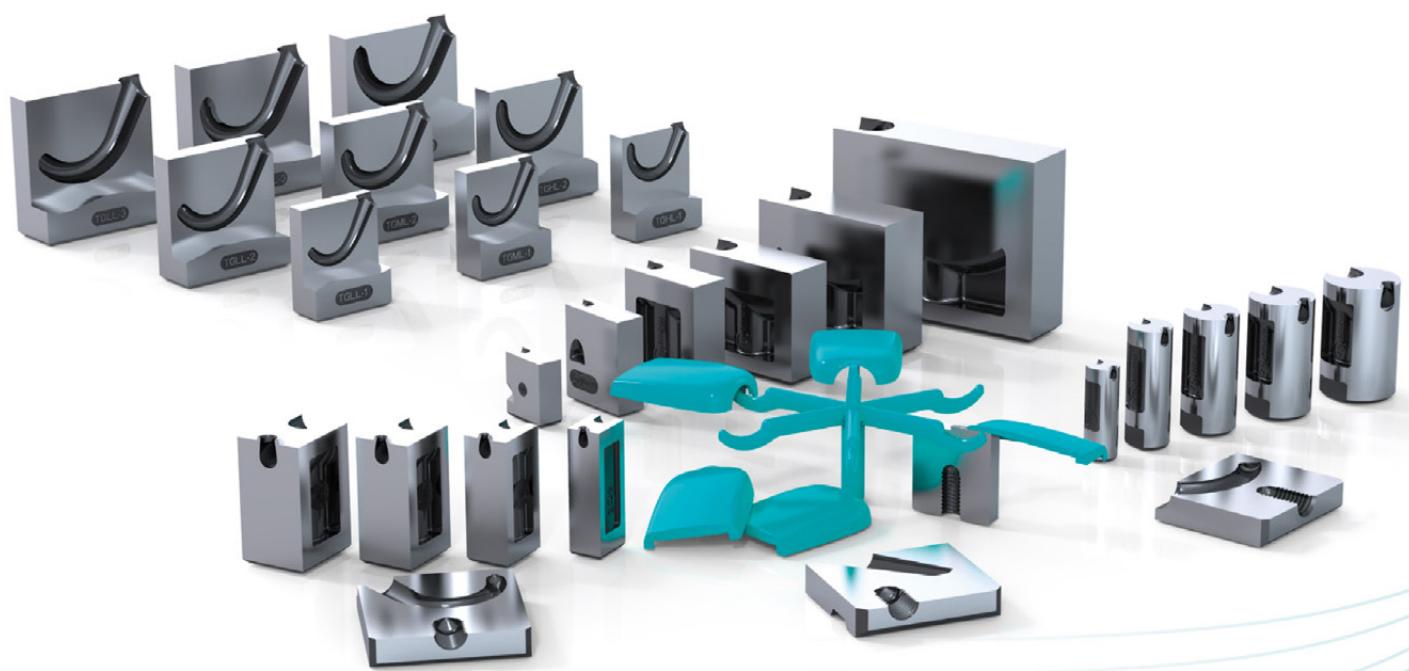
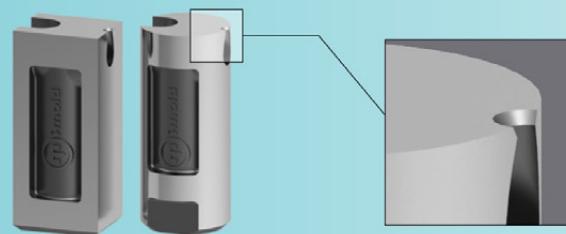




TUNNEL GATE INSERTS

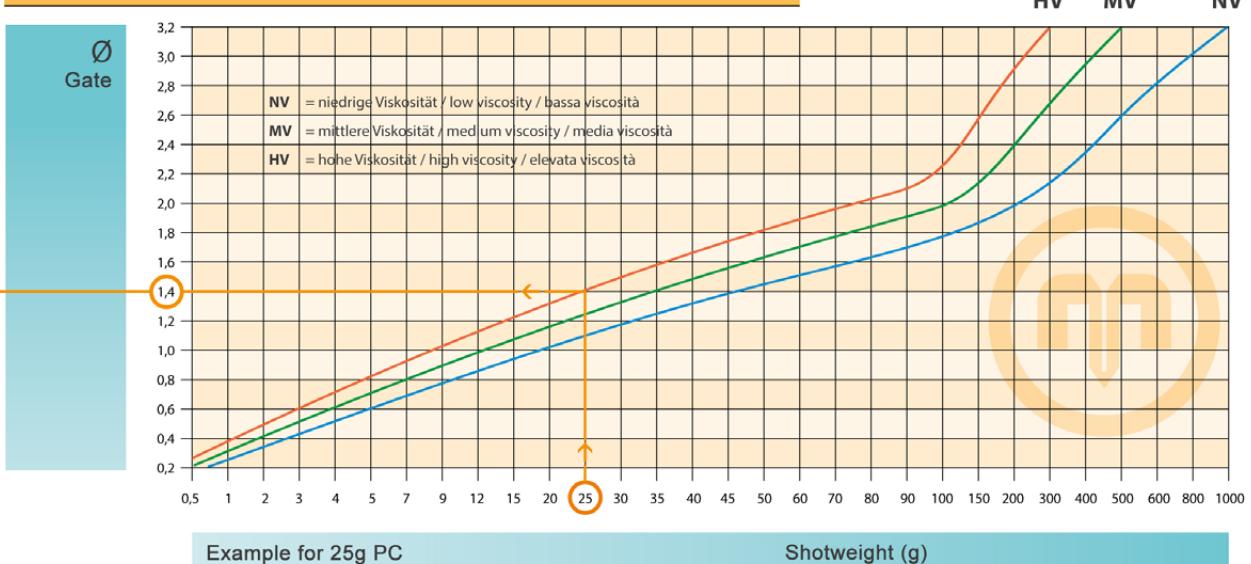


Standard Version S1



Technical information

Viscosity graph



EN

Caution: When using filled plastics (glass fibres, carbon fibres etc.) you should increase the computed gate diameter by 20%.

The recommended shotweights and gate diameters are guide values only! Please also take into account such individual parameters as part geometry, mold design, type of plastic and fillers.

Gate Diameter

| ∅ | Cross-sectional area mm ² | TGS/TGR | TGC-XS SGC-XS | TGC-S SGC-S TPS-S | TGC-1 SGC-1 TPS-1 TGLL-1 TGML-1 TGHL-1 | TGC-2 SGC-2 TPS-2 TGLL-2 TGML-2 TGHL-2 | TGC-3 / -4 SGC-3 / -4 TPS-3 TGLL-3 TGML-3 TGHL-3 |
|-----|--------------------------------------|---------|------------------|-------------------------|---|---|---|
| | | | | | | | |
| 0,4 | 0,13 | | | | | | |
| 0,6 | 0,28 | | | | | | |
| 0,8 | 0,50 | | | | | | |
| 1,0 | 0,78 | | | | | | |
| 1,2 | 1,13 | | | | | | |
| 1,4 | 1,54 | | 2,0 | | | 1,4 | 1,4 |
| 1,6 | 2,01 | | | | | | |
| 1,8 | 2,54 | | | | | | |
| 2,0 | 3,14 | | | | | | |
| 2,2 | 3,8 | | | | | | |
| 2,4 | 4,52 | | | | | | |
| 2,6 | 5,31 | | | | | | |
| 2,8 | 6,15 | | | | | | |
| 3,0 | 7,07 | | | | | | |
| 3,2 | 8,04 | | | | | | |
| : | : | | | | | | |
| 4,5 | 18,8 | | | | | | |

TGR / TGS / TGC / TGCL / TGLL / TGML / TGHL SGC TPS

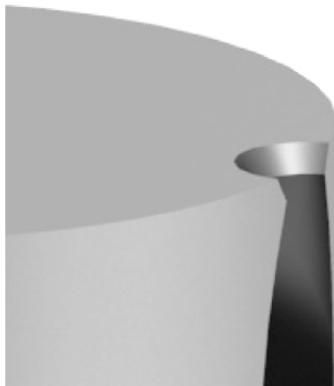
0,5 x (4,5)
0,6 x (4,6)
0,7 x (4,7)
0,8 x (4,8)
0,9 x (4,9)
1,0 x (5,0)
1,1 x (5,1)
1,2 x (5,2)
1,3 x (5,3)
1,4 x (5,4)
1,5 x (5,5)

4,5

TGR TGS S1

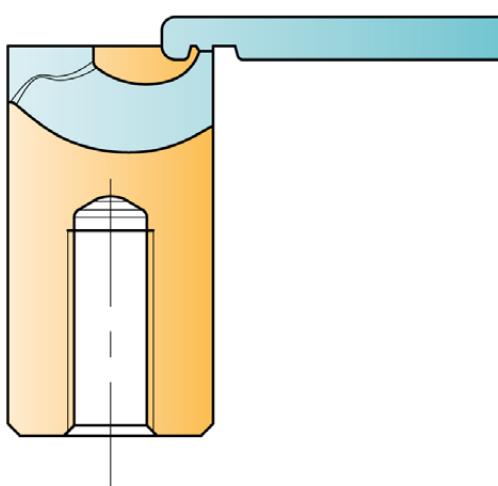
with machining allowance

Suitable for all plastics



- EN**
- > with machining allowance on upper surface
 - > slight contourings possible
 - > same properties as version S2
 - > available in round (TGR) and square (TGS) versions

TGR / TGS S1

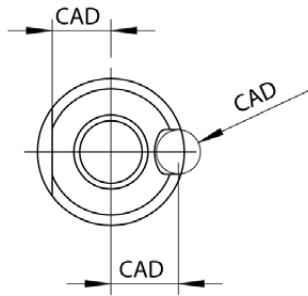


| | TGR 6 | TGR/TGS 8 | TGR/TGS 10 | TGR/TGS 12 | TGR/TGS 14 |
|--|-------|-----------|-----------------|-----------------|-----------------------|
|  gate point | 0.6 | 0,6 / 0,8 | 0,8 / 1,2 / 1,6 | 1,2 / 1,6 / 2,0 | 1,6 / 2,0 / 2,4 / 2,8 |
| Ø runner | 2.5 | 3 | 4 | 5 | 6 |
| max. shotweight (g) | | | | | |
| NV | 3 | 5 | 30 | 50 | 200 |
| MV | 2 | 4 | 20 | 35 | 120 |
| HV | 1 | 3 | 12 | 25 | 75 |

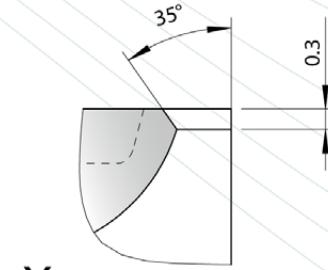
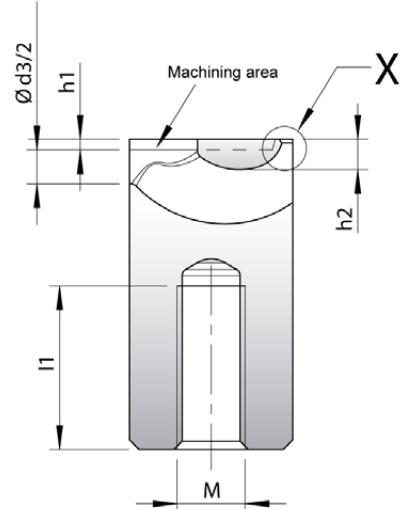
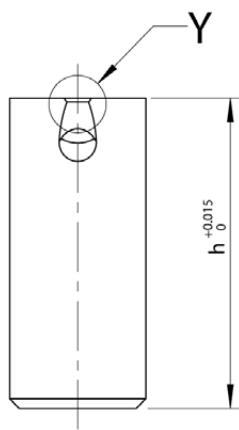
NV = low viscosity

MV = medium viscosity

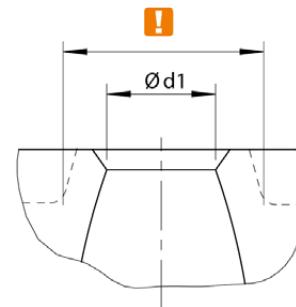
HV = high viscosity



Anti-rotation locking possibility



X



Y



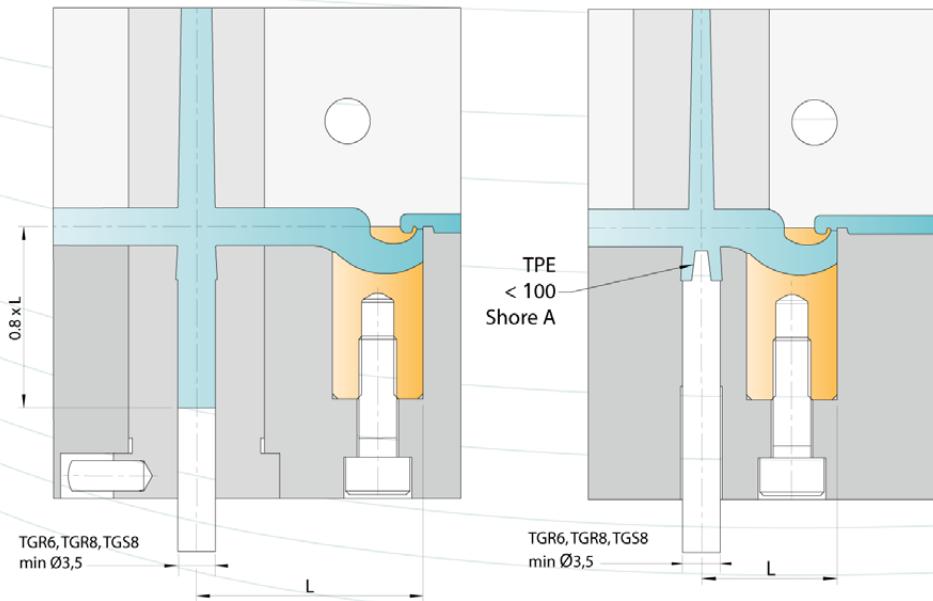
Minimum size of vestige same as version S2

| TGS | Typ | b | b1 | d1 | d3 | h | h1 | h2 | I1 | I2 | M | Version |
|-----|-------|----|----|-----|----|------|-----|-----|----|------|---|---------|
| | TGS8 | 8 | 6 | 0.6 | 3 | 22.6 | 0.6 | 1.7 | 13 | 3.25 | 4 | S1 |
| | | | | 0.8 | | | | | | | | |
| | TGS10 | 10 | 8 | 0.8 | 4 | 22.8 | 0.8 | 2.0 | 12 | 4 | 5 | S1 |
| | | | | 1.2 | | | | | | | | |
| | | | | 1.6 | | | | | | | | |
| | TGS12 | 12 | 10 | 1.2 | 5 | 22.8 | 0.8 | 2.2 | 11 | 5 | 5 | S1 |
| | | | | 1.6 | | | | | | | | |
| | | | | 2.0 | | | | | | | | |
| | TGS14 | 14 | 12 | 1.6 | 6 | 22.8 | 0.8 | 2.4 | 10 | 6 | 6 | S1 |
| | | | | 2.0 | | | | | | | | |
| | | | | 2.4 | | | | | | | | |
| | | | | 2.8 | | | | | | | | |

| TGR | Typ | d | d1 | d3 | h | h1 | h2 | I1 | I2 | M | Version |
|-----|-------|----|-----|-----|------|-----|-----|----|------|---|---------|
| | TGR6 | 6 | 0.6 | 2.5 | 17.6 | 0.6 | 1.4 | 10 | 2.5 | 4 | S1 |
| | | | 0.8 | 3 | 22.6 | 0.6 | 1.7 | 13 | 3.25 | 4 | S1 |
| | TGR8 | 8 | 0.6 | 4 | 22.8 | 0.8 | 2.0 | 12 | 4 | 5 | S1 |
| | | | 0.8 | | | | | | | | |
| | TGR10 | 10 | 0.8 | 5 | 22.8 | 0.8 | 2.2 | 11 | 5 | 5 | S1 |
| | | | 1.2 | | | | | | | | |
| | | | 1.6 | | | | | | | | |
| | TGR12 | 12 | 1.2 | 6 | 22.8 | 0.8 | 2.4 | 10 | 6 | 6 | S1 |
| | | | 1.6 | | | | | | | | |
| | | | 2.0 | | | | | | | | |
| | TGR14 | 14 | 1.6 | 6 | 22.8 | 0.8 | 2.4 | 10 | 6 | 6 | S1 |
| | | | 2.0 | | | | | | | | |
| | | | 2.4 | | | | | | | | |
| | | | 2.8 | | | | | | | | |



Example of order specification: TGR6-06-S1

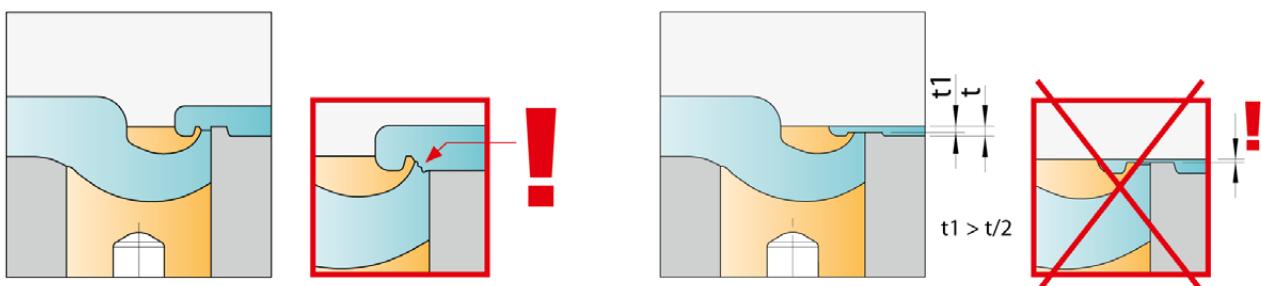


EN Thermoplastic elastomers (TPE)

- > Low Shore hardness = shorter distance L
- > Use centring pin
- > Max. hardness 100 Shore A

| Table for distance L | | | | |
|----------------------|------------------|-----------------------------|---------------------------|-------|
| Material type | | | | |
| TPE, TPU etc. | PE, PP, PET etc. | PC/ABS, PA, POM, HI-PC etc. | PA+GF, PC, SAN, PMMA etc. | |
| TGR 6 | 9-12 | 12-18 | 15-22 | 18-25 |
| TGR/TGS 8 | 11-14 | 15-22 | 19-27 | 23-30 |
| TGR/TGS 10 | 15-18 | 19-27 | 24-33 | 28-36 |
| TGR/TGS 12 | 18-22 | 22-30 | 27-36 | 32-40 |
| TGR/TGS 14 | 20-25 | 25-33 | 30-37 | 35-43 |

| Recommendations | Companion vestige | Flat parts |
|-----------------|-------------------|------------|
|-----------------|-------------------|------------|

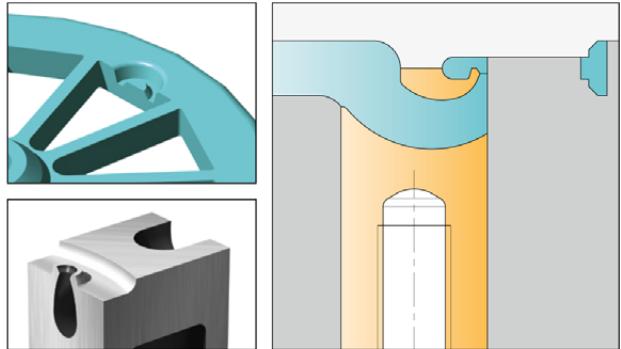


EN For optimum degating (especially of flat parts), we recommend the use of a companion vestige supplementing the vestige with cutting edge. This configuration will ensure that the part is separated from the runner flush with the parting line. Users will find this particularly advantageous in cases where materials are susceptible to stringing.

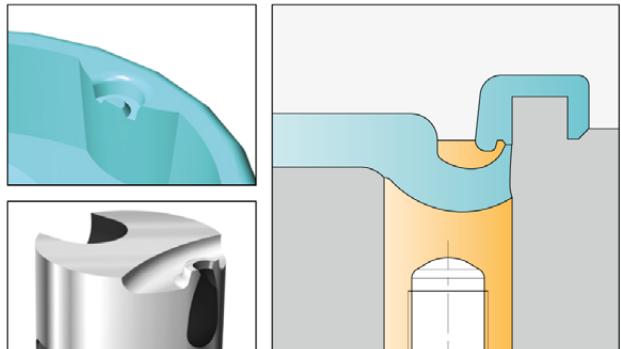
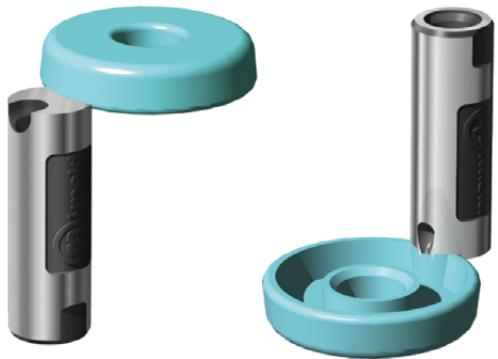
EN If the molded part is very thin, the calotte must be ground down. ($t_1 > t/2$)

Exemples of installation

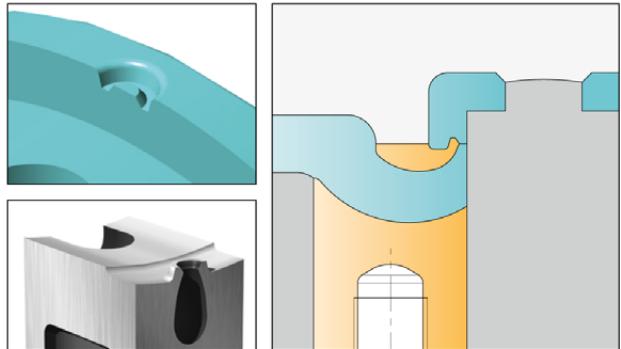
rounded edge



with flow promoter



rounded separation



flat, with companion vestige

