

# **MXTG**

## **Technical Guide**

# MXTG13

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT)	✓	✓	✓
One-hole Torpedo Tip (X 13 IT)	✓	✓	✓
Open Tip (X 13 OT)	✓	✗	✗

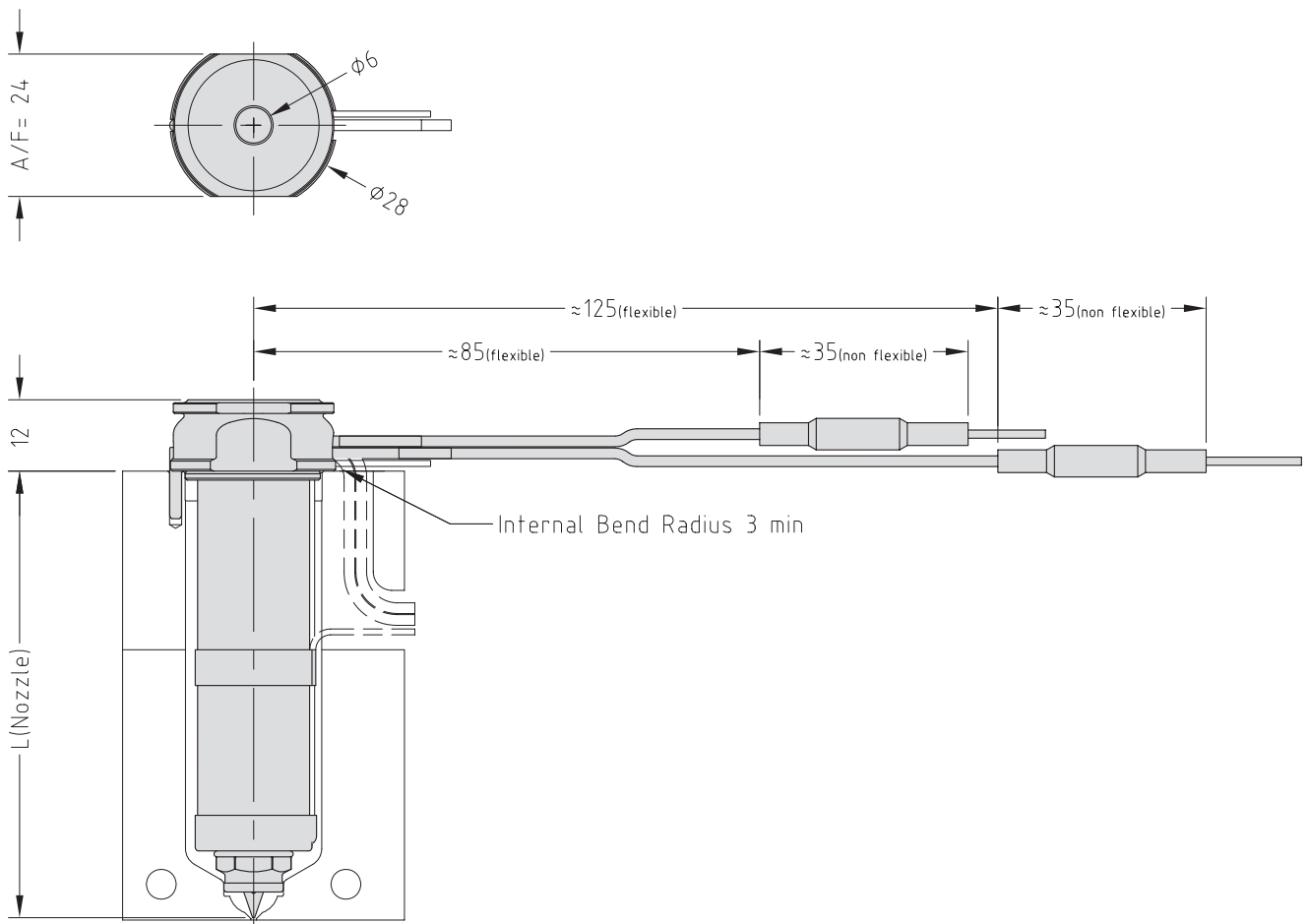
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXIT13175 G5)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 13 IT G5)

Nozzle Dimensions





Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT)	✓	✓	✓
One-hole Torpedo Tip (X 13 IT)	✓	✓	✓
Open Tip (X 13 OT)	✓	✗	✗

Bush Nut Options

- BN - Standard bush nut
- BE - Full-contact bush nut\*

The nozzle codes listed to the right are for nozzle assemblies with a standard bush nut. To order a full-contact bush nut, replace the BN in the code with BE.

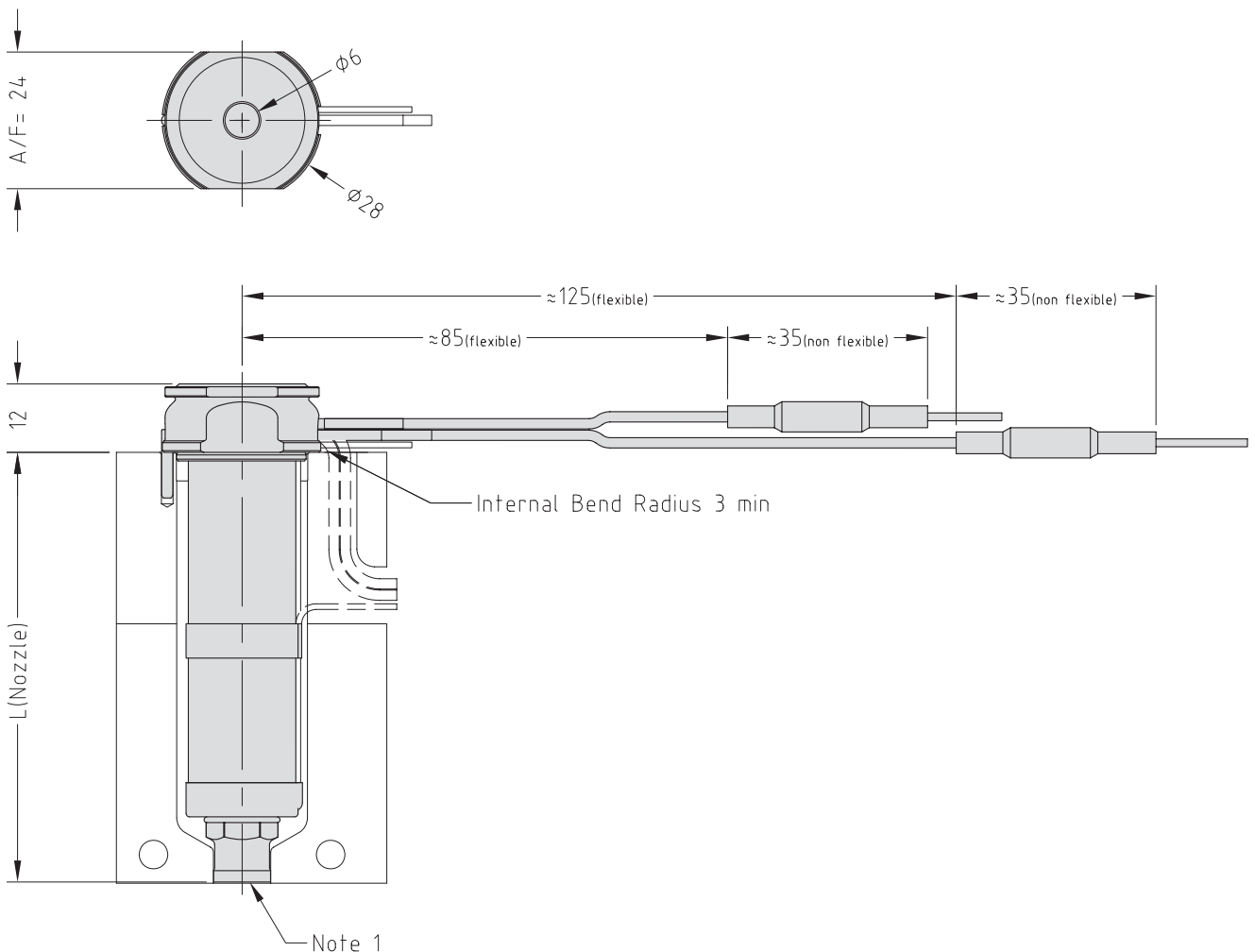
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
(Order example: MXIBN13175 G5)

To order a tip:

Provide the Tip Code + Grade  
(Order example: X 13 IT G5)

Nozzle Dimensions



Note

1. Modify the contact area to suit the application.

→ See Gate Modifications and Cooling sections in the Technical Specifications.



Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT)	✓	✓	✓
One-hole Torpedo Tip (X 13 IT)	✓	✓	✓
Open Tip (X 13 OT)	✓	×	×

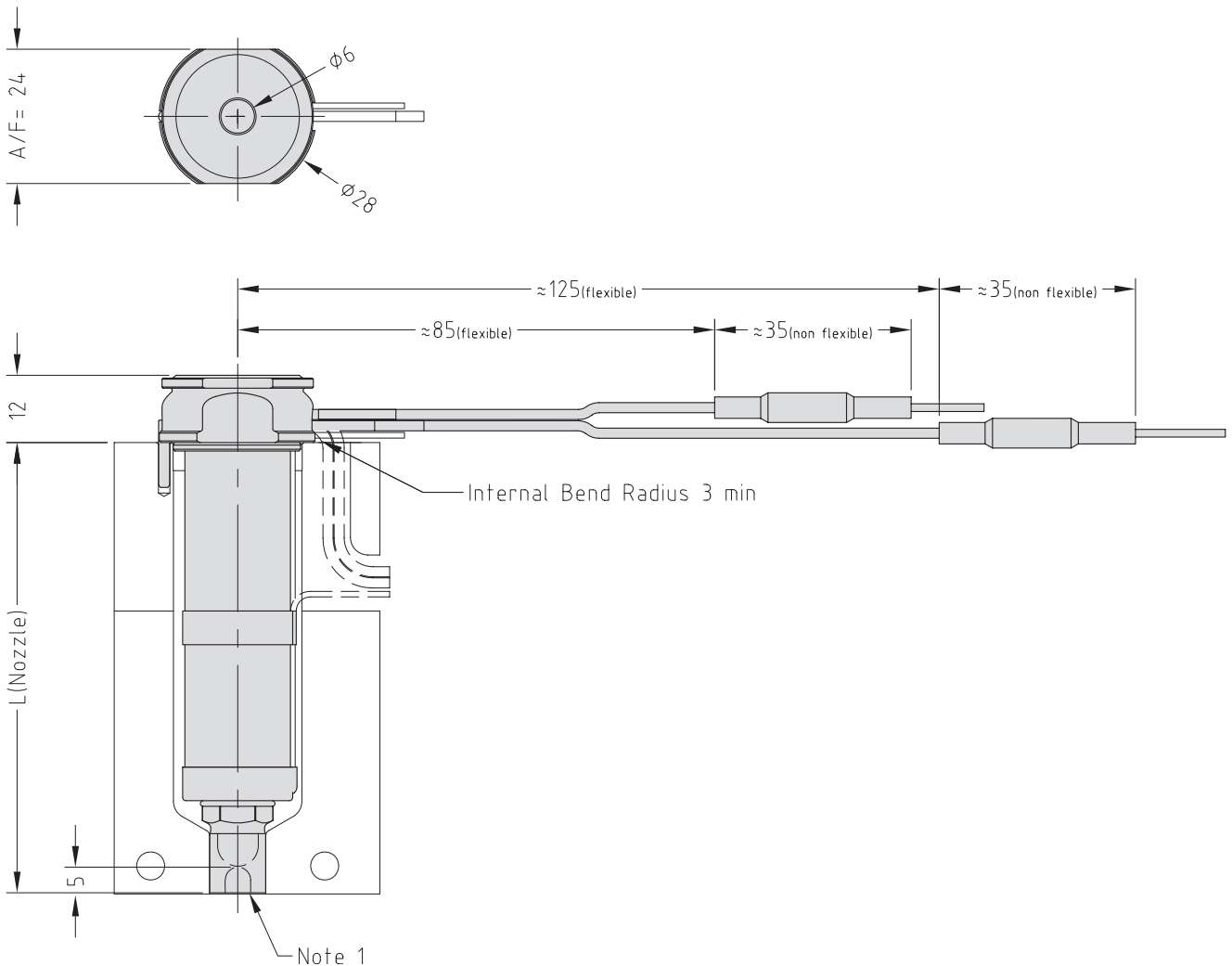
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
 (Order example: MXISN13175 G5)

To order a tip:

Provide the Tip Code + Grade  
 (Order example: X 13 IT G5)

Nozzle Dimensions



Note

1. Modify the contact area and the sprue nut to suit the application.  
 → See Gate Modifications and Cooling sections in the Technical Specifications.





Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT)	✓	✓	✓
One-hole Torpedo Tip (X 13 IT)	✓	✓	✓
Open Tip (X 13 OT)	✓	✗	✗

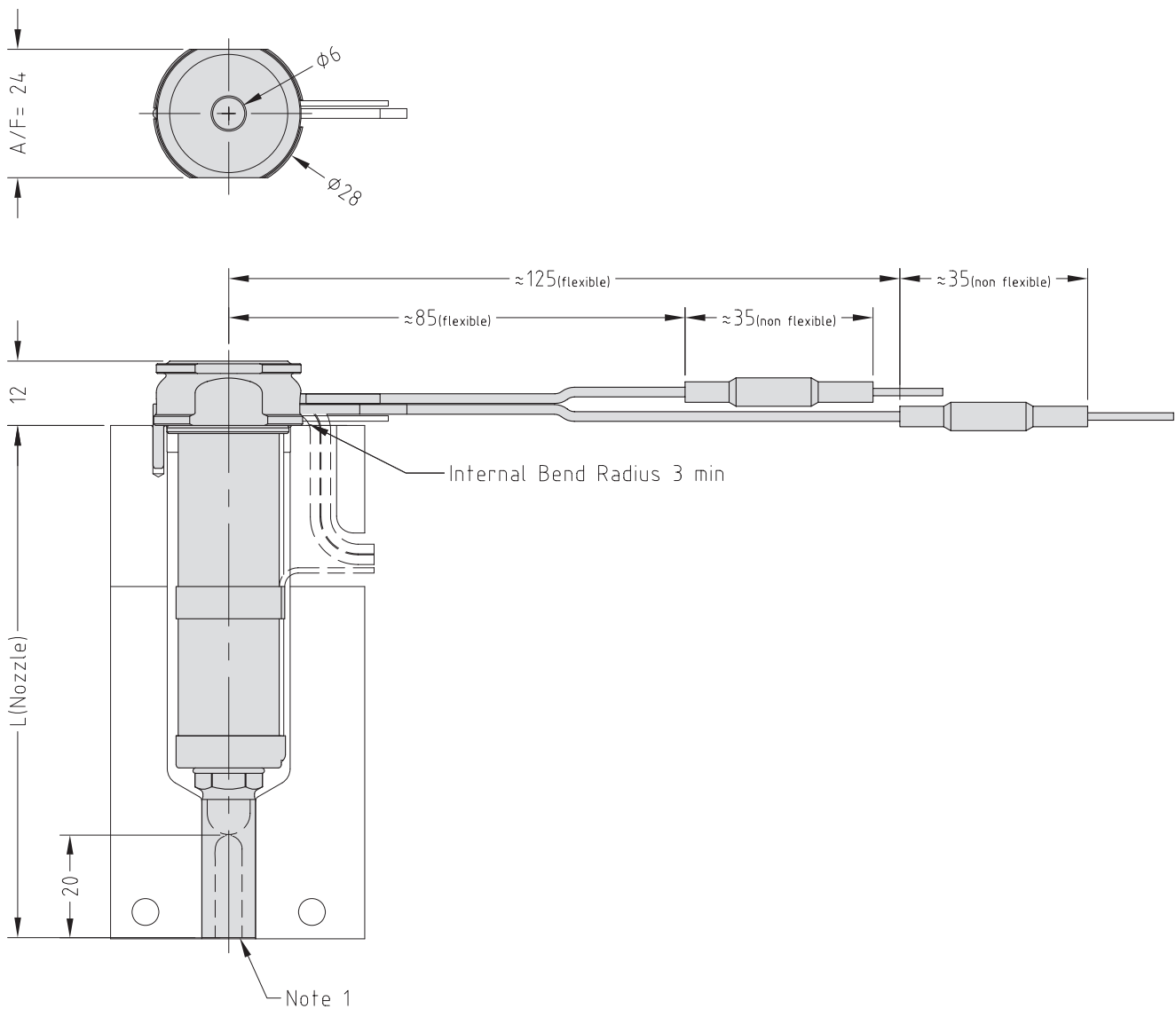
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXISX13175 G5)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 13 IT G5)

Nozzle Dimensions



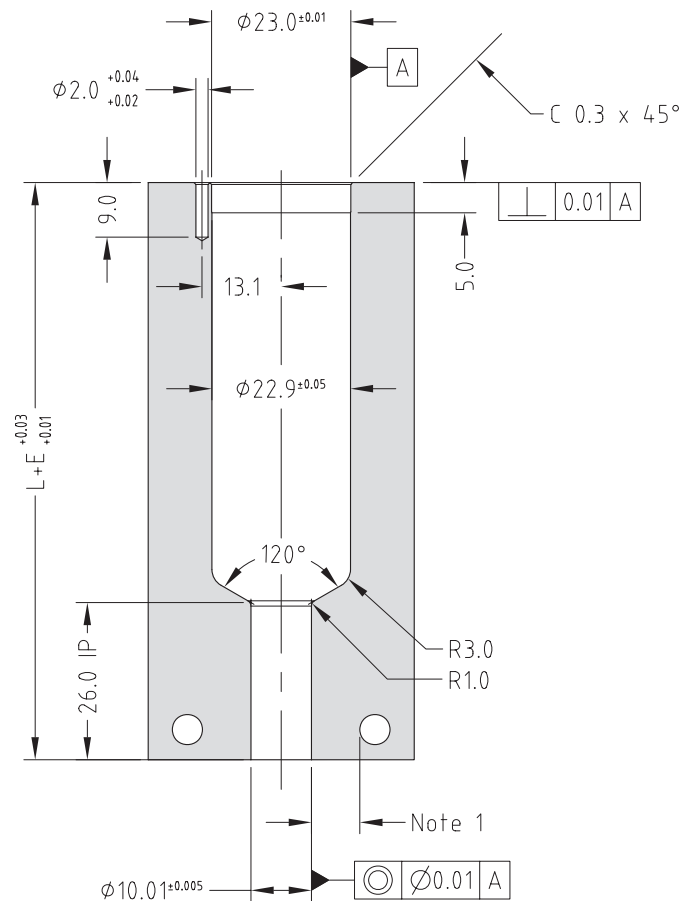
**Note**

1. Modify the contact area and the sprue nut to suit the application.  
→ See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	$E @ \Delta T = 200C$	$E @ \Delta T = 250C$
MXTSX13045	MXISX13045	MXOSX13045	65.2	0.17	0.22
MXTSX13055	MXISX13055	MXOSX13055	75.2	0.20	0.25
MXTSX13065	MXISX13065	MXOSX13065	85.2	0.23	0.28
MXTSX13075	MXISX13075	MXOSX13075	95.2	0.25	0.31
MXTSX13095	MXISX13095	MXOSX13095	115.2	0.30	0.38
MXTSX13115	MXISX13115	MXOSX13115	135.2	0.36	0.45
MXTSX13145	MXISX13145	MXOSX13145	165.2	0.44	0.55
MXTSX13175	MXISX13175	MXOSX13175	195.2	0.52	0.64

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with  $\phi 0.9$  → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
 \*\* Hot half configurations are not recommended for sprue nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT)	✓	✓	✓
One-hole Torpedo Tip (X 13 IT)	✓	✓	✓
Open Tip (X 13 OT)	✓	✗	✗

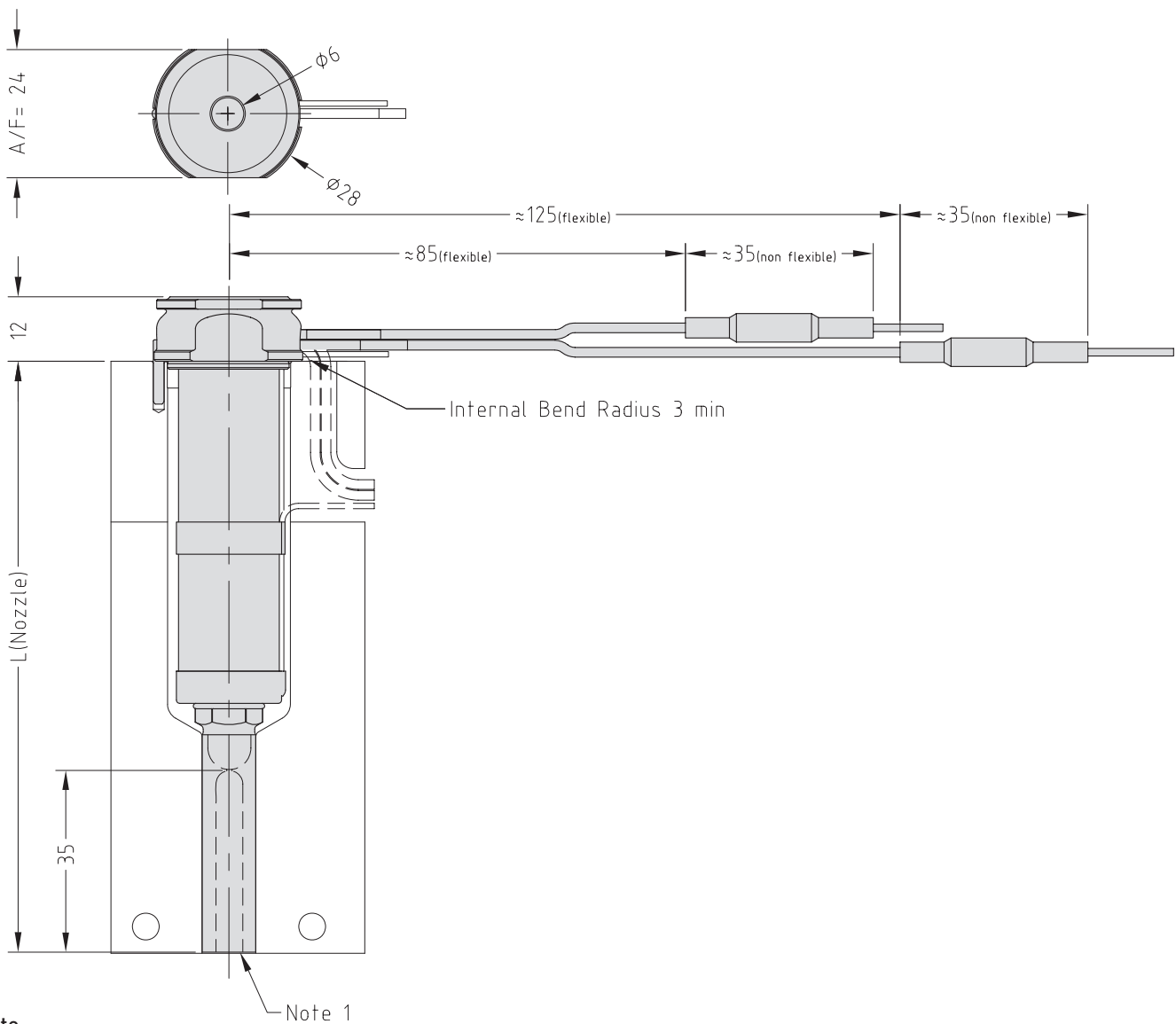
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
(Order example: MXISL13175 G5)

To order a tip:

provide the Tip Code + Grade  
(Order example: X 13 IT G5)

Nozzle Dimensions



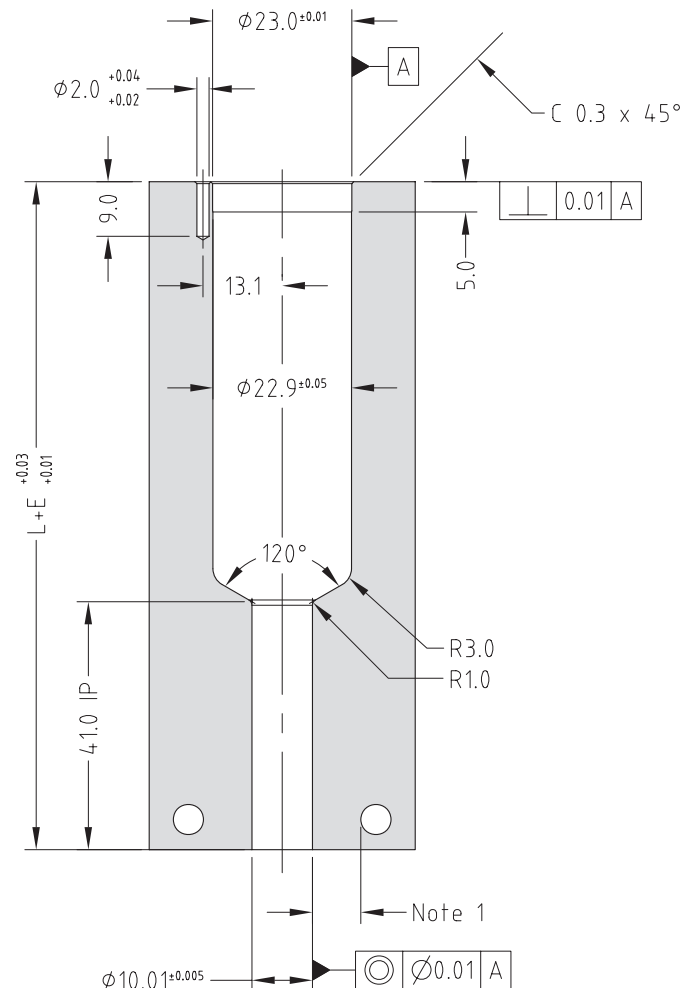
Note

1. Modify the contact area and the sprue nut to suit the application.  
→ See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	$E @ \Delta T = 200C$	$E @ \Delta T = 250C$
MXTSL13045	MXISL13045	MXOSL13045	80.2	0.21	0.26
MXTSL13055	MXISL13055	MXOSL13055	90.2	0.24	0.30
MXTSL13065	MXISL13065	MXOSL13065	100.2	0.26	0.33
MXTSL13075	MXISL13075	MXOSL13075	110.2	0.29	0.36
MXTSL13095	MXISL13095	MXOSL13095	130.2	0.34	0.43
MXTSL13115	MXISL13115	MXOSL13115	150.2	0.40	0.50
MXTSL13145	MXISL13145	MXOSL13145	180.2	0.48	0.59
MXTSL13175	MXISL13175	MXOSL13175	210.2	0.55	0.69

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with  $\phi 0.9$  → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
\*\* Hot half configurations are not recommended for sprue nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT+5)	✓	✓	✗
One-hole Torpedo Tip (X 13 IT+5)	✓	✓	✗
Open Tip	✗	✗	✗

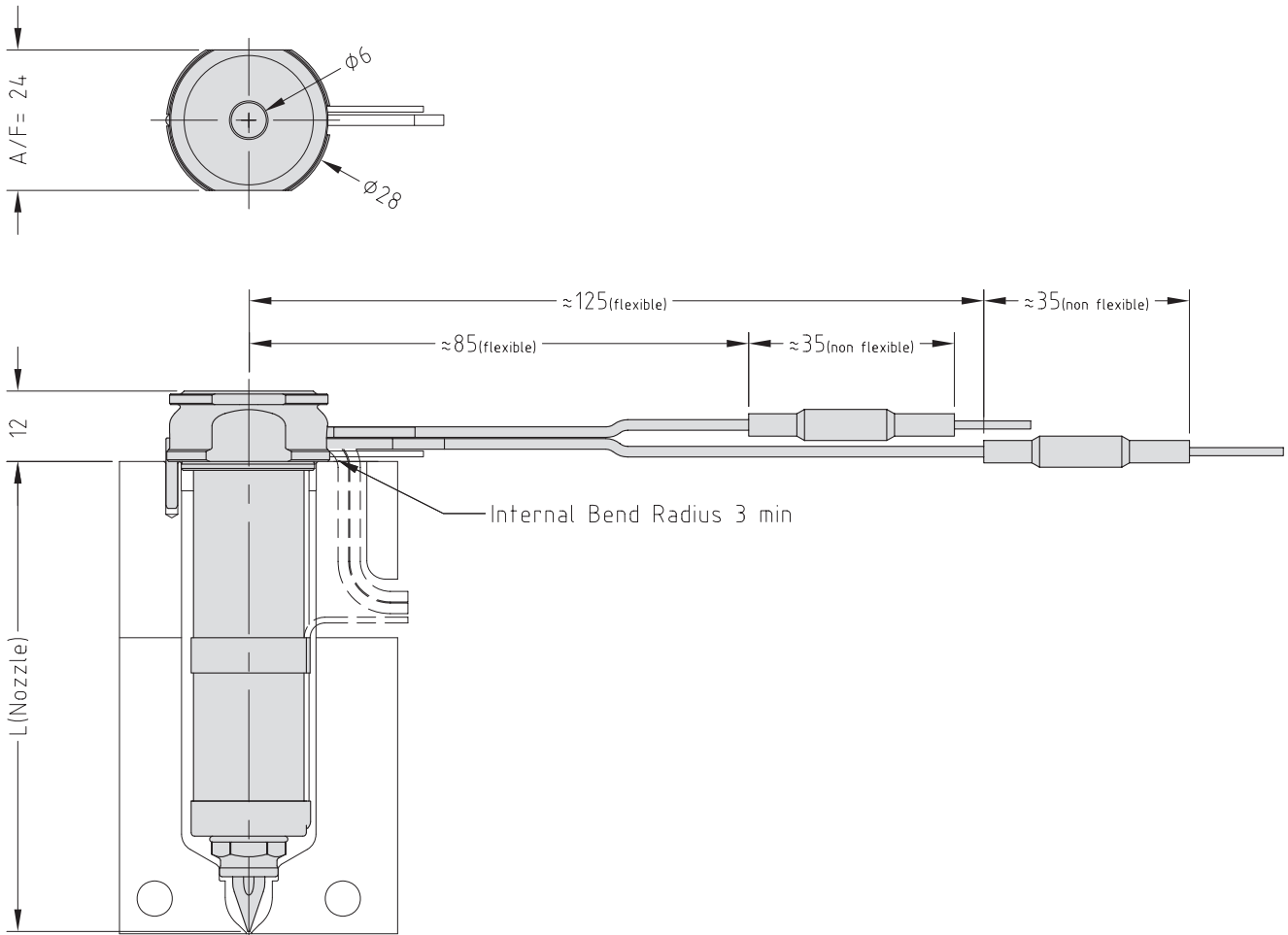
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXIT13175+5 G1)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 13 IT+5 G1)

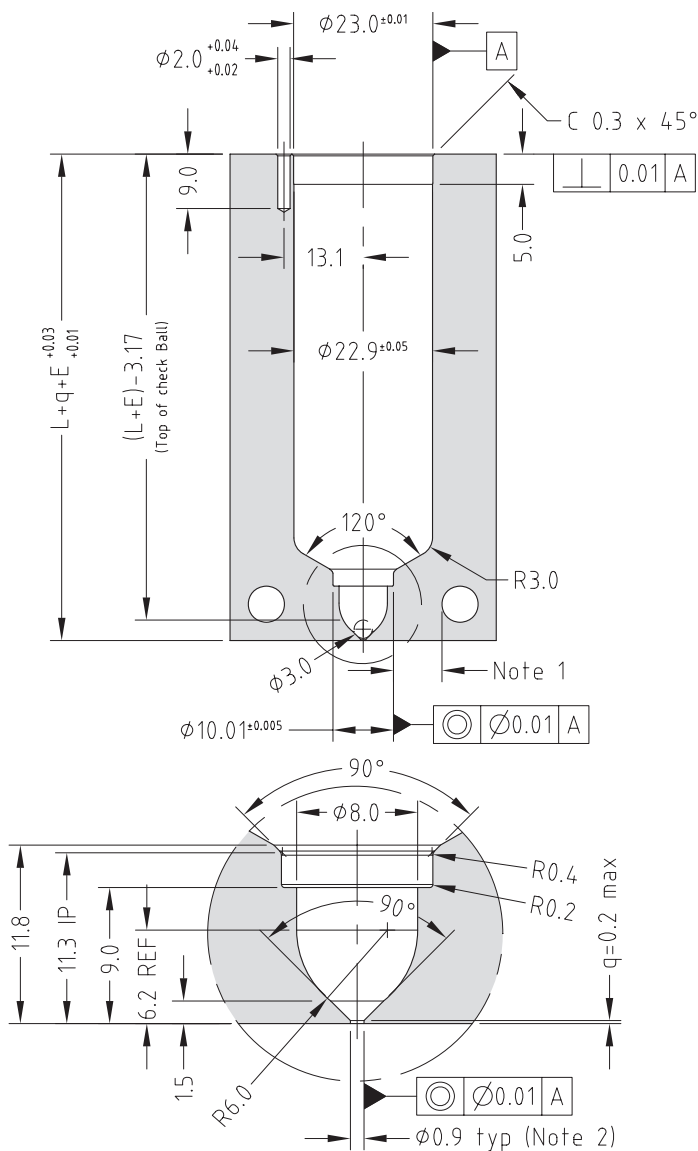
Nozzle Dimensions



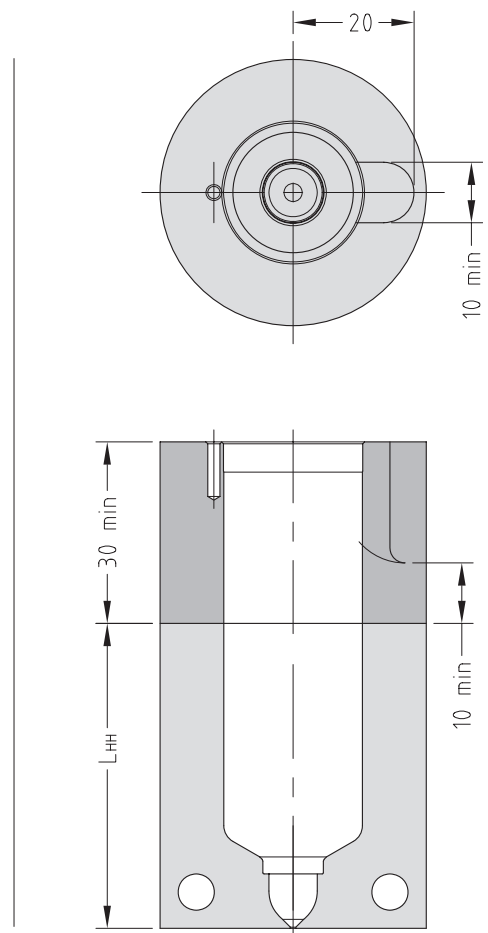
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	L	$E @ \Delta T = 200C$	$E @ \Delta T = 250C$
MXTT13045+5	MXIT13045+5	50	0.13	0.17
MXTT13055+5	MXIT13055+5	60	0.16	0.20
MXTT13065+5	MXIT13065+5	70	0.18	0.23
MXTT13075+5	MXIT13075+5	80	0.21	0.26
MXTT13095+5	MXIT13095+5	100	0.26	0.33
MXTT13115+5	MXIT13115+5	120	0.32	0.40
MXTT13145+5	MXIT13145+5	150	0.40	0.50
MXTT13175+5	MXIT13175+5	180	0.48	0.59

### Nozzle Fitment and Gate Dimensions

$$E = L \times 0.000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$$



### Hot Half Configuration



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 13 TT+10)	✓	✓	✗
One-hole Torpedo Tip (X 13 IT+10)	✓	✓	✗
Open Tip	✗	✗	✗

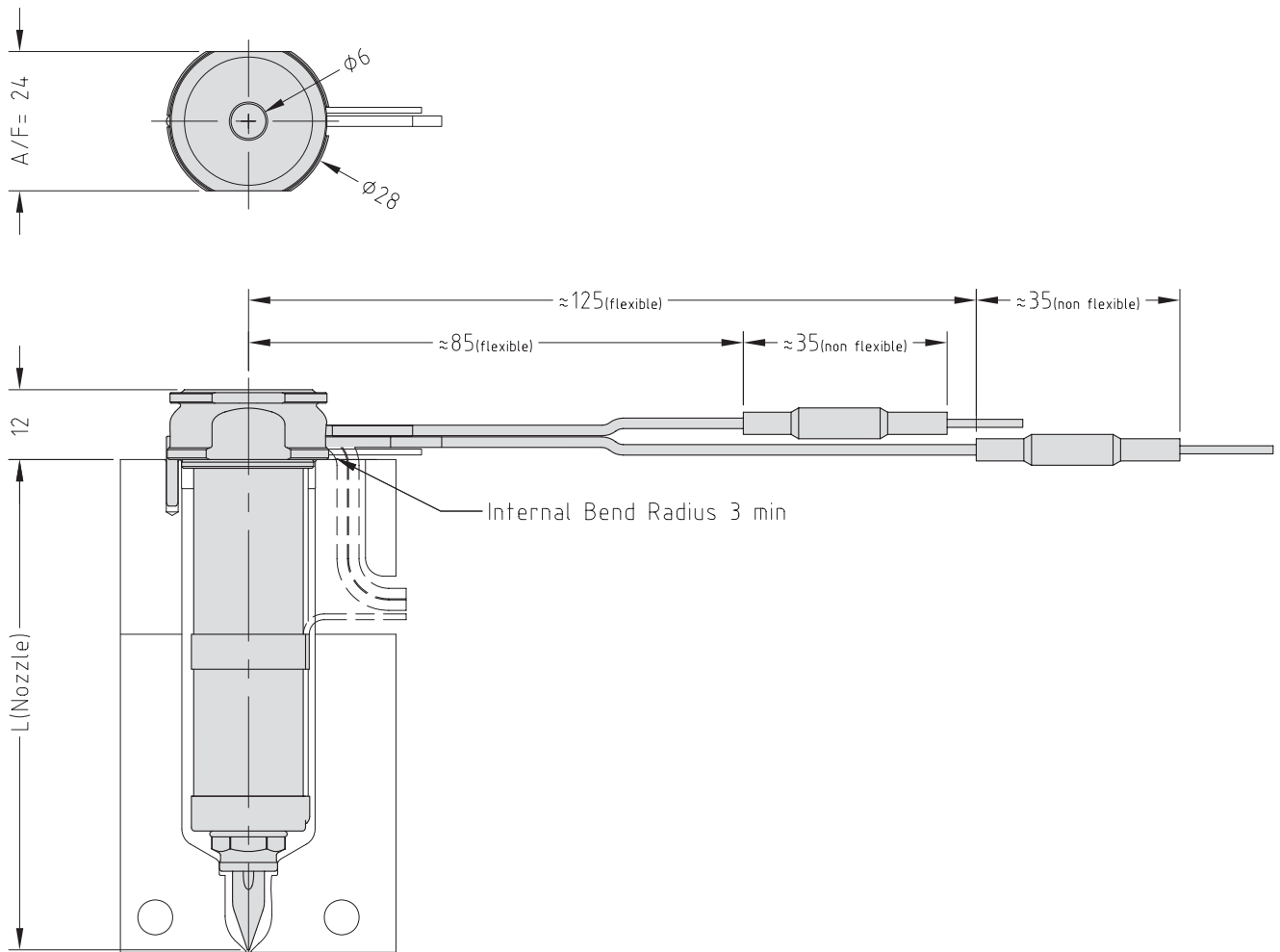
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXIT13175+10 G1)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 13 IT+10 G1)

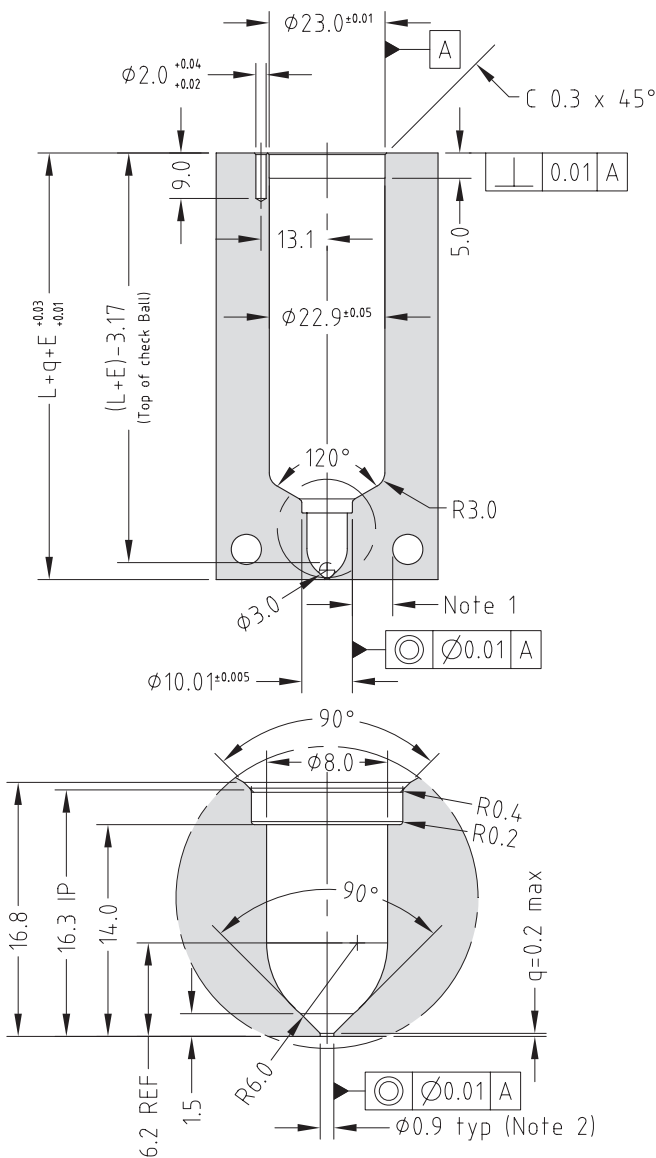
Nozzle Dimensions



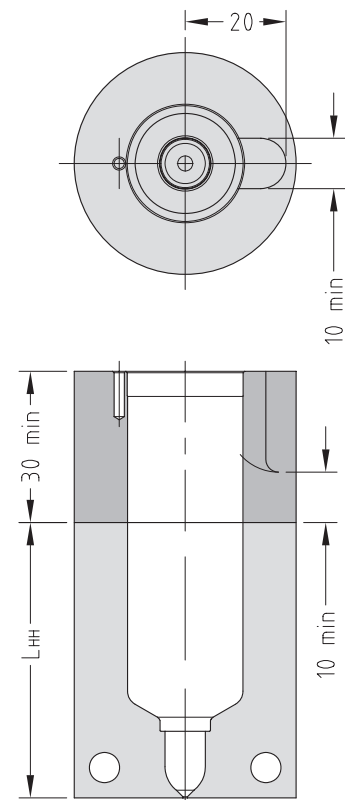
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT13045+10	MXIT13045+10	55	0.15	0.18
MXTT13055+10	MXIT13055+10	65	0.17	0.21
MXTT13065+10	MXIT13065+10	75	0.20	0.25
MXTT13075+10	MXIT13075+10	85	0.22	0.28
MXTT13095+10	MXIT13095+10	105	0.28	0.35
MXTT13115+10	MXIT13115+10	125	0.33	0.41
MXTT13145+10	MXIT13145+10	155	0.41	0.51
MXTT13175+10	MXIT13175+10	185	0.49	0.61

**Nozzle Fitment and Gate Dimensions**

$E = L \times 0.000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$



**Hot Half Configuration**



**Note**

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.



# MXTG16

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT)	✓	✓	✓
One-hole Torpedo Tip (X 16 IT)	✓	✓	✓
Open Tip (X 16 OT)	✓	✗	✗

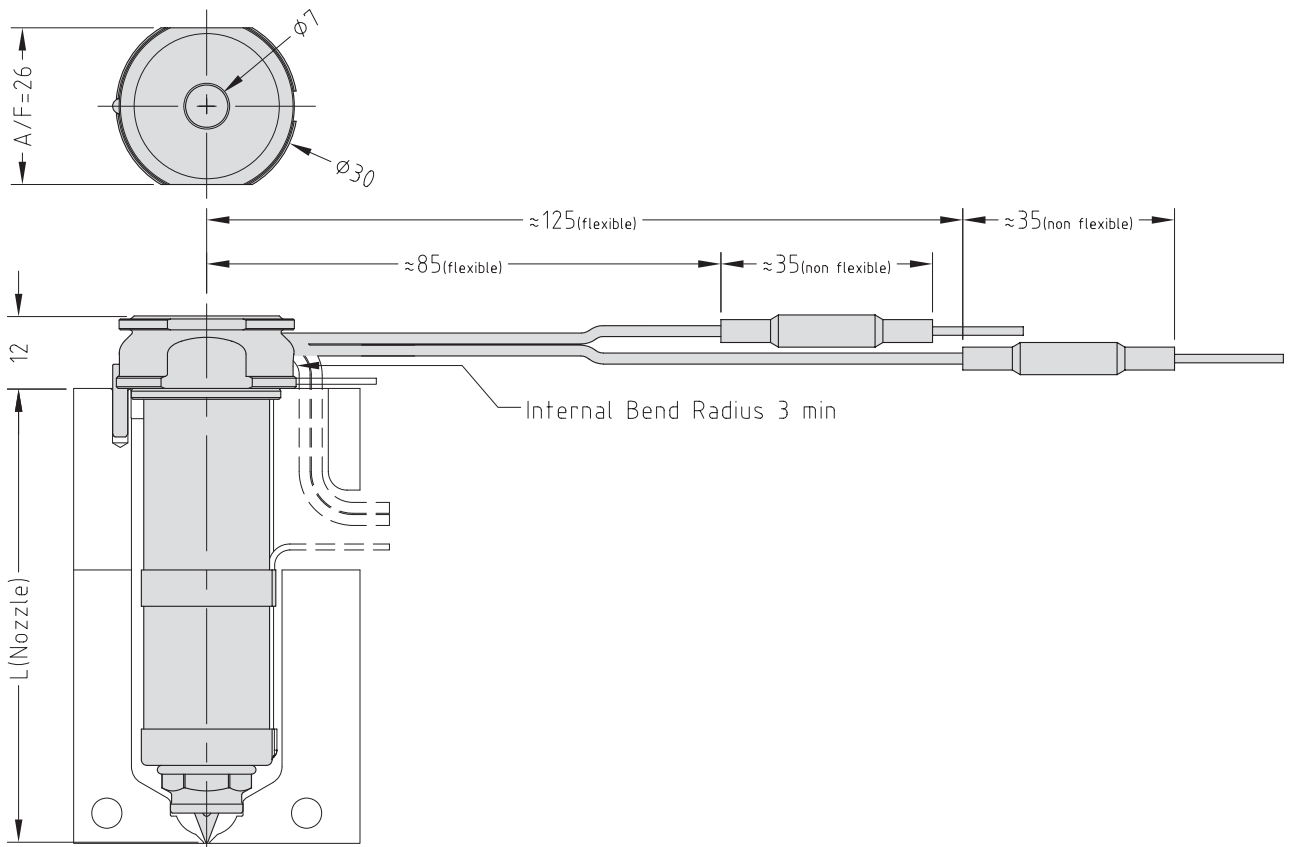
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXIT16175 G5)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 16 IT G5)

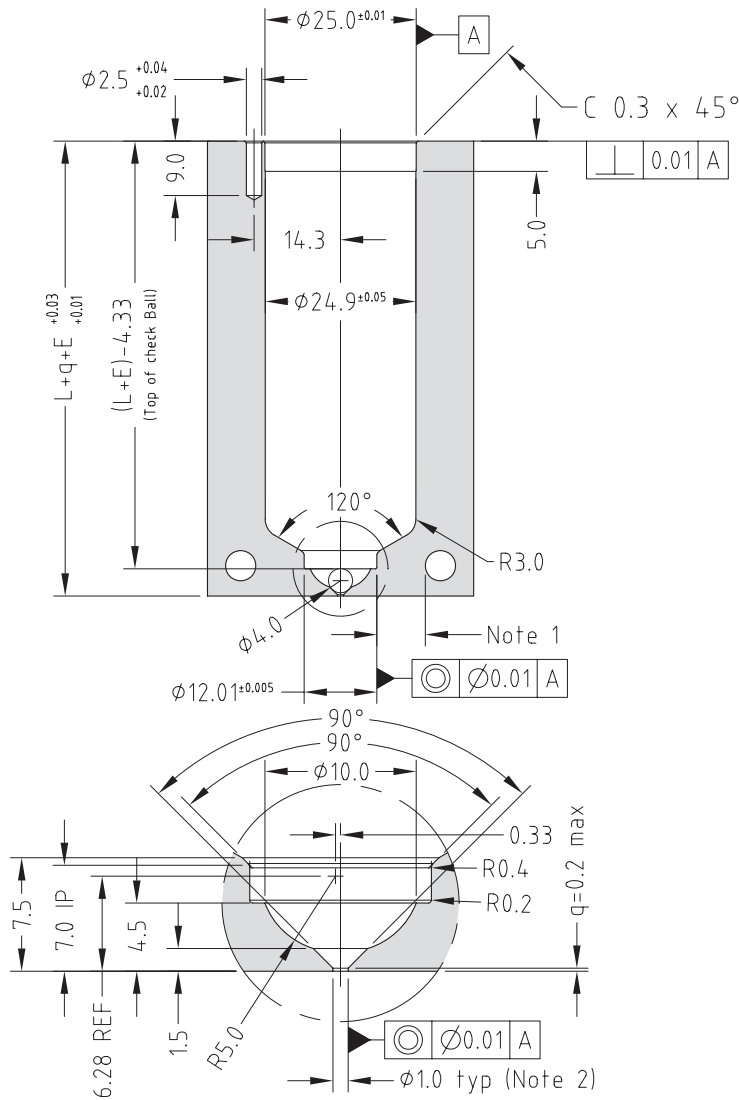
Nozzle Dimensions



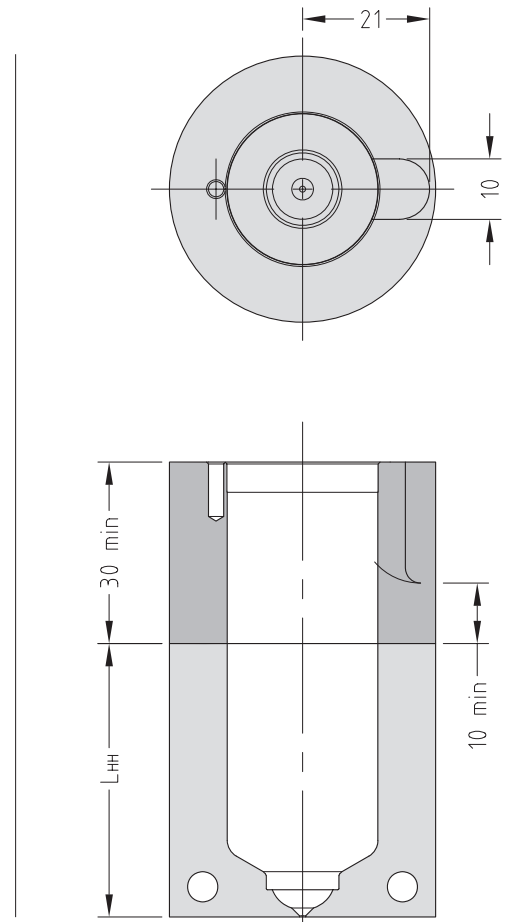
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT16045	MXIT16045	MXOT16045	45	0.12	0.15
MXTT16055	MXIT16055	MXOT16055	55	0.15	0.18
MXTT16065	MXIT16065	MXOT16065	65	0.17	0.21
MXTT16075	MXIT16075	MXOT16075	75	0.20	0.25
MXTT16095	MXIT16095	MXOT16095	95	0.25	0.31
MXTT16115	MXIT16115	MXOT16115	115	0.30	0.38
MXTT16145	MXIT16145	MXOT16145	145	0.38	0.48
MXTT16175	MXIT16175	MXOT16175	175	0.46	0.58

**Nozzle Fitment and Gate Dimensions**

$E = L \times 0.000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$



**Hot Half Configuration**



**Note**

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT)	✓	✓	✓
One-hole Torpedo Tip (X 16 IT)	✓	✓	✓
Open Tip (X 16 OT)	✓	✗	✗

Bush Nut Options

- BN - Standard bush nut
- BE - Full-contact bush nut\*

The nozzle codes listed to the right are for nozzle assemblies with a standard bush nut. To order a full-contact bush nut, replace the BN in the code with BE.

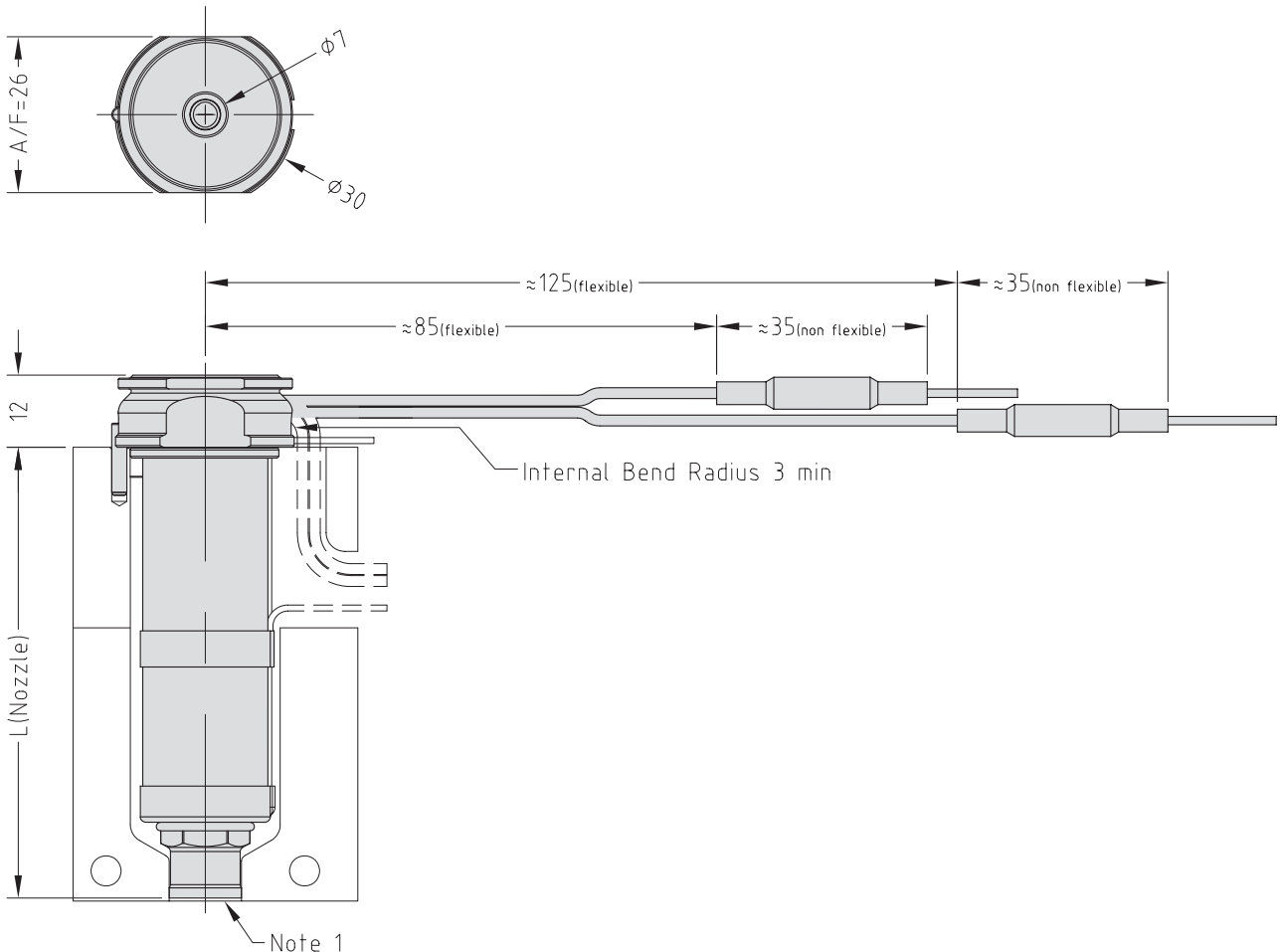
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
(Order example: MXTBN16175 G5)

To order a tip:

Provide the Tip Code + Grade  
(Order example: X 16 IT G5)

Nozzle Dimensions



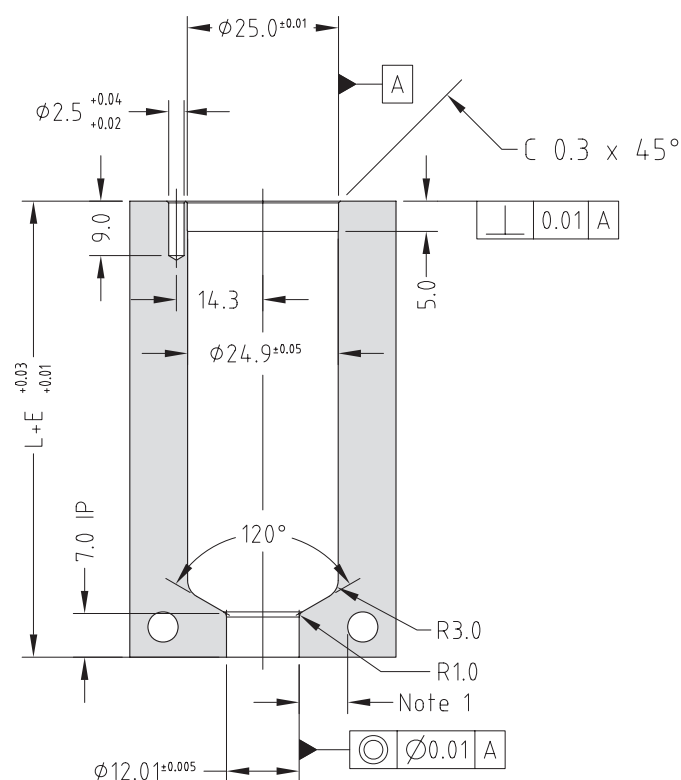
Note

1. Modify the contact area to suit the application.  
→ See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	$E \Delta T$ =200C	$E \Delta T$ =250C
MXTBN16045	MXIBN16045	MXOBN16045	45.2	0.12	0.15
MXTBN16055	MXIBN16055	MXOBN16055	55.2	0.15	0.18
MXTBN16065	MXIBN16065	MXOBN16065	65.2	0.17	0.22
MXTBN16075	MXIBN16075	MXOBN16075	75.2	0.20	0.25
MXTBN16095	MXIBN16095	MXOBN16095	95.2	0.25	0.31
MXTBN16115	MXIBN16115	MXOBN16115	115.2	0.30	0.38
MXTBN16145	MXIBN16145	MXOBN16145	145.2	0.38	0.48
MXTBN16175	MXIBN16175	MXOBN16175	175.2	0.46	0.58

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with Ø1.0 → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
 \*\* Hot half configurations are not recommended for bush nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT)	✓	✓	✓
One-hole Torpedo Tip (X 16 IT)	✓	✓	✓
Open Tip (X 16 OT)	✓	✗	✗

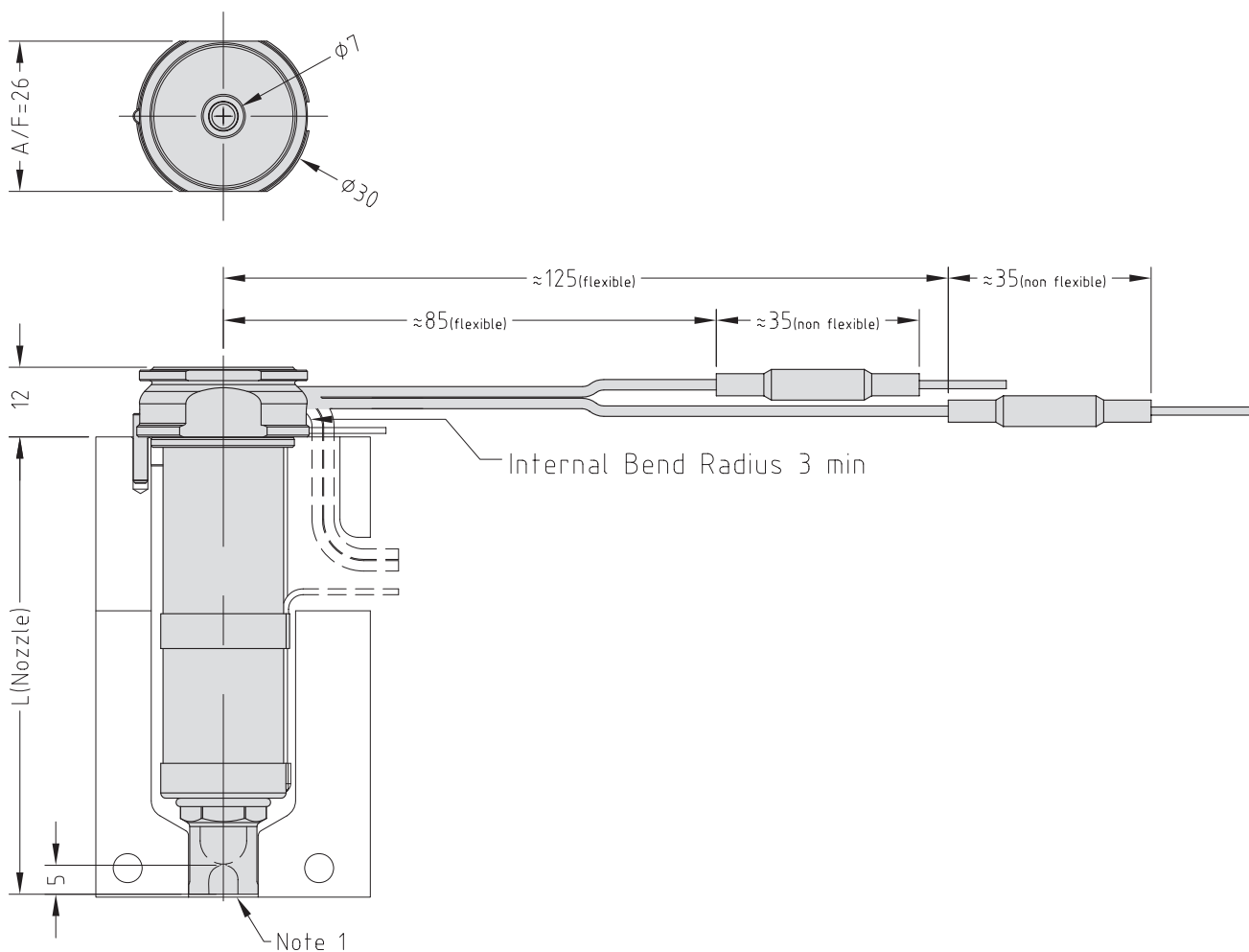
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXOSN16175 G1)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 16 IT G5)

Nozzle Dimensions



**Note**

1. Modify the contact area and the sprue nut to suit the application.

→ See Gate Modifications and Cooling sections in the Technical Specifications.



Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT)	✓	✓	✓
One-hole Torpedo Tip (X 16 IT)	✓	✓	✓
Open Tip (X 16 OT)	✓	✗	✗

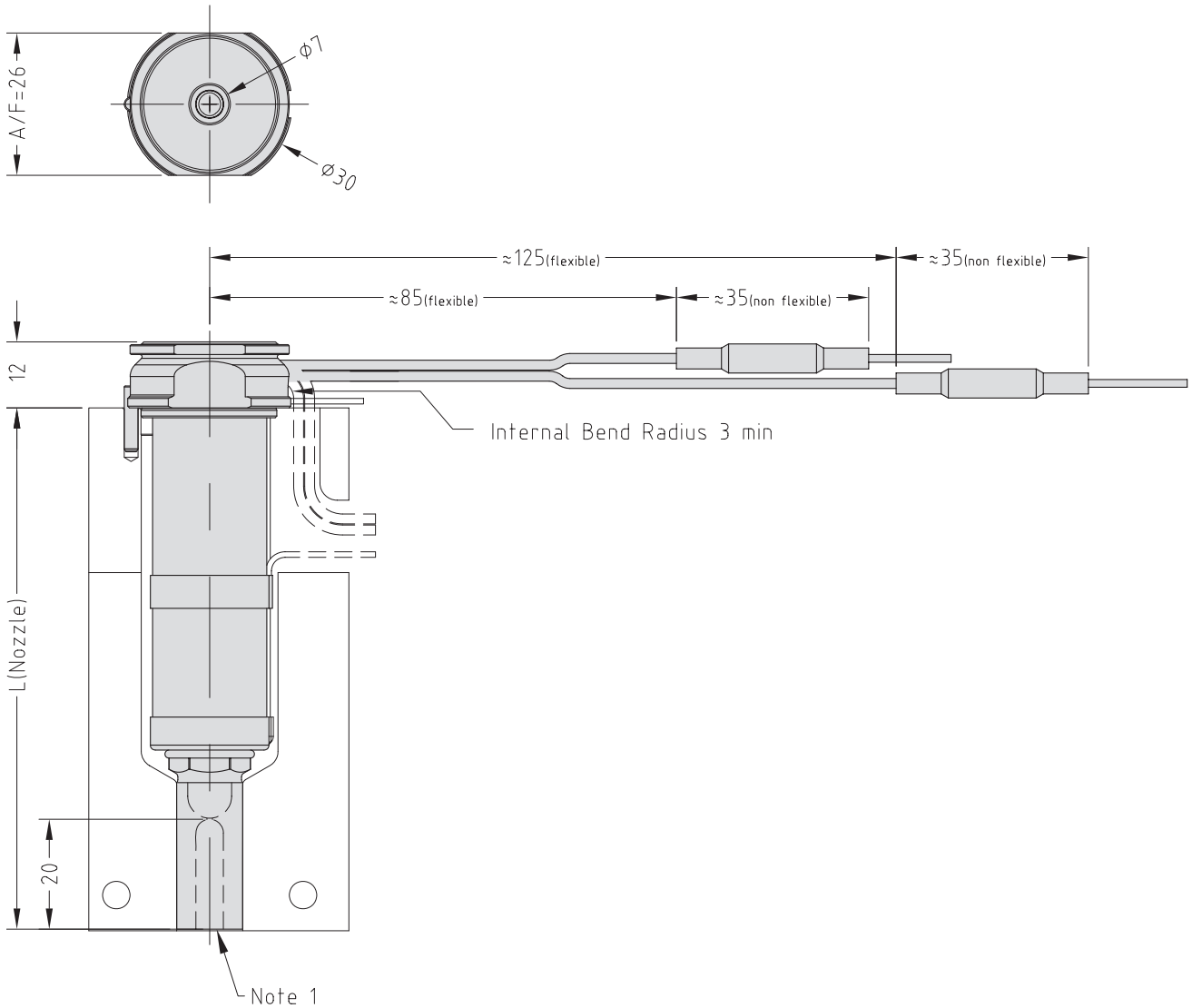
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
 (Order example: MXOSX16175 G1)

To order a tip:

Provide the Tip Code + Grade  
 (Order example: X 16 IT G5)

Nozzle Dimensions



Note

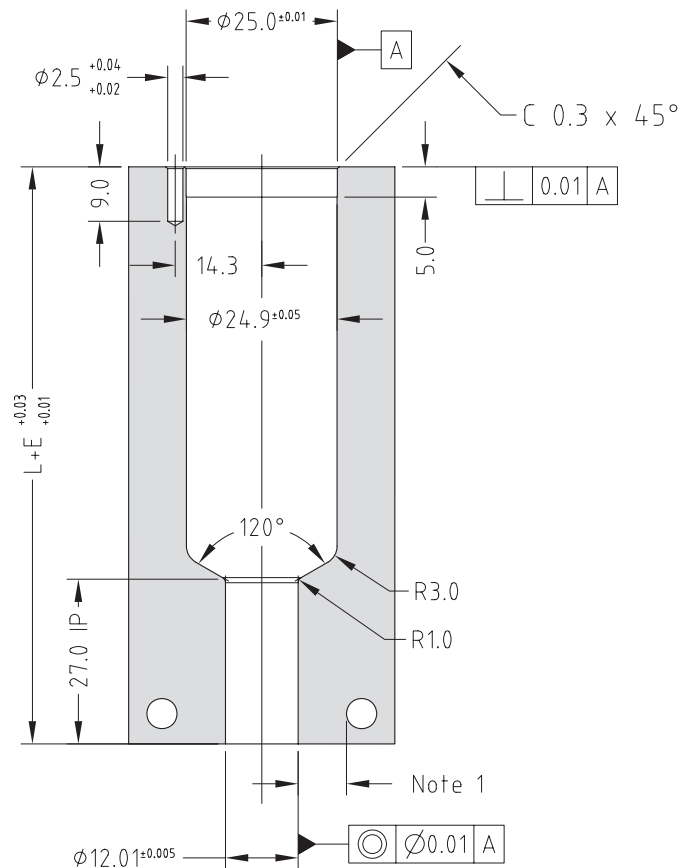
1. Modify the contact area and the sprue nut to suit the application.  
 → See Gate Modifications and Cooling sections in the Technical Specifications.



Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSX16045	MXISX16045	MXOSX16045	65.2	0.17	0.22
MXTSX16055	MXISX16055	MXOSX16055	75.2	0.20	0.25
MXTSX16065	MXISX16065	MXOSX16065	85.2	0.22	0.28
MXTSX16075	MXISX16075	MXOSX16075	95.2	0.25	0.31
MXTSX16095	MXISX16095	MXOSX16095	115.2	0.30	0.38
MXTSX16115	MXISX16115	MXOSX16115	135.2	0.36	0.45
MXTSX16145	MXISX16145	MXOSX16145	165.2	0.44	0.55
MXTSX16175	MXISX16175	MXOSX16175	195.2	0.52	0.64

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with  $\phi 1.0$  → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
 \*\* Hot half configurations are not recommended for sprue nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT)	✓	✓	✓
One-hole Torpedo Tip (X 16 IT)	✓	✓	✓
Open Tip (X 16 OT)	✓	✗	✗

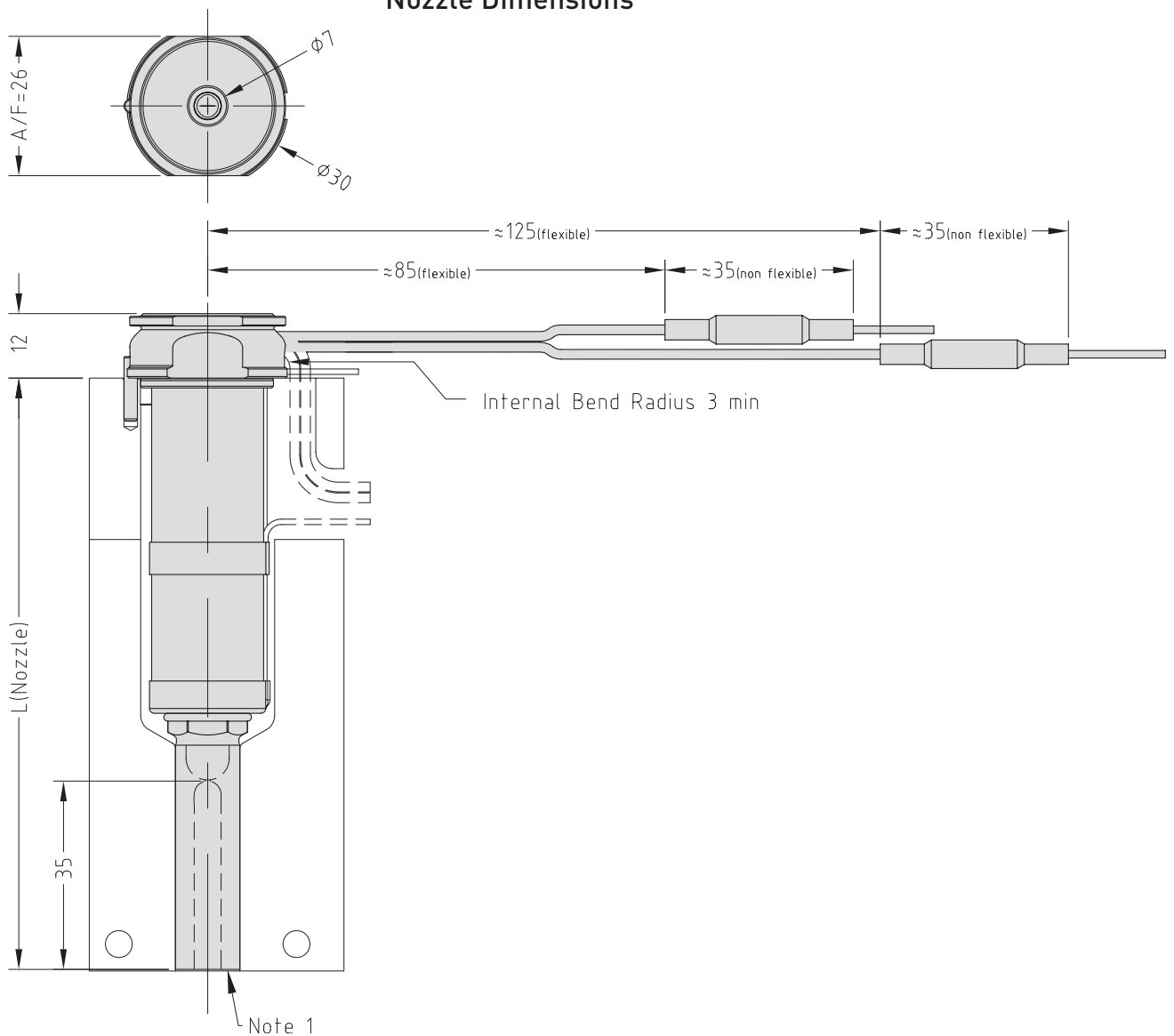
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXOSL16175 G1)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 16 IT G5)

Nozzle Dimensions



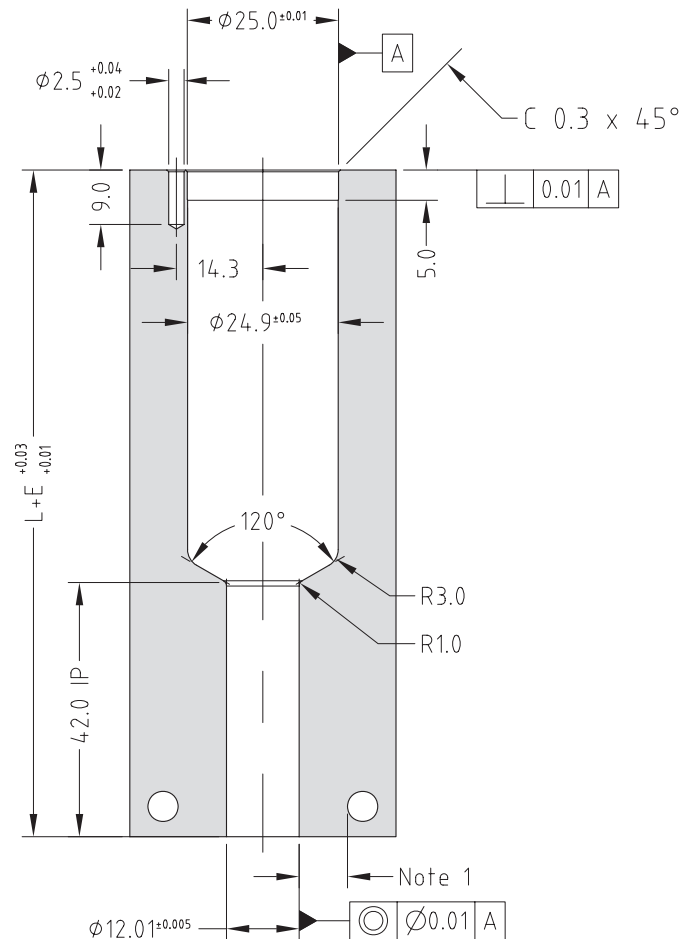
Note

1. Modify the contact area and the sprue nut to suit the application.  
 → See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSL16045	MXISL16045	MXOSL16045	80.2	0.21	0.26
MXTSL16055	MXISL16055	MXOSL16055	90.2	0.24	0.30
MXTSL16065	MXISL16065	MXOSL16065	100.2	0.26	0.33
MXTSL16075	MXISL16075	MXOSL16075	110.2	0.29	0.36
MXTSL16095	MXISL16095	MXOSL16095	130.2	0.34	0.43
MXTSL16115	MXISL16115	MXOSL16115	150.2	0.40	0.50
MXTSL16145	MXISL16145	MXOSL16145	180.2	0.48	0.59
MXTSL16175	MXISL16175	MXOSL16175	210.2	0.55	0.69

### Nozzle Fitment and Gate Dimensions

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



**Note**

1. Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  2. Modify gate diameter and land to suit the part. Supplied with Ø1.0 → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.
  - \*\* Hot half configurations are not recommended for sprue nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT+5)	✓	✓	✗
One-hole Torpedo Tip (X 16 IT+5)	✓	✓	✗
Open Tip	✗	✗	✗

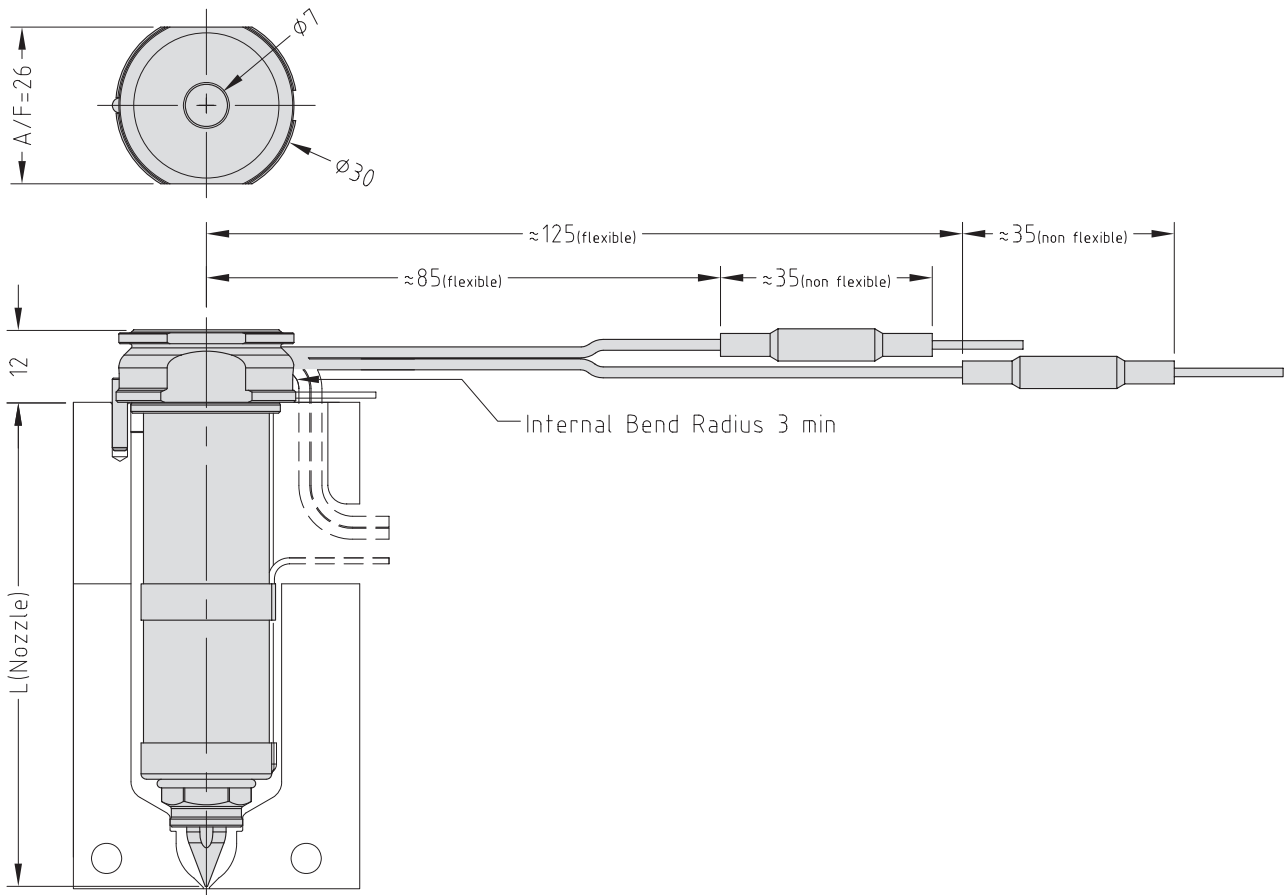
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXTT16175+5 G1)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 16 IT+5 G1)

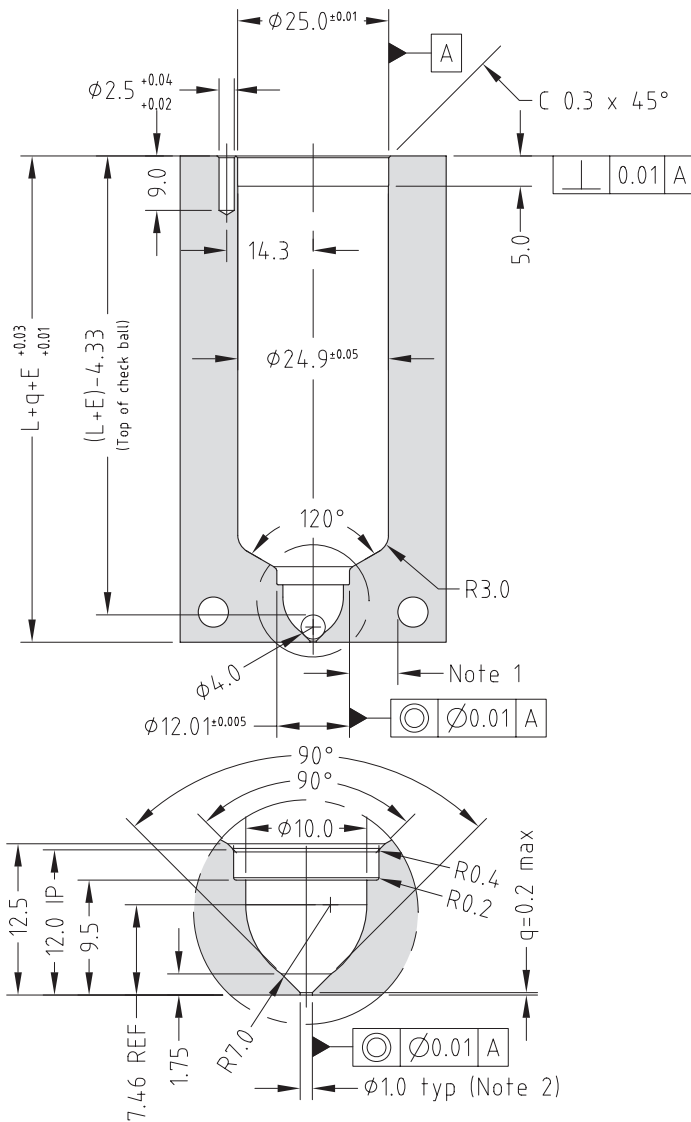
Nozzle Dimensions



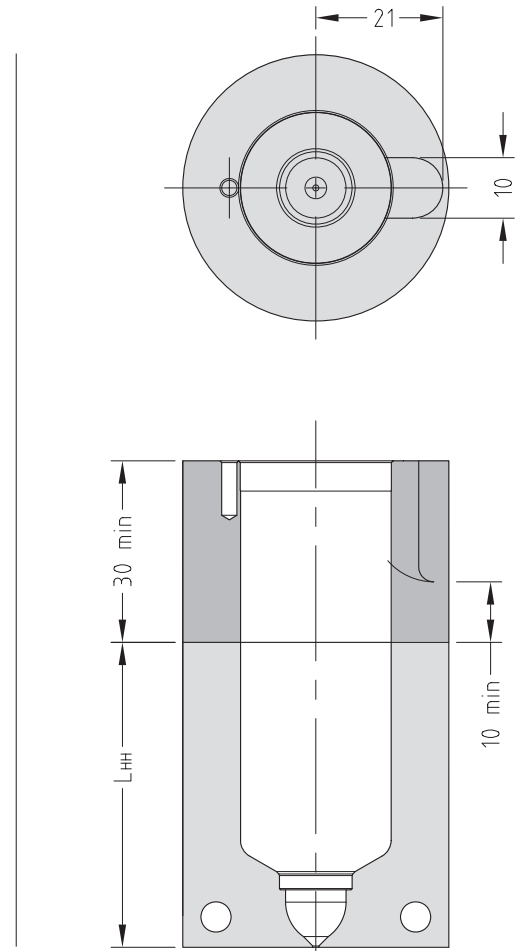
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	L	$E @ \Delta T = 200C$	$E @ \Delta T = 250C$
MXTT16045+5	MXIT16045+5	50	0.13	0.17
MXTT16055+5	MXIT16055+5	60	0.16	0.20
MXTT16065+5	MXIT16065+5	70	0.18	0.23
MXTT16075+5	MXIT16075+5	80	0.21	0.26
MXTT16095+5	MXIT16095+5	100	0.26	0.33
MXTT16115+5	MXIT16115+5	120	0.32	0.40
MXTT16145+5	MXIT16145+5	150	0.40	0.50
MXTT16175+5	MXIT16175+5	180	0.48	0.59

**Nozzle Fitment and Gate Dimensions**

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



**Hot Half Configuration**



**Note**

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 16 TT+10)	✓	✓	✗
One-hole Torpedo Tip (X 16 IT+10)	✓	✓	✗
Open Tip	✗	✗	✗

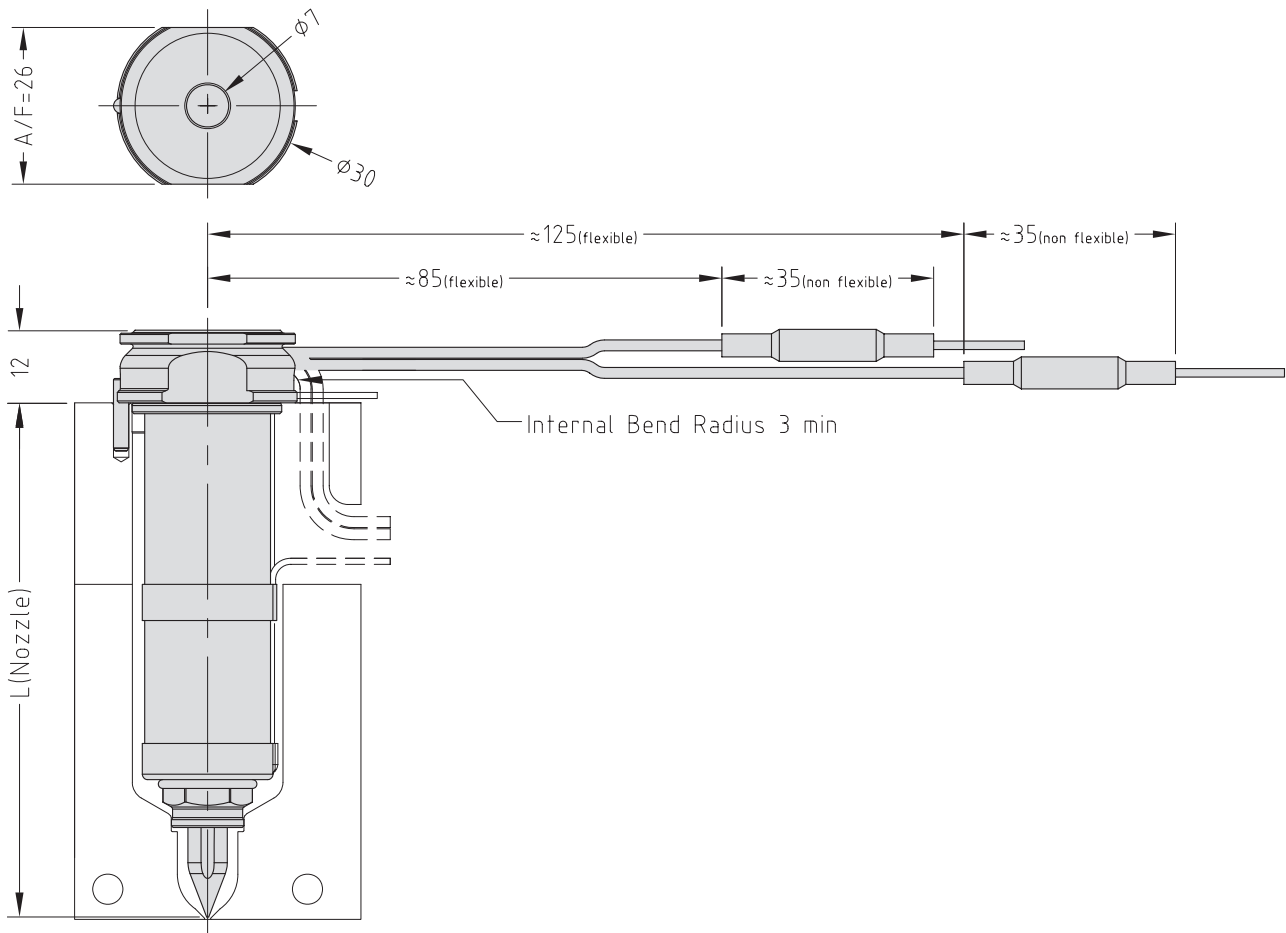
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXTT16175+10 G1)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 16 IT+10 G1)

Nozzle Dimensions

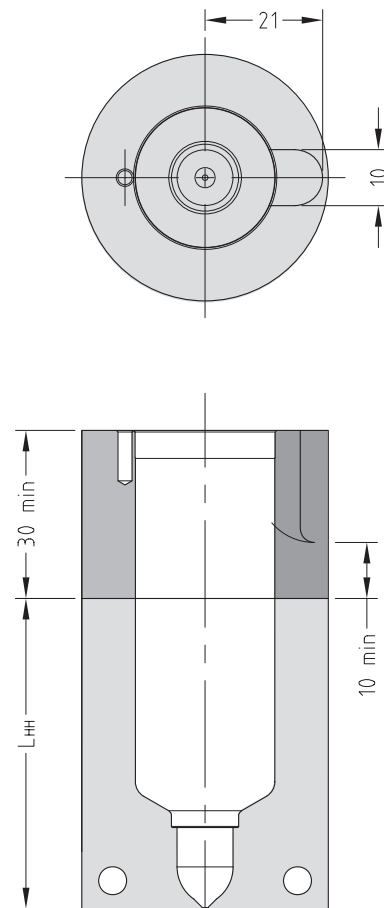
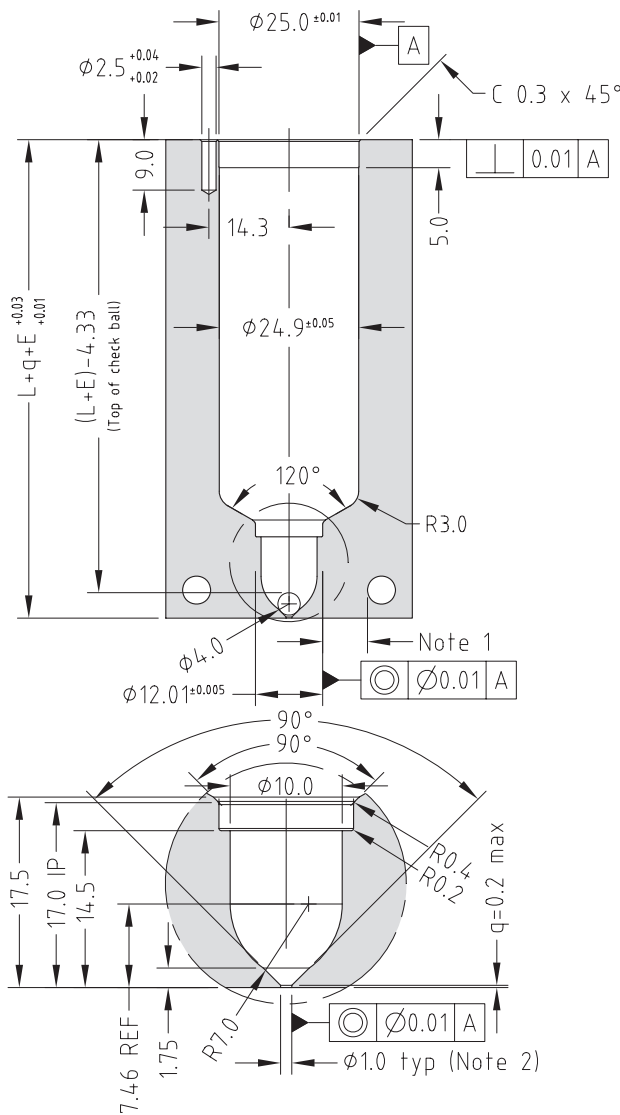


Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	L	EQΔT =200C	EQΔT =250C
MXTT16045+10	MXIT16045+10	55	0.15	0.18
MXTT16055+10	MXIT16055+10	65	0.17	0.21
MXTT16065+10	MXIT16065+10	75	0.20	0.25
MXTT16075+10	MXIT16075+10	85	0.22	0.28
MXTT16095+10	MXIT16095+10	105	0.28	0.35
MXTT16115+10	MXIT16115+10	125	0.33	0.41
MXTT16145+10	MXIT16145+10	155	0.41	0.51
MXTT16175+10	MXIT16175+10	185	0.49	0.61

**Nozzle Fitment and Gate Dimensions**

$E = L \times 0.000132 \times (\text{nozzle temp. } ^\circ\text{C} - \text{mould temp. } ^\circ\text{C})$

**Hot Half Configuration**



**Note**

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.

# MXTG19



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)	✓	✗	✓

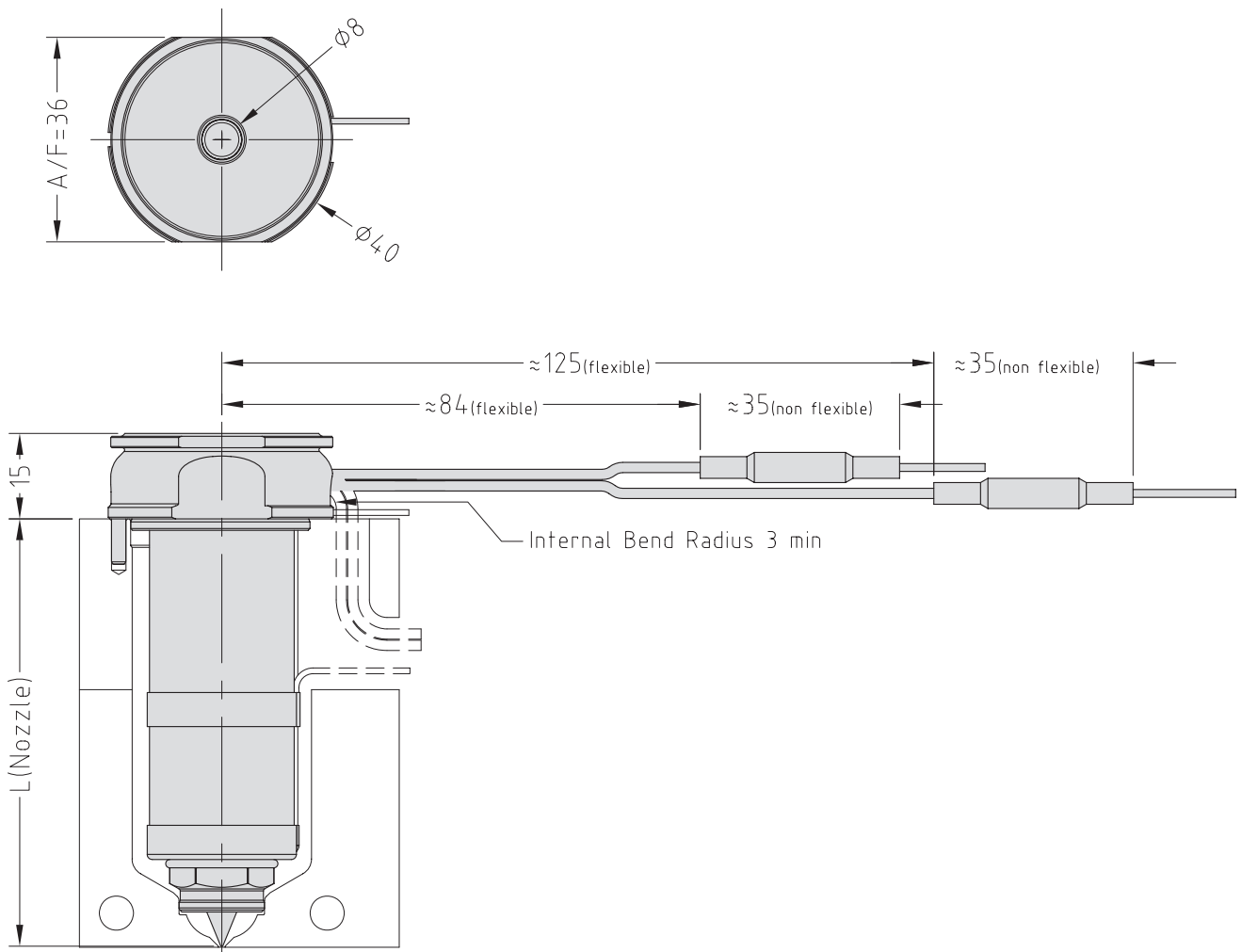
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXIT19175 G1)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 19 OT G5)

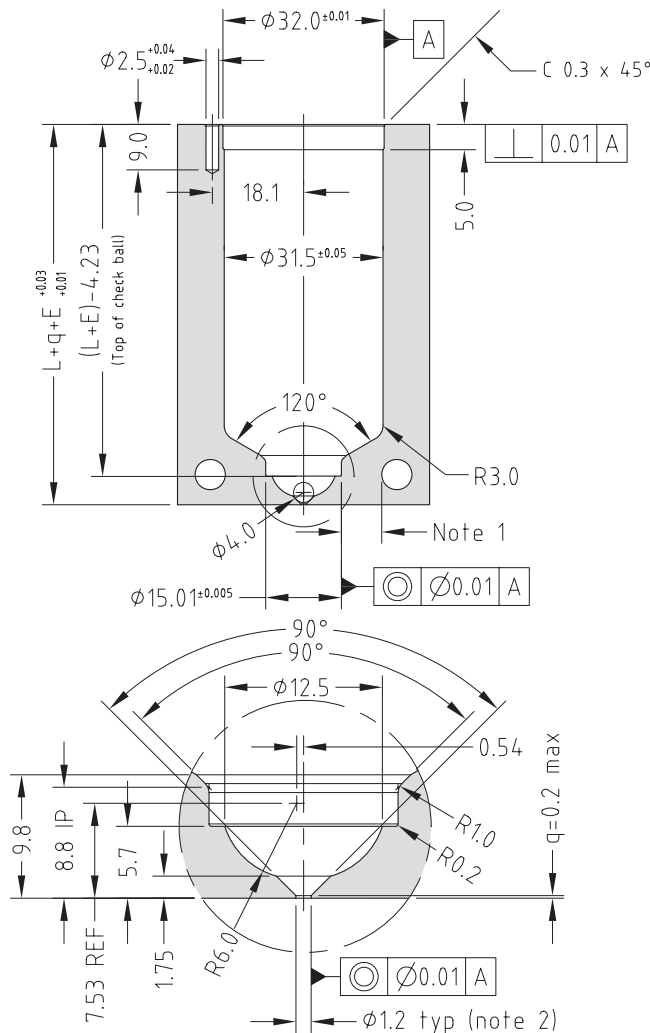
Nozzle Dimensions



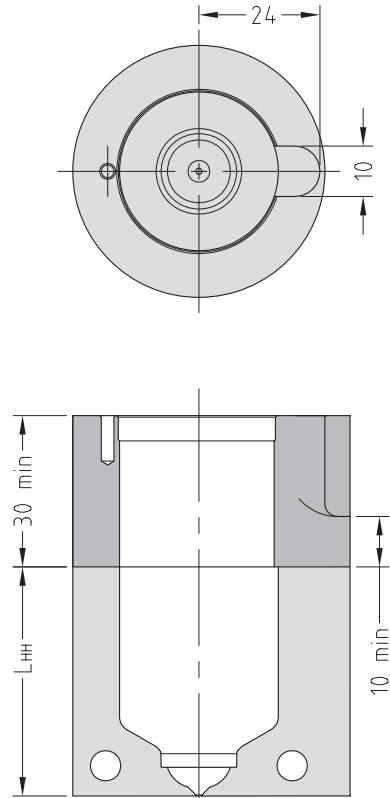
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT19055	MXIT19055	MXOT19055	55	0.15	0.18
MXTT19065	MXIT19065	MXOT19065	65	0.17	0.21
MXTT19075	MXIT19075	MXOT19075	75	0.20	0.25
MXTT19095	MXIT19095	MXOT19095	95	0.25	0.31
MXTT19115	MXIT19115	MXOT19115	115	0.30	0.38
MXTT19145	MXIT19145	MXOT19145	145	0.38	0.48
MXTT19175	MXIT19175	MXOT19175	175	0.46	0.58

**Nozzle Fit and Gate Dimensions**

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



**Hot Half Configuration**



**Note**

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) 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)	✓	✗	✓

Bush Nut Options

- BN - Standard bush nut
- BE - Full-contact bush nut\*

The nozzle codes listed to the right are for nozzle assemblies with a standard bush nut. To order a full-contact bush nut, replace the BN in the code with BE.

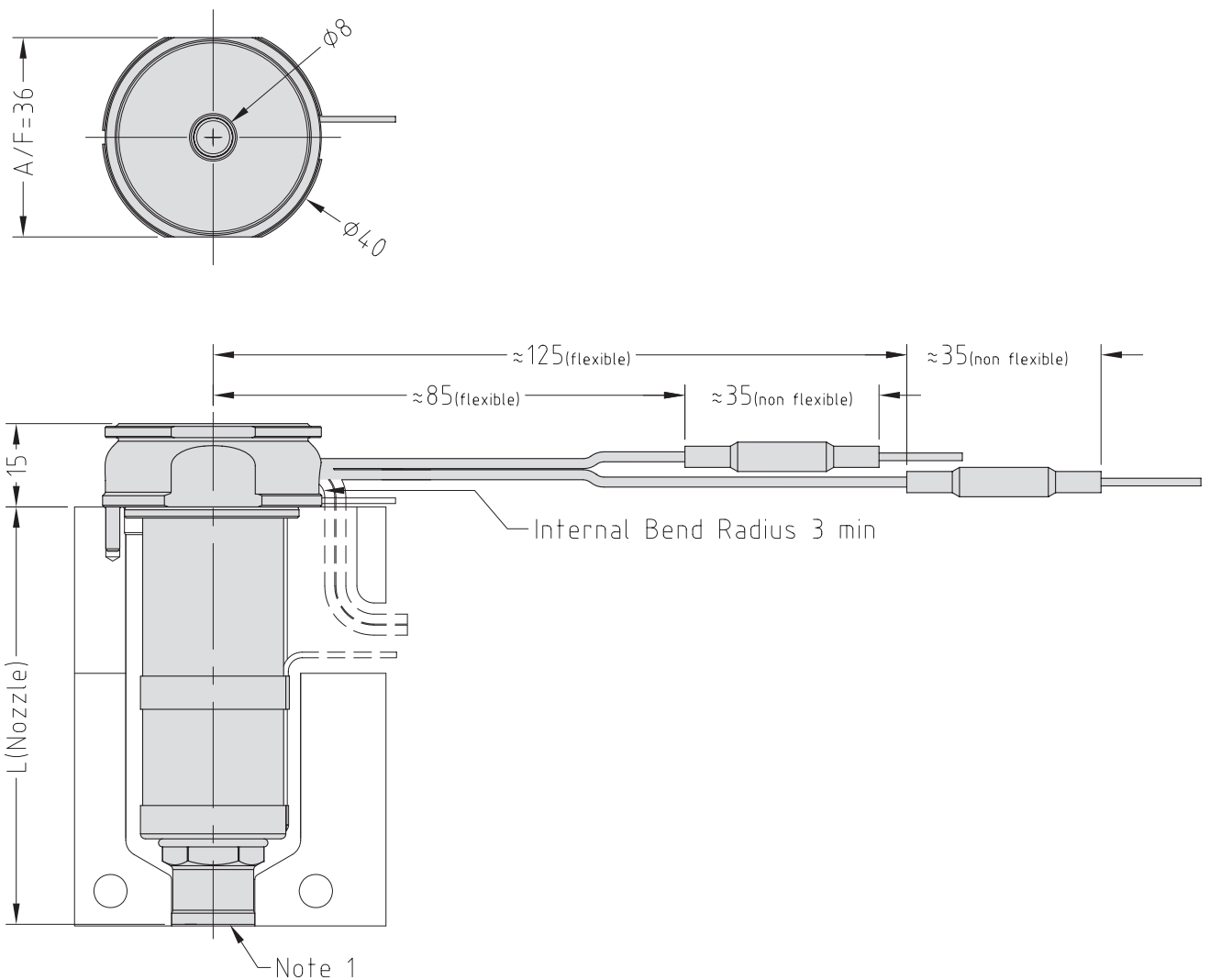
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
(Order example: MXIBN19175 G5)

To order a tip:

Provide the Tip Code + Grade  
(Order example: X 19 IT G5)

Nozzle Dimensions



Note

1. Modify the contact area to suit the application.  
→ See Gate Modifications and Cooling sections in the Technical Specifications.



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)	✓	✗	✓

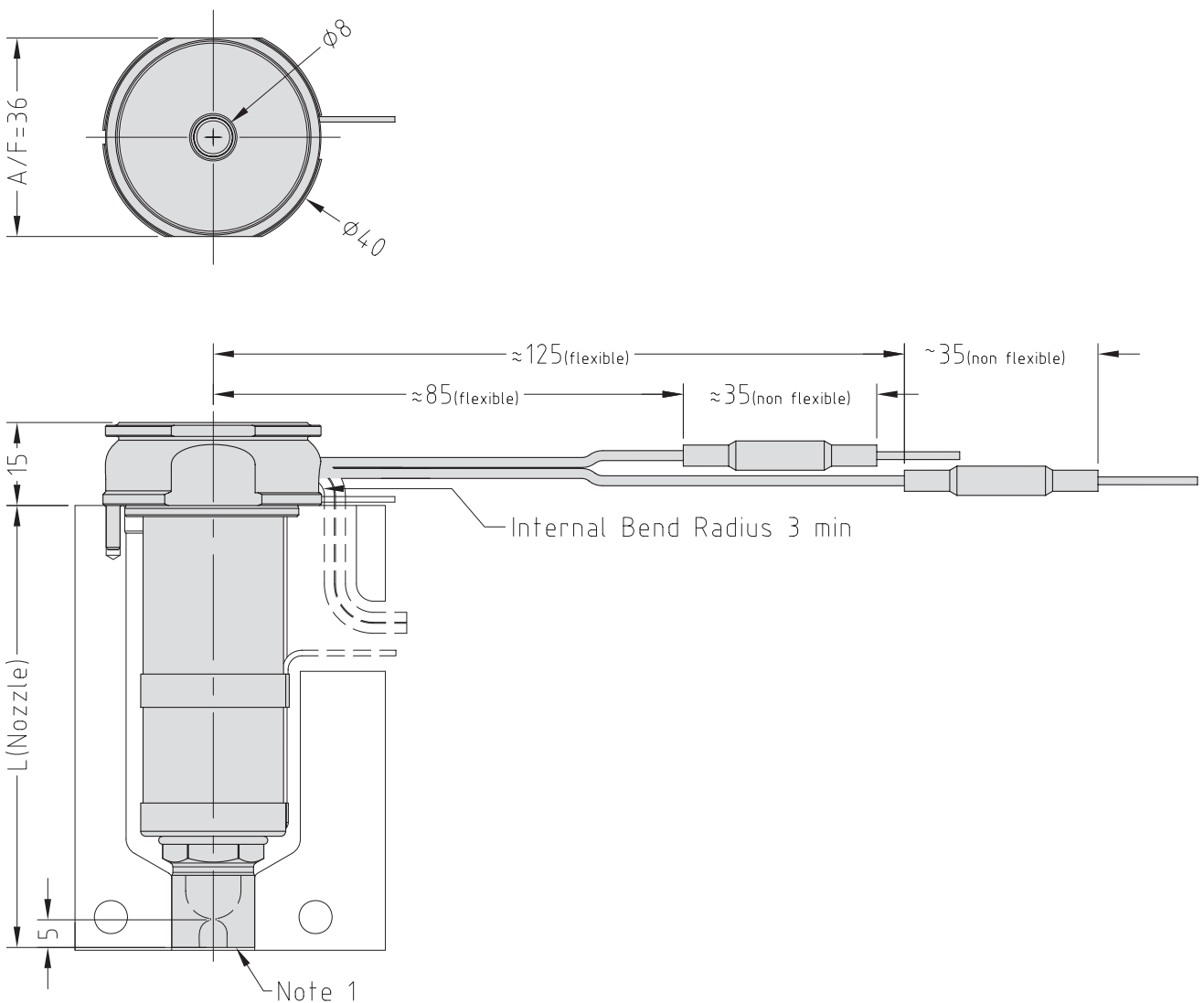
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
(Order example: MXISN19175 G5)

To order a tip:

Provide the Tip Code + Grade  
(Order example: X 19 IT G5)

Nozzle Dimensions



Note

1. Modify the contact area and the sprue nut to suit the application.  
→ See Gate Modifications and Cooling sections in the Technical Specifications.



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)	✓	✗	✓

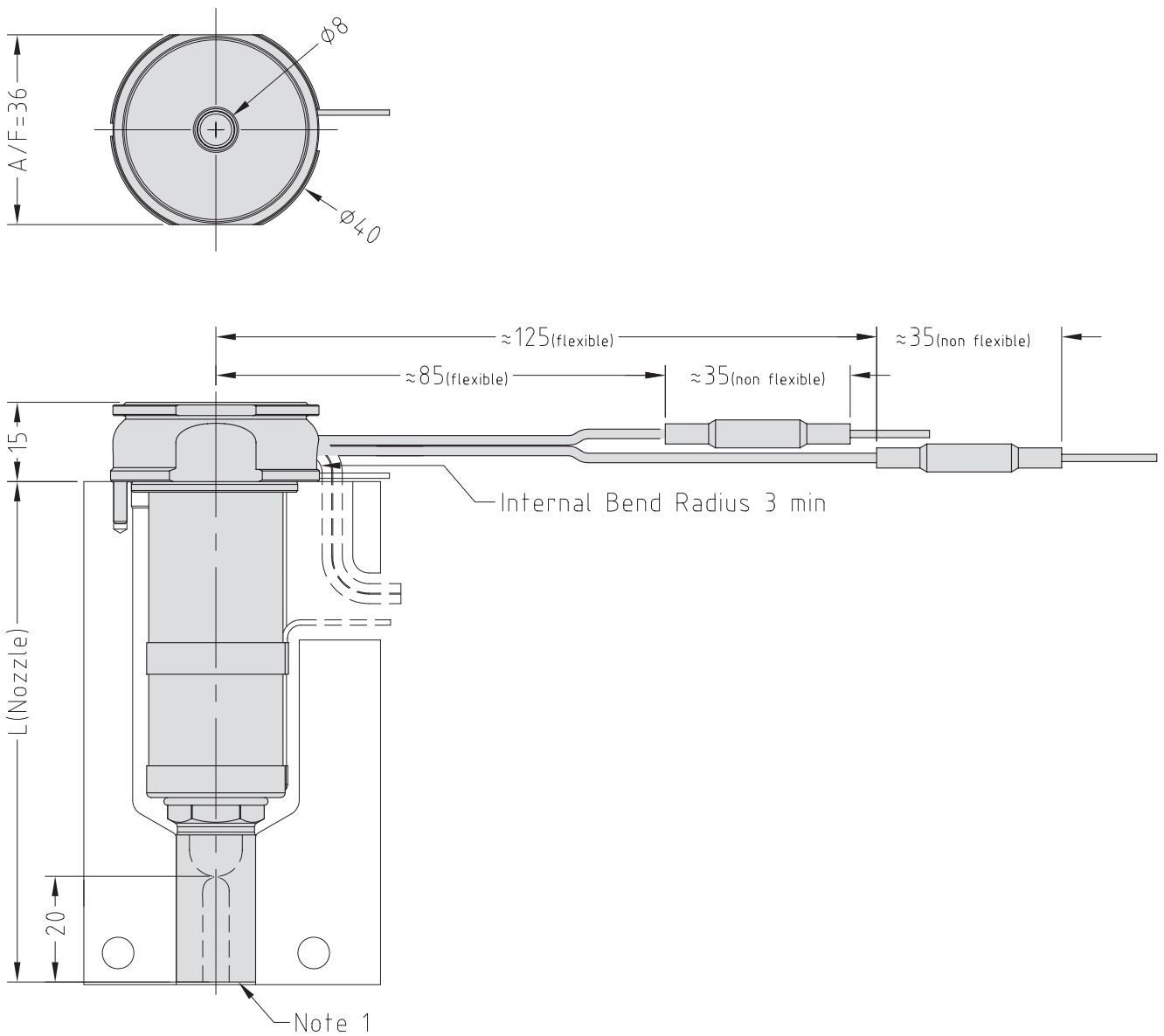
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
 (Order example: MXISX19175 G5)

**To order a tip:**

Provide the Tip Code + Grade  
 (Order example: X 19 IT G5)

Nozzle Dimensions



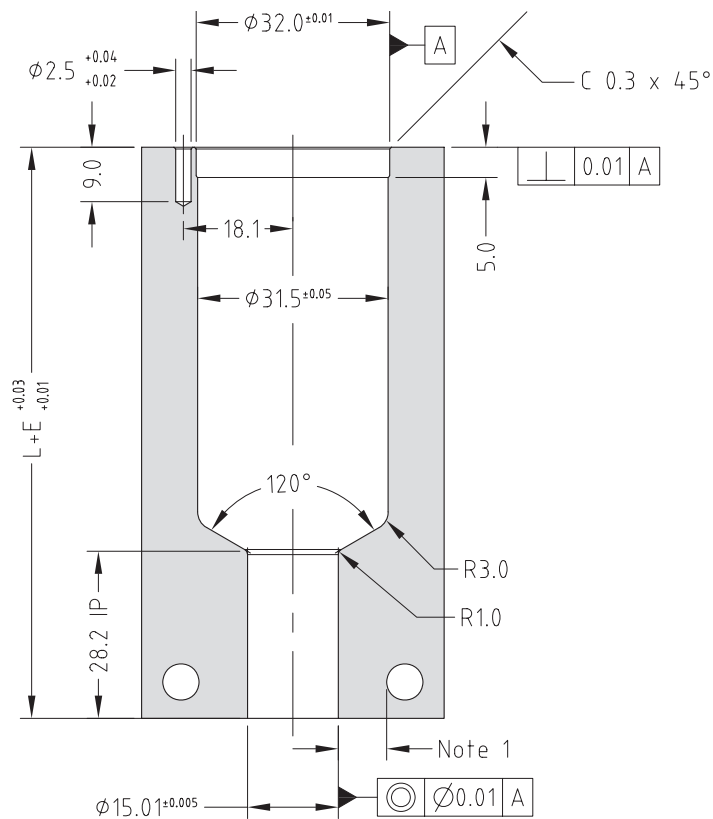
**Note**

1. Modify the contact area and the sprue nut to suit the application.  
 → See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	$E\Delta T$ =200C	$E\Delta T$ =250C
MXTSX19055	MXISX19055	MXOSX19055	75.2	0.20	0.25
MXTSX19065	MXISX19065	MXOSX19065	85.2	0.23	0.28
MXTSX19075	MXISX19075	MXOSX19075	95.2	0.25	0.31
MXTSX19095	MXISX19095	MXOSX19095	115.2	0.30	0.38
MXTSX19115	MXISX19115	MXOSX19115	135.2	0.36	0.45
MXTSX19145	MXISX19145	MXOSX19145	165.2	0.44	0.55
MXTSX19175	MXISX19175	MXOSX19175	195.2	0.52	0.64

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with  $\phi 1.2$  → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
 \*\* Hot half configurations are not recommended for sprue nut nozzles.



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)	✓	✗	✓

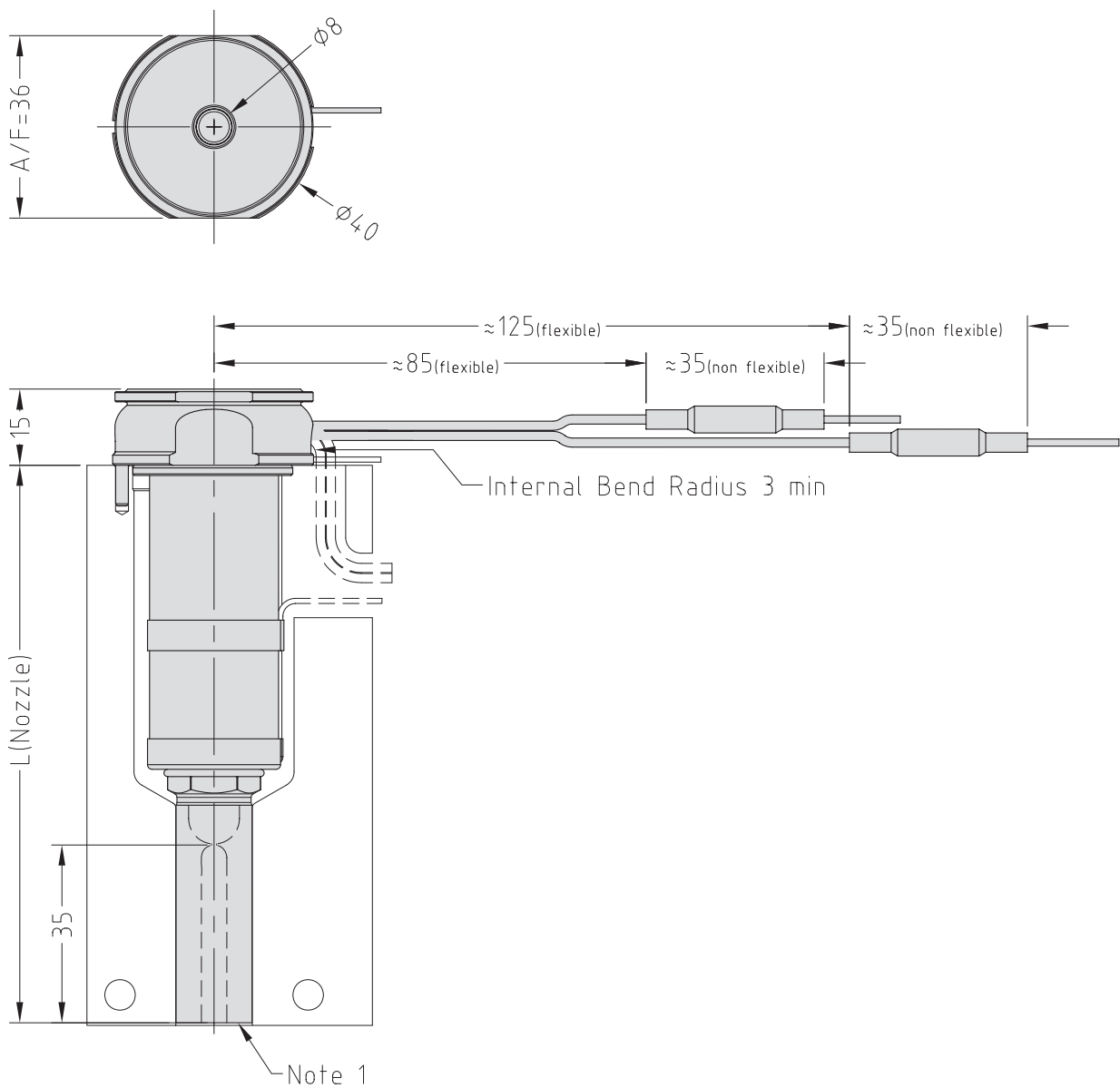
To order a nozzle assembly:

Provide the Nozzle Code + Grade  
 (Order example: MXISL19175 G5)

To order a tip:

Provide the Tip Code + Grade  
 (Order example: X 19 IT G5)

Nozzle Dimensions



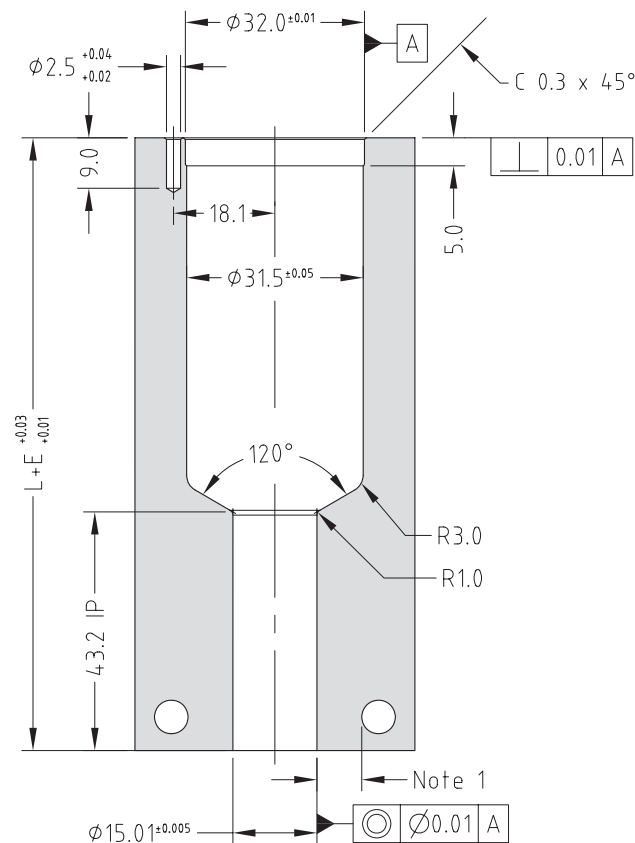
Note

1. Modify the contact area and the sprue nut to suit the application.  
 → See Gate Modifications and Cooling sections in the Technical Specifications.

Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSL19055	MXISL19055	MXOSL19055	90.2	0.24	0.30
MXTSL19065	MXISL19065	MXOSL19065	100.2	0.26	0.33
MXTSL19075	MXISL19075	MXOSL19075	110.2	0.29	0.36
MXTSL19095	MXISL19095	MXOSL19095	130.2	0.34	0.43
MXTSL19115	MXISL19115	MXOSL19115	150.2	0.40	0.50
MXTSL19145	MXISL19145	MXOSL19145	180.2	0.48	0.59
MXTSL19175	MXISL19175	MXOSL19175	210.2	0.55	0.69

### Nozzle Fitment and Gate Dimensions

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



#### Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. Supplied with  $\phi 1.2$  → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.  
 \*\* Hot half configurations are not recommended for sprue nut nozzles.

Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 19 TT+5)	✓	✓	✗
One-hole Torpedo Tip (X 1 IT+5)	✓	✓	✗
Open Tip	✗	✗	✗

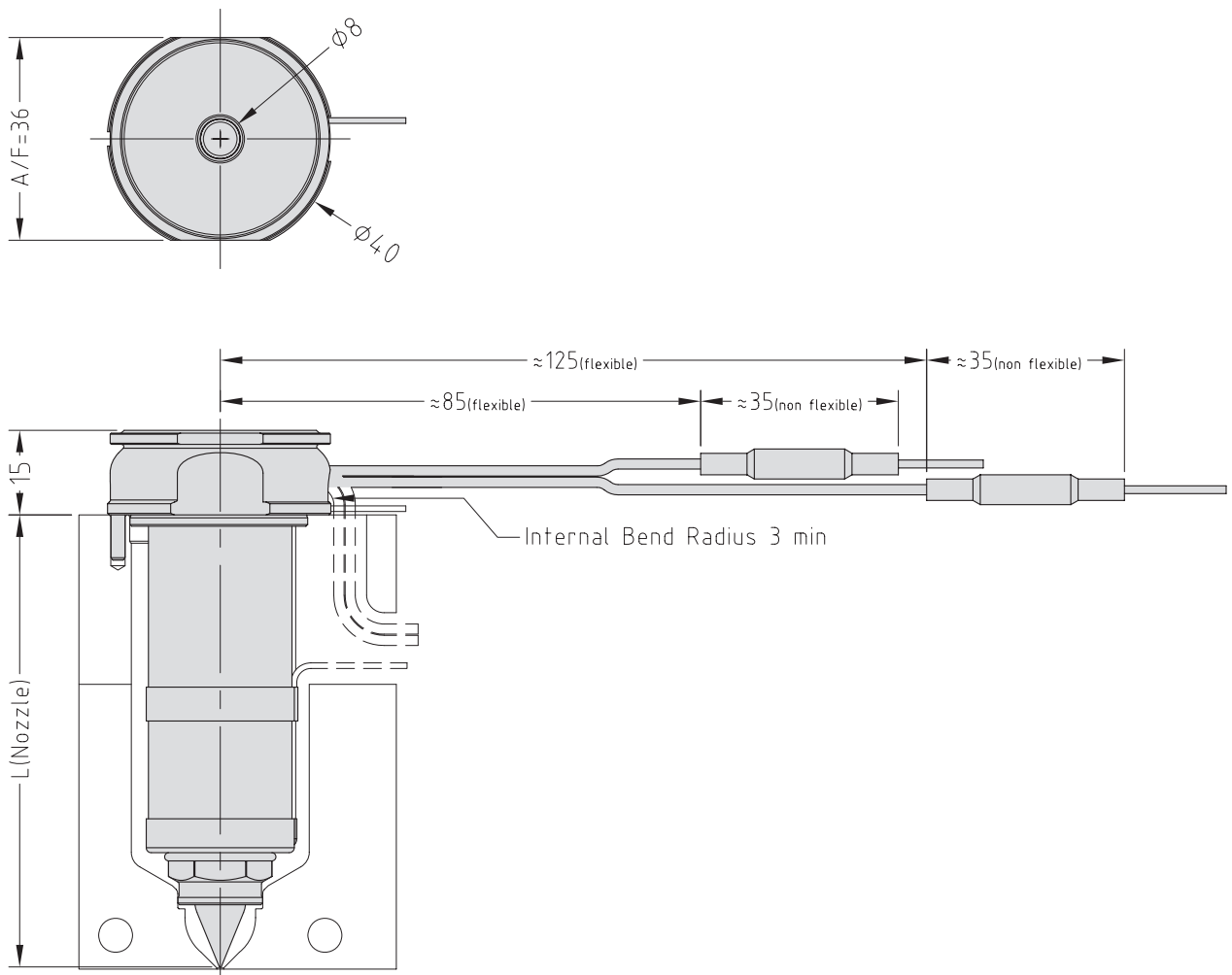
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXIT19175+5 G1)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 19 IT+5 G1)

Nozzle Dimensions





Tip and Material Grade Availability

Tip (Code)	G1	G2	G5
Multi-hole Torpedo Tip (X 19 TT+10)	✓	✓	✗
One-hole Torpedo Tip (X 1 IT+10)	✓	✓	✗
Open Tip	✗	✗	✗

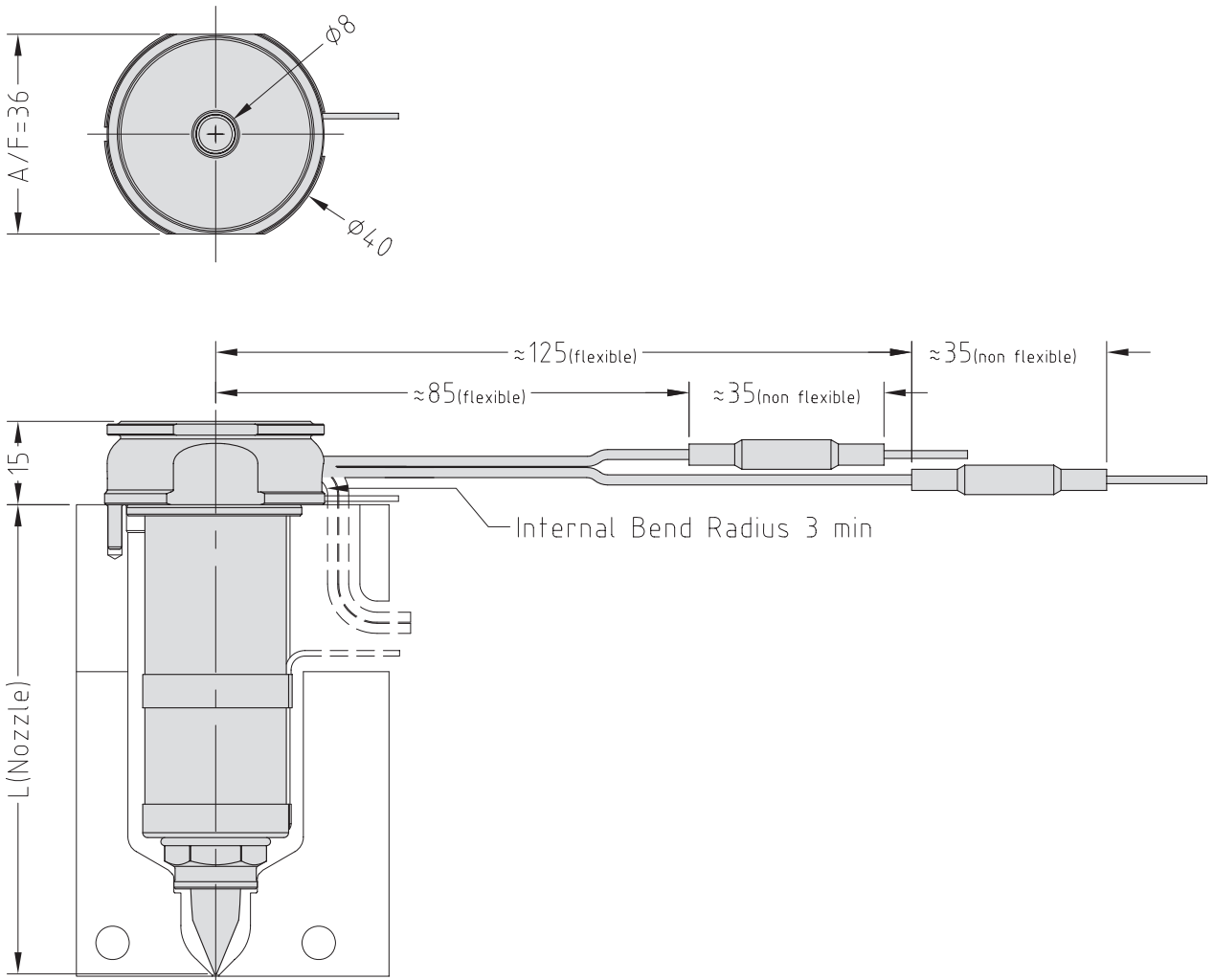
**To order a nozzle assembly:**

Provide the Nozzle Code + Grade  
(Order example: MXIT19175+10 G1)

**To order a tip:**

Provide the Tip Code + Grade  
(Order example: X 19 IT+10 G1)

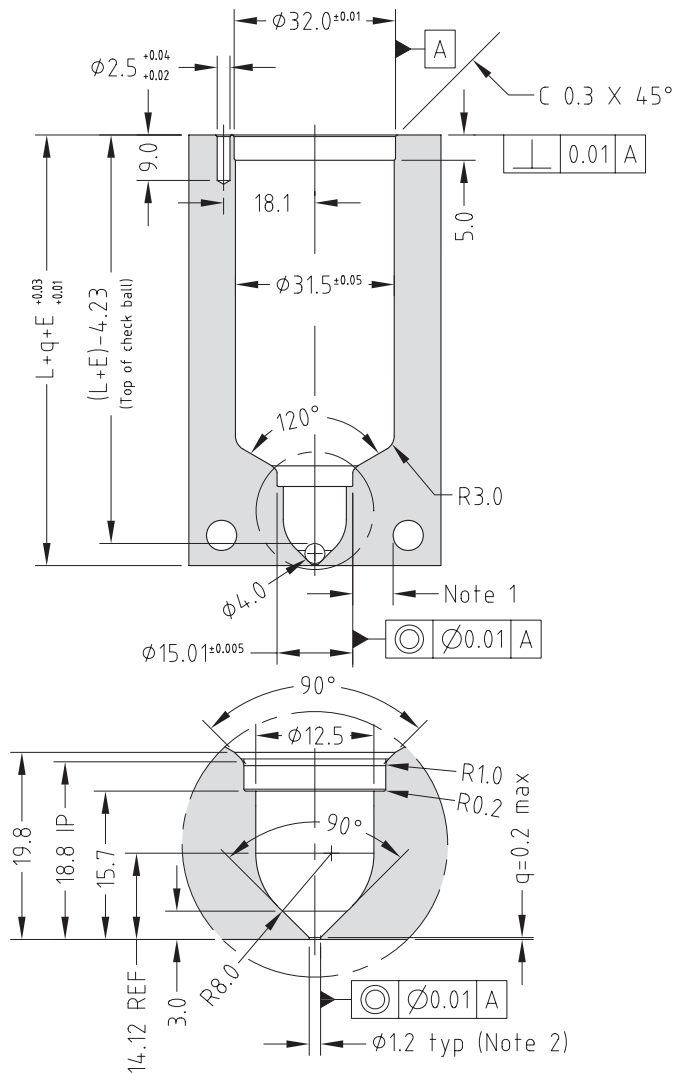
Nozzle Dimensions



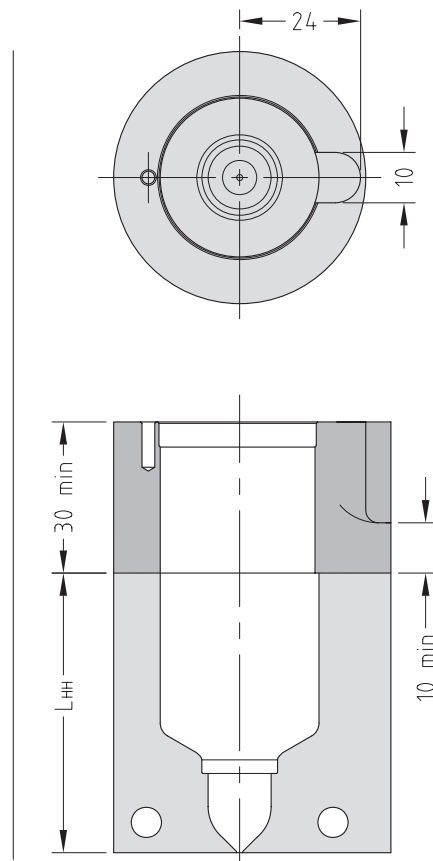
Multi-hole Torpedo Tip Nozzle Code	One-hole Torpedo Tip Nozzle Code	L	E $\Delta$ T =200C	E $\Delta$ T =250C
MXTT19055+10	MXIT19055+10	65	0.17	0.21
MXTT19065+10	MXIT19065+10	75	0.20	0.25
MXTT19075+10	MXIT19075+10	85	0.22	0.28
MXTT19095+10	MXIT19095+10	105	0.28	0.35
MXTT19115+10	MXIT19115+10	125	0.33	0.41
MXTT19145+10	MXIT19145+10	155	0.41	0.51
MXTT19175+10	MXIT19175+10	185	0.49	0.61

Nozzle Fitment and Gate Dimensions

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



Hot Half Configuration



Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling Section in the Technical Specifications.
  - Modify gate diameter and land to suit the part. → See Gate Modifications in the Technical Specifications.
- \* Minimum strength ( $\sigma_y$ ) of nozzle plate 800MPa.



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