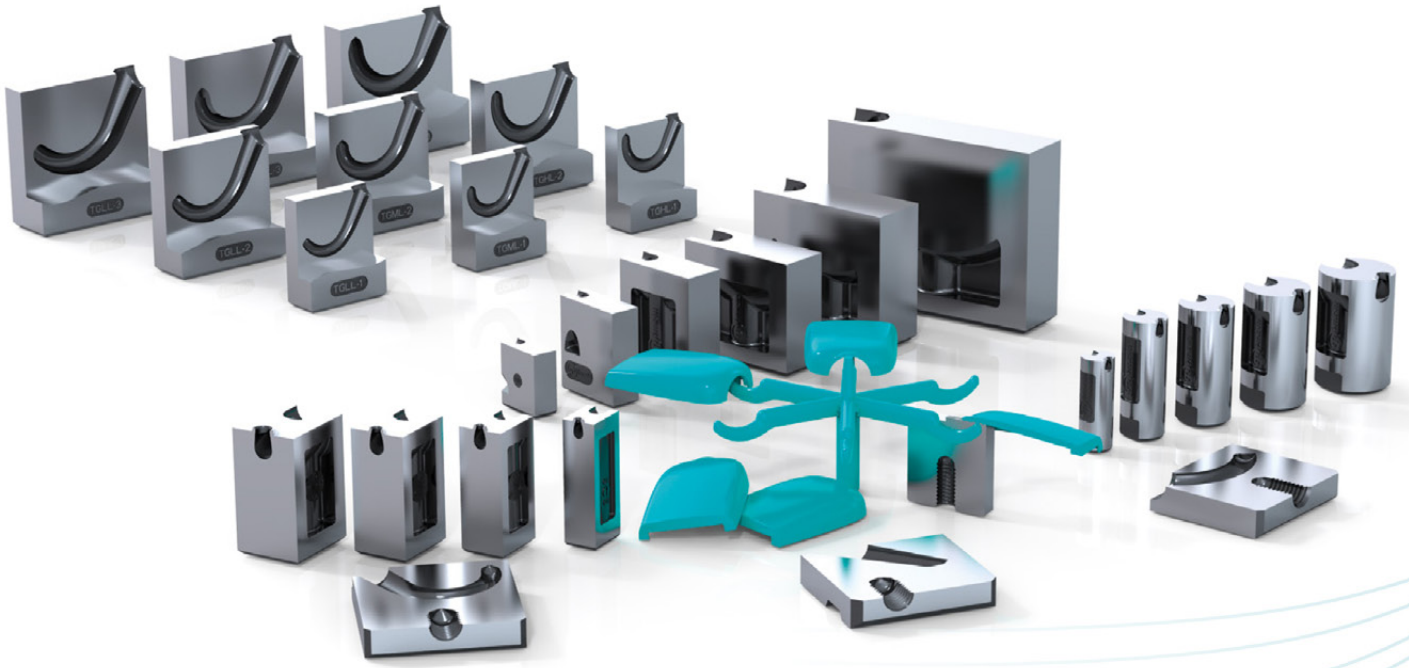
IMC.SE

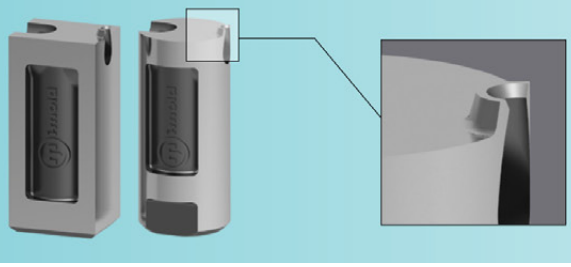
i-mold
MOLDING INNOVATIONS

TUNNEL GATE INSERTS



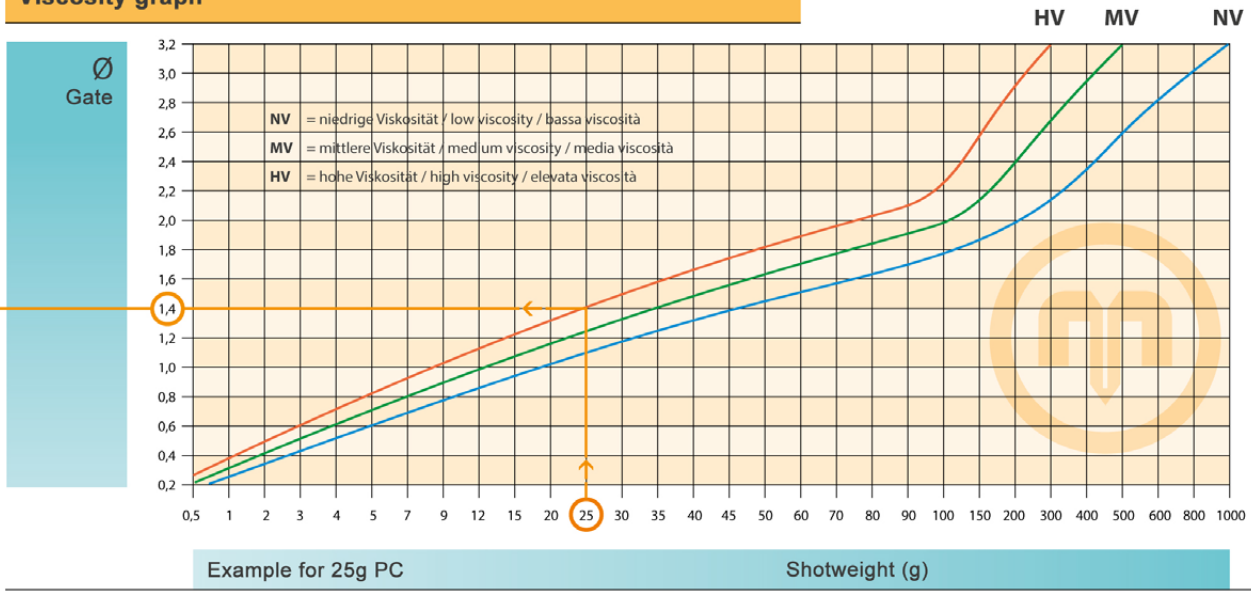
MADE
IN
GERMANY

Standard Version S2



Technical information

Viscosity graph



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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

Ø	Cross-sectional area mm²	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	0,4	0,4	0,6		
0,6	0,28	0,8	0,6	0,6	0,8		
0,8	0,50	1,2	0,8	0,8	1,0	0,8	
1,0	0,78	1,6		1,0	1,2	1,0	
1,2	1,13			1,2	1,4	1,2	
1,4	1,54	2,0				1,4	
1,6	2,01	2,4			1,8	1,6	0,5 x (4,5)
1,8	2,54	2,8				1,8	0,6 x (4,6)
2,0	3,14					2,1	0,7 x (4,7)
2,2	3,8						0,8 x (4,8)
2,4	4,52						0,9 x (4,9)
2,6	5,31						1,0 x (5,0)
2,8	6,15					2,8	1,1 x (5,1)
3,0	7,07						1,2 x (5,2)
3,2	8,04						1,3 x (5,3)
:	:						1,4 x (5,4)
4,5	18,8						1,5 x (5,5)
							4,5

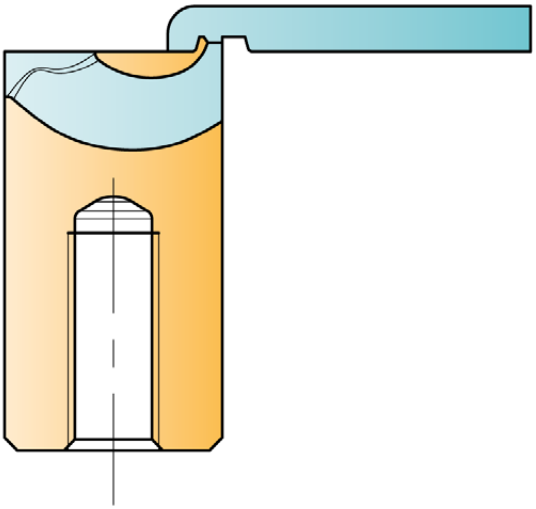
TGR / TGS / TGC / TGLL / TGML / TGHL | SGC | TPS

TGR TGS S2

with machining allowance

Suitable for all plastics

EN
- for flat parting surfaces, including vesige with integrated cutting egde
- ready to use! No adjustmets necessary
- available with hardness 60 HRC
- available in round (TGR) and square (TGS) versions



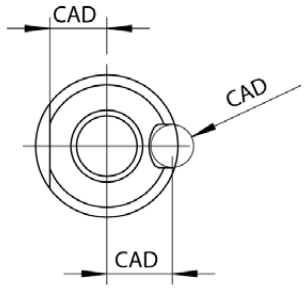
		TGR 6	TGR/TGS 8	TGR/TGS 10	TGR/TGS 12	TGR/TGS 14
	gate point	0.6	0,6 / 0,8	0,8 / 1,2 / 1,6	1,2 / 1,6 / 2,0	1,6 / 2,0 / 2,4 / 2,8
Ø	runner	2.5	3	4	5	6

max. shotweight (g)					
NV	3	5	30	50	200
MV	2	4	20	35	120
HV	1	3	12	25	75

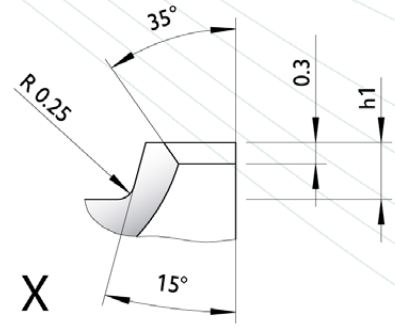
NV = low viscosity
MV = medium viscosity
HV = high viscosity

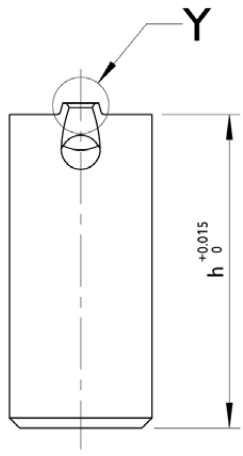
TGR | TGS with vestige

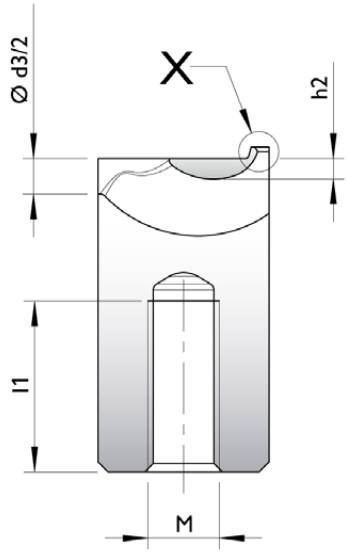
S2

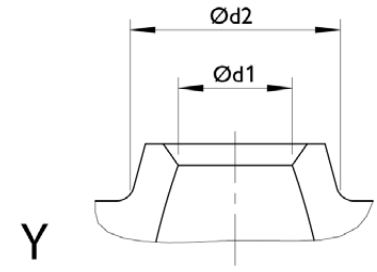


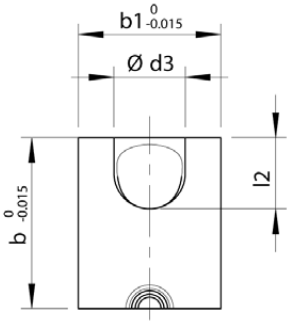
Anti-rotation locking possibility

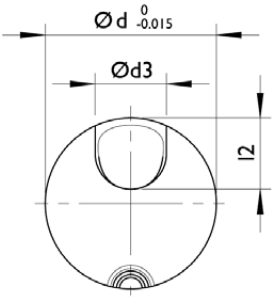




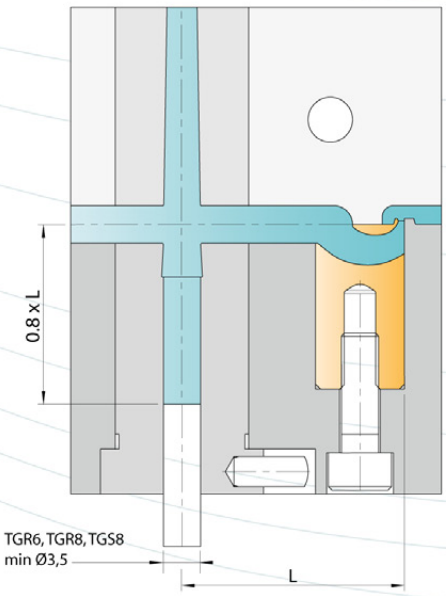


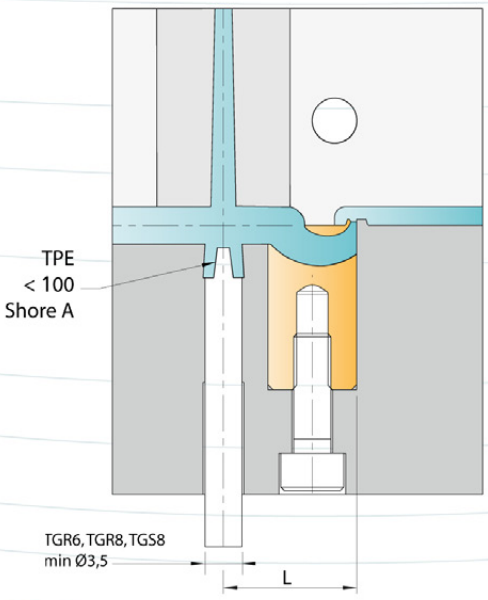


TGS	Typ	b	b1	d1	d2	d3	h	h1	h2	l1	l2	M	Version
	TGS8	8	6	0.6	1.9	3	22.0	0.6	1.1	13	3.25	4	S2
				0.8	2.1								
	TGS10	10	8	0.8	2.2	4	22.0	0.8	1.2	12	4	5	S2
				1.2	2.6								
				1.6	3.0								
	TGS12	12	10	1.2	2.6	5	22.0	0.8	1.40	11	5	5	S2
				1.6	3.0								
				2.0	3.4								
	TGS14	14	12	1.6	3.0	6	22.0	0.8	1.6	10	6	6	S2
				2.0	3.4								
				2.4	3.8								
				2.8	4.2								

TGR	Typ	d	d1	d2	d3	h	h1	h2	l1	l2	M	Version
	TGR6	6	0.6	1.9	2.5	17.0	0.6	0.8	10	2.5	4	S2
	TGR8	8	0.6	1.9	3	22.0	0.6	1.1	13	3.25	4	
			0.8	2.1								
	TGR10	10	0.8	2.2	4	22.0	0.8	1.2	12	4	5	S2
			1.2	2.6								
			1.6	3.0								
	TGR12	12	1.2	2.6	5	22.0	0.8	1.4	11	5	5	S2
			1.6	3.0								
			2.0	3.4								
	TGR14	14	1.6	3.0	6	22.0	0.8	1.6	10	6	6	S2
			2.0	3.4								
			2.4	3.8								
			2.8	4.2								

Example of order specification: **TGR6-06-S2**





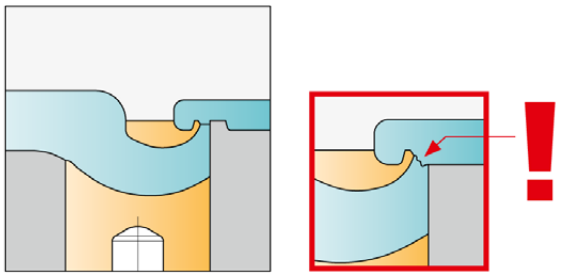
EN **Thermoplastic elastomers (TPE)**
- > Low Shore hardness = shorter distance L
- > Use centring pin
- > Max. hardness 100 Shore A

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

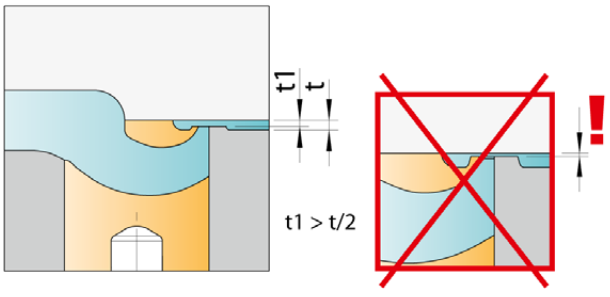
Recomendations

Companion vestige



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.

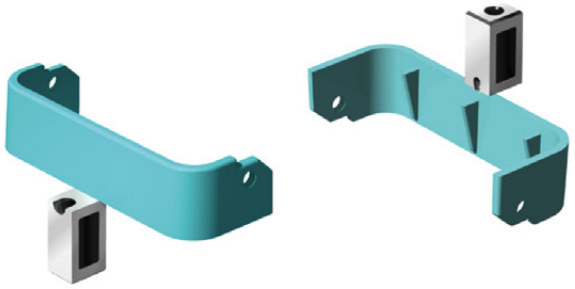
Flat parts

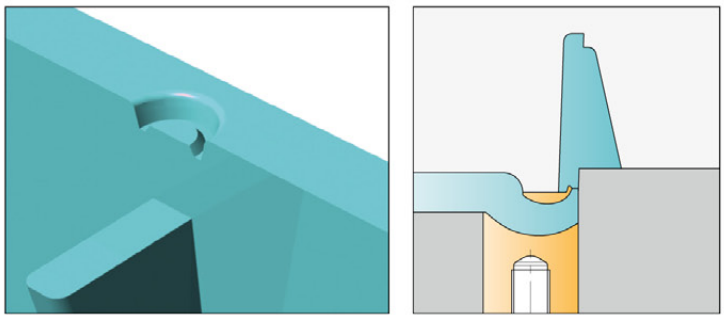


EN_If the molded part is very thin, the calotte must be ground down. (t1>t/2)

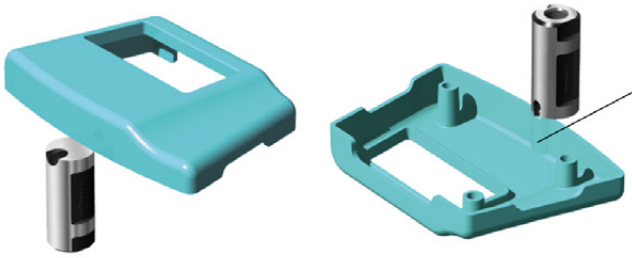
Exemples of installation

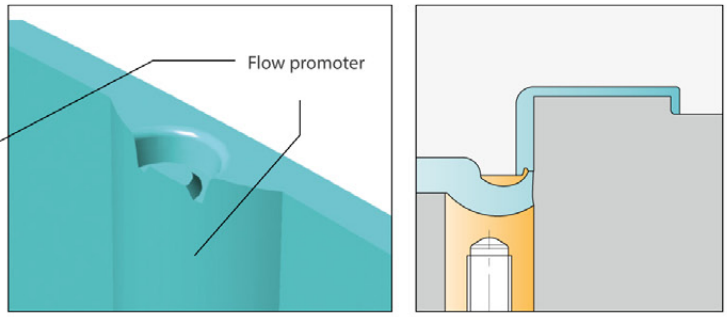
under wall



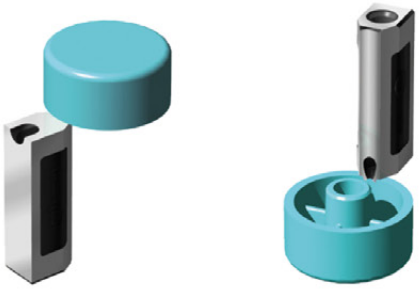


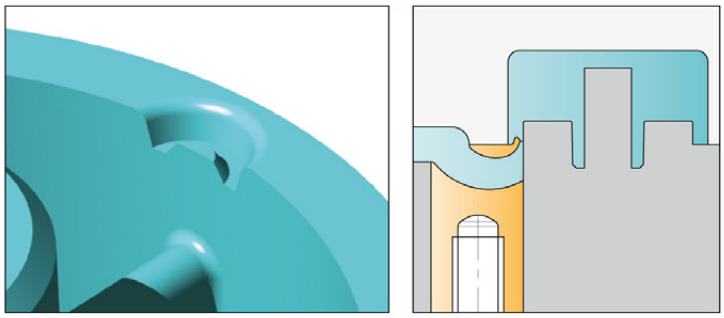
with flow promoter



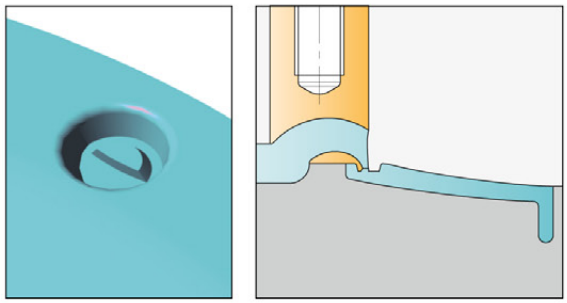


adapted to part





flat part with companion vestige installation in fixed half of the mold



flat part without companion vestige

EN_If a 100% clean separation of the sprue is not necessary or if reinforced plastics are being processed, the use of a companion vestige may be waived when molding flat parts. (see page 9).