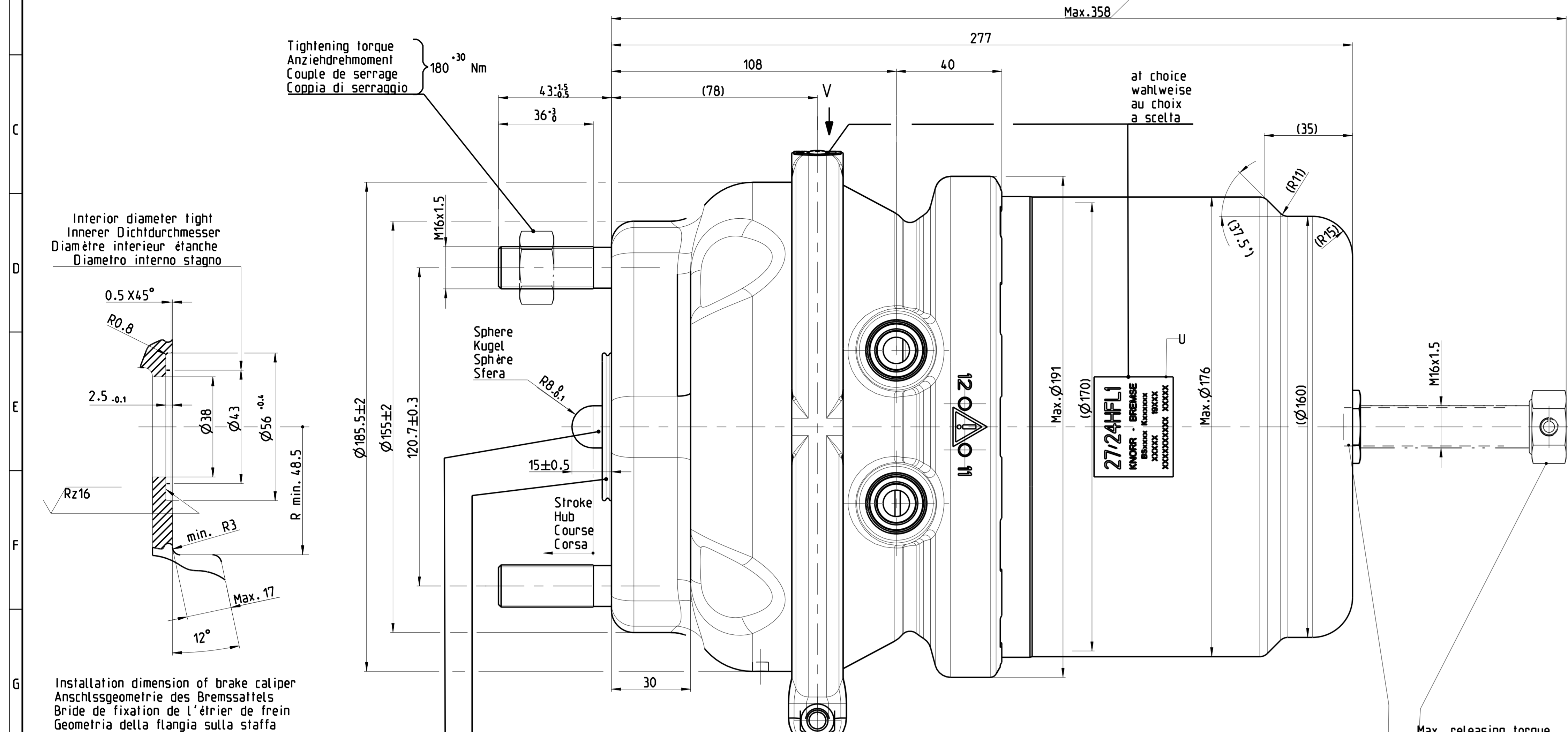


| Tolerances/Toleranzen/Tolleranze | | | | | |
|----------------------------------|----------|-----------|------------|-------------|------|
| Nominal dimensions in mm | | | | | |
| Cotes nominales en mm | | | | | |
| Dimensioni nominali in mm | | | | | |
| <6 | >6 - <30 | >30 - <80 | >80 - <120 | >120 - <315 | >315 |
| ±1 | ±1.3 | ±2 | ±2.5 | ±3 | ±4 |



Tightening torque Anziedrehmoment Couple de serrage Coppia di serraggio } 180 ⁺³⁰ Nm

Interior diameter tight Innerer Dichtdurchmesser Diamètre intérieur étanche Diametro interno stagno

0.5 X 45°

Rz16

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

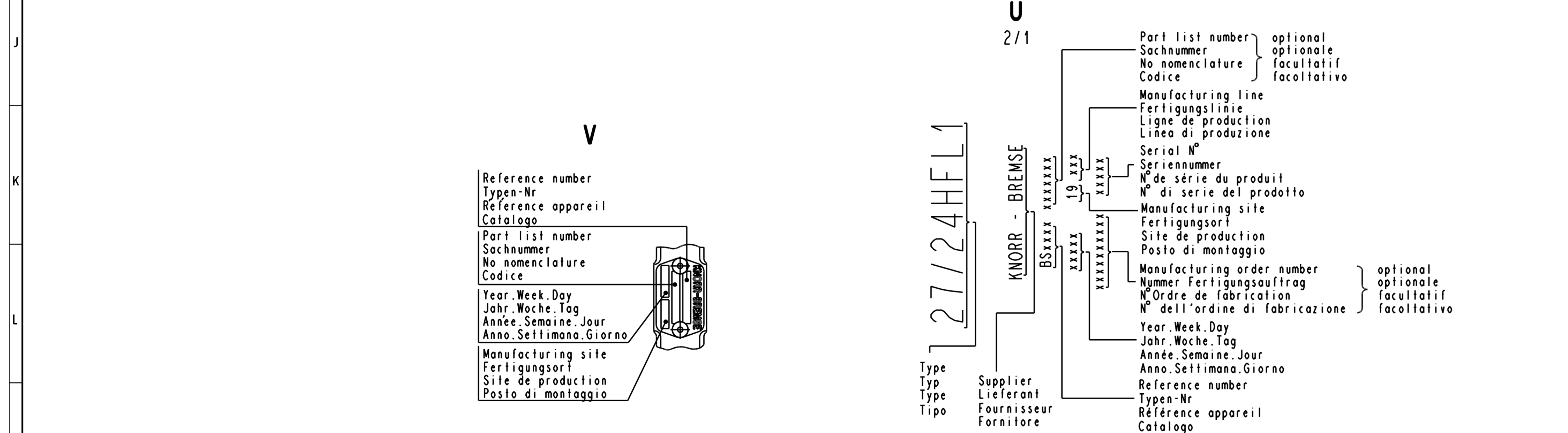
Sealing pressure tight against secondary chamber Abdichtung/dichtdicht zum Sekundarraum Etanchéité: étanche à la chambre secondaire Tenuta ermetizzare la camera secondaria } 0.4 bar

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 cotés Angolo di rotazione dello stelo stantuffo in tutti i direzioni } 4°

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

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

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



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 Fertigungsstandort Site de production Posto di montaggio

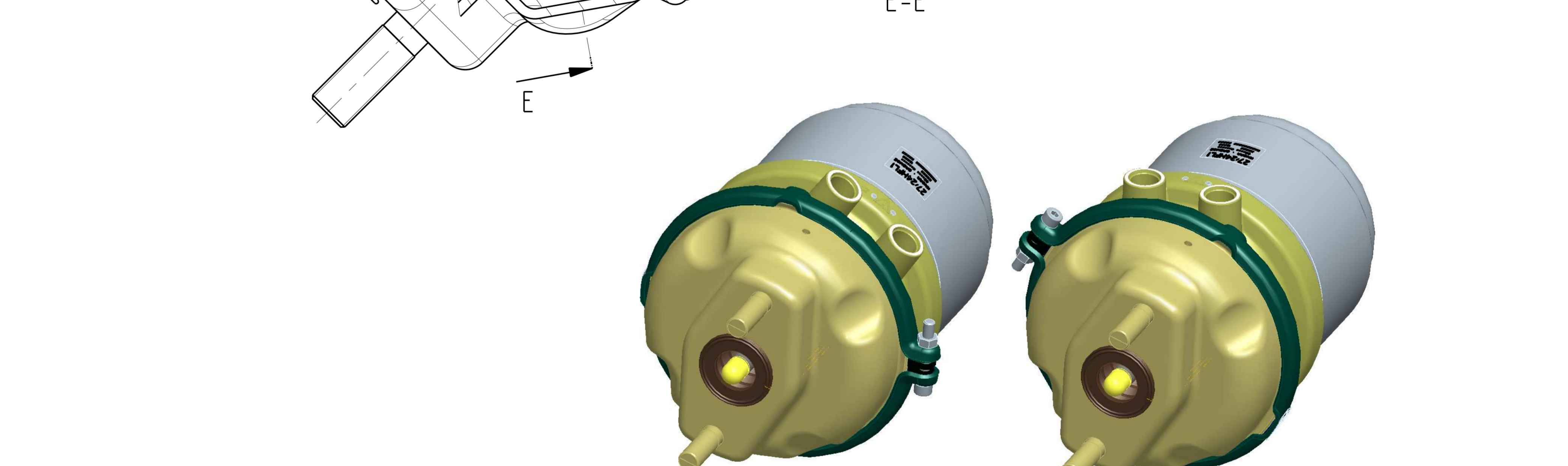
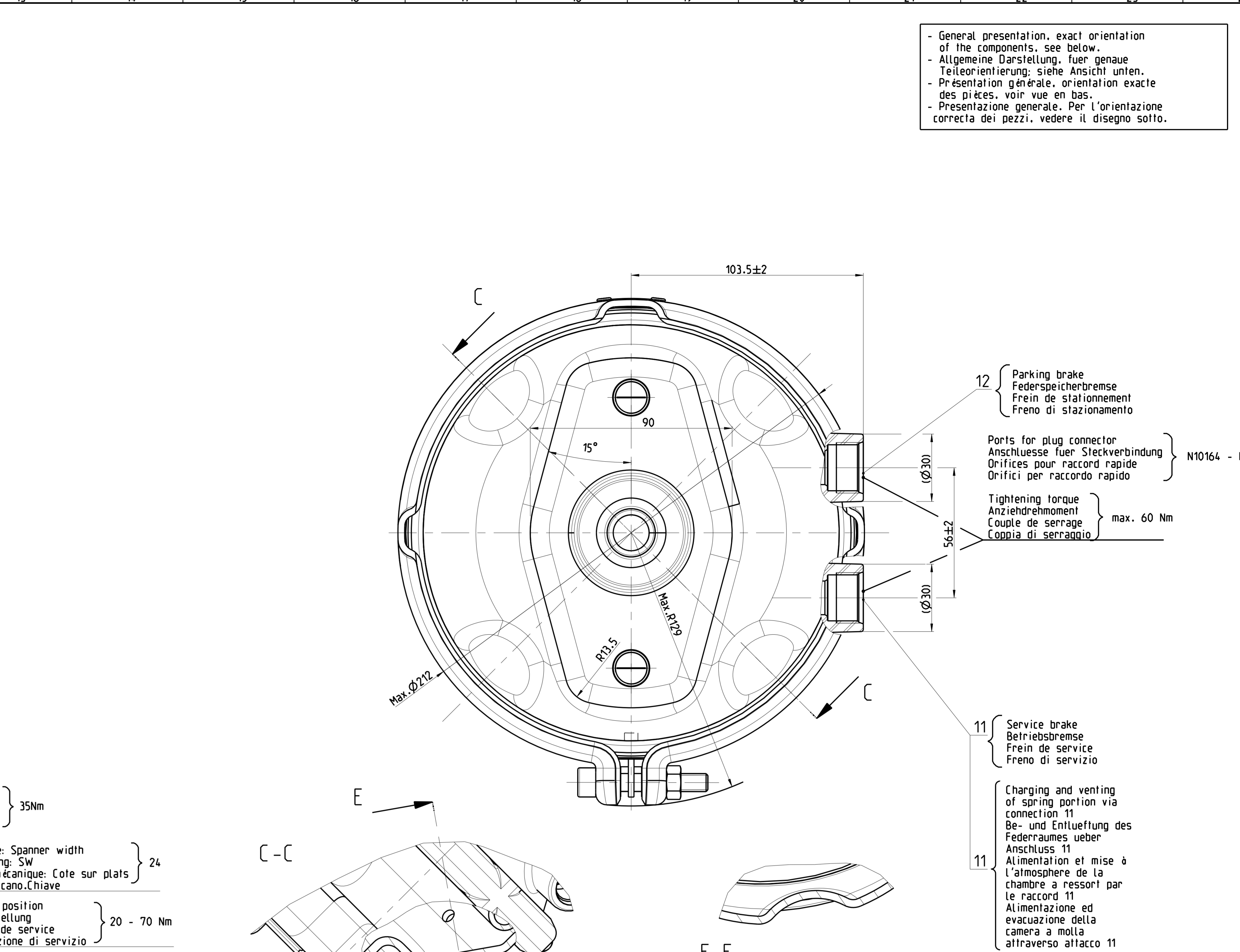
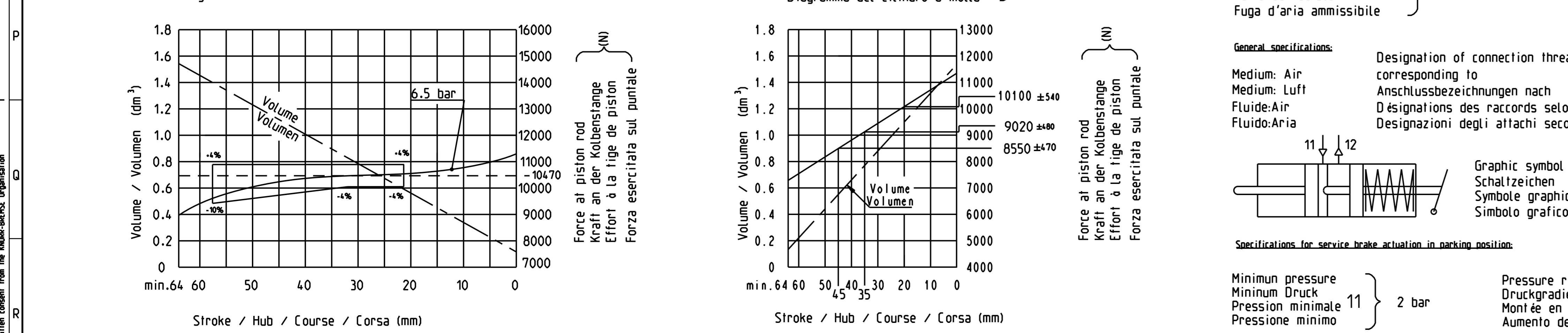
Part list number optional No nomenclature facultatif Codice Manufacturing line Fertigungslinie Ligne de production Linea di produzione Serial N° Seriennummer N° de série du produit N° di serie del prodotto Manufacturing site Fertigungsstandort Site de production Posto di montaggio Manufacturing order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

Operational uses specifications: Max. operating pressure Max. Betriebsdruck Pression de service max. } 11 } 10.2 bar Max. operating pressure Max. Betriebsdruck Pression de service max. } 12 } 8.5 bar Permissible leakage Zulaessige Undichtheit Fuite admissible Fuga d'aria ammissibile } V n = 23 cm³/min

Critical uses specifications without part failure: Max. pressure Hoehstdruck Pression max. } 11 } 13 bar Max. pressure Hoehstdruck Pression max. } 12 } 11 bar Temperature range Therm. Anwendungsbereich Plage de température Campo termico di applicazione } -40°C bis +80°C

General specifications: Designation of connection threads corresponding to Anschlussesbezeichnungen nach Designations des raccords selon Designazioni degli attacchi secondo } DIN-ISO 6786 Graphic symbol Schaltzeichen Symbole graphique Simbolo grafico } DIN-ISO 1219

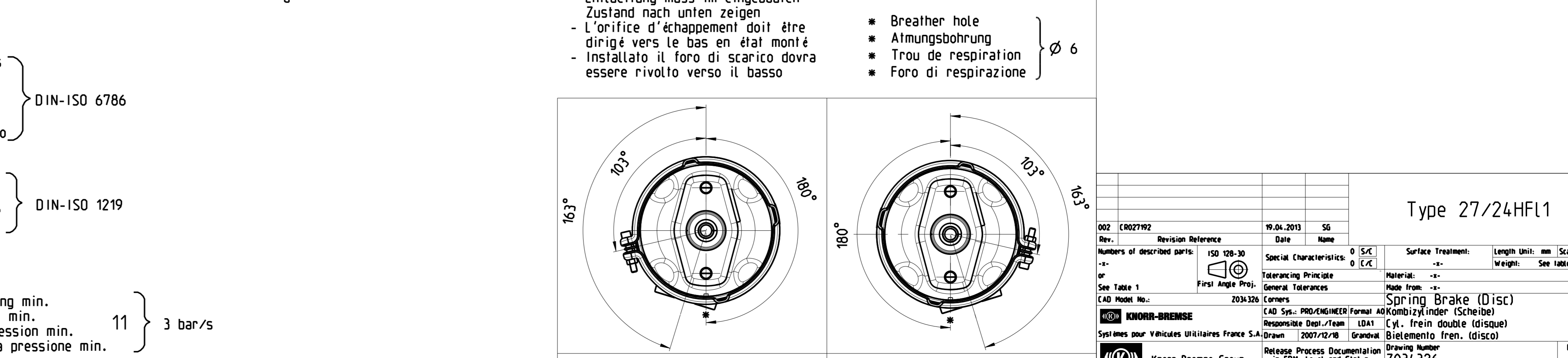
Specifications for service brake actuation in parking position: Minimum pressure Minimum Druck Montée en pression min. Pressione minimo } 11 } 2 bar Pressure rising min. Druckgradient min. Montée en pression min. Aumento della pressione min. } 11 } 3 bar/s



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 benestanti formalmente dalla Knorr-Bremse.

Exhaust hole must be directed downwards when mounted - Entlüftung muss im eingebauten Zustand nach unten zeigen - L'orifice d'échappement doit être dirigé vers le bas en état monté - Installato il foro di scarico dovrà essere rivolto verso il basso

Breather hole Altmungsbohrung Trou de respiration Foro di respirazione } Ø 6



- 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 corretta dei pezzi, vedere il disegno sotto.

| Valid for Frei fuer Valido per | | |
|--------------------------------|------------|--|
| | K026534N00 | |
| | K026533N00 | |

| BS9582 - K026534 | 9.1 |
|-------------------------------------------------------|---------------------------|
| BS9581 - K026533 | 9.1 |
| KB-Ref. number KB-Bestell-Nr. KB-N° de ref. Codice KB | Weight Gewicht Masse (Kg) |
| | |

| Type 27/24HFL1 | | |
|----------------|------------------------------|-----------------------------------------------|
| 002 0202702 | 19.01.2010 50 | |
| Rev.: | Revision Reference Date Name | |
| 1 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 2 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 3 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 4 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 5 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 6 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 7 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 8 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 9 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 10 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 11 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 12 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 13 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 14 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 15 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 16 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 17 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 18 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 19 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 20 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 21 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 22 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 23 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |
| 24 | 150 129-30 | Surface Treatment: Length Unit: mm Scale: 1:1 |