

Precision LV187



The precision LV187 is a compact bush, designed for close drop centres, yet with a substantial shot capacity, making it particularly useful where space is restricted.

Maximum Shot Weight (Grams)

Sprue Gate	Gating on runners
Pp, Ps	200
LDPe, PVC-p, SAN	150
ABS, HDPe, Pa	100
PET, POM	50
PBT, Pc, PMMA, PPO	30

Ring Gate	Gating on parts with Witness Ring
Pp, Ps	150
LDPe, PVC-p, SAN	100
ABS, HDPe, Pa	50
PET, POM	25
PBT, Pc, PMMA, PPO	15

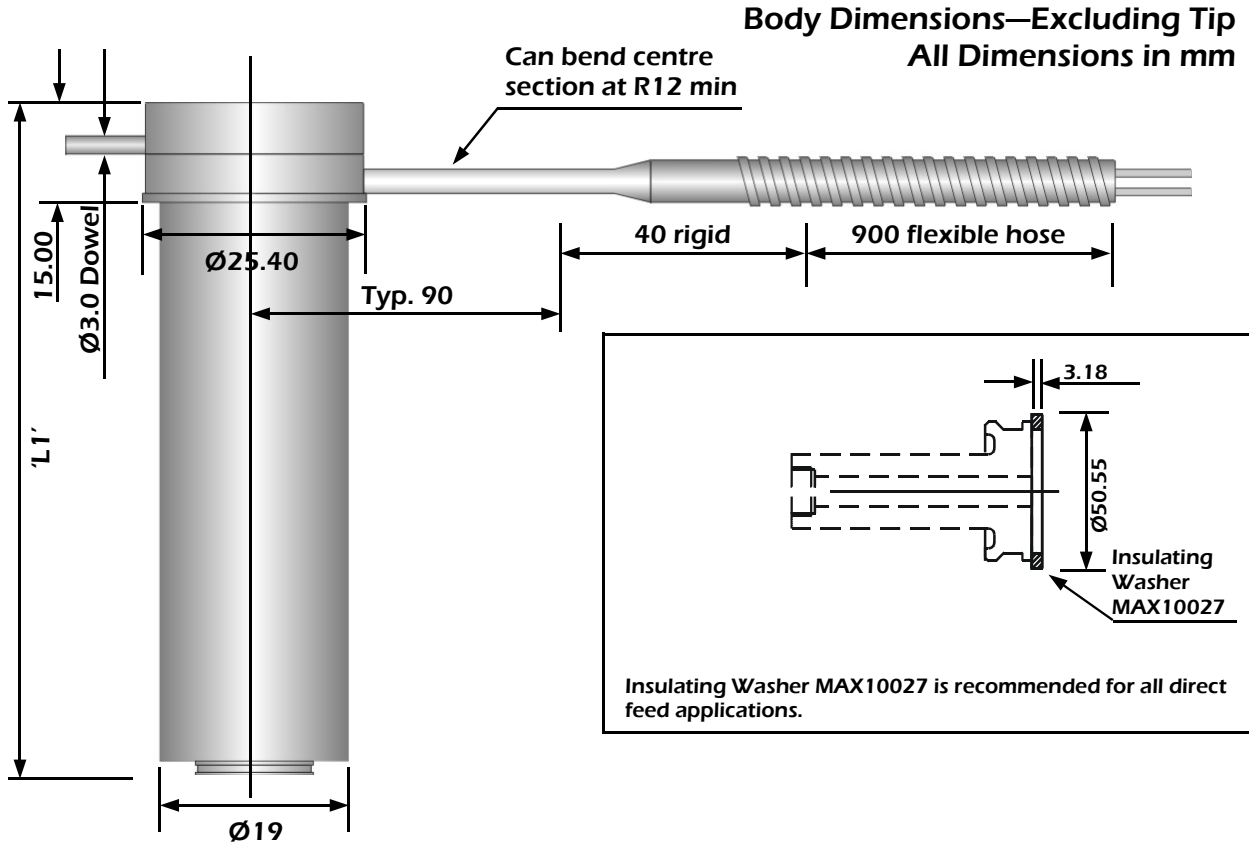
Collar Gate	Gating on parts without Witness Ring
Pp, Ps	150
LDPe, PVC-p, SAN	100
ABS, HDPe, Pa	50
PET, POM	25
PBT, Pc, PMMA, PPO	15

Note: Maximum shot weights may be reduced, depending on polymer grade & component dimensions.

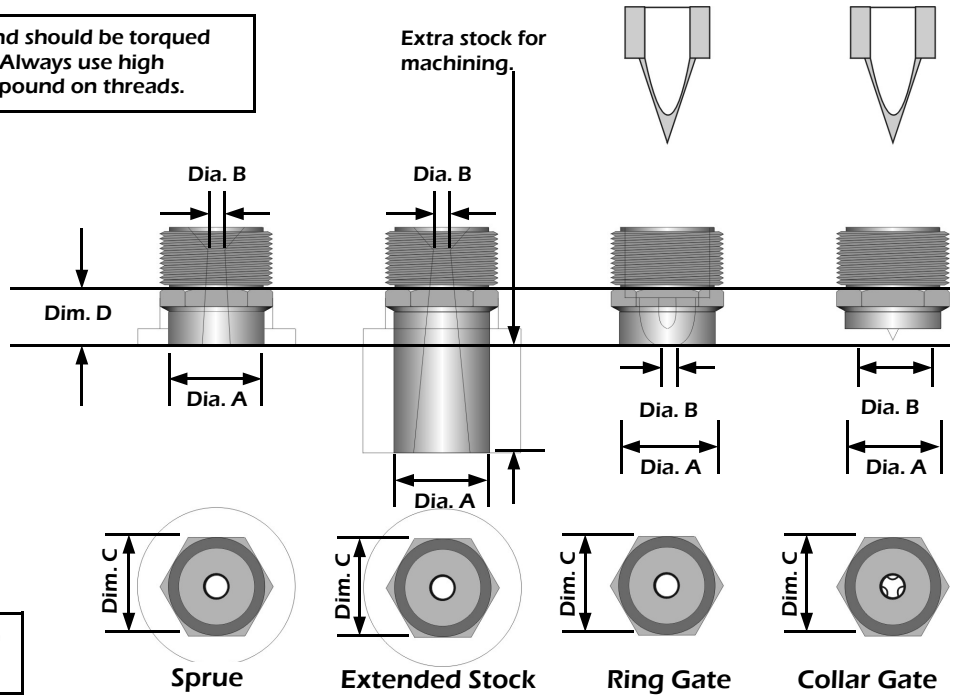
Precision LV Series Technical Specifications

PRECISION LV BUSHINGS

Precision LV187



Tips have M9 x 1 threads and should be torqued down to 34 Nm (25 ft. lbs). Always use high temperature anti-seize compound on threads.



Overall Bush Length
 $L' = L1 + D$

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Precision LV Series Technical Specifications

Precision LV187—Ordering Chart

Body & Heater Part Numbers

Body Assembly	Len. 'L1'	Spare Heater	Watts
PLV187-045	45.00	LPH12036B	240
PLV187-055	55.00	LPH12046B	240
PLV187-065	65.00	LPH12056B	240
PLV187-075	75.00	LPH12066C	295
PLV187-085	85.00	LPH12076C	295
PLV187-095	95.00	LPH12086D	350
PLV187-115	115.00	LPH12106D	350
PLV187-135	135.00	LPH12126E	400
PLV187-155	155.00	LPH12146E	400

Optional
Insulating washer MAX10027

Tip Part Numbers

Gate Style	Tip Alloy	Part Number	Dia. 'A'	Dia. 'B'	Dim. 'C'	Dim. 'D'
Sprue	Standard	TP187100	8.00	2.0	12.7	8.0
	Standard	TP187101	8.00	2.5	12.7	8.0
Extended	Standard	TP187200	8.00	2.0	12.7	18.0
Ring Gate	Standard	TP187300	8.00	1.0	12.7	8.0
Collar Gate	Standard	TP187400	8.00	4.7	12.7	8.0

PRECISION LV BUSHINGS

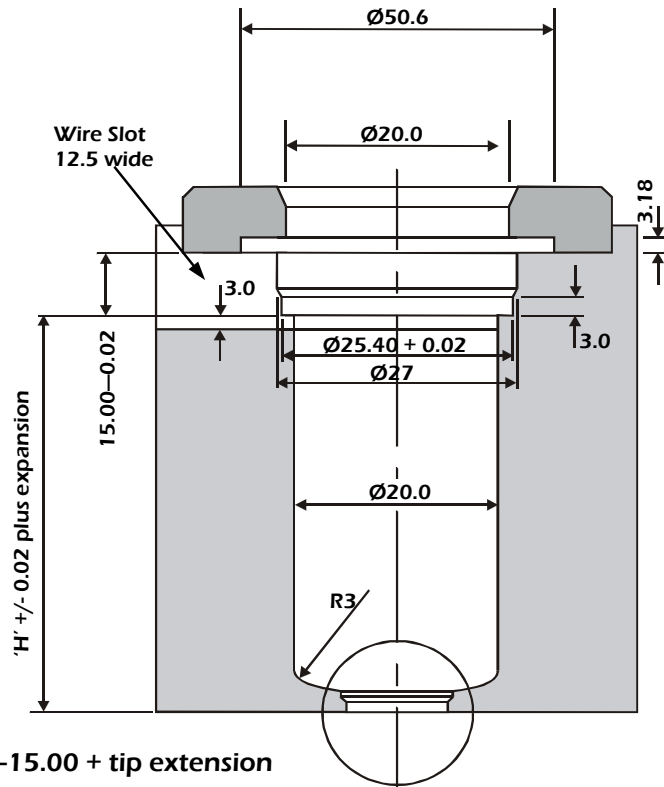
Precision LV Series Technical Specifications

DIRECT FEED APPLICATIONS

Precision LV187

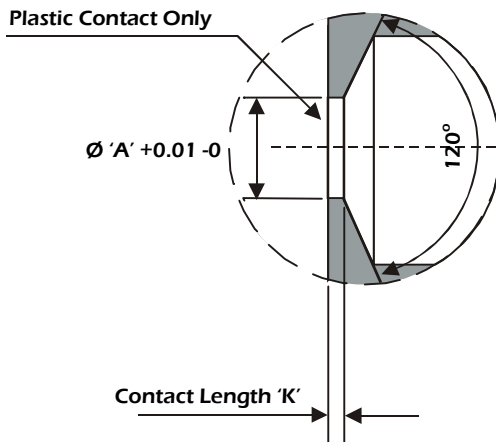
Bore & Gate Dimensions (Metric)

Bush Installation With Insulating Washer MAX10027

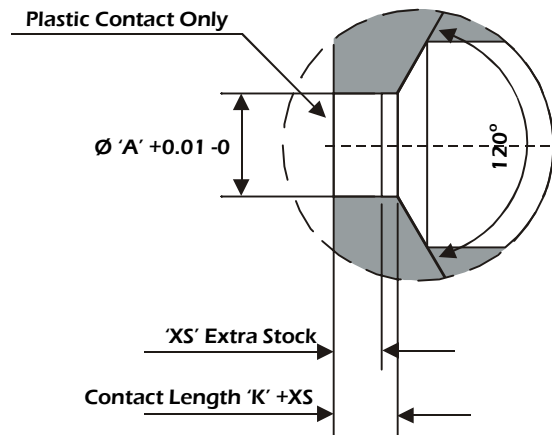


The thermal expansion of the bush relative to the mould is calculated by the formula:
'H' x 0.0000126 x (melt temp. °C - mould temp. °C), where height 'H' = L1-15.00 + tip extension.

Standard Sprue & Ring Gate



Extended Sprue



'K' = 1.5 (0.060") for Crystalline resins
'K' = 2.0 (0.080") for Amorphous resins

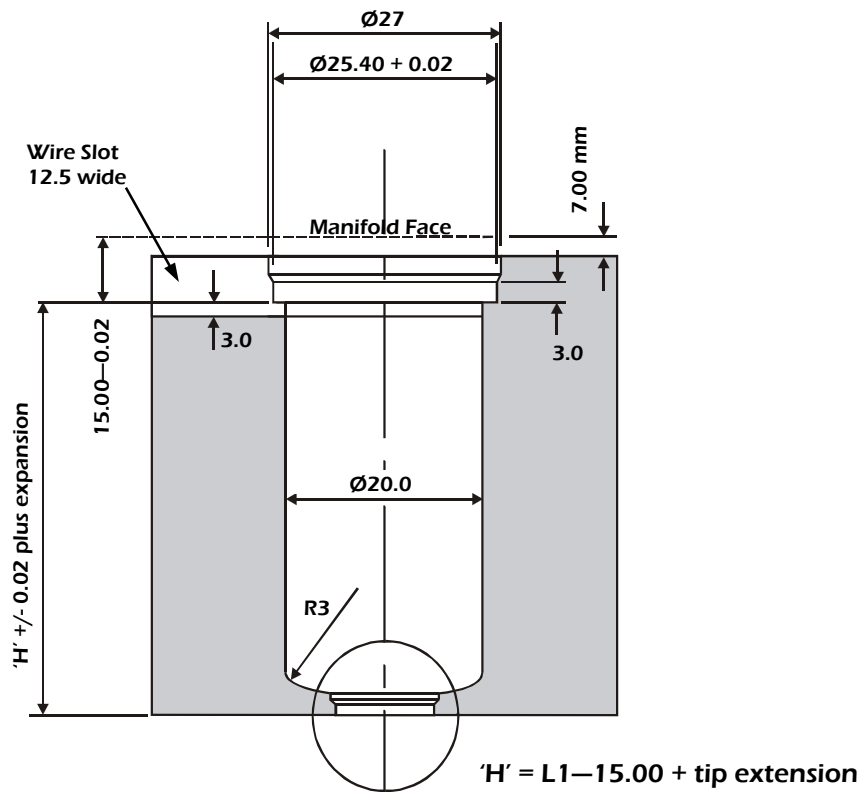
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Precision LV Series Technical Specifications

Bore & Gate Dimensions (Metric)

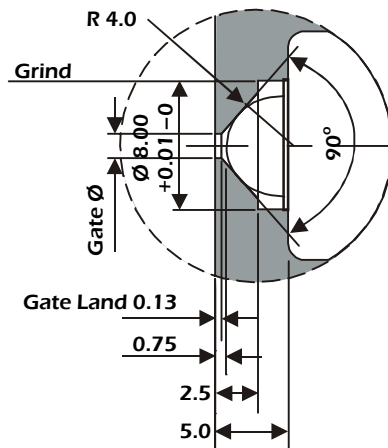
Precision LV187

Standard Bush Installation

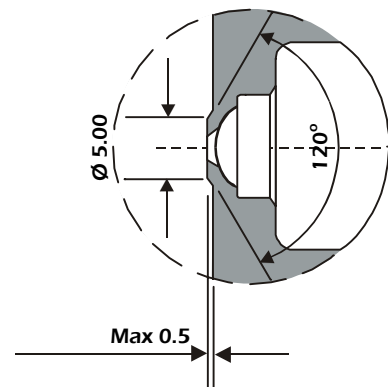


The thermal expansion of the bush relative to the mould is calculated by the formula:
 $'H' \times 0.0000126 \times (\text{melt temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$, where height 'H' = L1 - 15.00 + tip extension.

Collar Gate



Recessed Gate



Precision LV Series Technical Specifications

PRECISION LV BUSHINGS

Precision LV187—Engineering Charts

187 Series Resin Compatibility

Gating Options	Tip Alloy	Commodity Resin	Engineering Resin	Glass-Filled Resin
187 Series				
Sprue	Standard	●	●	●
Extended Sprue	Standard	●	●	●
Ring Gate	Standard	●	●	○
Collar Gate	Standard	●	○	○

● = Recommended ○ = Possible

187 Series Gate Diameters

Tip Type	Low Viscosity	Medium Viscosity	High Viscosity
Sprue			
All	2.0–3.0 mm	2.0–3.0 mm	2.0–3.0 mm
Spreader Needle			
Ring Gate 0.25 Flat	1.0–1.5 mm	1.5–2.0 mm	2.0–2.5 mm
Collar Gate 0.25 Flat	1.0–1.5 mm	1.5–2.0 mm	2.0–2.5 mm

Tips are supplied with the smallest gate diameter—customer to re-machine if necessary for larger shot weights.
 High viscosity = melt flow 0.5–6
 Medium viscosity = melt flow 7–16
 Low viscosity = melt flow > 16

Shot Weights

Resin Type	Shot Weight (grams) Sprue	Shot Weight (grams) Ring & Collar
Pp, Ps	200	150
LDPe, PVC-p, SAN	150	100
ABS, HDPe, Pa	100	50
PET, POM	50	25
PBT, Pc, PMMA, PPO	30	15

These values are for reference purposes only. The values can be affected by the resin melt flow, part dimensions & wall thickness, mould & melt temperatures and the moulding conditions used.

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