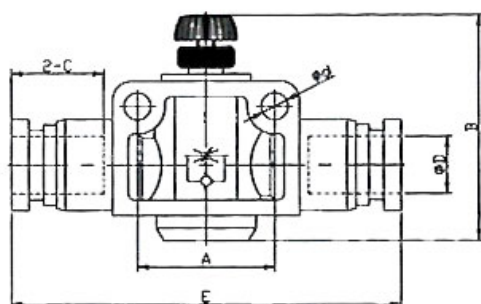
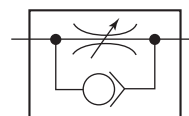


Unsere Schnellsteckverbinderserie aus Kunststoff bzw. vernickeltem Messing.  
Die Teile sind einsetzbar in Verbindung mit Kunststoffschläuchen und Kupferrohren.

|                       |                                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------------------------|
| Einsatzbereiche:      | Luft, Vakuum                                                                                        |
| Material:             | Kunststoff bzw. Messing vernickelt                                                                  |
| Andruckring:          | Kunststoff                                                                                          |
| Temperaturbereich:    | -20 °C bis 80 °C                                                                                    |
| Dichtfläche:          | O-Ring im Gehäuse bei zylindrischer Ausführung<br>PTFE-Gewindebeschichtung bei konischer Ausführung |
| Medium:               | Druckluft, Gase, Flüssigkeiten, soweit mit den Materialien verträglich                              |
| Empfohlener Schlauch: | PU oder PA (Nylon)                                                                                  |

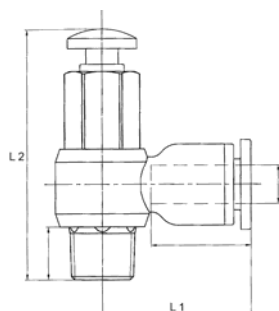


181.0808

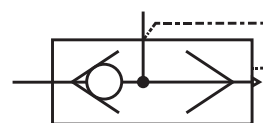


## Drosselrückschlagventil mit Steckanschluss, gerade Form

| Artikel Nr. | Typen Nr. | Ø D<br>mm | Arbeitsdruck<br>max.<br>bar | Ø d<br>mm | A<br>mm | B (max)<br>mm | B (min)<br>mm | E<br>mm | C<br>mm |
|-------------|-----------|-----------|-----------------------------|-----------|---------|---------------|---------------|---------|---------|
| 109972      | 181.0404  | 4         | 15                          | 3,2       | 14,0    | 30,8          | 28,3          | 39,5    | 14,4    |
| 109973      | 181.0606  | 6         | 15                          | 4,3       | 20,0    | 47,2          | 41,0          | 47,1    | 15,4    |
| 109974      | 181.0808  | 8         | 15                          | 4,3       | 22,0    | 51,5          | 44,4          | 52,0    | 16,7    |
| 109975      | 181.1010  | 10        | 15                          | 4,3       | 26,0    | 55,0          | 48,0          | 62,3    | 19,7    |
| 109976      | 181.1212  | 12        | 15                          | 4,3       | 32,0    | 57,7          | 52,3          | 73,6    | 22,3    |



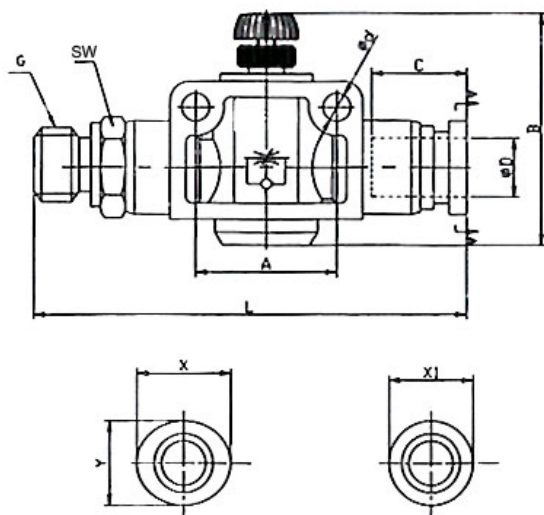
281.018-6



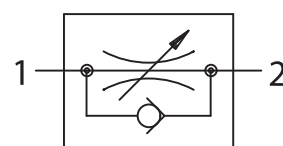
**Manuell betätigtes Schnellentlüftungsventil**, Winkelform, Außengewinde konisch mit Gewindebeschichtung

Temperaturbereich: -10 °C bis 80 °C

| Artikel Nr. | Typen Nr. | Ø D<br>mm | Gewinde | Arbeitsdruck<br>max.<br>bar | L1<br>mm | L2<br>mm | SW<br>mm |
|-------------|-----------|-----------|---------|-----------------------------|----------|----------|----------|
| 135987      | 281.018-6 | 6         | R 1/8   | 10                          | 22,9     | 38,3     | 10       |

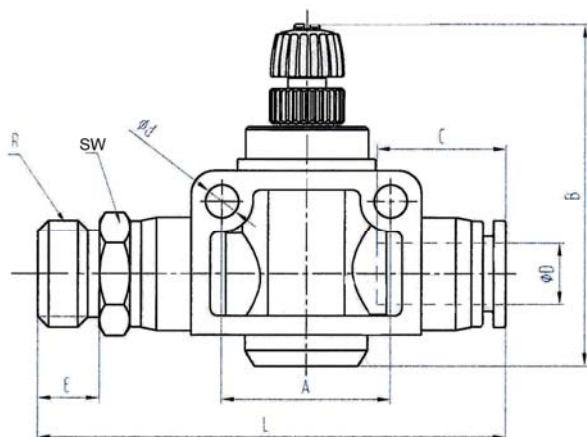


183.014-6

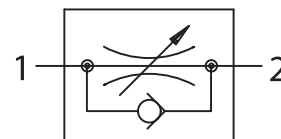


**Drosselrückschlagventil** mit zylindrischem Außengewinde und Steckanschluss, gerade Form, Drosselung von Schlauch zu Gewinde

| Artikel Nr. | Typen Nr.  | L<br>mm | A<br>mm | B<br>(max)<br>mm | B<br>(min)<br>mm | C<br>mm | Ø D<br>mm | Arbeitsdruck<br>max.<br>bar | Ø d<br>mm | Gewinde | SW<br>mm | Ø P<br>mm |
|-------------|------------|---------|---------|------------------|------------------|---------|-----------|-----------------------------|-----------|---------|----------|-----------|
| 109947      | 183.018-4  | 46,5    | 14,0    | 31,2             | 28,9             | 14,3    | 4         | 15                          | 3,2       | G 1/8   | 12       | 14,0      |
| 109948      | 183.018-6  | 53,7    | 20,0    | 46,8             | 41,1             | 15,4    | 6         | 15                          | 4,3       | G 1/8   | 12       | 14,0      |
| 109949      | 183.018-8  | 58,1    | 22,0    | 47,4             | 41,7             | 16,4    | 8         | 15                          | 4,3       | G 1/8   | 14       | 14,0      |
| 109950      | 183.014-6  | 55,1    | 20,0    | 47,0             | 40,8             | 15,4    | 6         | 15                          | 4,3       | G 1/4   | 14       | 17,0      |
| 109951      | 183.014-8  | 59,6    | 22,0    | 50,8             | 44,8             | 16,4    | 8         | 15                          | 4,3       | G 1/4   | 17       | 17,0      |
| 109952      | 183.014-10 | 70,3    | 26,0    | 54,0             | 47,4             | 18,7    | 10        | 15                          | 4,3       | G 1/4   | 17       | 17,0      |
| 109953      | 183.014-12 | 80,6    | 32,0    | 55,3             | 50,3             | 22,3    | 12        | 15                          | 4,3       | G 1/4   | 21       | 21,0      |
| 109954      | 183.038-8  | 61,0    | 22,0    | 50,4             | 44,3             | 16,4    | 8         | 15                          | 4,3       | G 3/8   | 17       | 20,0      |
| 109955      | 183.038-10 | 71,6    | 26,0    | 55,3             | 48,5             | 18,7    | 10        | 15                          | 4,3       | G 3/8   | 20       | 20,0      |
| 109956      | 183.038-12 | 81,3    | 32,0    | 57,1             | 51,8             | 22,3    | 12        | 15                          | 4,3       | G 3/8   | 21       | 21,0      |
| 109957      | 183.012-10 | 76,0    | 26,0    | 54,5             | 48,3             | 18,7    | 10        | 15                          | 4,3       | G 1/2   | 19       | 24,0      |
| 109958      | 183.012-12 | 85,9    | 32,0    | 56,8             | 51,5             | 22,3    | 12        | 15                          | 4,3       | G 1/2   | 24       | 24,0      |

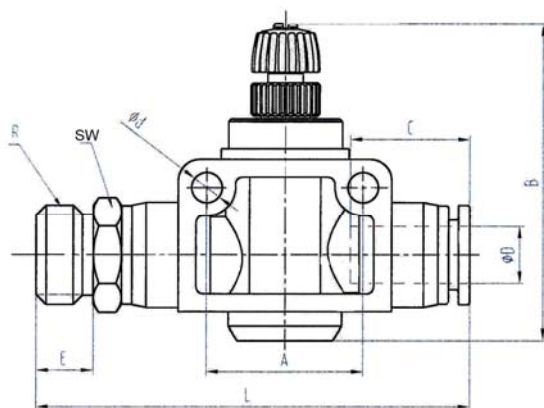


182.014-6

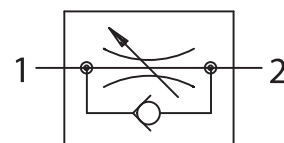


**Drosselrückschlagventil** mit konischem Außengewinde und Steckanschluss, gerade Form, Drosselung von Schlauch zu Gewinde

| Artikel Nr. | Typen Nr.  | L<br>mm | A<br>mm | B<br>(max)<br>mm | B<br>(min)<br>mm | C<br>mm | Ø D<br>mm | Arbeitsdruck<br>max.<br>bar | Ø d<br>mm | Gewinde | SW<br>mm | E<br>mm |
|-------------|------------|---------|---------|------------------|------------------|---------|-----------|-----------------------------|-----------|---------|----------|---------|
| 109959      | 182.018-4  | 45,9    | 14,0    | 29,0             | 26,9             | 14,4    | 4         | 15                          | 3,2       | R 1/8   | 10       | 5,5     |
| 109960      | 182.018-6  | 53,6    | 20,0    | 43,0             | 37,8             | 15,4    | 6         | 15                          | 4,3       | R 1/8   | 12       | 5,5     |
| 109961      | 182.018-8  | 58,4    | 22,0    | 47,2             | 41,5             | 16,4    | 8         | 15                          | 4,3       | R 1/8   | 14       | 5,5     |
| 109962      | 182.014-6  | 56,2    | 20,0    | 43,6             | 38,0             | 15,4    | 6         | 15                          | 4,3       | R 1/4   | 14       | 6,5     |
| 109963      | 182.014-8  | 60,6    | 22,0    | 47,1             | 41,1             | 16,4    | 8         | 15                          | 4,3       | R 1/4   | 14       | 6,5     |
| 109964      | 182.014-10 | 71,4    | 26,0    | 55,2             | 47,6             | 18,7    | 10        | 15                          | 4,3       | R 1/4   | 17       | 6,5     |
| 109965      | 182.014-12 | 82,3    | 32,0    | 55,6             | 51,8             | 22,3    | 12        | 15                          | 4,3       | R 1/4   | 21       | 9,5     |
| 109966      | 182.038-8  | 62,1    | 22,0    | 47,2             | 41,9             | 16,4    | 8         | 15                          | 4,3       | R 3/8   | 17       | 7,5     |
| 109967      | 182.038-10 | 71,8    | 26,0    | 54,9             | 48,3             | 18,7    | 10        | 15                          | 4,3       | R 3/8   | 17       | 7,5     |
| 109968      | 182.038-12 | 83,0    | 32,0    | 55,9             | 51,2             | 22,3    | 12        | 15                          | 4,3       | R 3/8   | 21       | 7,5     |
| 109969      | 182.012-10 | 75,4    | 26,0    | 54,6             | 48,0             | 18,7    | 10        | 15                          | 4,3       | R 1/2   | 21       | 9,5     |
| 109970      | 182.012-12 | 86,2    | 32,0    | 56,6             | 52,0             | 22,3    | 12        | 15                          | 4,3       | R 1/2   | 21       | 6,5     |

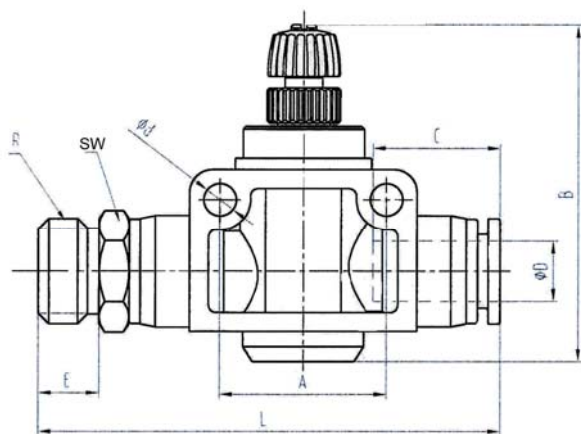


286.014-6

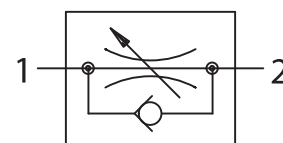


**Drosselrückschlagventil** mit zylindrischem Außengewinde und Steckanschluss, gerade Form, Drosselung von Gewinde zu Schlauch

| Artikel Nr. | Typen Nr.  | L mm | A mm | B (max) mm | B (min) mm | C mm | Ø D mm | Arbeitsdruck max. bar | Ø d mm | Gewinde | SW mm | E mm |
|-------------|------------|------|------|------------|------------|------|--------|-----------------------|--------|---------|-------|------|
| 135811      | 286.018-4  | 46,5 | 14,0 | 28,0       | 31,0       | 14,4 | 4      | 15                    | 3,2    | G 1/8   | 12    | 5,5  |
| 135812      | 286.018-6  | 54,1 | 20,0 | 40,7       | 47,5       | 15,5 | 6      | 15                    | 4,3    | G 1/8   | 14    | 5,5  |
| 135813      | 286.018-8  | 58,8 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | G 1/8   | 14    | 5,5  |
| 135814      | 286.014-6  | 55,6 | 20,0 | 40,7       | 47,5       | 15,5 | 6      | 15                    | 4,3    | G 1/4   | 14    | 6,5  |
| 135815      | 286.014-8  | 60,0 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | G 1/4   | 17    | 6,5  |
| 135816      | 286.014-10 | 69,9 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | G 1/4   | 17    | 6,5  |
| 135817      | 286.014-12 | 80,4 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | G 1/4   | 21    | 6,5  |
| 135818      | 286.038-8  | 61,5 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | G 3/8   | 17    | 7,5  |
| 135819      | 286.038-10 | 71,4 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | G 3/8   | 20    | 7,5  |
| 135820      | 286.038-12 | 81,4 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | G 3/8   | 21    | 7,5  |
| 135821      | 286.012-10 | 74,9 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | G 1/2   | 19    | 9,5  |
| 135822      | 286.012-12 | 84,9 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | G 1/2   | 24    | 9,5  |

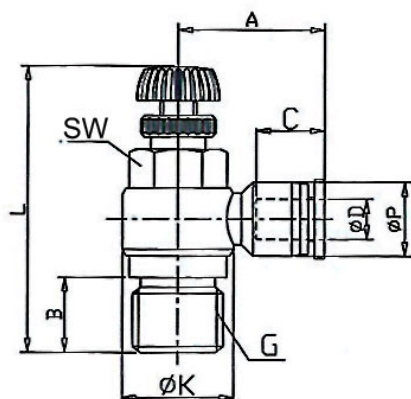


287.014-6

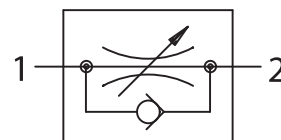


**Drosselrückschlagventil** mit konischem Außengewinde und Steckanschluss, gerade Form, Drosselung von Gewinde zu Schlauch

| Artikel Nr. | Typen Nr.  | L mm | A mm | B (max) mm | B (min) mm | C mm | Ø D mm | Arbeitsdruck max. bar | Ø d mm | Gewinde | SW mm | E mm |
|-------------|------------|------|------|------------|------------|------|--------|-----------------------|--------|---------|-------|------|
| 135823      | 287.018-4  | 46,0 | 14,0 | 28,0       | 31,0       | 14,4 | 4      | 15                    | 3,2    | R 1/8   | 10    | 7,5  |
| 135824      | 287.018-6  | 54,1 | 20,0 | 40,7       | 47,5       | 15,5 | 6      | 15                    | 4,3    | R 1/8   | 12    | 7,5  |
| 135825      | 287.018-8  | 59,0 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | R1/8    | 14    | 7,5  |
| 135826      | 287.014-6  | 56,6 | 20,0 | 40,7       | 47,5       | 15,5 | 6      | 15                    | 4,3    | R 1/4   | 14    | 9,5  |
| 135827      | 287.014-8  | 61,0 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | R 1/4   | 14    | 9,5  |
| 135828      | 287.014-10 | 71,4 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | R 1/4   | 17    | 9,5  |
| 135829      | 287.014-12 | 82,8 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | R1/4    | 21    | 9,5  |
| 135830      | 287.038-8  | 62,5 | 22,0 | 44,1       | 51,8       | 16,8 | 8      | 15                    | 4,3    | R 3/8   | 17    | 10,5 |
| 135831      | 287.038-10 | 72,4 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | R 3/8   | 17    | 10,5 |
| 135832      | 287.038-12 | 83,8 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | R 3/8   | 21    | 10,5 |
| 135833      | 287.012-10 | 75,9 | 26,0 | 47,7       | 55,3       | 19,5 | 10     | 15                    | 4,3    | R 1/2   | 21    | 13,5 |
| 135834      | 287.012-12 | 86,8 | 32,0 | 52,0       | 58,0       | 22,3 | 12     | 15                    | 4,3    | R 1/2   | 21    | 13,5 |

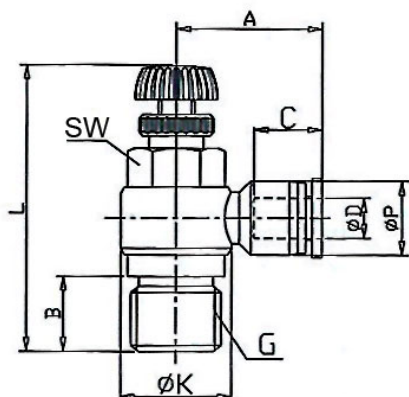


187.014-10

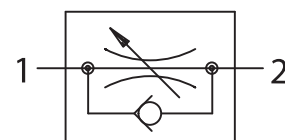


**Drosselrückschlagventil mit Zuluftdrosselung**, regulierbar mit Rändelschraube, Winkelform, drehbar, Außengewinde zylindrisch mit O-Ring (NBR)

| Artikel Nr. | Typen Nr.  | L (max) mm | L (min) mm | A mm | B mm | C mm | Ø D mm | Arbeitsdruck max. bar | Ø P mm | Ø K mm | Gewinde | SW mm |
|-------------|------------|------------|------------|------|------|------|--------|-----------------------|--------|--------|---------|-------|
| 109977      | 187.005-4  | 31,9       | 29,0       | 20,0 | 3,5  | 14,9 | 4      | 15                    | -      | -      | M5      | 8     |
| 109978      | 187.005-6  | 31,9       | 29,0       | 21,7 | 3,5  | 15,4 | 6      | 15                    | -      | -      | M5      | 8     |
| 109979      | 187.018-4  | 44,0       | 37,8       | 22,3 | 6,0  | 14,9 | 4      | 15                    | 10,0   | 14,4   | G 1/8   | 10    |
| 109980      | 187.018-6  | 44,0       | 37,8       | 22,9 | 6,0  | 15,4 | 6      | 15                    | 12,0   | 14,4   | G 1/8   | 10    |
| 109981      | 187.018-8  | 44,0       | 37,8       | 25,3 | 6,0  | 17,8 | 8      | 15                    | 14,0   | 14,4   | G 1/8   | 10    |
| 109982      | 187.018-10 | 44,0       | 37,8       | 30,1 | 6,0  | 20,4 | 10     | 15                    | 17,0   | 14,4   | G 1/8   | 10    |
| 109983      | 187.014-4  | 51,0       | 44,0       | 24,0 | 8,3  | 14,9 | 4      | 15                    | 10,0   | 18,3   | G 1/4   | 14    |
| 109984      | 187.014-6  | 51,0       | 44,0       | 24,9 | 8,3  | 15,4 | 6      | 15                    | 12,0   | 18,3   | G 1/4   | 14    |
| 109985      | 187.014-8  | 51,0       | 44,0       | 28,4 | 8,3  | 17,8 | 8      | 15                    | 14,0   | 18,3   | G 1/4   | 14    |
| 109986      | 187.014-10 | 51,0       | 44,0       | 32,0 | 8,3  | 20,4 | 10     | 15                    | 17,0   | 18,3   | G 1/4   | 14    |
| 109987      | 187.014-12 | 51,0       | 44,0       | 32,0 | 8,3  | 22,9 | 12     | 15                    | 20,0   | 18,3   | G 1/4   | 14    |
| 109988      | 187.038-8  | 55,0       | 48,7       | 29,3 | 9,5  | 17,8 | 8      | 15                    | 14,0   | 22,0   | G 3/8   | 19    |
| 109989      | 187.038-10 | 55,0       | 48,7       | 32,5 | 9,5  | 20,4 | 10     | 15                    | 17,0   | 22,0   | G 3/8   | 19    |
| 109990      | 187.038-12 | 55,0       | 48,7       | 35,3 | 9,5  | 22,9 | 12     | 15                    | 20,0   | 22,0   | G 3/8   | 19    |
| 109991      | 187.012-8  | 59,2       | 53,0       | 32,3 | 13,0 | 17,8 | 8      | 15                    | 14,0   | 28,0   | G 1/2   | 24    |
| 109992      | 187.012-10 | 59,2       | 53,0       | 35,5 | 13,0 | 20,4 | 10     | 15                    | 17,0   | 28,0   | G 1/2   | 24    |
| 109993      | 187.012-12 | 59,2       | 53,0       | 36,3 | 13,0 | 22,9 | 12     | 15                    | 20,0   | 28,0   | G 1/2   | 24    |

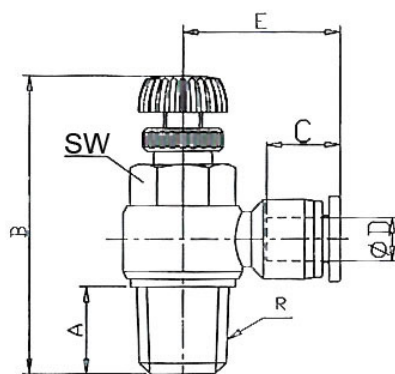


188.018-6

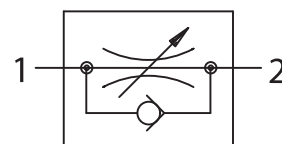


**Drosselrückschlagventil mit Abluftdrosselung**, regulierbar mit Rändelschraube, Winkelform, drehbar, Außengewinde zylindrisch mit O-Ring (NBR)

| Artikel Nr. | Typen Nr.  | L (max) mm | L (min) mm | A mm | B mm | C mm | Ø D mm | Arbeitsdruck max. bar | Ø P mm | Ø K mm | Gewinde | SW mm |
|-------------|------------|------------|------------|------|------|------|--------|-----------------------|--------|--------|---------|-------|
| 110011      | 188.005-4  | 31,9       | 29,0       | 20,0 | 3,5  | 14,9 | 4      | 15                    | -      | -      | M5      | 8     |
| 110012      | 188.005-6  | 31,9       | 29,0       | 21,7 | 3,5  | 15,4 | 6      | 15                    | -      | -      | M5      | 8     |
| 110013      | 188.018-4  | 44,0       | 37,8       | 22,3 | 6,0  | 14,9 | 4      | 15                    | 10,0   | 14,4   | G 1/8   | 10    |
| 110014      | 188.018-6  | 44,0       | 37,8       | 22,9 | 6,0  | 15,4 | 6      | 15                    | 12,0   | 14,4   | G 1/8   | 10    |
| 110015      | 188.018-8  | 44,0       | 37,8       | 25,3 | 6,0  | 17,8 | 8      | 15                    | 14,0   | 14,4   | G 1/8   | 10    |
| 110016      | 188.018-10 | 44,0       | 37,8       | 30,1 | 6,0  | 20,4 | 10     | 15                    | 17,0   | 14,4   | G 1/8   | 10    |
| 110017      | 188.014-4  | 51,0       | 44,0       | 24,0 | 8,3  | 14,9 | 4      | 15                    | 10,0   | 18,3   | G 1/4   | 14    |
| 110018      | 188.014-6  | 51,0       | 44,0       | 24,9 | 8,3  | 15,4 | 6      | 15                    | 12,0   | 18,3   | G 1/4   | 14    |
| 110019      | 188.014-8  | 51,0       | 44,0       | 28,4 | 8,3  | 17,8 | 8      | 15                    | 14,0   | 18,3   | G 1/4   | 14    |
| 110020      | 188.014-10 | 51,0       | 44,0       | 32,0 | 8,3  | 20,4 | 10     | 15                    | 17,0   | 18,3   | G 1/4   | 14    |
| 110021      | 188.014-12 | 51,0       | 44,0       | 32,0 | 8,3  | 22,9 | 12     | 15                    | 20,0   | 18,3   | G 1/4   | 14    |
| 110022      | 188.038-8  | 55,0       | 48,7       | 29,3 | 9,5  | 17,8 | 8      | 15                    | 14,0   | 22,0   | G 3/8   | 19    |
| 110023      | 188.038-10 | 55,0       | 48,7       | 32,5 | 9,5  | 20,4 | 10     | 15                    | 17,0   | 22,0   | G 3/8   | 19    |
| 110024      | 188.038-12 | 55,0       | 48,7       | 35,3 | 9,5  | 22,9 | 12     | 15                    | 20,0   | 22,0   | G 3/8   | 19    |
| 110025      | 188.012-8  | 59,2       | 53,0       | 32,3 | 13,0 | 17,8 | 8      | 15                    | 14,0   | 28,0   | G 1/2   | 24    |
| 110026      | 188.012-10 | 59,2       | 53,0       | 35,5 | 13,0 | 20,4 | 10     | 15                    | 17,0   | 28,0   | G 1/2   | 24    |
| 110027      | 188.012-12 | 59,2       | 53,0       | 36,3 | 13,0 | 22,9 | 12     | 15                    | 20,0   | 28,0   | G 1/2   | 24    |

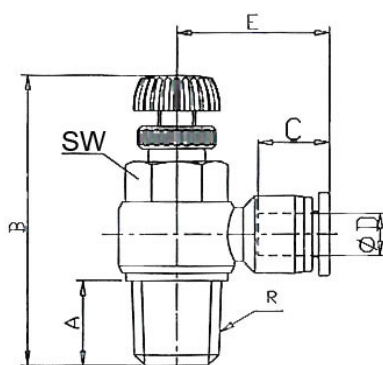


185.014-10

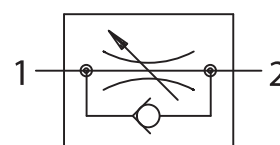


**Drosselrückschlagventil mit Zuluftdrosselung**, regulierbar mit Rändelschraube, Winkelform, drehbar, Außengewinde konisch mit Gewindebeschichtung

| Artikel Nr. | Typen Nr.  | Ø D mm | Gewinde | Arbeitsdruck max. bar | A mm | SW mm | E mm | B (max) mm | B (min) mm | C mm | L mm |
|-------------|------------|--------|---------|-----------------------|------|-------|------|------------|------------|------|------|
| 109994      | 185.018-4  | 4      | R 1/8   | 15                    | 7,5  | 10    | 22,3 | 44,0       | 37,8       | 14,9 | 37,8 |
| 109995      | 185.018-6  | 6      | R 1/8   | 15                    | 7,5  | 10    | 22,9 | 44,0       | 37,8       | 15,4 | 37,8 |
| 109996      | 185.018-8  | 8      | R 1/8   | 15                    | 7,5  | 10    | 25,3 | 44,0       | 37,8       | 17,8 | 37,8 |
| 109997      | 185.018-10 | 10     | R 1/8   | 15                    | 7,5  | 10    | 30,1 | 44,0       | 37,8       | 20,5 | 37,8 |
| 109998      | 185.014-4  | 4      | R 1/4   | 15                    | 11,2 | 14    | 24,1 | 51,0       | 44,0       | 14,9 | 44,0 |
| 109999      | 185.014-6  | 6      | R 1/4   | 15                    | 11,2 | 14    | 24,9 | 51,0       | 44,0       | 15,4 | 44,0 |
| 110000      | 185.014-8  | 8      | R 1/4   | 15                    | 11,2 | 14    | 28,4 | 51,0       | 44,0       | 17,8 | 44,0 |
| 110001      | 185.014-10 | 10     | R 1/4   | 15                    | 11,2 | 14    | 32,0 | 51,0       | 44,0       | 20,5 | 44,0 |
| 110002      | 185.014-12 | 12     | R 1/4   | 15                    | 11,2 | 14    | 32,0 | 51,0       | 44,0       | 22,9 | 44,0 |
| 110003      | 185.038-6  | 6      | R 3/8   | 15                    | 12,3 | 19    | 26,6 | 55,0       | 48,7       | 15,4 | 48,7 |
| 110004      | 185.038-8  | 8      | R 3/8   | 15                    | 12,3 | 19    | 29,2 | 55,0       | 48,7       | 17,8 | 48,7 |
| 110005      | 185.038-10 | 10     | R 3/8   | 15                    | 12,3 | 19    | 32,5 | 55,0       | 48,7       | 20,5 | 48,7 |
| 110006      | 185.038-12 | 12     | R 3/8   | 15                    | 12,3 | 19    | 35,3 | 55,0       | 48,7       | 22,9 | 48,7 |
| 110007      | 185.012-6  | 6      | R 1/2   | 15                    | 14,0 | 24    | 29,6 | 59,2       | 53,0       | 15,4 | 53,0 |
| 110008      | 185.012-8  | 8      | R 1/2   | 15                    | 14,0 | 24    | 32,3 | 59,2       | 53,0       | 17,8 | 53,0 |
| 110009      | 185.012-10 | 10     | R 1/2   | 15                    | 14,0 | 24    | 35,5 | 59,2       | 53,0       | 20,5 | 53,0 |
| 110010      | 185.012-12 | 12     | R 1/2   | 15                    | 14,0 | 24    | 36,3 | 59,2       | 53,0       | 22,9 | 53,0 |



186.014-10

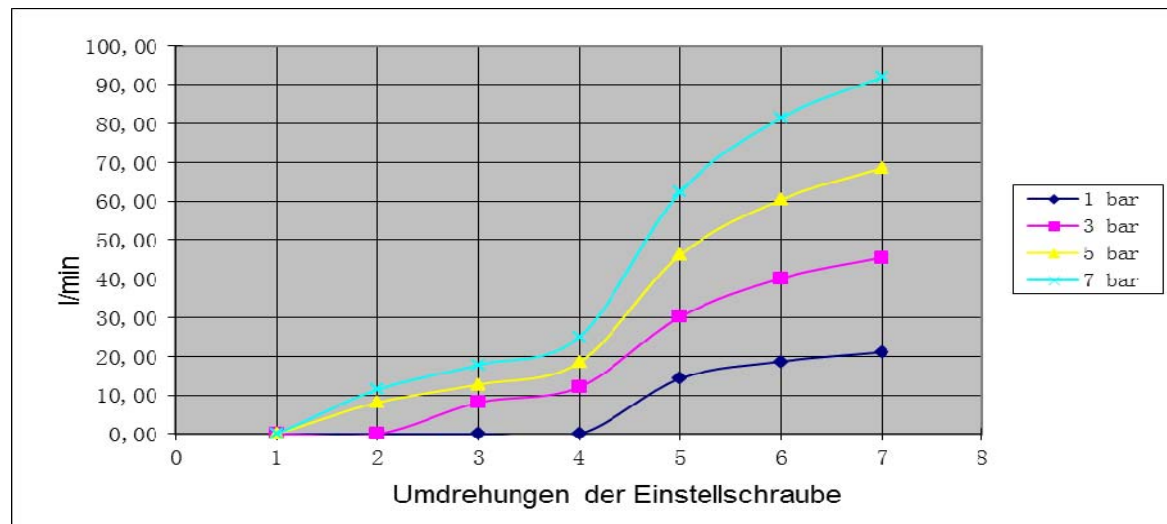


**Drosselrückschlagventil mit Abluftdrosslung**, regulierbar mit Rändelschraube, Winkelform, drehbar, Außengewinde konisch mit Gewindebeschichtung

| Artikel Nr. | Typen Nr.  | Ø D mm | Gewinde | Arbeitsdruck max. bar | A mm | SW mm | E mm | B (max) mm | B (min) mm | C mm | L mm |
|-------------|------------|--------|---------|-----------------------|------|-------|------|------------|------------|------|------|
| 110044      | 186.018-4  | 4      | R 1/8   | 15                    | 7,5  | 10    | 22,3 | 44,0       | 37,8       | 14,9 | 36,7 |
| 110045      | 186.018-6  | 6      | R 1/8   | 15                    | 7,5  | 10    | 22,9 | 44,0       | 37,8       | 15,4 | 36,7 |
| 110046      | 186.018-8  | 8      | R 1/8   | 15                    | 7,5  | 10    | 24,8 | 44,0       | 37,8       | 17,8 | 36,7 |
| 110047      | 186.018-10 | 10     | R 1/8   | 15                    | 7,5  | 10    | 30,1 | 44,0       | 37,8       | 20,5 | 36,7 |
| 110048      | 186.014-4  | 4      | R 1/4   | 15                    | 11,2 | 14    | 24,1 | 51,0       | 44,0       | 14,9 | 44,2 |
| 110049      | 186.014-6  | 6      | R 1/4   | 15                    | 11,2 | 14    | 24,9 | 51,0       | 44,0       | 15,4 | 44,2 |
| 110050      | 186.014-8  | 8      | R 1/4   | 15                    | 11,2 | 14    | 28,4 | 51,0       | 44,0       | 17,8 | 44,2 |
| 110051      | 186.014-10 | 10     | R 1/4   | 15                    | 11,2 | 14    | 32,0 | 51,0       | 44,0       | 20,5 | 44,2 |
| 110052      | 186.014-12 | 12     | R 1/4   | 15                    | 11,2 | 14    | 32,0 | 51,0       | 44,0       | 22,9 | 44,2 |
| 110053      | 186.038-6  | 6      | R 3/8   | 15                    | 12,3 | 19    | 26,6 | 55,0       | 48,7       | 15,4 | 49,0 |
| 110054      | 186.038-8  | 8      | R 3/8   | 15                    | 12,3 | 19    | 29,2 | 55,0       | 48,7       | 17,8 | 49,0 |
| 110055      | 186.038-10 | 10     | R 3/8   | 15                    | 12,3 | 19    | 32,5 | 55,0       | 48,7       | 20,5 | 49,0 |
| 110056      | 186.038-12 | 12     | R 3/8   | 15                    | 12,3 | 19    | 35,3 | 55,0       | 48,7       | 22,9 | 49,0 |
| 110057      | 186.012-6  | 6      | R 1/2   | 15                    | 14,0 | 24    | 29,6 | 59,2       | 53,0       | 15,4 | 55,8 |
| 110058      | 186.012-8  | 8      | R 1/2   | 15                    | 14,0 | 24    | 32,3 | 59,2       | 53,0       | 17,8 | 55,8 |
| 110059      | 186.012-10 | 10     | R 1/2   | 15                    | 14,0 | 24    | 35,5 | 59,2       | 53,0       | 20,5 | 55,8 |
| 110060      | 186.012-12 | 12     | R 1/2   | 15                    | 14,0 | 24    | 36,3 | 59,2       | 53,0       | 22,9 | 55,8 |

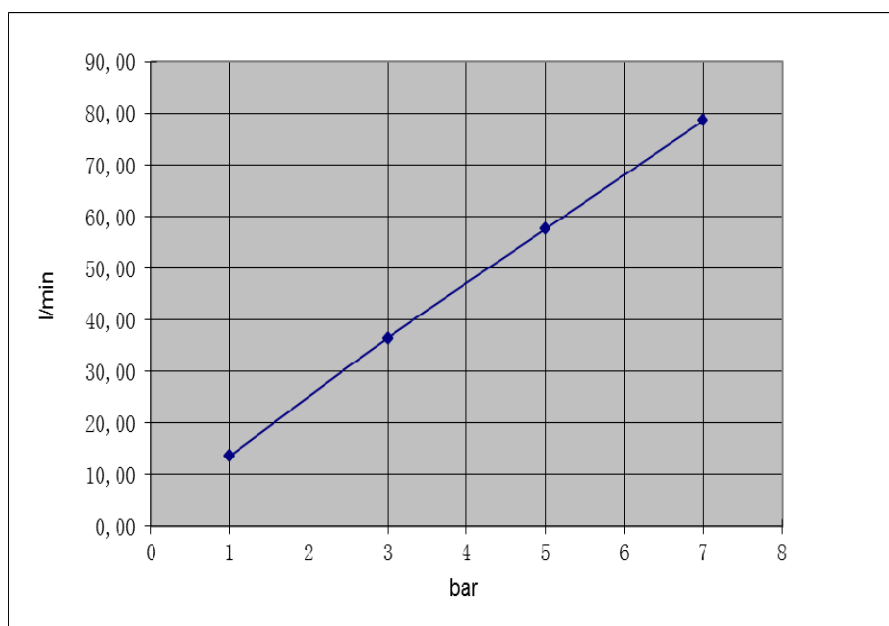
## Durchflüsse zu Typen Nr. 188.005-4 und 188.005-6

|       | 1    | 2     | 3     | 4     | 5     | 6     | 7     |
|-------|------|-------|-------|-------|-------|-------|-------|
| 1 bar | 0,00 | 0,00  | 0,00  | 0,00  | 14,27 | 18,66 | 21,07 |
| 3 bar | 0,00 | 0,00  | 8,10  | 12,08 | 30,18 | 40,09 | 45,45 |
| 5 bar | 0,01 | 8,10  | 12,73 | 18,45 | 46,14 | 60,34 | 68,50 |
| 7 bar | 0,01 | 11,43 | 17,77 | 25,01 | 62,32 | 81,38 | 91,97 |



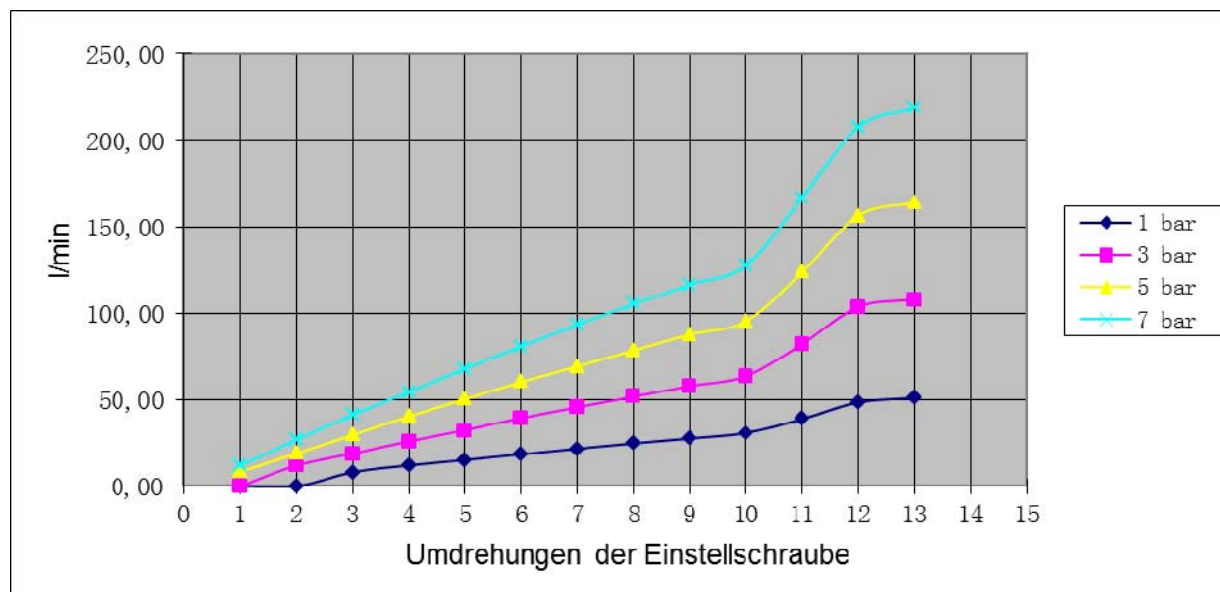
## Freier Durchgang

| Druck - bar        | 1     | 3     | 5     | 7     |
|--------------------|-------|-------|-------|-------|
| Durchfluss - l/min | 13,62 | 36,50 | 57,60 | 78,60 |



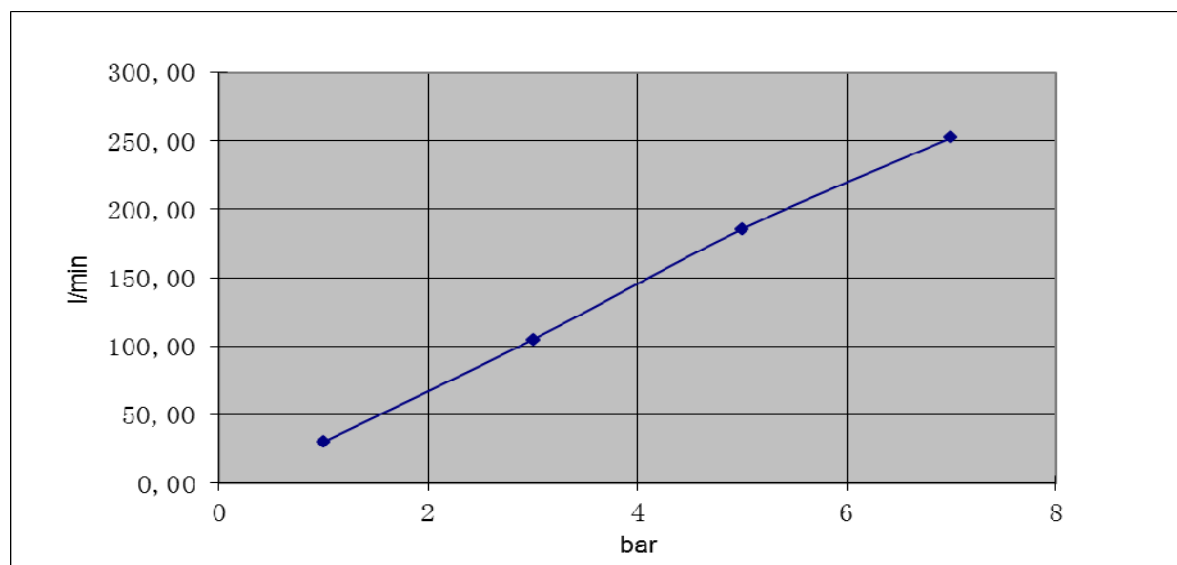
## Durchflüsse zu Typen Nr. 188.018-4, 188.018-6 und 188.018-8; 186.018-4, 186.018-6 und 186.018-8

|       | 0    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8      | 9      | 10     | 11     | 12     | 13     |
|-------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 1 bar | 0,00 | 0,00  | 0,00  | 8,10  | 12,04 | 15,14 | 18,47 | 21,72 | 24,76  | 27,65  | 30,82  | 38,87  | 48,51  | 50,99  |
| 3 bar | 0,00 | 0,00  | 11,93 | 18,86 | 25,95 | 32,41 | 39,41 | 45,59 | 51,74  | 57,89  | 63,68  | 82,28  | 103,71 | 107,91 |
| 5 bar | 0,00 | 8,26  | 18,93 | 29,59 | 40,36 | 50,37 | 60,24 | 69,27 | 78,43  | 87,76  | 95,39  | 123,85 | 156,48 | 164,07 |
| 7 bar | 0,00 | 11,84 | 26,82 | 41,33 | 54,37 | 67,93 | 80,91 | 93,42 | 105,22 | 116,51 | 127,59 | 166,75 | 207,75 | 218,75 |



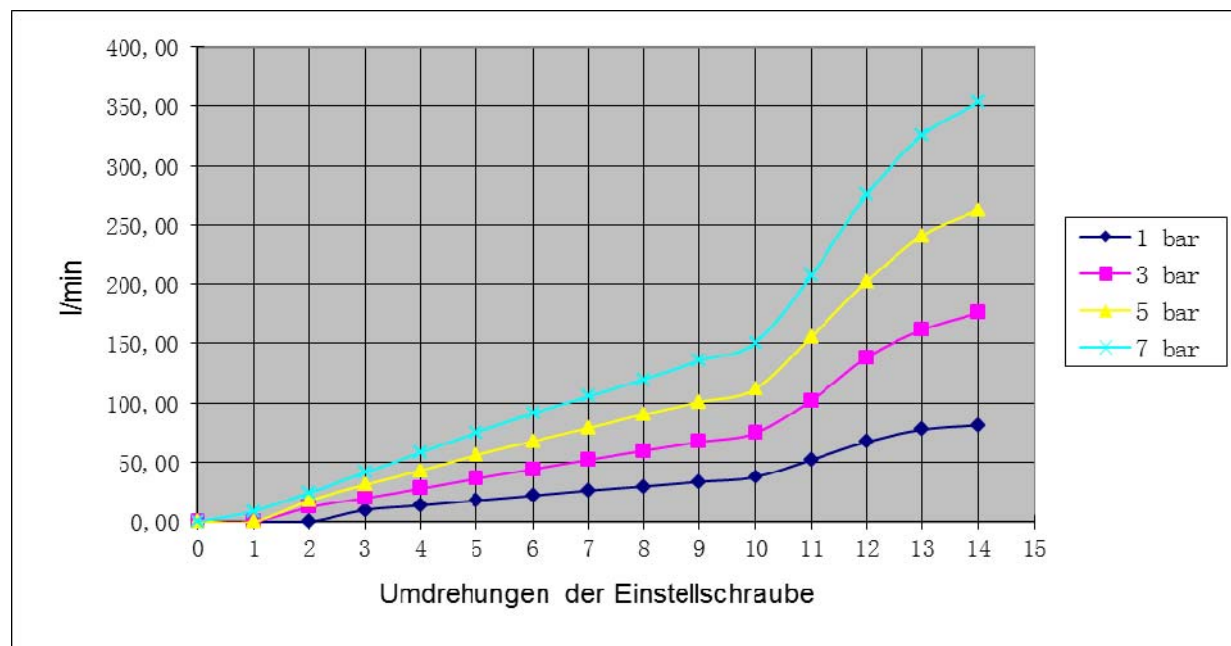
## Freier Durchgang

| Druck - bar        | 1     | 3      | 5      | 7      |
|--------------------|-------|--------|--------|--------|
| Durchfluss - l/min | 30,30 | 105,00 | 185,48 | 252,31 |



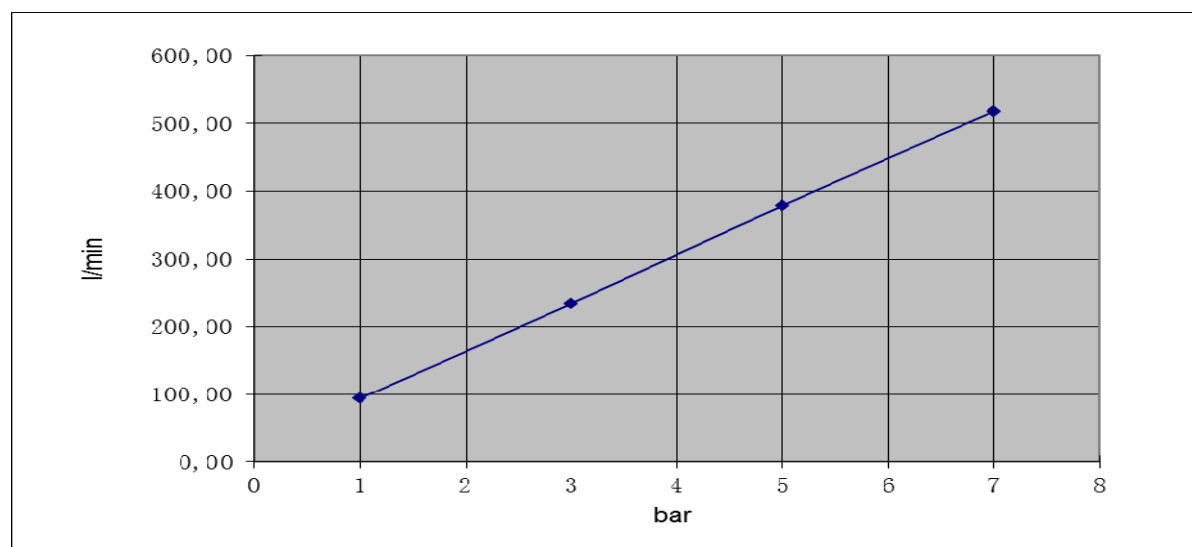
## Durchflüsse zu Typen Nr. 188.014-6, 188.014-8 und 188.014-10; 186.014-6, 186.014-8 und 186.014-10

|       | 0    | 1    | 2     | 3     | 4     | 5     | 6     | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     |
|-------|------|------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 bar | 0,00 | 0,00 | 0,01  | 9,88  | 13,50 | 17,75 | 21,80 | 26,06  | 29,57  | 33,53  | 37,46  | 51,92  | 67,16  | 77,45  | 81,14  |
| 3 bar | 0,00 | 0,00 | 12,06 | 19,72 | 27,60 | 36,15 | 44,01 | 51,93  | 59,66  | 67,12  | 74,58  | 102,21 | 138,39 | 161,70 | 175,86 |
| 5 bar | 0,13 | 0,00 | 17,72 | 31,02 | 42,95 | 56,06 | 67,66 | 78,79  | 90,33  | 100,75 | 111,83 | 155,75 | 202,57 | 241,09 | 262,37 |
| 7 bar | 0,01 | 8,78 | 24,36 | 41,24 | 58,14 | 75,12 | 91,13 | 105,34 | 119,82 | 135,47 | 150,71 | 207,39 | 275,80 | 325,70 | 353,15 |



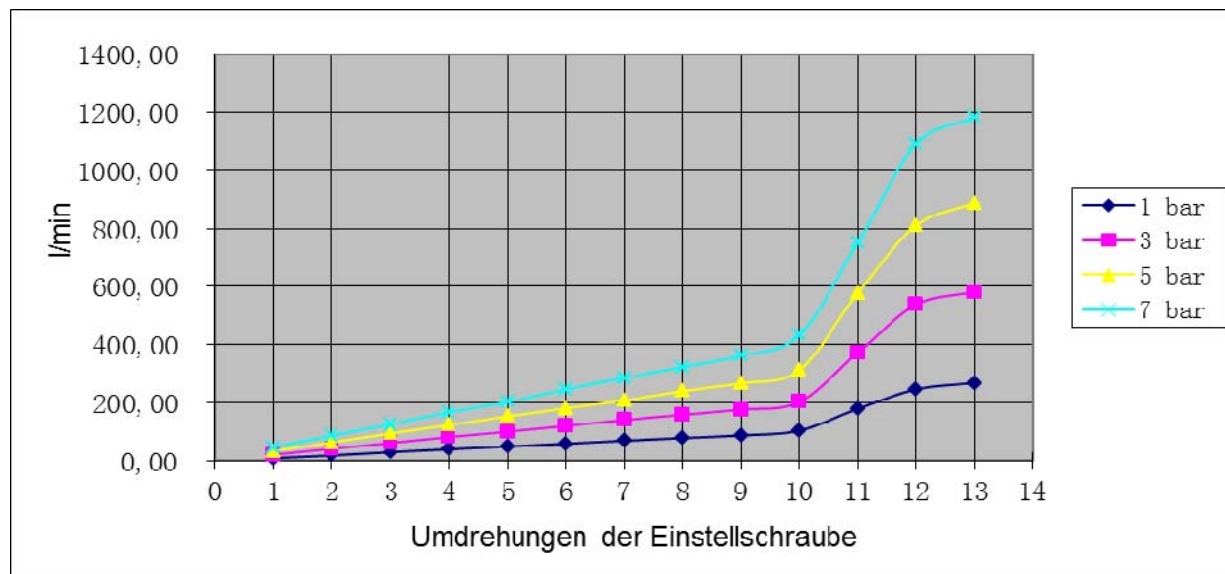
## Freier Durchgang

| Druck - bar        | 1     | 3      | 5      | 7      |
|--------------------|-------|--------|--------|--------|
| Durchfluss - l/min | 93,55 | 234,41 | 378,98 | 518,19 |



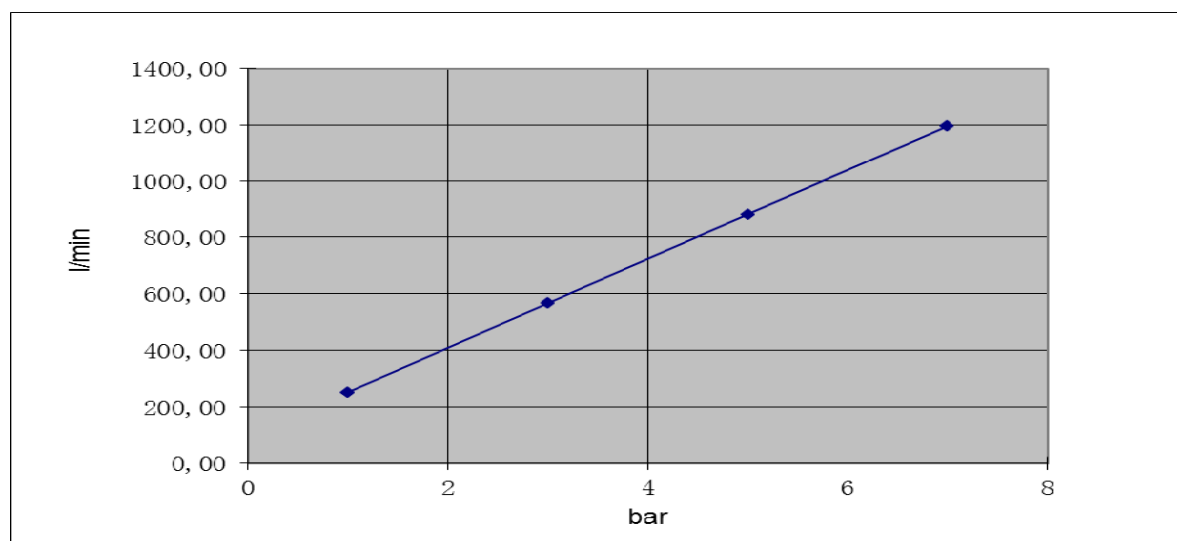
## Durchflüsse zu Typen Nr. 188.038-8, 188.038-10 und 188.038-12; 186.0138-6, 186.038-8 und 186.038-10

|       | 1     | 2     | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12      | 13      |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 1 bar | 9,22  | 18,54 | 29,63  | 39,55  | 49,21  | 58,98  | 69,34  | 78,72  | 87,64  | 104,22 | 179,24 | 246,45  | 268,07  |
| 3 bar | 21,09 | 41,88 | 61,52  | 81,93  | 100,39 | 120,00 | 140,77 | 158,96 | 176,57 | 202,83 | 372,27 | 537,98  | 581,49  |
| 5 bar | 33,99 | 64,07 | 94,28  | 123,36 | 152,83 | 181,05 | 207,78 | 240,49 | 267,20 | 312,19 | 577,88 | 810,92  | 887,45  |
| 7 bar | 47,13 | 87,24 | 126,42 | 167,72 | 202,60 | 246,45 | 285,40 | 323,02 | 362,16 | 432,43 | 750,53 | 1090,98 | 1183,22 |



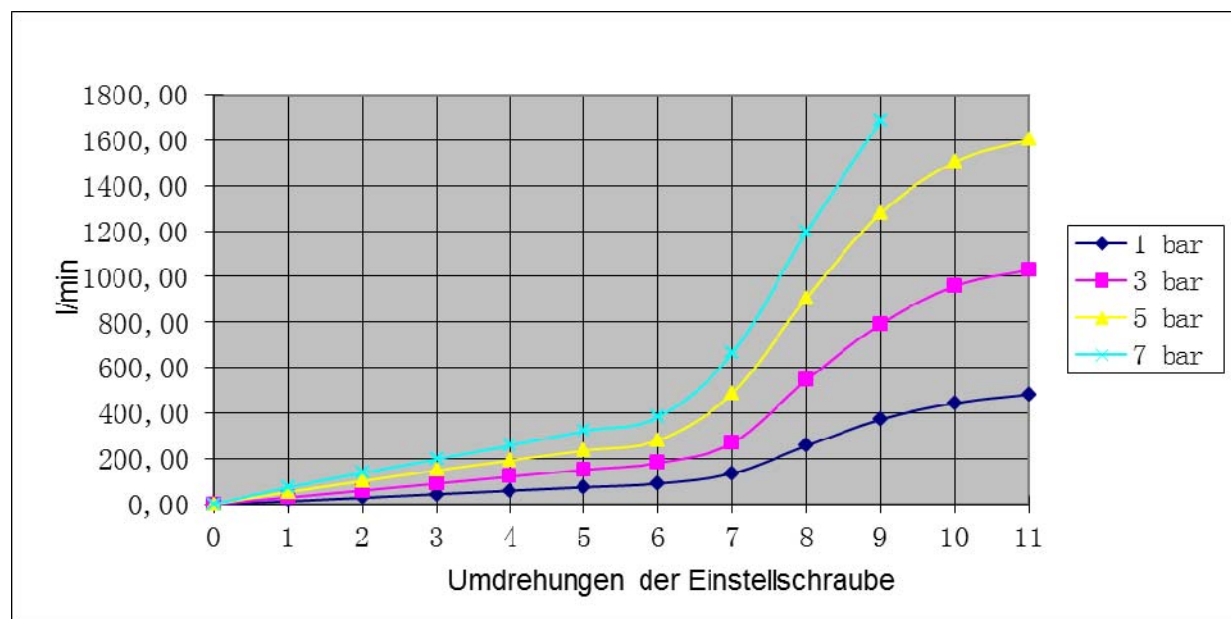
## Freier Durchgang

| Druck - bar        | 1      | 3      | 5      | 7       |
|--------------------|--------|--------|--------|---------|
| Durchfluss - l/min | 251,15 | 566,50 | 881,35 | 1196,54 |



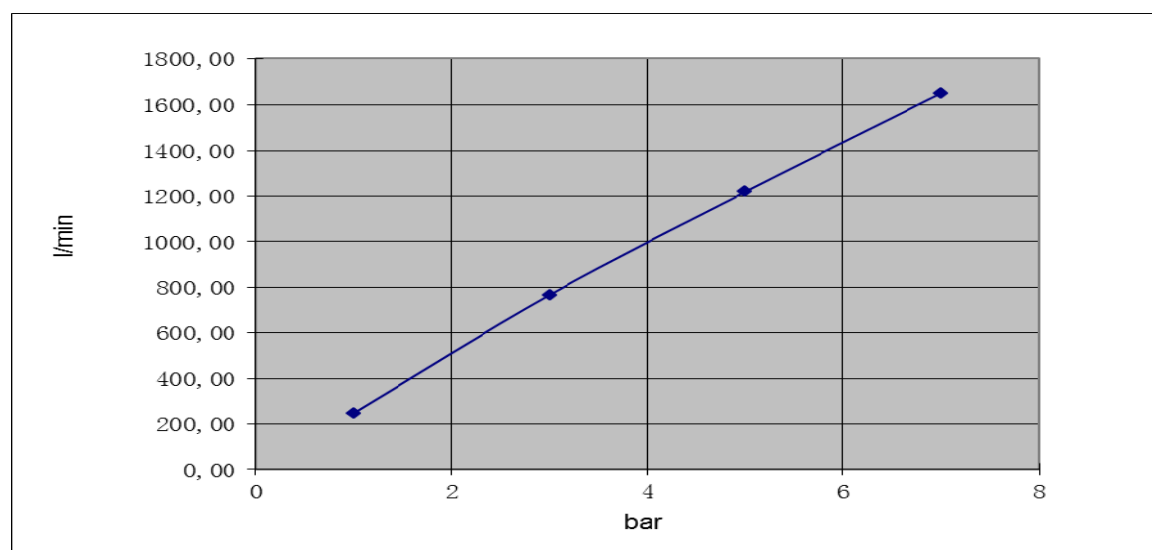
## Durchflüsse zu Typen Nr. 188.012-8, 188.012-10 und 188.012-12; 186.012-8, 186.012-10 und 186.012-12

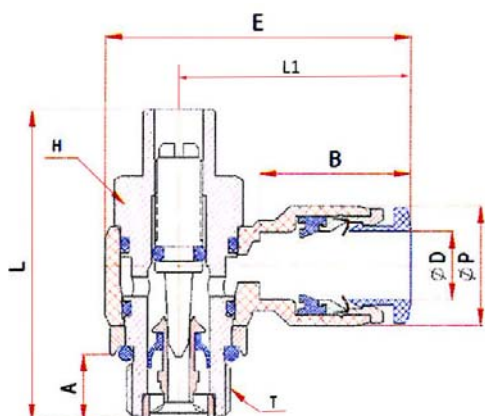
|       | 0    | 1     | 2      | 3      | 4      | 5      | 6      | 7      | 8       | 9       | 10      | 11      |
|-------|------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 1 bar | 0,00 | 12,96 | 28,09  | 43,70  | 58,98  | 74,37  | 90,11  | 134,66 | 256,28  | 371,36  | 443,91  | 481,96  |
| 3 bar | 0,00 | 29,73 | 59,59  | 89,80  | 120,29 | 151,26 | 180,84 | 268,78 | 545,48  | 791,67  | 958,91  | 1028,69 |
| 5 bar | 0,00 | 53,92 | 100,73 | 147,81 | 192,32 | 235,39 | 280,57 | 487,92 | 906,52  | 1278,55 | 1504,68 | 1603,00 |
| 7 bar | 0,00 | 73,49 | 136,74 | 197,20 | 257,16 | 321,73 | 381,90 | 664,30 | 1196,58 | 1684,88 |         |         |



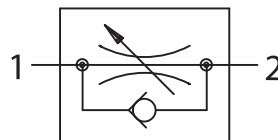
## Freier Durchgang

| Druck - bar        | 1      | 3      | 5       | 7       |
|--------------------|--------|--------|---------|---------|
| Durchfluss - l/min | 247,42 | 767,17 | 1219,37 | 1653,10 |



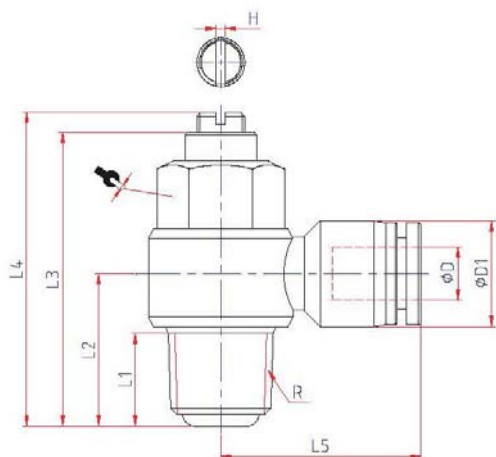


285.014-8

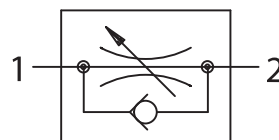


**Drosselrückschlagventil mit Abluftdrosselung**, regulierbar mit Schlitzschraube, Winkelform, drehbar, Außengewinde zylindrisch mit O-Ring (NBR)

| Artikel Nr. | Typen Nr.  | ØD mm | Gewinde | Arbeitsdruck max. bar | E mm | L mm | A mm | B mm | H mm | ØP mm | L1 mm |
|-------------|------------|-------|---------|-----------------------|------|------|------|------|------|-------|-------|
| 110028      | 285.005-4  | 4     | M5      | 10                    | 24,5 | 23,0 | 3,5  | 15,0 | 8    | 11,0  | 20,0  |
| 110029      | 285.005-6  | 6     | M5      | 10                    | 26,5 | 23,0 | 3,5  | 15,0 | 8    | 13,0  | 21,5  |
| 110030      | 285.018-4  | 4     | G 1/8   | 10                    | 29,5 | 31,5 | 4,3  | 15,0 | 12   | 11,0  | 23,0  |
| 110031      | 285.018-6  | 6     | G 1/8   | 10                    | 30,0 | 31,5 | 4,3  | 15,0 | 12   | 13,0  | 23,0  |
| 110032      | 285.018-8  | 8     | G 1/8   | 10                    | 32,5 | 31,5 | 4,3  | 18,0 | 12   | 14,5  | 26,5  |
| 110033      | 285.014-4  | 4     | G 1/4   | 10                    | 33,0 | 38,3 | 6,5  | 15,0 | 14   | 11,0  | 25,0  |
| 110034      | 285.014-6  | 6     | G 1/4   | 10                    | 34,0 | 38,3 | 6,5  | 15,0 | 14   | 13,0  | 25,0  |
| 110035      | 285.014-8  | 8     | G 1/4   | 10                    | 37,5 | 38,3 | 6,5  | 18,0 | 14   | 14,5  | 29,0  |
| 110036      | 285.014-10 | 10    | G 1/4   | 10                    | 41,0 | 38,3 | 6,5  | 22,0 | 14   | 18,5  | 31,0  |
| 110037      | 285.038-6  | 6     | G 3/8   | 10                    | 39,5 | 43,0 | 7,5  | 15,0 | 19   | 13,0  | 27,0  |
| 110038      | 285.038-8  | 8     | G 3/8   | 10                    | 40,0 | 43,0 | 7,5  | 18,0 | 19   | 14,5  | 30,5  |
| 110039      | 285.038-10 | 10    | G 3/8   | 10                    | 44,0 | 43,0 | 7,5  | 22,0 | 19   | 18,5  | 32,0  |
| 110040      | 285.038-12 | 12    | G 3/8   | 10                    | 46,0 | 43,0 | 7,5  | 22,0 | 19   | 21,0  | 35,0  |
| 110041      | 285.012-8  | 8     | G 1/2   | 10                    | 46,0 | 49,0 | 9,6  | 18,0 | 24   | 14,5  | 33,0  |
| 110042      | 285.012-10 | 10    | G 1/2   | 10                    | 49,5 | 49,0 | 9,6  | 22,0 | 24   | 18,5  | 34,5  |
| 110043      | 285.012-12 | 12    | G 1/2   | 10                    | 50,0 | 49,0 | 9,6  | 22,0 | 24   | 21,0  | 36,5  |



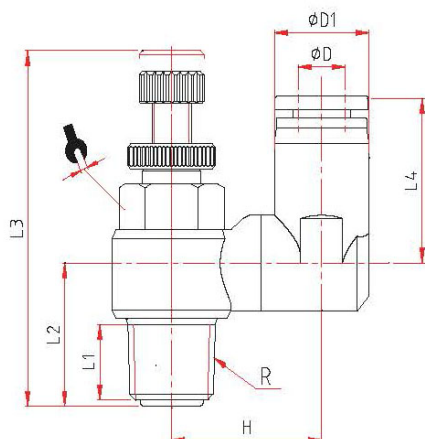
297.012-8



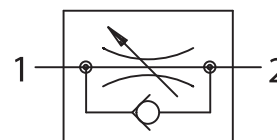
**Drosselrückschlagventil mit Abluftdrosselung**, regulierbar mit Schlitzschraube, Winkelform, drehbar, Außengewinde konisch mit Gewindebeschichtung

Temperaturbereich: 0 °C bis 60 °C

| Artikel Nr.                                                                               | Typen Nr.   | ØD mm | Gewinde | Arbeitsdruck max. bar | L1 mm | L2 mm | L3 mm | L4 (max) mm | L5 mm | ØD1 mm | H mm | SW mm |
|-------------------------------------------------------------------------------------------|-------------|-------|---------|-----------------------|-------|-------|-------|-------------|-------|--------|------|-------|
| 136005                                                                                    | 297.018-4   | 4     | R 1/8   | 10                    | 7,0   | 15,0  | 29,0  | 32,0        | 23,0  | 11,3   | 0,8  | 12    |
| 136006                                                                                    | 297.018-6   | 6     | R 1/8   | 10                    | 7,0   | 15,0  | 29,0  | 32,0        | 23,0  | 13,3   | 0,8  | 12    |
| 136006 = Auslaufartikel. Artikel nicht mehr verfügbar. Ersatzartikel 151604 (297.018-6-1) |             |       |         |                       |       |       |       |             |       |        |      |       |
| 151604                                                                                    | 297.018-6-1 | 6     | R 1/8   | 10                    |       |       |       |             |       |        |      |       |
| 136007                                                                                    | 297.018-8   | 8     | R 1/8   | 10                    | 7,0   | 15,8  | 29,0  | 32,0        | 25,8  | 15,0   | 0,8  | 12    |
| 136008                                                                                    | 297.014-4   | 4     | R 1/4   | 10                    | 11,0  | 18,5  | 34,8  | 37,5        | 25,2  | 11,3   | 1,2  | 14    |
| 136009                                                                                    | 297.014-6   | 6     | R 1/4   | 10                    | 11,0  | 18,5  | 34,8  | 37,5        | 25,0  | 13,3   | 1,2  | 14    |
| 136010                                                                                    | 297.014-8   | 8     | R 1/4   | 10                    | 11,0  | 19,5  | 34,8  | 37,5        | 28,9  | 15,0   | 1,2  | 14    |
| 136011                                                                                    | 297.014-10  | 10    | R 1/4   | 10                    | 11,0  | 21,2  | 34,8  | 37,5        | 32,7  | 19,0   | 1,2  | 14    |
| 136012                                                                                    | 297.038-6   | 6     | R 3/8   | 10                    | 12,5  | 22,0  | 40,8  | 43,5        | 26,7  | 13,3   | 1,2  | 19    |
| 136013                                                                                    | 297.038-8   | 8     | R 3/8   | 10                    | 12,5  | 21,3  | 40,8  | 43,5        | 29,8  | 15,0   | 1,2  | 19    |
| 136014                                                                                    | 297.038-10  | 10    | R 3/8   | 10                    | 12,5  | 23,2  | 40,8  | 43,5        | 33,0  | 19,0   | 1,2  | 19    |
| 136015                                                                                    | 297.038-12  | 12    | R 3/8   | 10                    | 12,5  | 24,5  | 40,8  | 43,5        | 35,5  | 21,5   | 1,2  | 19    |
| 136016                                                                                    | 297.012-8   | 8     | R 1/2   | 10                    | 15,0  | 26,0  | 46,6  | 51,0        | 32,8  | 15,0   | 1,6  | 24    |
| 136017                                                                                    | 297.012-10  | 10    | R 1/2   | 10                    | 15,0  | 26,2  | 46,6  | 51,0        | 36,0  | 19,0   | 1,6  | 24    |
| 136018                                                                                    | 297.012-12  | 12    | R 1/2   | 10                    | 15,0  | 27,5  | 46,6  | 51,0        | 36,5  | 21,5   | 1,6  | 24    |



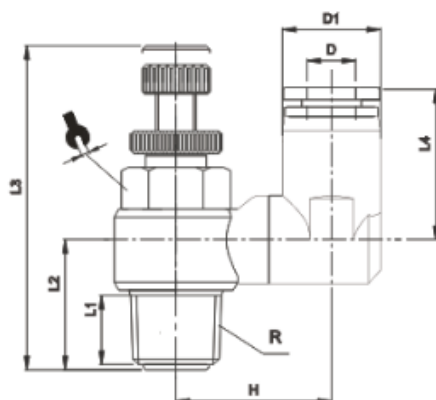
299.038-12



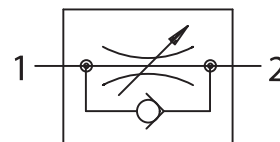
**Drosselrückschlagventil mit Abluftdrosselung**, regulierbar mit Rändelschraube, gerade Form, drehbar, Außengewinde konisch mit Gewindebeschichtung

Temperaturbereich: 0 °C bis 60 °C

| Artikel Nr. | Typen Nr.  | ØD mm | Gewinde | Arbeitsdruck max. bar | L1 mm | L2 mm | L3 (max) mm | L4 mm | H mm | ØD1 mm | SW mm |
|-------------|------------|-------|---------|-----------------------|-------|-------|-------------|-------|------|--------|-------|
| 136019      | 299.005-4  | 4     | M5      | 10                    | 3,2   | 11,5  | 33,5        | 20,5  | 11,5 | 11,0   | 8     |
| 136020      | 299.005-6  | 6     | M5      | 10                    | 3,2   | 11,5  | 33,5        | 22,0  | 13,0 | 13,5   | 8     |
| 136021      | 299.018-4  | 4     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0        | 26,5  | 18,0 | 15,0   | 12    |
| 136022      | 299.018-6  | 6     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0        | 26,5  | 18,0 | 15,0   | 12    |
| 136023      | 299.018-8  | 8     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0        | 26,5  | 18,0 | 15,0   | 12    |
| 136024      | 299.014-4  | 4     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0        | 27,0  | 20,5 | 15,0   | 14    |
| 136025      | 299.014-6  | 6     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0        | 27,0  | 20,5 | 15,0   | 14    |
| 136026      | 299.014-8  | 8     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0        | 27,0  | 20,5 | 15,0   | 14    |
| 136027      | 299.014-10 | 10    | R 1/4   | 10                    | 10,0  | 17,5  | 48,0        | 30,0  | 22,0 | 21,5   | 14    |
| 136028      | 299.014-12 | 12    | R 1/4   | 10                    | 10,0  | 17,5  | 48,0        | 30,0  | 22,0 | 21,5   | 14    |
| 136029      | 299.038-10 | 10    | R 3/8   | 10                    | 11,4  | 21,5  | 53,0        | 31,0  | 23,0 | 21,5   | 19    |
| 136030      | 299.038-12 | 12    | R 3/8   | 10                    | 11,4  | 21,5  | 53,0        | 31,0  | 23,0 | 21,5   | 19    |



298.038-12



**Drosselrückschlagventil, mit Zuluftdrosselung**, regulierbar mit Rändelschraube, gerade Form, drehbar, Außengewinde konisch mit Gewindebeschichtung

Temperaturbereich: 0 °C bis 60 °C

| Artikel Nr. | Typen Nr.  | ØD mm | Gewinde | Arbeitsdruck max. bar | L1 mm | L2 mm | L3 mm | L4 mm | H mm | ØD1 mm | SW mm |
|-------------|------------|-------|---------|-----------------------|-------|-------|-------|-------|------|--------|-------|
| 136032      | 298.005-4  | 4     | M5      | 10                    | 3,2   | 11,5  | 33,5  | 20,5  | 11,5 | 11,0   | 8     |
| 136033      | 298.005-6  | 6     | M5      | 10                    | 3,2   | 11,5  | 33,5  | 22,0  | 13,0 | 13,5   | 8     |
| 136034      | 298.018-4  | 4     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0  | 26,5  | 18,0 | 15,0   | 12    |
| 136035      | 298.018-6  | 6     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0  | 26,5  | 18,0 | 15,0   | 12    |
| 135979      | 298.018-8  | 8     | R 1/8   | 10                    | 6,4   | 14,0  | 42,0  | 26,5  | 18,0 | 15,0   | 12    |
| 135980      | 298.014-4  | 4     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0  | 27,0  | 20,5 | 15,0   | 14    |
| 135981      | 298.014-6  | 6     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0  | 27,0  | 20,5 | 15,0   | 14    |
| 135982      | 298.014-8  | 8     | R 1/4   | 10                    | 10,0  | 17,5  | 48,0  | 27,0  | 20,5 | 15,0   | 14    |
| 135983      | 298.014-10 | 10    | R 1/4   | 10                    | 10,0  | 17,5  | 48,0  | 30,0  | 22,0 | 21,5   | 14    |
| 135984      | 298.014-12 | 12    | R 1/4   | 10                    | 10,0  | 17,5  | 48,0  | 30,0  | 22,0 | 21,5   | 14    |
| 135985      | 298.038-10 | 10    | R 3/8   | 10                    | 11,4  | 21,5  | 53,0  | 31,0  | 23,0 | 21,5   | 19    |
| 135986      | 298.038-12 | 12    | R 3/8   | 10                    | 11,4  | 21,5  | 53,0  | 31,0  | 23,0 | 21,5   | 19    |

**Montage von Schnellsteckverbindungen**

- Schlauchenden gerade abschneiden. Um eine optimale Dichtwirkung und sicheres Halten der Verbindung zu gewährleisten sollte das Schlauchende nicht oval sein.
- Schlauchende reinigen, Grate entfernen.
- Schlauchende vollständig bis zum Anschlag in die Schnellsteckverbindung stecken.
- Durch ein kurzes Ziehen die Haltbarkeit der Verbindung prüfen.
- Zum Lösen des Schlauches den Lösering drücken.
- Den Schlauch mit einer leichten Drehbewegung aus der Verschraubung ziehen.
- Vor einer erneuten Montage sollte das Schlauchende wieder gerade abgeschnitten werden, um die Steck- und Lösbarkeit nicht zu erschweren.