

# Kurzhubzylinder, Serie KHZ

- Ø 12-100 mm
- Anschlüsse M5 G 1/8 G 1/4
- doppelwirkend
- mit Magnetkolben
- Dämpfung elastisch
- Kolbenstange Innengewinde



|                                       |                           |
|---------------------------------------|---------------------------|
| Druckluftanschluss                    | Innengewinde              |
| Umgebungstemperatur min./max.         | -25 ... 80 °C             |
| Mediumtemperatur min./max.            | -25 ... 80 °C             |
| Medium                                | Druckluft                 |
| Max. Partikelgröße                    | 50 µm                     |
| Ölgehalt der Druckluft                | 0 ... 5 mg/m <sup>3</sup> |
| Druck zur Bestimmung der Kolbenkräfte | 6.3 bar                   |

## Technische Daten

| Kolben-Ø<br>Kolbenstangengewinde<br>Anschlüsse | 12 mm<br>M3<br>M5 | 16 mm<br>M5<br>M5 | 20 mm<br>M5<br>M5 | 25 mm<br>M5<br>G 1/8 | 32 mm<br>M6<br>G 1/8 | 40 mm<br>M6<br>G 1/8 |
|------------------------------------------------|-------------------|-------------------|-------------------|----------------------|----------------------|----------------------|
| Hub 5                                          | 0822010600        | 0822010610        | 0822010620        | 0822010630           | 0822010640           | 0822010650           |
| 10                                             | 0822010601        | 0822010611        | 0822010621        | 0822010631           | 0822010641           | 0822010651           |
| 15                                             | 0822010602        | 0822010612        | 0822010622        | 0822010632           | 0822010642           | 0822010652           |
| 20                                             | 0822010603        | 0822010613        | 0822010623        | 0822010633           | 0822010643           | 0822010653           |
| 25                                             | 0822010604        | 0822010614        | 0822010624        | 0822010634           | 0822010644           | 0822010654           |
| 30                                             | 0822010605        | 0822010615        | 0822010625        | 0822010635           | 0822010645           | 0822010655           |
| 40                                             | 0822010606        | 0822010616        | 0822010626        | 0822010636           | 0822010646           | 0822010656           |
| 50                                             | -                 | -                 | 0822010627        | 0822010637           | 0822010647           | 0822010657           |
| 80                                             | -                 | -                 | -                 | -                    | 0822010648           | 0822010658           |
| 100                                            | -                 | -                 | -                 | -                    | 0822010649           | 0822010659           |

| Kolben-Ø<br>Kolbenstangengewinde<br>Anschlüsse | 50 mm<br>M8<br>G 1/8 | 63 mm<br>M8<br>G 1/8 | 80 mm<br>M10<br>G 1/4 | 100 mm<br>M12<br>G 1/4 |
|------------------------------------------------|----------------------|----------------------|-----------------------|------------------------|
| Hub 5                                          | -                    | -                    | -                     | -                      |
| 10                                             | 0822010661           | 0822010671           | 0822010681            | 0822010691             |
| 15                                             | 0822010662           | 0822010672           | R402005794            | -                      |

| Kolben-Ø<br>Kolbenstangengewinde<br>Anschlüsse | 50 mm<br>M8<br>G 1/8 | 63 mm<br>M8<br>G 1/8 | 80 mm<br>M10<br>G 1/4 | 100 mm<br>M12<br>G 1/4 |
|------------------------------------------------|----------------------|----------------------|-----------------------|------------------------|
| 20                                             | 0822010663           | 0822010673           | -                     | -                      |
| 25                                             | 0822010664           | 0822010674           | 0822010684            | 0822010694             |
| 30                                             | 0822010665           | 0822010675           | -                     | -                      |
| 40                                             | 0822010666           | 0822010676           | R402005797            | R402005844             |
| 50                                             | 0822010667           | 0822010677           | 0822010687            | 0822010697             |
| 80                                             | 0822010668           | 0822010678           | 0822010688            | 0822010698             |
| 100                                            | 0822010669           | 0822010679           | 0822010689            | 0822010699             |

## Technische Daten

| Kolben-Ø                | 12 mm        | 16 mm        | 20 mm        | 25 mm        |
|-------------------------|--------------|--------------|--------------|--------------|
| Kolbenkraft einfahrend  | 53 N         | 95 N         | 148 N        | 260 N        |
| Kolbenkraft ausfahrend  | 71 N         | 127 N        | 198 N        | 309 N        |
| Aufschlagenergie        | 0,03 J       | 0,06 J       | 0,08 J       | 0,1 J        |
| Gewicht 0 mm Hub        | 0,05 kg      | 0,065 kg     | 0,092 kg     | 0,178 kg     |
| Gewicht +10 mm Hub      | 0,013 kg     | 0,016 kg     | 0,021 kg     | 0,03 kg      |
| Betriebsdruck min./max. | 1 ... 10 bar | 1 ... 10 bar | 1 ... 10 bar | 1 ... 10 bar |
| Werkstoff Deckel vorne  | Messing      | Messing      | Messing      | Messing      |

| Kolben-Ø                | 32 mm          | 40 mm          | 50 mm          | 63 mm          |
|-------------------------|----------------|----------------|----------------|----------------|
| Kolbenkraft einfahrend  | 435 N          | 720 N          | 1110 N         | 1837 N         |
| Kolbenkraft ausfahrend  | 507 N          | 792 N          | 1237 N         | 1964 N         |
| Aufschlagenergie        | 0,16 J         | 0,24 J         | 0,32 J         | 0,38 J         |
| Gewicht 0 mm Hub        | 0,195 kg       | 0,285 kg       | 0,388 kg       | 0,636 kg       |
| Gewicht +10 mm Hub      | 0,042 kg       | 0,052 kg       | 0,074 kg       | 0,096 kg       |
| Betriebsdruck min./max. | 0,6 ... 10 bar | 0,6 ... 10 bar | 0,6 ... 10 bar | 0,6 ... 10 bar |
| Werkstoff Deckel vorne  | Aluminium      | Aluminium      | Aluminium      | Aluminium      |

| Kolben-Ø                | 80 mm          | 100 mm         |
|-------------------------|----------------|----------------|
| Kolbenkraft einfahrend  | 2857 N         | 4639 N         |
| Kolbenkraft ausfahrend  | 3167 N         | 4948 N         |
| Aufschlagenergie        | 0,38 J         | 0,5 J          |
| Gewicht 0 mm Hub        | 1,22 kg        | 2,38 kg        |
| Gewicht +10 mm Hub      | 0,149 kg       | 0,218 kg       |
| Betriebsdruck min./max. | 0,6 ... 10 bar | 0,6 ... 10 bar |
| Werkstoff Deckel vorne  | Aluminium      | Aluminium      |

## Technische Informationen

Der Drucktaupunkt muss mindestens 15 °C unter der Umgebungs- und Mediumtemperatur liegen und darf max. 3 °C betragen.

Der Ölgehalt der Druckluft muss über die gesamte Lebensdauer konstant bleiben.

Verwenden Sie ausschließlich von AVENTICS zugelassene Öle. Weitere Informationen finden Sie im Dokument „Technische Informationen“ (erhältlich im MediaCentre).

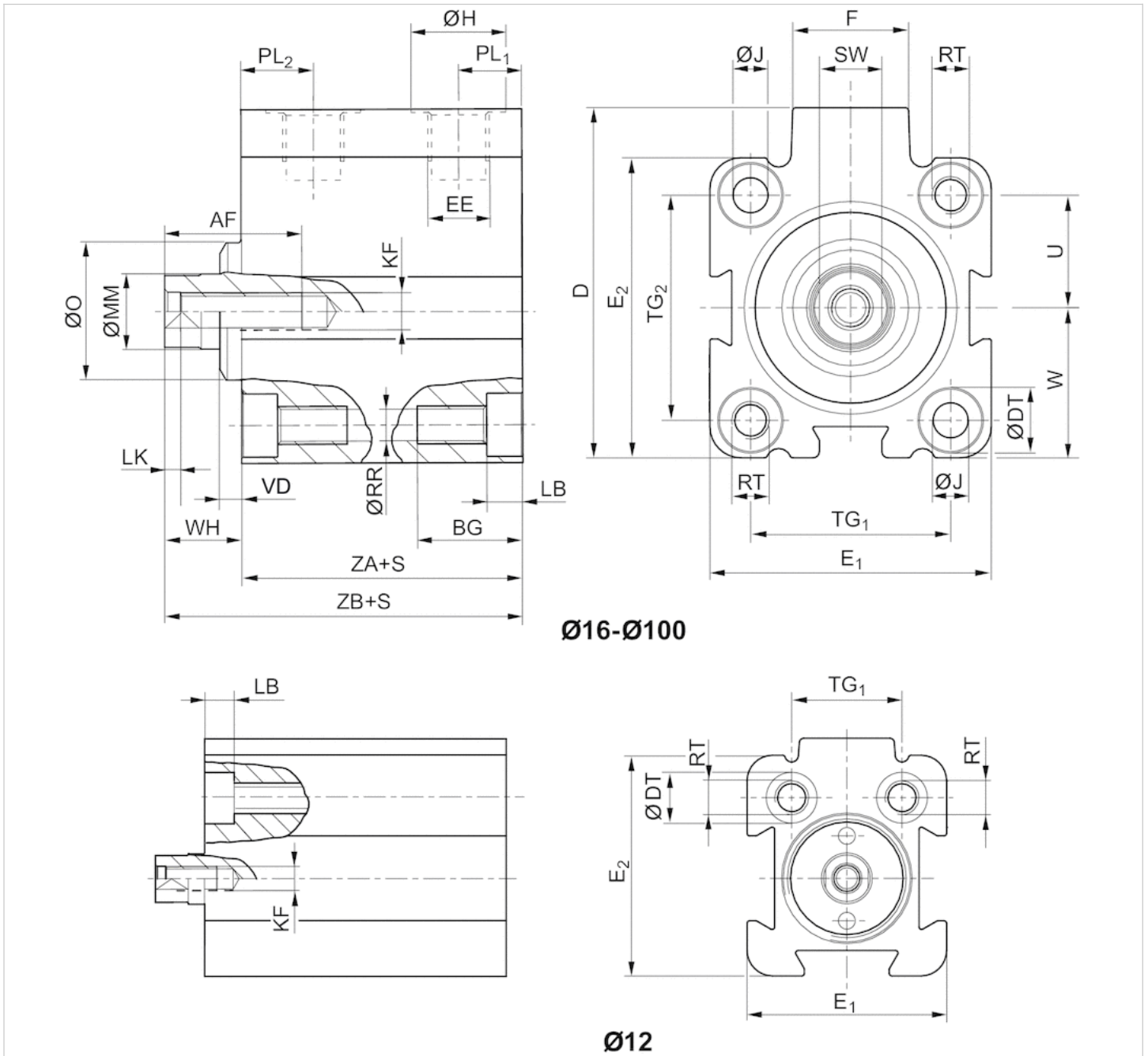
Weitere Abwandlungen sind über die AVENTICS Vertriebszentren erhältlich.

## Technische Informationen

| Werkstoff     |                      |
|---------------|----------------------|
| Zylinderrohr  | Aluminium, eloxiert  |
| Kolbenstange  | Nichtrostender Stahl |
| Kolben        | Nitril-Kautschuk     |
| Deckel vorne  | Messing Aluminium    |
| Deckel hinten | Aluminium            |
| Abstreifer    | Polyurethan          |

# Abmessungen

## Abmessungen



S = Hub

## Abmessungen

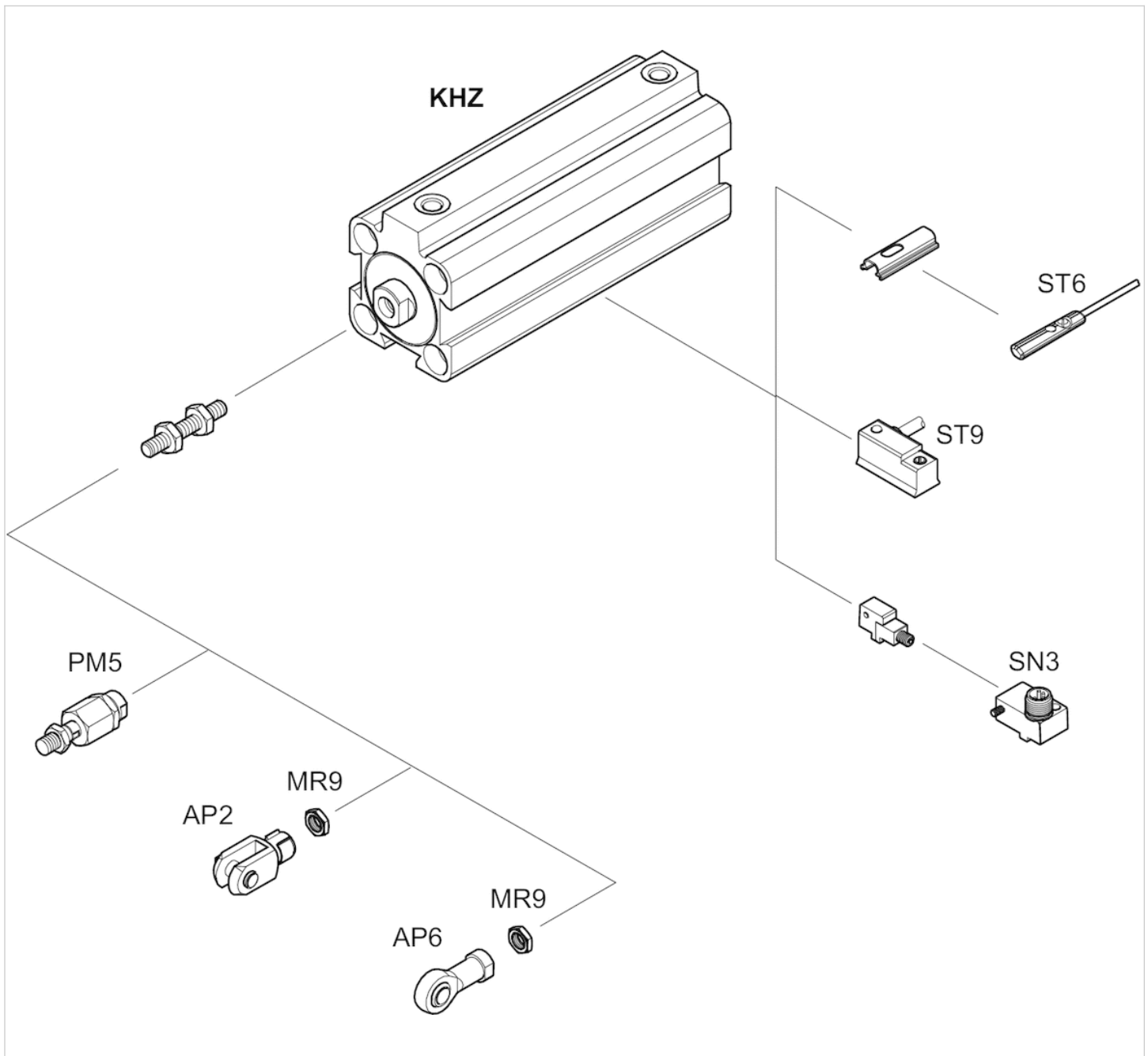
| Kolben-Ø | Hub      | AF +1 | BG min. | D JS15 | ØDT H13 | E1 JS15 | E2 JS15 | EE    | F    | ØH | ØJ   |
|----------|----------|-------|---------|--------|---------|---------|---------|-------|------|----|------|
| 12 mm    | 5 - 10   | 8     | 12.4    | 28     | 6       | 23.5    | 26      | M 5   | 11   | 8  | 3.3  |
| 16 mm    | 5 - 10   | 10    | 12.4    | 33     | 6       | 28      | 28      | M 5   | 11.5 | 8  | 3.55 |
| 20 mm    | 5 - 10   | 10    | 13.6    | 37     | 7.5     | 32      | 32      | M 5   | 11   | 8  | 4.55 |
| 25 mm    | 5 - 50   | 10    | 13.6    | 47.5   | 8       | 37      | 39      | G 1/8 | 17.5 | 15 | 4.55 |
| 32 mm    | 5 - 100  | 15    | 16.7    | 56     | 10      | 45      | 48      | G 1/8 | 18.5 | 15 | 5.5  |
| 40 mm    | 5 - 100  | 15    | 16.7    | 62.5   | 10      | 54.5    | 54      | G 1/8 | 18.5 | 15 | 5.5  |
| 50 mm    | 10 - 100 | 18    | 19.8    | 73     | 11      | 66      | 66      | G 1/8 | 18   | 15 | 7.3  |
| 63 mm    | 10 - 100 | 18    | 25      | 88     | 15      | 80      | 80      | G 1/8 | 23   | 15 | 9.2  |
| 80 mm    | 10 - 100 | 18    | 25      | 110    | 15      | 100     | 100     | G 1/4 | 27   | 19 | 9.2  |
| 100 mm   | 10 - 100 | 20    | 30      | 132    | 17.5    | 124     | 124     | G 1/4 | 28   | 19 | 11   |

| Kolben-Ø | KF  | LB +0,4 | LK +0,5 | ØMM f8 | ØO | PL1  | PL2  | ØRR  | RT  | SW -0,3 | TG1      | TG2      |
|----------|-----|---------|---------|--------|----|------|------|------|-----|---------|----------|----------|
| 12 mm    | M3  | 3.4     | 2       | 6      | -  | 6    | 10.5 | 3.3  | M4  | 5       | 13 ±0,2  | -        |
| 16 mm    | M5  | 3.4     | 2       | 8      | -  | 6.5  | 11.3 | 3.3  | M4  | 7       | 20 ±0,2  | 20 ±0,2  |
| 20 mm    | M5  | 4.6     | 2       | 10     | -  | 6.5  | 10   | 4.2  | M5  | 8       | 22 ±0,2  | 22 ±0,2  |
| 25 mm    | M5  | 4.6     | 2       | 10     | 20 | 9.5  | 11.5 | 4.2  | M5  | 8       | 26 ±0,25 | 28 ±0,25 |
| 32 mm    | M6  | 5.7     | 2.5     | 12     | 22 | 8.5  | 15   | 5.05 | M6  | 10      | 32 ±0,25 | 36 ±0,25 |
| 40 mm    | M6  | 5.7     | 2.5     | 12     | 30 | 10   | 13.5 | 5.05 | M6  | 10      | 40 ±0,25 | 40 ±0,25 |
| 50 mm    | M8  | 6.8     | 3.5     | 16     | 35 | 10   | 14   | 6.8  | M8  | 13      | 50 ±0,25 | 50 ±0,25 |
| 63 mm    | M8  | 9       | 3.5     | 16     | 35 | 11.5 | 14   | 8.5  | M10 | 13      | 62 ±0,25 | 62 ±0,25 |
| 80 mm    | M10 | 9       | 4       | 20     | 46 | 12   | 15.5 | 8.5  | M10 | 17      | 82 ±0,3  | 82 ±0,3  |
| 100 mm   | M12 | 11      | 4       | 25     | 56 | 12   | 18.5 | 10.2 | M12 | 22      | 103 ±0,3 | 103 ±0,3 |

| Kolben-Ø | U    | W         | VD -1 | WH   | ZA ±0,2 | ZB ±0,8 |
|----------|------|-----------|-------|------|---------|---------|
| 12 mm    | 9.5  | 11,5 ±0,2 | -     | 5.5  | 30.5    | 36      |
| 16 mm    | 10   | 14 ±0,2   | -     | 4.5  | 32      | 36.5    |
| 20 mm    | 11   | 16 ±0,2   | -     | 4.5  | 32      | 36.5    |
| 25 mm    | 14   | 19,5 ±0,2 | 3.5   | 9.5  | 39      | 48.5    |
| 32 mm    | 18   | 24 ±0,2   | 3.5   | 11   | 39.5    | 50.5    |
| 40 mm    | 20   | 27,3 ±0,2 | 4.5   | 13.5 | 39.5    | 53      |
| 50 mm    | 25   | 33 ±0,2   | 6     | 13.5 | 39.5    | 53      |
| 63 mm    | 31   | 40 ±0,2   | 6.5   | 15.5 | 42      | 57.5    |
| 80 mm    | 41   | 50 ±0,3   | 8.5   | 18   | 46      | 64      |
| 100 mm   | 51.5 | 62 ±0,3   | 7     | 20   | 56      | 76      |

## Zubehörübersicht

## Übersichtszeichnung



## HINWEIS:

Diese Übersichtszeichnung dient zur Orientierung, an welcher Stelle die unterschiedlichen Zubehörteile am Zylinder befestigt werden können. Dazu wurde die Darstellung vereinfacht. Eine konkrete Ableitung maßlicher Gegebenheiten ist deshalb nicht zulässig.

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