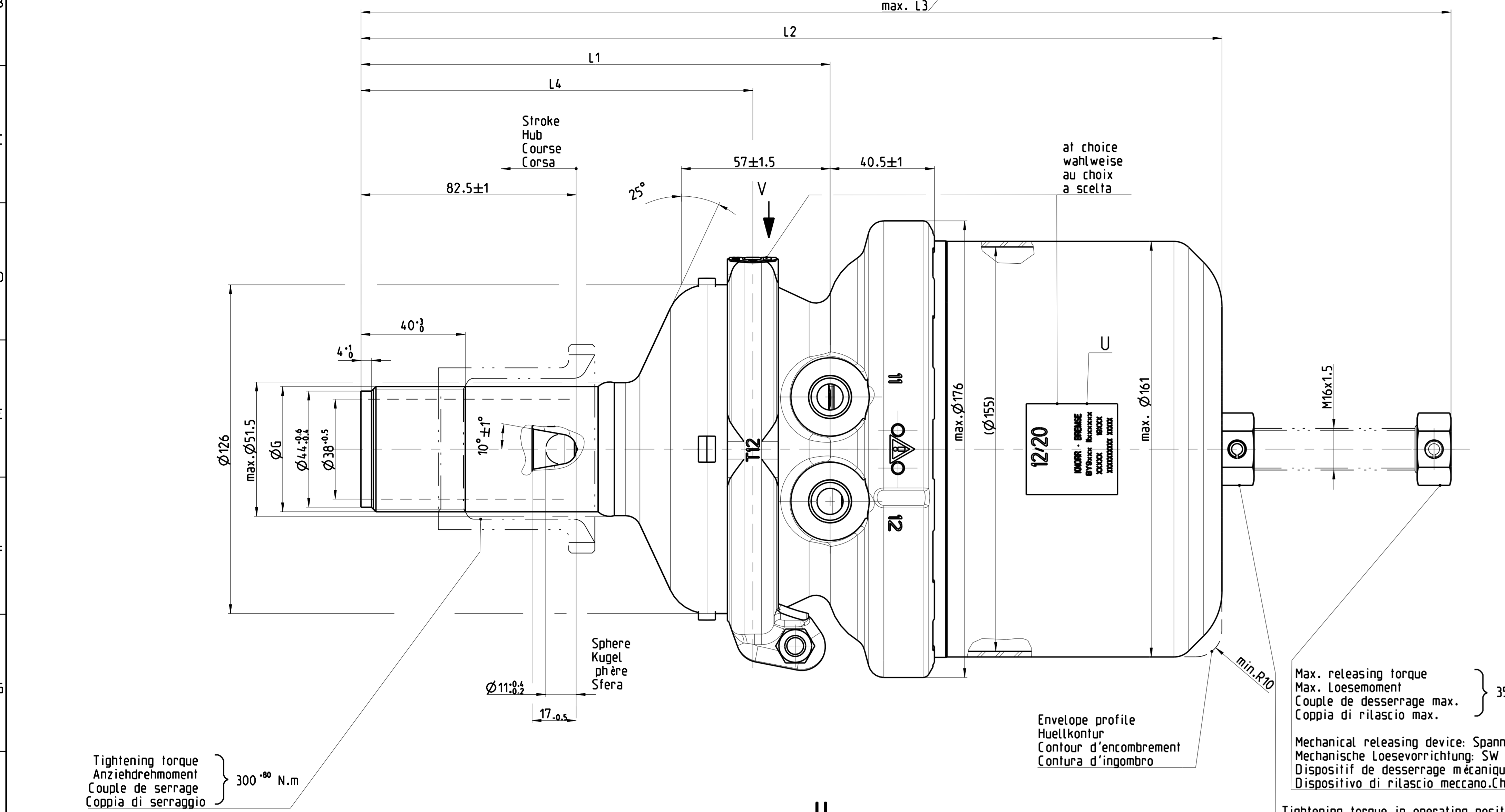
| Tolerances | Nominal dimensions in [mm] | | | | | |
|------------|-----------------------------|-----------|------------|-------------|-------|-----|
| Tolerances | Cotes nominales en [mm] | | | | | |
| Toleranza | Dimensioni nominali in [mm] | | | | | |
| < 6 | > 6 - 30 | > 30 - 80 | > 80 - 120 | > 120 - 315 | > 315 | |
| ±1 | ±1.5 | ±2 | ±2.5 | ±3 | ±4 | ±3° |

Spring brake cylinder released
 Federspeicher geloeset
 Cylindre du frein a ressort detessee
 Cilindro a molla rilasciato

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

11 { Service brake
 Betriebsbremse
 Frein de service
 Freno di servizio

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

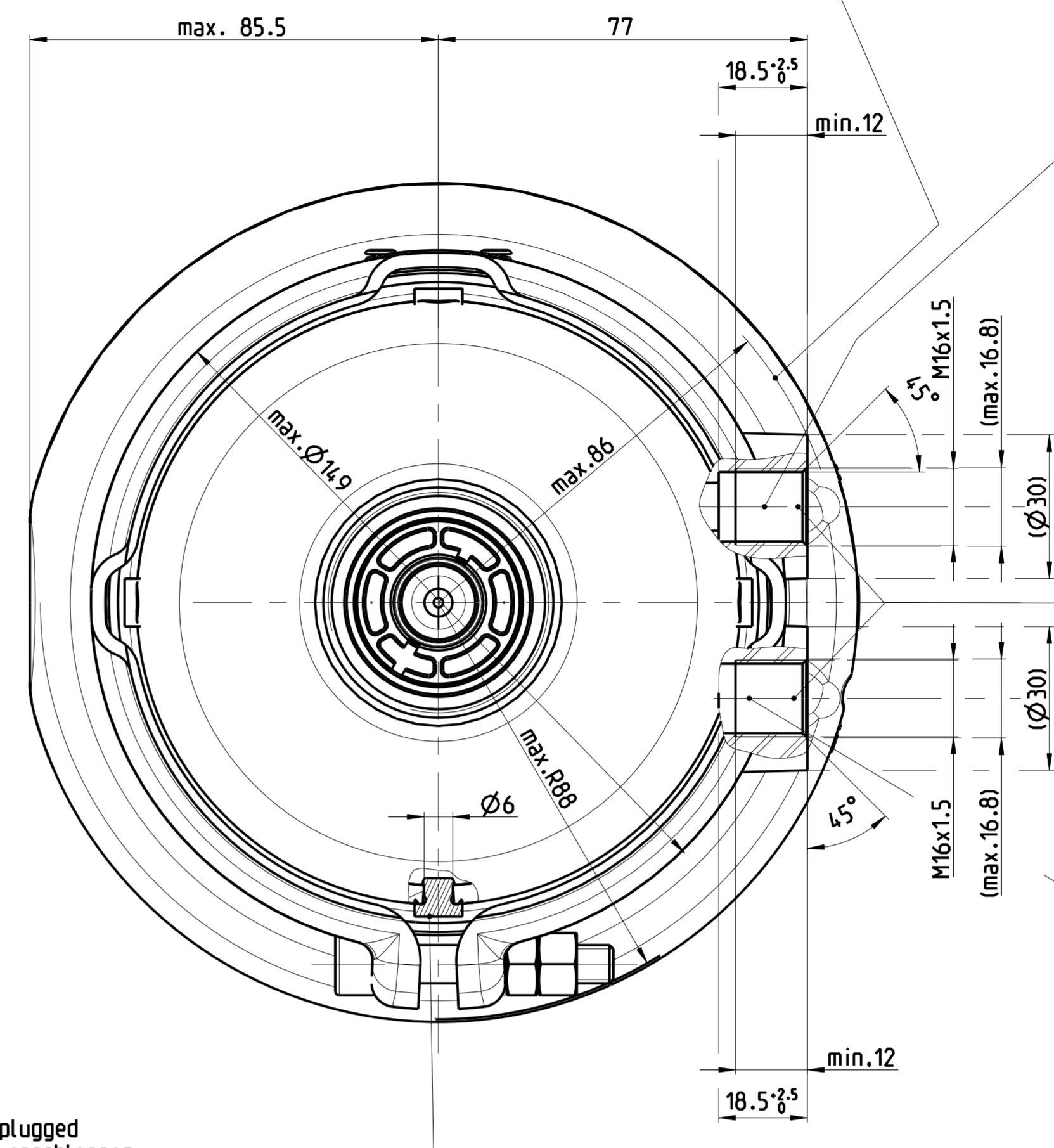


Tightening torque
 Anzieldrehmoment
 Couple de serrage
 Coppia di serraggio } 300 ± 80 N.m

Max. releasing torque
 Max. Loesemoment
 Couple de desserrage max.
 Coppia di rilascio max. } 35 N.m

Mechanical releasing device: Spanner width
 Mechanische Loesevorrichtung: SW
 Dispositif de desserrage mécanique: Cole sur plats
 Dispositivo di rilascio mecano: Chiave } 24

Tightening torque in operating position
 Anzieldrehmoment in Betriebsstellung
 Couple de serrage en position de service
 Coppia di serraggio nella posizione di servizio } 20 - 70 N.m



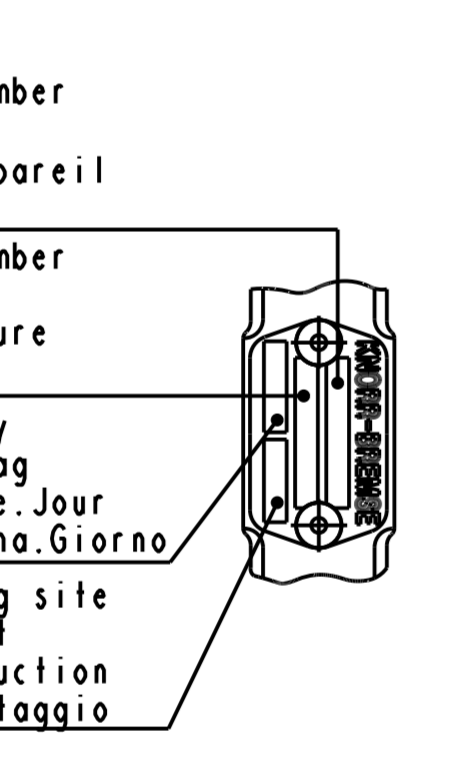
Tightening torque
 Anzieldrehmoment
 Couple de serrage
 Coppia di serraggio } 40 ± 5 N.m

12 { Parking brake
 Federspeicherbremse
 Frein de stationnement
 Freno di stazionamento

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

Mounting position vertikal downwards ±15°
 Einbaulage vertikal nach unten ±15°
 Position de montage verticale vers la bas ±15°
 Posizione di montaggio verticale verso il basso ±15°

After installation into the vehicle the lower plug must be removed
 Nach dem Einbau in das Fahrzeug ist der untenliegende Pfropfen zu entfernen
 Après montage sur véhicule le bouchon inférieur doit être déposé
 Arrivato il montaggio sul veicolo, il tappo inferiore dev'essere tolto

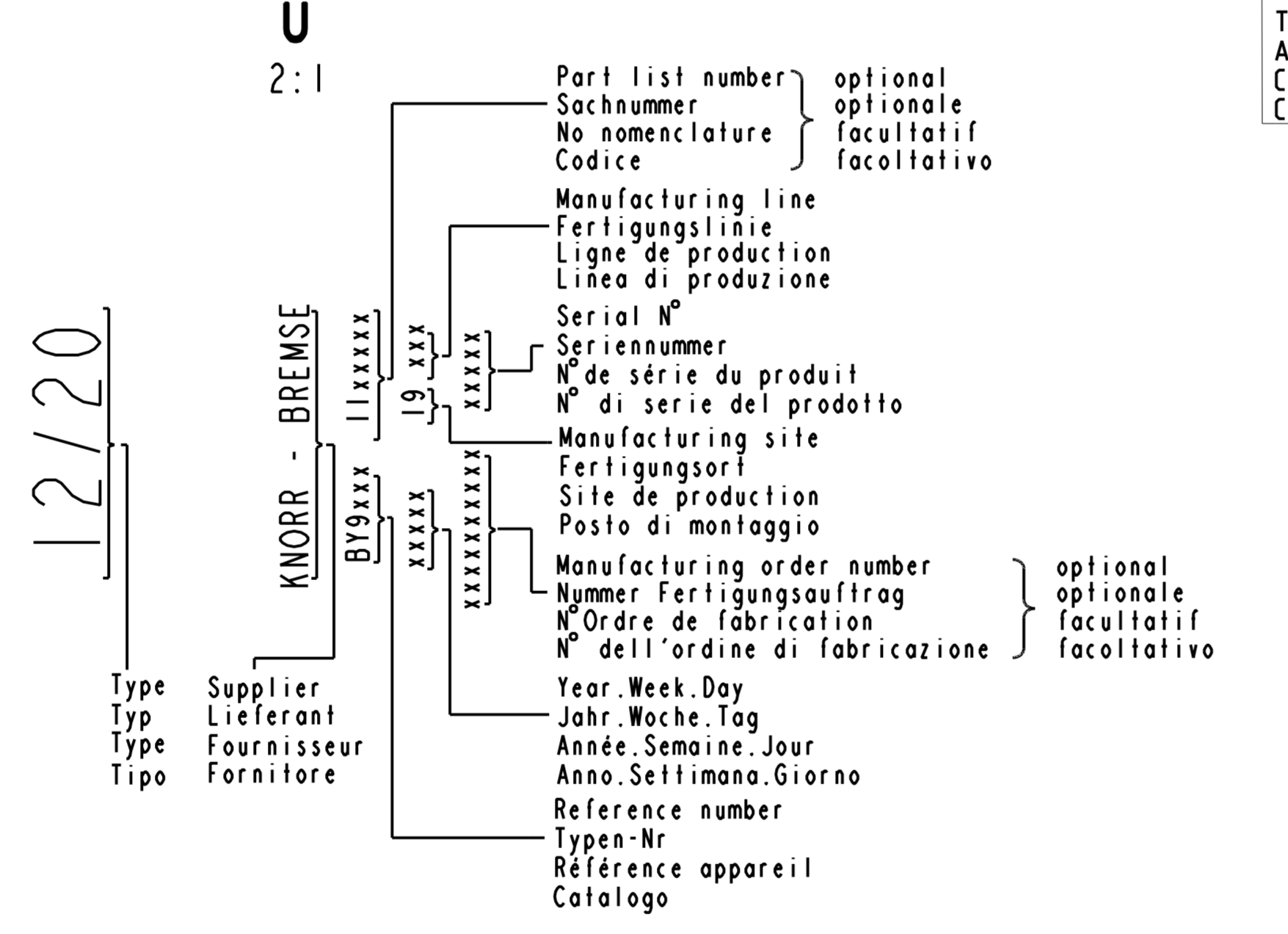


Reference number
 Typen-Nr
 Référence appareil
 Catalogo

Part list number
 Sachnummer
 No nomenclature
 Codice

Year, Week, Day
 Jahr, Woche, Tag
 Année, Semaine, Jour
 Anno, Settimana, Giorno

Manufacturing site
 Fertigungsorrt
 Site de production
 Posto di montaggio



1:2
 BY9205

Operational uses specifications:

Max. operating pressure
 Max. Betriebsdruck
 Pression de service max. 11 } 10 bar
 Pressione d'esercizio max.

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

Permissible leakage
 Zulässige Undichtheit
 Fuite admissible 11 } $v_n = 30 \text{ cm}^3 / \text{min}$ (10.5 bar)
 Fuga d'aria ammissibile

Permissible leakage
 Zulässige Undichtheit
 Fuite admissible 12 } $v_n = 30 \text{ cm}^3 / \text{min}$ (8.5 bar)
 Fuga d'aria ammissibile

Critical uses specifications without part failure:

Max. pressure
 Hoehstdruck
 Pression max. 11 } 12 bar
 Pressione massima

Max. pressure
 Hoehstdruck
 Pression max. 12 } 10 bar
 Pressione massima

Temperature range
 Therm. Anwendungsbereich
 Plage de température
 Campo termico di applicazione } -40°C bis +80°C

Required release pressure
 Erforderlicher Loesedruck
 Pression de desserrage nécessaire
 Pressione di rilascio necessaria } 5.5 ± 0.3 bar

Diagram of spring loaded cylinder
 Diagramme des Federspeichers
 Diagramme du cylindre à ressort
 Diagramma del cilindro a molla } Type 20

Diagram of service brake according to DIN74060-2
 Diagramme der Betriebsbremse nach DIN74060-2
 Diagramme du frein de service suivant DIN74060-2
 Diagramma del freno di servizio secondo DIN74060-2 } Type 12

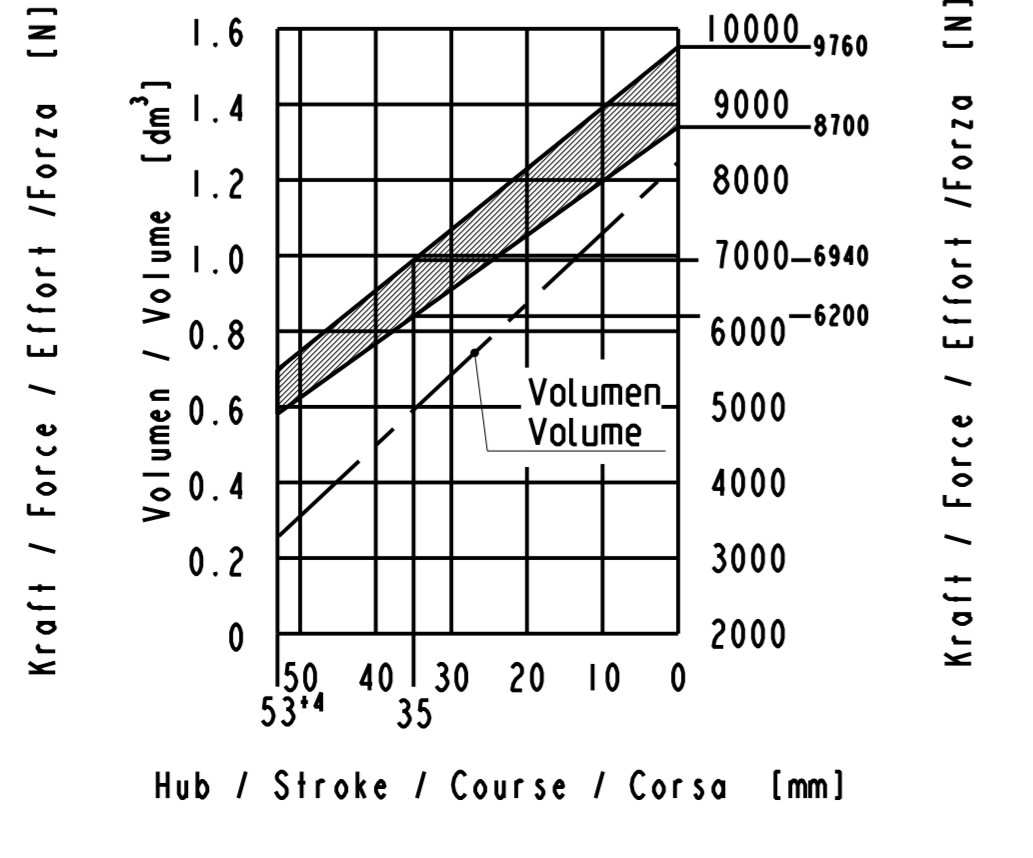
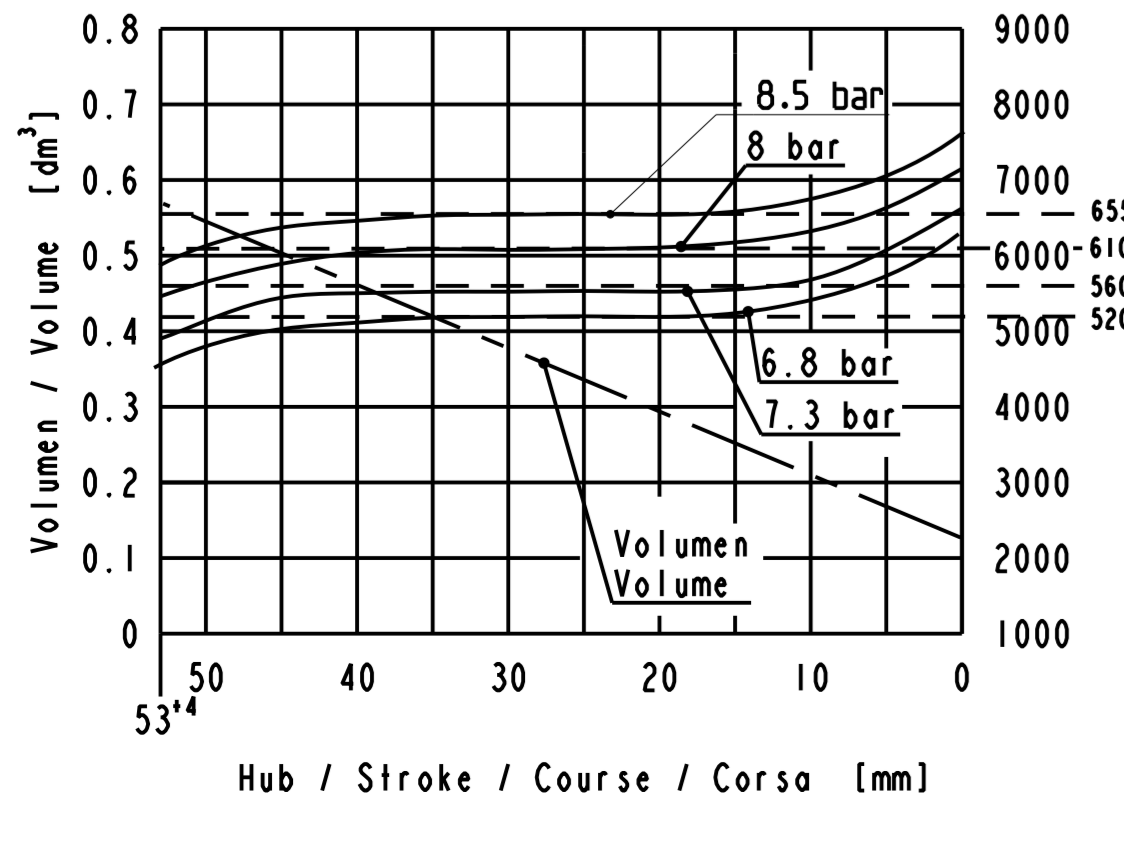
General specifications:

Medium: Air
 Medium: Luft
 Fluide: Air
 Fluido: Aria } Designation of connection threads corresponding to DIN-ISO 6786
 Anschlussesbezeichnungen nach DIN-ISO 6786
 Désignations des raccords selon DIN-ISO 6786
 Designazioni degli attacchi secondo DIN-ISO 6786

Graphic symbol
 Schaltzeichen
 Symbole graphique
 Simbolo grafico } DIN-ISO 1219

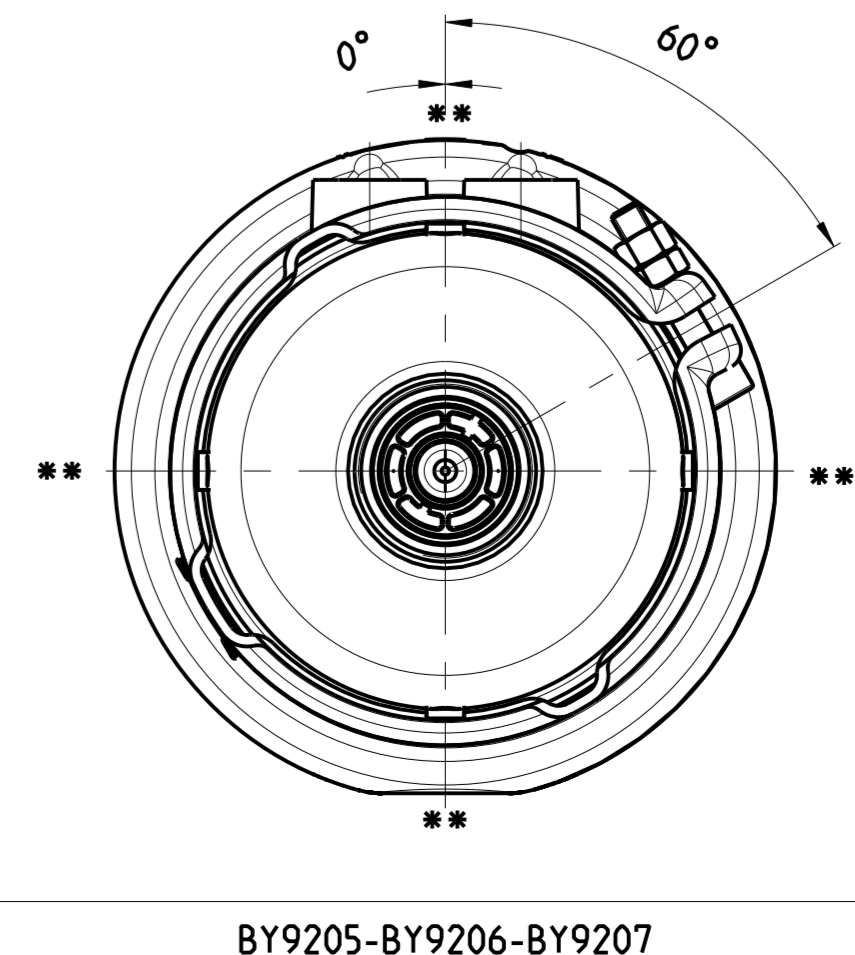
Specifications for service brake actuation in parking position:

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



Warning / Nachricht / Avertissement / Avvertimento

This brake actuator can only be used on applications for which it has been formally validated by Knorr-Bremse
 Dieser Bremszylinder darf nur für Applikationen angewendet werden, für die er von Knorr-Bremse freigegeben worden ist
 Cet actionneur de frein ne doit être utilisé que sur les applications pour lesquelles il a été formellement homologué par Knorr-Bremse
 Questo cilindro a molla deve essere utilizzato solo per applicazioni benesariate formalmente dalla Knorr-Bremse



| | | | | | | |
|------------------|-----|-----|-----|-----|------|-----|
| BY9207 - 1117470 | 167 | 317 | 399 | 137 | M4x2 | 6.8 |
| BY9206 - 1117469 | 187 | 337 | 419 | 157 | M4x2 | 6.9 |
| BY9205 - 1117468 | 180 | 330 | 412 | 150 | M4x2 | 7.0 |

KB-Ref. Number
 KB-Bestell-Nr
 KB-No de réf.
 Codice KB per ordine

Weight
 Gewicht
 Massa (Kg)

| 100 | | 12/20 | | 12 | | 12/20 | | 12 | | 12 | |
|---|--------------------|------------|------|-------------------------|-------|-------------------|-------------|----|-------|-----|--------------|
| Rev. | Revision Reference | Date | Name | Special Characteristics | 0 S/C | Surface Treatment | Length Unit | mm | Scale | 1:1 | Sheet 1 of 1 |
| 1 | 150 129-30 | 13.06.2016 | 0008 | 0 C/C | 0 C/C | 0 C/C | See table | 10 | 10 | 10 | 10 |
| <p>KNORR-BREMSE 48500, 70300, 72300, 74300, 76300, 78300, 80300, 82300, 84300, 86300, 88300, 90300, 92300, 94300, 96300, 98300, 100300</p> <p>Spring Brake (wedge) Frein double (coin) Biembreto frein. (scand)</p> <p>57957 Knorr-Bremse Group</p> | | | | | | | | | | | |