

## Strangregulierventile mit Innengewinde

Die Strangregulierventile mit schrägem Sitz ermöglichen ein genaues Regulieren von Heiz- und Klimakreisläufen.

Sämtliche Modelle erlauben dem Installateur ein exaktes Messen von Druckverlusten und Durchflussmengen und damit einen äußerst präzisen Abgleich der Stränge. Das Modell 751 (ausgestattet mit zwei Messventilen) ermöglicht zudem eine unmittelbare Druckmessung.

### Funktion

- Regeln
- Absperrern
- Messen (mit zwei Anschlüssen zur unmittelbaren Druckmessung)
- Entleeren

### Leistungen

- Vereinfachte Messung von Druckverlusten und Durchflussmengen durch zwei Messnippel (Modell 751)
- Alle Strangregulierventile mit Innengewinde lassen sich in Vorlauf- und Rücklaufleitungen sowie in sämtlichen Positionen montieren und erlauben damit ein Strömen des Mediums in beide Richtungen. Das Handrad besitzt 40 Regelpositionen mit einer Zehntel Umdrehung pro Position (Für das Ablesen der Umdrehung zeigt das rote Fenster die Zehntel und die Krone die Werte vor dem Komma an).
- Das Ablesen der Position ist oberhalb und unterhalb des Ventils möglich. Eine doppelte Sicherung der Armatur erfolgt durch die Plombierung des Handrads und der Verstelleinrichtung. Die Modelle 750 und 751 sind zusätzlich absperrbar und können auch zum Entleeren und Füllen des Kreislaufes genutzt werden.
- Eine Auswahl von Strangregulierventilen mit einem reduzierten Kv-Wert (blaues Handrad) steht speziell für das Abgleichen von Altanlagen zur Verfügung.
- Minimale Einregelgenauigkeit: 5%

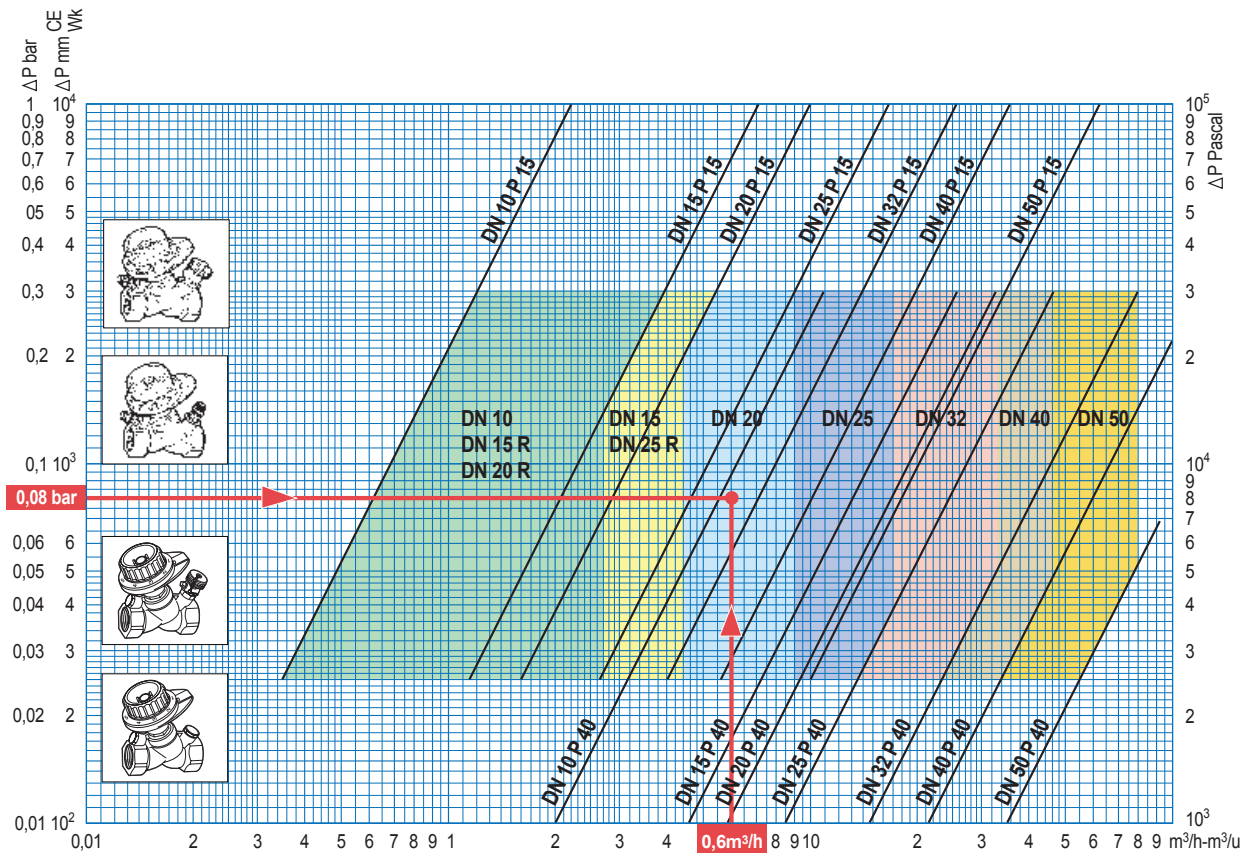
### Betriebsparameter

- Max. Betriebstemperatur: von -25°C bis 110°C
- Max. Betriebsdruck: 16 bar

### Empfehlung

- Fließrichtung A nach B wählen (auf dem Gehäuse markiert), um eine optimale Einstellung des Ventils zu erzielen.
- Vor und nach dem Ventil muss sich eine gerade Rohrführung befinden. Die Mindestlänge beträgt jeweils 15 x DN (Ventil).

## Strangregulierventile



| REF   | DN - ND |    |     |    |     |    |     |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|---|---------|----|-----|----|-----|----|-----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|   | 10      | 15 | 15R | 20 | 20R | 25 | 25R | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |  |
| 750   | 5       | 6  | 7   | 8  | 9   | 10 | 11  | 12 | 13 | 14 |    |    |     |     |     |     |     |     |     |     |  |
| 751   | 5       | 6  | 7   | 8  | 9   | 10 | 11  | 12 | 13 | 14 |    |    |     |     |     |     |     |     |     |     |  |
| 752   | 5       | 6  |     | 8  |     | 10 |     | 12 | 13 | 14 |    |    |     |     |     |     |     |     |     |     |  |
| 753   | 5       | 6  |     | 8  |     | 10 |     | 12 | 13 | 14 |    |    |     |     |     |     |     |     |     |     |  |
| Y = a X <sup>6</sup> + b X <sup>5</sup> ... | 17 - 18 |    |     |    |     |    |     |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
| 751B  |         | 19 |     | 19 |     | 20 |     | 20 | 21 | 21 | 22 | 22 | 23  | 23  | 24  | 24  |     |     |     |     |  |
| 750 B                                       |         |    |     |    |     |    |     |    |    |    |    |    |     |     |     |     | 25  | 25  | 26  | 26  |  |
| Y = a X <sup>6</sup> + b X <sup>5</sup> ... | 28 - 29 |    |     |    |     |    |     |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
| 1750  | 30      | 31 | 32  | 33 | 34  | 35 | 36  | 37 | 38 | 39 |    |    |     |     |     |     |     |     |     |     |  |
| 1751  | 30      | 31 | 32  | 33 | 34  | 35 | 36  | 37 | 38 | 39 |    |    |     |     |     |     |     |     |     |     |  |
| 1752  | 30      | 31 |     | 33 |     | 35 |     | 37 | 38 | 39 |    |    |     |     |     |     |     |     |     |     |  |
| 1753  | 30      | 31 |     | 33 |     | 35 |     | 37 | 38 | 39 |    |    |     |     |     |     |     |     |     |     |  |
| Y = a X <sup>6</sup> + b X <sup>5</sup> ... | 41 - 42 |    |     |    |     |    |     |    |    |    |    |    |     |     |     |     |     |     |     |     |  |

Die Werte des ZETA-Koeffizienten wurden für folgende Rohre berechnet:

$$\text{Zeta} = \frac{2 \cdot g \cdot \Delta P}{V^2 \cdot \gamma}$$

g = 9,81 m/s<sup>2</sup>    ΔP : daPa  
 v : (m/s)        γ = 1000 kg/m<sup>3</sup>

## Strangregulierventile

### DIN 2440 - NF A49.115

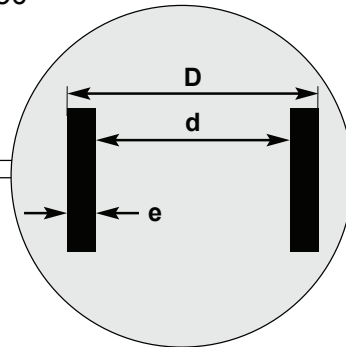


750 ➔ 1753

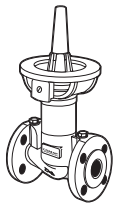


DN15 ➔ DN50

| DN - ND | D    | e    | d    |
|---------|------|------|------|
| 10      | 17,2 | 2,35 | 12,5 |
| 15 R    | 21,3 | 2,65 | 16   |
| 20 R    | 26,9 | 2,65 | 21,6 |
| 25 R    | 33,7 | 3,25 | 27,2 |
| 32      | 42,4 | 3,25 | 35,9 |
| 40      | 48,3 | 3,25 | 41,8 |
| 50      | 60,3 | 3,65 | 53   |



### DIN 2448 - NF A49.112



751B  
DN50 ➔ DN200



750B  
DN250 ➔ DN400

| DN - ND | D     | e   | d     |
|---------|-------|-----|-------|
| 50      | 60,3  | 2,9 | 54,5  |
| 65      | 76,1  | 2,9 | 70,3  |
| 80      | 88,9  | 3,2 | 82,5  |
| 100     | 114,3 | 3,6 | 107,1 |
| 125     | 139,7 | 4   | 131,7 |
| 150     | 168,3 | 4,5 | 159,3 |
| 200     | 219,1 | 6,3 | 206,5 |
| 250     | 273   | 6,3 | 260,4 |
| 300     | 323,9 | 7,1 | 309,7 |
| 350     | 355,6 | 8   | 339,6 |
| 400     | 406,4 | 8,8 | 388,8 |

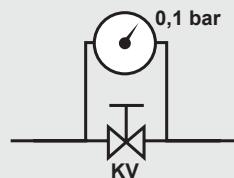


Diagramm für Durchflussrichtung gegen den Ventilkegel

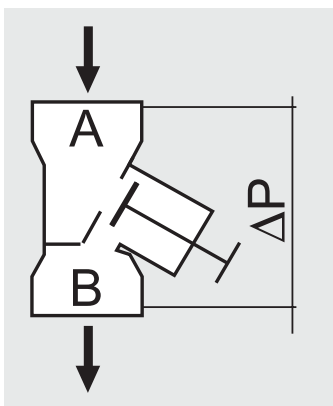
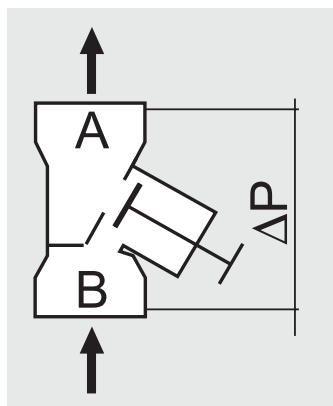
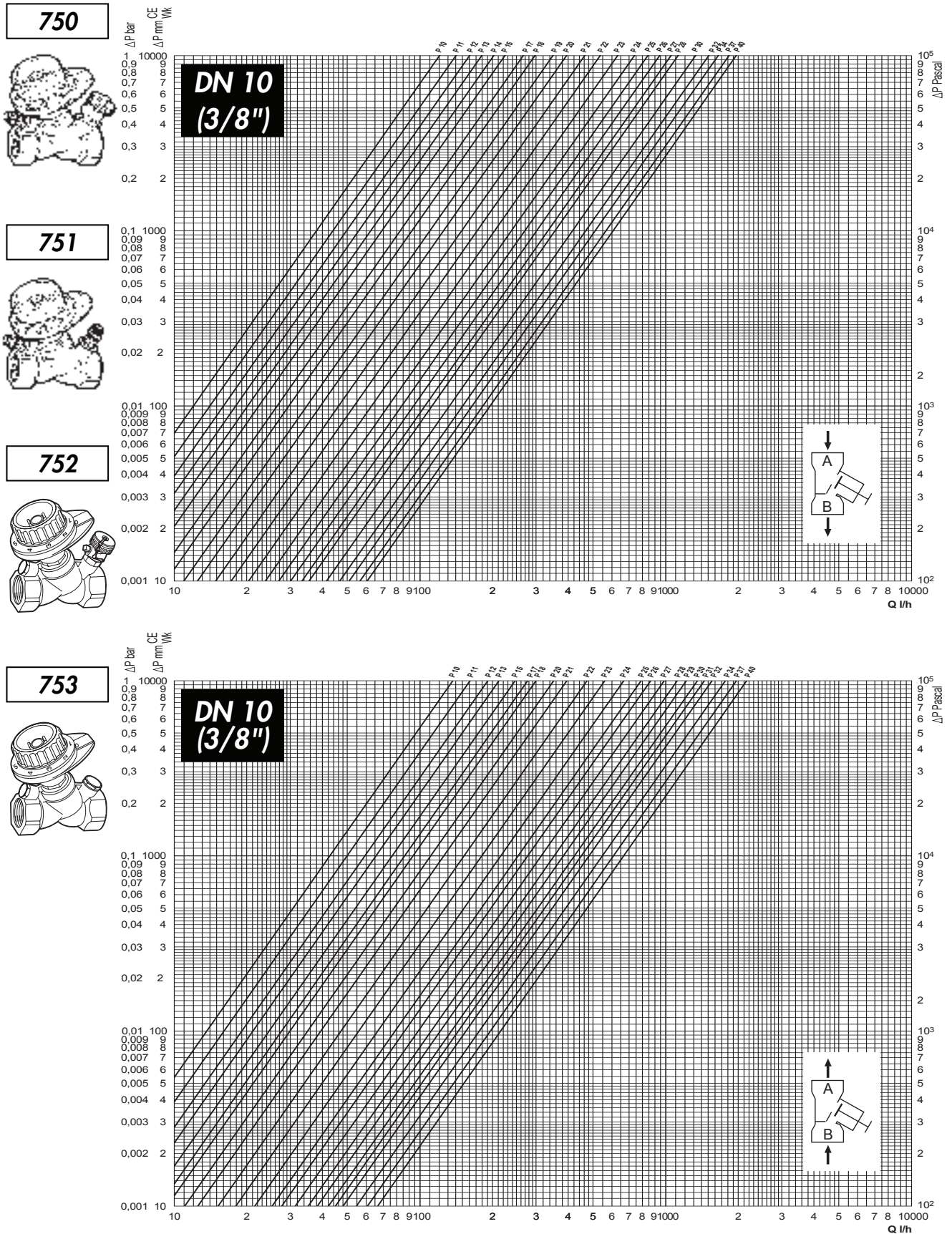


Diagramm für Durchflussrichtung über den Ventilkegel

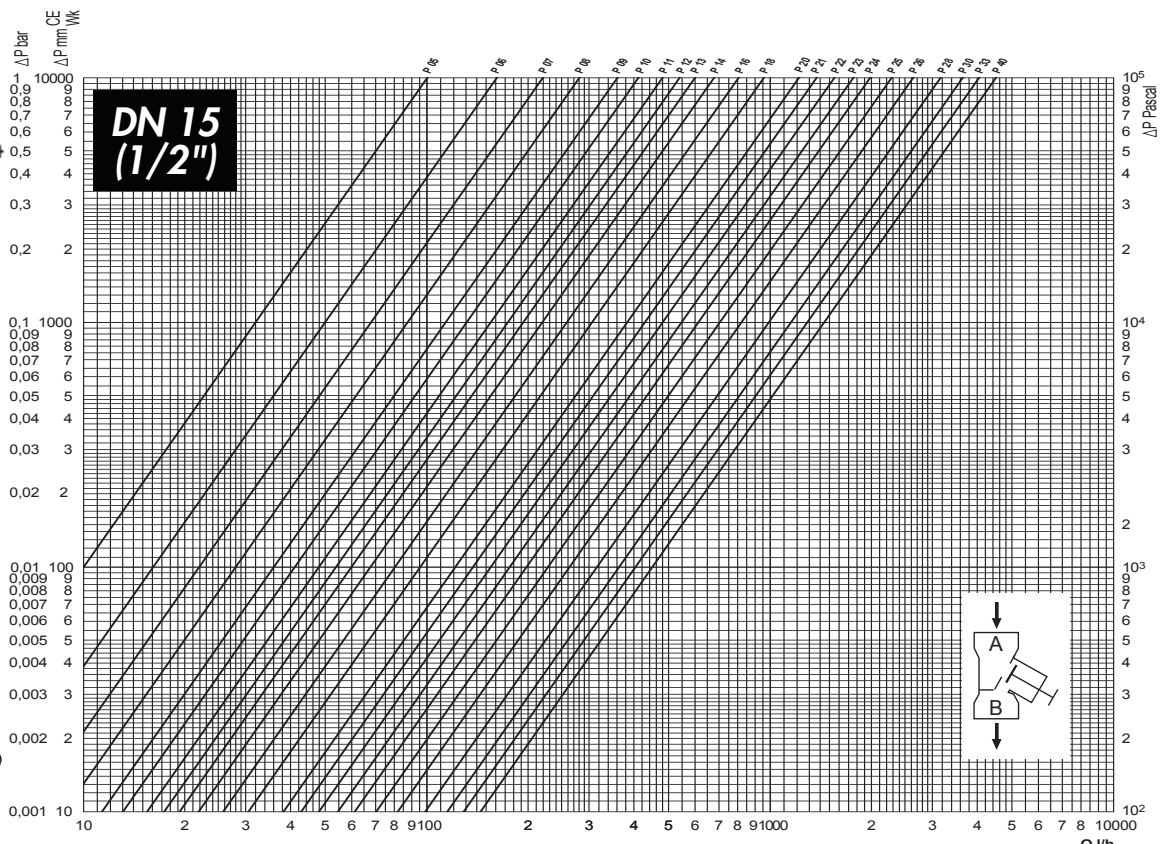


## Strangregulierventile aus Rotguss mit Innengewinde



## Strangregulierventile aus Rotguss mit Innengewinde

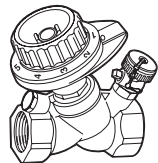
**750**



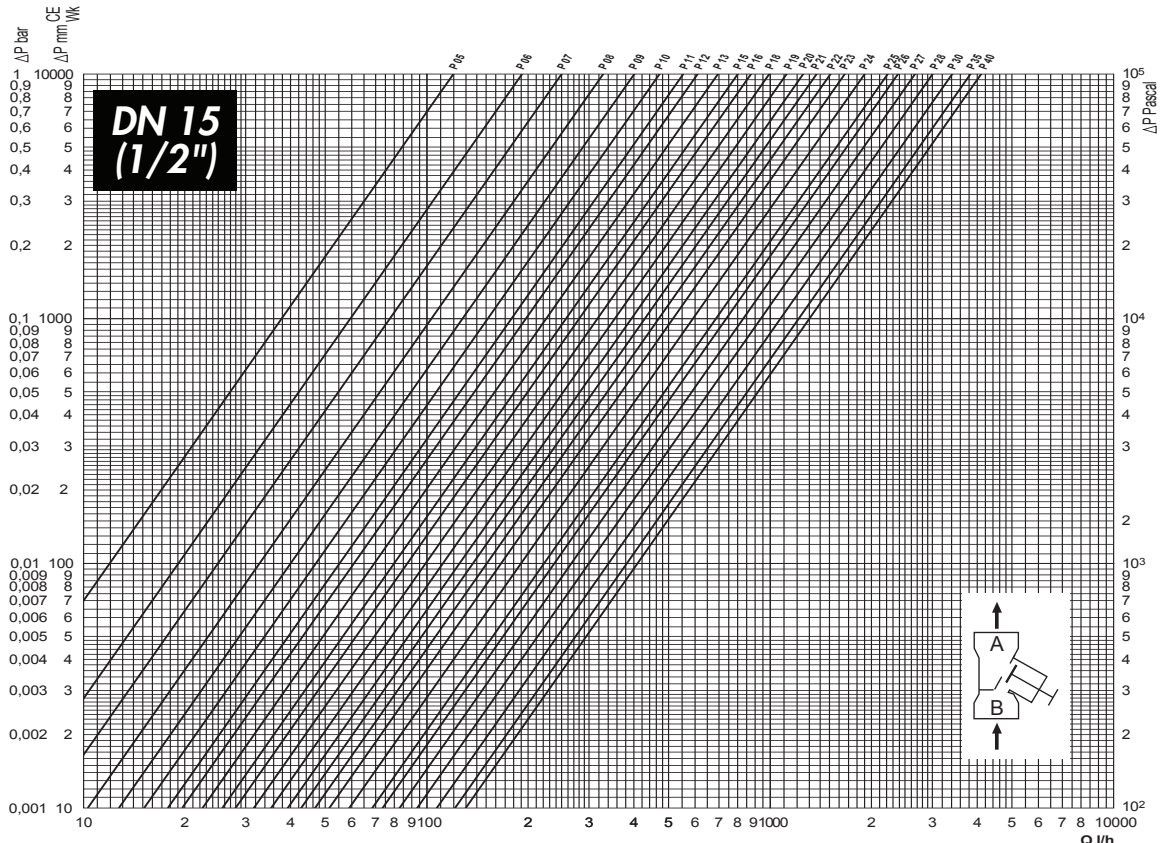
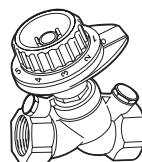
**751**



**752**



**753**



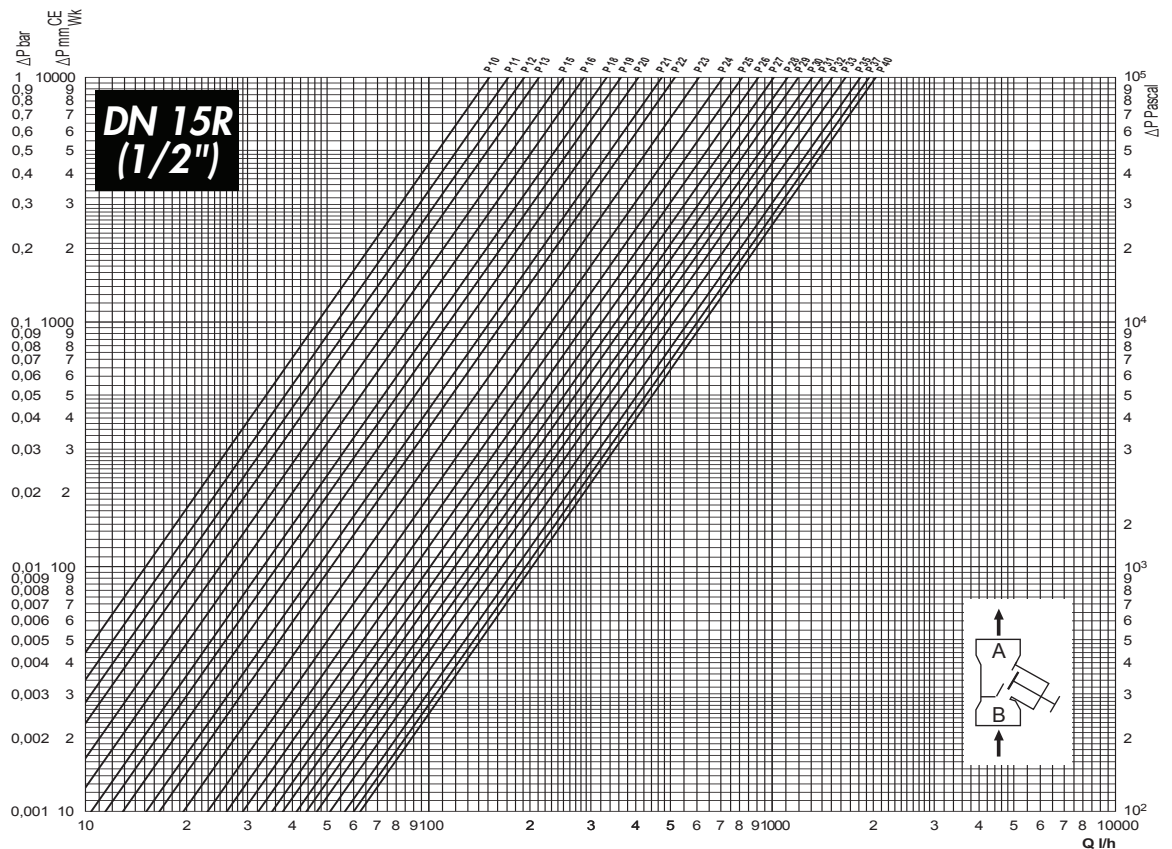
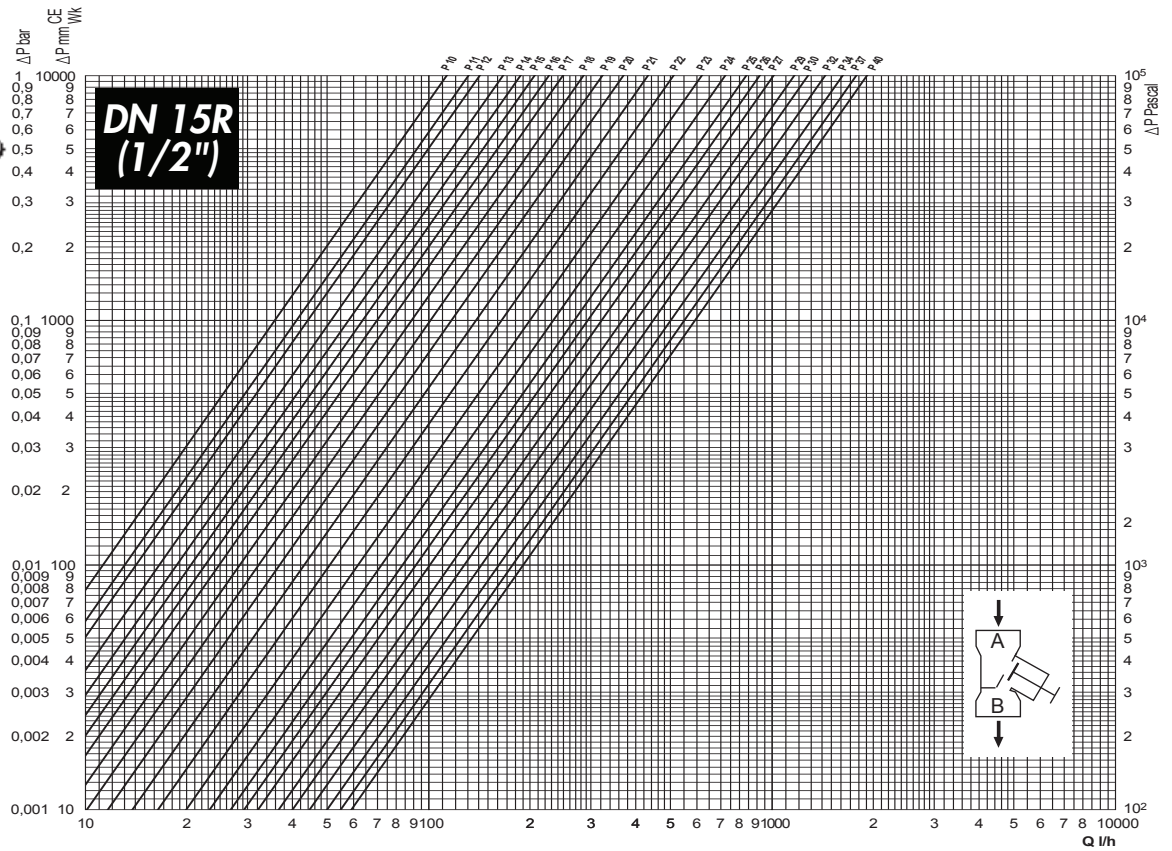


## Strangregulierventile aus Rotguss mit Innengewinde

**750 R**

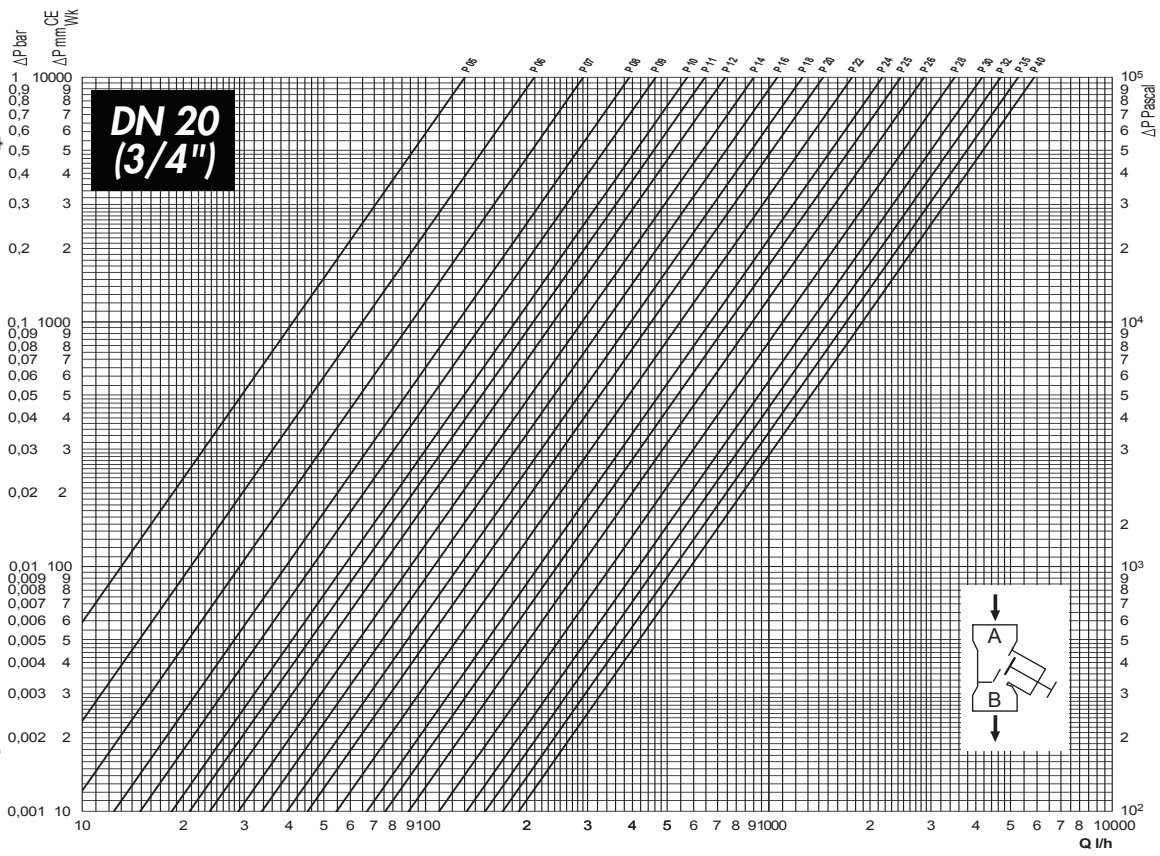


**751 R**

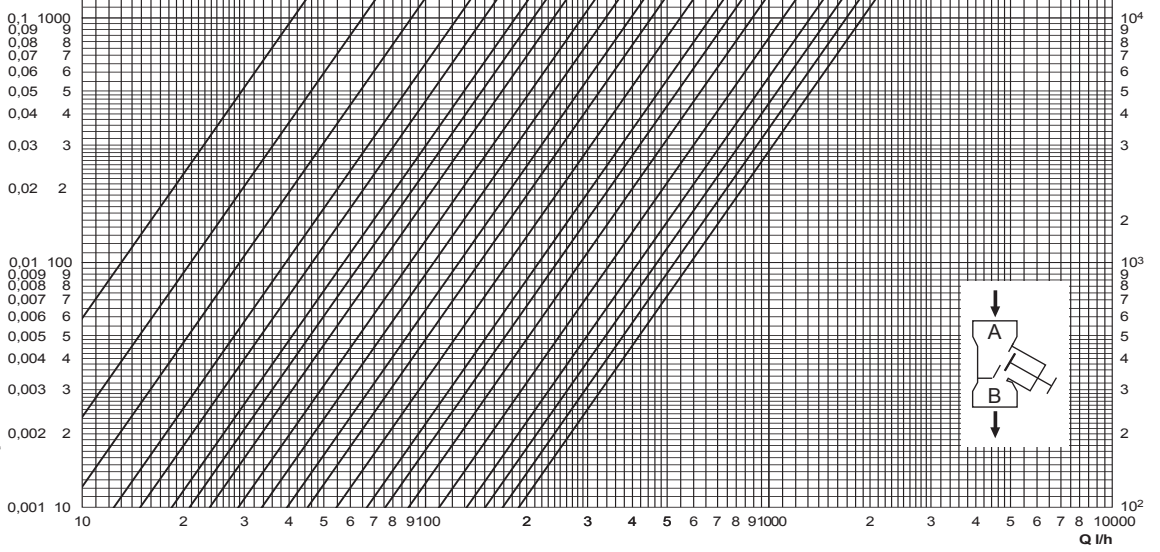


## Strangregulierventile aus Rotguss mit Innengewinde

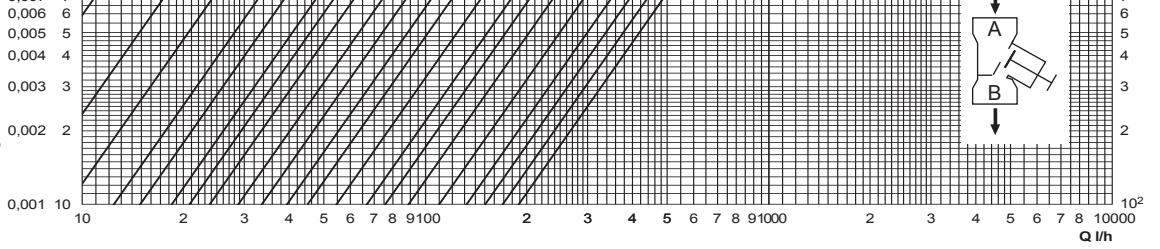
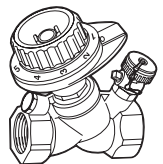
**750**



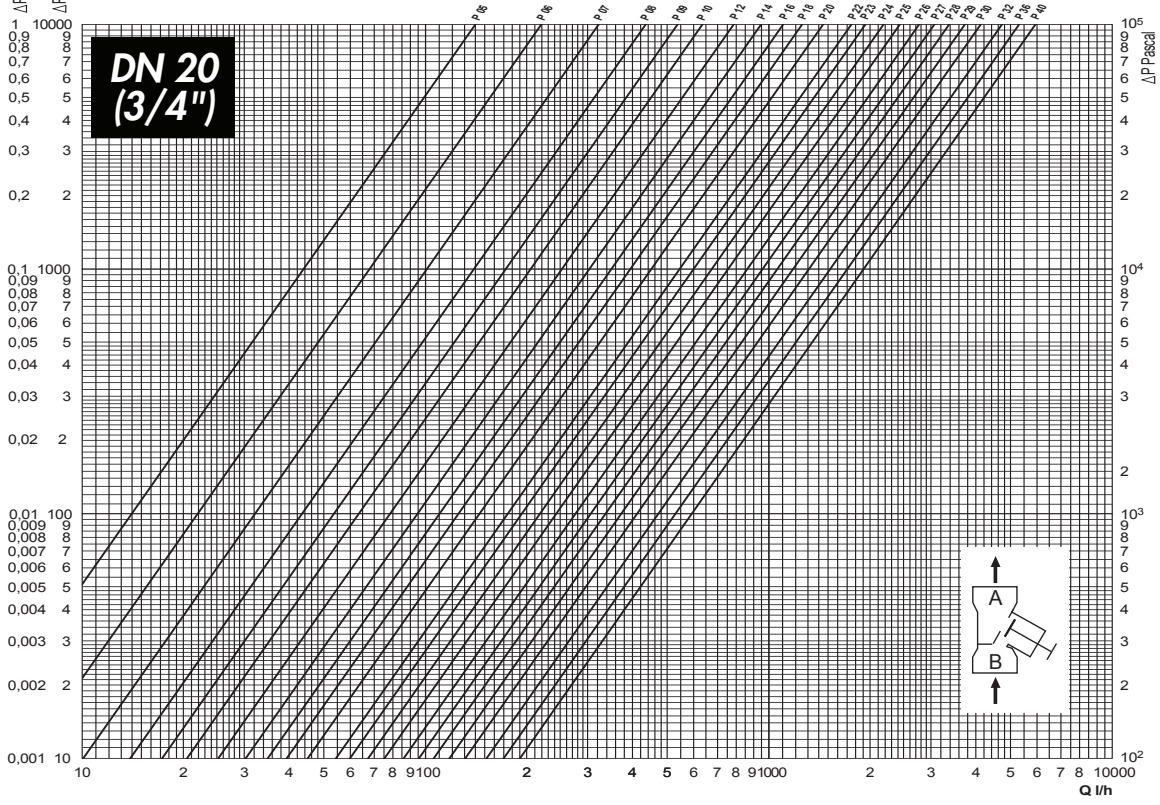
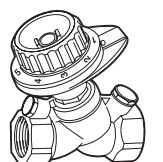
**751**



**752**



**753**

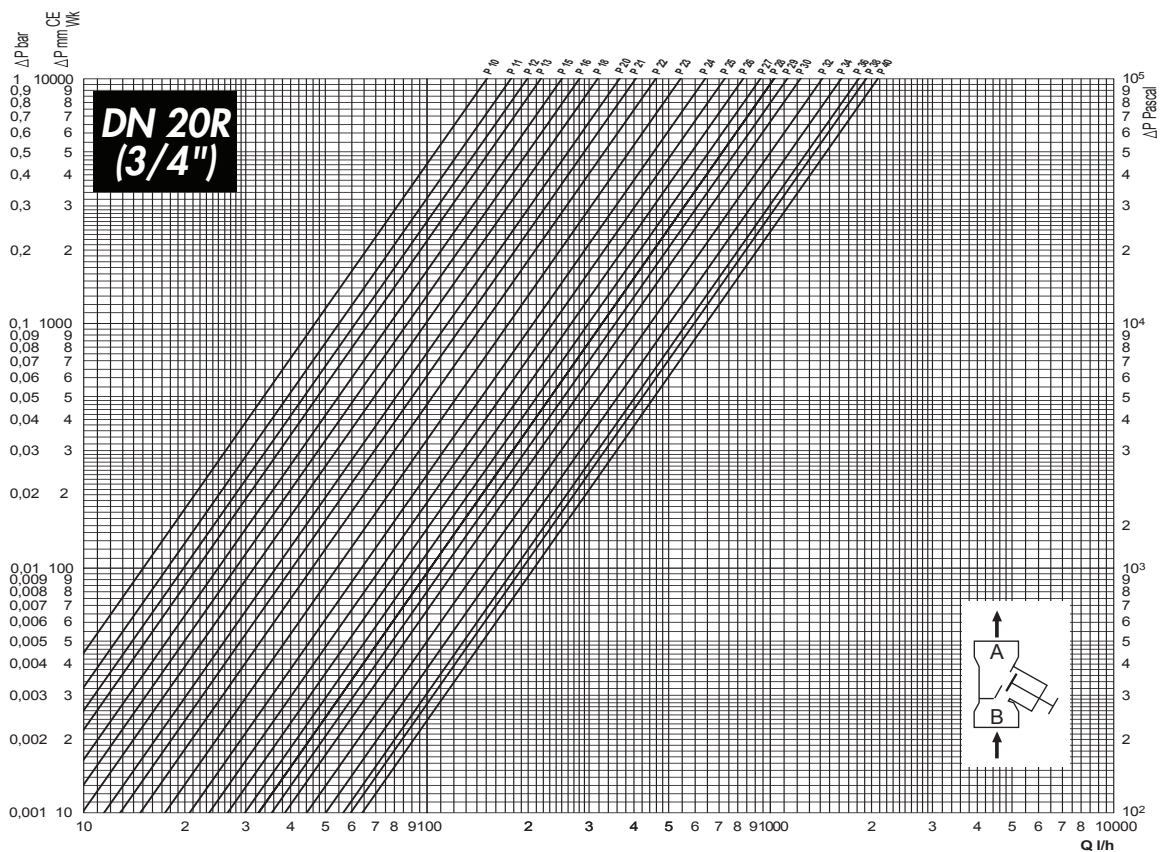
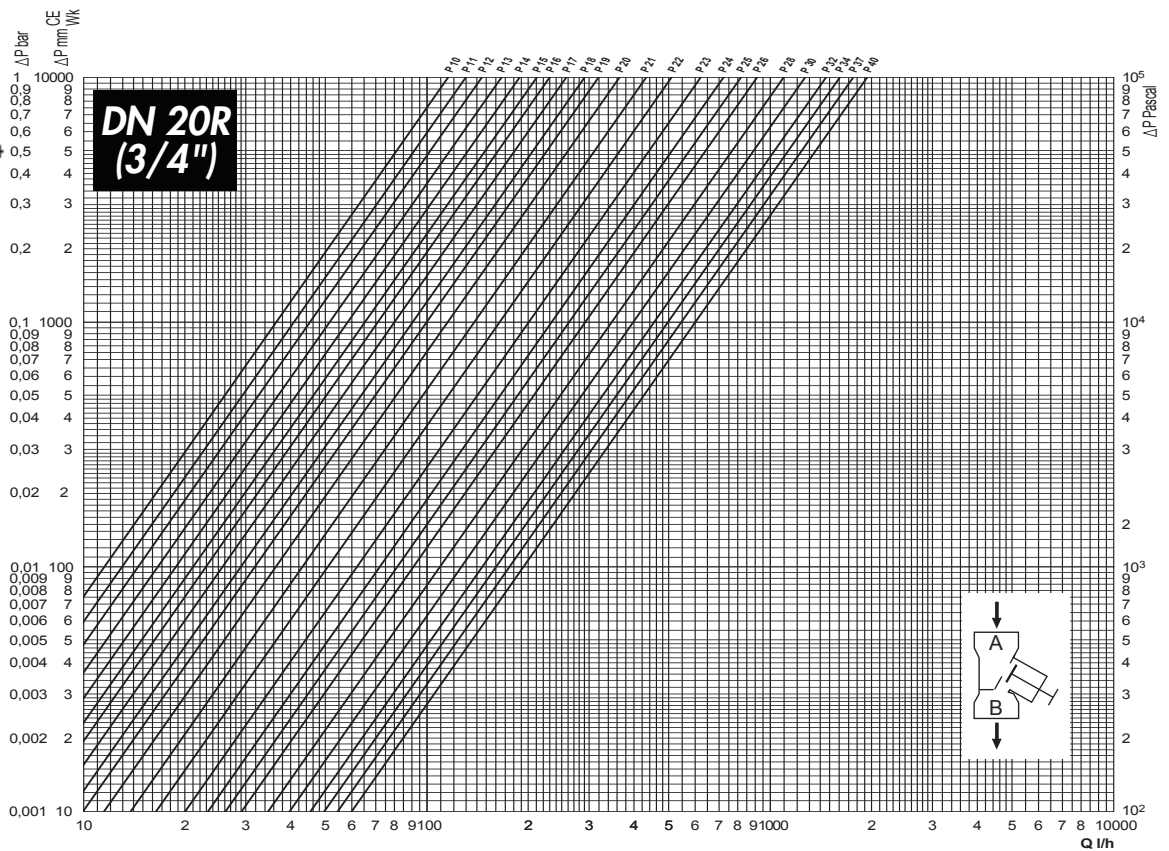


## Strangregulierventile aus Rotguss mit Innengewinde

**750 R**

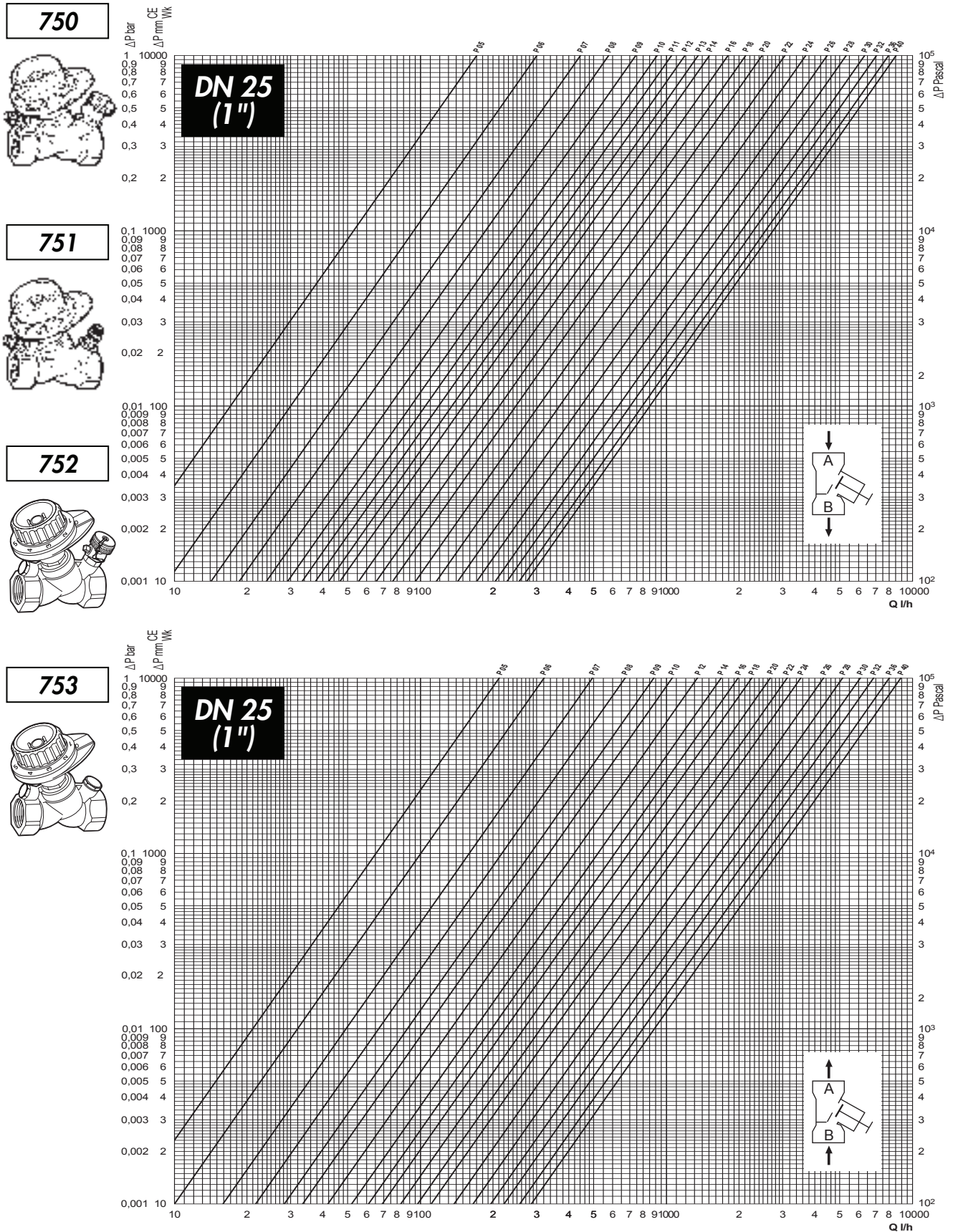


**751 R**

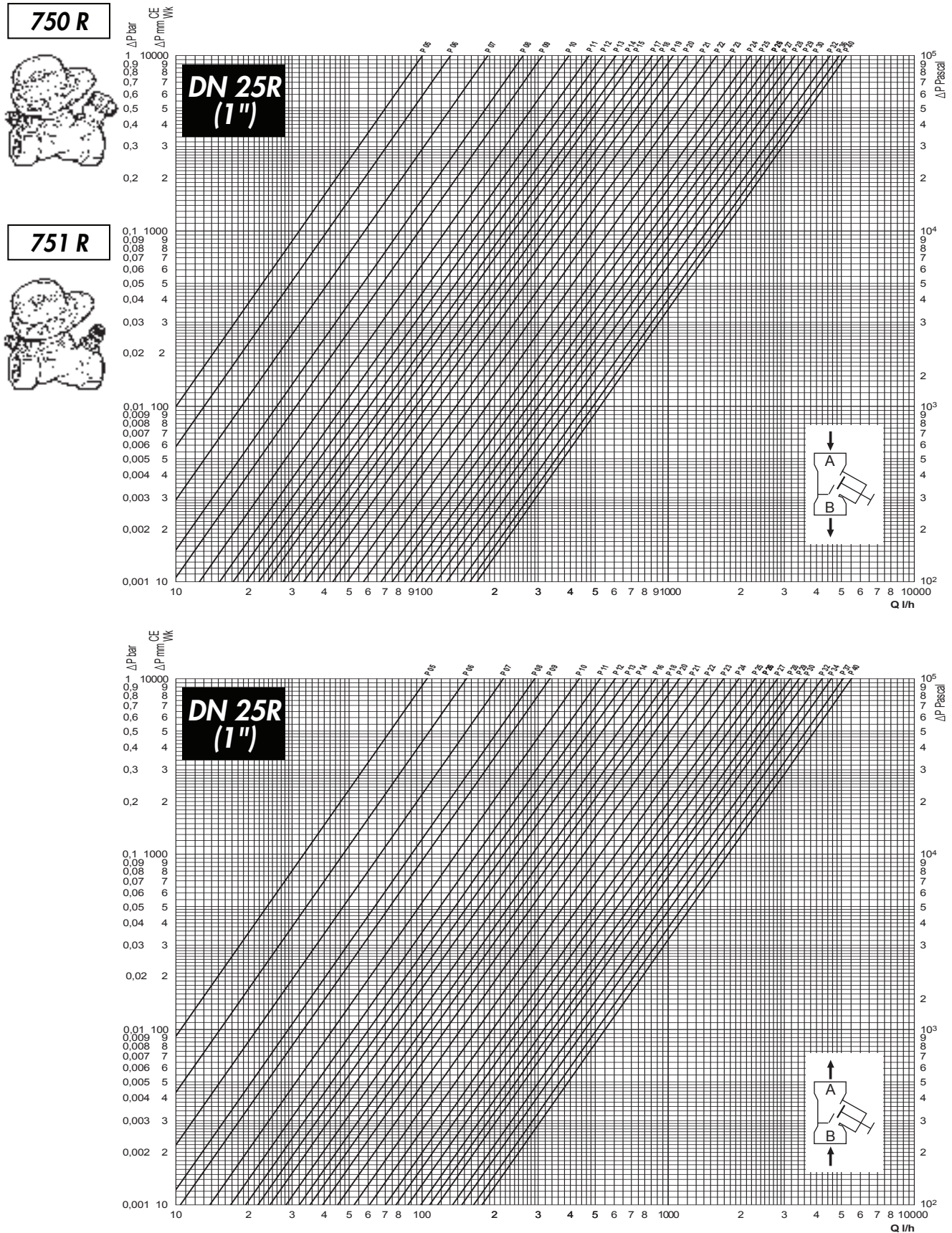




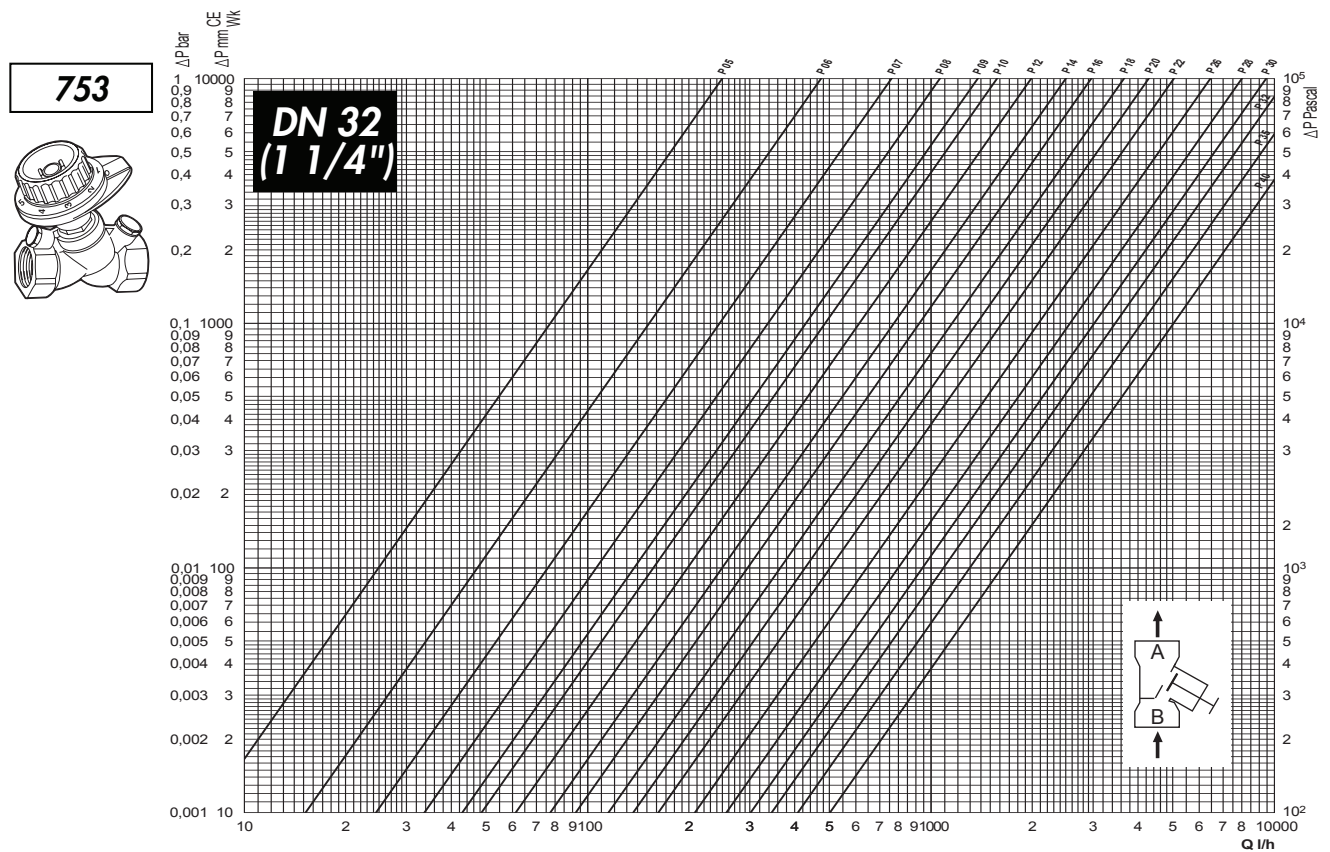
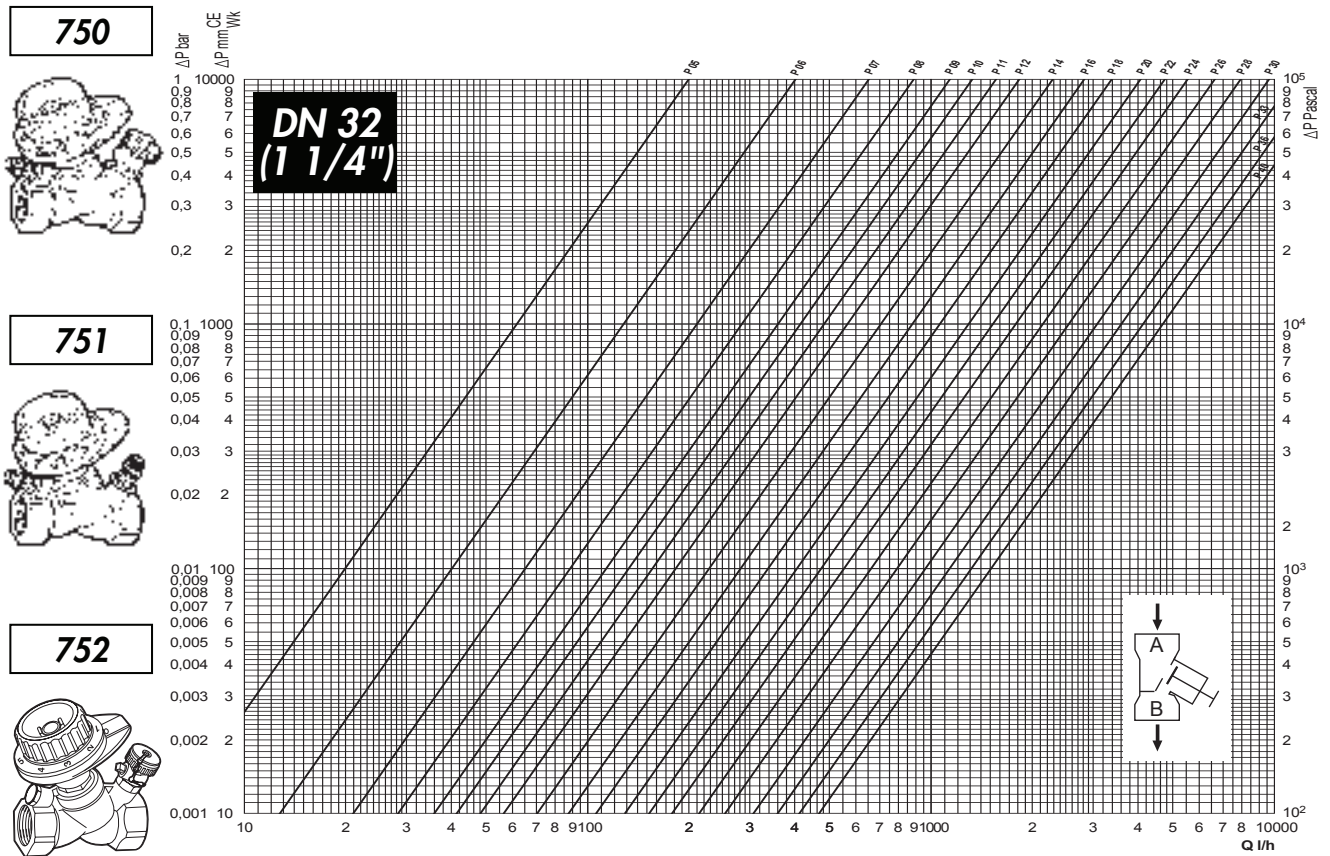
## Strangregulierventile aus Rotguss mit Innengewinde



## Strangregulierventile aus Rotguss mit Innengewinde

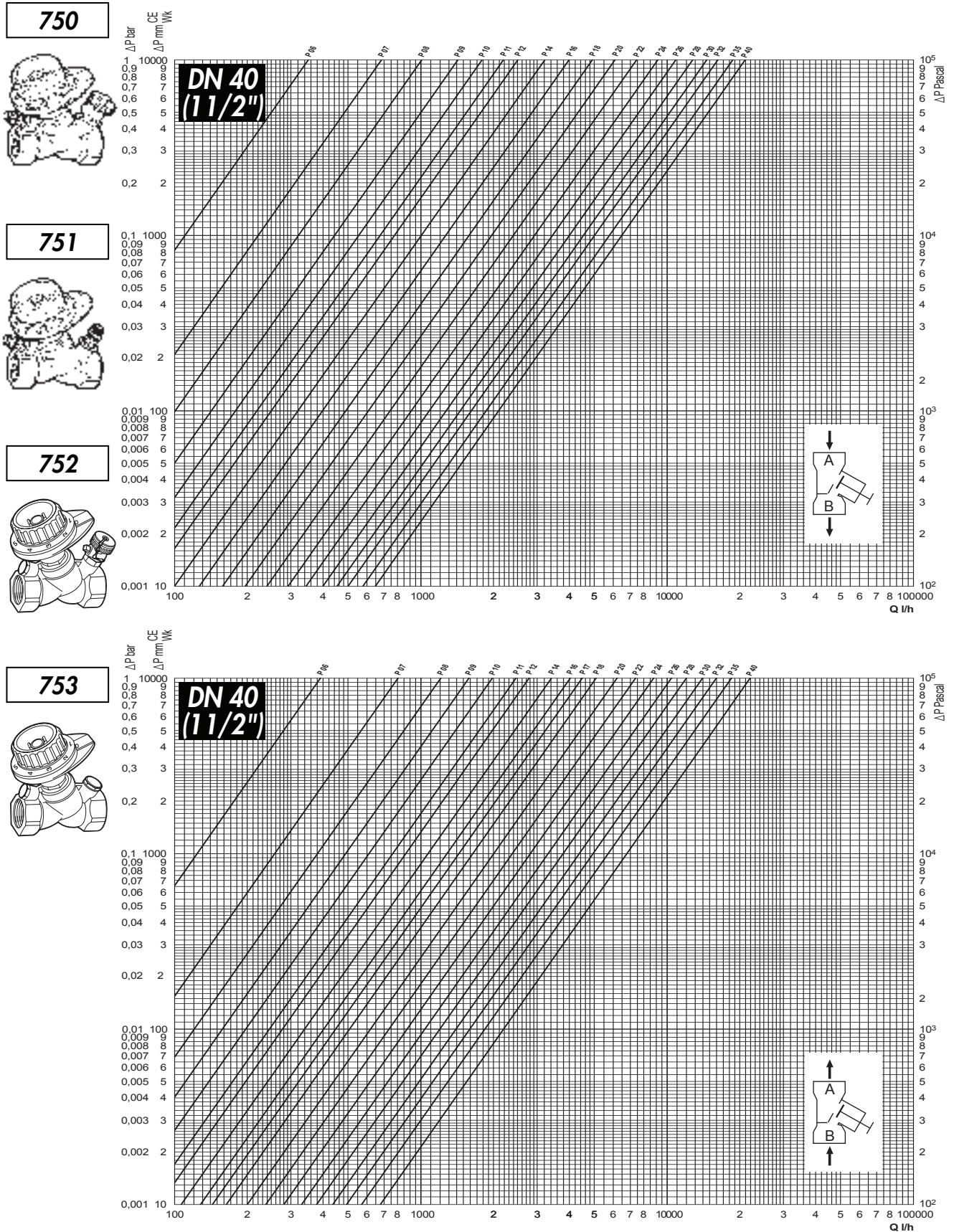


## Strangregulierventile aus Rotguss mit Innengewinde



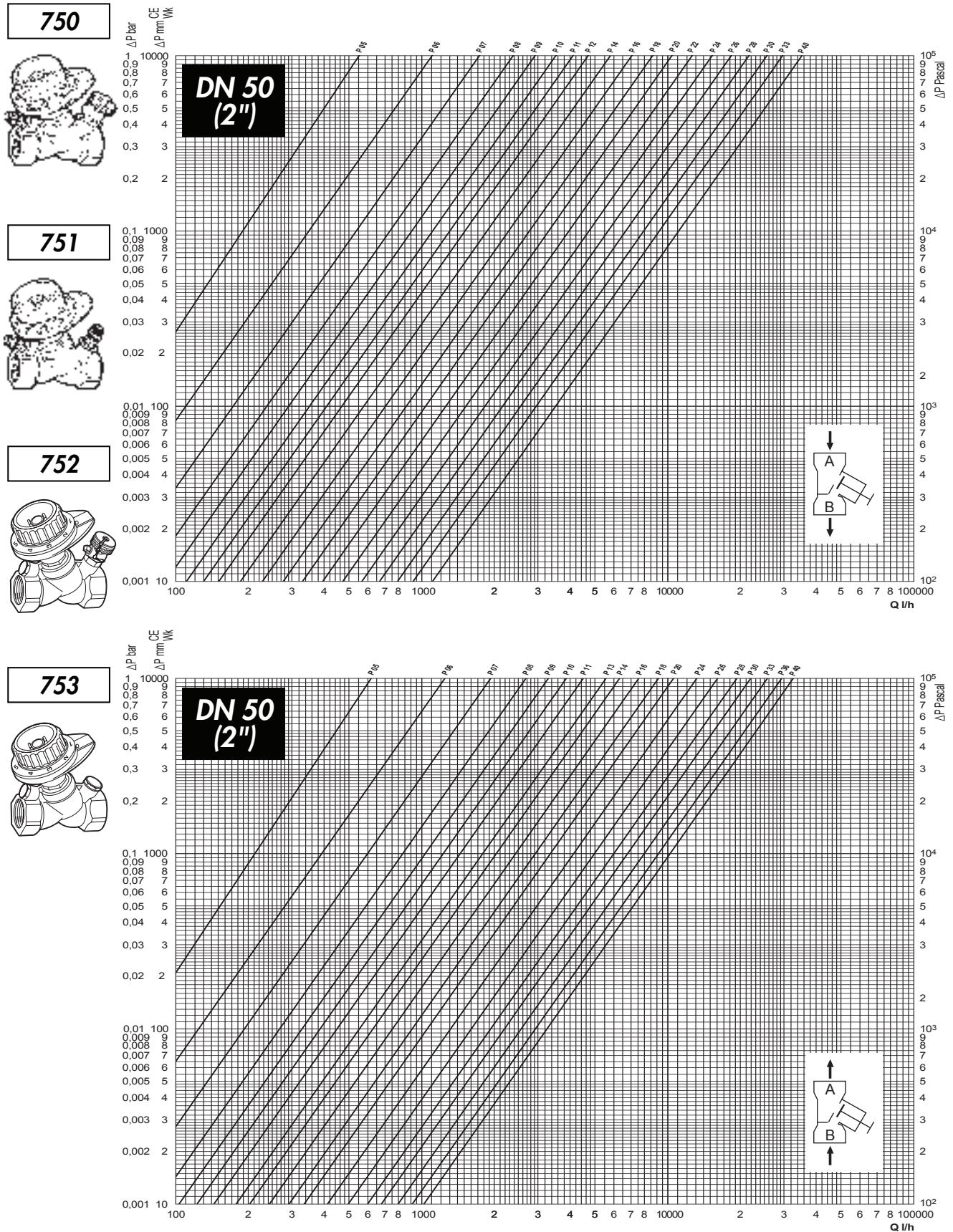


## Strangregulierventile aus Rotguss mit Innengewinde





## Strangregulierventile aus Rotguss mit Innengewinde



## Strangregulierventile aus Rotguss mit Innengewinde

Kv

A → B

| POS / DN | 10 - (3/8")  | 15R - (1/2") | 15 - (1/2") | 20R - (3/4") | 20 - (3/4") | 25R - (1")   | 25 - (1")   | 32 - (1 1/4") | 40 (1 1/2")  | 50 - (2")    |
|----------|--------------|--------------|-------------|--------------|-------------|--------------|-------------|---------------|--------------|--------------|
| 05       |              |              | 0,1         |              | 0,13        | 0,1          | 0,17        | 0,2           | 0,23         | 0,55         |
| 06       |              |              | <b>0,16</b> |              | <b>0,21</b> | <b>0,13</b>  | <b>0,3</b>  | <b>0,4</b>    | <b>0,35</b>  | <b>1,11</b>  |
| 07       |              |              | 0,22        |              | 0,29        | 0,185        | 0,44        | 0,65          | 0,68         | 1,72         |
| 08       |              |              | <b>0,28</b> |              | <b>0,39</b> | <b>0,26</b>  | <b>0,59</b> | <b>0,88</b>   | <b>1,04</b>  | <b>2,37</b>  |
| 09       |              |              | 0,36        |              | 0,46        | 0,315        | 0,73        | 1,13          | 1,42         | 2,9          |
| 10       | <b>0,12</b>  | <b>0,115</b> | <b>0,41</b> | <b>0,115</b> | <b>0,57</b> | <b>0,395</b> | <b>0,91</b> | <b>1,33</b>   | <b>1,78</b>  | <b>3,5</b>   |
| 11       | 0,14         | 0,130        | 0,48        | 0,130        | 0,64        | 0,470        | 1,04        | 1,55          | 2,17         | 4,08         |
| 12       | <b>0,16</b>  | <b>0,140</b> | <b>0,54</b> | <b>0,145</b> | <b>0,73</b> | <b>0,535</b> | <b>1,19</b> | <b>1,8</b>    | <b>2,5</b>   | <b>4,66</b>  |
| 13       | 0,18         | 0,165        | 0,6         | 0,165        | 0,82        | 0,610        | 1,33        | 2,07          | 2,83         | 5,24         |
| 14       | <b>0,205</b> | <b>0,185</b> | <b>0,67</b> | <b>0,185</b> | <b>0,9</b>  | <b>0,675</b> | <b>1,5</b>  | <b>2,29</b>   | <b>3,2</b>   | <b>5,79</b>  |
| 15       | 0,225        | 0,205        | 0,73        | 0,210        | 0,97        | 0,750        | 1,64        | 2,53          | 3,56         | 6,32         |
| 16       | <b>0,25</b>  | <b>0,225</b> | <b>0,8</b>  | <b>0,230</b> | <b>1,05</b> | <b>0,8</b>   | <b>1,78</b> | <b>2,82</b>   | <b>3,99</b>  | <b>7</b>     |
| 17       | 0,265        | 0,250        | 0,87        | 0,255        | 1,13        | 0,875        | 1,95        | 3,14          | 4,4          | 7,8          |
| 18       | <b>0,295</b> | <b>0,285</b> | <b>0,95</b> | <b>0,290</b> | <b>1,24</b> | <b>0,950</b> | <b>2,11</b> | <b>3,37</b>   | <b>4,9</b>   | <b>8,6</b>   |
| 19       | 0,345        | 0,325        | 1,08        | 0,320        | 1,32        | 1,050        | 2,28        | 3,71          | 5,48         | 9,46         |
| 20       | <b>0,390</b> | <b>0,375</b> | <b>1,21</b> | <b>0,365</b> | <b>1,43</b> | <b>1,175</b> | <b>2,49</b> | <b>4,05</b>   | <b>6,1</b>   | <b>10,37</b> |
| 21       | 0,460        | 0,430        | 1,35        | 0,430        | 1,58        | 1,37         | 2,76        | 4,42          | 6,75         | 11,32        |
| 22       | <b>0,540</b> | <b>0,515</b> | <b>1,54</b> | <b>0,515</b> | <b>1,73</b> | <b>1,595</b> | <b>3,04</b> | <b>4,74</b>   | <b>7,45</b>  | <b>12,43</b> |
| 23       | 0,630        | 0,620        | 1,75        | 0,620        | 1,92        | 1,84         | 3,36        | 5,07          | 8,25         | 13,71        |
| 24       | <b>0,740</b> | <b>0,730</b> | <b>1,99</b> | <b>0,720</b> | <b>2,16</b> | <b>2,18</b>  | <b>3,69</b> | <b>5,52</b>   | <b>9,08</b>  | <b>15,1</b>  |
| 25       | 0,840        | 0,840        | 2,28        | 0,815        | 2,43        | 2,425        | 4,05        | 6,03          | 10,04        | 16,54        |
| 26       | <b>0,940</b> | <b>0,925</b> | <b>2,61</b> | <b>0,910</b> | <b>2,83</b> | <b>2,725</b> | <b>4,45</b> | <b>6,63</b>   | <b>10,96</b> | <b>18,15</b> |
| 27       | 1,040        | 1,015        | 2,91        | 1,015        | 3,17        | 3,010        | 4,84        | 7,29          | 11,87        | 19,13        |
| 28       | <b>1,155</b> | <b>1,095</b> | <b>3,18</b> | <b>1,095</b> | <b>3,49</b> | <b>3,34</b>  | <b>5,38</b> | <b>7,99</b>   | <b>12,79</b> | <b>21,44</b> |
| 29       | 1,235        | 1,175        | 3,42        | 1,185        | 3,89        | 3,64         | 5,92        | 8,67          | 13,47        | 23,4         |
| 30       | <b>1,310</b> | <b>1,280</b> | <b>3,63</b> | <b>1,265</b> | <b>4,18</b> | <b>3,99</b>  | <b>6,36</b> | <b>9,61</b>   | <b>14,48</b> | <b>25,52</b> |
| 31       | 1,440        | 1,375        | 3,79        | 1,365        | 4,4         | 4,230        | 6,77        | 10,39         | 15,45        | 27,29        |
| 32       | <b>1,50</b>  | <b>1,470</b> | <b>3,9</b>  | <b>1,465</b> | <b>4,65</b> | <b>4,490</b> | <b>7,04</b> | <b>10,94</b>  | <b>16,32</b> | <b>28,57</b> |
| 33       | 1,580        | 1,565        | 4,02        | 1,525        | 4,88        | 4,65         | 7,26        | 11,51         | 17,12        | 29,87        |
| 34       | <b>1,645</b> | <b>1,620</b> | <b>4,16</b> | <b>1,6</b>   | <b>5,09</b> | <b>4,7</b>   | <b>7,54</b> | <b>11,89</b>  | <b>17,84</b> | <b>30,64</b> |
| 35       | 1,710        | 1,675        | 4,28        | 1,64         | 5,26        | 4,775        | 7,68        | 12,33         | 18,45        | 31,53        |
| 36       | <b>1,755</b> | <b>1,740</b> | <b>4,35</b> | <b>1,69</b>  | <b>5,44</b> | <b>4,895</b> | <b>7,87</b> | <b>12,97</b>  | <b>19,13</b> | <b>32,19</b> |
| 37       | 1,80         | 1,770        | 4,37        | 1,74         | 5,58        | 4,935        | 8,02        | 13,44         | 19,76        | 33,3         |
| 38       | <b>1,85</b>  | <b>1,830</b> | <b>4,41</b> | <b>1,8</b>   | <b>5,7</b>  | <b>5,030</b> | <b>8,22</b> | <b>13,99</b>  | <b>20,2</b>  | <b>34,22</b> |
| 39       | 1,915        | 1,870        | 4,45        | 1,83         | 5,83        | 5,140        | 8,38        | 14,40         | 20,66        | 34,83        |
| 40       | <b>1,95</b>  | <b>1,900</b> | <b>4,47</b> | <b>1,89</b>  | <b>5,9</b>  | <b>5,190</b> | <b>8,52</b> | <b>14,88</b>  | <b>21,09</b> | <b>35,48</b> |

ZETA

A → B

| POS / DN | 10 - (3/8") | 15R - (1/2") | 15 - (1/2") | 20R - (3/4") | 20 - (3/4") | 25R - (1")   | 25 - (1")   | 32 - (1 1/4") | 40 (1 1/2")  | 50 - (2")   |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|---------------|--------------|-------------|
| 5        |             |              | 10279       |              | 20517       | 85855        | 29707       | 61995         | 87450        | 41363       |
| 6        |             |              | <b>4015</b> |              | <b>8124</b> | <b>50802</b> | <b>9539</b> | <b>15884</b>  | <b>39768</b> | <b>9991</b> |
| 7        |             |              | 2123        |              | 4060        | 25085        | 4435        | 6205          | 10479        | 4198        |
| 8        |             |              | <b>1311</b> |              | <b>2303</b> | <b>12700</b> | <b>2509</b> | <b>3372</b>   | <b>4453</b>  | <b>2202</b> |
| 9        |             |              | 793         |              | 1607        | 8653         | 1624        | 2055          | 2375         | 1472        |
| 10       | <b>2659</b> | <b>7773</b>  | <b>611</b>  | <b>25817</b> | <b>1051</b> | <b>5503</b>  | <b>1028</b> | <b>1464</b>   | <b>1511</b>  | <b>1012</b> |
| 11       | 1954        | 6082         | 446         | 20203        | 836         | 3887         | 798         | 1086          | 1017         | 743         |
| 12       | <b>1496</b> | <b>5245</b>  | <b>356</b>  | <b>16239</b> | <b>634</b>  | <b>3000</b>  | <b>607</b>  | <b>802</b>    | <b>766</b>   | <b>570</b>  |
| 13       | 1182        | 3776         | 286         | 12541        | 509         | 2307         | 485         | 606           | 598          | 451         |
| 14       | <b>911</b>  | <b>3003</b>  | <b>229</b>  | <b>9976</b>  | <b>426</b>  | <b>1884</b>  | <b>381</b>  | <b>497</b>    | <b>468</b>   | <b>370</b>  |
| 15       | 756         | 2446         | 191         | 7742         | 363         | 1526         | 318         | 406           | 378          | 309         |
| 16       | <b>613</b>  | <b>2031</b>  | <b>161</b>  | <b>6454</b>  | <b>310</b>  | <b>1341</b>  | <b>270</b>  | <b>328</b>    | <b>301</b>   | <b>252</b>  |
| 17       | 545         | 1645         | 137         | 5251         | 266         | 1121         | 227         | 264           | 247          | 204         |
| 18       | <b>440</b>  | <b>1266</b>  | <b>114</b>  | <b>4060</b>  | <b>223</b>  | <b>951</b>   | <b>194</b>  | <b>229</b>    | <b>199</b>   | <b>167</b>  |
| 19       | 322         | 973          | 89          | 3334         | 195         | 779          | 166         | 190           | 159          | 138         |
| 20       | <b>252</b>  | <b>731</b>   | <b>70</b>   | <b>2563</b>  | <b>168</b>  | <b>622</b>   | <b>138</b>  | <b>159</b>    | <b>129</b>   | <b>115</b>  |
| 21       | 181         | 556          | 56          | 1847         | 137         | 457          | 113         | 133           | 105          | 97          |
| 22       | <b>131</b>  | <b>388</b>   | <b>43</b>   | <b>1287</b>  | <b>114</b>  | <b>337</b>   | <b>93</b>   | <b>116</b>    | <b>86</b>    | <b>80</b>   |
| 23       | 96          | 267          | 34          | 888          | 93          | 254          | 76          | 102           | 70           | 66          |
| 24       | <b>70</b>   | <b>193</b>   | <b>26</b>   | <b>659</b>   | <b>73</b>   | <b>181</b>   | <b>63</b>   | <b>86</b>     | <b>58</b>    | <b>54</b>   |
| 25       | 54          | 146          | 20          | 514          | 58          | 146          | 52          | 72            | 48           | 45          |
| 26       | <b>43</b>   | <b>120</b>   | <b>15</b>   | <b>412</b>   | <b>43</b>   | <b>116</b>   | <b>43</b>   | <b>59</b>     | <b>40</b>    | <b>38</b>   |
| 27       | 35          | 100          | 12          | 331          | 34          | 95           | 37          | 49            | 34           | 34          |
| 28       | <b>29</b>   | <b>86</b>    | <b>10</b>   | <b>285</b>   | <b>28</b>   | <b>77</b>    | <b>30</b>   | <b>41</b>     | <b>29</b>    | <b>27</b>   |
| 29       | 25          | 74           | 9           | 243          | 23          | 65           | 24          | 35            | 26           | 23          |
| 30       | <b>22</b>   | <b>63</b>    | <b>8</b>    | <b>213</b>   | <b>20</b>   | <b>54</b>    | <b>21</b>   | <b>28</b>     | <b>23</b>    | <b>19</b>   |
| 31       | 18          | 54           | 7           | 183          | 18          | 48           | 19          | 24            | 20           | 17          |
| 32       | <b>17</b>   | <b>48</b>    | <b>7</b>    | <b>159</b>   | <b>16</b>   | <b>43</b>    | <b>17</b>   | <b>22</b>     | <b>18</b>    | <b>15</b>   |
| 33       | 15          | 42           | 6           | 147          | 14          | 40           | 16          | 20            | 16           | 14          |
| 34       | <b>14</b>   | <b>39</b>    | <b>6</b>    | <b>133</b>   | <b>13</b>   | <b>39</b>    | <b>15</b>   | <b>18</b>     | <b>15</b>    | <b>13</b>   |
| 35       | 13          | 37           | 6           | 127          | 12          | 38           | 15          | 17            | 14           | 13          |
| 36       | <b>12</b>   | <b>34</b>    | <b>5</b>    | <b>120</b>   | <b>12</b>   | <b>36</b>    | <b>14</b>   | <b>15</b>     | <b>13</b>    | <b>12</b>   |
| 37       | 12          | 33           | 5           | 113          | 11          | 35           | 13          | 14            | 12           | 11          |
| 38       | <b>11</b>   | <b>31</b>    | <b>5</b>    | <b>105</b>   | <b>11</b>   | <b>34</b>    | <b>13</b>   | <b>13</b>     | <b>12</b>    | <b>11</b>   |
| 39       | 10          | 29           | 5           | 102          | 10          | 32           | 12          | 13            | 11           | 10          |
| 40       | <b>10</b>   | <b>28</b>    | <b>5</b>    | <b>96</b>    | <b>10</b>   | <b>32</b>    | <b>12</b>   | <b>12</b>     | <b>11</b>    | <b>10</b>   |

## Strangregulierventile aus Rotguss mit Innengewinde

Kv

B → A

| POS / DN | 10 - (3/8")  | 15R - (1/2") | 15 - (1/2") | 20R - (3/4") | 20 - (3/4") | 25R - (1")   | 25 - (1")   | 32 - (1 1/4") | 40 (1 1/2")  | 50 - (2")    |
|----------|--------------|--------------|-------------|--------------|-------------|--------------|-------------|---------------|--------------|--------------|
| 05       |              |              | 0,12        |              | 0,14        | 0,105        | 0,21        | 0,25          | 0,28         | 0,62         |
| 06       |              |              | <b>0,19</b> |              | <b>0,22</b> | <b>0,155</b> | <b>0,32</b> | <b>0,47</b>   | <b>0,39</b>  | <b>1,23</b>  |
| 07       |              |              | 0,25        |              | 0,32        | 0,215        | 0,49        | 0,76          | 0,8          | 1,92         |
| 08       |              |              | <b>0,33</b> |              | <b>0,43</b> | <b>0,29</b>  | <b>0,67</b> | <b>1,06</b>   | <b>1,21</b>  | <b>2,68</b>  |
| 09       |              |              | 0,4         |              | 0,53        | 0,36         | 0,88        | 1,37          | 1,57         | 3,29         |
| 10       | <b>0,135</b> | <b>0,15</b>  | <b>0,47</b> | <b>0,15</b>  | <b>0,63</b> | <b>0,435</b> | <b>1,03</b> | <b>1,57</b>   | <b>1,96</b>  | <b>3,85</b>  |
| 11       | 0,160        | 0,17         | 0,55        | 0,175        | 0,7         | 0,525        | 1,19        | 1,8           | 2,45         | 4,47         |
| 12       | <b>0,190</b> | <b>0,19</b>  | <b>0,61</b> | <b>0,195</b> | <b>0,78</b> | <b>0,605</b> | <b>1,33</b> | <b>1,96</b>   | <b>2,75</b>  | <b>5,04</b>  |
| 13       | 0,210        | 0,21         | 0,69        | 0,215        | 0,86        | 0,675        | 1,51        | 2,2           | 3,06         | 5,51         |
| 14       | <b>0,225</b> | <b>0,235</b> | <b>0,74</b> | <b>0,235</b> | <b>0,95</b> | <b>0,755</b> | <b>1,65</b> | <b>2,5</b>    | <b>3,41</b>  | <b>6,32</b>  |
| 15       | 0,245        | 0,25         | 0,8         | 0,25         | 1,04        | 0,825        | 1,8         | 2,66          | 3,74         | 6,94         |
| 16       | <b>0,260</b> | <b>0,285</b> | <b>0,87</b> | <b>0,28</b>  | <b>1,11</b> | <b>0,875</b> | <b>1,95</b> | <b>2,96</b>   | <b>4,02</b>  | <b>7,56</b>  |
| 17       | 0,275        | 0,31         | 0,93        | 0,295        | 1,19        | 0,95         | 2,09        | 3,29          | 4,49         | 8,27         |
| 18       | <b>0,3</b>   | <b>0,33</b>  | <b>0,99</b> | <b>0,315</b> | <b>1,26</b> | <b>1,005</b> | <b>2,25</b> | <b>3,64</b>   | <b>5,14</b>  | <b>9,08</b>  |
| 19       | 0,32         | 0,365        | 1,12        | 0,33         | 1,33        | 1,075        | 2,43        | 3,98          | 5,83         | 9,82         |
| 20       | <b>0,35</b>  | <b>0,415</b> | <b>1,24</b> | <b>0,365</b> | <b>1,44</b> | <b>1,125</b> | <b>2,65</b> | <b>4,27</b>   | <b>6,2</b>   | <b>10,59</b> |
| 21       | 0,395        | 0,475        | 1,36        | 0,405        | 1,55        | 1,240        | 2,9         | 4,67          | 6,83         | 11,38        |
| 22       | <b>0,470</b> | <b>0,525</b> | <b>1,51</b> | <b>0,46</b>  | <b>1,72</b> | <b>1,445</b> | <b>3,1</b>  | <b>5</b>      | <b>7,37</b>  | <b>10,88</b> |
| 23       | 0,560        | 0,610        | 1,65        | 0,545        | 1,92        | 1,69         | 3,22        | 5,19          | 8,03         | 11,99        |
| 24       | <b>0,670</b> | <b>0,715</b> | <b>1,92</b> | <b>0,635</b> | <b>2,17</b> | <b>1,975</b> | <b>3,55</b> | <b>5,34</b>   | <b>8,71</b>  | <b>13,19</b> |
| 25       | 0,775        | 0,82         | 2,22        | 0,725        | 2,41        | 2,275        | 3,93        | 5,69          | 9,58         | 14,61        |
| 26       | <b>0,865</b> | <b>0,905</b> | <b>2,38</b> | <b>0,825</b> | <b>2,73</b> | <b>2,505</b> | <b>4,3</b>  | <b>6,48</b>   | <b>10,4</b>  | <b>16,10</b> |
| 27       | 0,980        | 1,010        | 2,68        | 0,925        | 3,06        | 2,78         | 4,72        | 7,24          | 11,32        | 17,61        |
| 28       | <b>1,105</b> | <b>1,105</b> | <b>3,02</b> | <b>1,025</b> | <b>3,39</b> | <b>3,07</b>  | <b>5,15</b> | <b>8</b>      | <b>11,95</b> | <b>19,1</b>  |
| 29       | 1,21         | 1,185        | 3,24        | 1,12         | 3,75        | 3,4          | 5,58        | 8,84          | 12,92        | 20,46        |
| 30       | <b>1,32</b>  | <b>1,305</b> | <b>3,42</b> | <b>1,215</b> | <b>4,14</b> | <b>3,67</b>  | <b>6,05</b> | <b>9,47</b>   | <b>13,88</b> | <b>21,84</b> |
| 31       | 1,435        | 1,395        | 3,53        | 1,31         | 4,45        | 3,985        | 6,48        | 10,28         | 14,99        | 23,15        |
| 32       | <b>1,56</b>  | <b>1,510</b> | <b>3,61</b> | <b>1,405</b> | <b>4,67</b> | <b>4,19</b>  | <b>6,86</b> | <b>11,02</b>  | <b>15,99</b> | <b>24,44</b> |
| 33       | 1,645        | 1,630        | 3,7         | 1,515        | 4,83        | 4,38         | 7,18        | 11,86         | 16,82        | 25,68        |
| 34       | <b>1,730</b> | <b>1,760</b> | <b>3,75</b> | <b>1,610</b> | <b>5</b>    | <b>4,53</b>  | <b>7,46</b> | <b>12,52</b>  | <b>17,68</b> | <b>26,94</b> |
| 35       | 1,820        | 1,815        | 3,81        | 1,725        | 5,14        | 4,805        | 7,72        | 13,19         | 18,48        | 28,08        |
| 36       | <b>1,9</b>   | <b>1,915</b> | <b>3,88</b> | <b>1,82</b>  | <b>5,33</b> | <b>5,015</b> | <b>8</b>    | <b>14</b>     | <b>19,15</b> | <b>29,22</b> |
| 37       | 1,965        | 1,93         | 3,94        | 1,865        | 5,51        | 5,155        | 8,22        | 14,7          | 19,83        | 30,14        |
| 38       | <b>2,05</b>  | <b>1,965</b> | <b>4</b>    | <b>1,935</b> | <b>5,64</b> | <b>5,295</b> | <b>8,43</b> | <b>15,24</b>  | <b>20,54</b> | <b>31,07</b> |
| 39       | 2,11         | 1,995        | 4,06        | 2            | 5,82        | 5,425        | 8,63        | 15,72         | 21,16        | 31,97        |
| 40       | <b>2,15</b>  | <b>2,040</b> | <b>4,13</b> | <b>2,085</b> | <b>5,95</b> | <b>5,5</b>   | <b>8,84</b> | <b>16,11</b>  | <b>21,66</b> | <b>32,48</b> |

ZETA

B → A

| POS / DN | 10 - (3/8") | 15R - (1/2") | 15 - (1/2") | 20R - (3/4") | 20 - (3/4") | 25R - (1")   | 25 - (1")   | 32 - (1 1/4") | 40 (1 1/2")  | 50 - (2")   |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|---------------|--------------|-------------|
| 05       |             |              | 7138        |              | 17671       | 77873        | 19468       | 43052         | 60643        | 32196       |
| 06       |             |              | <b>2847</b> |              | <b>7386</b> | <b>35736</b> | <b>8384</b> | <b>11596</b>  | <b>31162</b> | <b>8221</b> |
| 07       |             |              | 1644        |              | 3355        | 18573        | 3576        | 4534          | 7482         | 3371        |
| 08       |             |              | <b>944</b>  |              | <b>1821</b> | <b>10209</b> | <b>1913</b> | <b>2323</b>   | <b>3271</b>  | <b>1730</b> |
| 09       |             |              | 642         |              | 1239        | 6625         | 1106        | 1390          | 1943         | 1145        |
| 10       | <b>2101</b> | <b>4569</b>  | <b>465</b>  | <b>15175</b> | <b>860</b>  | <b>4537</b>  | <b>814</b>  | <b>1064</b>   | <b>1246</b>  | <b>835</b>  |
| 11       | 1496        | 3557         | 340         | 11149        | 707         | 3115         | 607         | 808           | 798          | 619         |
| 12       | <b>1061</b> | <b>2847</b>  | <b>276</b>  | <b>8979</b>  | <b>560</b>  | <b>2346</b>  | <b>485</b>  | <b>678</b>    | <b>633</b>   | <b>488</b>  |
| 13       | 868         | 2331         | 216         | 7386         | 465         | 1884         | 376         | 536           | 511          | 408         |
| 14       | <b>756</b>  | <b>1861</b>  | <b>188</b>  | <b>6183</b>  | <b>377</b>  | <b>1506</b>  | <b>315</b>  | <b>418</b>    | <b>412</b>   | <b>309</b>  |
| 15       | 638         | 1645         | 161         | 5463         | 318         | 1261         | 264         | 369           | 342          | 257         |
| 16       | <b>566</b>  | <b>1266</b>  | <b>136</b>  | <b>4355</b>  | <b>276</b>  | <b>1121</b>  | <b>227</b>  | <b>298</b>    | <b>296</b>   | <b>217</b>  |
| 17       | 506         | 1070         | 119         | 3923         | 242         | 951          | 197         | 241           | 238          | 181         |
| 18       | <b>425</b>  | <b>944</b>   | <b>105</b>  | <b>3441</b>  | <b>215</b>  | <b>850</b>   | <b>170</b>  | <b>197</b>    | <b>181</b>   | <b>150</b>  |
| 19       | 374         | 772          | 82          | 3135         | 193         | 743          | 146         | 164           | 141          | 128         |
| 20       | <b>313</b>  | <b>597</b>   | <b>67</b>   | <b>2563</b>  | <b>166</b>  | <b>678</b>   | <b>123</b>  | <b>143</b>    | <b>125</b>   | <b>110</b>  |
| 21       | 245         | 456          | 56          | 2082         | 142         | 558          | 102         | 119           | 103          | 95          |
| 22       | <b>173</b>  | <b>373</b>   | <b>45</b>   | <b>1614</b>  | <b>116</b>  | <b>411</b>   | <b>89</b>   | <b>104</b>    | <b>88</b>    | <b>105</b>  |
| 23       | 122         | 276          | 38          | 1150         | 93          | 301          | 83          | 97            | 74           | 86          |
| 24       | <b>85</b>   | <b>201</b>   | <b>28</b>   | <b>847</b>   | <b>72</b>   | <b>220</b>   | <b>68</b>   | <b>91</b>     | <b>63</b>    | <b>71</b>   |
| 25       | 64          | 153          | 21          | 650          | 59          | 166          | 56          | 80            | 52           | 58          |
| 26       | <b>51</b>   | <b>126</b>   | <b>18</b>   | <b>502</b>   | <b>46</b>   | <b>137</b>   | <b>46</b>   | <b>62</b>     | <b>44</b>    | <b>48</b>   |
| 27       | 40          | 101          | 14          | 399          | 37          | 111          | 39          | 50            | 37           | 40          |
| 28       | <b>31</b>   | <b>84</b>    | <b>11</b>   | <b>325</b>   | <b>30</b>   | <b>91</b>    | <b>32</b>   | <b>41</b>     | <b>34</b>    | <b>34</b>   |
| 29       | 26          | 73           | 10          | 272          | 24          | 74           | 28          | 33            | 29           | 30          |
| 30       | <b>22</b>   | <b>60</b>    | <b>9</b>    | <b>231</b>   | <b>20</b>   | <b>64</b>    | <b>23</b>   | <b>29</b>     | <b>25</b>    | <b>26</b>   |
| 31       | 19          | 53           | 8           | 199          | 17          | 54           | 20          | 25            | 21           | 23          |
| 32       | <b>16</b>   | <b>45</b>    | <b>8</b>    | <b>173</b>   | <b>16</b>   | <b>49</b>    | <b>18</b>   | <b>21</b>     | <b>19</b>    | <b>21</b>   |
| 33       | 14          | 39           | 8           | 149          | 15          | 45           | 17          | 19            | 17           | 19          |
| 34       | <b>13</b>   | <b>33</b>    | <b>7</b>    | <b>132</b>   | <b>14</b>   | <b>42</b>    | <b>15</b>   | <b>17</b>     | <b>15</b>    | <b>17</b>   |
| 35       | 12          | 31           | 7           | 115          | 13          | 37           | 14          | 15            | 14           | 16          |
| 36       | <b>11</b>   | <b>28</b>    | <b>7</b>    | <b>103</b>   | <b>12</b>   | <b>34</b>    | <b>13</b>   | <b>13</b>     | <b>13</b>    | <b>15</b>   |
| 37       | 10          | 28           | 7           | 98           | 11          | 32           | 13          | 12            | 12           | 14          |
| 38       | <b>9</b>    | <b>27</b>    | <b>6</b>    | <b>91</b>    | <b>11</b>   | <b>31</b>    | <b>12</b>   | <b>11</b>     | <b>11</b>    | <b>13</b>   |
| 39       | 9           | 26           | 6           | 85           | 10          | 29           | 12          | 11            | 11           | 12          |
| 40       | <b>8</b>    | <b>25</b>    | <b>6</b>    | <b>79</b>    | <b>10</b>   | <b>28</b>    | <b>11</b>   | <b>10</b>     | <b>10</b>    | <b>12</b>   |

## Strangregulierventile aus Rotguss mit Innengewinde

**KV = f (POS)**

$$\frac{KV}{10} = a \left(\frac{POS}{100}\right)^6 + b \left(\frac{POS}{100}\right)^5 + c \left(\frac{POS}{100}\right)^4 + d \left(\frac{POS}{100}\right)^3 + e \left(\frac{POS}{100}\right)^2 + f \left(\frac{POS}{100}\right) + g$$

Ref. 750, 751, 752, 753

**A → B**

| Ref.               | a           | b            | c          | d           | e         | f         | g        |
|--------------------|-------------|--------------|------------|-------------|-----------|-----------|----------|
| 750 DN 10 (3/8")   | 0           | 735,09       | -950,02    | 456,38      | -99,287   | 10,104    | -0,37544 |
| 750 DN 15 (1/2")   | 9505        | -12035,9     | 5734,5     | -1288,5     | 144,59    | -7,093    | 0,13257  |
| 750 DN 15R (1/2")  | 0           | 522,9        | -686,41    | 331,13      | -71,004   | 7,078     | -0,25453 |
| 750 DN 20 (3/4")   | 11717,24906 | -15645,99472 | 7962,12398 | -1938,40488 | 237,25161 | -12,96649 | 0,26923  |
| 750 DN 20R (3/4")  | 85,19594    | 544,38891    | -789,58669 | 390,58409   | -85,40707 | 8,6644    | -0,31906 |
| 750 DN 25 (1")     | 15799,4107  | -20905,9142  | 10560,9535 | -2564,0382  | 315,3046  | -17,1108  | 0,3506   |
| 750 DN 25R (1")    | 13160,20409 | -17048,8957  | 8398,95946 | -1979,97337 | 236,23736 | -12,8985  | 0,26634  |
| 750 DN 32 (1" 1/4) | 15986,5903  | -22045,7515  | 11634,3086 | -2951,3652  | 380,0543  | -21,1124  | 0,4385   |
| 750 DN 40 (1" 1/2) | 12241,9475  | -15910,5619  | 7670,9523  | -1713,7994  | 194,5505  | -7,506    | 0,0748   |
| 750 DN 50 (2")     | 44895,1453  | -59741,462   | 30166,2535 | -7264,5978  | 884,5544  | -45,8264  | 0,8913   |

**B → A**

| Ref.               | a          | b            | c          | d           | e         | f         | g        |
|--------------------|------------|--------------|------------|-------------|-----------|-----------|----------|
| 750 DN 10 (3/8")   | 0          | 665,66       | -914,25    | 467,41      | -108,2    | 11,635    | -0,45237 |
| 750 DN 15 (1/2")   | 11647,9    | -14799       | 7149,7     | -1651,7     | 191,93    | -9,9402   | 0,19723  |
| 750 DN 15R (1/2")  | 0          | 144,97       | -266,67    | 159,05      | -38,728   | 4,3133    | -0,16342 |
| 750 DN 20 (3/4")   | 13720,5165 | -18277,75721 | 9314,43309 | -2278,80476 | 280,00551 | -15,41176 | 0,32139  |
| 750 DN 20R (3/4")  | 644,09     | -534,83      | -25,518    | 137,79      | -44,494   | 5,5722    | -0,22876 |
| 750 DN 25 (1")     | 11639,9276 | -15986,7209  | 8381,1298  | -2105,0572  | 265,5967  | -14,2726  | 0,2897   |
| 750 DN 25R (1")    | 9704,76258 | -12924,8184  | 6546,85171 | -1580,70841 | 191,51653 | -10,3287  | 0,20997  |
| 750 DN 32 (1" 1/4) | 2714,3461  | -5530,0418   | 3686,3903  | -1064,5273  | 146,7672  | -6,8148   | 0,1158   |
| 750 DN 40 (1" 1/2) | 7468,9465  | -10646,9713  | 5596,4072  | -1353,9843  | 164,9218  | -6,1441   | 0,0528   |
| 750 DN 50 (2")     | 27828,9956 | -39204,9859  | 21009,0322 | -5368,2746  | 686,7419  | -35,2273  | 0,6764   |



**750 DN 15 (1/2") - A → B**

**POS = 2 ÷ 100**

**= 0,2**

$$\frac{KV}{10} = kv = 9505 \times \left(\frac{20}{100}\right)^6 + (-12035,9) \times \left(\frac{20}{100}\right)^5 + 5734,5 \left(\frac{20}{100}\right)^4 + (-1288,5) \times \left(\frac{20}{100}\right)^3 + 144,59 \times \left(\frac{20}{100}\right)^2 + (-7,093) \times \left(\frac{20}{100}\right) + 0,13257 = 0,121$$

(KV = kv x 10)

**KV = 1,21** 😊



## Strangregulierventile aus Rotguss mit Innengewinde



### 750 DN 15 (1/2") - A → B

$$KV = 1,21$$

$$kv = (1,21 : 10) = 0,121$$

$$\begin{aligned} POS/100 = pos &= 1344,99 \times (0,121)^6 + (-1785,016) \times (0,121)^5 \\ &+ 896,4754 \times (0,121)^4 + (-201,41631) \times (0,121)^3 \\ &+ 15,871321 \times (0,121)^2 + 1,1402068 \times 0,121 + 0,038045 = 0,201 \\ (POS = pos \times 100) \end{aligned}$$

$$POS = 20$$



### POS = f (KV)

$$\frac{pos}{100} = a \left(\frac{KV}{10}\right)^6 + b \left(\frac{KV}{10}\right)^5 + c \left(\frac{KV}{10}\right)^4 + d \left(\frac{KV}{10}\right)^3 + e \left(\frac{KV}{10}\right)^2 + f \left(\frac{KV}{10}\right) + g$$

Ref. 750, 751, 752, 753

#### A → B

| Ref.               | a         | b          | c         | d          | e         | f         | g        |
|--------------------|-----------|------------|-----------|------------|-----------|-----------|----------|
| 750 DN 10 (3/8")   | 0         | 10515,1    | -6234,7   | 1445,193   | -160,0003 | 9,29043   | 0,008    |
| 750 DN 15 (1/2")   | 1344,99   | -1785,016  | 896,4754  | -201,41631 | 15,871321 | 1,1402068 | 0,038045 |
| 750 DN 15R (1/2")  | 0         | 17740,7    | -9701,66  | 2036,239   | -201,9978 | 10,37434  | 0,00638  |
| 750 DN 20 (3/4")   | 202,22    | -389,4     | 286,3934  | -95,89918  | 12,388184 | 0,5865269 | 0,042544 |
| 750 DN 20R (3/4")  | -143102   | 99475,4    | -27493,11 | 3886,143   | -296,2356 | 12,54851  | -0,01139 |
| 750 DN 25 (1")     | 3,377118  | -11,082344 | 14,793574 | -8,74796   | 1,59622   | 0,587196  | 0,04061  |
| 750 DN 25R (1")    | 347,93    | -513,636   | 279,4524  | -61,14628  | 1,060716  | 1,7275695 | 0,034891 |
| 750 DN 32 (1" 1/4) | -0,059481 | 0,037701   | 0,423948  | -0,677742  | 0,108007  | 0,432194  | 0,04179  |
| 750 DN 40 (1" 1/2) | 0,038761  | -0,246912  | 0,590402  | -0,596959  | 0,121112  | 0,296739  | 0,046986 |
| 750 DN 50 (2")     | 0,000551  | -0,007164  | 0,037399  | -0,083011  | 0,036463  | 0,172476  | 0,039541 |

#### B → A

| Ref.               | a         | b          | c           | d          | e           | f          | g        |
|--------------------|-----------|------------|-------------|------------|-------------|------------|----------|
| 750 DN 10 (3/8")   | 0         | 9194,4     | -6010,5     | 1513,6     | -180,93     | 11,007     | -0,0268  |
| 750 DN 15 (1/2")   | 599,61    | -866,128   | 510,4556    | -139,16562 | 13,806733   | 0,9593089  | 0,03725  |
| 750 DN 15R (1/2")  | 0         | 14561,8    | -8336,93    | 1836,544   | -194,7929   | 10,97944   | -0,0291  |
| 750 DN 20 (3/4")   | 164,29    | -345,627   | 277,6144    | -101,91031 | 15,072875   | 0,2971868  | 0,045301 |
| 750 DN 20R (3/4")  | -43017,24 | 39087,017  | -14015,5419 | 2549,9794  | -248,085874 | 13,1941309 | -0,05745 |
| 750 DN 25 (1")     | 2,575325  | -10,732039 | 16,791518   | -11,603711 | 3,064769    | 0,323563   | 0,045381 |
| 750 DN 25R (1")    | 408,46    | -702,435   | 452,7251    | -129,29587 | 13,121302   | 0,9453458  | 0,041806 |
| 750 DN 32 (1" 1/4) | 0,18534   | -1,051987  | 2,317325    | -2,348268  | 0,883819    | 0,276957   | 0,043797 |
| 750 DN 40 (1" 1/2) | 0,019876  | -0,137983  | 0,368667    | -0,430308  | 0,116353    | 0,273679   | 0,045638 |
| 750 DN 50 (2")     | 0,000291  | -0,007362  | 0,053746    | -0,15623   | 0,163438    | 0,098314   | 0,044975 |