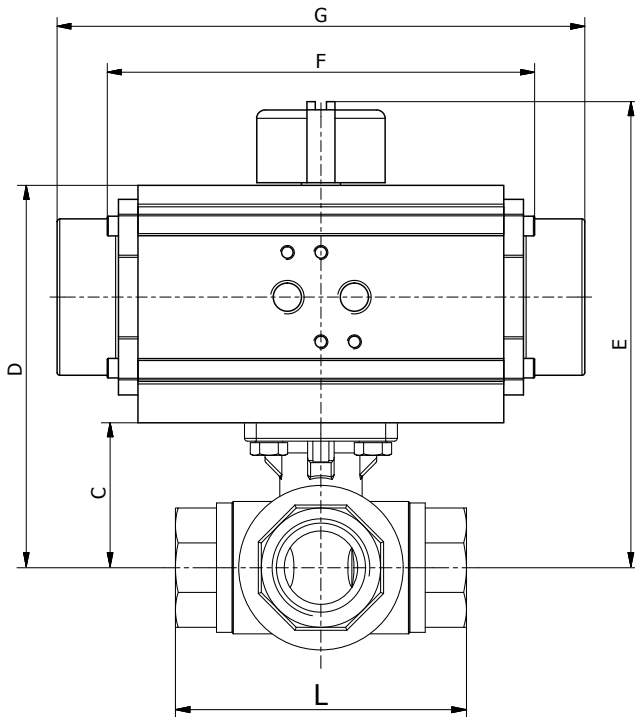


FIGUR:
AD: Pneumatischer Schwenkantrieb, doppelwirkend

AS: Pneumatischer Schwenkantrieb, einfachwirkend (Feder schließend)

ABMESSUNGEN: (mm)

| ø | L | C | AD | | | | | AS | | | | |
|--------|--------|-------|-----|-------|-------|-----|------|-----|-------|-------|-------|------|
| | | | AD | D | E | F | Kg | AS | D | E | G | Kg |
| 1/2" | 72,00 | 38,5 | 20 | 104,5 | 134,5 | 145 | 2,3 | 40 | 123,5 | 153,5 | 195 | 3,2 |
| 3/4" | 83,00 | 41,00 | 20 | 107,0 | 137,0 | 145 | 2,9 | 40 | 126,0 | 156,0 | 195 | 3,8 |
| 1" | 99,00 | 49,00 | 40 | 134,0 | 164,0 | 158 | 4,3 | 80 | 156,0 | 186,0 | 217 | 5,8 |
| 1 1/4" | 112,00 | 55,00 | 40 | 140,0 | 170,0 | 158 | 5,4 | 130 | 172,0 | 202,0 | 258 | 8,0 |
| 1 1/2" | 125,00 | 63,00 | 80 | 170,0 | 200,0 | 177 | 8,3 | 200 | 198,0 | 228,0 | 299 | 12,3 |
| 2" | 149,00 | 74,00 | 130 | 191,0 | 221,0 | 196 | 13,3 | 300 | 226,0 | 256,0 | 348,5 | 20,0 |

Der Schwenkantrieb ist berechnet für einen Steuerdruck von 6 bar, einen Sicherheitsfaktor von 30% und max. Differenzdruck von 64 bar bis 1 1/4", 55 bar ab 1 1/2".

ZUBEHÖR:

Pilotventile, Endschalter, Nothandbetätigung, pneumatischer oder elektropneumatischer Stellungsregler.

TECHNISCHE BESCHREIBUNG:

- Reduzierter Durchgang
- 90° Schaltweg
- Aufbauflansch nach ISO 5211
- Nicht-ausdrückbare Welle
- Selbstregulierende Spindelpackung
- Kugeldichtung aus RPTFE

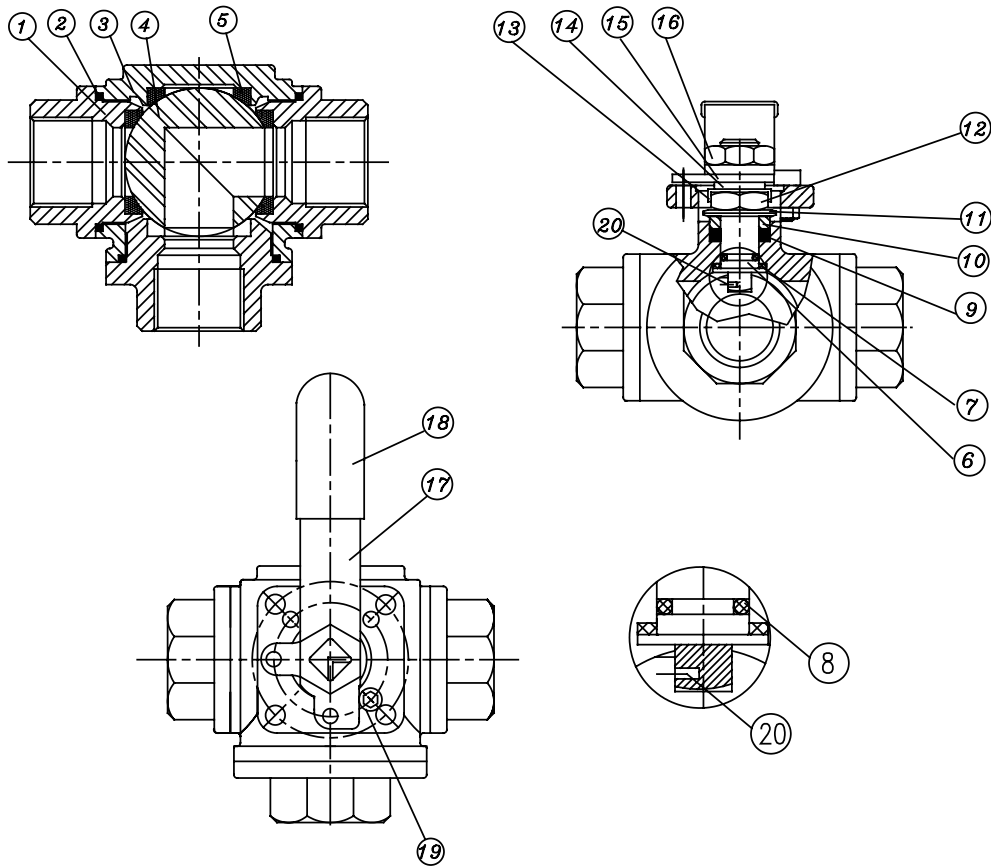
FIGUR:
1370T: BSP nach DIN EN 10266, T-Bohrung

1372T: NPT nach ASME B1.20.1, T-Bohrung

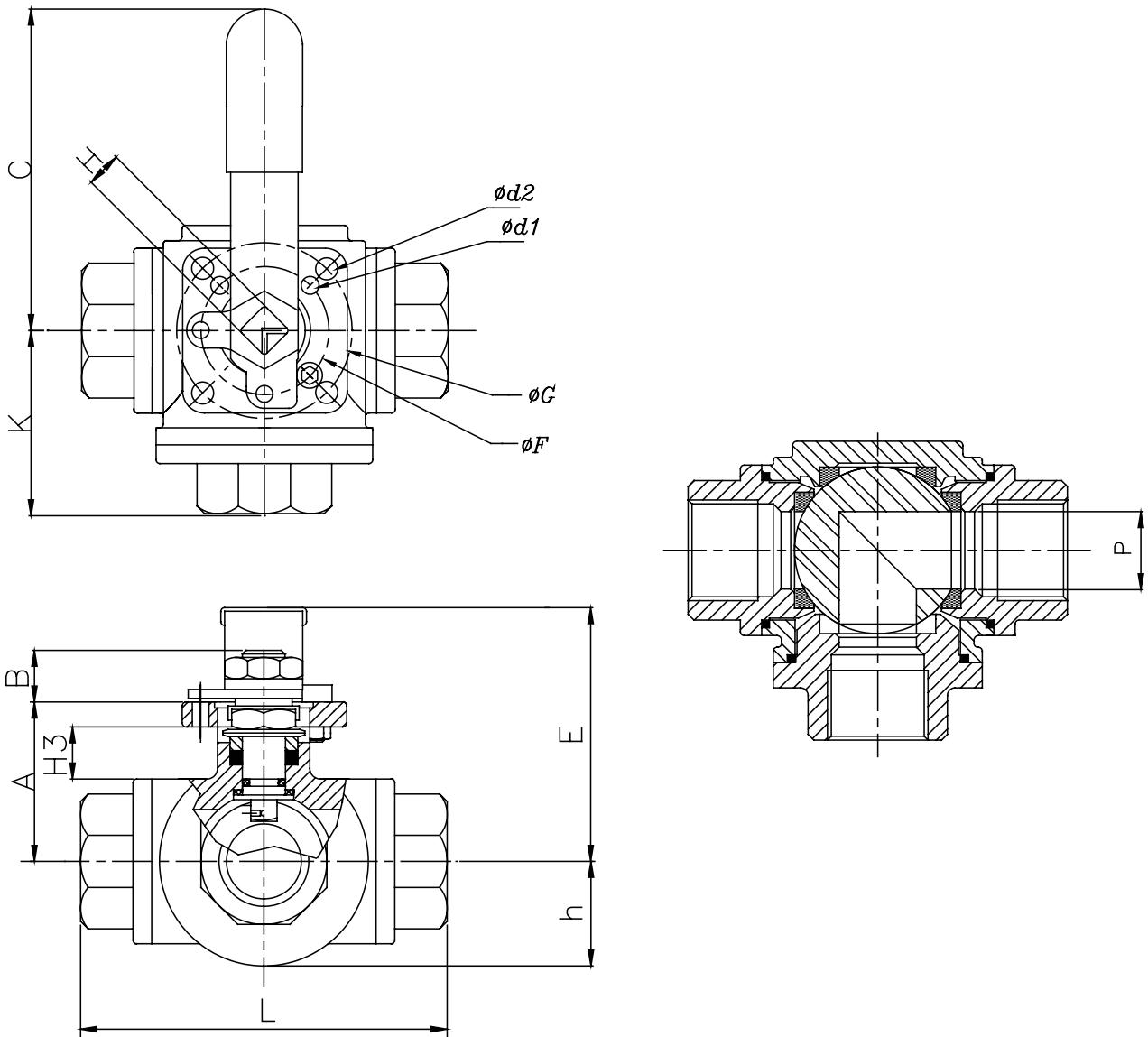
1370L: BSP nach DIN EN 10266, L-Bohrung

1372L: NPT nach ASME B1.20.1, L-Bohrung


| AUSFÜHRUNG | |
|-----------------------|---------------------------------|
| Nach | ANSI B16.34, ANSI B1.20, API 6D |
| Aufbauflansch | ISO 5211 |
| Markierung | ISO 5209, EN 19 |
| PRÜFUNG UND ZEUGNISSE | |
| Qualität | ISO 9001 |
| Werkstoff Zeugnisse | EN 10204-3.1 |
| Druckprüfung | API 598 |



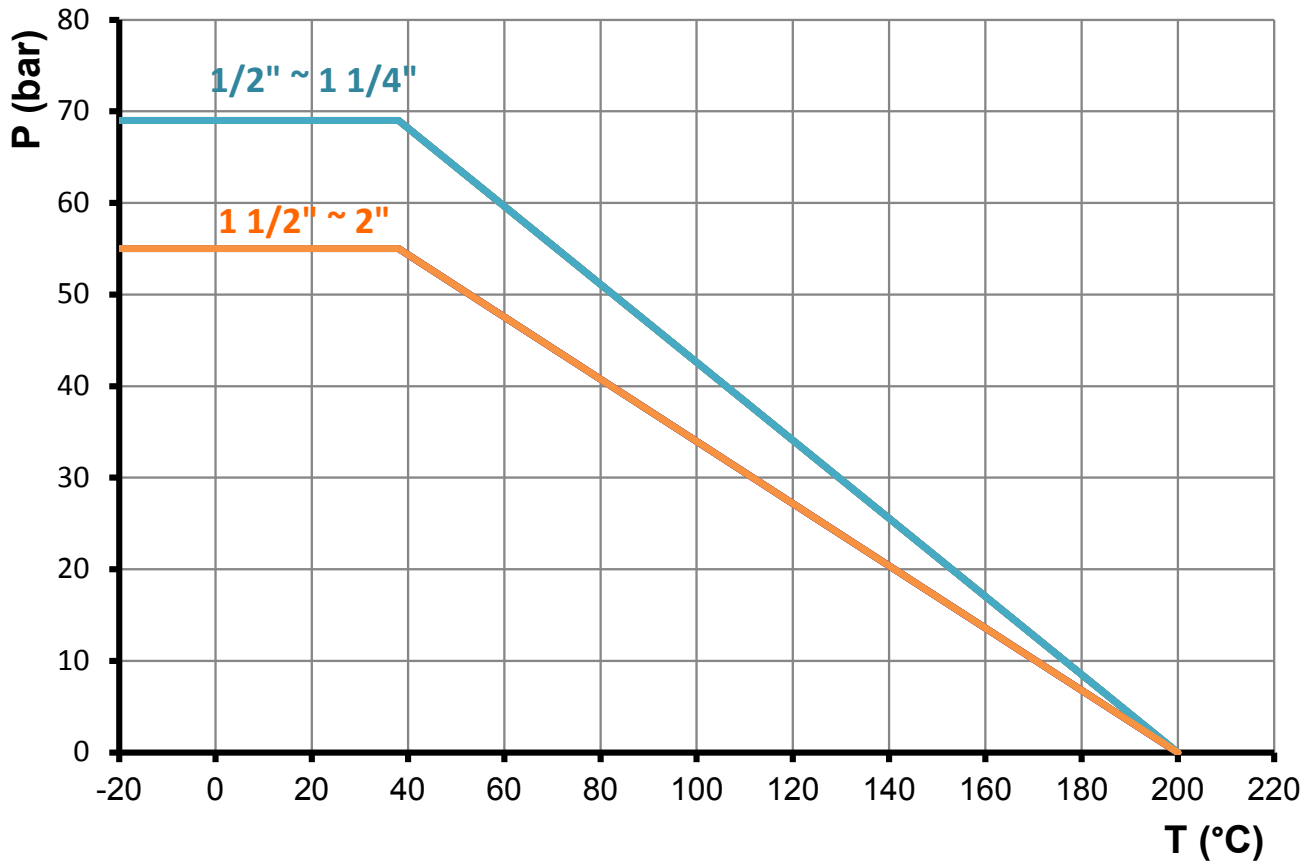
| Pos. | Umschreibung | Werkstoffe |
|------|-----------------------|--------------------|
| 1 | Ergänzungsteil | A351 Gr CF8M |
| 2 | Gehäusedichtung | PTFE |
| 3 | Gehäuse | A351 Gr CF8M |
| 4 | Kugel | Edelstahl 316 |
| 5 | Sitzring | RPTFE |
| 6 | Welle | Edelstahl 316 |
| 7 | Wellendichtung | RPTFE |
| 8 | O-Ring | Viton |
| 9 | Packung | PTFE + 15% Graphit |
| 10 | Stopfbuchse | Edelstahl 304 |
| 11 | Tellerfeder | Edelstahl 301 |
| 12 | Mutter | Edelstahl 304 |
| 13 | Scheibe | Edelstahl 304 |
| 14 | Scheibe | Edelstahl 304 |
| 15 | Anschlagplatte | Edelstahl 304 |
| 16 | Mutter | Edelstahl 304 |
| 17 | Handhebel | Edelstahl 304 |
| 18 | Handhebelschutz | Vinyl |
| 19 | Anschlag | Edelstahl 304 |
| 20 | Antistatikvorrichtung | Edelstahl 316 |


ABMESSUNGEN: (mm)

| Ø | DN | A | B | C | Ød1 | Ød2 | E | ØF | ØG |
|--------|----|------|----|-----|-----|-----|-----|----|----|
| 1/2" | 15 | 38,5 | 11 | 130 | 6,0 | 6,0 | 62 | 36 | 42 |
| 3/4" | 20 | 41,0 | 11 | 130 | 6,0 | 6,0 | 64 | 36 | 42 |
| 1" | 25 | 49,0 | 14 | 165 | 6,0 | 7,1 | 82 | 42 | 50 |
| 1 1/4" | 32 | 55,0 | 14 | 165 | 6,0 | 7,1 | 89 | 42 | 50 |
| 1 1/2" | 40 | 63,0 | 18 | 205 | 7,1 | 9,2 | 98 | 50 | 70 |
| 2" | 50 | 74,0 | 18 | 205 | 7,1 | 9,2 | 108 | 50 | 70 |

| Ø | DN | H | K | L | H3 | h | P | ISO5211 | Kg |
|--------|----|----|------|-----|------|------|----|---------|-----|
| 1/2" | 15 | 9 | 36,0 | 72 | 11,8 | 20,0 | 12 | F03/F04 | 0,9 |
| 3/4" | 20 | 9 | 41,5 | 83 | 13,4 | 23,2 | 15 | F03/F04 | 1,5 |
| 1" | 25 | 11 | 49,5 | 99 | 14,8 | 28,0 | 20 | F04/F05 | 2,2 |
| 1 1/4" | 32 | 11 | 56,0 | 112 | 15,0 | 34,0 | 25 | F04/F05 | 3,3 |
| 1 1/2" | 40 | 14 | 62,5 | 125 | 16,2 | 39,0 | 32 | F05/F07 | 5,2 |
| 2" | 50 | 14 | 74,5 | 149 | 16,5 | 48,0 | 38 | F05/F07 | 9,5 |

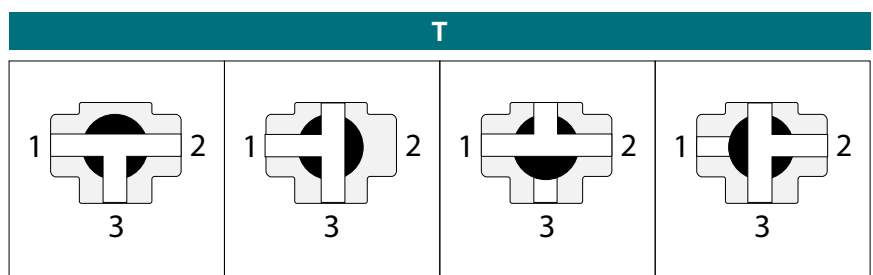
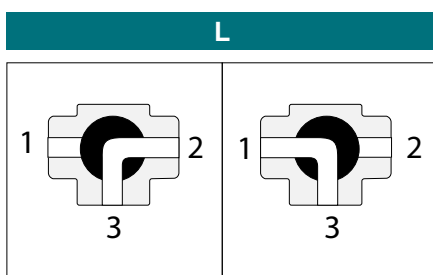
Änderungen vorbehalten

DRUCK-/TEMPERATURDIAGRAMM:

DREHMOMENTE: (in Nm)

| Ø | T (Nm) |
|--------|--------|
| 1/2" | 10 |
| 3/4" | 13 |
| 1" | 23 |
| 1 1/4" | 42 |
| 1 1/2" | 51 |
| 2" | 59 |

Kv-WERTE:

| Ø | L-Bohrung | T-Bohrung (Gerade) | T-Bohrung (Ecke) |
|--------|-----------|--------------------|------------------|
| 1/2" | 9,5 | 11,2 | 6,9 |
| 3/4" | 13,0 | 16,4 | 9,5 |
| 1" | 26,0 | 29,4 | 19,0 |
| 1 1/4" | 40,7 | 46,7 | 35,5 |
| 1 1/2" | 60,6 | 72,7 | 46,7 |
| 2" | 115,0 | 136,7 | 83,9 |

KONFIGURATIONEN:


TECHNISCHE BESCHREIBUNG:

- Pneumatik-Antrieb "Rack & pinion"
- 90° ±5° Schwenkbewegung
- Einstellung Hubbegrenzung ±5°
- Betriebstemperatur: -30 °C ~ 100 °C
- Betriebsdruck: 3 ~ 8 bar
- Flanschbild nach ISO 5211 und DIN 3337 (Oktagonalkupplung)
- Aufbau von Steuerventile nach Namur Std.
- Aufbau von Endschalter nach Namur

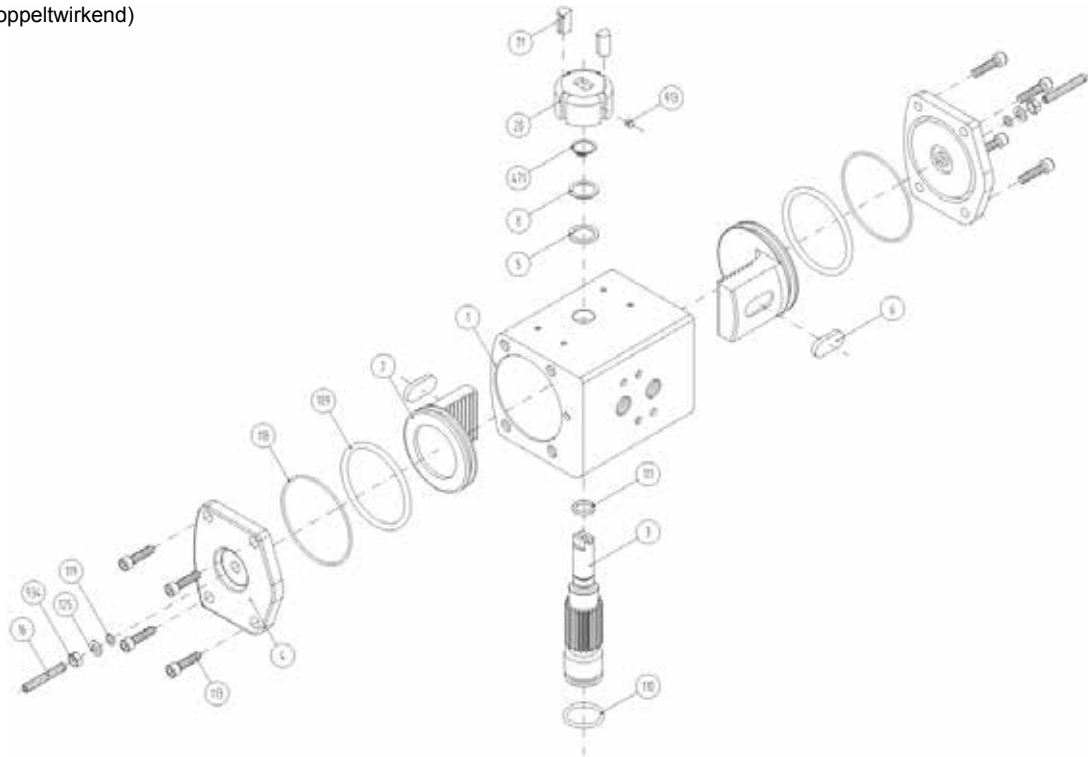
FIGUR:

- ADA:** doppeltwirkend
- ASR:** einfachwirkend, normal geschlossen
- ASRO:** einfachwirkend, normal offen



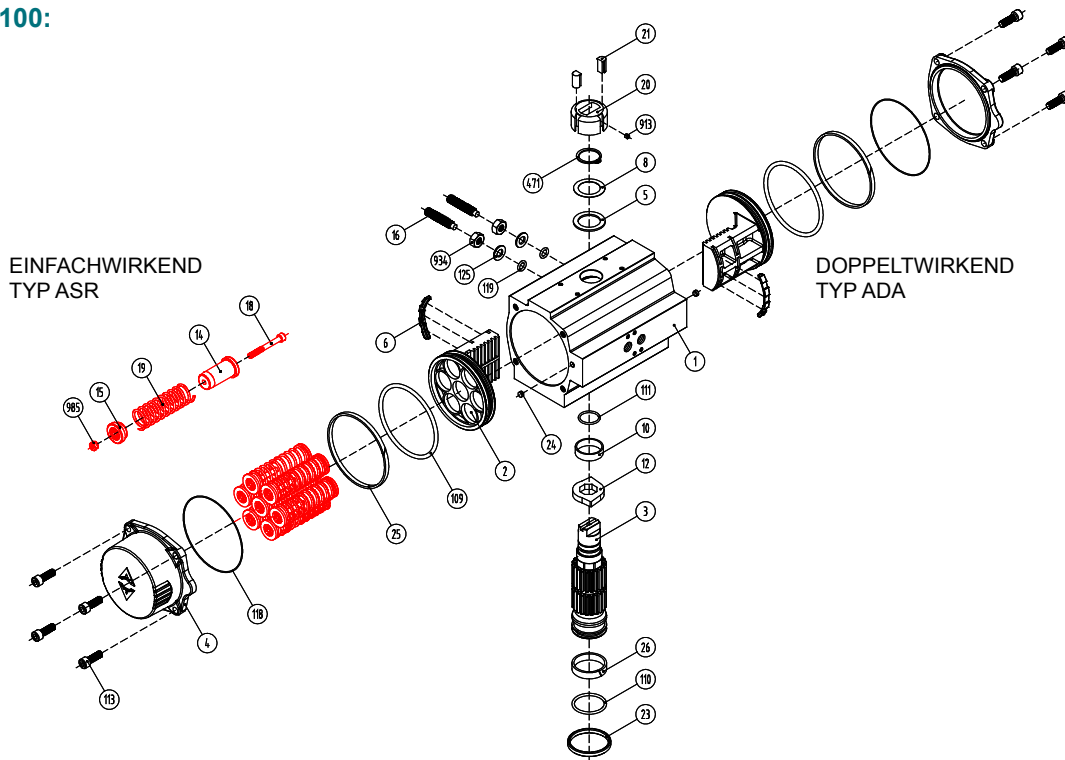
| AUSFÜHRUNG | |
|--------------------------|--------------------------------|
| Aufbau von Magnetventile | NAMUR Std. |
| Aufbau von Zubehör | NAMUR VDI, NAMUR VDE 3845 Std. |
| Anschluss | ISO 5211, DIN 3337 |
| PRÜFUNG UND ZEUGNISSE | |
| Sicherheit | ATEX II 2 GD, SIL3 |
| Qualität | CE/PED, ISO9001 |

TYP 10: (doppeltwirkend)


WERKSTOFFE

| Pos. | Umschreibung | Werkstoffe | Pos. | Umschreibung | Werkstoffe |
|------|------------------|-------------------------------|------|-------------------|------------|
| 1 | Gehäuse | Aluminium-Legierung, eloxiert | 109 | O-Ring | NBR |
| 2 | Kolben | Aluminium | 110 | O-Ring | NBR |
| 3 | Kolben | Stahl, vernickelt | 111 | O-Ring | NBR |
| 4 | Endkappe | Aluminium + Epoxy | 113 | Bolzen | Edelstahl |
| 5 | Scheibe | Polyamide PA 6.6 | 118 | O-Ring | NBR |
| 6 | Führungsband | Polyamide PA 6.6 + 30% G.F. | 119 | O-Ring | NBR |
| 8 | Scheibe | Edelstahl | 125 | Scheibe | Edelstahl |
| 16 | Einstellschraube | Edelstahl | 913 | Feststellschraube | Edelstahl |
| 20 | Stellungsanzeige | Polyamide | 471 | Sicherungsring | Edelstahl |
| 21 | Nocken | Polyamide | 934 | Mutter | Edelstahl |

TYP 20 - 2100:



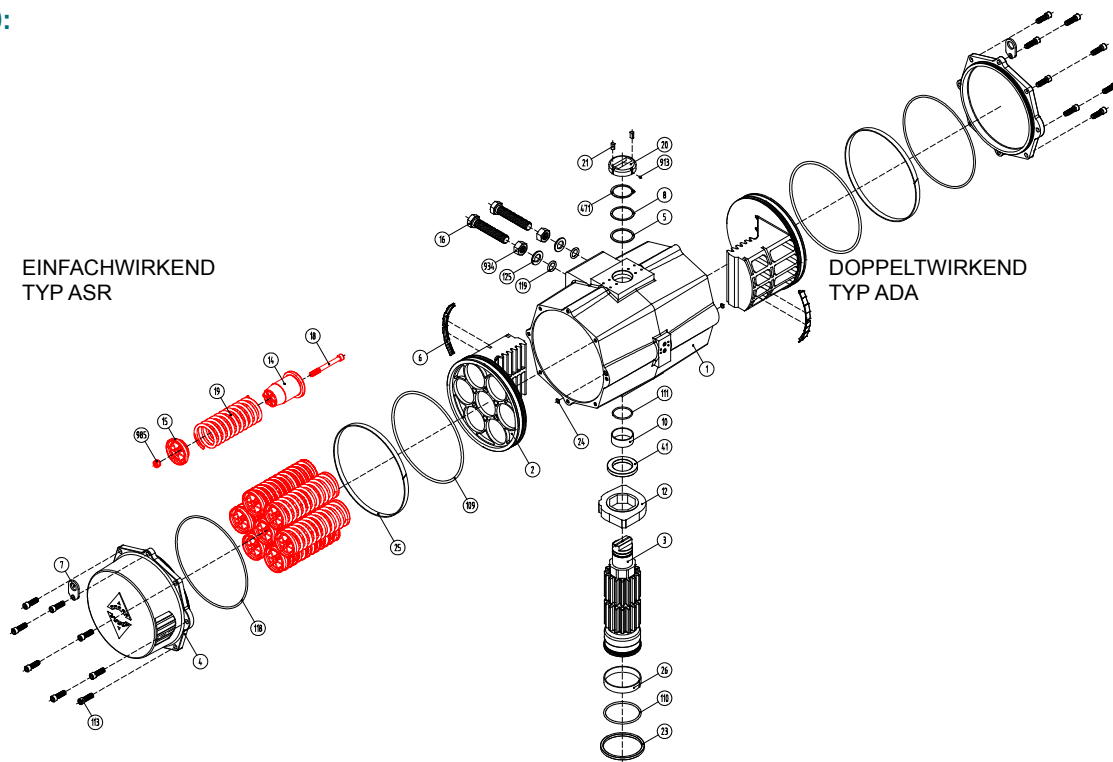
WERKSTOFFE:

| Pos. | Umschreibung | Werkstoffe | Pos. | Umschreibung | Werkstoffe |
|------|-----------------------|-------------------------------|------|-------------------|-------------------|
| 1 | Gehäuse | Aluminium-Legierung, eloxiert | 23 | Zentrier링 | Stahl, vernickelt |
| 2 | Kolben | Aluminium | 24 | Dichtungsstopfen | NBR |
| 3 | Kolben | Stahl, vernickelt | 25 | Führungsband | Resin |
| 4 | Endkappe | Aluminium + Epoxy | 26 | Lagerbuchse | Hostalen RCH 1000 |
| 5 | Scheibe | Polyamide PA 6.6 | 109 | O-Ring | NBR |
| 6 | Führungsband | Polyamide PA 6.6 + 30% G.F. | 110 | O-Ring | NBR |
| 8 | Scheibe | Edelstahl | 111 | O-Ring | NBR |
| 10 | Lagerbuchse | Hostalen RCH 1000 | 113 | Bolzen | Edelstahl |
| 12 | Stop | ASTM A 105 | 118 | O-Ring | NBR |
| 14 | (*) Druckfederpatrone | Polyamide PA 6.6 | 119 | O-Ring | NBR |
| 15 | (*) Druckfederpatrone | Polyamide PA 6.6 | 125 | Scheibe | Edelstahl |
| 16 | Einstellschraube | Edelstahl | 913 | Feststellschraube | Edelstahl |
| 18 | (*) Bolzen | Edelstahl | 471 | Sicherungsring | Edelstahl |
| 19 | (*) Feder | DIN 2076 -D-5.6 | 934 | Mutter | Edelstahl |
| 20 | Stellungsanzeige | Polyamide | 985 | (*) Mutter | Edelstahl |
| 21 | Nocken | Polyamide | | | |

* Nur für ASR

** Für Typ 20: Polyamide PA 6.6 + 30% G.F.

TYP 2500:



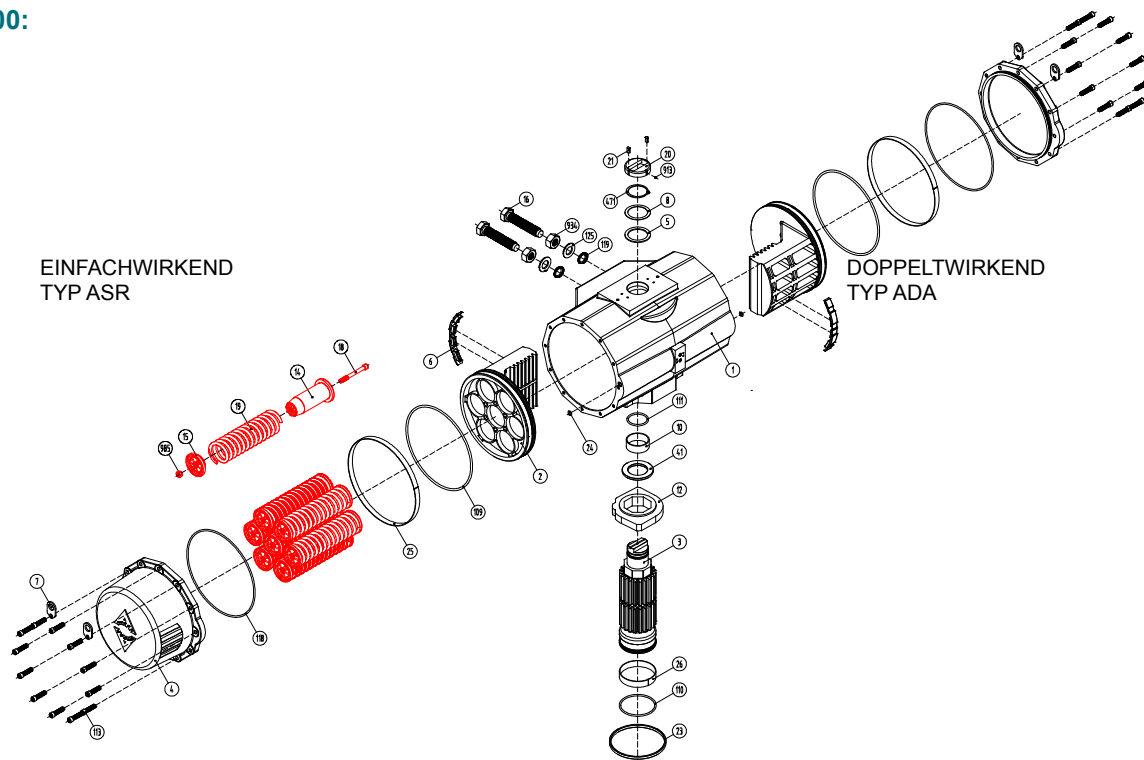
WERKSTOFFE:

| Pos. | Umschreibung | Werkstoffe | Pos. | Umschreibung | Werkstoffe |
|------|-----------------------|-------------------------------|------|-------------------|-------------------|
| 1 | Gehäuse | Aluminium-Legierung, eloxiert | 23 | Zentrierring | Stahl, vernickelt |
| 2 | Kolben | Aluminium | 24 | Dichtungsstopfen | NBR |
| 3 | Kolben | Stahl, vernickelt | 25 | Führungsband | Resin |
| 4 | Endkappe | Aluminium + Epoxy | 26 | Lagerbuchse | Hostalen RCH 1000 |
| 5 | Scheibe | Polyamide PA 6.6 | 109 | O-Ring | NBR |
| 6 | Führungsband | Polyamide PA 6.6 + 30% G.F. | 110 | O-Ring | NBR |
| 8 | Scheibe | Edelstahl | 111 | O-Ring | NBR |
| 10 | Lagerbuchse | Hostalen RCH 1000 | 113 | Bolzen | Edelstahl |
| 12 | Stop | ASTM A 105 | 118 | O-Ring | NBR |
| 14 | (*) Druckfederpatrone | Polyamide PA 6.6 | 119 | O-Ring | NBR |
| 15 | (*) Druckfederpatrone | Polyamide PA 6.6 | 125 | Scheibe | Edelstahl |
| 16 | Einstellschraube | Edelstahl | 913 | Feststellschraube | Edelstahl |
| 18 | (*) Bolzen | Edelstahl | 471 | Sicherungsring | Edelstahl |
| 19 | (*) Feder | DIN 2076 -D-5.6 | 934 | Mutter | Edelstahl |
| 20 | Stellungsanzeige | Polyamide | 985 | (*) Mutter | Edelstahl |
| 21 | Nocken | Polyamide | | | |

* Nur für ASR

** Für Typ 20: Polyamide PA 6.6 + 30% G.F.

TYP 4000:



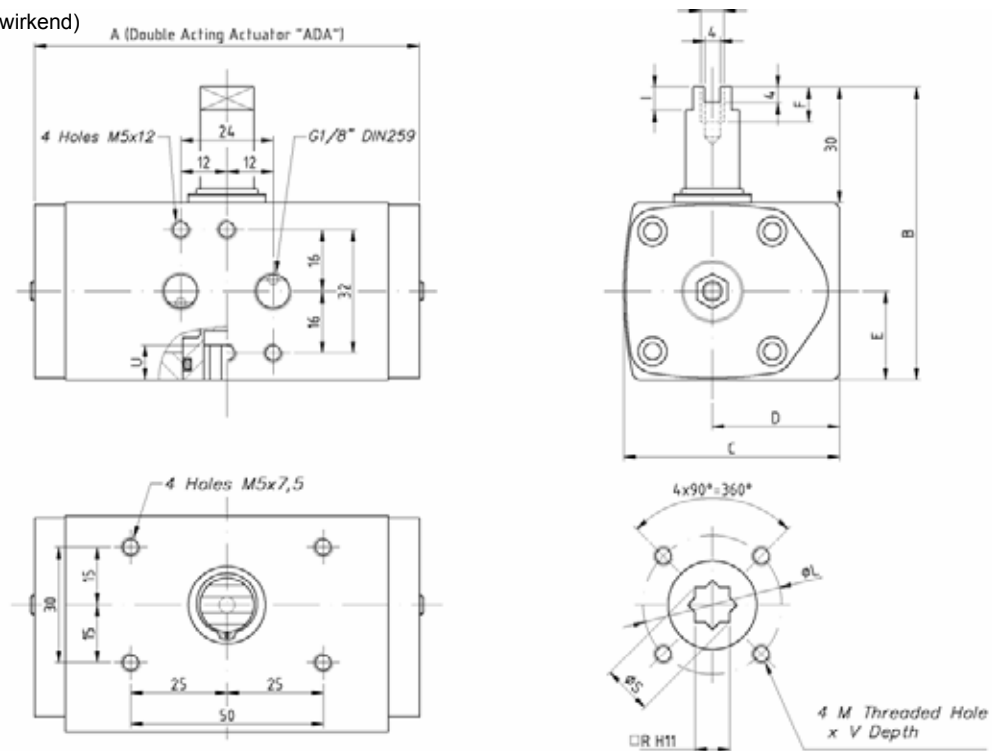
WERKSTOFFE:

| Pos. | Umschreibung | Werkstoffe | Pos. | Umschreibung | Werkstoffe |
|------|-----------------------|-------------------------------|------|-------------------|-------------------|
| 1 | Gehäuse | Aluminium-Legierung, eloxiert | 23 | Zentrierring | Stahl, vernickelt |
| 2 | Kolben | Aluminium | 24 | Dichtungsstopfen | NBR |
| 3 | Kolben | Stahl, vernickelt | 25 | Führungsband | Resin |
| 4 | Endkappe | Aluminium + Epoxy | 26 | Lagerbuchse | Hostalen RCH 1000 |
| 5 | Scheibe | Polyamide PA 6.6 | 109 | O-Ring | NBR |
| 6 | Führungsband | Polyamide PA 6.6 + 30% G.F. | 110 | O-Ring | NBR |
| 8 | Scheibe | Edelstahl | 111 | O-Ring | NBR |
| 10 | Lagerbuchse | Hostalen RCH 1000 | 113 | Bolzen | Edelstahl |
| 12 | Stop | ASTM A 105 | 118 | O-Ring | NBR |
| 14 | (*) Druckfederpatrone | Polyamide PA 6.6 | 119 | O-Ring | NBR |
| 15 | (*) Druckfederpatrone | Polyamide PA 6.6 | 125 | Scheibe | Edelstahl |
| 16 | Einstellschraube | Edelstahl | 913 | Feststellschraube | Edelstahl |
| 18 | (*) Bolzen | Edelstahl | 471 | Sicherungsring | Edelstahl |
| 19 | (*) Feder | DIN 2076 -D-5.6 | 934 | Mutter | Edelstahl |
| 20 | Stellungsanzeige | Polyamide | 985 | (*) Mutter | Edelstahl |
| 21 | Nocken | Polyamide | | | |

* Nur für ASR

** Für Typ 20: Polyamide PA 6.6 + 30% G.F.

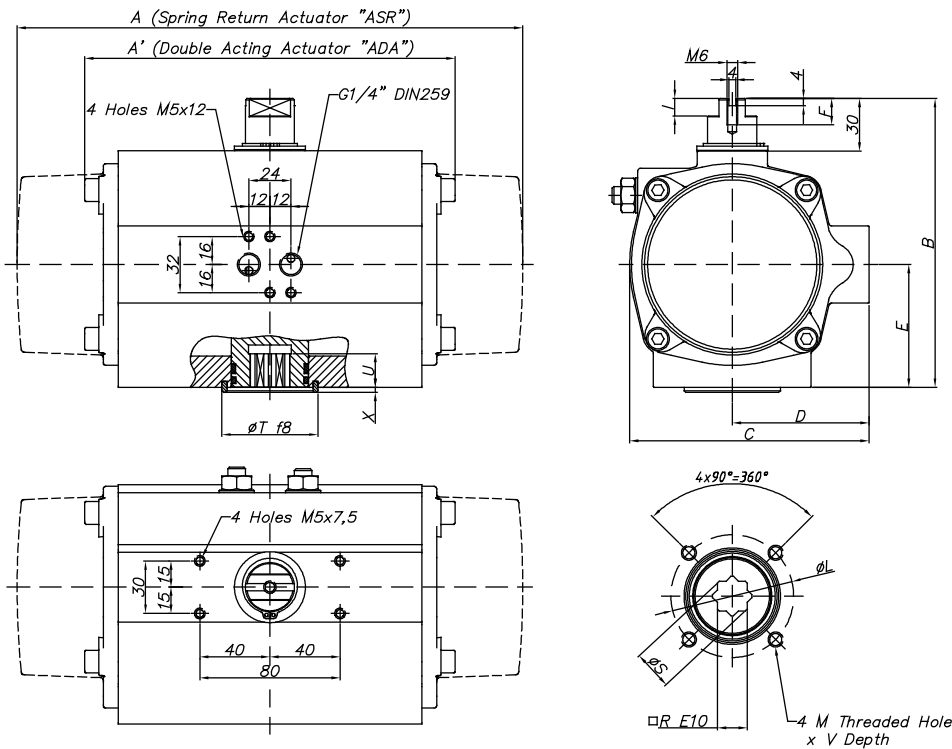
TYP 10: (doppeltwirkend)



ABMESSUNGEN: (mm)

| TYP | A | B | C | D | E | F | I | R | ØS | ISO 5211 | ØL | M x V | U |
|-----|-----|----|----|----|----|---|---|---|------|----------|----|-------|----|
| 10 | 100 | 76 | 56 | 33 | 23 | 9 | 6 | 9 | 12,5 | F03 | 36 | M5x8 | 10 |

TYP 20-1750:

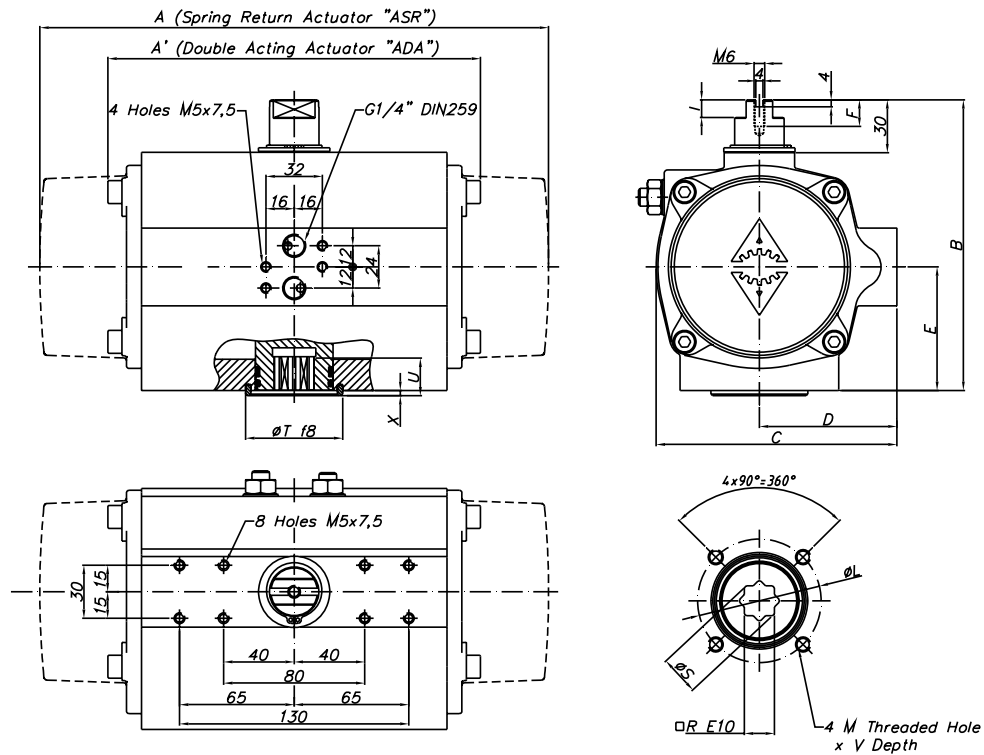


ABMESSUNGEN: (mm)

| TYP | A | A' | B | C | D | E | F | I | R | ØS | ISO 5211 | ØL/ ØL1 | M x V | ØT | X | U |
|--------|-------|-----|-----|-------|-----|-----|----|----|----|------|----------|---------|--------|-----|---|----|
| C20 | 163,0 | 145 | 96 | 76,0 | 48 | 34 | 9 | 6 | 14 | 18,1 | F04 | 42 | M5x10 | 35 | 3 | 12 |
| 20F05 | 163,0 | 145 | 96 | 76,0 | 48 | 34 | 9 | 6 | 14 | 18,1 | F05 | 50 | M6x10 | 35 | 3 | 12 |
| 20VK09 | 163,0 | 145 | 96 | 76,0 | 48 | 34 | 9 | 6 | 9 | 12,5 | F03 | 36 | M5x8 | 25 | 2 | 10 |
| | | | | | | | | | | | F05 | 50 | M6x10 | | | |
| 40 | 195,0 | 158 | 115 | 91,0 | 56 | 45 | 9 | 6 | 14 | 18,1 | F04 | 42 | M5x10 | 35 | 3 | 12 |
| 40F05 | 195,0 | 158 | 115 | 91,0 | 56 | 45 | 9 | 6 | 14 | 18,1 | F05 | 50 | M6x10 | 35 | 3 | 12 |
| | | | | | | | | | | | F05 | 50 | M6x10 | 55 | 3 | 19 |
| | | | | | | | | | | | F07 | 70 | M8x16 | | | |
| 80 | 217,0 | 177 | 137 | 111,0 | 66 | 55 | 12 | 8 | 17 | 22,5 | F05 | 50 | M6x10 | 55 | 3 | 22 |
| | | | | | | | | | | | F07 | 70 | M8x16 | | | |
| 130 | 258,0 | 196 | 147 | 122,0 | 71 | 60 | 15 | 8 | 17 | 22,5 | F05 | 50 | M6x10 | 55 | 3 | 22 |
| | | | | | | | | | | | F07 | 70 | M8x16 | | | |
| 200 | 299,0 | 225 | 165 | 135,5 | 78 | 70 | 15 | 10 | 17 | 22,5 | F07 | 70 | M8x16 | 55 | 3 | 23 |
| | | | | | | | | | | | F10 | 102 | M10x16 | | | |
| 300 | 348,5 | 273 | 182 | 152,5 | 86 | 80 | 16 | 12 | 22 | 28,5 | F07 | 70 | M8x16 | 70 | 3 | 24 |
| | | | | | | | | | | | F10 | 102 | M10x16 | | | |
| 500 | 397,0 | 304 | 199 | 173,0 | 96 | 85 | 17 | 15 | 22 | 28,5 | F10 | 102 | M10x16 | 70 | 3 | 32 |
| | | | | | | | | | | | F10 | 102 | M10x17 | | | |
| | | | | | | | | | | | F12 | 125 | M12x20 | 85 | 3 | 39 |
| 1200 | 560,0 | 439 | 249 | 212,5 | 116 | 114 | 16 | 15 | 36 | 48,5 | F10 | 102 | M10x17 | 100 | 4 | 48 |
| | | | | | | | | | | | F14 | 140 | M16x26 | | | |
| 1750 | 601,0 | 461 | 280 | 242,5 | 131 | 130 | 16 | 15 | 36 | 48,5 | F14 | 140 | M16x26 | 100 | 4 | 50 |

Änderungen vorbehalten

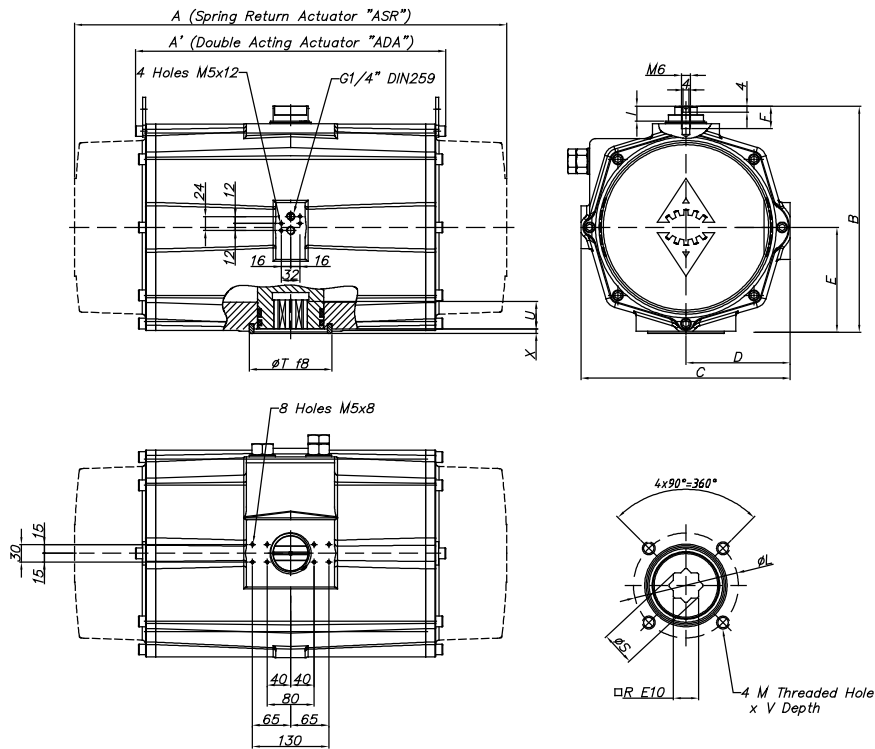
TYP 2100:



ABMESSUNGEN: (mm)

| TYP | A | A' | B | C | D | E | F | I | R | ØS | ISO 5211 | ØL/ ØL1 | M x V | ØT | X | U |
|-------|-------|-----|-----|-------|-----|-----|----|----|----|------|----------|---------|--------|-----|---|----|
| C2100 | 702,0 | 510 | 313 | 276,5 | 148 | 147 | 16 | 15 | 46 | 65,1 | F16 | 165 | M20x29 | 130 | 4 | 50 |

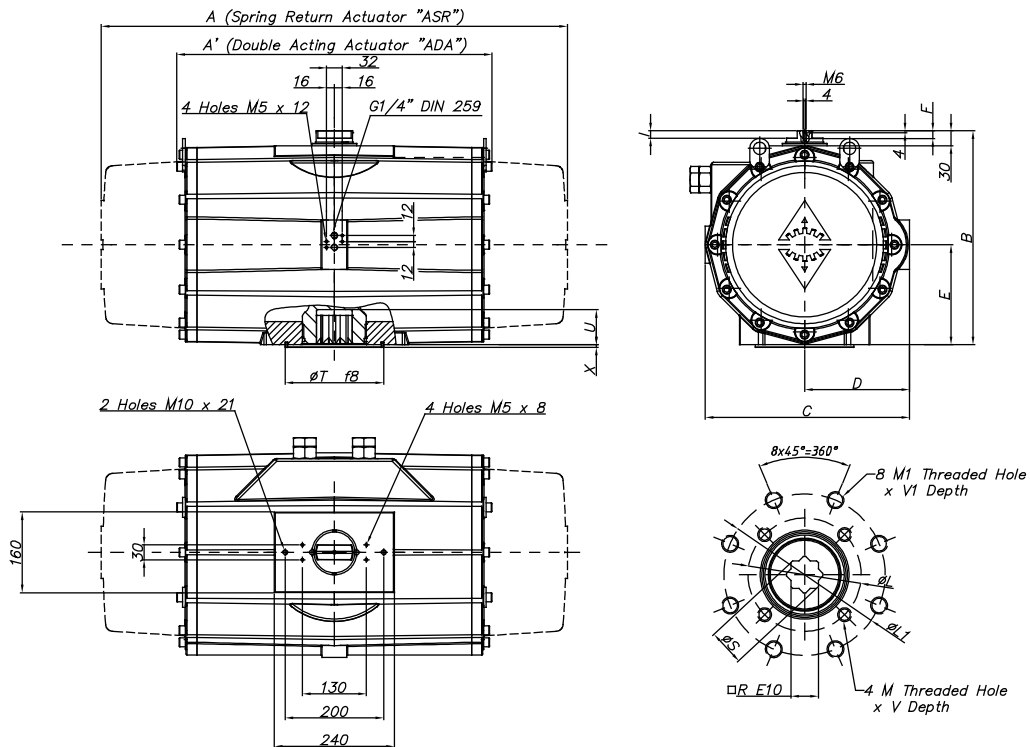
TYP 2500:



ABMESSUNGEN: (mm)

| TYP | A | A' | B | C | D | E | F | I | R | ØS | ISO 5211 | ØL/ ØL1 | M x V | ØT | X | U |
|-------|-------|-----|-----|-------|-------|-------|----|----|----|------|----------|---------|--------|-----|---|----|
| C2500 | 738,0 | 518 | 383 | 356,0 | 177,5 | 176,5 | 16 | 15 | 46 | 60,2 | F16 | 165 | M20x29 | 130 | 4 | 58 |

TYP 4000:



ABMESSUNGEN: (mm)

| TYP | A | A' | B | C | D | E | F | I | R | ØS | ISO 5211 | ØL | M x V | ØT | X | U |
|-------|-------|-----|-----|-------|-----|-----|----|----|----|------|----------|-----|--------|-----|---|----|
| C4000 | 940,0 | 630 | 434 | 415,0 | 213 | 201 | 16 | 15 | 55 | 72,5 | F16 | 165 | M20x30 | 200 | 4 | 60 |
| | | | | | | | | | | | F25 | 254 | M16x30 | | | |

| TYP | Drehmoment für doppeltwirkendem Antrieb in Nm | | | | | | | | | | | | | | | | | | Kg | | |
|------|---|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-------|-----|------|-------|-------|
| | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar | | 6,5 bar | | 7 bar | | | 8 bar | |
| | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | 0° | 90° |
| 10 | 6 | | 8 | | 9 | | 10 | | 11 | | 11,5 | | 12 | | 12 | | 13 | | 14 | | 0,6 |
| 20 | 9,7 | | 11,4 | | 13 | | 14,6 | | 16,2 | | 17,8 | | 19,5 | | 21,1 | | 23 | | 26 | | 1,4 |
| 40 | 20,3 | | 23,7 | | 27,1 | | 30,5 | | 33,9 | | 37,3 | | 41 | | 44 | | 47 | | 54 | | 2,1 |
| 80 | 38,5 | | 44,9 | | 51,3 | | 57,7 | | 64,1 | | 70,5 | | 77 | | 83 | | 90 | | 103 | | 3,0 |
| 130 | 59,1 | | 68,9 | | 78,7 | | 88,6 | | 98,4 | | 108,3 | | 118 | | 128 | | 138 | | 157 | | 3,8 |
| 200 | 88 | | 102 | | 117 | | 131 | | 146 | | 161 | | 175 | | 190 | | 205 | | 234 | | 5,6 |
| 300 | 145 | | 170 | | 194 | | 218 | | 242 | | 267 | | 291 | | 315 | | 339 | | 388 | | 8,5 |
| 500 | 217 | | 253 | | 289 | | 325 | | 361 | | 397 | | 433 | | 469 | | 505 | | 577 | | 11,2 |
| 850 | 359 | | 419 | | 479 | | 538 | | 598 | | 658 | | 718 | | 778 | | 837 | | 957 | | 16,9 |
| 1200 | 519 | | 606 | | 692 | | 779 | | 865 | | 952 | | 1038 | | 1125 | | 1211 | | 1384 | | 25,8 |
| 1750 | 707 | | 824 | | 942 | | 1060 | | 1178 | | 1295 | | 1413 | | 1531 | | 1649 | | 1884 | | 32,5 |
| 2100 | 1086 | | 1267 | | 1448 | | 1629 | | 1810 | | 1991 | | 2172 | | 2353 | | 2534 | | 2896 | | 49,0 |
| 2500 | 1730 | | 2019 | | 2307 | | 2596 | | 2884 | | 3172 | | 3461 | | 3749 | | 4038 | | 4614 | | 69,6 |
| 4000 | 2408 | | 2809 | | 3210 | | 3612 | | 4013 | | 4414 | | 4816 | | 5217 | | 5618 | | 6421 | | 129,4 |

| TYP | Federsatz | Drehmoment für einfachwirkendem Antrieb in Nm | | | | | | | | | | | | | | | | | | Federbereich | | Kg | | |
|-----|-----------|---|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-----------|-----|---------|-----|-------|-----|--------------|-----|-----|------|--------|
| | | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar (A) | | 6,5 bar | | 7 bar | | 8 bar | | | ENDE | ANFANG |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | 0° | 90° |
| 20 | S04 | | | 8 | 5 | 9 | 7 | 11 | 8 | 13 | 10 | 14 | 12 | 16 | 13 | 17 | 15 | 19 | 17 | 22 | 20 | 4 | 7 | 1,5 |
| | S06 | | | | | | | | | 11 | 7 | 12 | 9 | 14 | 10 | 15 | 12 | 17 | 13 | 20 | 17 | 7 | 11 | 1,5 |
| | S08 (A) | | | | | | | | | | | 10 | 5 | 12 | 7 | 14 | 9 | 15 | 10 | 18 | 14 | 9 | 15 | 1,6 |
| 40 | S04 | 16 | 14 | 20 | 17 | 23 | 20 | 26 | 24 | 30 | 27 | 33 | 30 | 37 | 34 | 40 | 37 | 43 | 41 | 50 | 47 | 5 | 8 | 2,2 |
| | S06 | 14 | 10 | 18 | 14 | 21 | 17 | 24 | 20 | 28 | 24 | 31 | 27 | 34 | 30 | 38 | 34 | 41 | 37 | 48 | 44 | 7 | 12 | 2,2 |
| | S08 | | | 15 | 10 | 19 | 14 | 22 | 17 | 26 | 20 | 29 | 24 | 32 | 27 | 36 | 30 | 39 | 34 | 46 | 41 | 10 | 16 | 2,2 |
| | S10 | | | | | | | 20 | 14 | 24 | 17 | 27 | 20 | 30 | 24 | 34 | 27 | 37 | 30 | 44 | 37 | 12 | 20 | 2,3 |
| | S12 | | | | | | | | | 21 | 13 | 25 | 17 | 28 | 20 | 32 | 24 | 35 | 27 | 42 | 34 | 15 | 24 | 2,3 |
| | S14 (A) | | | | | | | | | | | 23 | 13 | 26 | 17 | 30 | 20 | 33 | 24 | 40 | 30 | 17 | 28 | 2,3 |
| 80 | S04 | 31 | 27 | 38 | 34 | 44 | 40 | 50 | 46 | 57 | 53 | 63 | 59 | 70 | 66 | 76 | 72 | 82 | 78 | 95 | 91 | 9 | 13 | 3,3 |
| | S06 | 27 | 21 | 34 | 28 | 40 | 34 | 47 | 41 | 53 | 47 | 59 | 53 | 66 | 60 | 72 | 66 | 79 | 73 | 92 | 86 | 13 | 20 | 3,4 |
| | S08 | | | | | 37 | 29 | 43 | 35 | 49 | 41 | 56 | 48 | 62 | 54 | 69 | 61 | 75 | 67 | 88 | 80 | 17 | 27 | 3,4 |
| | S10 | | | | | | | 39 | 29 | 46 | 36 | 52 | 42 | 59 | 49 | 65 | 55 | 71 | 61 | 84 | 74 | 22 | 33 | 3,5 |
| | S12 | | | | | | | | | 42 | 30 | 48 | 36 | 55 | 43 | 61 | 49 | 68 | 56 | 81 | 69 | 26 | 40 | 3,6 |
| | S14 (A) | | | | | | | | | | | 45 | 31 | 51 | 37 | 58 | 44 | 64 | 50 | 77 | 63 | 30 | 47 | 3,7 |
| 130 | S06 | 43 | 36 | 52 | 46 | 62 | 56 | 72 | 65 | 82 | 75 | 92 | 85 | 102 | 95 | 111 | 105 | 121 | 115 | 141 | 134 | 19 | 27 | 4,4 |
| | S08 | | | 47 | 38 | 57 | 48 | 67 | 58 | 76 | 68 | 86 | 77 | 96 | 87 | 106 | 97 | 116 | 107 | 135 | 127 | 26 | 36 | 4,5 |
| | S10 | | | | | 51 | 40 | 61 | 50 | 71 | 60 | 81 | 70 | 91 | 80 | 100 | 89 | 110 | 99 | 130 | 119 | 32 | 45 | 4,6 |
| | S12 | | | | | | | 56 | 42 | 65 | 52 | 75 | 62 | 85 | 72 | 95 | 82 | 105 | 92 | 124 | 111 | 39 | 54 | 4,7 |
| | S14 (A) | | | | | | | | | | | 70 | 54 | 80 | 64 | 89 | 74 | 99 | 84 | 119 | 103 | 45 | 64 | 4,8 |
| 200 | S06 | 61 | 49 | 76 | 63 | 90 | 78 | 105 | 92 | 119 | 107 | 134 | 122 | 149 | 136 | 163 | 151 | 178 | 166 | 207 | 195 | 31 | 46 | 6,5 |
| | S08 | | | 67 | 50 | 81 | 65 | 96 | 79 | 111 | 94 | 125 | 109 | 140 | 123 | 154 | 138 | 169 | 152 | 198 | 182 | 42 | 61 | 6,7 |
| | S10 | | | | | 72 | 52 | 87 | 66 | 102 | 81 | 116 | 96 | 131 | 110 | 146 | 125 | 160 | 139 | 189 | 169 | 52 | 77 | 6,9 |
| | S12 | | | | | | | 78 | 53 | 93 | 68 | 107 | 83 | 122 | 97 | 137 | 112 | 151 | 126 | 180 | 156 | 63 | 92 | 7,0 |
| | S14 (A) | | | | | | | | | | | 99 | 70 | 113 | 84 | 128 | 99 | 142 | 113 | 172 | 143 | 73 | 107 | 7,3 |
| 300 | S06 | 102 | 75 | 126 | 99 | 151 | 123 | 175 | 148 | 199 | 172 | 223 | 196 | 247 | 220 | 272 | 245 | 296 | 269 | 344 | 317 | 51 | 83 | 9,7 |
| | S08 | | | 112 | 76 | 136 | 100 | 160 | 124 | 185 | 148 | 209 | 173 | 233 | 197 | 257 | 221 | 281 | 245 | 330 | 294 | 68 | 111 | 9,9 |
| | S10 | | | | | 122 | 76 | 146 | 101 | 170 | 125 | 194 | 149 | 219 | 173 | 243 | 198 | 267 | 222 | 315 | 270 | 85 | 138 | 10,2 |
| | S12 | | | | | | | 131 | 77 | 156 | 101 | 180 | 126 | 204 | 150 | 228 | 174 | 253 | 198 | 301 | 247 | 102 | 166 | 10,5 |
| | S14 (A) | | | | | | | | | | | 165 | 102 | 190 | 126 | 214 | 151 | 238 | 175 | 287 | 223 | 119 | 193 | 10,8 |

(A) Standard

| TYP | Max. Druck | Drehmoment für einfachwirkendem Antrieb in Nm | | | | | | | | | | | | | | | | | | Federbereich | | Kg | | |
|------|------------|---|------|---------|------|-------|------|---------|------|-------|------|---------|------|-----------|------|---------|------|-------|------|--------------|------|------|------|--------|
| | | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar (A) | | 6,5 bar | | 7 bar | | 8 bar | | | ENDE | ANFANG |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | | |
| 500 | S06 | 152 | 119 | 188 | 155 | 224 | 191 | 260 | 227 | 296 | 263 | 333 | 299 | 369 | 335 | 405 | 371 | 441 | 407 | 513 | 480 | 76 | 115 | 13,3 |
| | S08 | 131 | 86 | 167 | 122 | 203 | 158 | 239 | 194 | 275 | 231 | 311 | 267 | 347 | 303 | 383 | 339 | 419 | 375 | 492 | 447 | 101 | 153 | 13,8 |
| | S10 | | | | | 181 | 126 | 217 | 162 | 254 | 198 | 290 | 234 | 326 | 270 | 362 | 306 | 398 | 342 | 470 | 414 | 126 | 192 | 14,4 |
| | S12 | | | | | | | 196 | 129 | 232 | 165 | 268 | 201 | 304 | 238 | 340 | 274 | 376 | 310 | 449 | 382 | 152 | 230 | 14,9 |
| | S14 (A) | | | | | | | | | | | 247 | 169 | 283 | 205 | 319 | 241 | 355 | 277 | 427 | 349 | 177 | 268 | 15,4 |
| 850 | S06 | 260 | 209 | 320 | 269 | 380 | 328 | 440 | 388 | 500 | 448 | 559 | 508 | 619 | 568 | 679 | 627 | 739 | 687 | 858 | 807 | 116 | 177 | 19,7 |
| | S08 | 227 | 159 | 287 | 218 | 347 | 278 | 407 | 338 | 467 | 398 | 526 | 458 | 586 | 518 | 646 | 577 | 706 | 637 | 826 | 757 | 155 | 236 | 20,3 |
| | S10 | | | 254 | 168 | 314 | 228 | 374 | 288 | 434 | 348 | 494 | 408 | 553 | 467 | 613 | 527 | 673 | 587 | 793 | 707 | 193 | 295 | 20,9 |
| | S12 | | | | | | | 341 | 238 | 401 | 298 | 461 | 358 | 521 | 417 | 580 | 477 | 640 | 537 | 760 | 657 | 232 | 353 | 21,6 |
| | S14 (A) | | | | | | | | | | | 428 | 307 | 488 | 367 | 547 | 427 | 607 | 487 | 727 | 607 | 271 | 412 | 22,2 |
| 1200 | S06 | 373 | 289 | 460 | 376 | 546 | 462 | 633 | 549 | 720 | 635 | 806 | 722 | 893 | 808 | 979 | 895 | 1066 | 981 | 1239 | 1154 | 171 | 271 | 30,1 |
| | S08 | 325 | 213 | 411 | 299 | 498 | 386 | 584 | 472 | 671 | 559 | 758 | 645 | 844 | 732 | 931 | 818 | 1017 | 905 | 1190 | 1078 | 229 | 361 | 31,1 |
| | S10 | 276 | 136 | 363 | 222 | 449 | 309 | 536 | 395 | 622 | 482 | 709 | 569 | 795 | 655 | 882 | 742 | 969 | 828 | 1142 | 1001 | 286 | 451 | 32,2 |
| | S12 | | | | | 401 | 232 | 487 | 319 | 574 | 405 | 660 | 492 | 747 | 578 | 833 | 665 | 920 | 751 | 1093 | 924 | 343 | 541 | 33,2 |
| | S14 (A) | | | | | | | | | 525 | 329 | 612 | 415 | 698 | 502 | 785 | 588 | 871 | 675 | 1044 | 848 | 400 | 631 | 34,3 |
| 1750 | S06 | 477 | 349 | 595 | 466 | 712 | 584 | 830 | 702 | 948 | 820 | 1066 | 937 | 1183 | 1055 | 1301 | 1173 | 1419 | 1291 | 1654 | 1526 | 270 | 421 | 39,3 |
| | S08 | 400 | 229 | 518 | 347 | 636 | 465 | 754 | 582 | 871 | 700 | 989 | 818 | 1107 | 936 | 1225 | 1053 | 1342 | 1171 | 1578 | 1407 | 360 | 562 | 41,0 |
| | S10 | | | 441 | 228 | 559 | 345 | 677 | 463 | 795 | 581 | 912 | 699 | 1030 | 816 | 1148 | 934 | 1266 | 1052 | 1501 | 1287 | 451 | 702 | 42,7 |
| | S12 | | | | | | | 600 | 344 | 718 | 461 | 836 | 579 | 954 | 697 | 1071 | 815 | 1189 | 933 | 1425 | 1168 | 541 | 843 | 44,4 |
| | S14 (A) | | | | | | | | | 642 | 342 | 759 | 460 | 877 | 578 | 995 | 695 | 1113 | 813 | 1348 | 1049 | 631 | 983 | 46,0 |
| 2100 | S06 | 702 | 509 | 883 | 690 | 1064 | 871 | 1245 | 1052 | 1426 | 1233 | 1607 | 1414 | 1788 | 1595 | 1969 | 1776 | 2150 | 1957 | 2512 | 2319 | 384 | 577 | 60,0 |
| | S08 | 574 | 316 | 755 | 497 | 936 | 678 | 1117 | 859 | 1298 | 1040 | 1479 | 1221 | 1660 | 1402 | 1841 | 1583 | 2022 | 1764 | 2384 | 2126 | 512 | 770 | 62,0 |
| | S10 | | | 627 | 305 | 808 | 486 | 989 | 667 | 1170 | 848 | 1351 | 1029 | 1532 | 1210 | 1713 | 1391 | 1894 | 1572 | 2256 | 1934 | 640 | 962 | 64,0 |
| | S12 | | | | | | | 861 | 474 | 1042 | 655 | 1223 | 836 | 1404 | 1017 | 1585 | 1198 | 1766 | 1379 | 2128 | 1741 | 768 | 1154 | 66,0 |
| | S14 (A) | | | | | | | | | 914 | 463 | 1095 | 644 | 1276 | 825 | 1457 | 1006 | 1638 | 1187 | 2000 | 1549 | 896 | 1347 | 68,0 |
| 2500 | S06 | 1299 | 1045 | 1587 | 1333 | 1876 | 1622 | 2164 | 1910 | 2453 | 2199 | 2741 | 2487 | 3029 | 2775 | 3318 | 3064 | 3606 | 3352 | 4183 | 3929 | 508 | 806 | 85,9 |
| | S08 | 1155 | 816 | 1444 | 1105 | 1732 | 1393 | 2020 | 1682 | 2309 | 1970 | 2597 | 2258 | 2886 | 2547 | 3174 | 2835 | 3462 | 3124 | 4039 | 3700 | 677 | 1075 | 89,4 |
| | S10 | | | 1300 | 876 | 1588 | 1165 | 1877 | 1453 | 2165 | 1742 | 2453 | 2030 | 2742 | 2318 | 3030 | 2607 | 3319 | 2895 | 3895 | 3472 | 846 | 1344 | 92,9 |
| | S12 | | | | | 1444 | 936 | 1733 | 1225 | 2021 | 1513 | 2310 | 1802 | 2598 | 2090 | 2886 | 2378 | 3175 | 2667 | 3752 | 3243 | 1015 | 1613 | 96,4 |
| | S14 (A) | | | | | | | 1589 | 996 | 1877 | 1285 | 2166 | 1573 | 2454 | 1861 | 2742 | 2150 | 3031 | 2438 | 3608 | 3015 | 1184 | 1882 | 99,9 |
| 4000 | S06 | 1763 | 1262 | 2165 | 1663 | 2566 | 2065 | 2967 | 2466 | 3369 | 2867 | 3770 | 3269 | | | | | | | | | 758 | 1348 | 158,7 |
| | S08 | 1549 | 880 | 1950 | 1282 | 2351 | 1683 | 2752 | 2084 | 3154 | 2485 | 3555 | 2887 | 3956 | 3288 | 4358 | 3689 | 4759 | 4091 | 5068 | 4399 | 1011 | 1797 | 164,7 |
| | S10 | | | | | 2136 | 1301 | 2538 | 1702 | 2939 | 2104 | 3340 | 2505 | 3742 | 2906 | 4143 | 3307 | 4544 | 3709 | 4853 | 4017 | 1264 | 2246 | 170,8 |
| | S12 | | | | | | | 2323 | 1320 | 2724 | 1722 | 3125 | 2123 | 3527 | 2524 | 3928 | 2926 | 4329 | 3327 | 4638 | 3636 | 1516 | 2696 | 176,9 |
| | S14 (A) | | | | | | | | | | | 2911 | 1741 | 3312 | 2142 | 3713 | 2544 | 4115 | 2945 | 4423 | 3254 | 1769 | 3145 | 182,9 |

(A) Standard

| TYP | Luftvolumen (l) | | Luftverbrauch Type ADA (s) | | Luftverbrauch Typ ASR (s) | |
|------|-----------------|------------|----------------------------|------------|---------------------------|------------|
| | Öffnen | Schliessen | Öffnen | Schliessen | Öffnen | Schliessen |
| 10 | 0,035 | 0,028 | 0,02 | 0,05 | - | - |
| 20 | 0,13 | 0,09 | 0,04 | 0,09 | 0,12 | 0,18 |
| 40 | 0,27 | 0,23 | 0,08 | 0,08 | 0,20 | 0,29 |
| 80 | 0,64 | 0,47 | 0,11 | 0,10 | 0,27 | 0,40 |
| 130 | 0,77 | 0,76 | 0,15 | 0,15 | 0,32 | 0,50 |
| 200 | 1,19 | 1,2 | 0,18 | 0,22 | 0,50 | 0,60 |
| 300 | 1,96 | 1,73 | 0,30 | 0,40 | 0,70 | 0,85 |
| 500 | 2,95 | 2,74 | 0,40 | 0,50 | 0,90 | 1,10 |
| 850 | 4,7 | 3,86 | 0,80 | 0,90 | 2,20 | 2,60 |
| 1200 | 6,95 | 4,64 | 1,20 | 1,50 | 2,30 | 2,80 |
| 1750 | 9,8 | 9,3 | 1,80 | 2,00 | 2,80 | 3,20 |
| 2100 | 11,6 | 10,2 | 2,30 | 2,60 | 3,30 | 3,70 |
| 2500 | 25 | 32 | 2,80 | 3,10 | 3,80 | 4,20 |
| 4000 | 33,2 | 27,5 | 3,00 | 3,50 | 4,30 | 5,00 |

Ohne Belastung, Steuerdruck 6 bar, standard Federsatz

Luftverbrauch ist das eigentlich frei Luftvolumen bei 1 atm