

SCREW & BARREL SPECIFICATION CHART

Material	PE-LD,PE-HD, PP				PP+EPDM				PS, SAN, ASA				ABS,MABS, ABS+PC				PMMA				PMMA optical grade				FEP, ETFE							
Fillers/Additives	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C				
Barrel	M3				M3				M3				M3				M3				M3				M4							
Screw up to 70	S1	S8	S8	S14	-	-	S8	S14	S1	S8	S8	S14	-	-	S8	S14	S1	-	S8	-	-	-	S8 ²	-	-	-	S14	S14	-	-	S14	S14
starting from 85	S1	S6	S4	S14	-	-	S4	S14	S1	S6	S4	S14	-	-	S4	S14	S1	-	S4	-	-	-	S4 ²	-	-	-	S14	S14	-	-	S14	S14
Check Valve up to 85	R2	R8b	R8b	R8b	-	-	R8b	R8b	R2	R8b	R8b	R8b	-	-	R8b	R8b	R2	-	R8b	-	-	-	R8c	-	-	-	R5	R5	-	-	R5	R5
starting from 90	R9	R9	R9b	R9b	-	-	R9b	R9b	R9	R9	R9	R9	-	-	R9b	R9b	R9	-	R9b	-	-	-	R9b	-	-	-	R5	R5	-	-	R5	R5
Barrelhead	F4	F3	F2	F2	-	-	F2	F2	F4	F3	F2	F2	-	-	F2	F2	F4	-	F2	-	-	-	F2	-	-	-	F1	F1	-	-	F1	F1
Nozzle	D2	D3	D4	D4	-	-	D4	D4	D2	D3	D4	D4	-	-	D4	D4	D2	-	D4	-	-	-	D4	-	-	-	D1	D1	-	-	D1	D1
Geometry	G2	G2 ¹	G2	G1	-	-	G1	G1	G1	G1	G1	G1	-	-	G1	G1	G1	-	G1	-	-	-	G3	-	-	-	G1	G1	-	-	G1	G1
Barrier up to 85	S7		S13				S13		S7		S13				S13		S7		S13				S13									
greater 85	S13		S13				S13		S13		S13				S13		S13		S13				S13									

Material	PA				PET				PET clear				PC				PC optical grade				PBT				LCP							
Fillers/Additives	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C
Barrel	M3				M3				M3				M3				M3				M3				M3 (poss. shrink sleeve!!)							
Screw up to 70	S1	S8 ⁶	S8	S8	S1	S8	S8	S8 ⁶	S8 ²	-	-	-	S8	S8	S8	S14	S8 ⁷	-	-	-	S1	S8	S8	S14	S1	S8	S8	S14	S1	S8	S8	S14
starting from 85	S1	S6 ⁶	S4	S4V ⁶	S1	S6	S4	S4V	S4V	-	-	-	S4	S4V	S4V	S14	S4V ⁷	-	-	-	S1	S6	S4	S14	S1	S6			S1	S6		
Check Valve up to 85	R2	R8b	R8b	R8b	R2	R8b	R8b	R8b	R8c	-	-	-	R8b	R8b	R8b	R8b	R8c	-	-	-	R2	R8b	R8b	R8b	R2	R8c			R2	R8c		
starting from 90	R9	R9	R9	R9	R9	R9b	R9b	R9b	R9	-	-	-	R9	R9b	R9b	R9b	R0	-	-	-	R9	R9b	R9b	R9b	R9	R9b			R9	R9b		
Barrelhead	F4	F3	F2	F2	F4	F4	F4	F4	F2	-	-	-	F2	F3	F2	F2	F2	-	-	-	F4	F3	F2	F2	F4	F3			F4	F3		
Nozzle	D2	D3	D4	D4	D2	D3	D4	D4	D4	-	-	-	D4	D3	D4	D4	D4	-	-	-	D2	D3	D4	D4	D2	D3			D2	D3		
Geometry	G2	G2 ⁶	G2	G2 ⁶	G2	G2 ⁶	G2	G2 ⁶	G2 ⁹	-	-	-	G1	G1	G1	G1	G1 ⁸	-	-	-	G1	G1	G1	G1	G1	G1			G1	G1		
Barrier up to 85	S7		S13		S7		S13		S7				S13		S13		S13				S7		S13									
greater 85	S13		S13		S13		S13		S13				S13		S13		S13				S13		S13									

Material	PVC-P				PVC-P				PVDF, ECTFE				TPE, TPU				PU				POM				PEK, PEEK							
Fillers/Additives	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C	S	A	C	A+C
Barrel	M3				M3				M4				M3				M3				M3				M3 (poss. shrink sleeve!!)							
Screw up to 70	-	-	S8 ²	S8 ²	-	-	S8 ³	S8 ³	-	-	S14	-	-	-	S8	S14	S1	-	S8	S14	-	-	S8	S14	S7	S7	-	S14				
starting from 85	-	-	S4 ²	S4V	-	-	S4V ⁴	S4V ⁴	-	-	S14	-	-	-	S4	S14	S1	-	S4	S14	-	-	S4	S14	S6	S6	-	-				
Check Valve up to 85	-	-	R8b	R8b	-	-	R4	R4	-	-	R5	-	-	-	R8b	R8b	R2	-	R8b	R8b	-	-	R8b	R8b	R8b	R8b	-	R8b				
starting from 90	-	-	R9b	R9b	-	-	R4	R4	-	-	R5	-	-	-	R9b	R9b	R9	-	R9b	R9b	-	-	R9b	R9b	R9	R9b	-	-				
Barrelhead	-	-	F2	F2	-	-	F2	F2	-	-	F1	-	-	-	F2	F2	F4	-	F2	F2	-	-	F2	F2	F2	F4	-	F2				
Nozzle	-	-	D4	D4	-	-	D4	D4	-	-	D1	-	-	-	D4	D4	D2	-	D4	D4	-	-	D4	D4	D4	D2	-	D4				
Geometry	-	-	G1	G1	-	-	G3	G3	-	-	G1	-	-	-	G1	G1	G1	-	G1	G1	-	-	G4 ⁵	G1	G1	G2 ⁶	-	G1				
Barrier up to 85															S13								S13									
greater 85															S13								S13									

S) Unreinforced material nor corrosive/corrosive additives (e.g. flame retardants) A) Reinforced material but not corrosive nor corrosive additives (e.g. flame retardants) C) Corrosive material and/or corrosive additives A+C) A and C combined

- 1) Use of G1 for better wear resistance with reinforcement content higher or equal to 30%
- 2) As an option S4V possible (double check with processing/sales&technologies!)
- 3) As an option S4 or S4V possible (double check with processing/sales&technologies!)
- 4) For some applications S4 could be used (medical parts) double check with processing/sales&technologies!)
- 5) For low viscosity types G2 or G1 can be used (double check with processing/sales&technologies!)
- 6) 30% reinforcement and up S14 and G1 is imperative
- 7) As an option S14 is possible (double check with processing/sales&technologies!)
- 8) LD ratio of the screw at least 20D, 22D-24D or barrier screw is recommended (double check with processing/sales&technologies!)
- 9) Barrier screw is recommended.

