

BXTG25

Technical Guide

BXTG25

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 19 TT)	✓	✓	✓ *
One-hole Torpedo Tip (X 19 IT)	✓	✓	✓ *
Open Tip (X 19 OT)	✓	✗	✓ *

To order a nozzle assembly:

Provide the Nozzle Code + Grade
 (Order example: BXIBN25187 G1)

To order a tip:

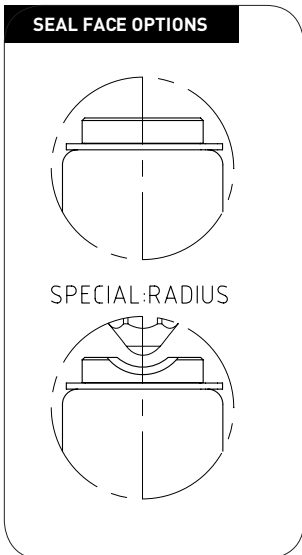
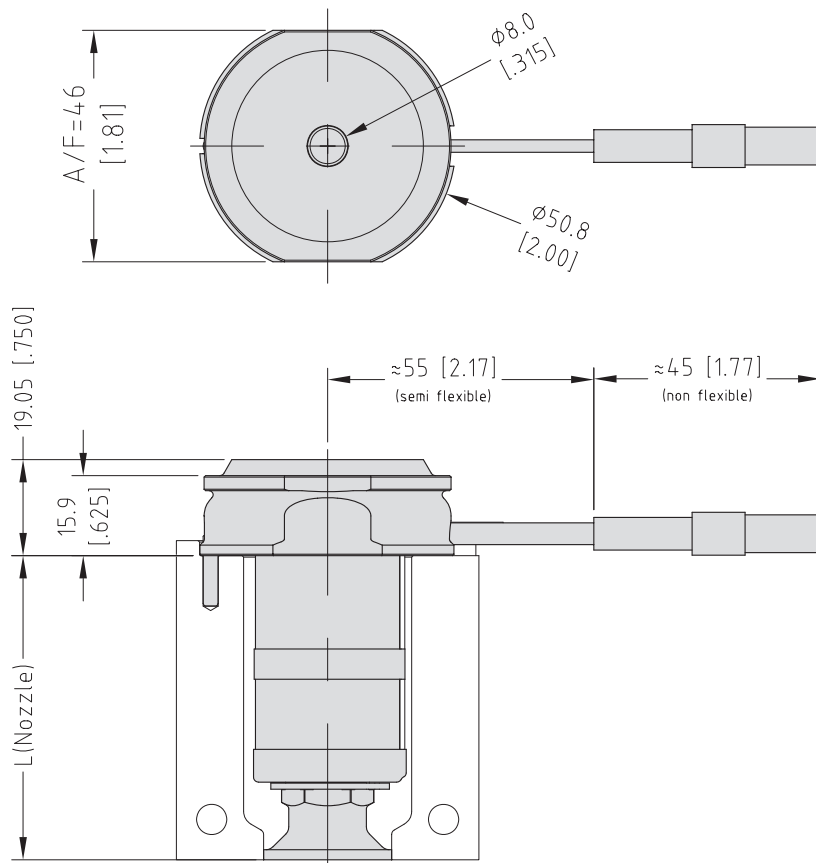
Provide the Tip Code + Grade
 The BX25 is compatible with the X range 19 series tips.
 (Order example: X 19 IT G1)

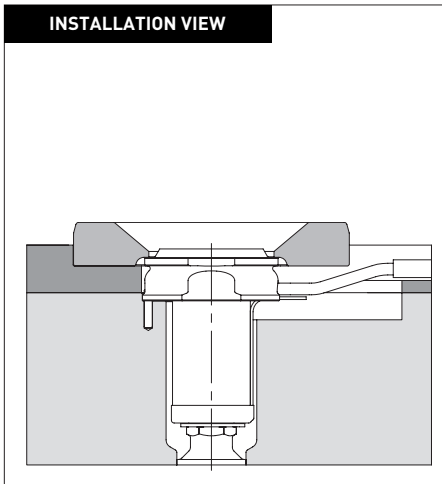
Notes:

- * 1. For single nozzle applications requiring G5 tip the SX nozzle must be used.
- 2. Before start up ensure all material in nozzle is molten.

Dimension key	
Dimension	Units
0.2	mm
[0.2]	inch

Nozzle Dimensions





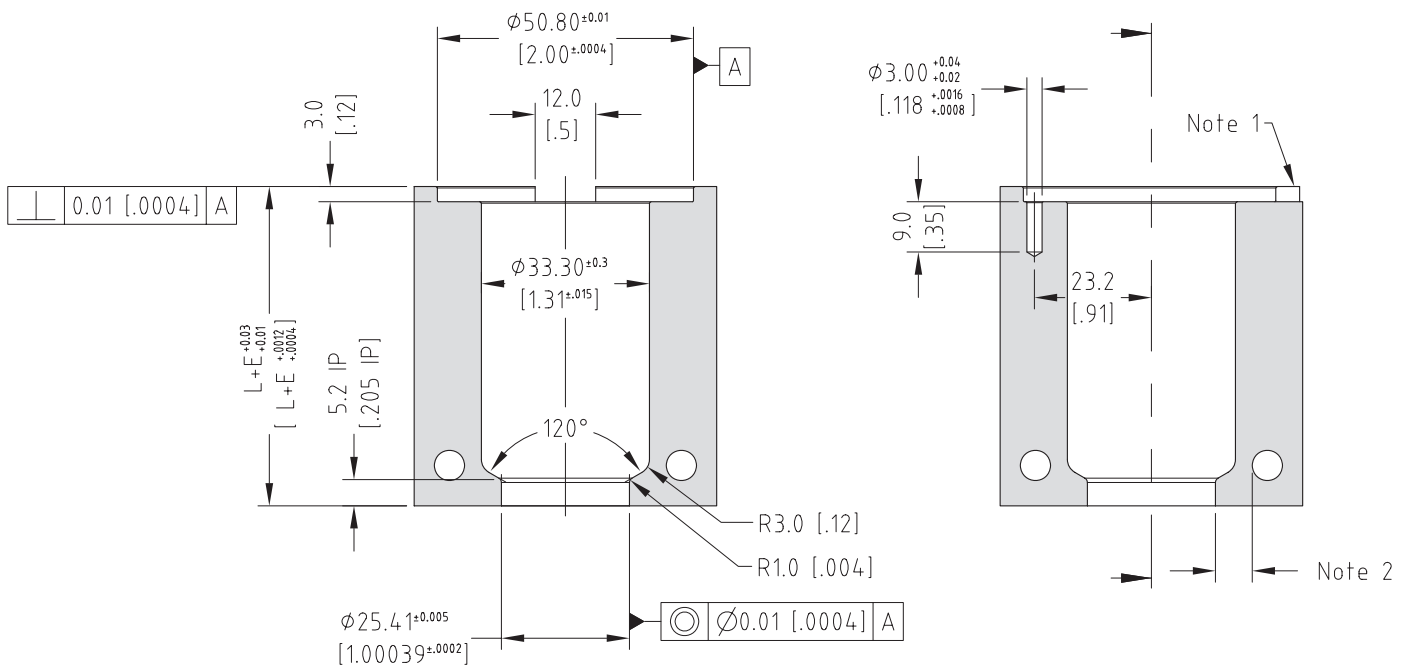
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	EQΔT = 200C	EQΔT = 250C
BXTBN25137	BXIBN25137	BXOBN25137	34.93 [1.375]	0.09 [0.0036]	0.12 [0.0045]
BXTBN25187	BXIBN25187	BXOBN25187	47.63 [1.875]	0.13 [0.0051]	0.16 [0.0062]
BXTBN25237	BXIBN25237	BXOBN25237	60.33 [2.375]	0.16 [0.0063]	0.20 [0.0078]
BXTBN25287	BXIBN25287	BXOBN25287	73.03 [2.875]	0.19 [0.0076]	0.24 [0.0095]
BXTBN25337	BXIBN25337	BXOBN25337	85.73 [3.375]	0.23 [0.0089]	0.28 [0.0111]

Dimension key	
Dimension	Units
0.2	mm
[0.2]	inch

Nozzle Fitment and Gate Dimensions

$$E = L \times 0.0000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$$

$$[E = L \times 0.0000073 \times (\text{nozzle temp. } ^\circ\text{F} - \text{mould temp. } ^\circ\text{F})]$$



Note

1. Wire channel to suit mould.
 2. Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.
 3. Modify gate diameter and land to suit the part. Supplied with $\phi 1.2$ [0.047] → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 19 TT)	✓	✓	✓ *
One-hole Torpedo Tip (X 19 IT)	✓	✓	✓ *
Open Tip (X 19 OT)	✓	✗	✓ *

To order a nozzle assembly:

Provide the Nozzle Code + Grade
 (Order example: BXISN25187 G1)

To order a tip:

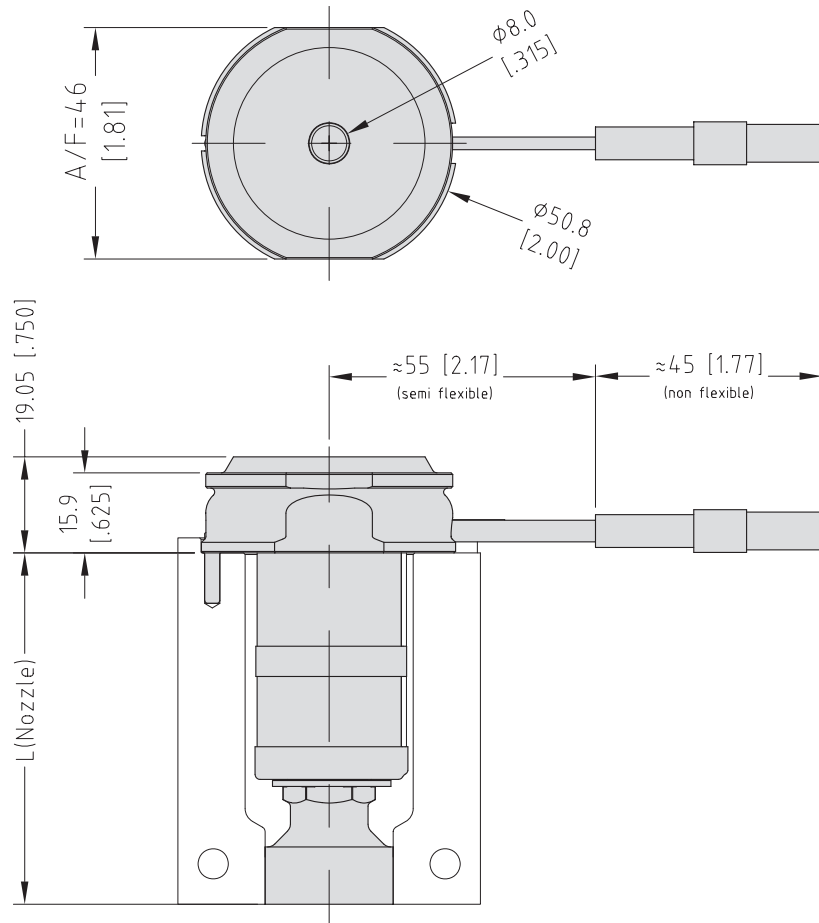
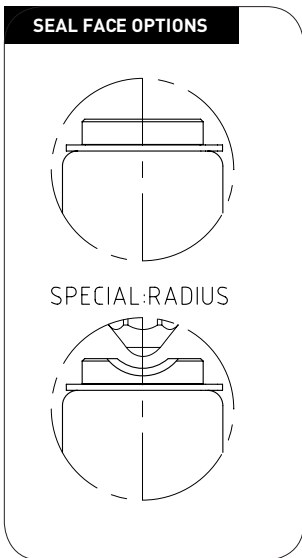
Provide the Tip Code + Grade
 The BX25 is compatible with the X range 19 series tips.
 (Order example: X 19 IT G1)

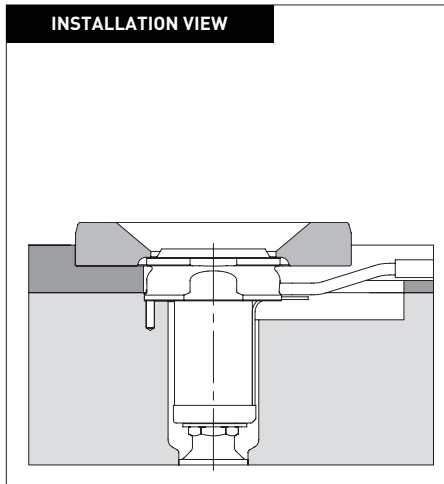
Notes:

- * 1. Mastip recommends SX nozzles for all applications requiring a G5 tip.
- 2. Before start up ensure all material in nozzle is molten.
- 3. Sprue Nuts are supplied full contact. Modify the contact area to suit mould requirements.

Dimension key	
Dimension	Units
0.2	mm
[0.2]	inch

Nozzle Dimensions





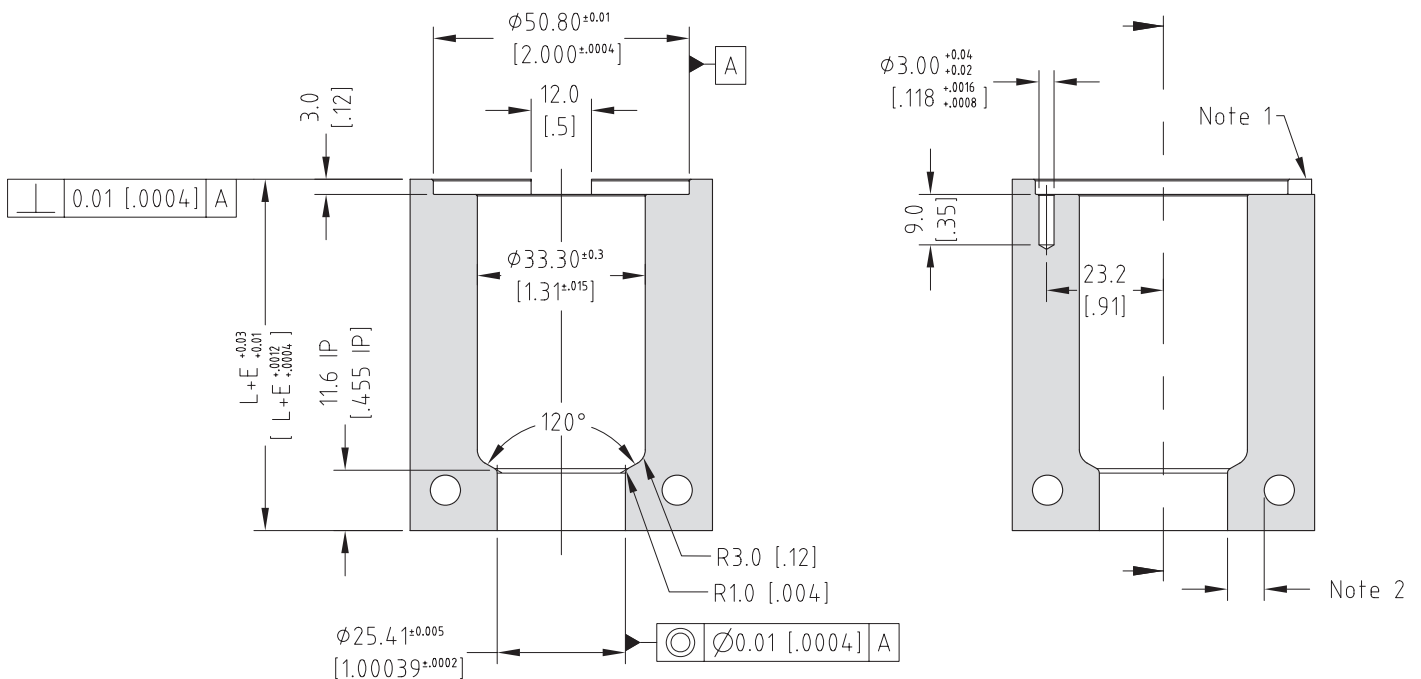
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT = 200C	E@ΔT = 250C
BXTSN25137	BXISN25137	BXOSN25137	41.28 [1.625]	0.11 [0.0043]	0.14 [0.0054]
BXTSN25187	BXISN25187	BXOSN25187	53.98 [2.125]	0.14 [0.0056]	0.18 [0.0070]
BXTSN25237	BXISN25237	BXOSN25237	66.68 [2.625]	0.18 [0.0069]	0.22 [0.0087]
BXTSN25287	BXISN25287	BXOSN25287	79.38 [3.125]	0.21 [0.0083]	0.26 [0.0103]
BXTSN25337	BXISN25337	BXOSN25337	92.08 [3.625]	0.24 [0.0096]	0.30 [0.0120]

Dimension key	
Dimension	Units
0.2	mm
[0.2]	inch

Nozzle Fitment and Gate Dimensions

$$E = L \times 0.0000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$$

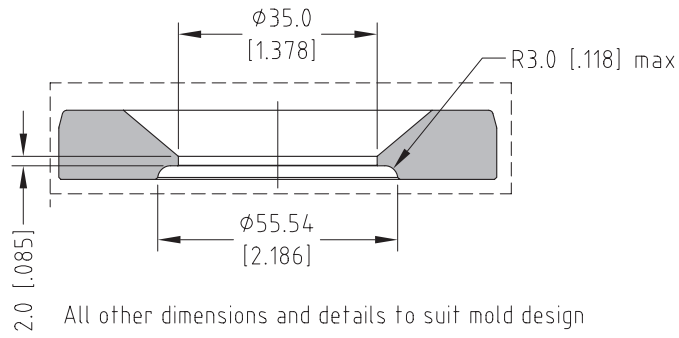
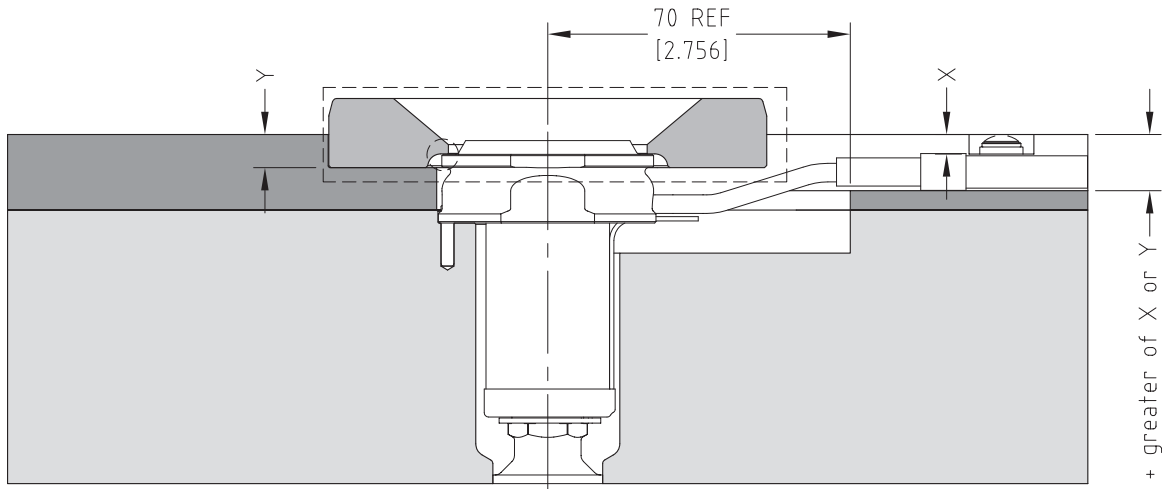
$$[E = L \times 0.0000073 \times (\text{nozzle temp. } ^\circ\text{F} - \text{mould temp. } ^\circ\text{F})]$$



Note

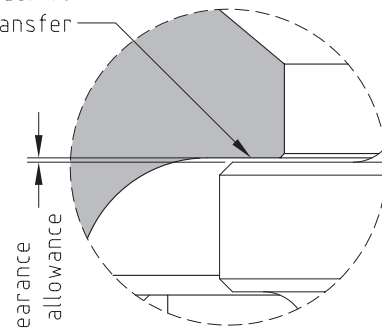
1. Wire channel to suit mould.
 2. Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.
 3. Modify gate diameter and land to suit the part. Supplied with $\varnothing 1.2$ [0.047] → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Installation Details



Min = 12 [0.5] + greater of X or Y

Minimum contact to reduce heat transfer



0.05 Cold clearance for expansion allowance

Mastip Inch Nozzles

BX Thermal Gate



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