

## Netzdaten

|                  |                      |
|------------------|----------------------|
| Bezeichnung      | Anl.3 ZUL Sportbad   |
| Modus            | Nachrechnen          |
| Berechnung       | Druck- und Saugseite |
| Medium           | Luft                 |
| mittl.Temperatur | 32,0 °C              |

## Ergebnisse

|               |            |
|---------------|------------|
| Volumenstrom  | 39500 m³/h |
| Totaler Druck | 443 Pa     |

### Druckseite

|                     |          |
|---------------------|----------|
| Luftgeschwindigkeit | 1,98 m/s |
| Statischer Druck    | 413 Pa   |
| Totaler Druck       | 415 Pa   |

### Saugseite

|                     |          |
|---------------------|----------|
| Luftgeschwindigkeit | 1,98 m/s |
| Statischer Druck    | -31 Pa   |
| Totaler Druck       | -28 Pa   |

## Legende

### Rohre, Kanäle

|       |                 |
|-------|-----------------|
| Kanal | Kanal           |
| Rohr  | Rohr            |
| Kflex | Kanal, flexibel |
| Rflex | Rohr, flexibel  |

### Bögen

|       |                        |
|-------|------------------------|
| KBsym | Bogen, symmetrisch     |
| KBÜ   | Bogenübergang          |
| KWsym | Winkel, symmetrisch    |
| KWÜ   | Winkelübergang         |
| RBgla | Rohrbogen, glatt       |
| RBseg | Rohrbogen, segmentiert |

### Übergänge

|       |                           |
|-------|---------------------------|
| KEta  | Etag                      |
| KEtaÜ | Etagenübergang            |
| REta  | Rohretage                 |
| KÜsym | Übergang, symmetrisch     |
| KÜasy | Übergang, asymmetrisch    |
| RÜsym | Reduzierung, symmetrisch  |
| RÜasy | Reduzierung, asymmetrisch |
| KÜstu | Kanalübergang, stumpf     |
| RÜstu | Rohrübergang, stumpf      |
| KRÜsy | Kanal-Rohrübergang, sym.  |
| KRÜas | Kanal-Rohrübergang, asym. |

### Abzweige

|       |                            |
|-------|----------------------------|
| KT    | T-Stück, gerade            |
| KTÜ   | T-Stück, schräg            |
| RTS   | T-Sattelstück              |
| RTSÜ  | T-Sattelstück, reduz.      |
| RTSK  | T-Sattelstück, eckig       |
| RTSS  | T-Sattelstutzen            |
| RTSSÜ | T-Sattelstutzen, reduz.    |
| KTaK  | Kanalausschnitt, eckig     |
| KTaR  | Kanalausschnitt, rund      |
| RTaK  | Rohrausschnitt, rechteckig |
| RTaR  | Rohrausschnitt, rund       |
| KH    | Hosenstück, eckig          |
| RHsym | Hosenstück, rund           |
| RHasy | Hosenstück, rund asym.     |

### Ergebnisse

|             |                                                 |
|-------------|-------------------------------------------------|
| pStatisch   | Statischer Druck                                |
| pTotal      | Totaler Druck                                   |
| pElem       | Gesamtdruckabfall der Strecke inklusive Objekte |
| pDross      | Abzudrosselnder Druck                           |
| pDrossSumme | Summe der abzudrosselnden Drücke                |

### Kreuzungen

|       |                                      |
|-------|--------------------------------------|
| KXaKK | X-Kanalausschnitt, eckig, beidseitig |
| KXaRR | X-Kanalausschnitt, rund, beidseitig  |
| KXaRK | X-Kanalausschnitt, eckig/rund        |
| RXS   | X-Sattelstück                        |
| RXSÜ  | X-Sattelstück, reduz.                |
| RXSS  | X-Sattelstutzen                      |
| RXSSÜ | X-Sattelstutzen, reduz.              |
| RXaRR | X-Rohrausschnitt, rund, beidseitig   |
| RXaKK | X-Rohrausschnitt, eckig, beidseitig  |
| RXaRK | X-Rohrausschnitt, eckig/rund         |

### Separatoren

|       |                                        |
|-------|----------------------------------------|
| KSTb  | Separator, Teilung in b                |
| KSTa  | Separator, Teilung in a                |
| KSXb  | X-Separator, Teilungen in b            |
| KSXa  | X-Separator, Teilungen in a            |
| KSXbO | X-Separator, Doppelteilung in b oben   |
| KSXaR | X-Separator, Doppelteilung in a rechts |
| KSXbU | X-Separator, Doppelteilung in b unten  |
| KSXaL | X-Separator, Doppelteilung in a links  |

### Aus-, Einlässe

|      |                          |
|------|--------------------------|
| KLa  | Luftdurchlass Kanal      |
| RLa  | Luftdurchlass Rohr       |
| KGiB | Kanal Gitterboden        |
| RGiB | Rohr Gitterboden         |
| KGi1 | Kanal Gitter, einseitig  |
| KGi2 | Kanal Gitter, beidseitig |
| RGi1 | Rohr Gitter, einseitig   |
| RGi2 | Rohr Gitter, beidseitig  |

### Sonstige

|       |                  |
|-------|------------------|
| KBod  | Boden            |
| RBod  | Rohr-Enddeckel   |
| KKomp | Kanal-Komponente |
| RKomp | Rohr-Komponente  |
| KVent | Kanal-Ventilator |
| RVent | Rohr-Ventilator  |

# Ungünstigster Strang

| lfd.<br>Nr. | Vorg / Nachf | ObjNr | Typ   | b    | a/DN | Länge | Vol    | w     | Gleich-<br>zeitigk. | tLuft | RWert  | pSta-<br>tisch | pTotal | pElem | pDross | pDross<br>Summe |
|-------------|--------------|-------|-------|------|------|-------|--------|-------|---------------------|-------|--------|----------------|--------|-------|--------|-----------------|
|             |              |       |       | [mm] | [mm] | [m]   | [m³/h] | [m/s] |                     | [°C]  | [Pa/m] | [Pa]           | [Pa]   | [Pa]  | [Pa]   | [Pa]            |
| 1           | -/2          | 7668  | KVent | 2200 | 2520 |       | 39500  | 1,98  |                     | 20,0  |        | -31            | 443    |       |        | 0               |
| 2           | 1/3          | 1521  | Kanal | 2200 | 2520 | 1,51  | 39500  | 1,98  | 1,0000              | 20,0  | 0,01   | 413            | 415    | 0     | 0      | 0               |
| 3           | 2/4          | 1520  | KÜstu | 2200 | 2520 |       | 39500  | 1,98  |                     | 20,0  |        | 413            | 415    |       |        | 0               |
| 4           | 3/5          | 1523  | Kanal | 2160 | 2480 | 0,06  | 39500  | 2,05  | 1,0000              | 20,0  | 0,02   | 412            | 415    | 0     | 0      | 0               |
| 5           | 4/6          | 1522  | KÜasy | 2160 | 2480 |       | 39500  | 2,05  |                     | 20,0  |        | 412            | 415    |       |        | 0               |
| 6           | 5/7          | 1532  | Kanal | 2100 | 2400 | 1,05  | 39500  | 2,18  | 1,0000              | 20,0  | 0,02   | 412            | 415    | 0     | 0      | 0               |
| 7           | 6/8          | 7736  | KBÜ   | 2400 | 2100 |       | 39500  | 2,18  |                     | 20,0  |        | 412            | 415    |       |        | 0               |
| 8           | 7/9          | 1528  | Kanal | 2100 | 1700 | 1,28  | 39500  | 3,07  | 1,0000              | 20,0  | 0,04   | 409            | 414    | 3     | 0      | 0               |
| 9           | 8/10         | 1545  | KÜasy | 1700 | 2100 |       | 39500  | 3,07  |                     | 20,0  |        | 409            | 414    |       |        | 0               |
| 10          | 9/11         | 1546  | Kanal | 2100 | 1700 | 1,15  | 39500  | 3,07  | 1,0000              | 20,0  | 0,04   | 409            | 414    | 0     | 0      | 0               |
| 11          | 10/12        | 1787  | KKomp | 1700 | 2100 |       | 39500  | 3,07  |                     | 20,0  |        | 409            | 414    | 19    |        | 0               |
| 12          | 11/13        | 1790  | Kanal | 2100 | 1700 | 1,65  | 39500  | 3,07  | 1,0000              | 20,0  | 0,04   | 390            | 395    | 0     | 0      | 0               |
| 13          | 12/1090+14   | 7735  | KT    | 2100 | 1700 |       | 39500  | 3,07  |                     | 20,0  |        | 390            | 395    |       |        | 0               |
| 14          | 13/15        | 1552  | Kanal | 1700 | 1200 | 1,08  | 19500  | 2,66  | 1,0000              | 20,0  | 0,04   | 388            | 392    | 1     | 0      | 0               |
| 15          | 14/16        | 1562  | KÜasy | 1700 | 1200 |       | 19500  | 2,66  |                     | 20,0  |        | 388            | 392    |       |        | 0               |
| 16          | 15/17        | 7727  | Kanal | 800  | 1200 | 0,91  | 19500  | 5,64  | 1,0000              | 20,0  | 0,28   | 373            | 390    | 16    | 0      | 0               |
| 17          | 16/18        | 7725  | KBÜ   | 1200 | 800  |       | 19500  | 5,64  |                     | 20,0  |        | 372            | 390    |       |        | 0               |
| 18          | 17/19        | 1564  | Kanal | 800  | 1600 | 2,26  | 19500  | 4,23  | 1,0000              | 20,0  | 0,15   | 378            | 388    | -6    | 0      | 0               |
| 19          | 18/20+490    | 7723  | KTaR  | 1600 | 800  |       | 19500  | 4,23  |                     | 20,0  |        | 378            | 388    |       |        | 0               |
| 20          | 19/21        | 1574  | Kanal | 800  | 1600 | 0,34  | 13000  | 2,82  | 1,0000              | 20,0  | 0,07   | 382            | 387    | -4    | 0      | 0               |
| 21          | 20/22        | 2025  | KÜasy | 800  | 1600 |       | 13000  | 2,82  |                     | 20,0  |        | 382            | 387    |       |        | 0               |
| 22          | 21/23        | 2026  | Kanal | 840  | 1600 | 0,28  | 13000  | 2,69  | 1,0000              | 20,0  | 0,06   | 382            | 386    | 0     | 0      | 0               |
| 23          | 22/24        | 2027  | KKomp | 840  | 1600 |       | 13000  | 2,69  |                     | 20,0  |        | 382            | 386    | 10    |        | 0               |
| 24          | 23/25        | 2028  | Kanal | 840  | 1600 | 0,47  | 13000  | 2,69  | 1,0000              | 20,0  | 0,06   | 372            | 376    | 0     | 0      | 0               |
| 25          | 24/26        | 7721  | KBÜ   | 1600 | 840  |       | 13000  | 2,69  |                     | 20,0  |        | 372            | 376    |       |        | 0               |
| 26          | 25/27        | 1568  | Kanal | 840  | 800  | 1,53  | 13000  | 5,37  | 1,0000              | 20,0  | 0,31   | 359            | 375    | 14    | 0      | 0               |
| 27          | 26/28        | 7722  | KBÜ   | 840  | 800  |       | 13000  | 5,37  |                     | 20,0  |        | 358            | 374    |       |        | 0               |
| 28          | 27/29        | 1570  | Kanal | 1000 | 800  | 0,39  | 13000  | 4,51  | 1,0000              | 20,0  | 0,20   | 361            | 372    | -3    | 0      | 0               |
| 29          | 28/30        | 2012  | KKomp | 1000 | 800  |       | 13000  | 4,51  |                     | 20,0  |        | 361            | 372    | 0     |        | 0               |
| 30          | 29/31        | 2013  | Kanal | 1000 | 800  | 0,32  | 13000  | 4,51  | 1,0000              | 20,0  | 0,20   | 361            | 372    | 0     | 0      | 0               |
| 31          | 30/32        | 1726  | KKomp | 1000 | 800  |       | 13000  | 4,51  |                     | 20,0  |        | 361            | 372    | 11    |        | 0               |
| 32          | 31/33        | 1727  | Kanal | 1000 | 800  | 1,47  | 13000  | 4,51  | 1,0000              | 20,0  | 0,20   | 350            | 361    | 0     | 0      | 0               |
| 33          | 32/34        | 2483  | KBsym | 1000 | 800  |       | 13000  | 4,51  |                     | 20,0  |        | 349            | 361    |       |        | 0               |
| 34          | 33/35        | 2482  | Kanal | 1000 | 800  | 1,63  | 13000  | 4,51  | 1,0000              | 20,0  | 0,20   | 340            | 351    | 10    | 0      | 0               |
| 35          | 34/36        | 2485  | KBsym | 1000 | 800  |       | 13000  | 4,51  |                     | 20,0  |        | 340            | 351    |       |        | 0               |
| 36          | 35/37        | 2484  | Kanal | 1000 | 800  | 2,68  | 13000  | 4,51  | 1,0000              | 20,0  | 0,20   | 330            | 341    | 10    | 0      | 0               |
| 37          | 36/38        | 2486  | KÜasy | 1000 | 800  |       | 13000  | 4,51  |                     | 20,0  |        | 330            | 341    |       |        | 0               |
| 38          | 37/39        | 2487  | Kanal | 450  | 500  | 1,45  | 13000  | 16,05 | 1,0000              | 20,0  | 4,74   | 182            | 325    | 155   | 0      | 0               |
| 39          | 38/40        | 2849  | KBÜ   | 500  | 450  |       | 13000  | 16,05 |                     | 20,0  |        | 175            | 318    |       |        | 0               |
| 40          | 39/41        | 2488  | Kanal | 450  | 1250 | 0,92  | 13000  | 6,42  | 1,0000              | 20,0  | 0,56   | 167            | 189    | 9     | 0      | 0               |
| 41          | 40/42+124    | 4214  | KT    | 1250 | 450  |       | 13000  | 6,42  |                     | 20,0  |        | 166            | 189    |       |        | 0               |
| 42          | 41/43        | 2492  | Kanal | 450  | 1250 | 0,41  | 6500   | 3,21  | 1,0000              | 20,0  | 0,16   | 179            | 185    | -13   | 0      | 0               |
| 43          | 42/44        | 2493  | KÜasy | 1250 | 450  |       | 6500   | 3,21  |                     | 20,0  |        | 179            | 185    |       |        | 0               |
| 44          | 43/45        | 2559  | Kanal | 1100 | 350  | 1,95  | 6500   | 4,69  | 1,0000              | 20,0  | 0,41   | 172            | 184    | 8     | 0      | 0               |
| 45          | 44/46        | 4835  | KBsym | 350  | 1100 |       | 6500   | 4,69  |                     | 20,0  |        | 171            | 184    |       |        | 0               |
| 46          | 45/47        | 2516  | Kanal | 1100 | 350  | 0,81  | 6500   | 4,69  | 1,0000              | 20,0  | 0,41   | 158            | 170    | 14    | 0      | 0               |
| 47          | 46/48        | 2523  | KKomp | 1100 | 350  |       | 6500   | 4,69  |                     | 20,0  |        | 157            | 170    | 12    |        | 0               |

LUFTKANALNETZBERECHNUNG Anlage: SWP größere Anlagen

| lfd.<br>Nr. | Vorg / Nachf | ObjNr | Typ   | b    | a/DN | Länge | Vol    | w     | Gleich-<br>zeitigk. | tLuft | RWert  | pSta-<br>tisch | pTotal | pElem | pDross | pDross<br>Summe |
|-------------|--------------|-------|-------|------|------|-------|--------|-------|---------------------|-------|--------|----------------|--------|-------|--------|-----------------|
|             |              |       |       | [mm] | [mm] | [m]   | [m³/h] | [m/s] |                     | [°C]  | [Pa/m] | [Pa]           | [Pa]   | [Pa]  | [Pa]   | [Pa]            |
| 48          | 47/49        | 2524  | Kanal | 1100 | 350  | 0,67  | 6500   | 4,69  | 1,0000              | 20,0  | 0,41   | 145            | 157    | 0     | 0      | 0               |
| 49          | 48/50        | 5603  | KÜasy | 1100 | 350  |       | 6500   | 4,69  |                     | 20,0  |        | 145            | 157    |       |        | 0               |
| 50          | 49/51        | 5629  | Kanal | 1100 | 350  | 9,58  | 6500   | 4,69  | 1,0000              | 20,0  | 0,41   | 145            | 157    | 4     | 0      | 0               |
| 51          | 50/52+996    | 5628  | KTaK  | 1100 | 350  |       | 6500   | 4,69  |                     | 20,0  |        | 141            | 153    |       |        | 0               |
| 52          | 51/53        | 5605  | Kanal | 1100 | 350  | 1,98  | 6300   | 4,55  | 1,0000              | 20,0  | 0,39   | 141            | 153    | 0     | 0      | 0               |
| 53          | 52/54        | 5606  | KBsym | 1100 | 350  |       | 6300   | 4,55  |                     | 20,0  |        | 141            | 152    |       |        | 0               |
| 54          | 53/55        | 4849  | Kanal | 1100 | 350  | 4,53  | 6300   | 4,55  | 1,0000              | 20,0  | 0,39   | 127            | 139    | 15    | 0      | 0               |
| 55          | 54/56+834    | 5675  | KTaK  | 1100 | 350  |       | 6300   | 4,55  |                     | 20,0  |        | 126            | 137    |       |        | 0               |
| 56          | 55/57        | 5676  | Kanal | 1100 | 350  | 3,60  | 5850   | 4,22  | 1,0000              | 20,0  | 0,34   | 127            | 137    | 0     | 0      | 0               |
| 57          | 56/58+828    | 5705  | KTaK  | 1100 | 350  |       | 5850   | 4,22  |                     | 20,0  |        | 125            | 135    |       |        | 0               |
| 58          | 57/59        | 5706  | Kanal | 1100 | 350  | 3,30  | 5400   | 3,90  | 1,0000              | 20,0  | 0,29   | 127            | 135    | 0     | 0      | 0               |
| 59          | 58/60+840    | 5740  | KTaK  | 1100 | 350  |       | 5400   | 3,90  |                     | 20,0  |        | 126            | 134    |       |        | 0               |
| 60          | 59/61        | 5741  | Kanal | 1100 | 350  | 1,24  | 4950   | 3,57  | 1,0000              | 20,0  | 0,25   | 127            | 134    | -1    | 0      | 0               |
| 61          | 60/62        | 5144  | KÜasy | 1100 | 350  |       | 4950   | 3,57  |                     | 20,0  |        | 126            | 133    |       |        | 0               |
| 62          | 61/63        | 5145  | Kanal | 900  | 300  | 2,46  | 4950   | 5,09  | 1,0000              | 20,0  | 0,58   | 118            | 133    | 10    | 0      | 0               |
| 63          | 62/64+772    | 5775  | KTaK  | 900  | 300  |       | 4950   | 5,09  |                     | 20,0  |        | 117            | 131    |       |        | 0               |
| 64          | 63/65        | 5776  | Kanal | 900  | 300  | 3,60  | 4500   | 4,63  | 1,0000              | 20,0  | 0,49   | 119            | 130    | 0     | 0      | 0               |
| 65          | 64/66+732    | 5810  | KTaK  | 900  | 300  |       | 4500   | 4,63  |                     | 20,0  |        | 117            | 129    |       |        | 0               |
| 66          | 65/67        | 5811  | Kanal | 900  | 300  | 0,89  | 4000   | 4,12  | 1,0000              | 20,0  | 0,39   | 119            | 128    | -2    | 0      | 0               |
| 67          | 66/68        | 5146  | KÜasy | 900  | 300  |       | 4000   | 4,12  |                     | 20,0  |        | 118            | 128    |       |        | 0               |
| 68          | 67/69        | 5147  | Kanal | 600  | 300  | 2,71  | 4000   | 6,17  | 1,0000              | 20,0  | 0,96   | 105            | 126    | 16    | 0      | 0               |
| 69          | 68/70+632    | 5906  | KTaK  | 600  | 300  |       | 4000   | 6,17  |                     | 20,0  |        | 103            | 124    |       |        | 0               |
| 70          | 69/71        | 5857  | Kanal | 600  | 300  | 2,60  | 3500   | 5,40  | 1,0000              | 20,0  | 0,75   | 106            | 122    | -2    | 0      | 0               |
| 71          | 70/72+656    | 5909  | KTaK  | 600  | 300  |       | 3500   | 5,40  |                     | 20,0  |        | 104            | 121    |       |        | 0               |
| 72          | 71/73        | 5886  | Kanal | 600  | 300  | 3,98  | 3000   | 4,63  | 1,0000              | 20,0  | 0,56   | 108            | 119    | -1    | 0      | 0               |
| 73          | 72/74+388    | 6116  | KTaK  | 600  | 300  |       | 3000   | 4,63  |                     | 20,0  |        | 105            | 117    |       |        | 0               |
| 74          | 73/75        | 5939  | Kanal | 600  | 300  | 1,85  | 2300   | 3,55  | 1,0000              | 20,0  | 0,35   | 109            | 116    | -3    | 0      | 0               |
| 75          | 74/76+468    | 6038  | KTaK  | 600  | 300  |       | 2300   | 3,55  |                     | 20,0  |        | 108            | 115    |       |        | 0               |
| 76          | 75/77        | 6039  | Kanal | 600  | 300  | 2,73  | 1600   | 2,47  | 1,0000              | 20,0  | 0,18   | 111            | 114    | -2    | 0      | 0               |
| 77          | 76/78+796    | 6107  | KTaK  | 600  | 300  |       | 1600   | 2,47  |                     | 20,0  |        | 111            | 114    |       |        | 0               |
| 78          | 77/79        | 6095  | Kanal | 600  | 300  | 1,17  | 1400   | 2,16  | 1,0000              | 20,0  | 0,14   | 111            | 114    | 0     | 0      | 0               |
| 79          | 78/80        | 5576  | KÜasy | 600  | 300  |       | 1400   | 2,16  |                     | 20,0  |        | 111            | 114    |       |        | 0               |
| 80          | 79/81        | 5577  | Kanal | 200  | 200  | 5,33  | 1400   | 9,72  | 1,0000              | 20,0  | 5,25   | 55             | 108    | 84    | 0      | 0               |
| 81          | 80/250+82    | 6129  | KTaK  | 200  | 200  |       | 1400   | 9,72  |                     | 20,0  |        | 27             | 80     |       |        | 0               |
| 82          | 81/83        | 6128  | Kanal | 200  | 200  | 0,17  | 700    | 4,86  | 1,0000              | 20,0  | 1,45   | 3              | 17     | 24    | 0      | 0               |
| 83          | 82/88+84     | 6127  | KTaR  | 200  | 200  |       | 700    | 4,86  |                     | 20,0  |        | 3              | 16     |       |        | 0               |
| 84          | 83/85        | 6126  | Rohr  |      | 160  | 0,47  | 100    | 1,38  | 1,0000              | 20,0  | 0,20   | 1              | 3      | 2     | 0      | 0               |
| 85          | 84/86        | 6133  | Rflex |      | 160  | 0,36  | 100    | 1,38  | 1,0000              | 20,0  | 0,20   | 1              | 2      | 0     | 0      | 0               |
| 86          | 85/87        | 6132  | Rohr  |      | 160  | 0,09  | 100    | 1,38  | 1,0000              | 20,0  | 0,20   | 1              | 2      | 0     | 0      | 0               |
| 87          | 86/-         | 6131  | RLa   |      | 160  |       | 100    | 1,38  |                     | 20,0  |        | 1              | 2      | 0     |        | 0               |

## Netzdaten

|                  |                      |
|------------------|----------------------|
| Bezeichnung      | Anl.3 ABL Sportbad   |
| Modus            | Nachrechnen          |
| Berechnung       | Druck- und Saugseite |
| Medium           | Luft                 |
| mittl.Temperatur | 32,0 °C              |

## Ergebnisse

|               |            |
|---------------|------------|
| Volumenstrom  | 39500 m³/h |
| Totaler Druck | 425 Pa     |

### Druckseite

|                     |          |
|---------------------|----------|
| Luftgeschwindigkeit | 1,98 m/s |
| Statischer Druck    | 54 Pa    |
| Totaler Druck       | 56 Pa    |

### Saugseite

|                     |          |
|---------------------|----------|
| Luftgeschwindigkeit | 1,98 m/s |
| Statischer Druck    | -370 Pa  |
| Totaler Druck       | -368 Pa  |

## Legende

### Rohre, Kanäle

|       |                 |
|-------|-----------------|
| Kanal | Kanal           |
| Rohr  | Rohr            |
| Kflex | Kanal, flexibel |
| Rflex | Rohr, flexibel  |

### Bögen

|       |                        |
|-------|------------------------|
| KBsym | Bogen, symmetrisch     |
| KBÜ   | Bogenübergang          |
| KWsym | Winkel, symmetrisch    |
| KWÜ   | Winkelübergang         |
| RBgla | Rohrbogen, glatt       |
| RBseg | Rohrbogen, segmentiert |

### Übergänge

|       |                           |
|-------|---------------------------|
| KEta  | Etag                      |
| KEtaÜ | Etagenübergang            |
| REta  | Rohretage                 |
| KÜsym | Übergang, symmetrisch     |
| KÜasy | Übergang, asymmetrisch    |
| RÜsym | Reduzierung, symmetrisch  |
| RÜasy | Reduzierung, asymmetrisch |
| KÜstu | Kanalübergang, stumpf     |
| RÜstu | Rohrübergang, stumpf      |
| KRÜsy | Kanal-Rohrübergang, sym.  |
| KRÜas | Kanal-Rohrübergang, asym. |

### Abzweige

|       |                            |
|-------|----------------------------|
| KT    | T-Stück, gerade            |
| KTÜ   | T-Stück, schräg            |
| RTS   | T-Sattelstück              |
| RTSÜ  | T-Sattelstück, reduz.      |
| RTSK  | T-Sattelstück, eckig       |
| RTSS  | T-Sattelstutzen            |
| RTSSÜ | T-Sattelstutzen, reduz.    |
| KTaK  | Kanalausschnitt, eckig     |
| KTaR  | Kanalausschnitt, rund      |
| RTaK  | Rohrausschnitt, rechteckig |
| RTaR  | Rohrausschnitt, rund       |
| KH    | Hosenstück, eckig          |
| RHsym | Hosenstück, rund           |
| RHasy | Hosenstück, rund asym.     |

### Ergebnisse

|             |                                                 |
|-------------|-------------------------------------------------|
| pStatisch   | Statischer Druck                                |
| pTotal      | Totaler Druck                                   |
| pElem       | Gesamtdruckabfall der Strecke inklusive Objekte |
| pDross      | Abzudrosselnder Druck                           |
| pDrossSumme | Summe der abzudrosselnden Drücke                |

### Kreuzungen

|       |                                      |
|-------|--------------------------------------|
| KXaKK | X-Kanalausschnitt, eckig, beidseitig |
| KXaRR | X-Kanalausschnitt, rund, beidseitig  |
| KXaRK | X-Kanalausschnitt, eckig/rund        |
| RXS   | X-Sattelstück                        |
| RXSÜ  | X-Sattelstück, reduz.                |
| RXSS  | X-Sattelstutzen                      |
| RXSSÜ | X-Sattelstutzen, reduz.              |
| RXaRR | X-Rohrausschnitt, rund, beidseitig   |
| RXaKK | X-Rohrausschnitt, eckig, beidseitig  |
| RXaRK | X-Rohrausschnitt, eckig/rund         |

### Separatoren

|       |                                        |
|-------|----------------------------------------|
| KSTb  | Separator, Teilung in b                |
| KSTa  | Separator, Teilung in a                |
| KSXb  | X-Separator, Teilungen in b            |
| KSXa  | X-Separator, Teilungen in a            |
| KSXbO | X-Separator, Doppelteilung in b oben   |
| KSXaR | X-Separator, Doppelteilung in a rechts |
| KSXbU | X-Separator, Doppelteilung in b unten  |
| KSXaL | X-Separator, Doppelteilung in a links  |

### Aus-, Einlässe

|      |                          |
|------|--------------------------|
| KLa  | Luftdurchlass Kanal      |
| RLa  | Luftdurchlass Rohr       |
| KGiB | Kanal Gitterboden        |
| RGiB | Rohr Gitterboden         |
| KGi1 | Kanal Gitter, einseitig  |
| KGi2 | Kanal Gitter, beidseitig |
| RGi1 | Rohr Gitter, einseitig   |
| RGi2 | Rohr Gitter, beidseitig  |

### Sonstige

|       |                  |
|-------|------------------|
| KBod  | Boden            |
| RBod  | Rohr-Enddeckel   |
| KKomp | Kanal-Komponente |
| RKomp | Rohr-Komponente  |
| KVent | Kanal-Ventilator |
| RVent | Rohr-Ventilator  |

# Ungünstigster Strang

| lfd.<br>Nr. | Vorg / Nachf | ObjNr | Typ   | b    | a/DN | Länge | Vol    | w     | Gleich-<br>zeitigk. | tLuft | RWert  | pSta-<br>tisch | pTotal | pElem | pDross | pDross<br>Summe |
|-------------|--------------|-------|-------|------|------|-------|--------|-------|---------------------|-------|--------|----------------|--------|-------|--------|-----------------|
|             |              |       |       | [mm] | [mm] | [m]   | [m³/h] | [m/s] |                     | [°C]  | [Pa/m] | [Pa]           | [Pa]   | [Pa]  | [Pa]   | [Pa]            |
| 1           | -/2          | 7671  | KVent | 2200 | 2520 |       | 39500  | 1,98  |                     | 16,5  |        | 54             | 425    |       |        | 0               |
| 2           | 1/3          | 1736  | Kanal | 2200 | 2520 | 1,54  | 39500  | 1,98  | 1,0000              | 16,5  | 0,01   | -370           | -368   | 0     | 0      | 0               |
| 3           | 2/4          | 1735  | KÜstu | 2200 | 2520 |       | 39500  | 1,98  |                     | 16,5  |        | -370           | -368   |       |        | 0               |
| 4           | 3/5          | 1738  | Kanal | 2160 | 2480 | 0,66  | 39500  | 2,05  | 1,0000              | 16,5  | 0,02   | -371           | -368   | 0     | 0      | 0               |
| 5           | 4/6          | 7715  | KBÜ   | 2480 | 2160 |       | 39500  | 2,05  |                     | 16,5  |        | -371           | -368   |       |        | 0               |
| 6           | 5/7          | 1741  | Kanal | 2160 | 1700 | 2,26  | 39500  | 2,99  | 1,0000              | 16,5  | 0,04   | -373           | -368   | -2    | 0      | 0               |
| 7           | 6/8          | 7718  | KBÜ   | 1700 | 2160 |       | 39500  | 2,99  |                     | 16,5  |        | -372           | -368   |       |        | 0               |
| 8           | 7/9          | 1757  | Kanal | 2160 | 1700 | 0,90  | 39500  | 2,99  | 1,0000              | 16,5  | 0,04   | -372           | -367   | 1     | 0      | 0               |
| 9           | 8/10         | 6346  | KÜasy | 2160 | 1700 |       | 39500  | 2,99  |                     | 16,5  |        | -372           | -367   |       |        | 0               |
| 10          | 9/11         | 6347  | Kanal | 2300 | 1500 | 1,58  | 39500  | 3,18  | 1,0000              | 16,5  | 0,05   | -373           | -367   | -1    | 0      | 0               |
| 11          | 10/12        | 1767  | KKomp | 2300 | 1500 |       | 39500  | 3,18  |                     | 16,5  |        | -373           | -367   | 13    |        | 0               |
| 12          | 11/13        | 1774  | Kanal | 2300 | 1500 | 2,26  | 39500  | 3,18  | 1,0000              | 16,5  | 0,05   | -360           | -354   | 0     | 0      | 0               |
| 13          | 12/14        | 7700  | KBÜ   | 2300 | 1500 |       | 39500  | 3,18  |                     | 16,5  |        | -359           | -354   |       |        | 0               |
| 14          | 13/15        | 1792  | Kanal | 1400 | 1500 | 2,10  | 39500  | 5,22  | 1,0000              | 16,5  | 0,15   | -367           | -352   | -7    | 0      | 0               |
| 15          | 14/16        | 7701  | KBsym | 1400 | 1500 |       | 39500  | 5,22  |                     | 16,5  |        | -366           | -351   |       |        | 0               |
| 16          | 15/17        | 1796  | Kanal | 1400 | 1500 | 1,32  | 39500  | 5,22  | 1,0000              | 16,5  | 0,15   | -354           | -339   | 12    | 0      | 0               |
| 17          | 16/18        | 1798  | KÜasy | 1400 | 1500 |       | 39500  | 5,22  |                     | 16,5  |        | -354           | -339   |       |        | 0               |
| 18          | 17/19        | 1799  | Kanal | 1400 | 1100 | 3,88  | 39500  | 7,12  | 1,0000              | 16,5  | 0,32   | -365           | -337   | -10   | 0      | 0               |
| 19          | 18/20        | 1833  | KÜasy | 1400 | 1100 |       | 39500  | 7,12  |                     | 16,5  |        | -364           | -336   |       |        | 0               |
| 20          | 19/21        | 1832  | Kanal | 1600 | 840  | 0,91  | 39500  | 8,16  | 1,0000              | 16,5  | 0,48   | -372           | -335   | -8    | 0      | 0               |
| 21          | 20/142+22    | 2527  | KTaR  | 1600 | 840  |       | 39500  | 8,16  |                     | 16,5  |        | -372           | -335   |       |        | 0               |
| 22          | 21/23        | 2526  | Rohr  |      | 600  | 1,42  | 13000  | 12,77 | 1,0000              | 9,5   | 2,31   | -339           | -249   | 36    | 0      | 0               |
| 23          | 22/24        | 7674  | RBgla |      | 600  |       | 13000  | 12,77 |                     | 9,5   |        | -336           | -245   |       |        | 0               |
| 24          | 23/25        | 2525  | Rohr  |      | 600  | 1,45  | 13000  | 12,77 | 1,0000              | 9,5   | 2,31   | -310           | -219   | 29    | 0      | 0               |
| 25          | 24/26        | 2531  | RKomp |      | 600  |       | 13000  | 12,77 |                     | 9,5   |        | -307           | -216   | 51    |        | 0               |
| 26          | 25/27        | 2532  | Rohr  |      | 600  | 5,46  | 13000  | 12,77 | 1,0000              | 9,5   | 2,31   | -256           | -165   | 13    | 0      | 0               |
| 27          | 26/28        | 2533  | KRÜsy |      | 600  |       | 13000  | 12,77 |                     | 9,5   |        | -244           | -153   |       |        | 0               |
| 28          | 27/29        | 2536  | Kanal | 800  | 750  | 1,66  | 13000  | 6,02  | 1,0000              | 9,5   | 0,41   | -202           | -182   | 42    | 0      | 0               |
| 29          | 28/30        | 2539  | KÜasy | 800  | 750  |       | 13000  | 6,02  |                     | 9,5   |        | -201           | -181   |       |        | 0               |
| 30          | 29/31        | 2540  | Kanal | 750  | 750  | 1,01  | 13000  | 6,42  | 1,0000              | 9,5   | 0,48   | -204           | -181   | -2    | 0      | 0               |
| 31          | 30/32        | 2551  | KBsym | 750  | 750  |       | 13000  | 6,42  |                     | 9,5   |        | -204           | -181   |       |        | 0               |
| 32          | 31/33        | 2542  | Kanal | 750  | 750  | 0,46  | 13000  | 6,42  | 1,0000              | 9,5   | 0,48   | -185           | -162   | 19    | 0      | 0               |
| 33          | 32/34        | 2544  | KÜasy | 750  | 750  |       | 13000  | 6,42  |                     | 9,5   |        | -185           | -162   |       |        | 0               |
| 34          | 33/35        | 2549  | Kanal | 450  | 1250 | 1,67  | 13000  | 6,42  | 1,0000              | 9,5   | 0,56   | -185           | -162   | 1     | 0      | 0               |
| 35          | 34/36+306    | 2554  | KT    | 450  | 1250 |       | 13000  | 6,42  |                     | 9,5   |        | -184           | -161   |       |        | 0               |
| 36          | 35/37        | 2555  | Kanal | 500  | 1250 | 0,26  | 6500   | 2,89  | 1,0000              | 19,0  | 0,12   | -177           | -173   | 7     | 0      | 0               |
| 37          | 36/38        | 2562  | KÜasy | 1250 | 500  |       | 6500   | 2,89  |                     | 19,0  |        | -177           | -172   |       |        | 0               |
| 38          | 37/39        | 2563  | Kanal | 350  | 1250 | 0,75  | 6500   | 4,13  | 1,0000              | 19,0  | 0,31   | -181           | -172   | -4    | 0      | 0               |
| 39          | 38/40        | 2572  | KÜasy | 1250 | 350  |       | 6500   | 4,13  |                     | 19,0  |        | -181           | -172   |       |        | 0               |
| 40          | 39/41        | 2573  | Kanal | 350  | 1250 | 1,83  | 6500   | 4,13  | 1,0000              | 19,0  | 0,31   | -181           | -172   | 1     | 0      | 0               |
| 41          | 40/42        | 2580  | KBsym | 350  | 1250 |       | 6500   | 4,13  |                     | 19,0  |        | -180           | -171   |       |        | 0               |
| 42          | 41/43        | 2565  | Kanal | 1250 | 350  | 0,81  | 6500   | 4,13  | 1,0000              | 19,0  | 0,31   | -169           | -160   | 12    | 0      | 0               |
| 43          | 42/44        | 2568  | KKomp | 1250 | 350  |       | 6500   | 4,13  |                     | 19,0  |        | -169           | -159   | 9     |        | 0               |
| 44          | 43/45        | 2569  | Kanal | 1250 | 350  | 0,86  | 6500   | 4,13  | 1,0000              | 19,0  | 0,31   | -159           | -150   | 0     | 0      | 0               |
| 45          | 44/46        | 2629  | KWÜ   | 1250 | 350  |       | 6500   | 4,13  |                     | 19,0  |        | -159           | -150   |       |        | 0               |
| 46          | 45/47        | 2620  | Kanal | 1100 | 350  | 0,50  | 6500   | 4,69  | 1,0000              | 19,0  | 0,41   | -143           | -131   | 16    | 0      | 0               |
| 47          | 46/48+688    | 4962  | KTaK  | 1100 | 350  |       | 6500   | 4,69  |                     | 19,0  |        | -143           | -131   |       |        | 0               |

LUFTKANALNETZBERECHNUNG Anlage: SWP größere Anlagen

| lfd.<br>Nr. | Vorg / Nachf | ObjNr | Typ   | b    | a/DN | Länge | Vol    | w     | Gleich-<br>zeitigk. | tLuft | RWert  | pSta-<br>tisch | pTotal | pElem | pDross | pDross<br>Summe |
|-------------|--------------|-------|-------|------|------|-------|--------|-------|---------------------|-------|--------|----------------|--------|-------|--------|-----------------|
|             |              |       |       | [mm] | [mm] | [m]   | [m³/h] | [m/s] |                     | [°C]  | [Pa/m] | [Pa]           | [Pa]   | [Pa]  | [Pa]   | [Pa]            |
| 48          | 47/49        | 2801  | Kanal | 1100 | 350  | 3,85  | 6100   | 4,40  | 1,0000              | 18,9  | 0,36   | -140           | -130   | 4     | 0      | 0               |
| 49          | 48/50+665    | 4963  | KTaK  | 1100 | 350  |       | 6100   | 4,40  |                     | 18,9  |        | -139           | -128   |       |        | 0               |
| 50          | 49/51        | 2805  | Kanal | 1100 | 350  | 3,30  | 5700   | 4,11  | 1,0000              | 18,8  | 0,32   | -137           | -127   | 3     | 0      | 0               |
| 51          | 50/52+627    | 5204  | KTaK  | 1100 | 350  |       | 5700   | 4,11  |                     | 18,8  |        | -135           | -126   |       |        | 0               |
| 52          | 51/53        | 5205  | Kanal | 1100 | 350  | 3,70  | 5300   | 3,82  | 1,0000              | 18,7  | 0,28   | -133           | -125   | 3     | 0      | 0               |
| 53          | 52/54+579    | 5201  | KTaK  | 1100 | 350  |       | 5300   | 3,82  |                     | 18,7  |        | -132           | -124   |       |        | 0               |
| 54          | 53/55        | 5202  | KÜasy | 1100 | 350  | 2,77  | 4900   | 3,54  | 1,0000              | 18,6  | 0,24   | -130           | -123   | 3     | 0      | 0               |
| 55          | 54/56        | 2624  | KÜasy | 1100 | 350  |       | 4900   | 3,54  |                     | 18,6  |        | -129           | -122   |       |        | 0               |
| 56          | 55/57        | 2625  | Kanal | 900  | 300  | 0,83  | 4900   | 5,04  | 1,0000              | 18,6  | 0,57   | -136           | -121   | -6    | 0      | 0               |
| 57          | 56/58+593    | 5198  | KTaK  | 900  | 300  |       | 4900   | 5,04  |                     | 18,6  |        | -135           | -121   |       |        | 0               |
| 58          | 57/59        | 5199  | Kanal | 900  | 300  | 4,00  | 4500   | 4,63  | 1,0000              | 18,5  | 0,49   | -131           | -119   | 6     | 0      | 0               |
| 59          | 58/60+548    | 5195  | KTaK  | 900  | 300  |       | 4500   | 4,63  |                     | 18,5  |        | -129           | -117   |       |        | 0               |
| 60          | 59/61        | 5196  | Kanal | 900  | 300  | 3,70  | 4100   | 4,22  | 1,0000              | 18,3  | 0,41   | -126           | -116   | 5     | 0      | 0               |
| 61          | 60/62+519    | 5192  | KTaK  | 900  | 300  |       | 4100   | 4,22  |                     | 18,3  |        | -124           | -114   |       |        | 0               |
| 62          | 61/63        | 5193  | Kanal | 900  | 300  | 0,56  | 3700   | 3,81  | 1,0000              | 18,2  | 0,34   | -121           | -113   | 3     | 0      | 0               |
| 63          | 62/64        | 2626  | KÜasy | 900  | 300  |       | 3700   | 3,81  |                     | 18,2  |        | -121           | -113   |       |        | 0               |
| 64          | 63/65        | 2627  | Kanal | 600  | 300  | 2,63  | 3700   | 5,71  | 1,0000              | 18,2  | 0,83   | -129           | -111   | -6    | 0      | 0               |
| 65          | 64/66+464    | 2829  | KTaK  | 600  | 300  |       | 3700   | 5,71  |                     | 18,2  |        | -127           | -109   |       |        | 0               |
| 66          | 65/67        | 2830  | Kanal | 600  | 300  | 1,31  | 3140   | 4,85  | 1,0000              | 17,8  | 0,61   | -118           | -105   | 10    | 0      | 0               |
| 67          | 66/68+424    | 5953  | KTaK  | 600  | 300  |       | 3140   | 4,85  |                     | 17,8  |        | -117           | -104   |       |        | 0               |
| 68          | 67/69        | 2845  | Kanal | 600  | 300  | 1,83  | 2580   | 3,98  | 1,0000              | 17,4  | 0,43   | -110           | -101   | 8     | 0      | 0               |
| 69          | 68/214+70    | 5385  | KTaK  | 600  | 300  |       | 2580   | 3,98  |                     | 17,4  |        | -109           | -100   |       |        | 0               |
| 70          | 69/71        | 2834  | Kanal | 200  | 200  | 2,76  | 880    | 6,11  | 1,0000              | 20,0  | 2,21   | -103           | -82    | 12    | 0      | 0               |
| 71          | 70/72        | 5387  | KBsym | 200  | 200  |       | 880    | 6,11  |                     | 20,0  |        | -97            | -76    |       |        | 0               |
| 72          | 71/73        | 5380  | Kanal | 200  | 200  | 1,12  | 880    | 6,11  | 1,0000              | 20,0  | 2,21   | -73            | -52    | 27    | 0      | 0               |
| 73          | 72/74        | 5386  | KBsym | 200  | 200  |       | 880    | 6,11  |                     | 20,0  |        | -70            | -50    |       |        | 0               |
| 74          | 73/75        | 5379  | Kanal | 200  | 200  | 0,29  | 880    | 6,11  | 1,0000              | 20,0  | 2,21   | -46            | -25    | 25    | 0      | 0               |
| 75          | 74/76+202    | 5373  | KTaR  | 200  | 200  |       | 880    | 6,11  |                     | 20,0  |        | -46            | -25    |       |        | 0               |
| 76          | 75/77        | 5342  | Kanal | 200  | 200  | 1,00  | 800    | 5,56  | 1,0000              | 20,0  | 1,85   | -39            | -22    | 8     | 0      | 0               |
| 77          | 76/78+138    | 5374  | KTaR  | 200  | 200  |       | 800    | 5,56  |                     | 20,0  |        | -37            | -20    |       |        | 0               |
| 78          | 77/79        | 5348  | Kanal | 200  | 200  | 1,00  | 720    | 5,00  | 1,0000              | 20,0  | 1,53   | -32            | -18    | 7     | 0      | 0               |
| 79          | 78/80+134    | 5375  | KTaR  | 200  | 200  |       | 720    | 5,00  |                     | 20,0  |        | -30            | -16    |       |        | 0               |
| 80          | 79/81        | 5332  | Kanal | 200  | 200  | 1,00  | 640    | 4,44  | 1,0000              | 20,0  | 1,23   | -25            | -14    | 6     | 0      | 0               |
| 81          | 80/82+130    | 5376  | KTaR  | 200  | 200  |       | 640    | 4,44  |                     | 20,0  |        | -24            | -13    |       |        | 0               |
| 82          | 81/83        | 5359  | Kanal | 200  | 200  | 1,00  | 560    | 3,89  | 1,0000              | 20,0  | 0,96   | -19            | -11    | 5     | 0      | 0               |
| 83          | 82/84+126    | 5377  | KTaR  | 200  | 200  |       | 560    | 3,89  |                     | 20,0  |        | -18            | -10    |       |        | 0               |
| 84          | 83/85        | 5365  | Kanal | 200  | 200  | 1,30  | 480    | 3,33  | 1,0000              | 20,0  | 0,73   | -14            | -8     | 5     | 0      | 0               |
| 85          | 84/114+86    | 6103  | KT    | 200  | 200  |       | 480    | 3,33  |                     | 20,0  |        | -13            | -7     |       |        | 0               |
| 86          | 85/87        | 5450  | Kanal | 200  | 200  | 3,40  | 320    | 2,22  | 1,0000              | 20,0  | 0,35   | -7             | -5     | 7     | 0      | 0               |
| 87          | 86/88+102    | 6104  | KT    | 200  | 200  |       | 320    | 2,22  |                     | 20,0  |        | -6             | -3     |       |        | 0               |
| 88          | 87/89        | 5447  | Kanal | 200  | 200  | 2,00  | 160    | 1,11  | 1,0000              | 20,0  | 0,10   | -3             | -3     | 3     | 0      | 0               |
| 89          | 88/90        | 6105  | KBsym | 200  | 200  |       | 160    | 1,11  |                     | 20,0  |        | -3             | -2     |       |        | 0               |
| 90          | 89/91        | 5446  | Kanal | 200  | 200  | 0,65  | 160    | 1,11  | 1,0000              | 20,0  | 0,10   | -2             | -1     | 1     | 0      | 0               |
| 91          | 90/92+98     | 5435  | KTaR  | 200  | 200  |       | 160    | 1,11  |                     | 20,0  |        | -2             | -1     |       |        | 0               |
| 92          | 91/93        | 5434  | Kanal | 200  | 200  | 2,20  | 80     | 0,56  | 1,0000              | 20,0  | 0,03   | -1             | -1     | 1     | 0      | 0               |
| 93          | 92/1088+94   | 5440  | KTaR  | 200  | 200  |       | 80     | 0,56  |                     | 20,0  |        | -1             | -1     |       |        | 0               |
| 94          | 93/95        | 5439  | Rohr  |      | 160  | 0,37  | 80     | 1,11  | 1,0000              | 20,0  | 0,13   | -1             | 0      | 0     | 0      | 0               |
| 95          | 94/96        | 5444  | Rflex |      | 160  | 0,36  | 80     | 1,11  | 1,0000              | 20,0  | 0,13   | -1             | 0      | 0     | 0      | 0               |

LUFTKANALNETZBERECHNUNG Anlage: SWP größere Anlagen

| lfd.<br>Nr. | Vorg / Nachf | ObjNr | Typ  | b    | a/DN | Länge | Vol    | w     | Gleich-<br>zeitigk. | tLuft | RWert  | pSta-<br>tisch | pTotal | pElem | pDross | pDross<br>Summe |
|-------------|--------------|-------|------|------|------|-------|--------|-------|---------------------|-------|--------|----------------|--------|-------|--------|-----------------|
|             |              |       |      | [mm] | [mm] | [m]   | [m³/h] | [m/s] |                     | [°C]  | [Pa/m] | [Pa]           | [Pa]   | [Pa]  | [Pa]   | [Pa]            |
| 96 95/97    |              | 5443  | Rohr |      | 160  | 0,09  | 80     | 1,11  | 1,0000              | 20,0  | 0,13   | -1             | 0      | 0     | 0      | 0               |
| 97 96/-     |              | 5442  | RLa  |      | 160  |       | 80     | 1,11  |                     | 20,0  |        | -1             | 0      | 0     |        | 0               |