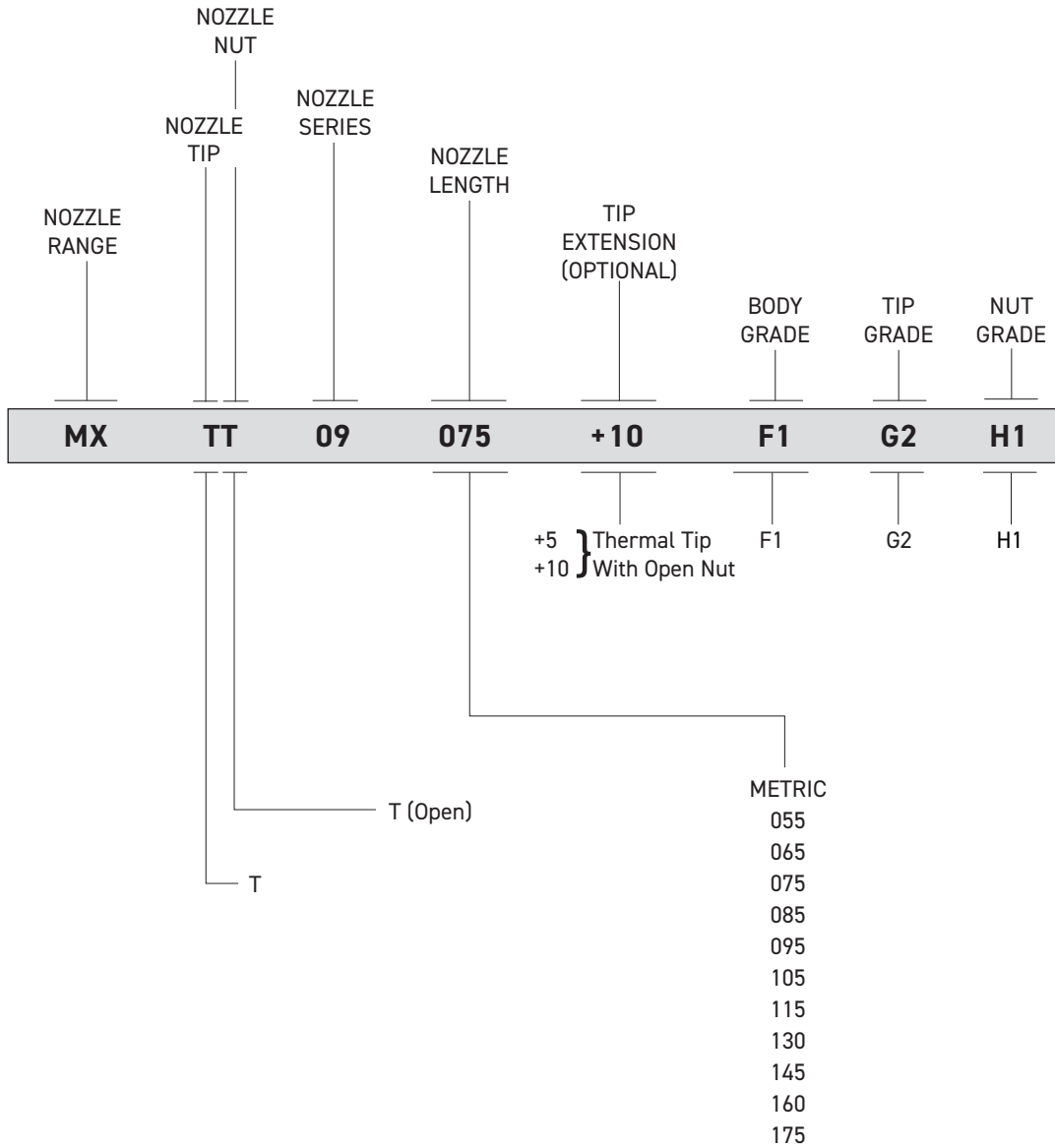


MX Thermal Gate Nozzle Assembly Technical Guide

MX Thermal Gate 09 Series

Nozzle Assembly Order Code for MX Thermal Gate 09 Series



* See page 10, 14 & 17 in the system selection guide for an explanation on the grades

Body, Tip & Nut Grade Availability

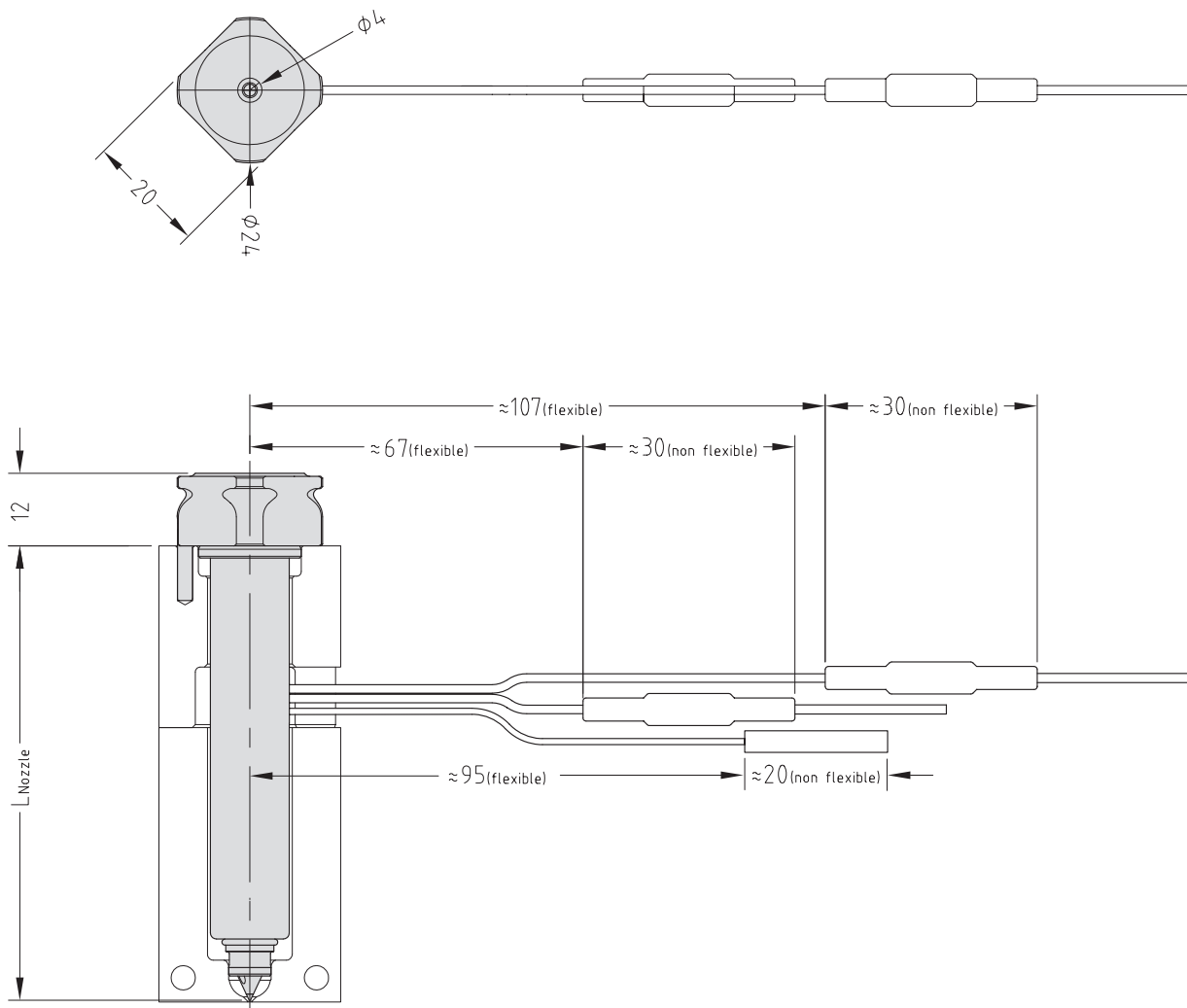
Nozzle Code \ Grade	F1G2H1
MXTT	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT09075F1G2H1)

Nozzle Dimensions

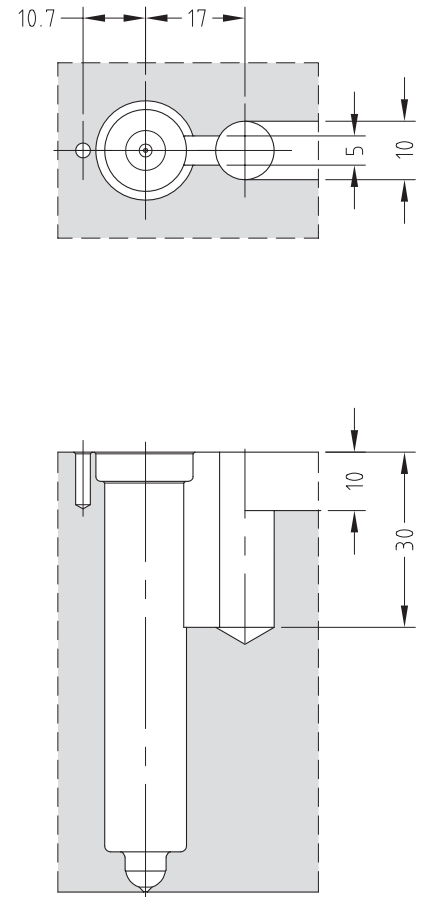
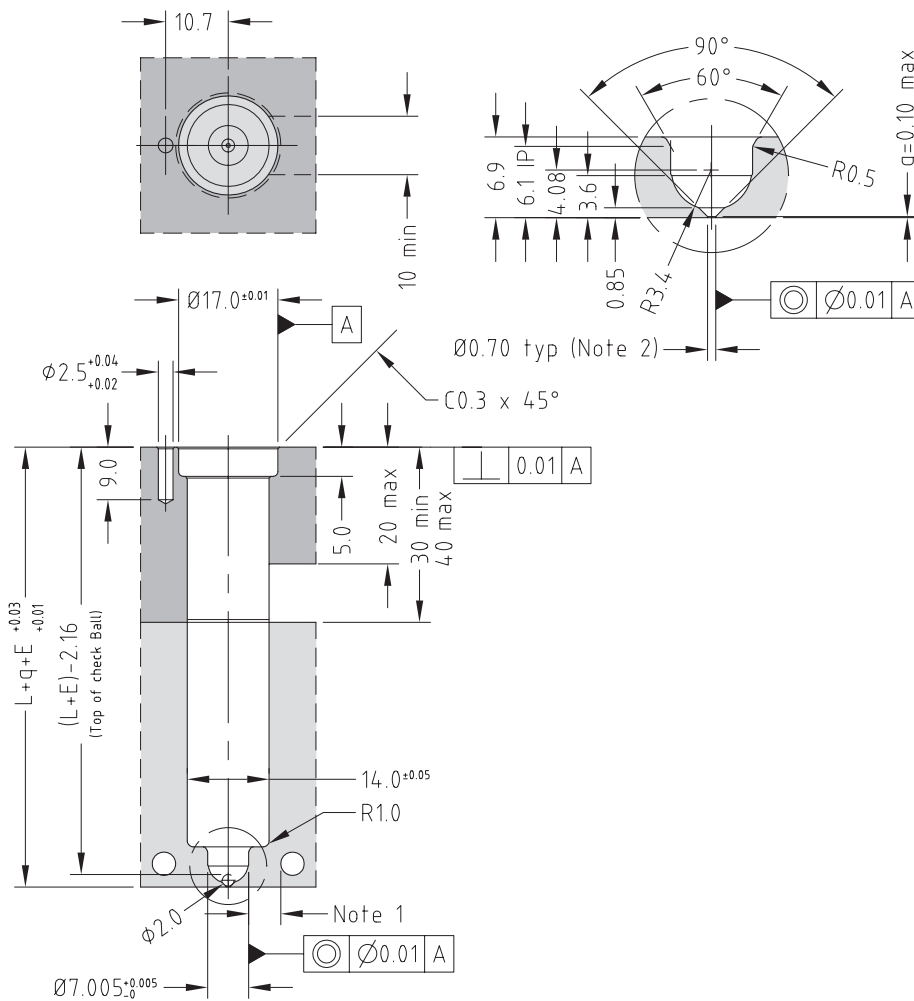


Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT09055	55	0.15	0.18
MXTT09065	65	0.17	0.21
MXTT09075	75	0.20	0.25
MXTT09085	85	0.22	0.28
MXTT09095	95	0.25	0.31
MXTT09105	105	0.28	0.35
MXTT09115	115	0.30	0.38
MXTT09130	130	0.34	0.43
MXTT09145	145	0.38	0.48
MXTT09160	160	0.42	0.53
MXTT09175	175	0.46	0.58

Front Loading Configuration - Recommended

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

Rear Loading 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 (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Grade Availability

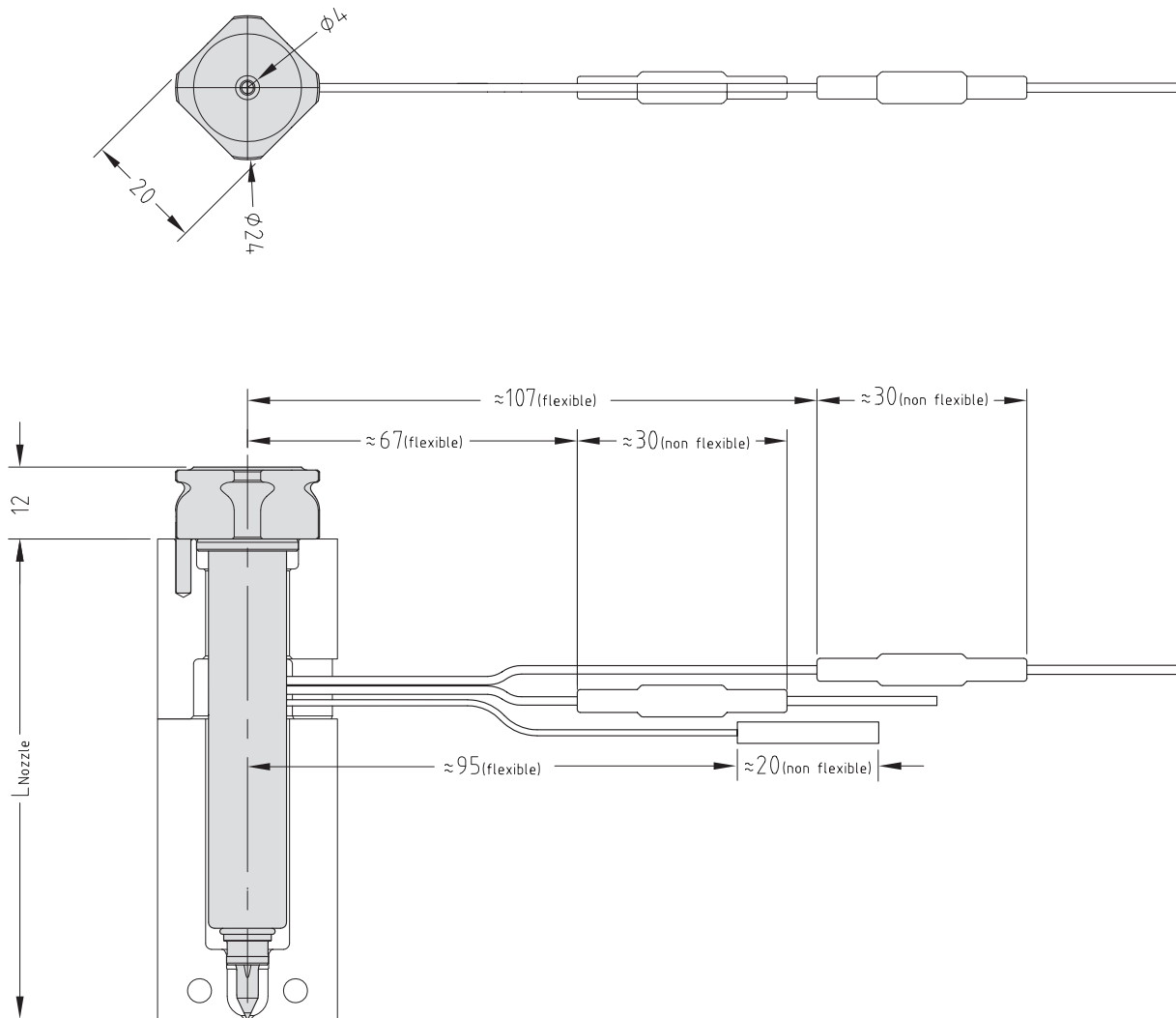
Nozzle Code \ Grade	F1G2H1
MXTT+5	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT09075+5F1G2H1)

Nozzle Dimensions

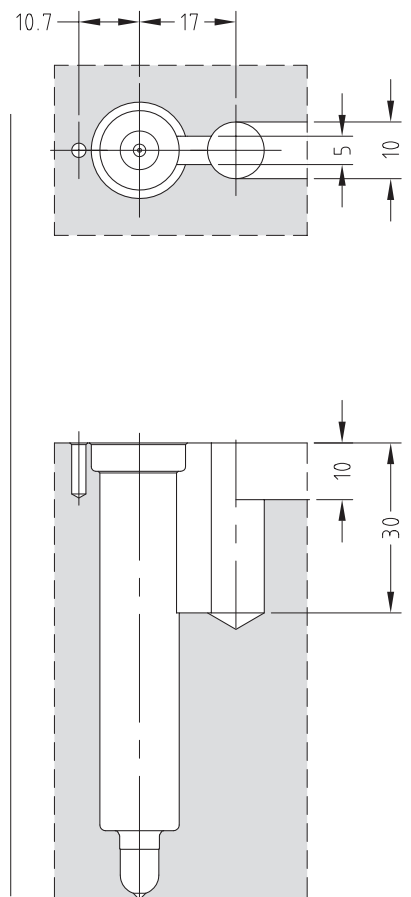
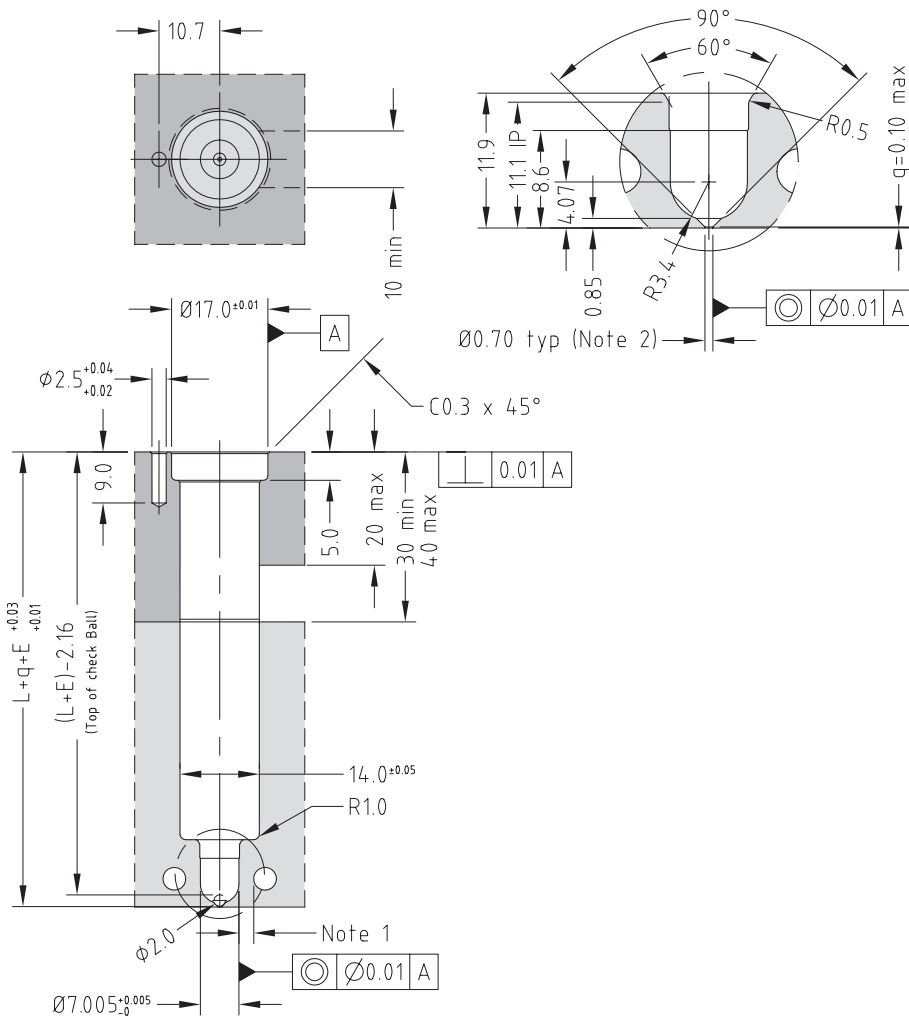


Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT09055+5	60	0.16	0.20
MXTT09065+5	70	0.18	0.23
MXTT09075+5	80	0.21	0.26
MXTT09085+5	90	0.24	0.30
MXTT09095+5	100	0.26	0.33
MXTT09105+5	110	0.29	0.36
MXTT09115+5	120	0.32	0.40
MXTT09130+5	135	0.36	0.45
MXTT09145+5	150	0.40	0.50
MXTT09160+5	165	0.44	0.54
MXTT09175+5	180	0.48	0.59

Front Loading Configuration - Recommended

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

Rear Loading Configuration



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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Grade Availability

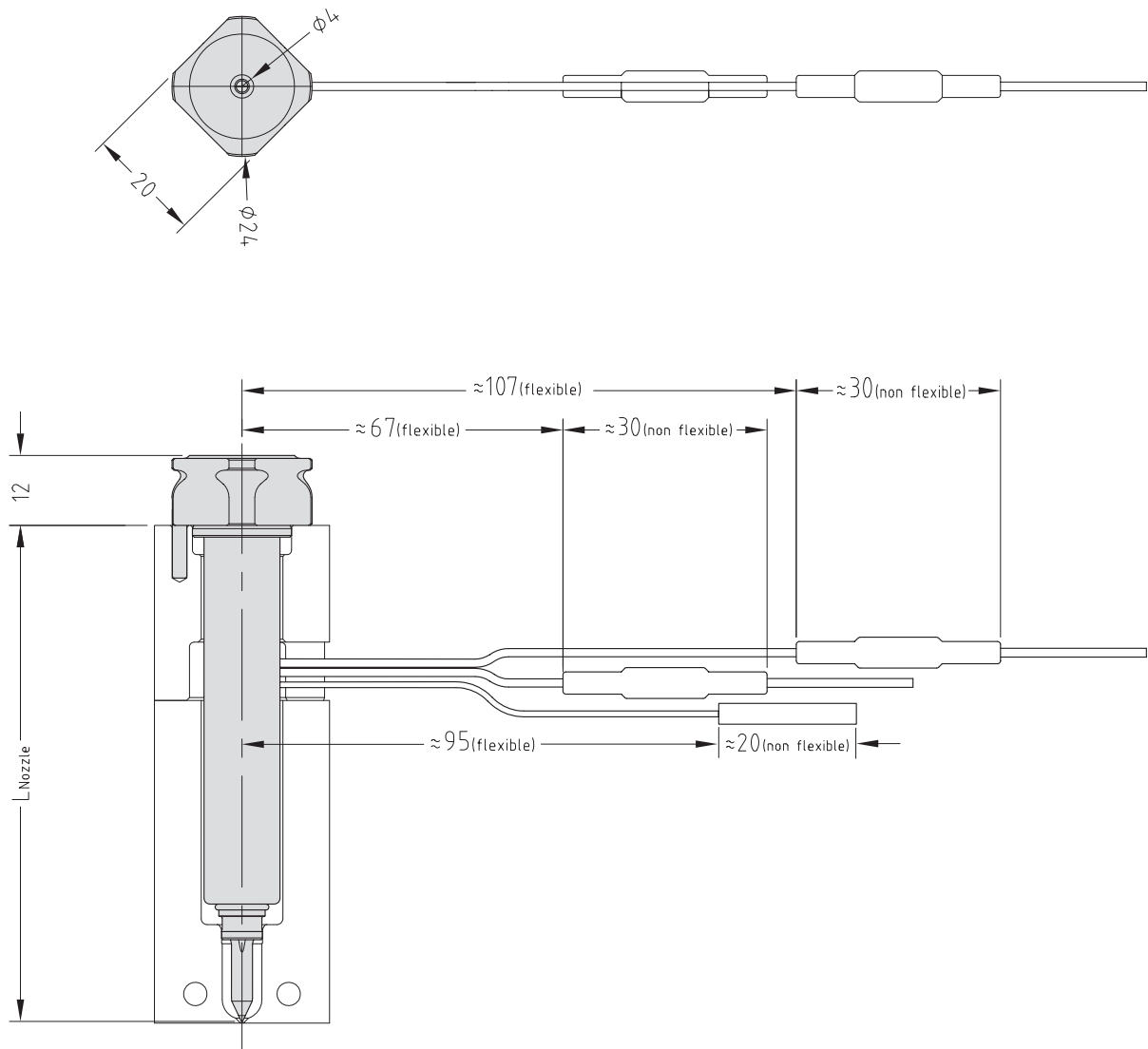
Nozzle Code \ Grade	F1G2H1
MXTT+10	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT09075+10F1G2H1)

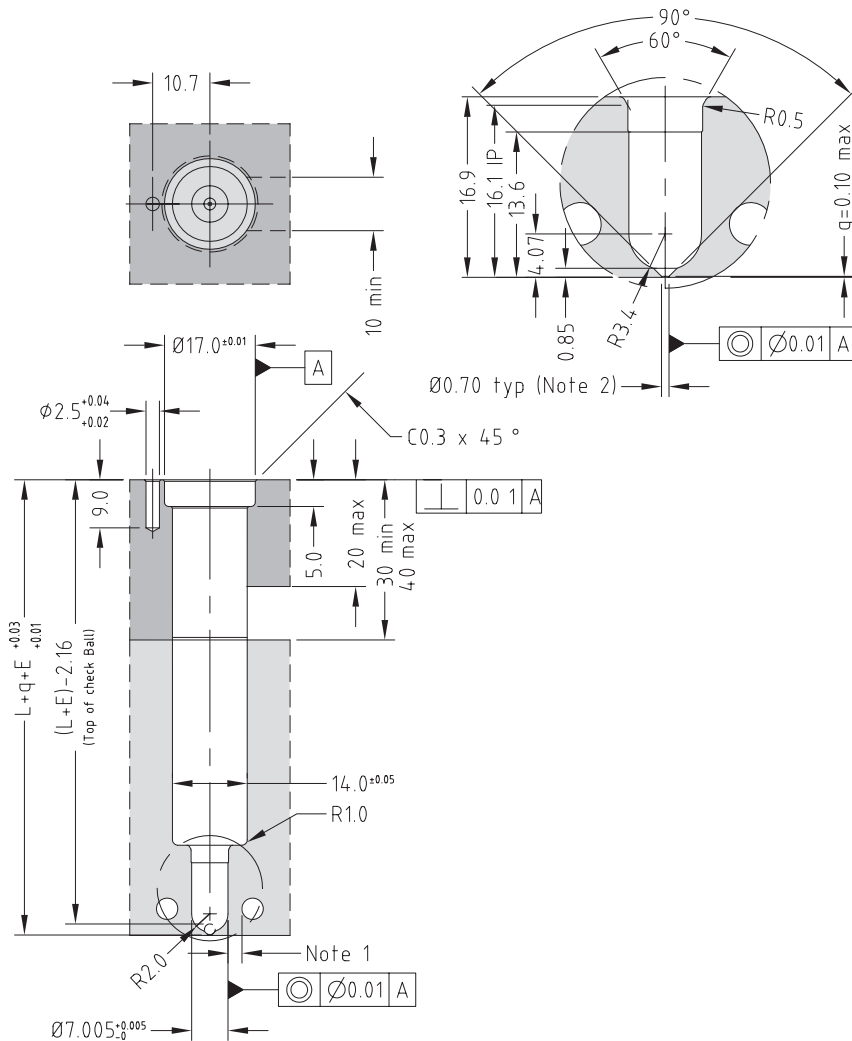
Nozzle Dimensions



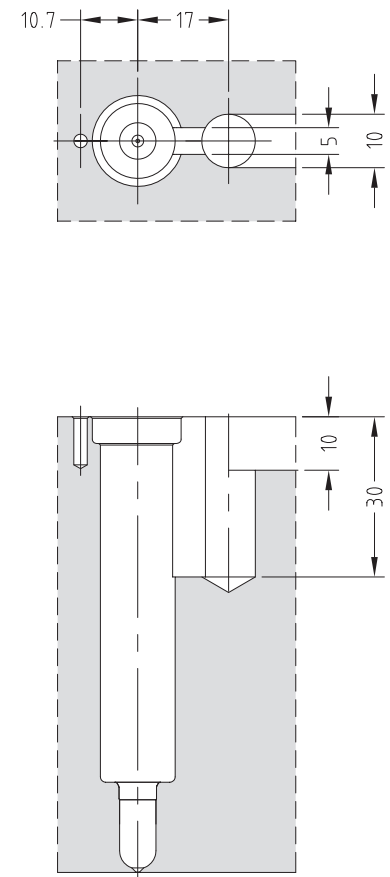
Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT09055+10	65	0.17	0.21
MXTT09065+10	75	0.20	0.25
MXTT09075+10	85	0.22	0.28
MXTT09085+10	95	0.25	0.31
MXTT09095+10	105	0.28	0.35
MXTT09105+10	115	0.30	0.38
MXTT09115+10	125	0.33	0.41
MXTT09130+10	140	0.37	0.46
MXTT09145+10	155	0.41	0.51
MXTT09160+10	170	0.45	0.56
MXTT09175+10	185	0.49	0.61

Front Loading Configuration - Recommended

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



Rear Loading Configuration

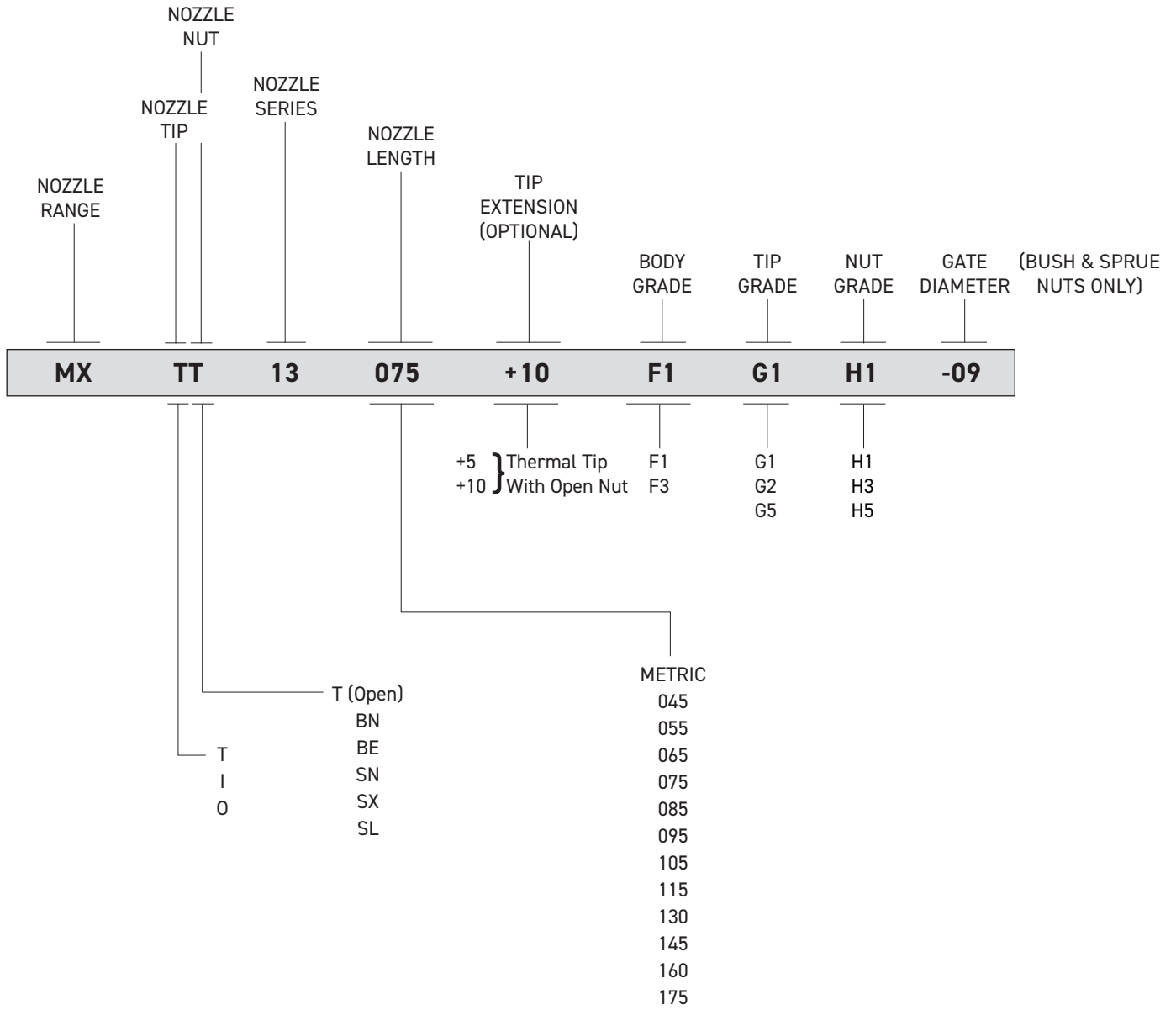


Note

- 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 (σ_y) of nozzle plate 800MPa.

MX Thermal Gate 13 Series

Nozzle Assembly Order Code for MX Thermal Gate 13 Series



* See page 10, 14 & 17 in the system selection guide for an explanation on the grades

Body, Tip & Nut Grade Availability

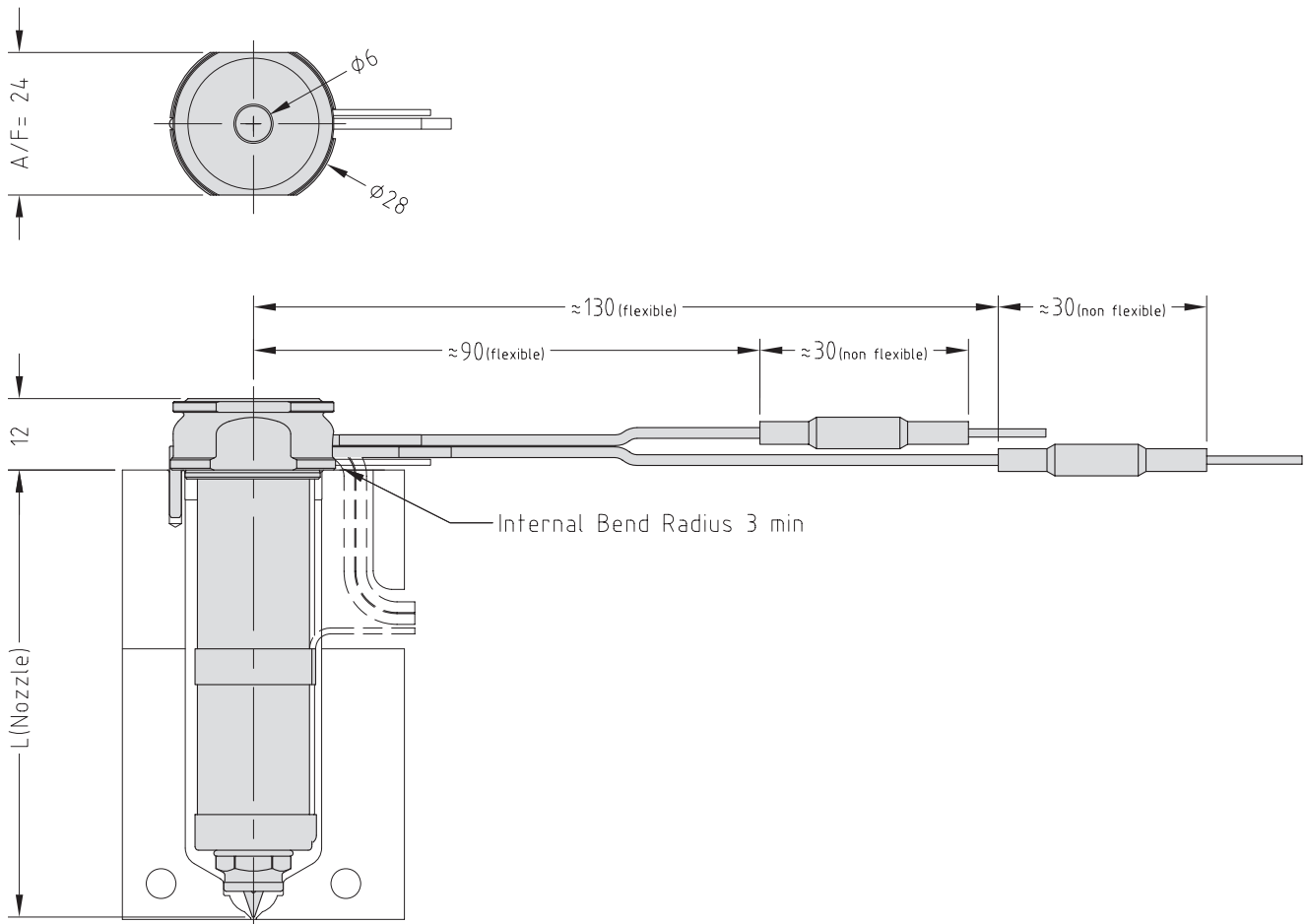
Nozzle Code	Grade					
	F1G1H1	F1G2H1	F1G5H1	F3G1H3	F3G2H3	F3G5H3
MXTT	✓	✓	✓	✓	✓	✓
MXIT	✓	✓	✓	✓	✓	✓
MXOT	✓	✗	✓	✓	✗	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT13075F1G1H1)

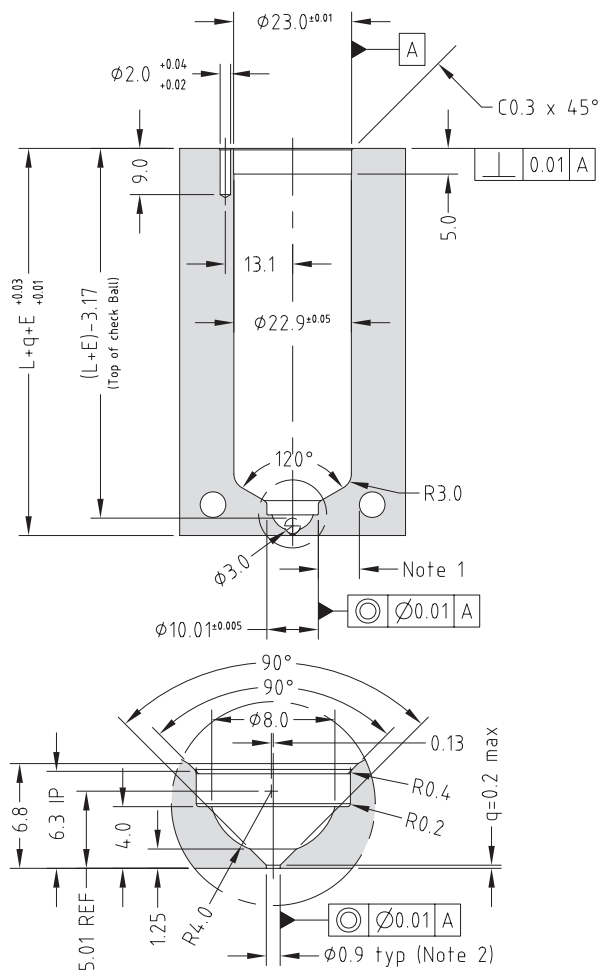
Nozzle Dimensions



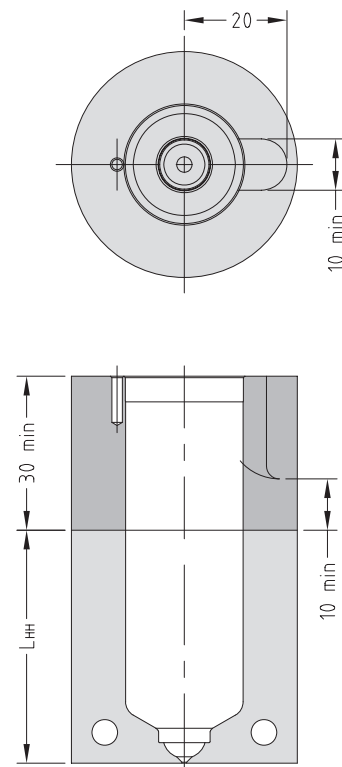
Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT13045	MXIT13045	MXOT13045	45	0.12	0.15
MXTT13055	MXIT13055	MXOT13055	55	0.15	0.18
MXTT13065	MXIT13065	MXOT13065	65	0.17	0.21
MXTT13075	MXIT13075	MXOT13075	75	0.20	0.25
MXTT13085	MXIT13085	MXOT13085	85	0.22	0.28
MXTT13095	MXIT13095	MXOT13095	95	0.25	0.31
MXTT13105	MXIT13105	MXOT13105	105	0.28	0.35
MXTT13115	MXIT13115	MXOT13115	115	0.30	0.38
MXTT13130	MXIT13130	MXOT13130	130	0.34	0.43
MXTT13145	MXIT13145	MXOT13145	145	0.38	0.48
MXTT13160	MXIT13160	MXOT13160	160	0.42	0.53
MXTT13175	MXIT13175	MXOT13175	175	0.46	0.58

Nozzle Fitment and Gate Dimensions

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



Hot Half Configuration



Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum steel strength (σ_y) of hot runner plates 800MPa.

Body, Tip & Nut Grade Availability

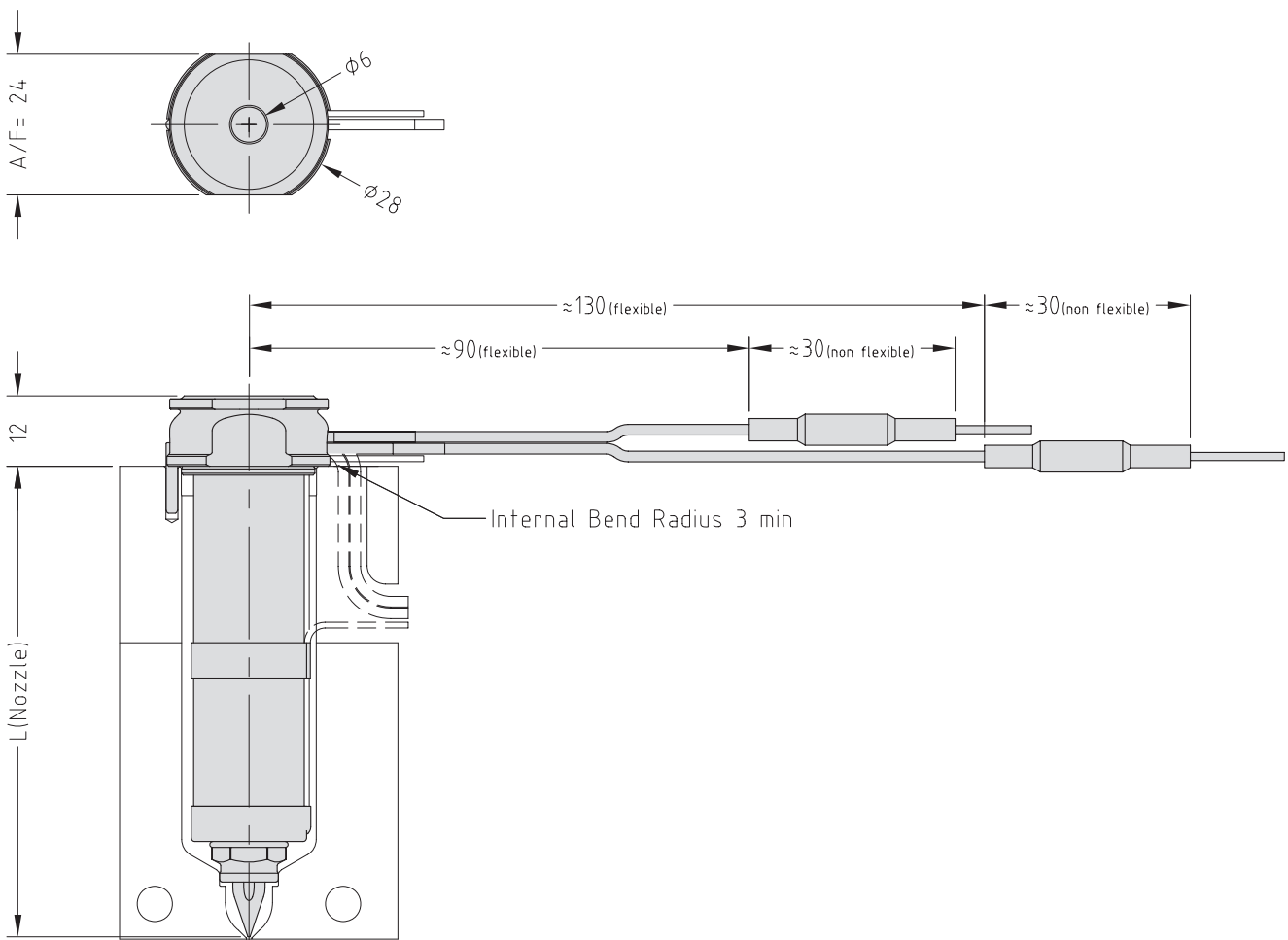
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+5	✓	✓	✓	✓
MXIT+5	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT13075+5F1G1H1)

Nozzle Dimensions

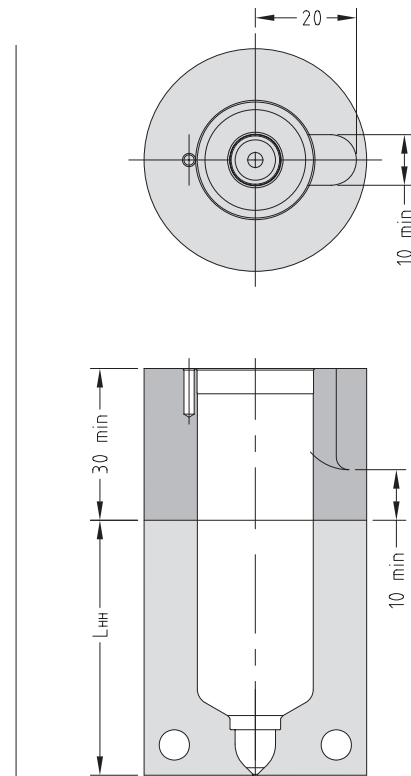
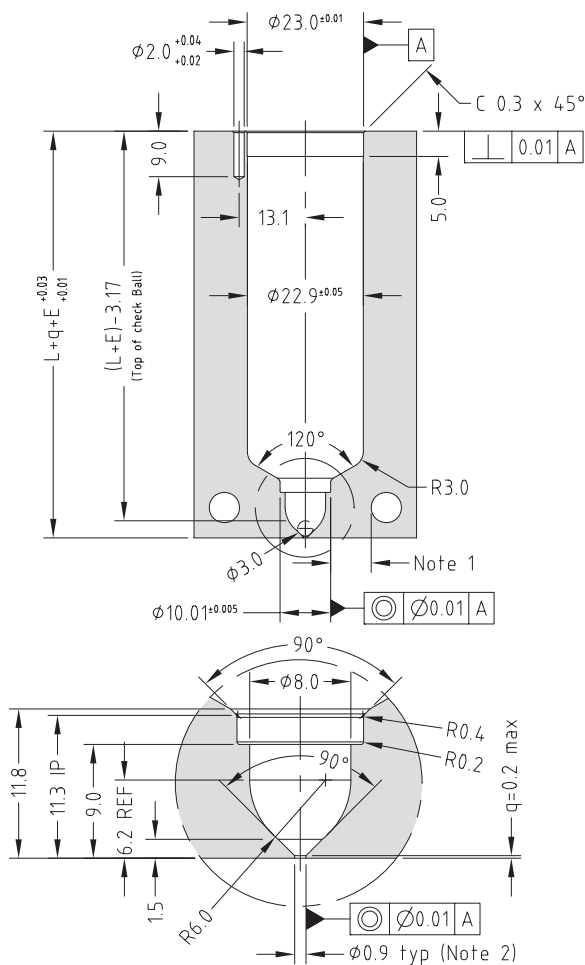


Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT13045+5	MXIT13045+5	50	0.13	0.17
MXTT13055+5	MXIT13055+5	60	0.16	0.20
MXTT13065+5	MXIT13065+5	70	0.18	0.23
MXTT13075+5	MXIT13075+5	80	0.21	0.26
MXTT13085+5	MXIT13085+5	90	0.24	0.30
MXTT13095+5	MXIT13095+5	100	0.26	0.33
MXTT13105+5	MXIT13105+5	110	0.29	0.36
MXTT13115+5	MXIT13115+5	120	0.32	0.40
MXTT13130+5	MXIT13130+5	135	0.36	0.45
MXTT13145+5	MXIT13145+5	150	0.40	0.50
MXTT13160+5	MXIT13160+5	165	0.44	0.54
MXTT13175+5	MXIT13175+5	180	0.48	0.59

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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum steel strength (σ_y) of hot runner plates 800MPa.

Body, Tip & Nut Grade Availability

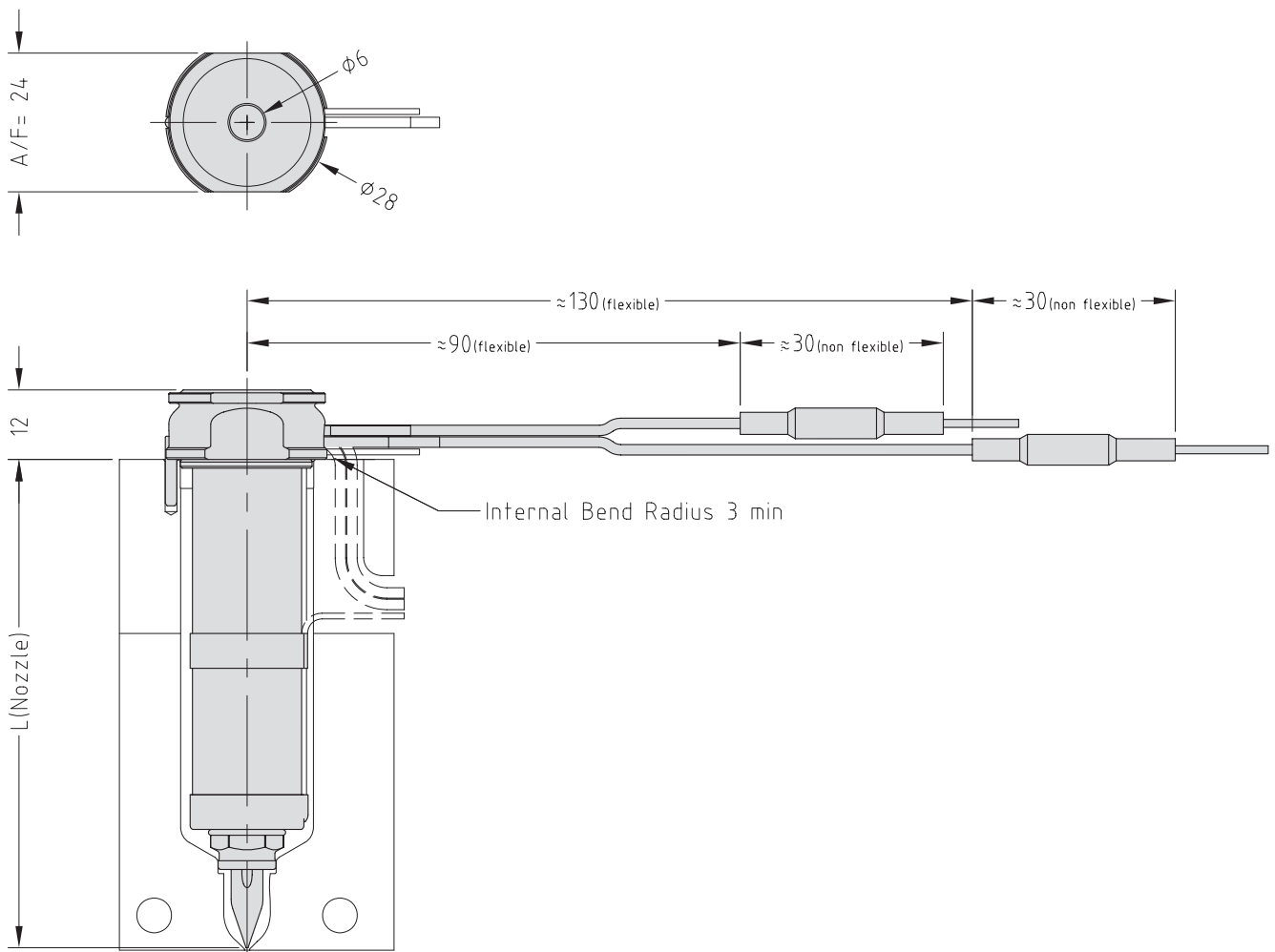
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+10	✓	✓	✓	✓
MXIT+10	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT13075+10F1G1H1)

Nozzle Dimensions



Body, Tip & Nut Material Grade Availability

Grade \ Nozzle Code	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
13 Series Bush Nut								
MXTBN	✓	✓	✓	✓	✓	✓	✓	✓
MXIBN	✓	✓	✓	✓	✓	✓	✓	✓
MXOBN	✓	✗	✓	✓	✓	✗	✓	✓
13 Series Bush Nut Full Contact								
MXTBE	✓	✓	✓	✗	✓	✓	✓	✗
MXIBE	✓	✓	✓	✗	✓	✓	✓	✗
MXOBE	✓	✗	✓	✗	✓	✗	✓	✗

Bush Nut Options

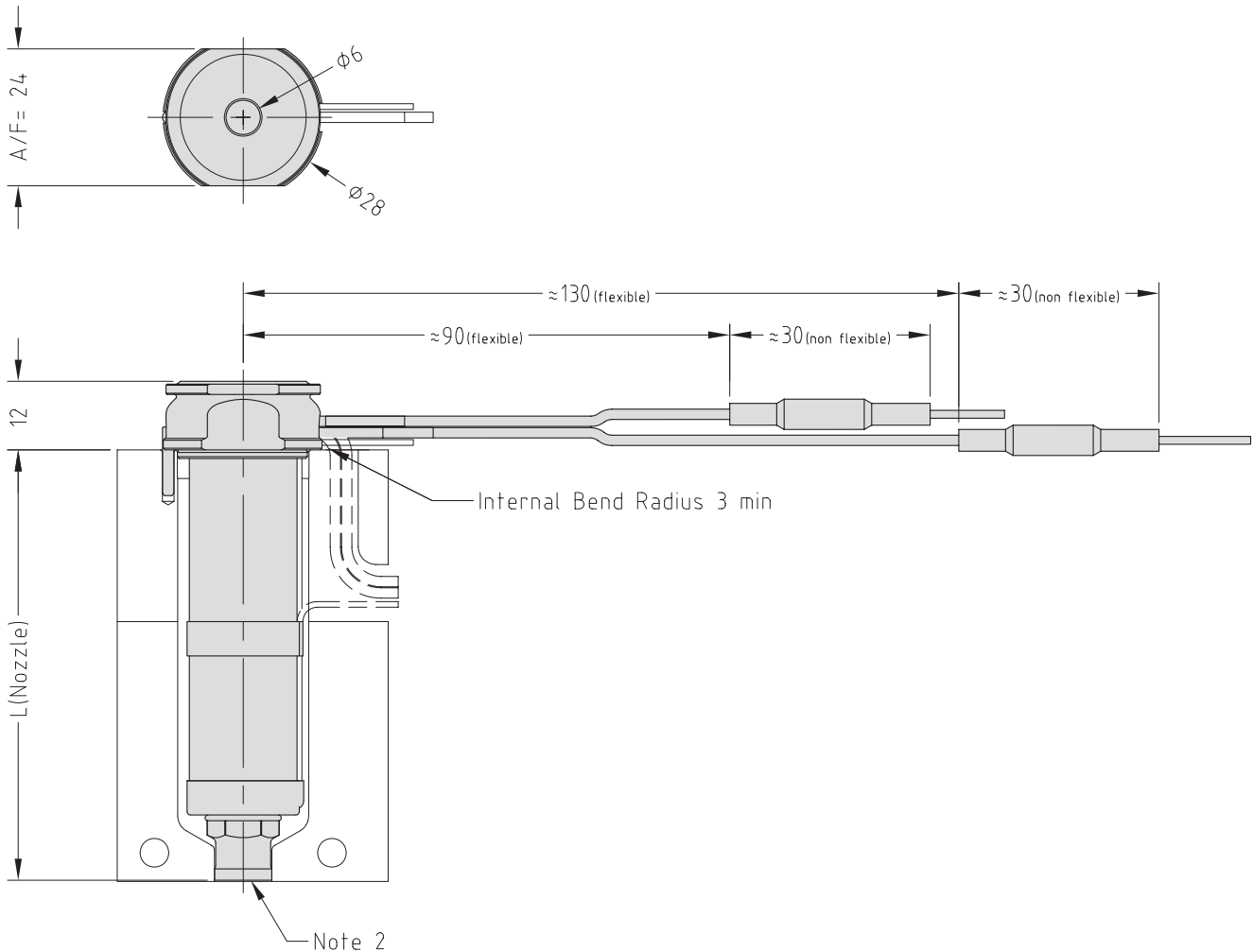
- BN - Standard bush nut
- BE - Full-contact bush nut*

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.

Standard Gate Diameters		
H1	0.9mm	1.1mm
H3	0.9mm	1.1mm
H5	1.4mm	

To order a nozzle assembly:
Provide the Nozzle Code + Grade + Gate Diameter
(Order example: MXTBN13075F1G1H1-09)

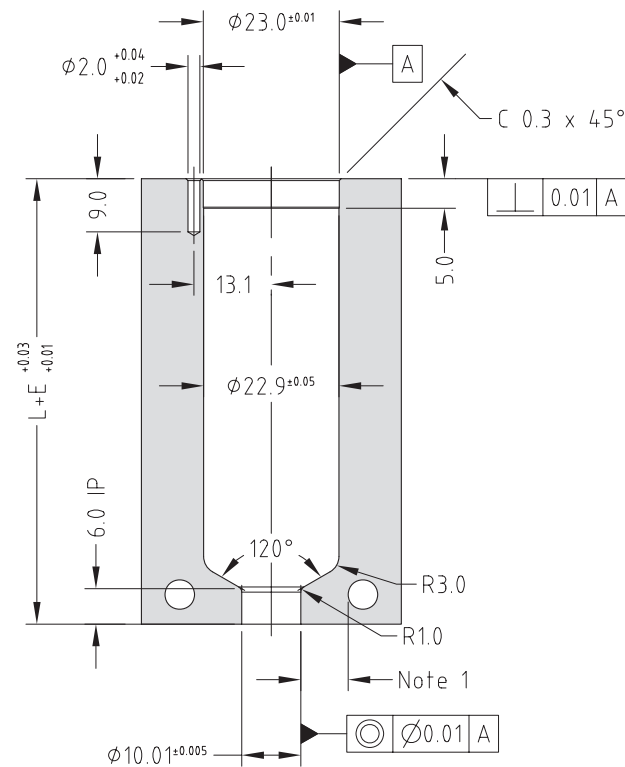
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTBN13045	MXIBN13045	MXOBN13045	45.2	0.12	0.15
MXTBN13055	MXIBN13055	MXOBN13055	55.2	0.15	0.18
MXTBN13065	MXIBN13065	MXOBN13065	65.2	0.17	0.22
MXTBN13075	MXIBN13075	MXOBN13075	75.2	0.20	0.25
MXTBN13085	MXIBN13085	MXOBN13085	85.2	0.22	0.28
MXTBN13095	MXIBN13095	MXOBN13095	95.2	0.25	0.31
MXTBN13105	MXIBN13105	MXOBN13105	105.2	0.28	0.35
MXTBN13115	MXIBN13115	MXOBN13115	115.2	0.30	0.38
MXTBN13130	MXIBN13130	MXOBN13130	130.2	0.34	0.43
MXTBN13145	MXIBN13145	MXOBN13145	145.2	0.38	0.48
MXTBN13160	MXIBN13160	MXOBN13160	160.2	0.42	0.53
MXTBN13175	MXIBN13175	MXOBN13175	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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

Nozzle Code	Grade	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
	MXTSN		✓	✓	✓	✓	✓	✓	✓
MXISN		✓	✓	✓	✓	✓	✓	✓	✓
MXOSN		✓	✗	✓	✓	✓	✗	✓	✓

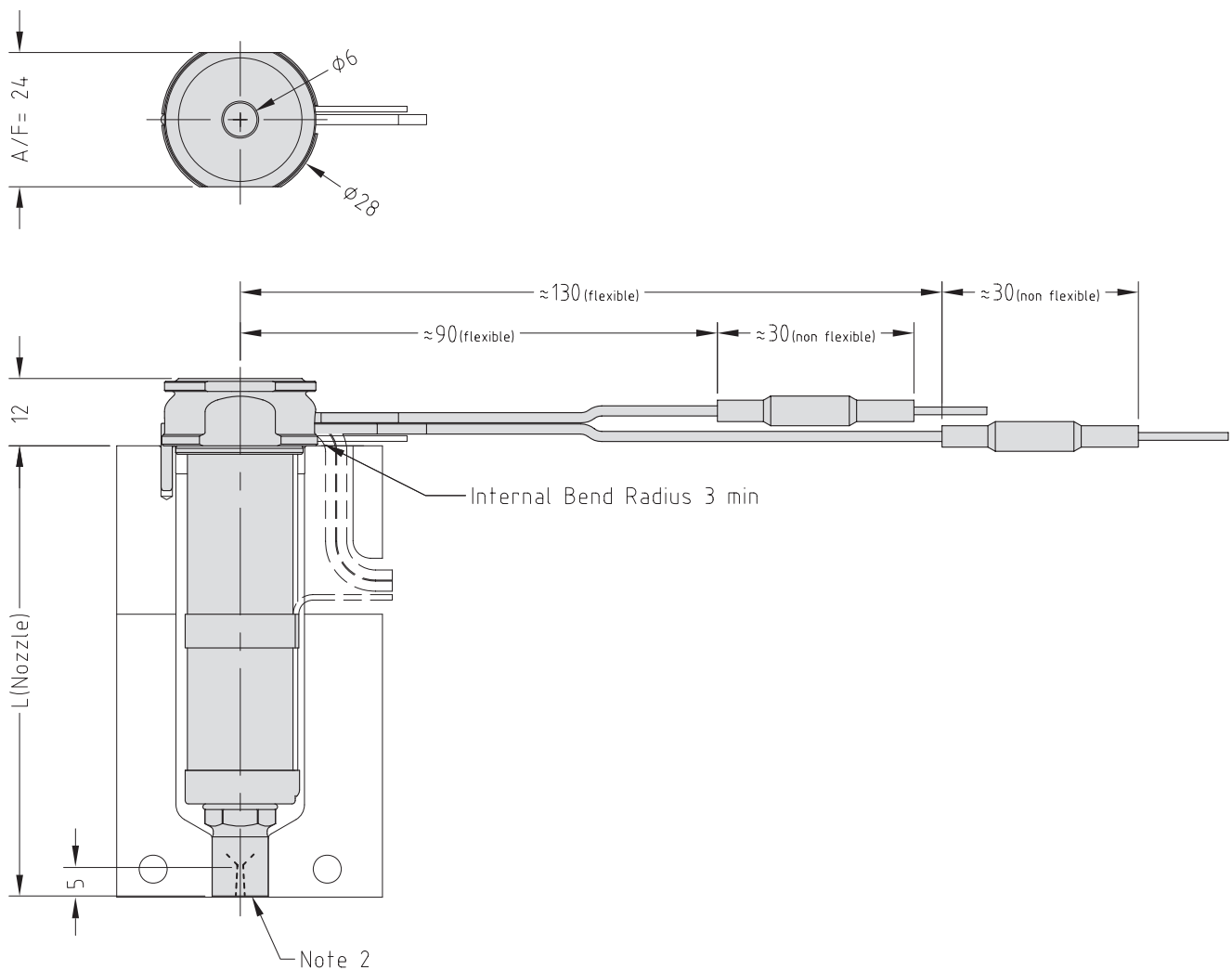
Standard Gate Diameters		
H1	0.9mm	1.3mm
H3	0.9mm	1.3mm
H5	1.6mm	

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter

(Order example: MXTSN13075F1G1H1-09)

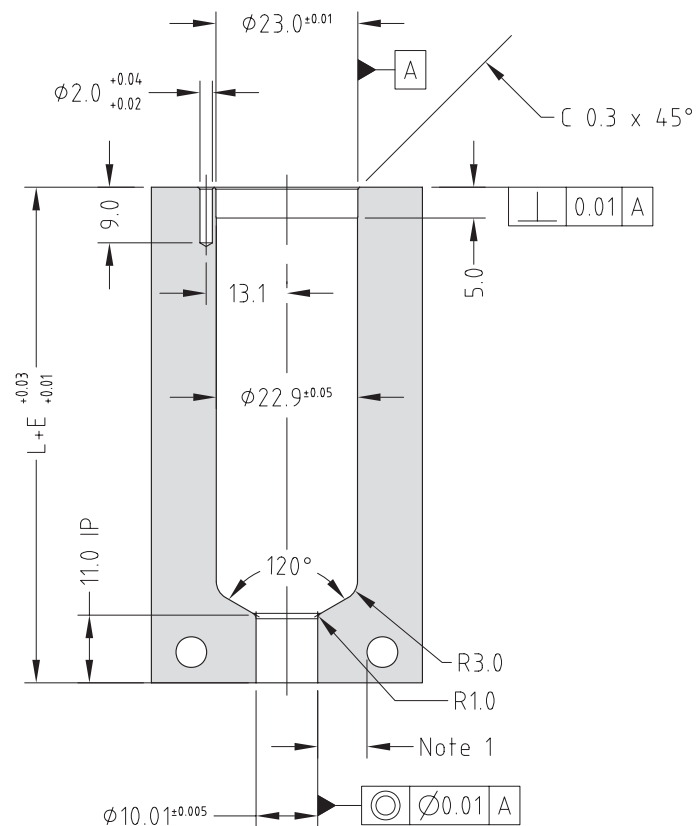
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSN13045	MXISN13045	MXOSN13045	50.2	0.13	0.17
MXTSN13055	MXISN13055	MXOSN13055	60.2	0.16	0.20
MXTSN13065	MXISN13065	MXOSN13065	70.2	0.19	0.23
MXTSN13075	MXISN13075	MXOSN13075	80.2	0.21	0.26
MXTSN13085	MXISN13085	MXOSN13085	90.2	0.24	0.30
MXTSN13095	MXISN13095	MXOSN13095	100.2	0.26	0.33
MXTSN13105	MXISN13105	MXOSN13105	110.2	0.29	0.36
MXTSN13115	MXISN13115	MXOSN13115	120.2	0.32	0.40
MXTSN13130	MXISN13130	MXOSN13130	135.2	0.36	0.45
MXTSN13145	MXISN13145	MXOSN13145	150.2	0.40	0.50
MXTSN13160	MXISN13160	MXOSN13160	165.2	0.44	0.55
MXTSN13175	MXISN13175	MXOSN13175	180.2	0.48	0.59

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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

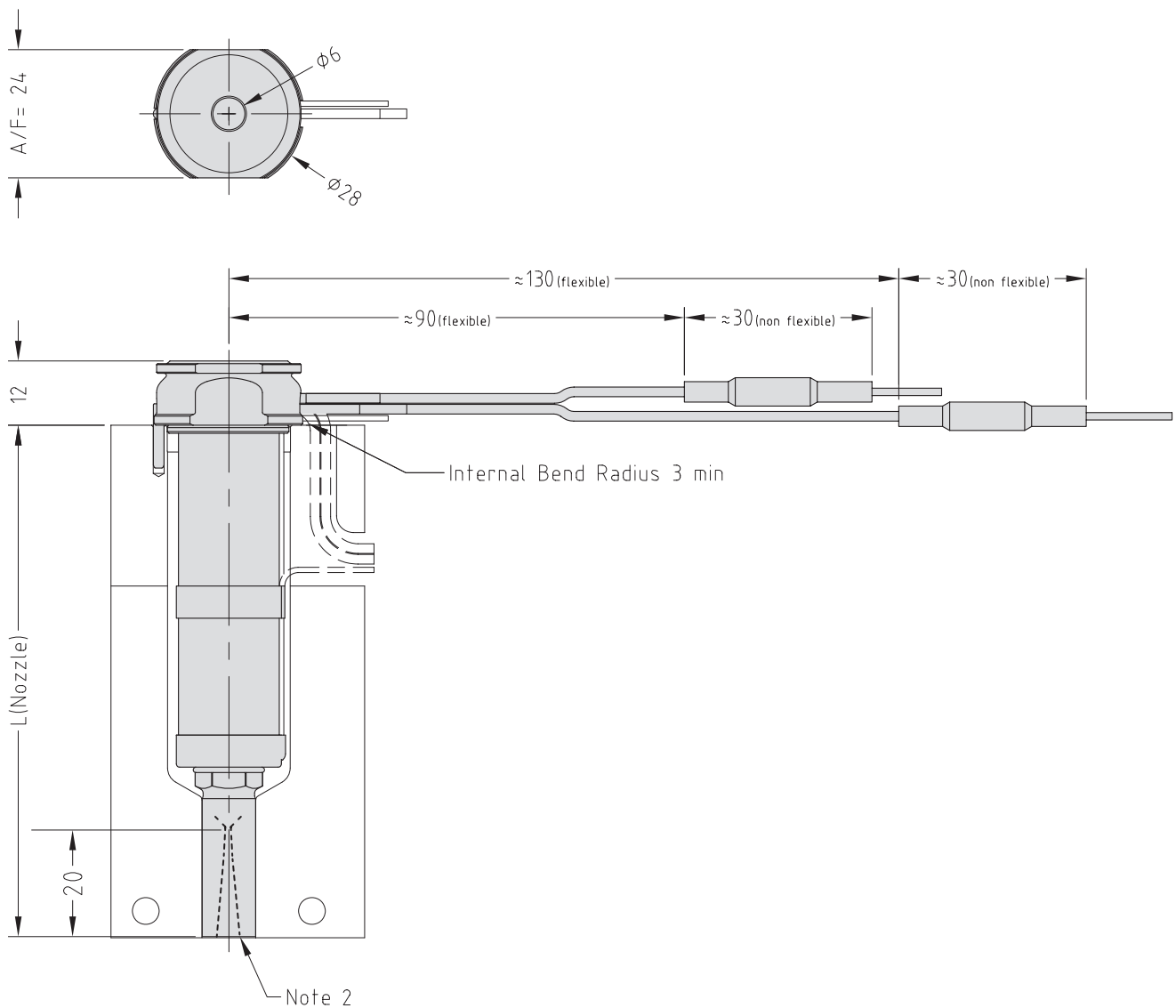
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSX	✓	✓	✓
MXISX	✓	✓	✓
MXOSX	✓	✗	✓

Standard Gate Diameters	
H1	0.9mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSX13075F1G1H1-09)

Nozzle Dimensions



Body, Tip and Nut Material Grade Availability

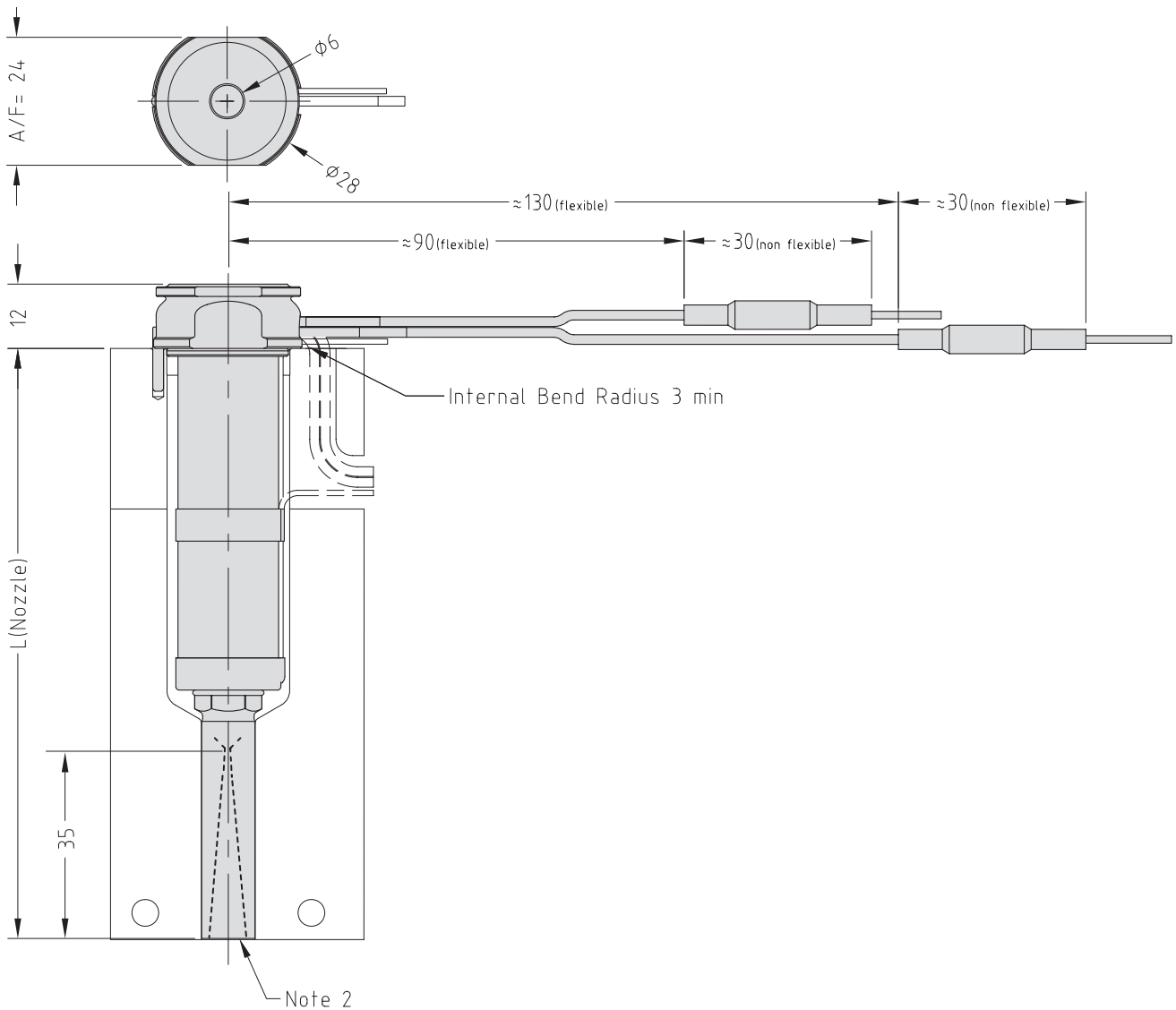
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSL	✓	✓	✓
MXISL	✓	✓	✓
MXOSL	✓	✗	✓

Standard Gate Diameters	
H1	0.9mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSL13075F1G1H1-09)

Nozzle Dimensions



MX YCN Nut Thermal Gate 13 Series

Nozzle Assembly Order Code for MX YCN Nut Thermal Gate 13 Series

NOZZLE RANGE	YCN NUT	NOZZLE SERIES	NOZZLE LENGTH	BODY GRADE	NUT GRADE	GATE PROFILE	POLYMER CLASSIFICATION	GATE DIAMETER
MX	YCN	13	175	F1	H3	P4	F	-18
			045 055 065 075 085 095 105 115 130 145 160 175	F1 F3	H3	P7 P4 N3	U (Unfilled) F (Filled) SP	EXAMPLE OF A FINAL ORDER CODE

* See page 26 in the system selection guide for an explanation on gate profiles

Body & Nut Grade Availability

Nozzle Code	F1H3	F3H3
MXYCN	✓	✓

Refer to the system selection guide page 26 for further explanation.

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Profile
(Order example: MXYCN13075F1H3P7U-12)

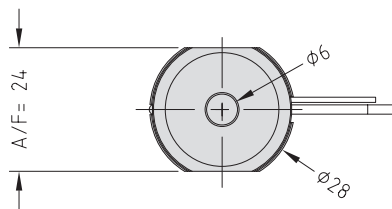
YCN Gate Profile Availability

Profile	Unfilled	Filled	Special
P7	P7U-12	P7F-16	P7-SP
P4	P4U-13	P4F-18	P4-SP
N3	N3U-13	N3F-16	N3-SP

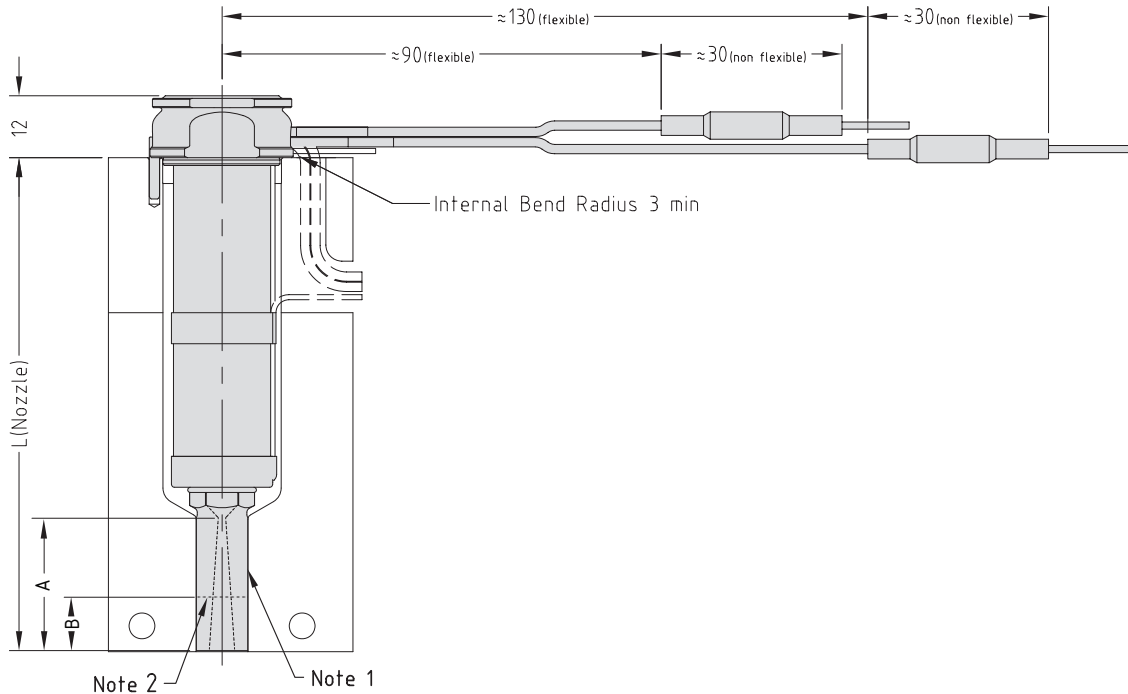
Standard Gate Diameters

Nut Grade	P7U-12	P7F-16	P4U-13	P4F-18	N3U-13	N3F-16
H3	1.2mm	1.6mm	1.3mm	1.8mm	1.3mm	1.6mm

Nozzle Dimensions



Profile	Gate Position A	Cut Length B
P7	25	Contact Mastip
P4	28	
N3	35	



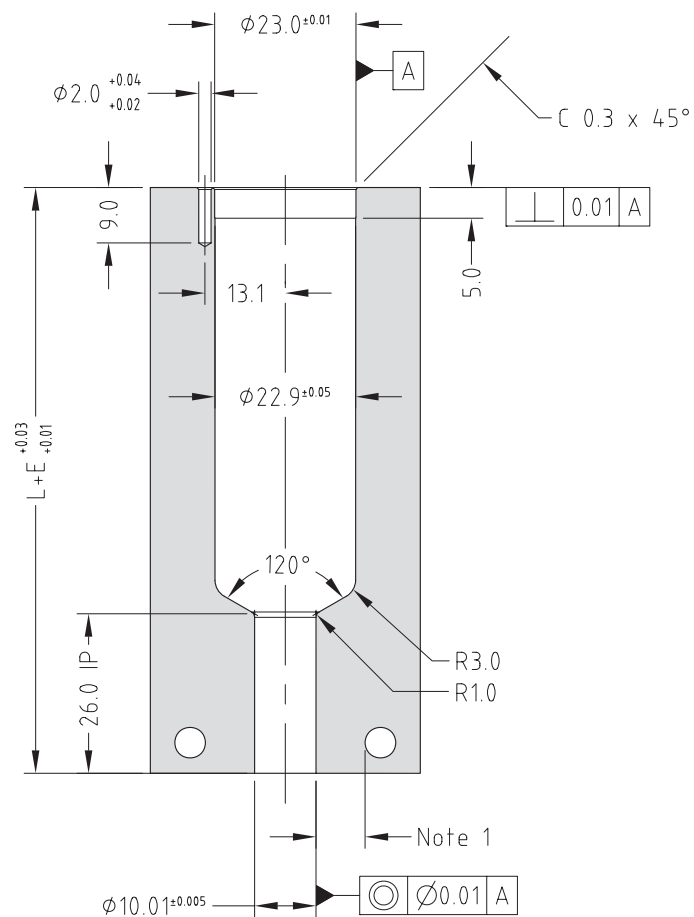
Note

1. Modify the contact area of the YCN nut to suit the application.
 2. Contact Mastip to reduce the length (B) of the YCN nut.
- Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.

YCN Open Nut Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXYCN13045	65.2	0.17	0.22
MXYCN13055	75.2	0.20	0.25
MXYCN13065	85.2	0.22	0.28
MXYCN13075	95.2	0.25	0.31
MXYCN13085	105.2	0.28	0.35
MXYCN13095	115.2	0.30	0.38
MXYCN13105	125.2	0.33	0.41
MXYCN13115	135.2	0.36	0.45
MXYCN13130	150.2	0.40	0.50
MXYCN13145	165.2	0.44	0.55
MXYCN13160	180.2	0.48	0.59
MXYCN13175	195.2	0.52	0.64

Nozzle Fitment and Gate Dimensions

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

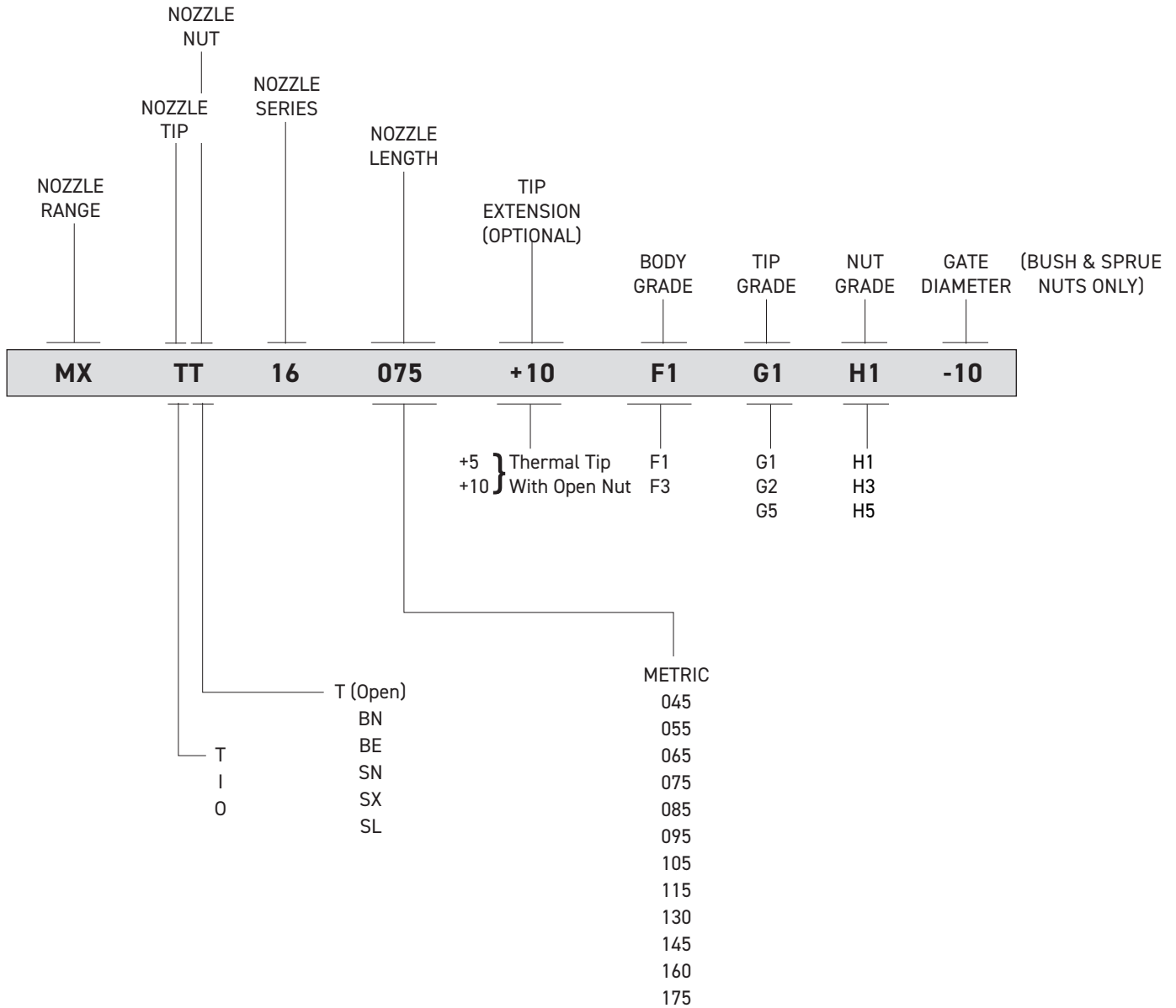


Note

- Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.
- * Minimum steel strength (σ_y) of hot runner plates 800MPa.

MX Thermal Gate 16 Series

Nozzle Assembly Order Code for MX Thermal Gate 16 Series



* See page 10, 14 & 17 in the system selection guide for an explanation on this grades

Body, Tip & Nut Grade Availability

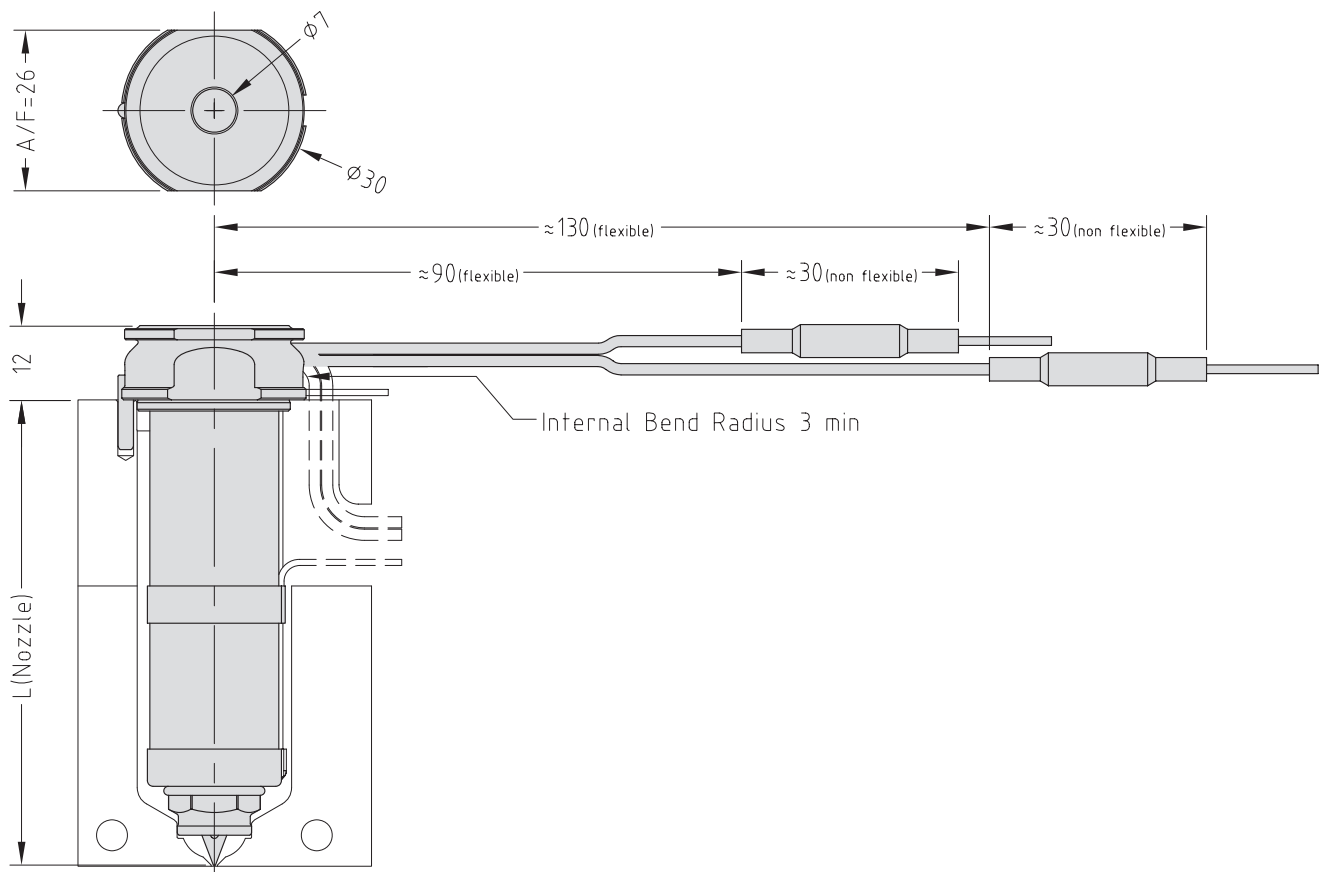
Nozzle Code	Grade					
	F1G1H1	F1G2H1	F1G5H1	F3G1H3	F3G2H3	F3G5H3
MXTT	✓	✓	✓	✓	✓	✓
MXIT	✓	✓	✓	✓	✓	✓
MXOT	✓	✗	✓	✓	✗	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT16075F1G1H1)

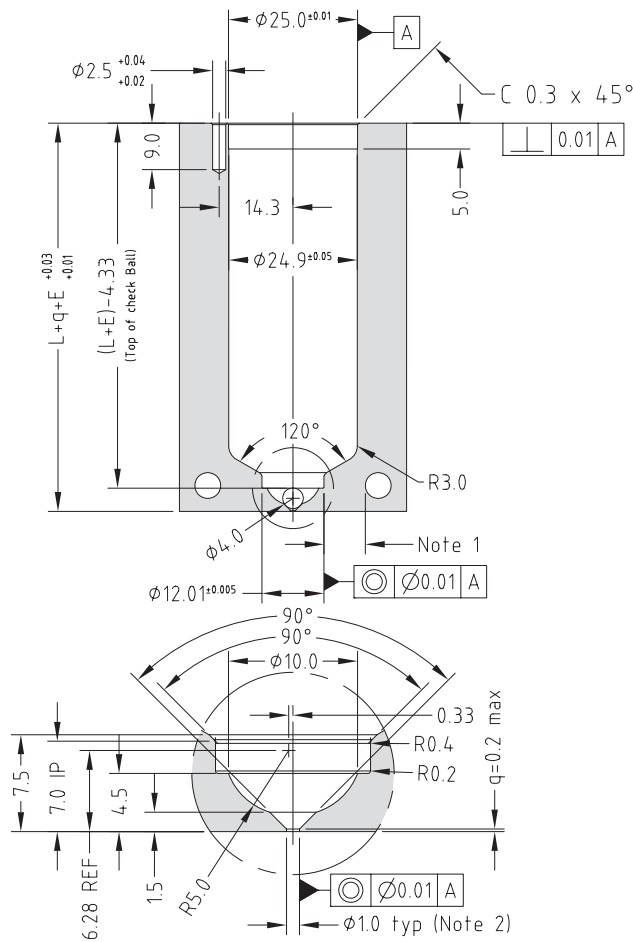
Nozzle Dimensions



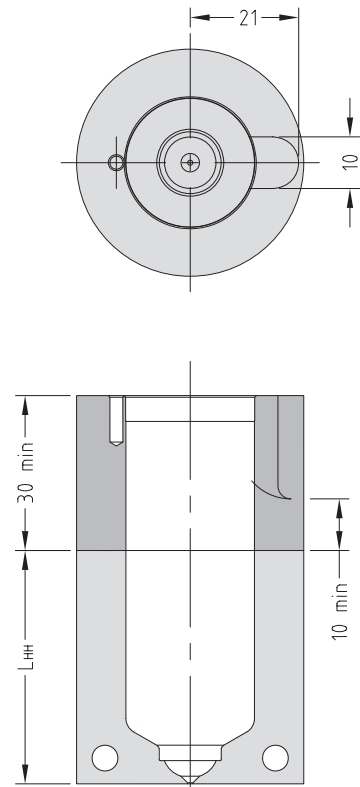
Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT16045	MXIT16045	MXOT16045	45	0.12	0.15
MXTT16055	MXIT16055	MXOT16055	55	0.15	0.18
MXTT16065	MXIT16065	MXOT16065	65	0.17	0.21
MXTT16075	MXIT16075	MXOT16075	75	0.20	0.25
MXTT16085	MXIT16085	MXOT16085	85	0.22	0.28
MXTT16095	MXIT16095	MXOT16095	95	0.25	0.31
MXTT16105	MXIT16105	MXOT16105	105	0.28	0.35
MXTT16115	MXIT16115	MXOT16115	115	0.30	0.38
MXTT16130	MXIT16130	MXOT16130	130	0.34	0.43
MXTT16145	MXIT16145	MXOT16145	145	0.38	0.48
MXTT16160	MXIT16160	MXOT16160	160	0.42	0.53
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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Grade Availability

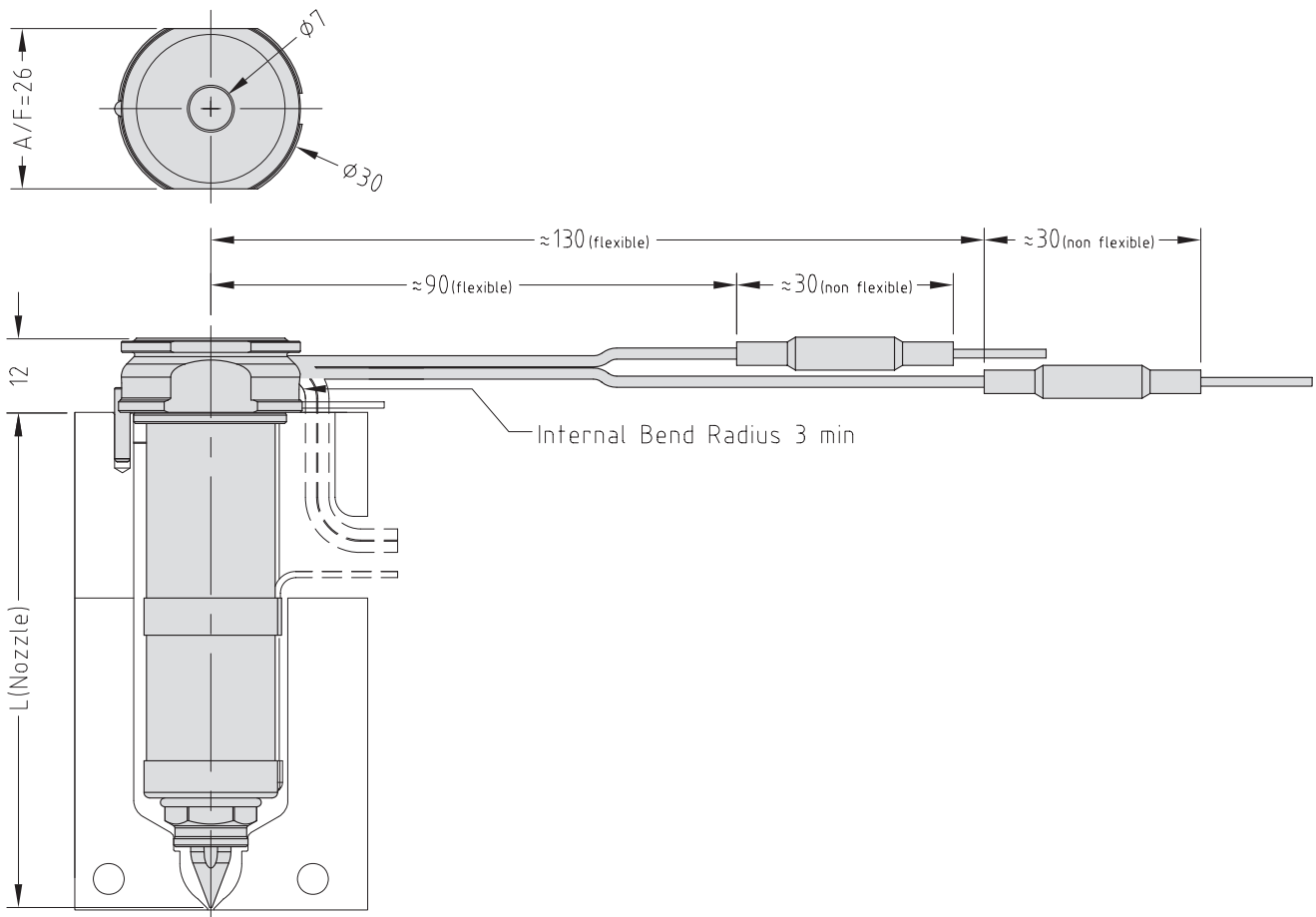
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+5	✓	✓	✓	✓
MXIT+5	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT16075+5F1G1H1)

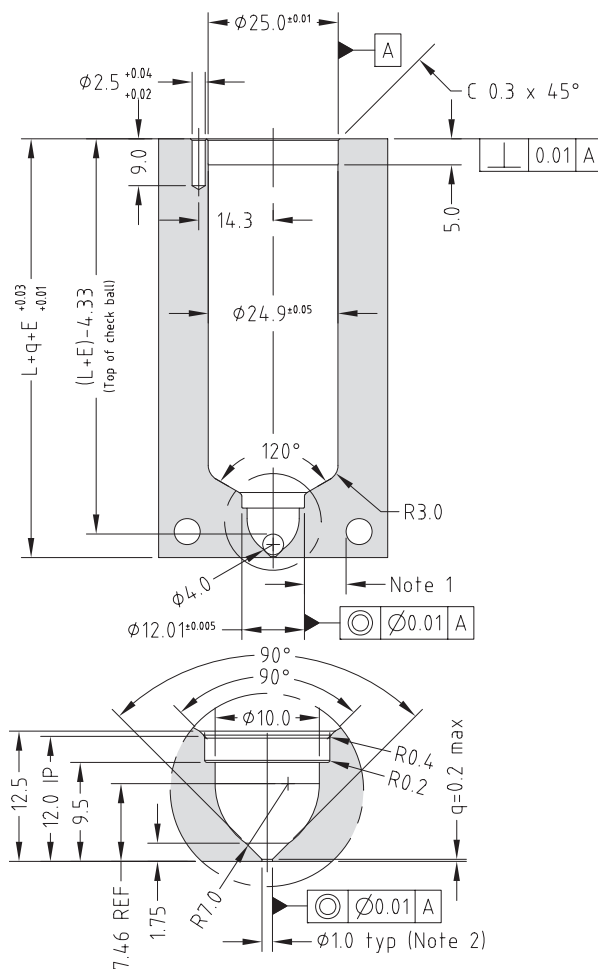
Nozzle Dimensions



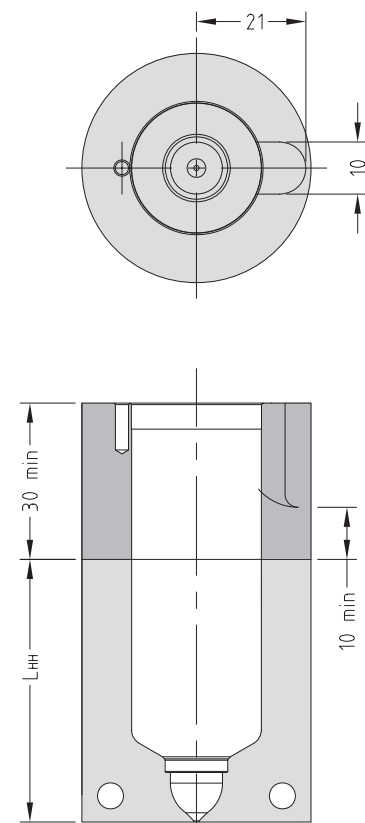
Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	L	E@ ΔT =200C	E@ ΔT =250C
MXTT16045+5	MXIT16045+5	50	0.13	0.17
MXTT16055+5	MXIT16055+5	60	0.16	0.20
MXTT16065+5	MXIT16065+5	70	0.18	0.23
MXTT16075+5	MXIT16075+5	80	0.21	0.26
MXTT16085+5	MXIT16085+5	90	0.24	0.30
MXTT16095+5	MXIT16095+5	100	0.26	0.33
MXTT16105+5	MXIT16105+5	110	0.29	0.36
MXTT16115+5	MXIT16115+5	120	0.32	0.40
MXTT16130+5	MXIT16130+5	135	0.36	0.45
MXTT16145+5	MXIT16145+5	150	0.40	0.50
MXTT16160+5	MXIT16160+5	165	0.44	0.54
MXTT16175+5	MXIT16175+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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Grade Availability

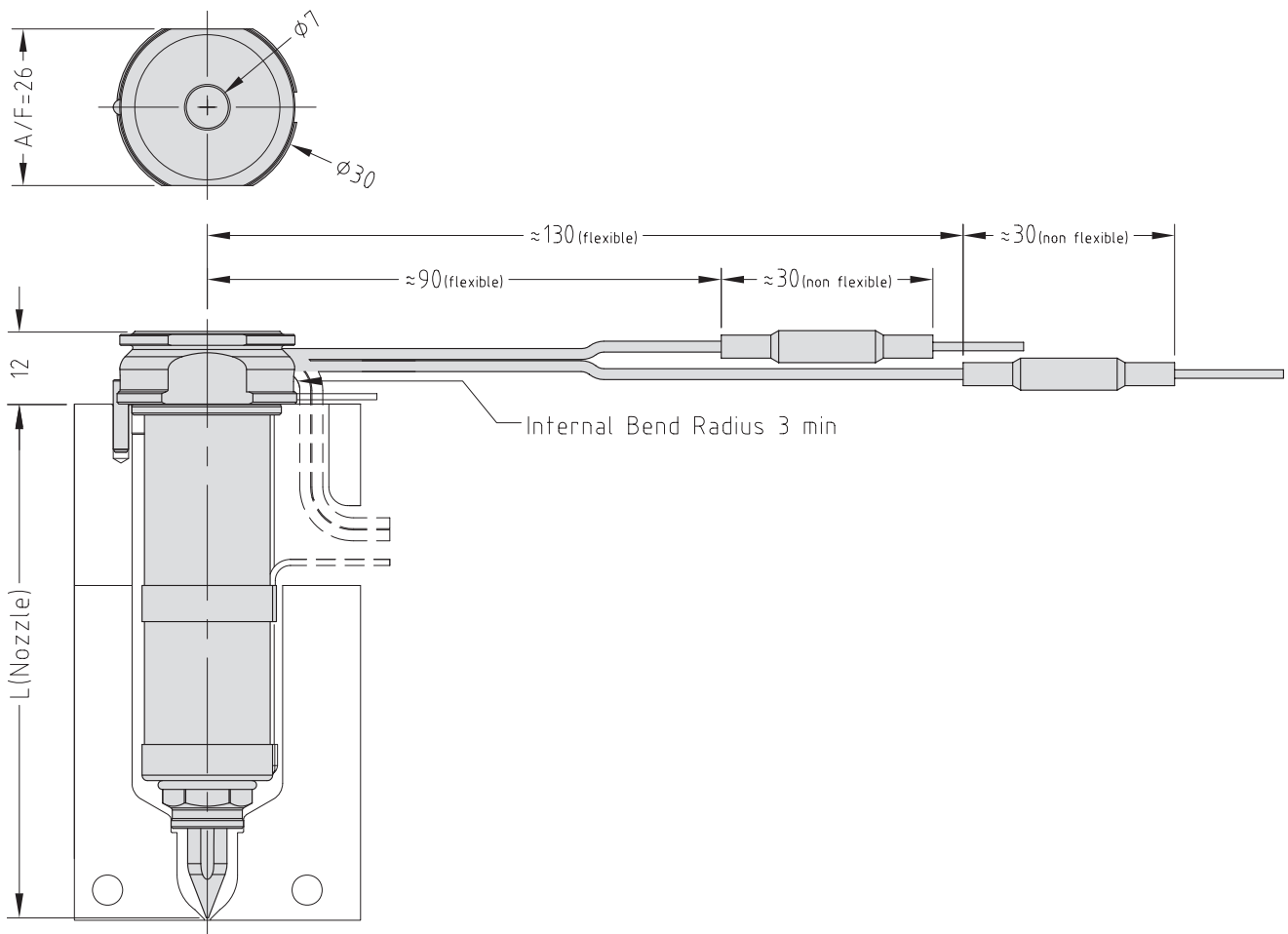
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+10	✓	✓	✓	✓
MXIT+10	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT16075+10F1G1H1)

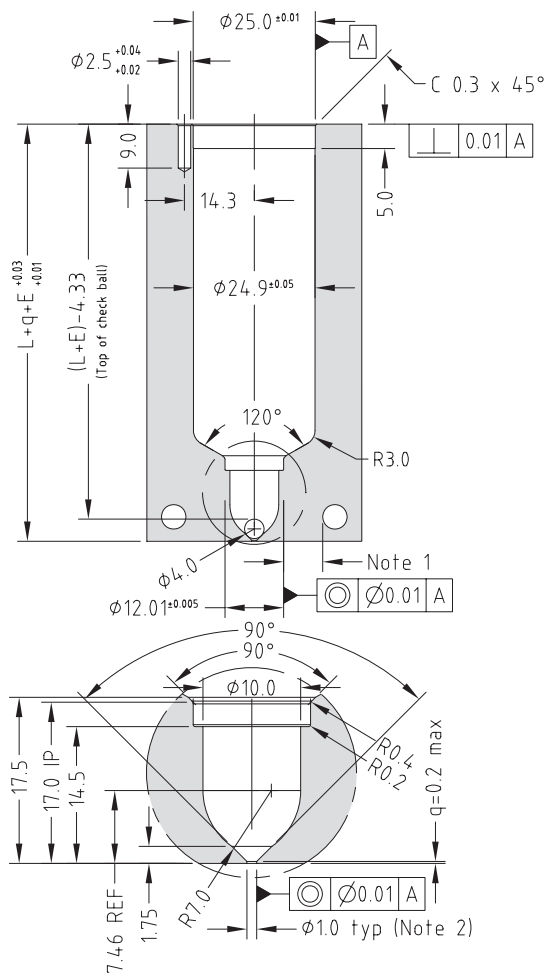
Nozzle Dimensions



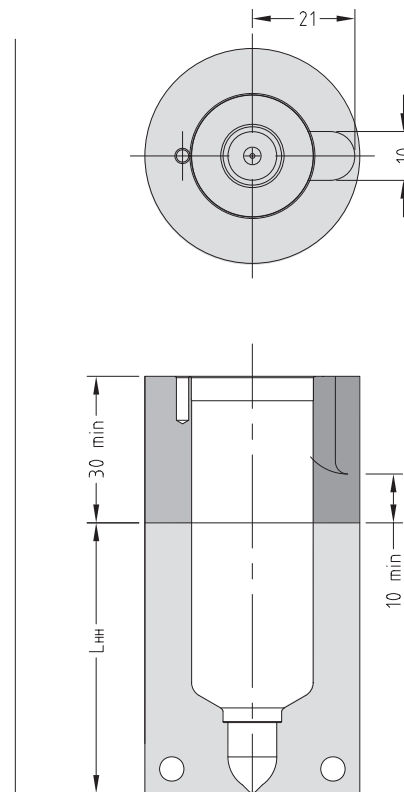
Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT16045+10	MXIT16045+10	55	0.15	0.18
MXTT16055+10	MXIT16055+10	65	0.17	0.21
MXTT16065+10	MXIT16065+10	75	0.20	0.25
MXTT16075+10	MXIT16075+10	85	0.22	0.28
MXTT16085+10	MXIT16085+10	95	0.25	0.31
MXTT16095+10	MXIT16095+10	105	0.28	0.35
MXTT16105+10	MXIT16105+10	115	0.30	0.38
MXTT16115+10	MXIT16115+10	125	0.33	0.41
MXTT16130+10	MXIT16130+10	140	0.37	0.46
MXTT16145+10	MXIT16145+10	155	0.41	0.51
MXTT16160+10	MXIT16160+10	170	0.45	0.56
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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Material Grade Availability

Grade \ Nozzle Code	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
16 Series Bush Nut								
MXTBN	✓	✓	✓	✓	✓	✓	✓	✓
MXIBN	✓	✓	✓	✓	✓	✓	✓	✓
MXOBN	✓	✗	✓	✓	✓	✗	✓	✓
16 Series Bush Nut Full Contact								
MXTBE	✓	✓	✓	✗	✓	✓	✓	✗
MXIBE	✓	✓	✓	✗	✓	✓	✓	✗
MXOBE	✓	✗	✓	✗	✓	✗	✓	✗

Bush Nut Options

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

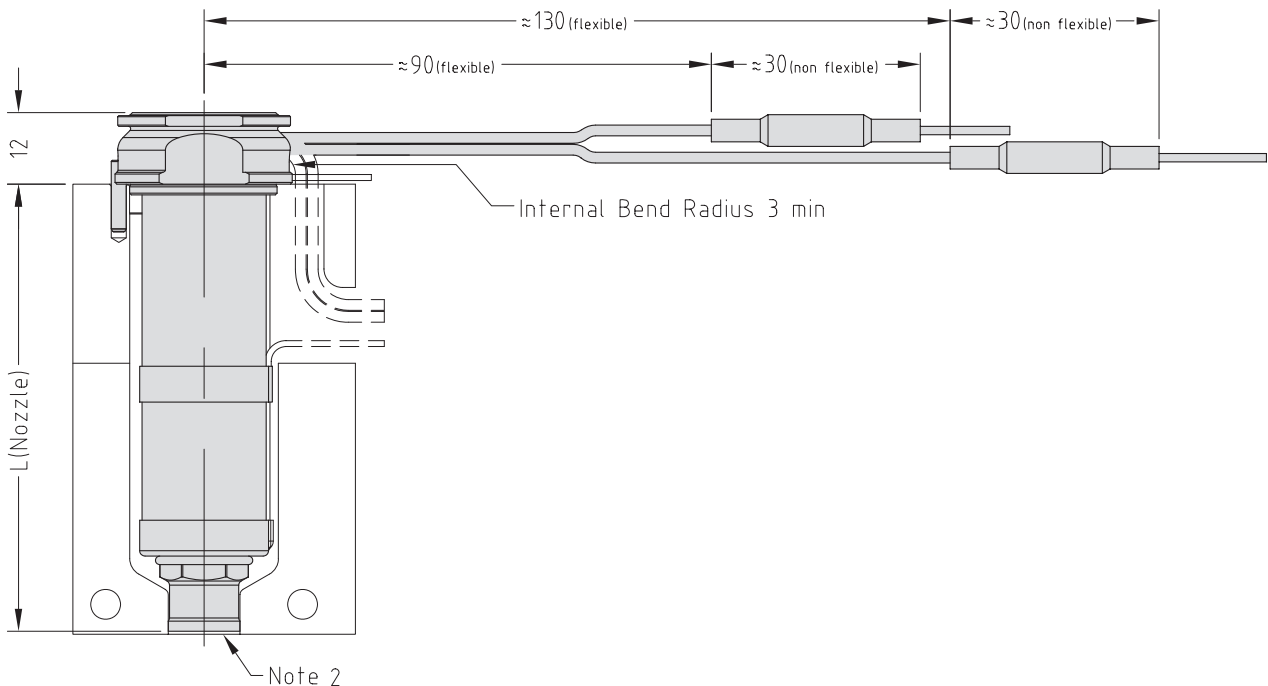
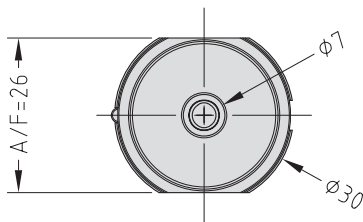
The nozzle codes listed to the right are for nozzle assemblies with a standard bush nut. To order a full-contact bush nut, replace the BN in the code with BE.

Standard Gate Diameters		
H1	1.0mm	1.2mm
H3	1.0mm	1.2mm
H5	1.5mm	

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTBN16075F1G1H1-10)

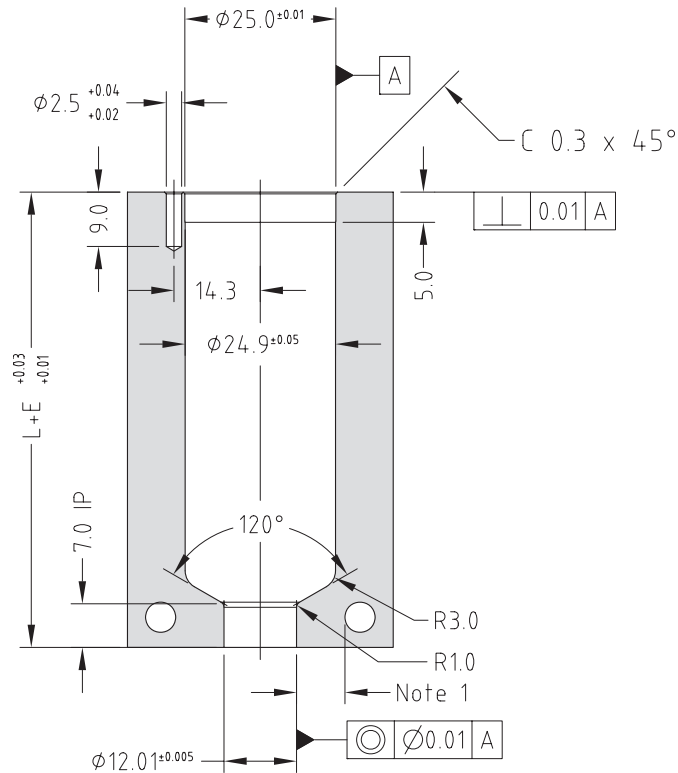
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =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
MXTBN16085	MXIBN16085	MXOBN16085	85.2	0.22	0.28
MXTBN16095	MXIBN16095	MXOBN16095	95.2	0.25	0.31
MXTBN16105	MXIBN16105	MXOBN16105	105.2	0.28	0.35
MXTBN16115	MXIBN16115	MXOBN16115	115.2	0.30	0.38
MXTBN16130	MXIBN16130	MXOBN16130	130.2	0.34	0.43
MXTBN16145	MXIBN16145	MXOBN16145	145.2	0.38	0.48
MXTBN16160	MXIBN16160	MXOBN16160	160.2	0.42	0.53
MXTBN16175	MXIBN16175	MXOBN16175	175.2	0.46	0.58

Nozzle Fitment and Gate Dimensions

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



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 (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

Nozzle Code	Grade	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
	MXTSN		✓	✓	✓	✓	✓	✓	✓
MXISN		✓	✓	✓	✓	✓	✓	✓	✓
MXOSN		✓	✗	✓	✓	✓	✗	✓	✓

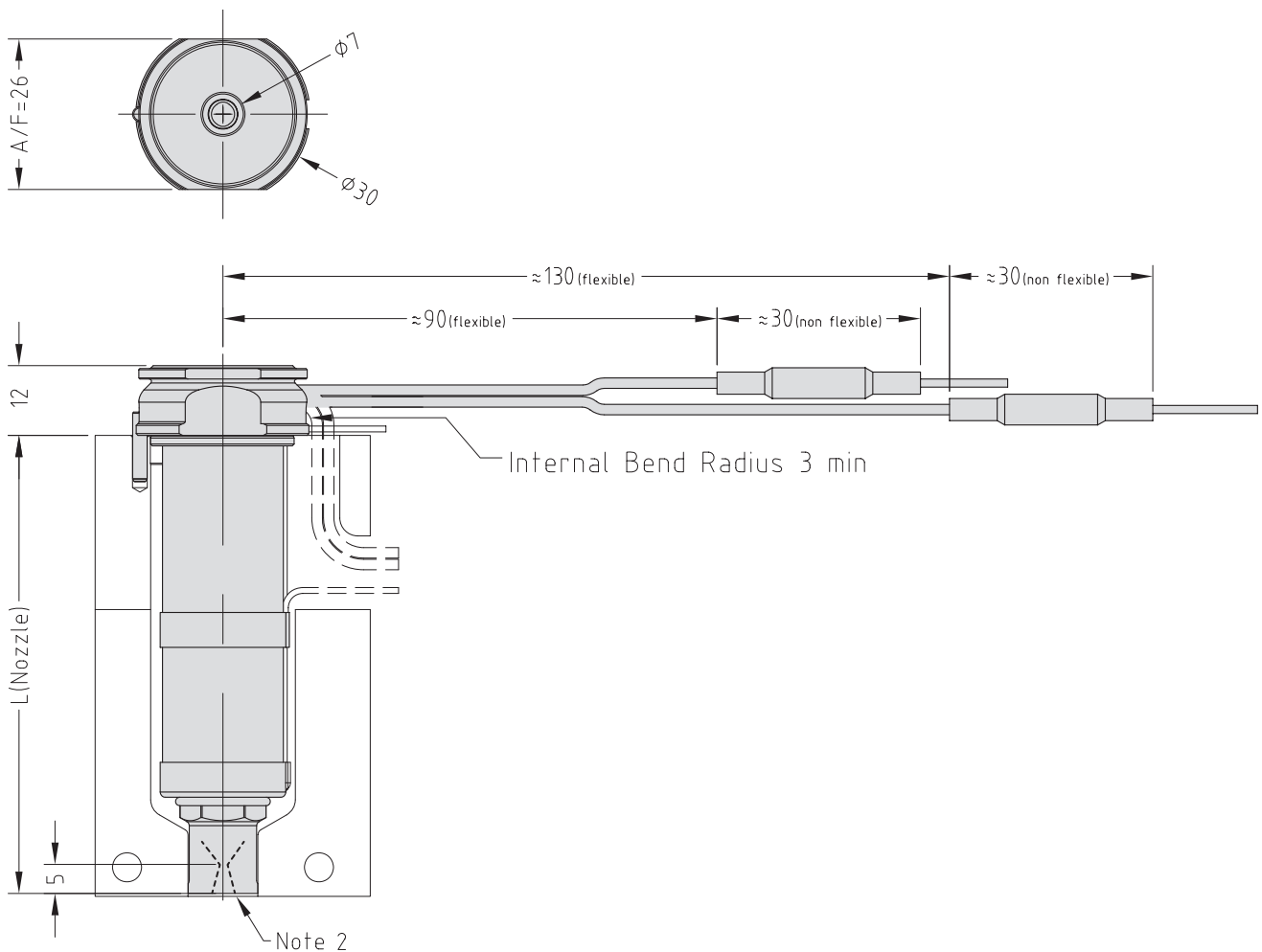
Standard Gate Diameters		
H1	1.0mm	1.4mm
H3	1.0mm	1.4mm
H5	1.7mm	

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter

(Order example: MXTSN16075F1G1H1-10)

Nozzle Dimensions



Body, Tip and Nut Material Grade Availability

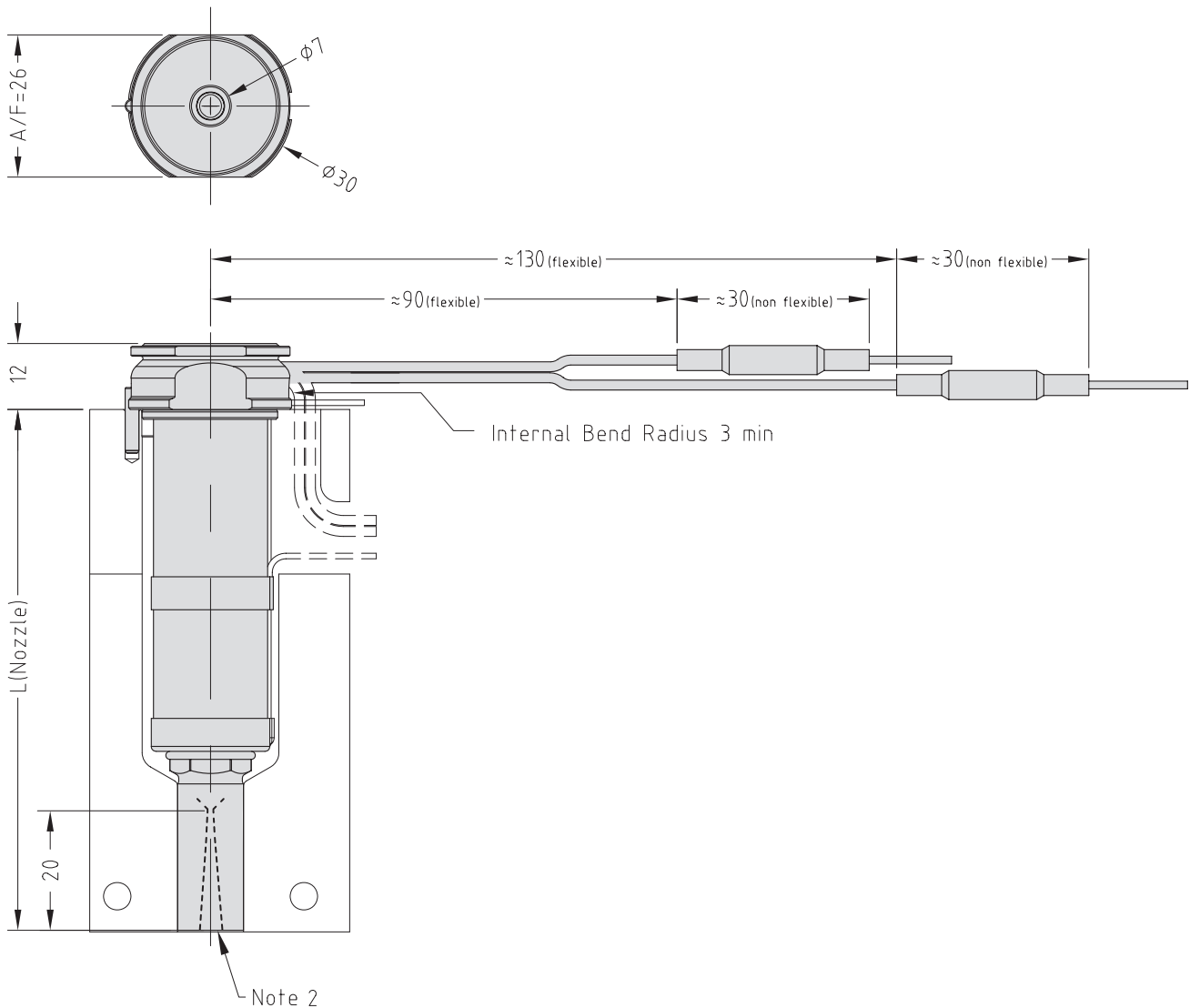
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSX	✓	✓	✓
MXISX	✓	✓	✓
MXOSX	✓	✗	✓

Standard Gate Diameters	
H1	1.0mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSX16075F1G1H1-10)

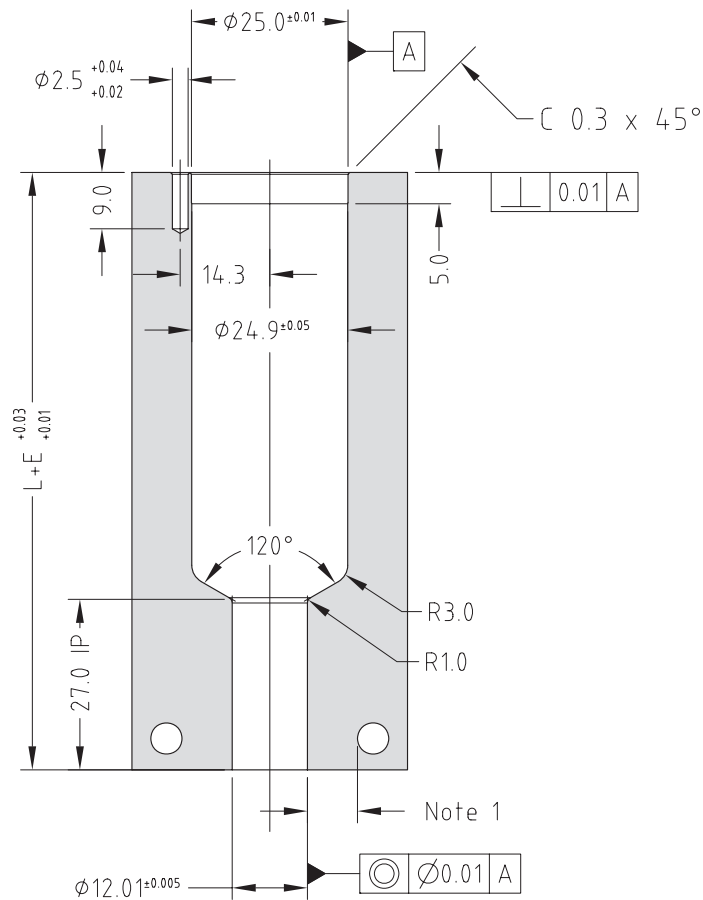
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo 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
MXTSX16085	MXISX16085	MXOSX16085	105.2	0.28	0.35
MXTSX16095	MXISX16095	MXOSX16095	115.2	0.30	0.38
MXTSX16105	MXISX16105	MXOSX16105	125.2	0.33	0.41
MXTSX16115	MXISX16115	MXOSX16115	135.2	0.36	0.45
MXTSX16130	MXISX16130	MXOSX16130	150.2	0.40	0.50
MXTSX16145	MXISX16145	MXOSX16145	165.2	0.44	0.55
MXTSX16160	MXISX16160	MXOSX16160	180.2	0.48	0.59
MXTSX16175	MXISX16175	MXOSX16175	195.2	0.52	0.64

Nozzle Fitment and Gate Dimensions

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



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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

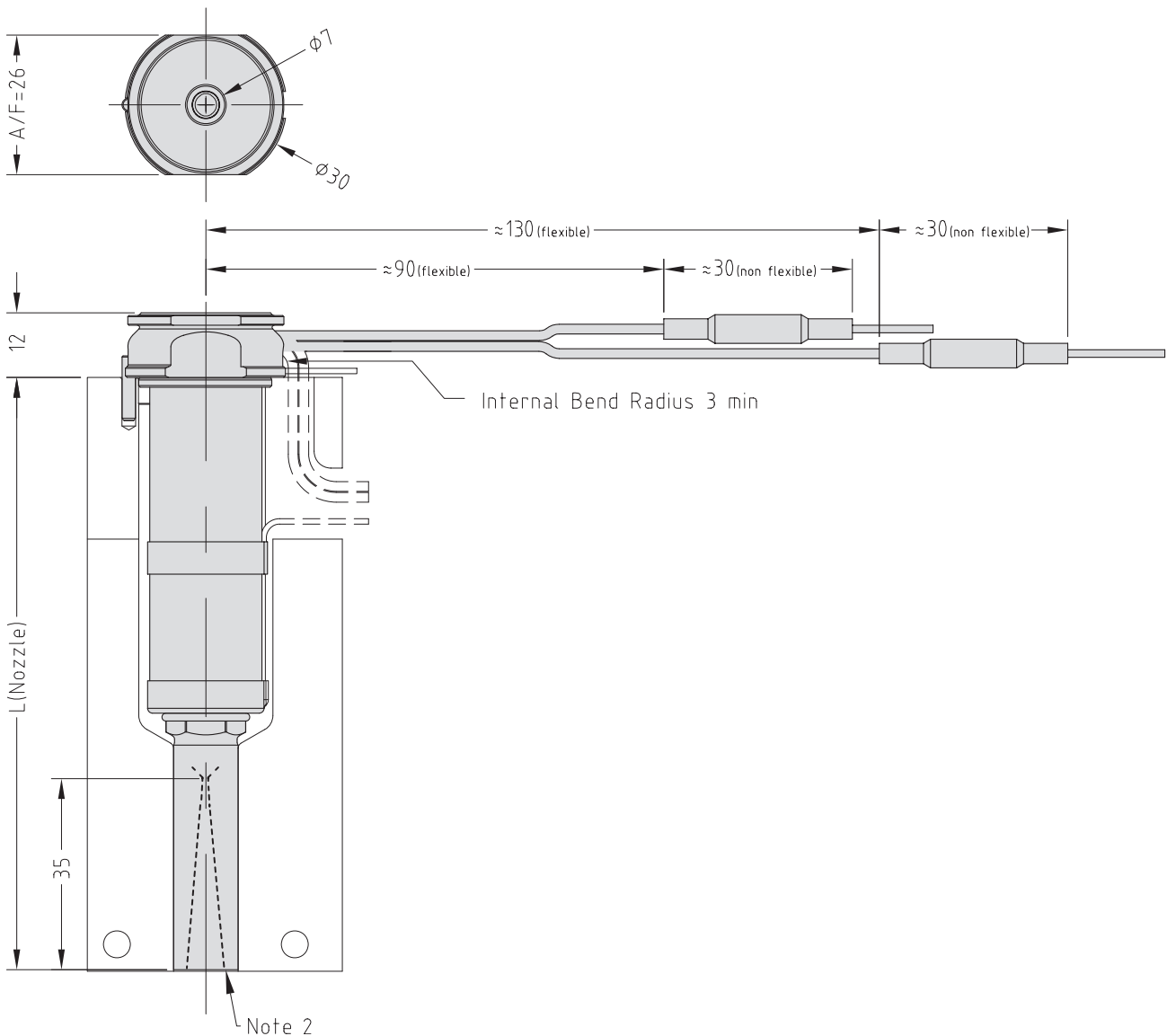
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSL	✓	✓	✓
MXISL	✓	✓	✓
MXOSL	✓	✗	✓

Standard Gate Diameters	
H1	1.0mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSL16075F1G1H1-10)

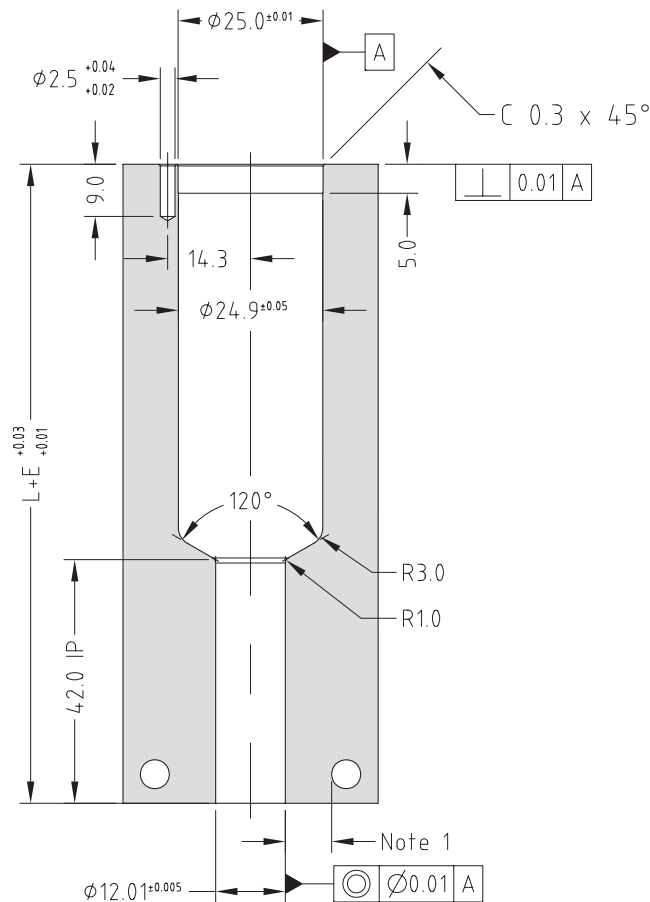
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo 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
MXTSL16085	MXISL16085	MXOSL16085	120.2	0.32	0.40
MXTSL16095	MXISL16095	MXOSL16095	130.2	0.34	0.43
MXTSL16105	MXISL16105	MXOSL16105	140.2	0.37	0.46
MXTSL16115	MXISL16115	MXOSL16115	150.2	0.40	0.50
MXTSL16130	MXISL16130	MXOSL16130	165.2	0.44	0.55
MXTSL16145	MXISL16145	MXOSL16145	180.2	0.48	0.59
MXTSL16160	MXISL16160	MXOSL16160	195.2	0.52	0.64
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

- 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 (σ_y) of nozzle plate 800MPa.

MX YCN Nut Thermal Gate 16 Series

Nozzle Assembly Order Code for MX YCN Nut Thermal Gate 16 Series

NOZZLE RANGE	YCN NUT	NOZZLE SERIES	NOZZLE LENGTH	BODY GRADE	NUT GRADE	GATE PROFILE	POLYMER CLASSIFICATION	GATE DIAMETER
MX	YCN	16	175	F1	H3	P4	F	-20
			045 055 065 075 085 095 105 115 130 145 160 175	F1 F3	H3	P7 P4 N3	U (Unfilled) F (Filled) SP	EXAMPLE OF A FINAL ORDER CODE

* See page 26 in the system selection guide for an explanation on gate profiles

Body & Nut Grade Availability

Nozzle Code	F1H3	F3H3
MXYCN	✓	✓

Refer to the system selection guide page 26 for further explanation.

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Profile
(Order example: MXYCN16075F1H3P7U-14)

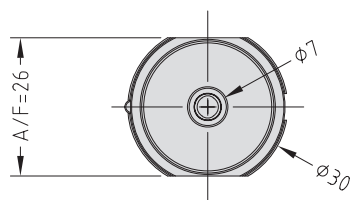
YCN Gate Profile Availability

Profile	Unfilled	Filled	Special
P7	P7U-14	P7F-18	P7-SP
P4	P4U-15	P4F-20	P4-SP
N3	N3U-15	N3F-20	N3-SP

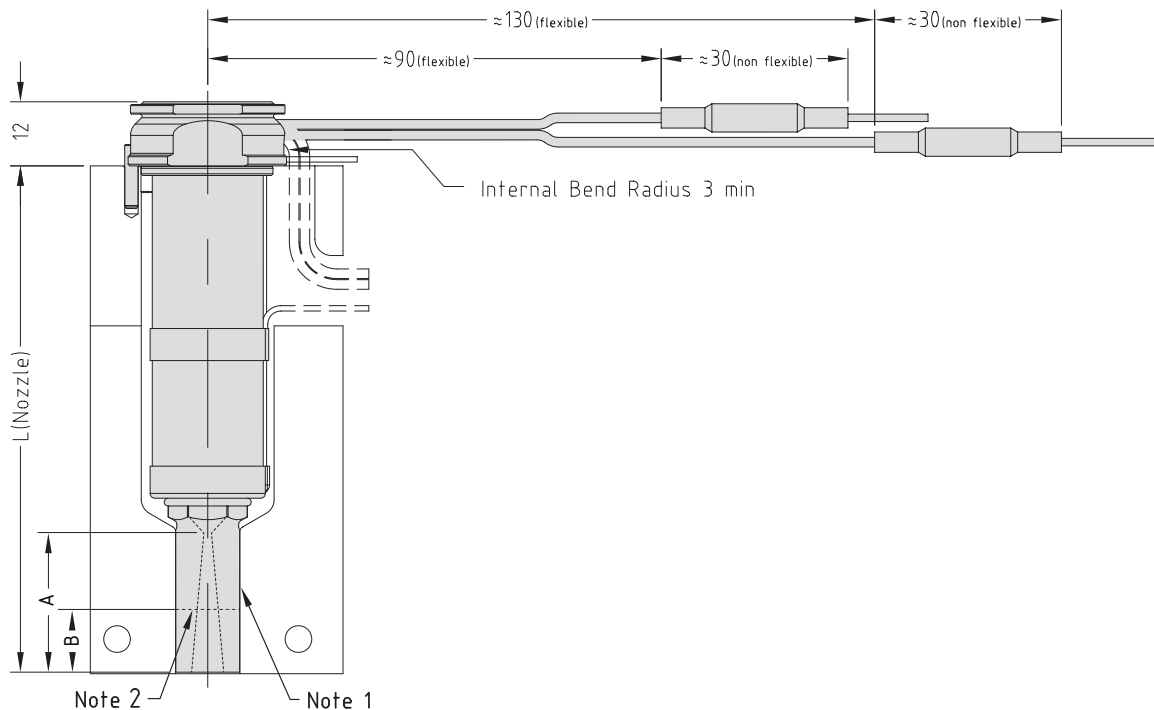
Standard Gate Diameters

Nut Grade	P7U-14	P7F-18	P4U-15	P4F-20	N3U-15	N3F-20
H3	1.4mm	1.8mm	1.5mm	2.0mm	1.5mm	2.0mm

Nozzle Dimensions



Profile	Gate Position A	Cut Length B
P7	26	Contact Mastip
P4	29	
N3	36	



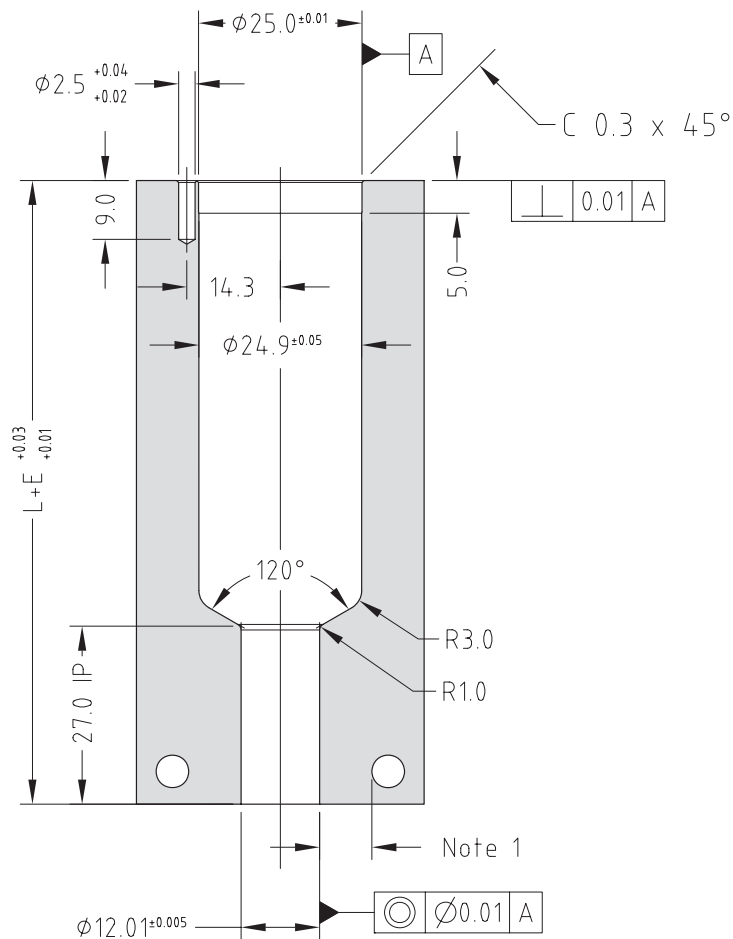
Note

1. Modify the contact area of the YCN nut to suit the application.
 2. Contact Mastip to reduce the length (B) of the YCN nut.
- Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.

YCN Open Nut Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXYCN16045	65.2	0.17	0.22
MXYCN16055	75.2	0.20	0.25
MXYCN16065	85.2	0.22	0.28
MXYCN16075	95.2	0.25	0.31
MXYCN16085	105.2	0.28	0.35
MXYCN16095	115.2	0.30	0.38
MXYCN16105	125.2	0.33	0.41
MXYCN16115	135.2	0.36	0.45
MXYCN16130	150.2	0.40	0.50
MXYCN16145	165.2	0.44	0.55
MXYCN16160	180.2	0.48	0.59
MXYCN16175	195.2	0.52	0.64

Nozzle Fitment and Gate Dimensions

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

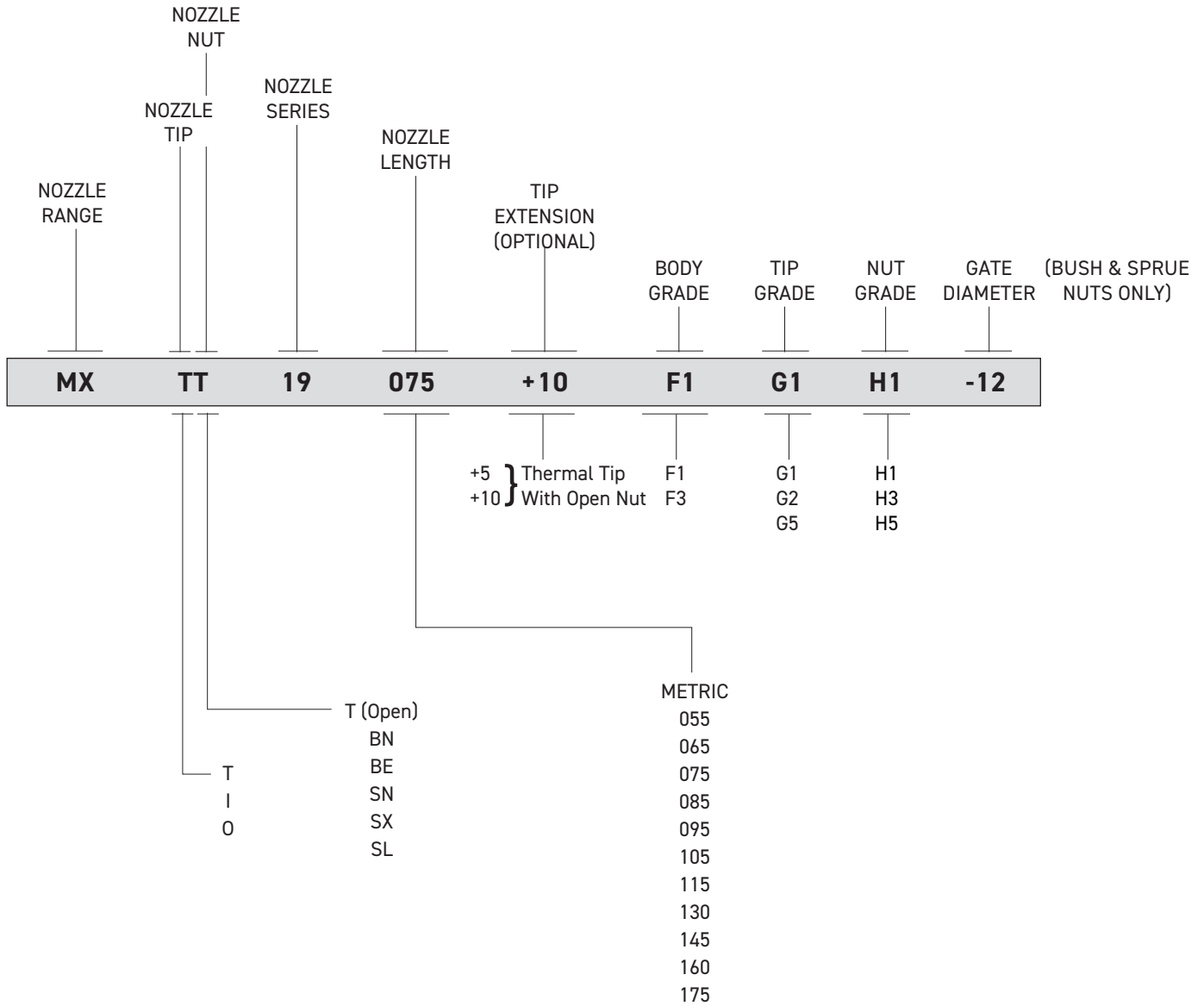


Note

- 1. Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.
- * Minimum steel strength (σ_y) of hot runner plates 800MPa.

MX Thermal Gate 19 Series

Nozzle Assembly Order Code for MX Thermal Gate 19 Series



* See page 10, 14 & 17 in the system selection guide for an explanation on this grades

Body, Tip & Nut Grade Availability

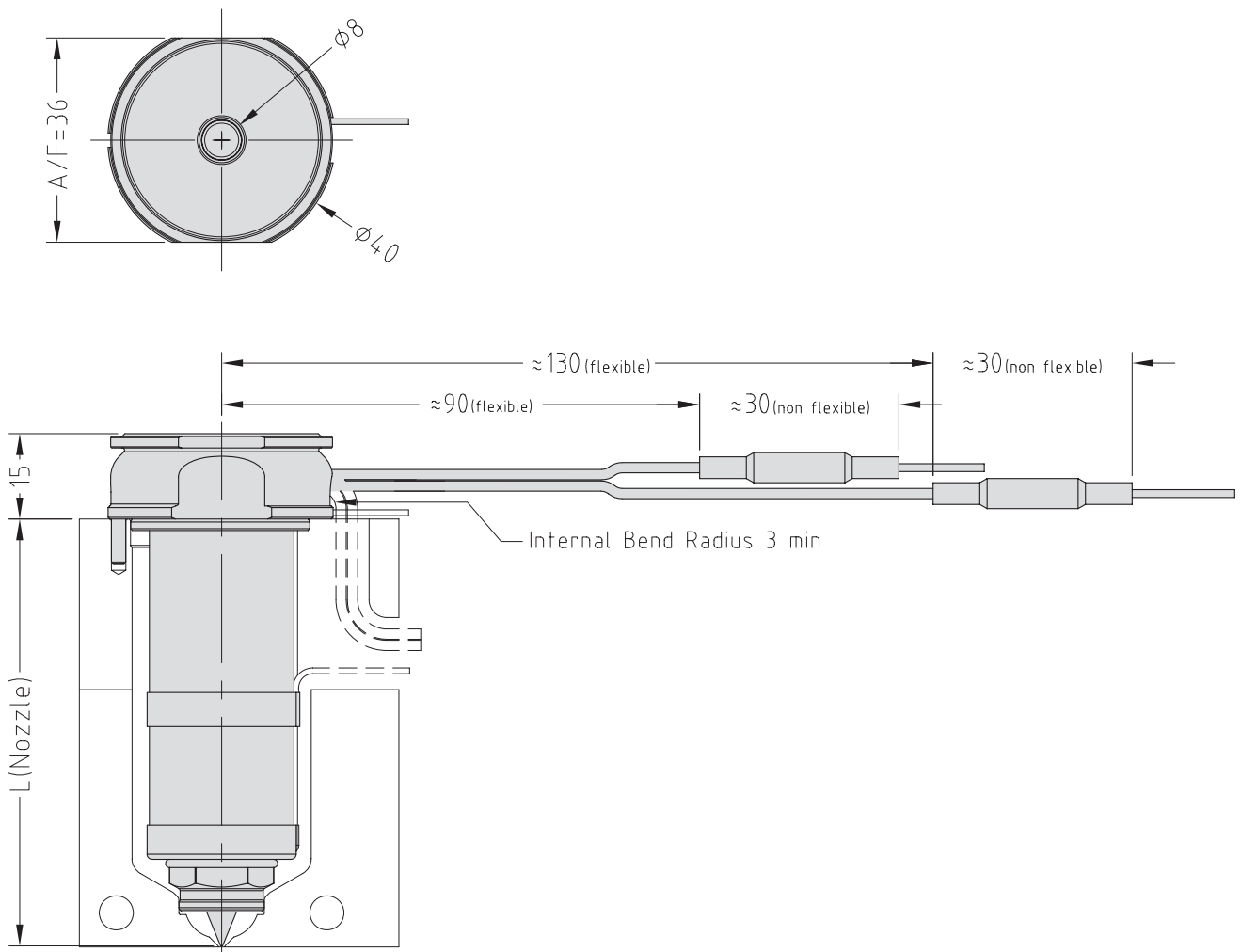
Nozzle Code	Grade					
	F1G1H1	F1G2H1	F1G5H1	F3G1H3	F3G2H3	F3G5H3
MXTT	✓	✓	✓	✓	✓	✓
MXIT	✓	✓	✓	✓	✓	✓
MXOT	✓	✗	✓	✓	✗	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT19075F1G1H1)

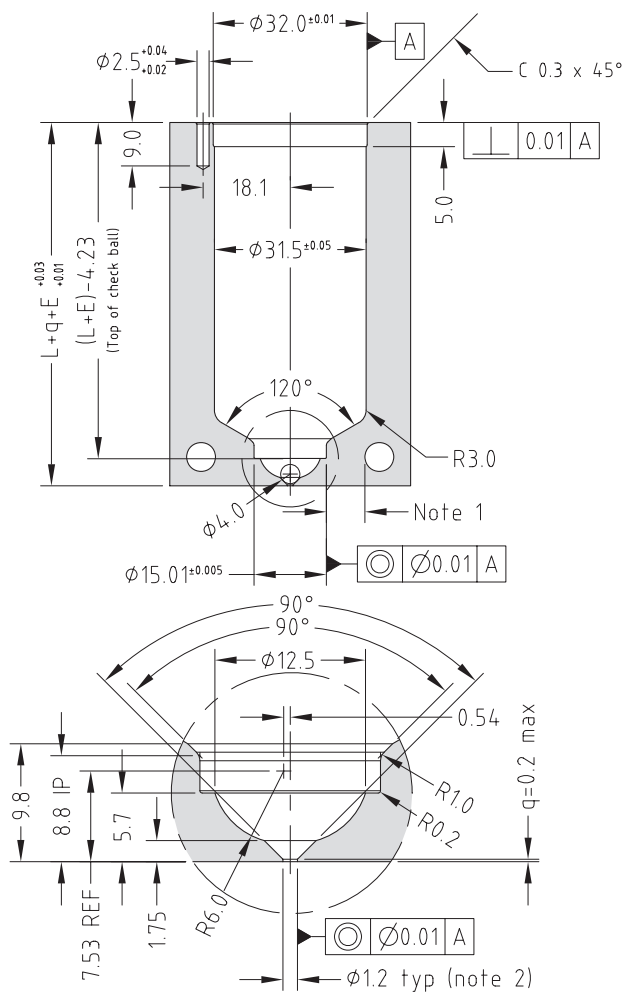
Nozzle Dimensions



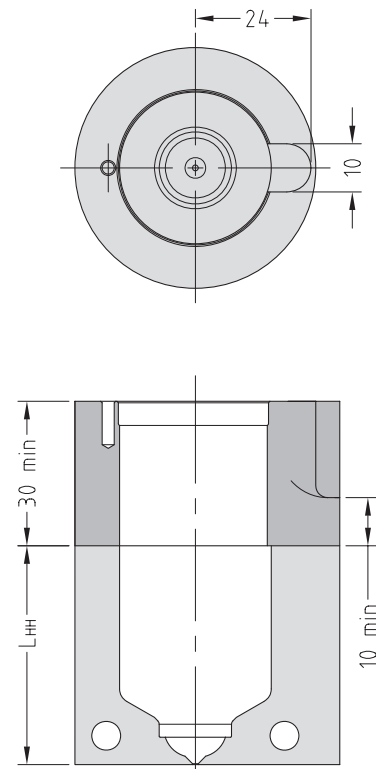
Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT19055	MXIT19055	MXOT19055	55	0.15	0.18
MXTT19065	MXIT19065	MXOT19065	65	0.17	0.21
MXTT19075	MXIT19075	MXOT19075	75	0.20	0.25
MXTT19085	MXIT19085	MXOT19085	85	0.22	0.28
MXTT19095	MXIT19095	MXOT19095	95	0.25	0.31
MXTT19105	MXIT19105	MXOT19105	105	0.28	0.35
MXTT19115	MXIT19115	MXOT19115	115	0.30	0.38
MXTT19130	MXIT19130	MXOT19130	130	0.34	0.43
MXTT19145	MXIT19145	MXOT19145	145	0.38	0.48
MXTT19160	MXIT19160	MXOT19160	160	0.42	0.53
MXTT19175	MXIT19175	MXOT19175	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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Grade Availability

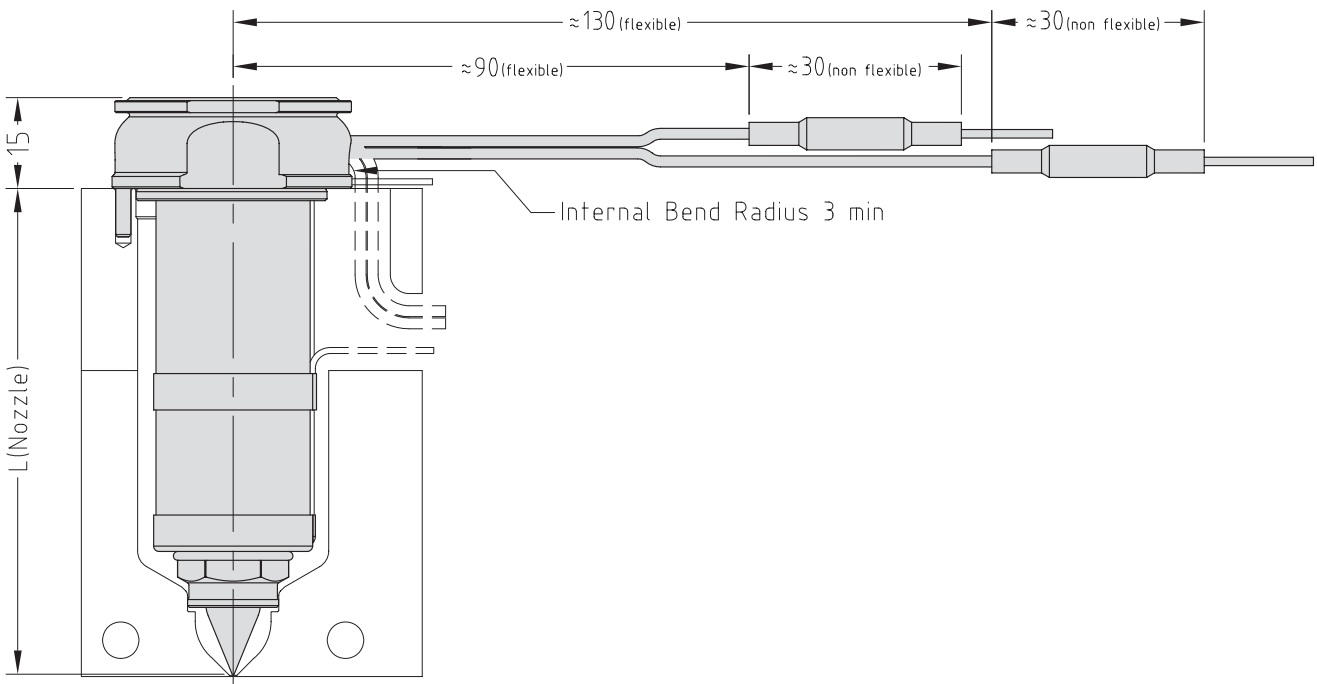
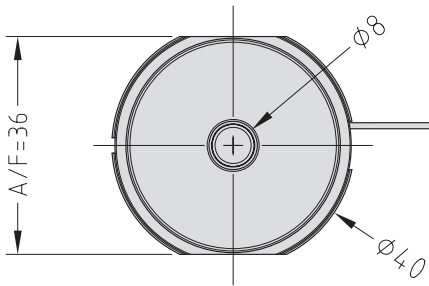
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+5	✓	✓	✓	✓
MXIT+5	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT19075+5F1G1H1)

Nozzle Dimensions

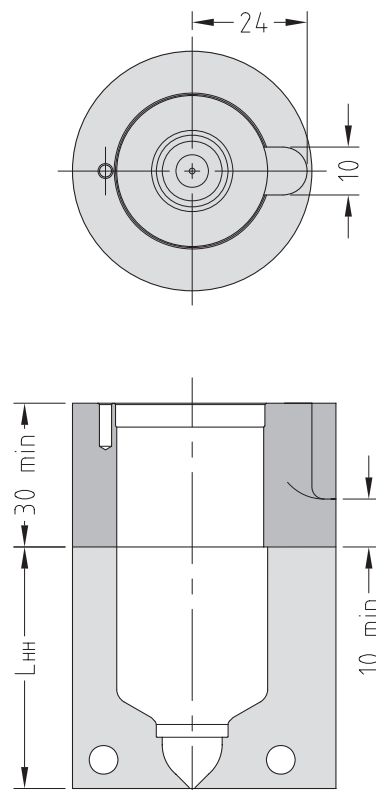
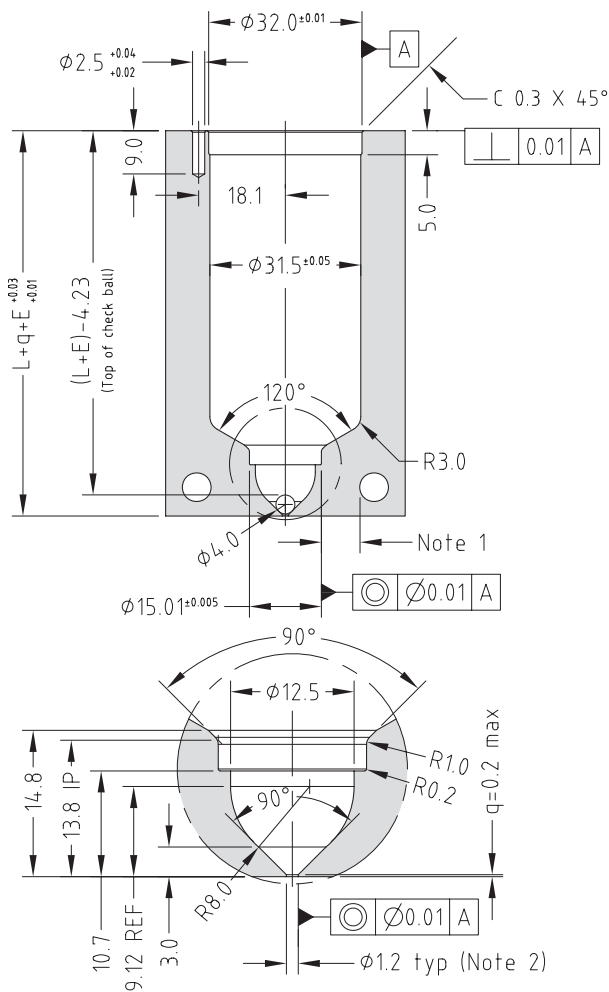


Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTT19055+5	MXIT19055+5	60	0.16	0.20
MXTT19065+5	MXIT19065+5	70	0.18	0.23
MXTT19075+5	MXIT19075+5	80	0.21	0.26
MXTT19085+5	MXIT19085+5	90	0.24	0.30
MXTT19095+5	MXIT19095+5	100	0.26	0.33
MXTT19105+5	MXIT19105+5	110	0.29	0.36
MXTT19115+5	MXIT19115+5	120	0.32	0.40
MXTT19130+5	MXIT19130+5	135	0.36	0.45
MXTT19145+5	MXIT19145+5	150	0.40	0.50
MXTT19160+5	MXIT19160+5	165	0.44	0.54
MXTT19175+5	MXIT19175+5	180	0.48	0.59

Nozzle Fitment and Gate Dimensions

Hot Half Configuration

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



Note

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

Body, Tip & Nut Grade Availability

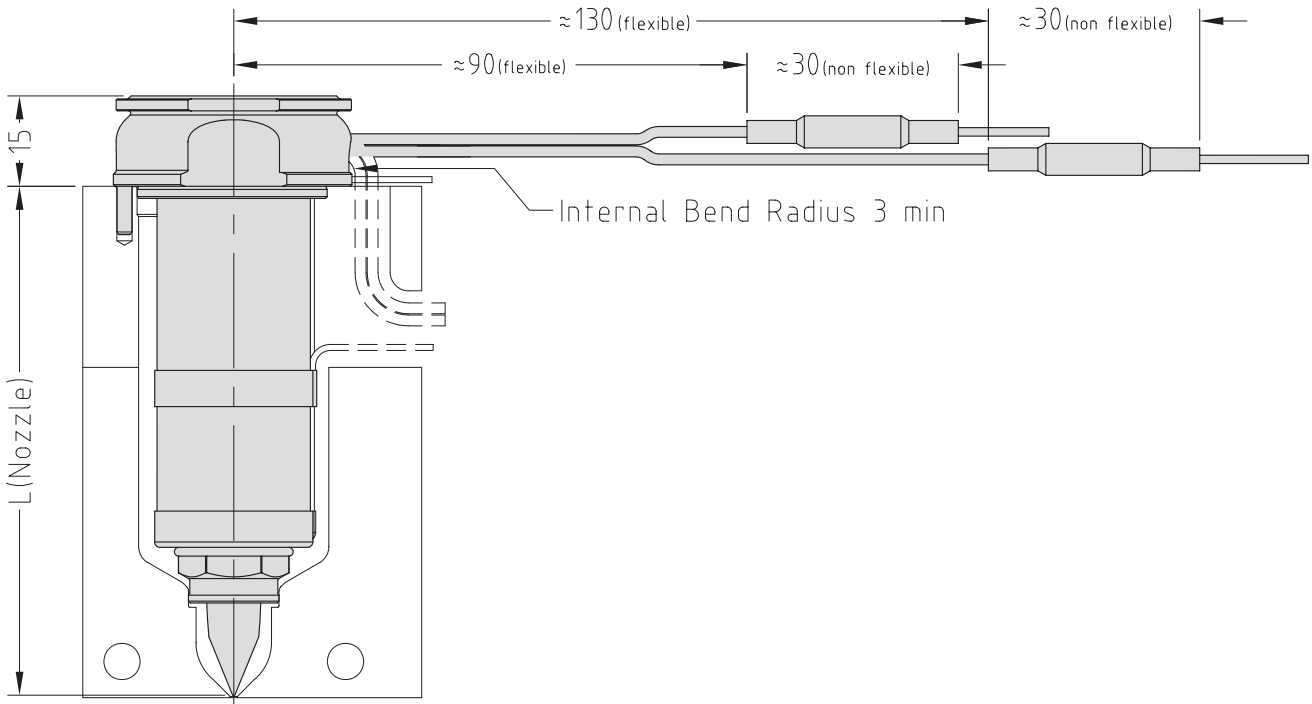
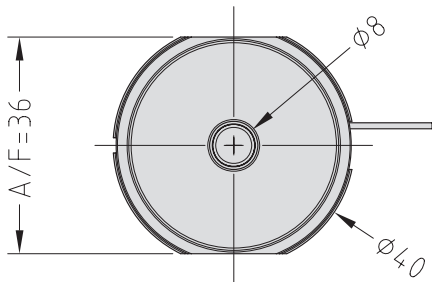
Nozzle Code \ Grade	F1G1H1	F1G2H1	F3G1H3	F3G2H3
MXTT+10	✓	✓	✓	✓
MXIT+10	✓	✓	✓	✓

To order a nozzle assembly:

Provide the Nozzle Code + Grade

(Order example: MXTT19075+10F1G1H1)

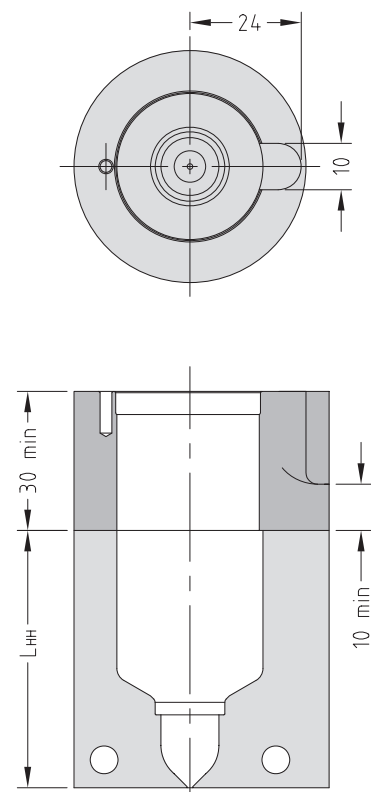
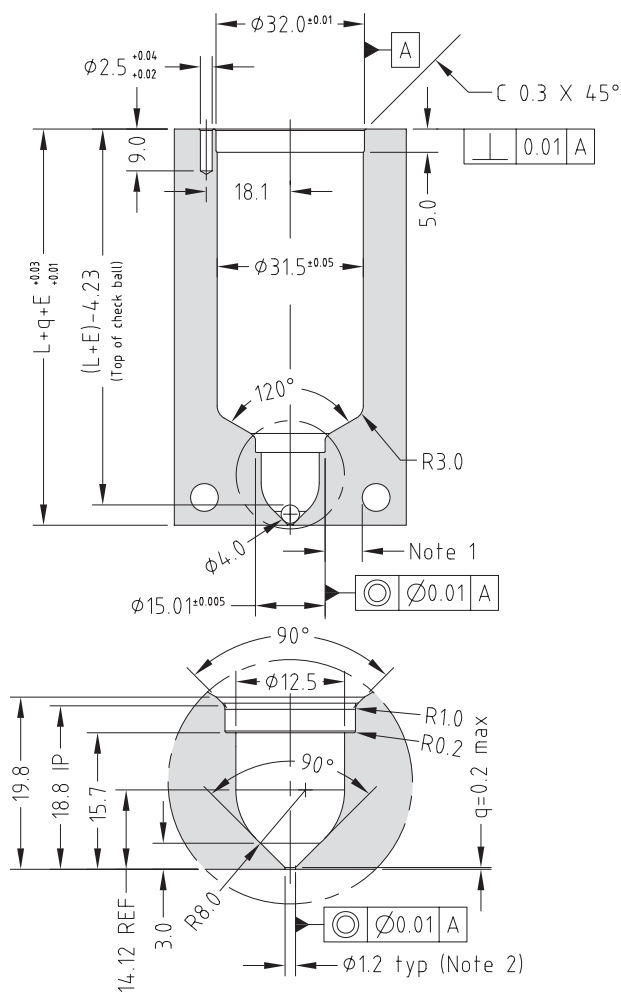
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	L	E@ΔT =200C	E@ΔT =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
MXTT19085+10	MXIT19085+10	95	0.25	0.31
MXTT19095+10	MXIT19095+10	105	0.28	0.35
MXTT19105+10	MXIT19105+10	115	0.30	0.38
MXTT19115+10	MXIT19115+10	125	0.33	0.41
MXTT19130+10	MXIT19130+10	140	0.37	0.46
MXTT19145+10	MXIT19145+10	155	0.41	0.51
MXTT19160+10	MXIT19160+10	170	0.45	0.56
MXTT19175+10	MXIT19175+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 Technical Specifications.
 - Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.
- Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip & Nut Material Grade Availability

Grade \ Nozzle Code	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
19 Series Bush Nut								
MXTBN	✓	✓	✓	✓	✓	✓	✓	✓
MXIBN	✓	✓	✓	✓	✓	✓	✓	✓
MXOBN	✓	✗	✓	✓	✓	✗	✓	✓
19 Series Bush Nut Full Contact								
MXTBE	✓	✓	✓	✗	✓	✓	✓	✗
MXIBE	✓	✓	✓	✗	✓	✓	✓	✗
MXOBE	✓	✗	✓	✗	✓	✗	✓	✗

Bush Nut Options

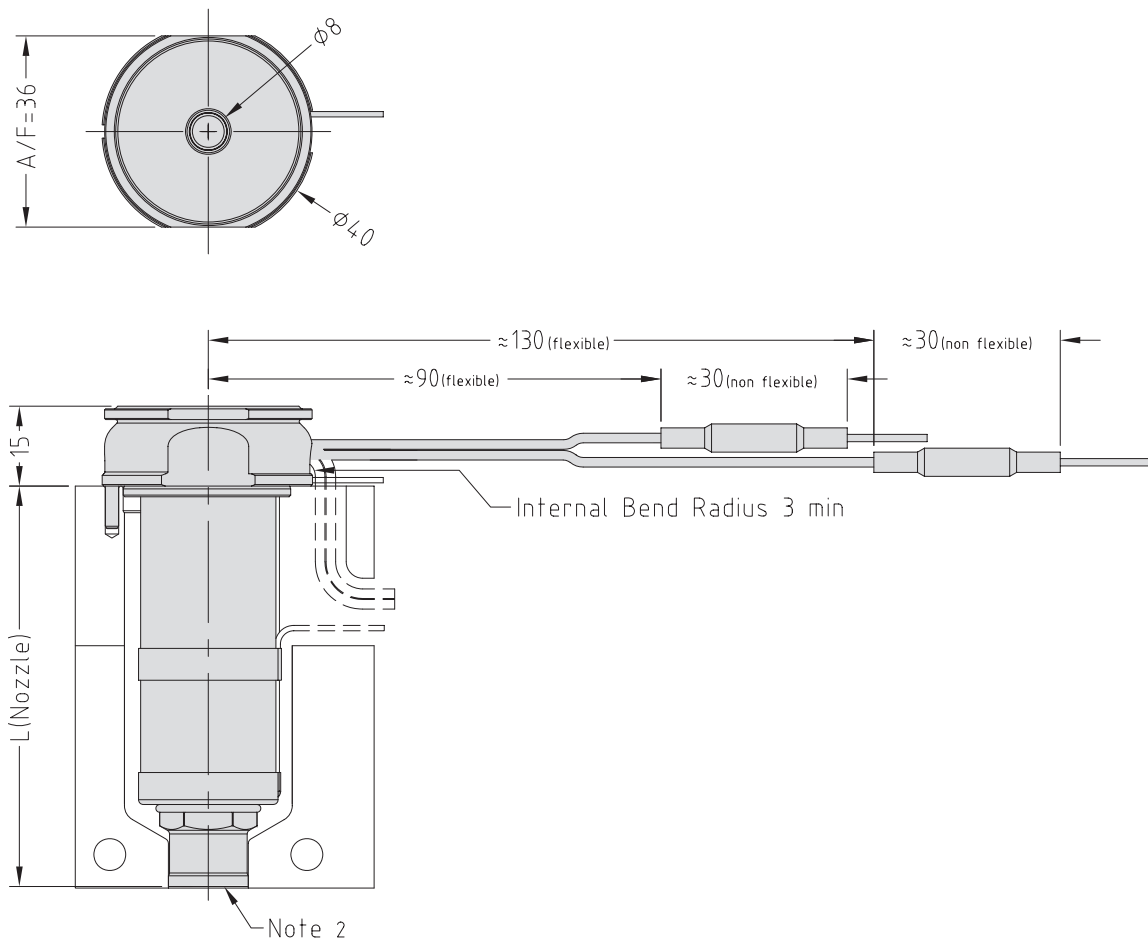
- BN - Standard bush nut
- BE - Full-contact bush nut*

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.

Standard Gate Diameters		
H1	1.2mm	1.4mm
H3	1.2mm	1.4mm
H5	1.7mm	

To order a nozzle assembly:
 Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTBN19075F1G1H1-12)

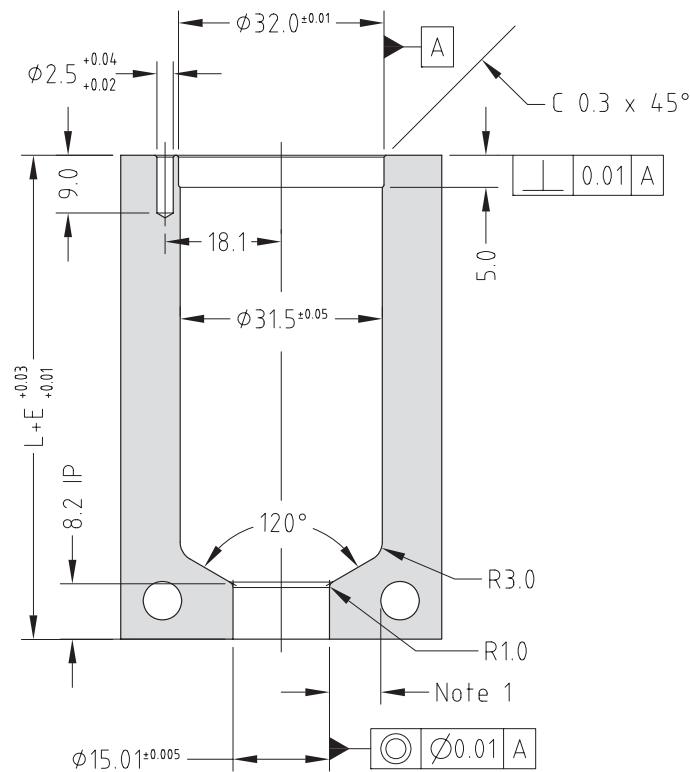
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ ΔT =200C	E@ ΔT =250C
MXTBN19055	MXIBN19055	MXOBN19055	55.2	0.15	0.18
MXTBN19065	MXIBN19065	MXOBN19065	65.2	0.17	0.22
MXTBN19075	MXIBN19075	MXOBN19075	75.2	0.20	0.25
MXTBN19085	MXIBN19085	MXOBN19085	85.2	0.22	0.28
MXTBN19095	MXIBN19095	MXOBN19095	95.2	0.25	0.31
MXTBN19105	MXIBN19105	MXOBN19105	105.2	0.28	0.35
MXTBN19115	MXIBN19115	MXOBN19115	115.2	0.30	0.38
MXTBN19130	MXIBN19130	MXOBN19130	130.2	0.34	0.43
MXTBN19145	MXIBN19145	MXOBN19145	145.2	0.38	0.48
MXTBN19160	MXIBN19160	MXOBN19160	160.2	0.42	0.53
MXTBN19175	MXIBN19175	MXOBN19175	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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

Nozzle Code	Grade	F1G1H1	F1G2H1	F1G5H1	F1G5H5	F3G1H3	F3G2H3	F3G5H3	F3G5H5
	MXTSN		✓	✓	✓	✓	✓	✓	✓
MXISN		✓	✓	✓	✓	✓	✓	✓	✓
MXOSN		✓	✗	✓	✓	✓	✗	✓	✓

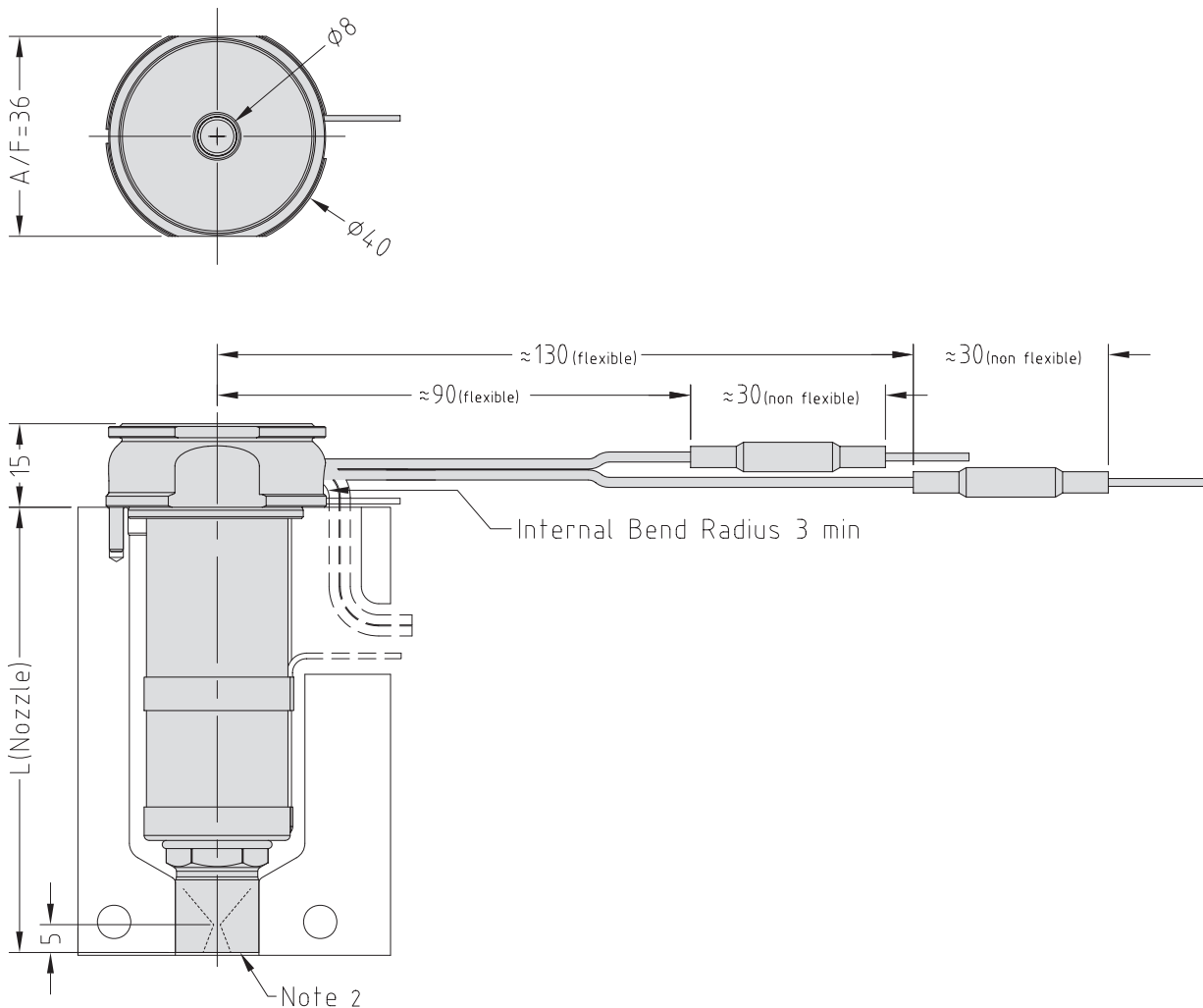
Standard Gate Diameters		
H1	1.2mm	1.6mm
H3	1.2mm	1.6mm
H5	2.0mm	

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter

(Order example: MXTSN19075F1G1H1-12)

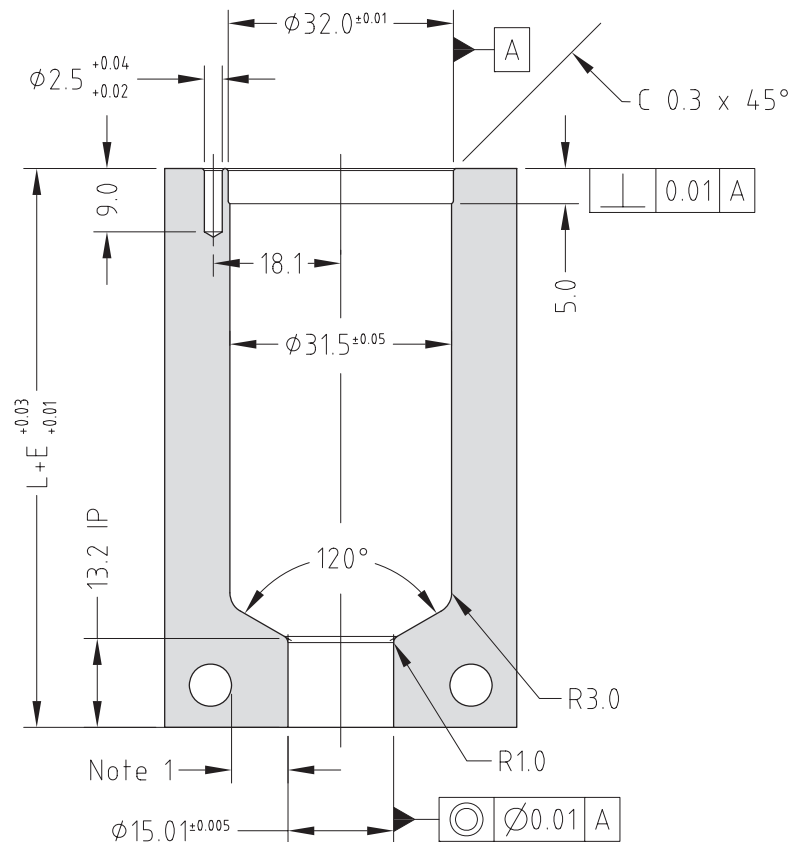
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSN19055	MXISN19055	MXOSN19055	60.2	0.16	0.20
MXTSN19065	MXISN19065	MXOSN19065	70.2	0.19	0.23
MXTSN19075	MXISN19075	MXOSN19075	80.2	0.21	0.26
MXTSN19085	MXISN19085	MXOSN19085	90.2	0.24	0.30
MXTSN19095	MXISN19095	MXOSN19095	100.2	0.26	0.33
MXTSN19105	MXISN19105	MXOSN19105	110.2	0.29	0.36
MXTSN19115	MXISN19115	MXOSN19115	120.2	0.32	0.40
MXTSN19130	MXISN19130	MXOSN19130	135.2	0.36	0.45
MXTSN19145	MXISN19145	MXOSN19145	150.2	0.40	0.50
MXTSN19160	MXISN19160	MXOSN19160	165.2	0.44	0.55
MXTSN19175	MXISN19175	MXOSN19175	180.2	0.48	0.59

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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

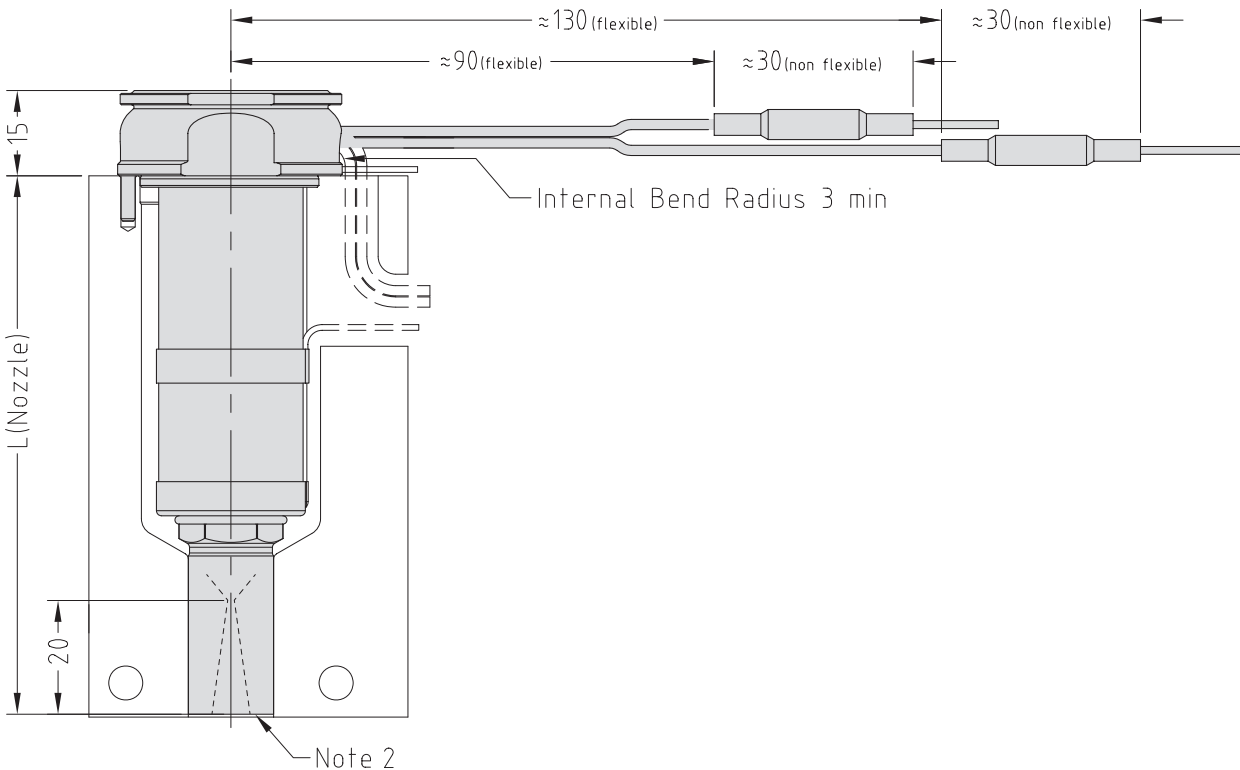
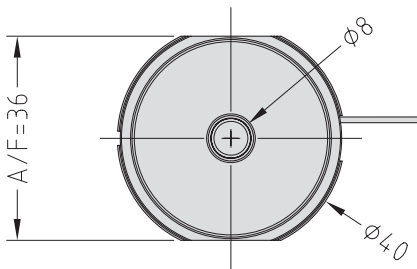
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSX	✓	✓	✓
MXISX	✓	✓	✓
MXOSX	✓	✗	✓

Standard Gate Diameters	
H1	1.2mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSX19075F1G1H1-12)

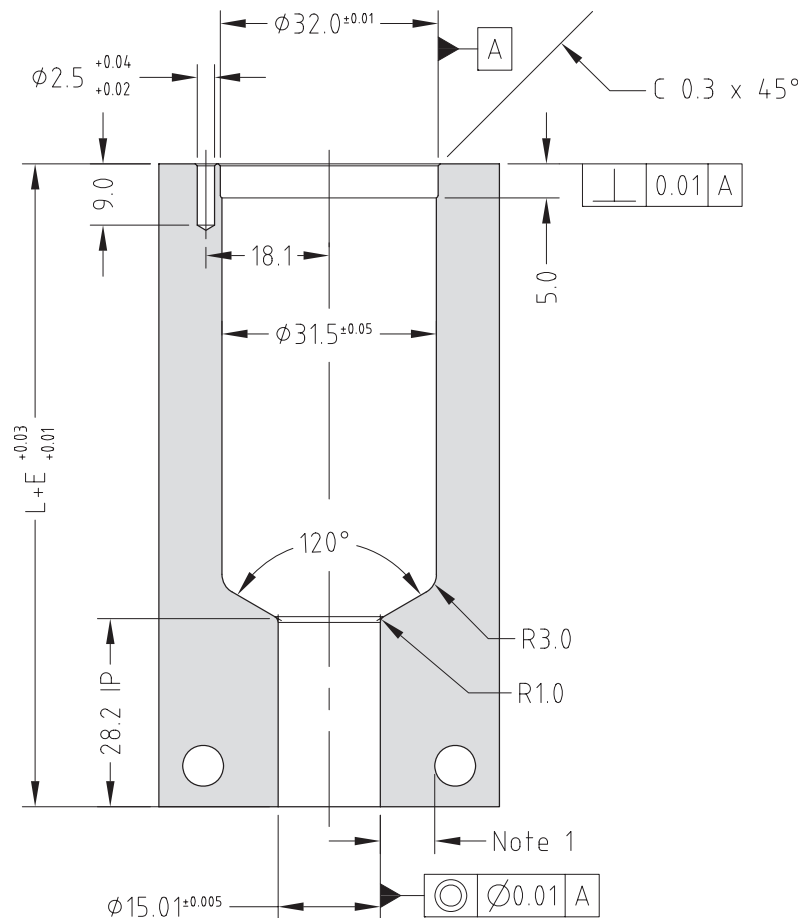
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo Nozzle Code	Open Tip Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXTSX19055	MXISX19055	MXOSX19055	75.2	0.20	0.25
MXTSX19065	MXISX19065	MXOSX19065	85.2	0.22	0.28
MXTSX19075	MXISX19075	MXOSX19075	95.2	0.25	0.31
MXTSX19085	MXISX19085	MXOSX19085	105.2	0.28	0.35
MXTSX19095	MXISX19095	MXOSX19095	115.2	0.30	0.38
MXTSX19105	MXISX19105	MXOSX19105	125.2	0.33	0.41
MXTSX19115	MXISX19115	MXOSX19115	135.2	0.36	0.45
MXTSX19130	MXISX19130	MXOSX19130	150.2	0.40	0.50
MXTSX19145	MXISX19145	MXOSX19145	165.2	0.44	0.55
MXTSX19160	MXISX19160	MXOSX19160	180.2	0.48	0.59
MXTSX19175	MXISX19175	MXOSX19175	195.2	0.52	0.64

Nozzle Fitment and Gate Dimensions

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



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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

Body, Tip and Nut Material Grade Availability

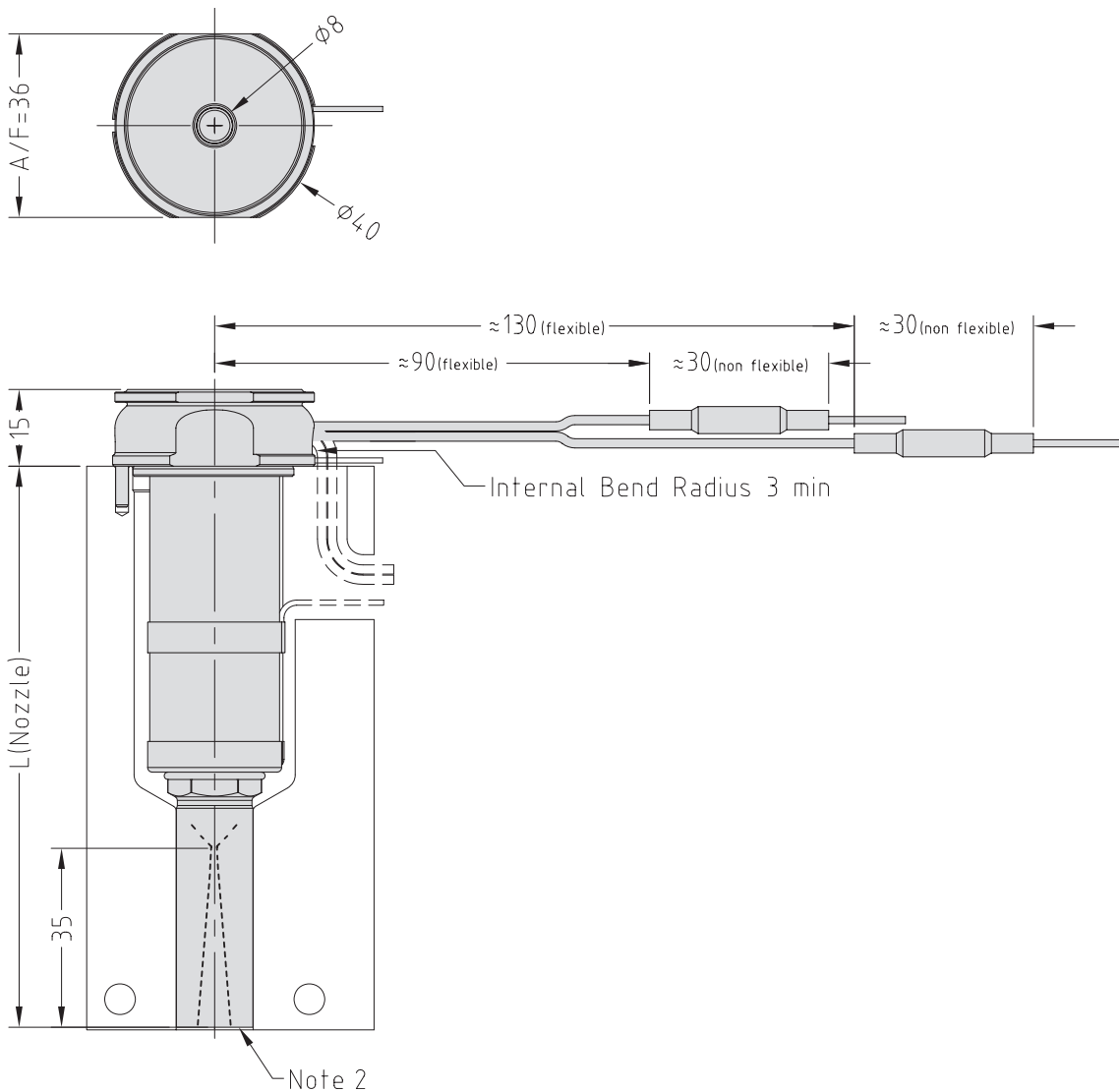
Nozzle Code	Grade		
	F1G1H1	F1G2H1	F1G5H1
MXTSL	✓	✓	✓
MXISL	✓	✓	✓
MXOSL	✓	✗	✓

Standard Gate Diameters	
H1	1.2mm

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Diameter
 (Order example: MXTSL19075F1G1H1-12)

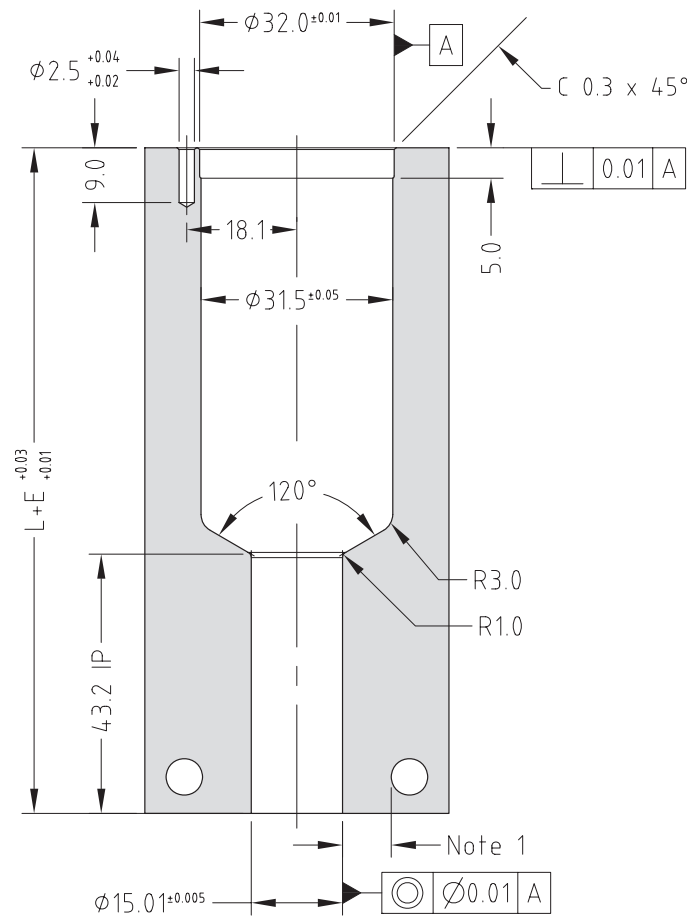
Nozzle Dimensions



Multi-Hole Torpedo Nozzle Code	One-Hole Torpedo 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
MXTSL19085	MXISL19085	MXOSL19085	120.2	0.32	0.40
MXTSL19095	MXISL19095	MXOSL19095	130.2	0.34	0.43
MXTSL19105	MXISL19105	MXOSL19105	140.2	0.37	0.46
MXTSL19115	MXISL19115	MXOSL19115	150.2	0.40	0.50
MXTSL19130	MXISL19130	MXOSL19130	165.2	0.44	0.55
MXTSL19145	MXISL19145	MXOSL19145	180.2	0.48	0.59
MXTSL19160	MXISL19160	MXOSL19160	195.2	0.52	0.64
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. → See Gate Modifications in the Technical Specifications.
- * Minimum strength (σ_y) of nozzle plate 800MPa.

MX YCN Nut Thermal Gate 19 Series

Nozzle Assembly Order Code for MX YCN Nut Thermal Gate 19 Series

NOZZLE RANGE	YCN NUT	NOZZLE SERIES	NOZZLE LENGTH	BODY GRADE	NUT GRADE	GATE PROFILE	POLYMER CLASSIFICATION	GATE DIAMETER
MX	YCN	19	175	F1	H3	P4	F	-25
			055 065 075 085 095 105 115 130 145 160 175	F1 F3	H3	P7 P4 N3	U (Unfilled) F (Filled) SP	EXAMPLE OF A FINAL ORDER CODE

* See page 26 in the system selection guide for an explanation on gate profiles

Body & Nut Grade Availability

Nozzle Code	F1H3	F3H3
MXYCN	✓	✓

Refer to system selection guide page 26 for further explanation.

To order a nozzle assembly:

Provide the Nozzle Code + Grade + Gate Profile
(Order example: MXYCN19075F1H3P7U-18)

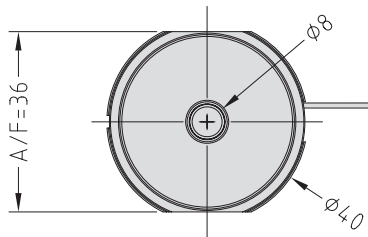
YCN Gate Profile Availability

Profile	Unfilled	Filled	Special
P7	P7U-18	P7F-22	P7-SP
P4	P4U-20	P4F-25	P4-SP
N3	N3U-20	N3F-25	N3-SP

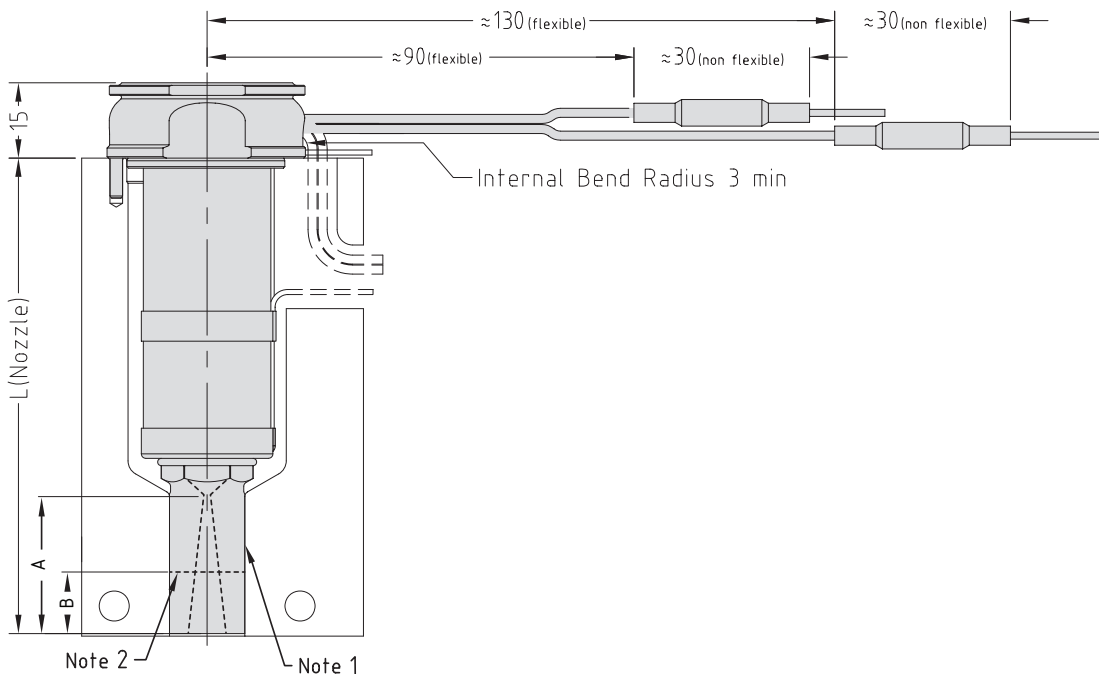
Standard Gate Diameters

Nut Grade	P7U-18	P7F-22	P4U-20	P4F-25	N3U-20	N3F-25
H3	1.8mm	2.2mm	2.0mm	2.5mm	2.0mm	2.5mm

Nozzle Dimensions



Profile	Gate Position A	Cut Length B
P7	29	Contact Mastip
P4	32	
N3	39	



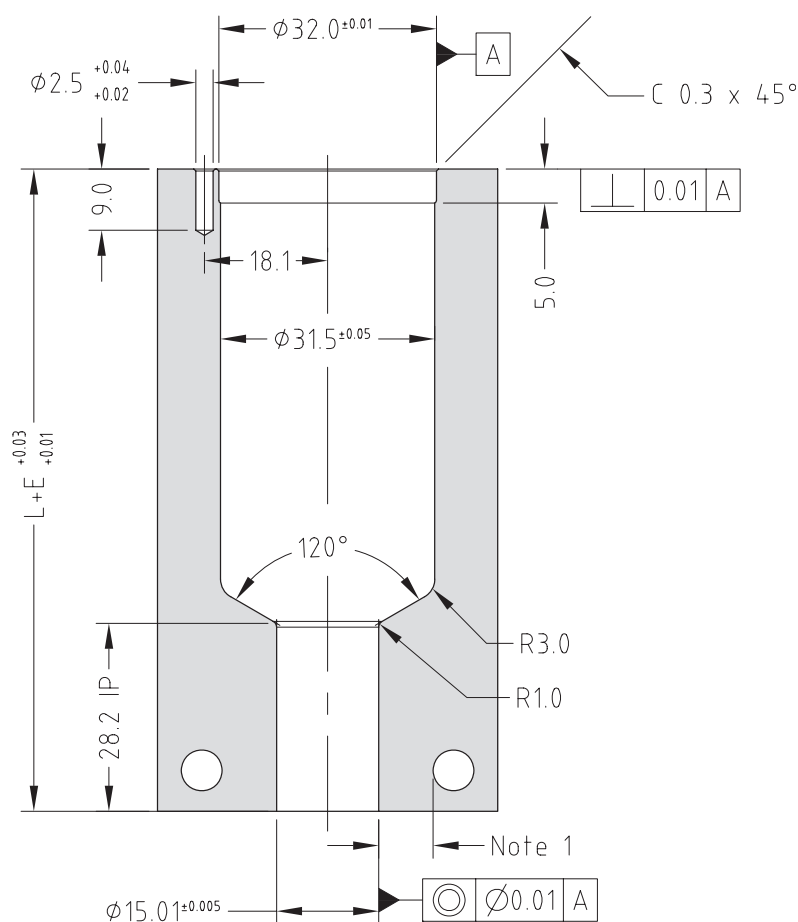
Note

1. Modify the contact area of the YCN nut to suit the application.
 2. Contact Mastip to reduce the length (B) of the YCN nut.
- Modify gate diameter and land to suit the part. → See Gate Modifications in Technical Specifications.

YCN Open Nut Nozzle Code	L	E@ΔT =200C	E@ΔT =250C
MXYCN19055	75.2	0.20	0.25
MXYCN19065	85.2	0.22	0.28
MXYCN19075	95.2	0.25	0.31
MXYCN19085	105.2	0.28	0.35
MXYCN19095	115.2	0.30	0.38
MXYCN19105	125.2	0.33	0.41
MXYCN19115	135.2	0.36	0.45
MXYCN19130	150.2	0.40	0.50
MXYCN19145	165.2	0.44	0.55
MXYCN19160	180.2	0.48	0.59
MXYCN19175	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

1. Gate cooling is critical for correct operation and gate quality. → See Cooling section in Technical Specifications.

* Minimum steel strength (σ_y) of hot runner plates 800MPa.



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