



**Solutions up to 58.000 rpm for micromachining.
BT 30 spindle - automatic tool changer**



**TURBODRILL
MINILINE**

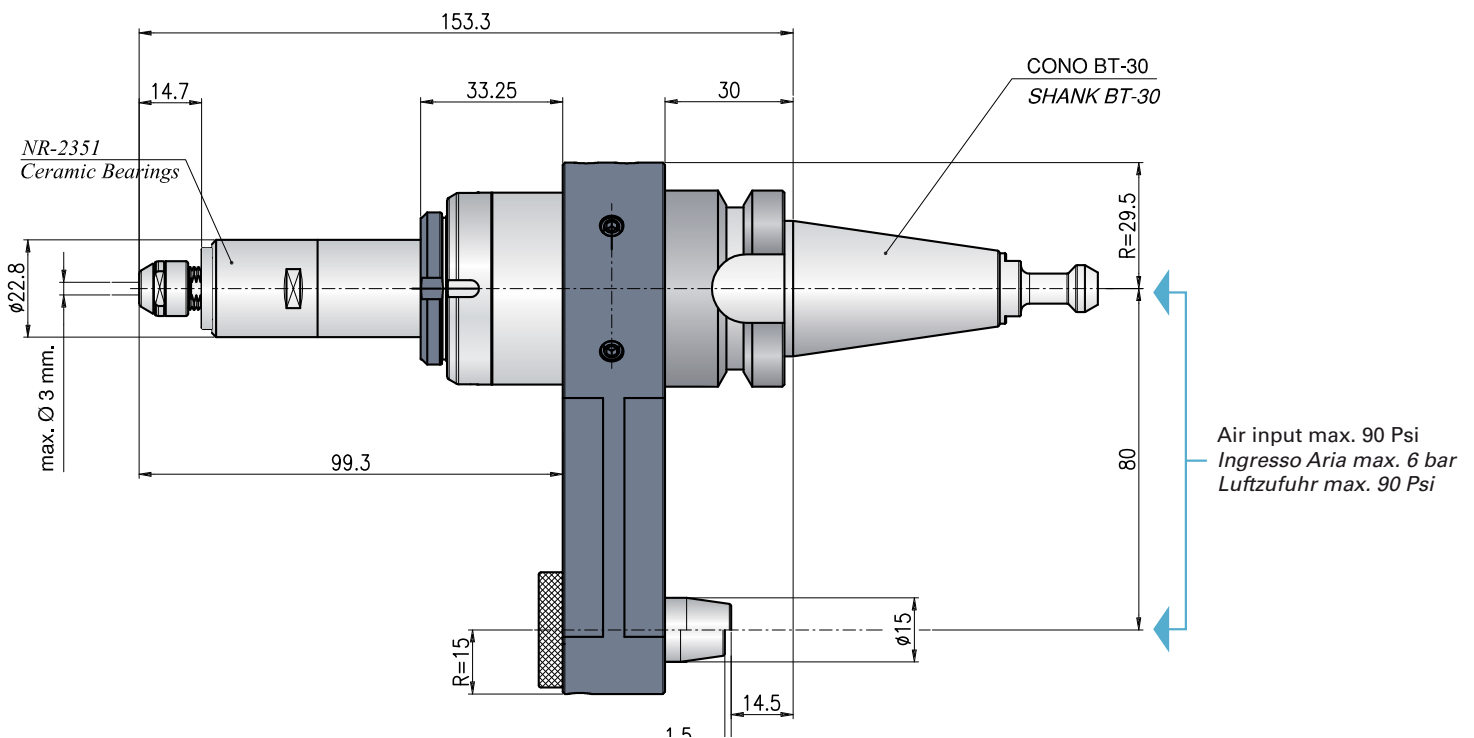
S2D / R2B

brother



TURBODRILL NR-2351

Driven through air motor / azionamento con motore ad aria / mit Luftmotor angetrieben



| Technical Data / Dati Tecnici / Technische Daten | | NR-2351 | RA-200 |
|--|-------------------|---------------------------------|---------------------------------|
| RPM max. / Max. Velocità / Drehzahl max. | min ⁻¹ | 58.000 | 30.000 |
| Type motor / Tipo di motore / motortyp | | AM-600 | AM-310 |
| Collet / Pinze / Spannzange | mm | CHK $\phi 3$ | CHS $\phi 3$ |
| Power / Potenza / Energie | W | 76 | 108 |
| Rotation / Rotazione / Rotation | | AM-600 RA Right, AM-600 LA Left | AM-310 RA Right, AM-310 LA Left |
| Air pressure / Pressione Aria / Luftdruck | Bar | max. 6 (max. 90 Psi) | max. 6 (max. 90 Psi) |
| Air consumption / consumo d'aria / Luftverbrauch | NI/min | 160 | 226 |
| Type Spindle / Tipo di manopolo / Spindeltyp | | NR-2351 | RA-200 |
| Output RPM / N° Giri in uscita / Drehzahlausgang | min ⁻¹ | 58.000 | 20.000 |
| Rt. reduction / Rt. in riduzione / Rt. Reduktion | | -- | 1/1,5 |
| Weight / Peso / Gewicht | Kg | 2 | 2 |

STANDARD EQUIPMENT INCLUDES: NAKANISHI Kit / Angle head / Collet / Wrenches / Instruction book

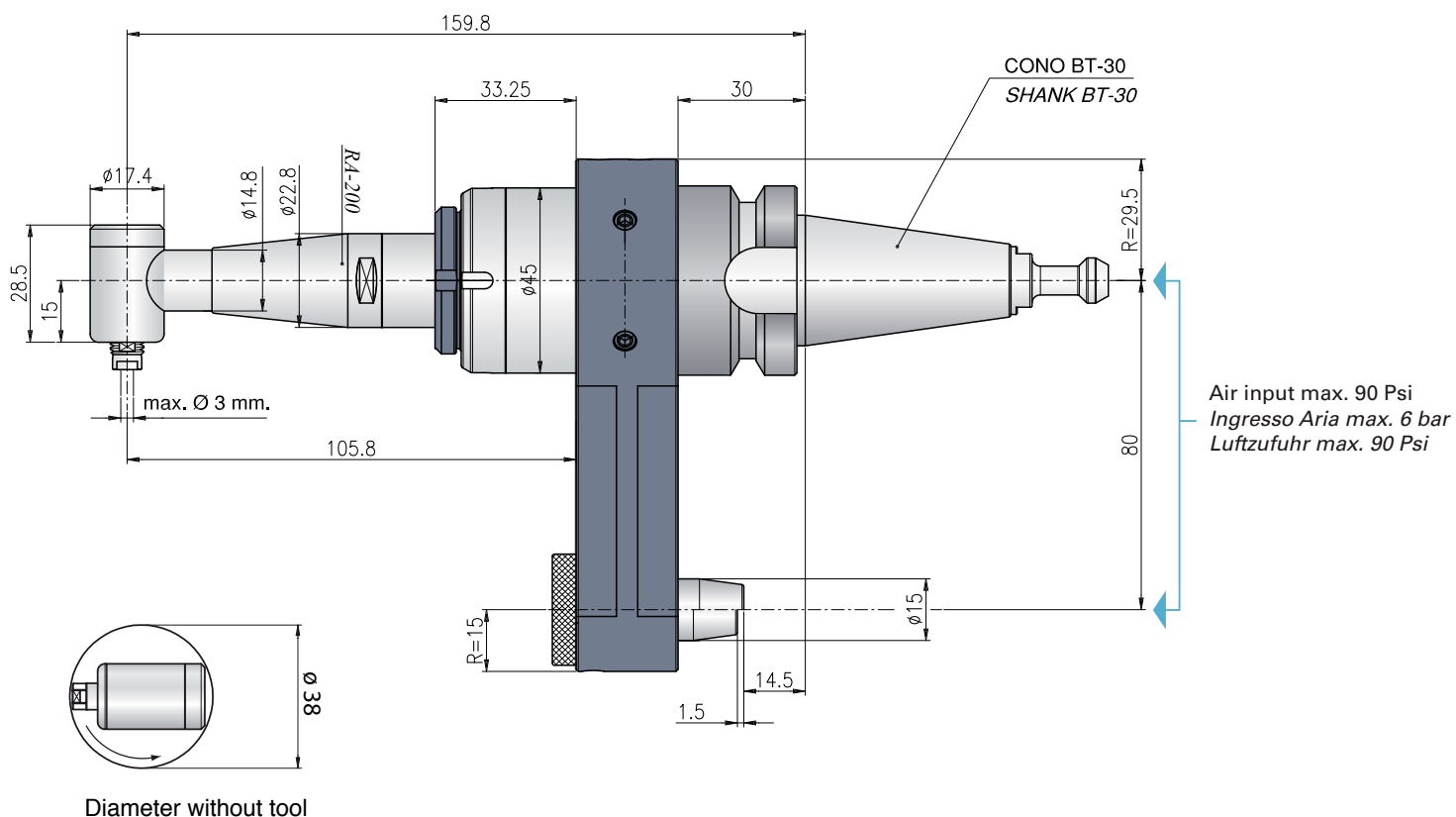
**For the correct functioning of the tool the machine spindle must not rotate**

Per il corretto funzionamento il mandrino della macchina non deve ruotare / Für die korrekte Verwendung von Werkzeug soll die Maschinenspindel nicht drehen

Air driven heads up to 58.000 min-1

TURBODRILL RA-200

Driven through air motor / azionamento con motore ad aria / mit Luftmotor angetrieben



| Accessories / Accessori / Zubehör | NR-2351 | RA-200 |
|--|--|-------------------------------------|
| Collet / Pinze / Spannzange | CHK $\phi 0,3$ mm, $\phi 3$ every 0,1 and $\phi 2,35$, $\phi 3,175$ | CHS $\phi 0,5$, 3mm every 0,1 |
| Retaining block / Tassello di ritegno / Stop block | Special stop block w/air stop valve | Special stop block w/air stop valve |
| Air line kit / Filtro regolatore aria / Luftsystm | AL-0304 | AL-0304 |



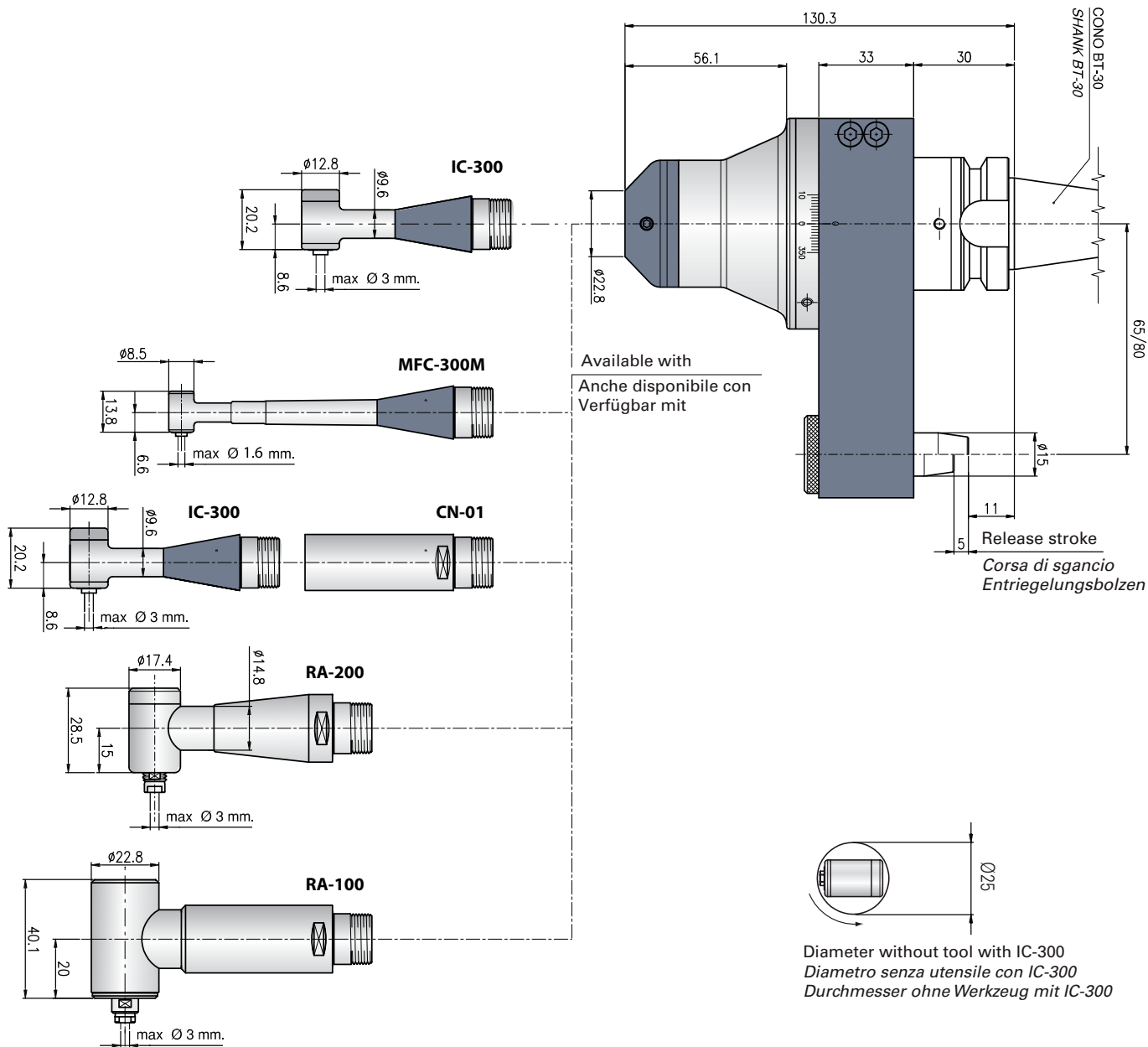
In case of air through the spindle please use special pull stud!!!
 Nel caso di aria attraverso il mandrino utilizzare il tirante speciale !!!
 Im Fall von Luft durch die Spindel verwenden Sie bitte spezielle Zugbolzen !!!

Air line kit / Filtro regolatore aria / Luftsystm - for NR-2351 / RA-200



SLIMLINE

Driven through machine spindle / azionamento tramite mandrino macchina / durch die Spindel angetrieben



Technical Data / Dati Tecnici / Technische Daten

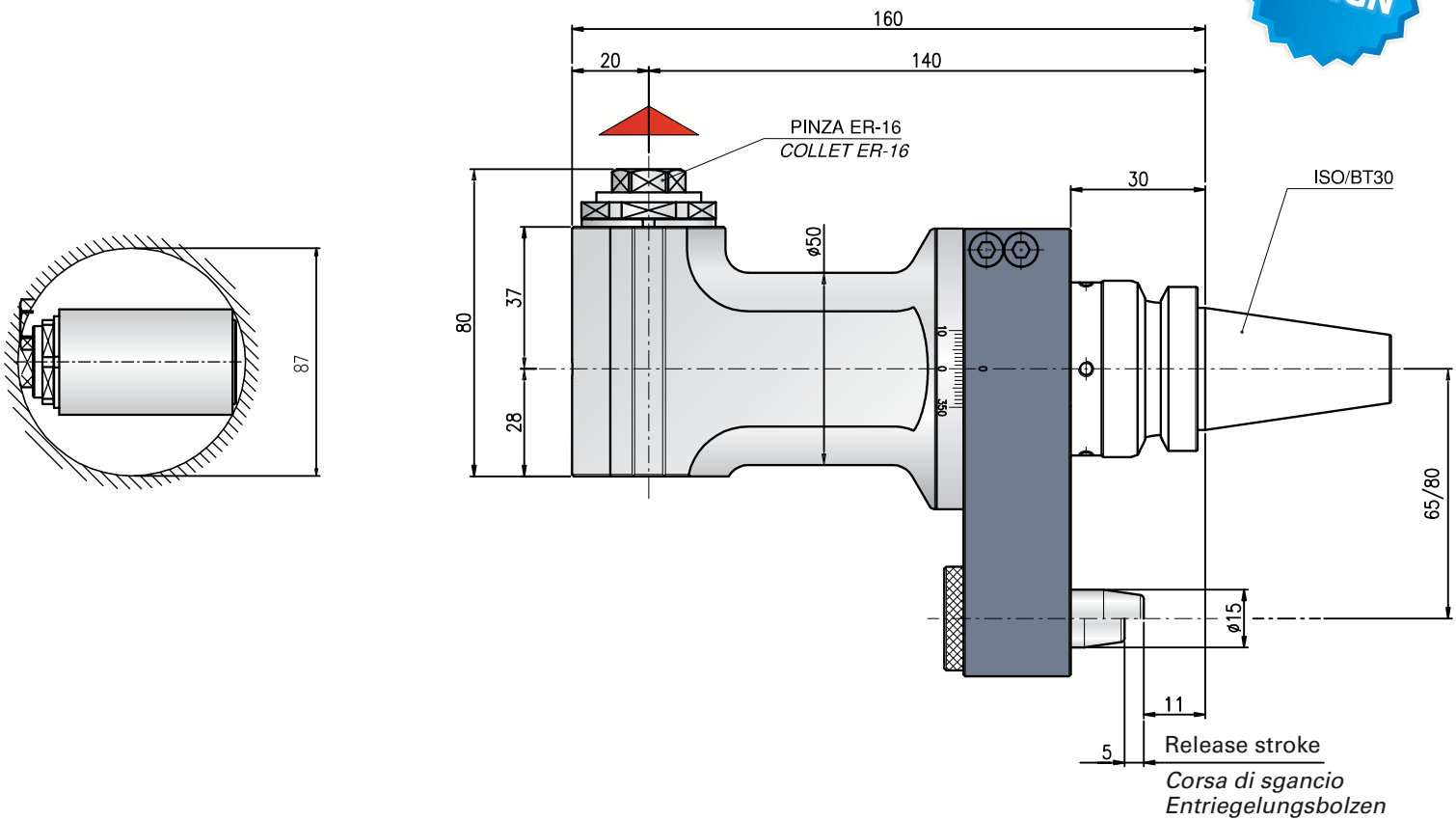
| | | IC-300* |
|--|-------------------|---|
| RPM max. / Max. Velocità / Drehzahl max. | min ⁻¹ | 20.000 |
| Rt. reduction / Rt. in riduzione / Rt. Reduktion | | 3/4 |
| Collet / Pinze / Spannzange | mm | CHM Ø3 |
| Type Spindle / Tipo di manipoło / Spindeltyp | W | IC-300 |
| Rotation / Rotazione / Rotation | | right/destra/recht, left/sinistra/links |
| Weight / Peso / Gewicht | Kg | 3 |

STANDARD EQUIPMENT INCLUDES: NAKANISHI Kit / Angle head / Collet / Wrenches / Instruction book

* For special applications only / solo per applicazioni speciali / nur für Sonderanwendungen

MINILINE 1,5

Driven through machine spindle / azionamento tramite mandrino macchina / durch die Spindel angetrieben



▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino / Drehrichtung entgegen Antriebsspindel

Technical Data / Dati Tecnici / Technische Daten**MINILINE 1,5/30**

| | | |
|---|-------------------|-----------------|
| Rt / Rt / Rt | | 1:1 |
| RPM max. / Max. velocità / Drehzahl max. | min ⁻¹ | 6.000 |
| Max. axial load / Max. carico assiale / Max. Axialbelastung | N | 250 |
| Torque / Momento torcente / Drehmoment | Nm | 7 |
| Weight / Peso / Gewicht | kg | 3 |
| Collet / Pinza / Spannzange | | ER-16 ø 1/10 mm |

OPTIONAL

High speed / alta velocità / Höhere Drehzahl max 10.000 RPM

Coolant through the spindle / Refrigerazione attraverso il mandrino / Kühlmittelzufuhr durch die Spindel max 40 Bar

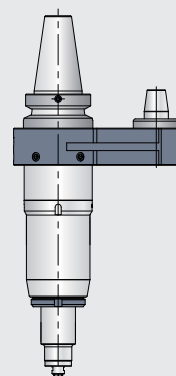
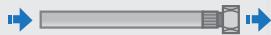
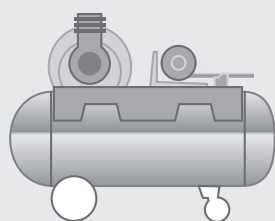
STANDARD EQUIPMENT INCLUDES: Angle head / Collet / Wrenches / Instruction book

**Special stop block for / *Stop block speciale* / *Sonderblock für*
Brother S2D / R2B**



For the correct use of the air driven tools
Per il corretto utilizzo delle unità ad aria
Für eine richtige Verwendung von Luftköpfe

Air line kit Set-up



Compressor / Compensore / Kompressor

Air line kit AL-0304

Spindle / Mandrino / Spindeltyp