



# INOFlex® VD

4-Backen-Handspannfutter ohne Durchgang  
4-jaw closed center manual chuck

## ANWENDUNG

- Spannen von runden, quadratischen/rechteckigen und geometrisch unregelmäßigen Bauteilen
- Für verformungsempfindliche Bauteile geeignet
- Innen- und Außenspannung

## TECHNISCHE MERKMALE

- Zentrisches ausgleichendes Spannen
- Spannhubkontrolle

## APPLICATION

- Clamping of round parts
- Clamping of square/rectangular parts
- Clamping of irregular parts
- For deformation sensitive parts
- Internal and external clamping

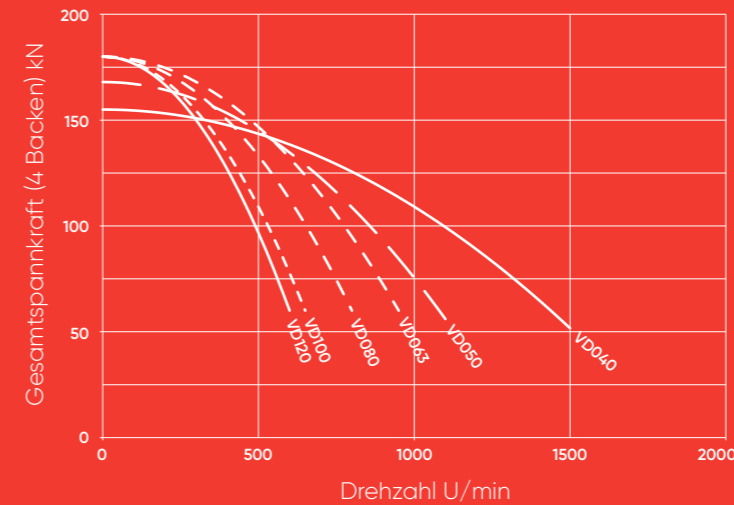
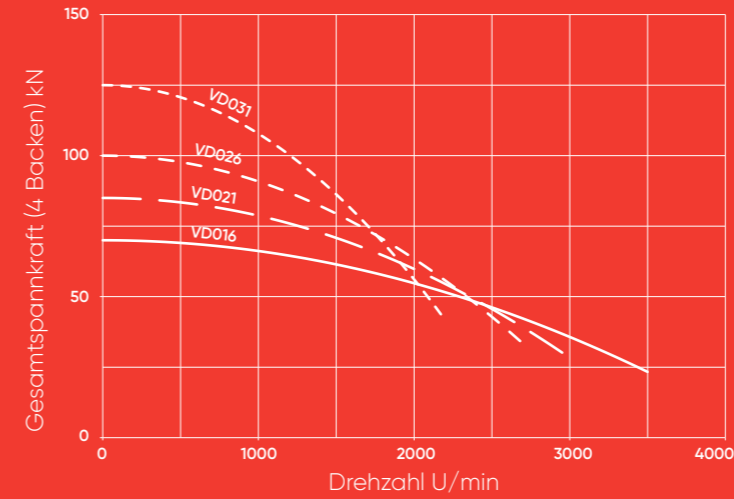
## TECHNICAL FEATURES

- Compensating concentric clamping
- Jaw travel control

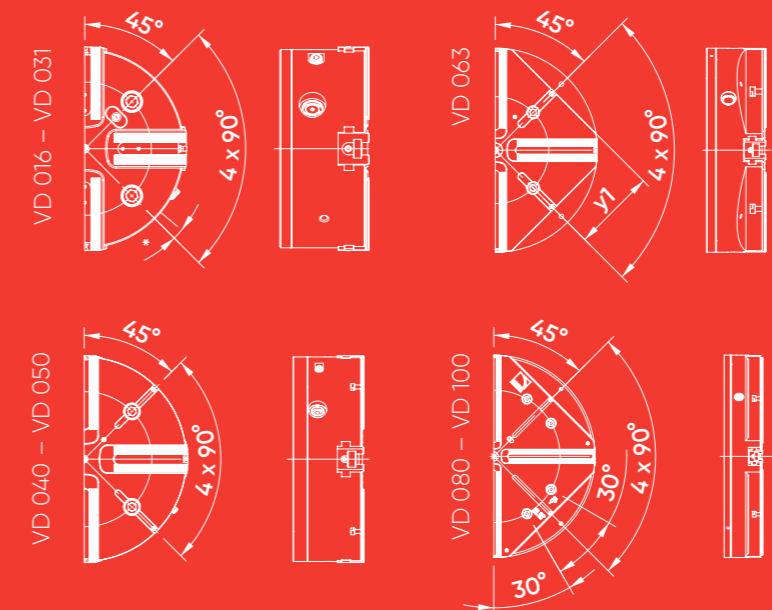
| Technische Daten<br>technical information         | VD016               | VD021  | VD026  | VD031  | VD040  | VD050  | VD063  | VD080  | VD100  | VD120  |       |
|---|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Ident-Nr. / ident-no.                             | 841016              | 841021 | 841026 | 841031 | 841040 | 841050 | 841063 | 841080 | 841100 | 841120 |       |
| Durchmesser<br>diameter                           | mm                  | 165    | 210    | 255    | 315    | 400    | 500    | 630    | 800    | 990    | 1150  |
| Hub pro Backe<br>radial jaw stroke                | mm                  | 4,3    | 5,2    | 5,2    | 6,1    | 6,9    | 8,7    | 11,3   | 11,3   | 11,3   | 11,3  |
| Ausgleichshub<br>compensation                     | mm                  | 2,5    | 3,5    | 3,5    | 4      | 4,5    | 6,1    | 8      | 8      | 8      | 8     |
| max. Anzugsmoment<br>max. torque                  | Nm                  | 70     | 120    | 160    | 200    | 270    | 300    | 320    | 320    | 320    | 320   |
| max. Spannkraft<br>max. gripping force            | kN                  | 70     | 85     | 100    | 125    | 155    | 168    | 180    | 180    | 180    | 180   |
| max. Drehzahl<br>max. speed                       | 1/min<br>r.p.m.     | 3500   | 3000   | 2700   | 2200   | 1500   | 1100   | 950    | 800    | 650    | 600   |
| Masse (ohne Backen)<br>weight (without top jaws)  | kg                  | 12     | 22     | 39     | 75     | 127    | 226    | 340    | 545    | 720    | 1100  |
| Massenträgheitsmoment<br>moment of inertia        | kg · m <sup>2</sup> | 0,04   | 0,12   | 0,32   | 0,97   | 2,63   | 7,39   | 16,9   | 24,5   | 84,5   | 176,4 |
| Nutenstein<br>standard t-nut                      | —                   | GP05   | GP07   | GP11   | GP11   | GP13   | GP21   | GP21   | GP21   | GP21   | GP21  |
| Standard weiche Aufsatzbacke<br>standard soft jaw | —                   | VS10   | VS12   | VS16   | VS16   | VS21   | VS25   | VS25   | VS25   | VS25   | VS25  |
| Standard harte Aufsatzbacke<br>standard hard jaw  | —                   | VG10   | VG12   | VG16   | VG16   | VG21   | VG25   | VG25   | VG25   | VG25   | VG25  |

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Spannkraft- / Drehzahl-Diagramm  
Clamping force - speed diagram



Beim Einsatz der weichen Standardbacke in äußerer Montageposition  
When using the soft standard jaw in outer mounting position



\* Lochkreis bei VD 016 um 5° nach links versetzt  
\* Bolt circle in VD 016 displaced by 5° to the left

|    | VD063     | VD080         | VD100         | VD120         |               |
|----|-----------|---------------|---------------|---------------|---------------|
|    | 630       | 800           | 990           | 1150          |               |
|    | 380       | 520           | 720           | 720           |               |
|    | 330,2     | 463,6         | 647,6         | 647,6         |               |
|    | 163,5     | 163,5         | 169,5         | 169,7         |               |
|    | 8         | 8             | 8             | 8             |               |
|    | 246       | 315           | 420           | 498           |               |
|    | 60        | 60            | 60            | 60            |               |
|    | 10,5      | 10,5          | 10,5          | 10,3          |               |
| °  | 3,0 x 60° | 3,0 x 60°     | 3,0 x 60°     | 3,0 x 60°     |               |
|    | 6         | 6             | 6             | 6             |               |
|    | 16,4      | 16,4          | 16,4          | 17,4          |               |
|    | 314,3     | 399,3         | 504,3         | 574,3         |               |
|    | 40, 4x    | M24 x 130, 7x | M24 x 180, 7x | M30 x 120, 7x | M30 x 180, 7x |
|    | 34,3      | 41,5          | 41,5          | 41,5          |               |
|    | 59        | 59            | 65            | 65            |               |
|    | 21        | 21            | 21            | 21            |               |
|    | 60        | 60            | 60            | 60            |               |
| 0  | 80 / 228  | 80 / 295      | 80 / 395      | 80 / 476      |               |
|    | 25        | 25            | 25            | 25            |               |
| 55 | M20 x 55  | M20 x 55      | M20 x 55      | M20 x 55      |               |
|    | 22        | 22            | 22            | 22            |               |
|    | 40        | 40            | 40            | 40            |               |
|    | 38        | 38            | 38            | 38            |               |
|    | 16        | 16            | 16            | 16            |               |
|    | 200       | 285           | 245           | 290           |               |

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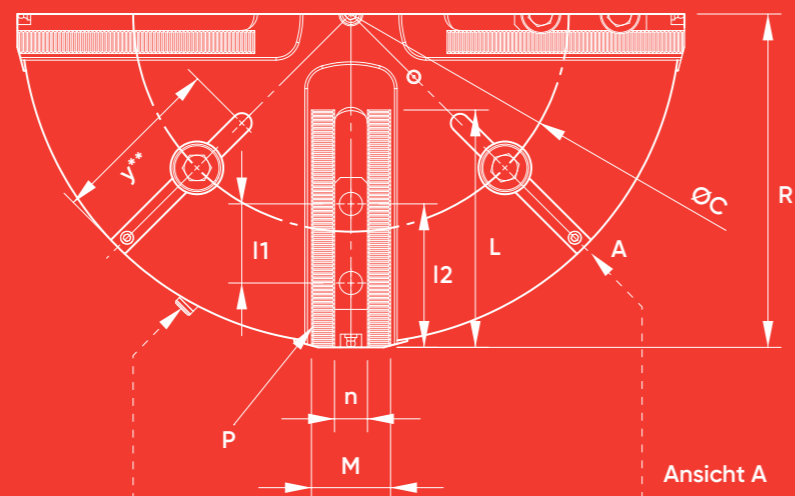


## ANWENDUNG

- Spannen von runden, quadratischen/rect. geometrisch unregelmäßigen Bauteilen
- Für verformungsempfindliche Bauteile geeignet
- Innen- und Außenspannung

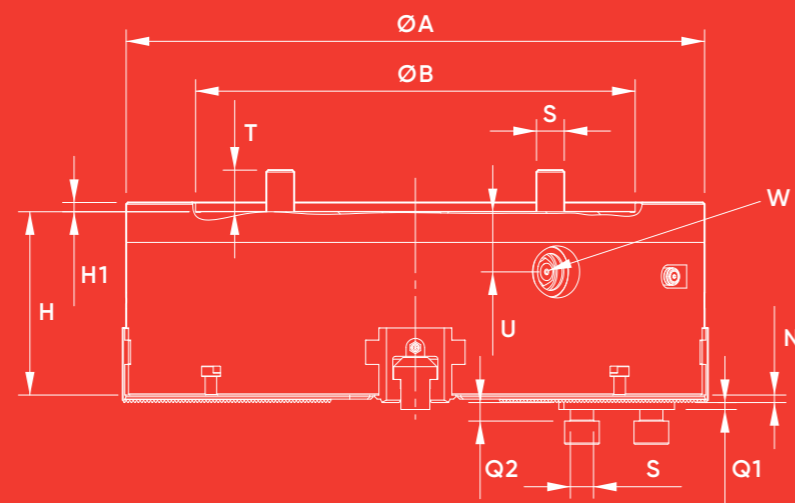
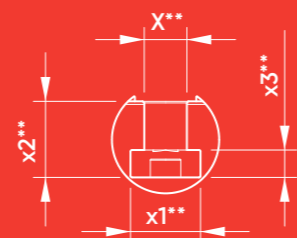
## TECHNISCHE MERKMALE

- Zentrisches ausgleichendes Spannen
- Spannhubkontrolle



Hubkontrolle  
Stroke control

\* Ab VD 040  
\* starting at VD 040



| Technische Daten<br>technical information         |                     | VD016 |
|---|---------------------|-------|
| Ident-Nr. / ident-no.                             |                     | 8410  |
| Durchmesser<br>diameter                           | mm                  | 165   |
| Hub pro Backe<br>radial jaw stroke                | mm                  | 4,3   |
| Ausgleichshub<br>compensation                     | mm                  | 2,5   |
| max. Anzugsmoment<br>max. torque                  | Nm                  | 70    |
| max. Spannkraft<br>max. gripping force            | kN                  | 70    |
| max. Drehzahl<br>max. speed                       | 1/min<br>r.p.m.     | 3500  |
| Masse (ohne Backen)<br>weight (without top jaws)  | kg                  | 12    |
| Massenträgheitsmoment<br>moment of inertia        | kg · m <sup>2</sup> | 0,04  |
| Nutenstein<br>standard t-nut                      | —                   | GP05  |
| Standard weiche Aufsatzbacke<br>standard soft jaw | —                   | VS10  |
| Standard harte Aufsatzbacke<br>standard hard jaw  | —                   | VG10  |

| Abmessungen<br>dimensions      | VD016   | VD021           | VD026           | VD031            | VD040            | VD050            | VD063            | VD080            | VD100            | VD120            |
|--------------------------------|---------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| A mm                           | 165     | 210             | 255             | 315              | 400              | 500              | 630              | 800              | 990              | 1150             |
| B H6 mm                        | 140     | 170             | 220             | 220              | 300              | 380              | 380              | 520              | 720              | 720              |
| C mm                           | 104,8   | 133,4           | 171,4           | 171,4            | 235              | 330,2            | 330,2            | 463,6            | 647,6            | 647,6            |
| H mm                           | 76      | 85              | 105             | 130              | 136,5            | 158,5            | 163,5            | 163,5            | 169,5            | 169,7            |
| H1 mm                          | 5       | 5               | 5               | 5                | 5                | 8                | 8                | 8                | 8                | 8                |
| L mm                           | 60      | 78              | 93              | 111              | 141              | 180              | 246              | 315              | 420              | 498              |
| M mm                           | 31      | 35,5            | 40              | 40               | 50               | 60               | 60               | 60               | 60               | 60               |
| N mm                           | 5       | 5               | 5               | 5                | 6,5              | 6,5              | 10,5             | 10,5             | 10,5             | 10,3             |
| Verzahnung<br>serration        | P mm    | 1,5 x 60°       | 1,5 x 60°       | 1,5 x 60°        | 1,5 x 60°        | 1,5 x 60°        | 3,0 x 60°        | 3,0 x 60°        | 3,0 x 60°        | 3,0 x 60°        |
|                                | Q1 mm   | 2,5             | 3               | 3                | 3                | 3,5              | 6                | 6                | 6                | 6                |
|                                | Q2 mm   | 10,5            | 11,5            | 11,5             | 11,5             | 11,5             | 16,4             | 16,4             | 16,4             | 17,4             |
| Futter geöffnet<br>chuck open  | R mm    | 84,8            | 107,9           | 130,7            | 161,1            | 201,9            | 252,8            | 314,3            | 399,3            | 504,3            |
|                                | S mm    | M10 x 80,<br>4x | M12 x 90,<br>4x | M16 x 110,<br>4x | M16 x 130,<br>4x | M20 x 110,<br>4x | M24 x 140,<br>4x | M24 x 130,<br>4x | M24 x 180,<br>7x | M30 x 120,<br>7x |
|                                | T mm    | 16              | 17,6            | 21,6             | 22,6             | 30               | 36               | 34,3             | 41,5             | 41,5             |
|                                | U mm    | 28              | 32              | 37               | 50               | 53               | 52               | 59               | 59               | 65               |
| Schlüsselweite<br>wrench width | W mm    | 12              | 12              | 17               | 17               | 21               | 21               | 21               | 21               | 21               |
|                                | l1 mm   | 18              | 20              | 30               | 30               | 30               | 60               | 60               | 60               | 60               |
| min./max.                      | l2 mm   | 25 / 52         | 28 / 68         | 41 / 60          | 41 / 97          | 43 / 122         | 70 / 150         | 80 / 228         | 80 / 295         | 80 / 395         |
|                                | n H8 mm | 10              | 12              | 16               | 16               | 21               | 25               | 25               | 25               | 25               |
|                                | s mm    | M8 x 25         | M10 x 25        | M12 x 30         | M12 x 30         | M16 x 35         | M20 x 55         | M20 x 55         | M20 x 55         | M20 x 55         |
|                                | xH12 mm | —               | —               | —                | —                | 14               | 14               | 22               | 22               | 22               |
|                                | x1 mm   | —               | —               | —                | —                | 23               | 23               | 40               | 40               | 40               |
|                                | x2 mm   | —               | —               | —                | —                | 25               | 25               | 38               | 38               | 38               |
|                                | x3 mm   | —               | —               | —                | —                | 9                | 9                | 16               | 16               | 16               |
|                                | y mm    | —               | —               | —                | —                | 118              | 133              | 200              | 285              | 245              |