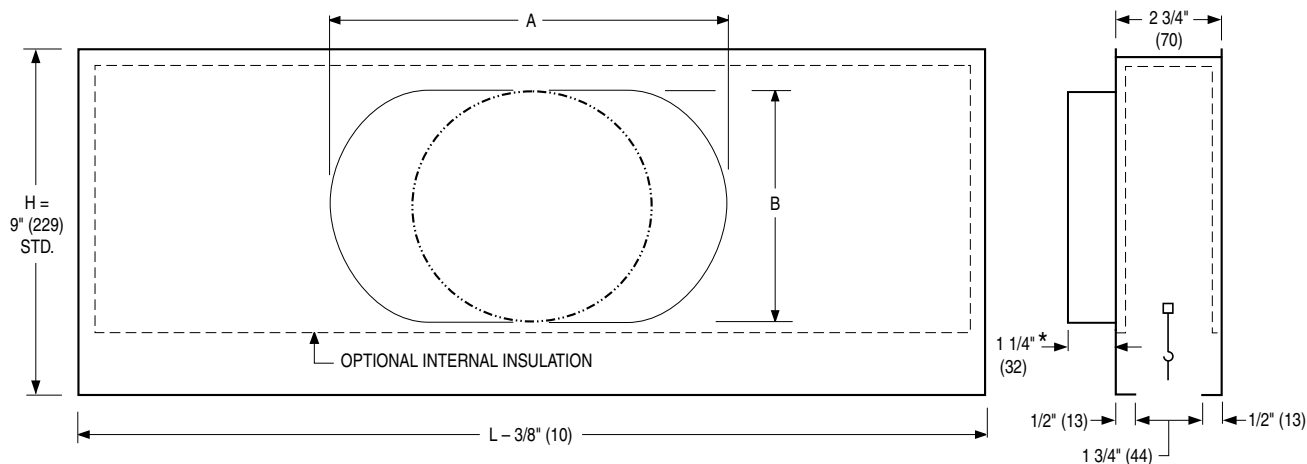




BS SERIES PLENUM SLOT DIFFUSERS

SUPPLY • PREMIUM PERFORMANCE
ADJUSTABLE VERTICAL DISCHARGE
MODEL: 59BS(I)



*4" (102) WITH OPTIONAL ID INLET DAMPER

Nominal Length L		Available Inlet Sizes
Imperial Modules	Metric Modules	
24 (610)	600	6, 8, 10 (152, 203, 254)
36 (914)	900	
48 (1219)	1200	
60 (1524)	1500	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59BS Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59BS design provides premium performance in perimeter curtain wall applications. An extruded aluminum pattern controller provides an adjustable vertical discharge along the wall or glass in perimeter applications.
- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" (610, 914, 1219 and 1524) to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" (152) round, 8" (203) and 10" (254) flat oval.
- Plenum is corrosion resistant steel.
- Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- ☐ Internal Insulation. Model 59BSI
 - ☐ FGI 1/4" (6) Coated Fiberglass (default)
 - ☐ FFI 3/8" (10) Fiber-Free Foam
- ☐ ID Inlet Damper
- ☐ PF Plaster Frame

- Supplementary T-Bars
 - ☐ T1 One (inlet side)
 - ☐ T0 One (opposite inlet side)
 - ☐ T2 Two (Both sides)
- Mounting Clips
 - ☐ M1 One side (2 opposite inlet side)
 - ☐ M2 Both sides (4)
- Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
 - ☐ FNLA 1 3/4" (44)
 - ☐ FNLC 1 5/8" (41)
 - ☐ FNLD 1 25/32" (45)
- ☐ EQT Earthquake Tabs
- ☐ EC 3" (76) Extended inlet collar w/bead
- Non-standard Plenum Height
 - ☐ H7 7" (178) high
 - ☐ H11 11" (279) high
- ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
- ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

5900

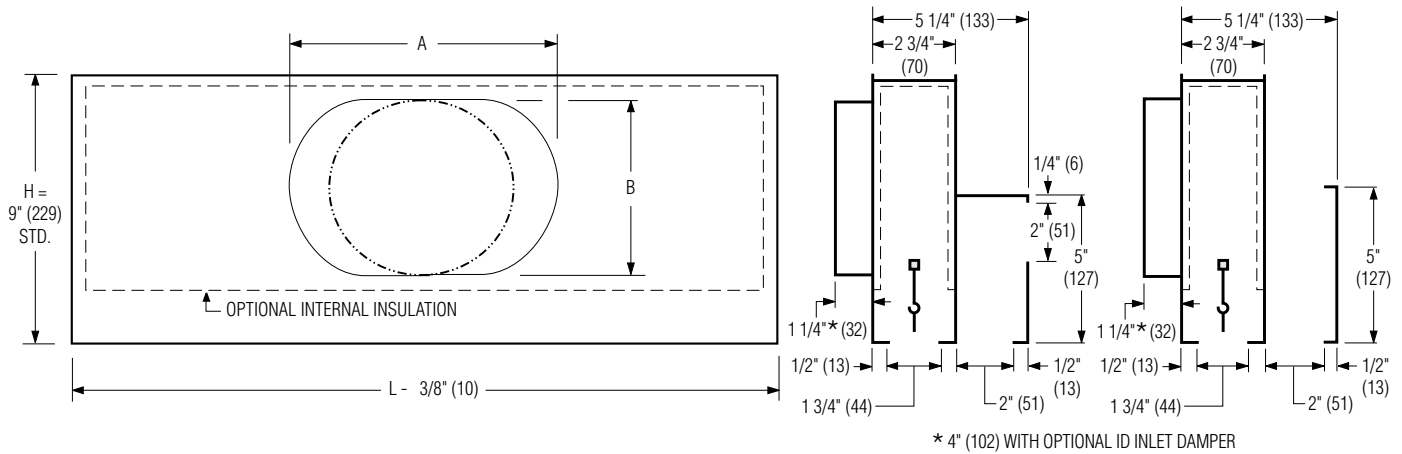
5 - 11 - 09

59BS



BS SERIES PLENUM SLOT DIFFUSERS

SUPPLY/RETURN • PREMIUM PERFORMANCE
ADJUSTABLE VERTICAL DISCHARGE
MODEL: 59BSR(I)



Nominal Length L		Available Inlet Sizes
Imperial Modules	Metric Modules	
24 (610)	600	6, 8, 10 (152, 203, 254)
36 (914)	900	
48 (1219)	1200	
60 (1524)	1500	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59BSR Supply/Return Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59BSR design provides premium performance in perimeter curtain wall applications. An extruded aluminum pattern controller provides an adjustable vertical discharge along the wall or glass in perimeter applications.
An integral return air section returns room air into the ceiling plenum, with minimal short-circuiting of supply air. Standard (SR) side inlet return section also acts as a light shield and prevents see through.
- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" (610, 914, 1219 and 1524) to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" (152) round, 8" (203) and 10" (254) flat oval.
- Plenum is corrosion resistant steel.
- Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- ☐ Internal Insulation. Model 59BSRI
 - ☐ FGI 1/4" (6) Coated Fiberglass (default)
 - ☐ FFI 3/8" (10) Fiber-Free Foam
- ☐ ID Inlet Damper
- ☐ PF Plaster Frame

5. Supplementary T-Bars

- ☐ T1 One (inlet side)
- ☐ T0 One (opposite inlet side)
- ☐ T2 Two (Both sides)

6. Mounting Clips

- ☐ M1 One side (2 opposite inlet side)
- ☐ M2 Both sides (4)

7. Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only) Cross notch not available

T-Bar Height

- ☐ FNLA 1 3/4" (44)
- ☐ FNLC 1 5/8" (41)
- ☐ FNLD 1 25/32" (45)

8. ☐ EQT Earthquake Tabs

9. ☐ EC 3" (76) Extended inlet collar w/bead

10. ☐ TR Top inlet return section

11. Non-standard Plenum Height

- ☐ H7 7" (178) high
- ☐ H11 11" (279) high

12. ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).

13. ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

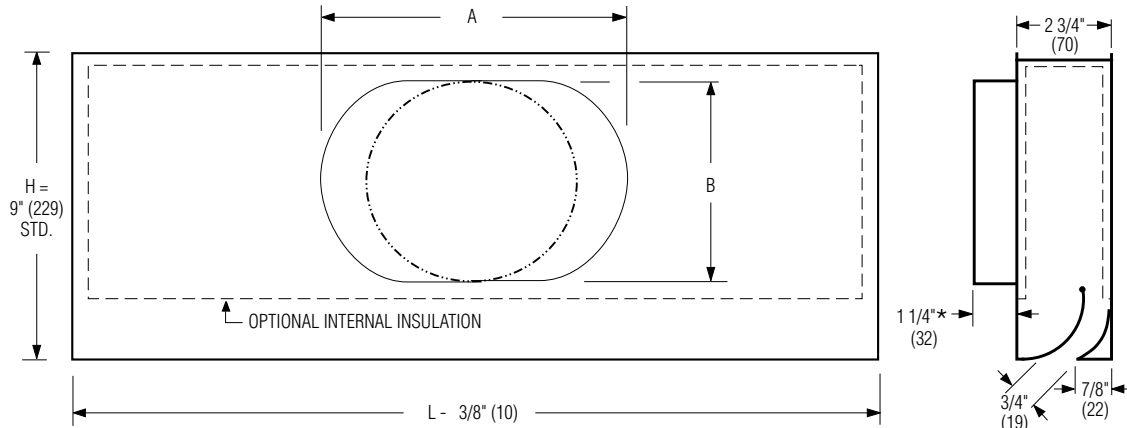
5900

5 - 11 - 09

59BSR



N SERIES PLENUM SLOT DIFFUSER
SUPPLY • PREMIUM PERFORMANCE
HORIZONTAL DISCHARGE
MODEL: 59N(I)



* 4" (102) WITH OPTIONAL ID INLET DAMPER

Nominal Length L		Available Inlet Sizes
Imperial Modules	Metric Modules	
24 (610)	600	6, 8, 10 (152, 203, 254)
36 (914)	900	
48 (1219)	1200	
60 (1524)	1500	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

1. The 59N Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
2. The 59N design provides premium performance. An aerodynamic extruded aluminum pattern controller provides a fixed horizontal discharge and produces a tight blanket of air into the room, maximizing coanda effect and induction of room air.
3. The design is excellent for VAV, heating and cooling applications.
4. Standard nominal lengths are 24", 36", 48" and 60" (610, 914, 1219 and 1524) to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" (152) round, 8" (203) and 10" (254) flat oval.
5. Plenum is corrosion resistant steel.
6. Finish: BK Black pattern controllers and exposed edges.
5. Supplementary T-Bars
 - ☐ T1 One (inlet side)
 - ☐ T0 One (opposite inlet side)
 - ☐ T2 Two (Both sides)
6. Mounting Clips
 - ☐ M1 One side (2 opposite inlet side)
 - ☐ M2 Both sides (4)
7. Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
 - ☐ FNLA 1 3/4" (44)
 - ☐ FNLC 1 5/8" (41)
 - ☐ FNLD 1 25/32" (45)
8. ☐ EQT Earthquake Tabs
9. ☐ EC 3" (76) Extended inlet collar w/bead
10. Non-standard Plenum Height
 - ☐ H7 7" (178) high
 - ☐ H11 11" (279) high
11. ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
12. ☐ SP Special features _____.

OPTIONS (see submittal 59N_BS-ACC for details):

1. ☐ EX External Foil Back Insulation
2. a. ☐ Internal Insulation. Model 59NI
b. ☐ FGI 1/4" (6) Coated Fiberglass (default)
☐ FFI 3/8" (10) Fiber-Free Foam
3. ☐ ID Inlet Damper
4. ☐ PF Plaster Frame

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

5900

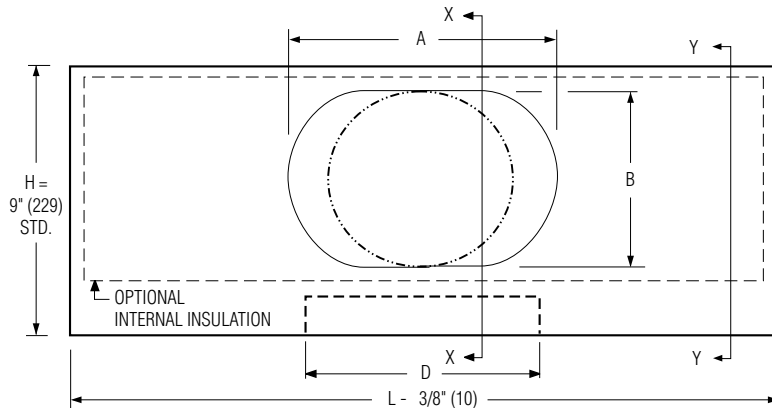
5 - 11 - 09

59N

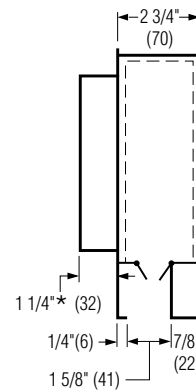


N SERIES PLENUM SLOT DIFFUSER

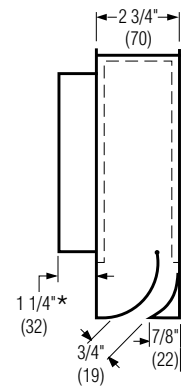
SUPPLY • PREMIUM PERFORMANCE
HORIZONTAL / VERTICAL DISCHARGE
MODEL: 59ND(I)



* 4" (102) WITH OPTIONAL ID INLET DAMPER



SECTION X-X



SECTION Y-Y

Nominal Length L		Available Down-Blow Slot Dim. D	Available Inlet Sizes
Imperial Modules	Metric Modules		
24 (610)	600	8, 12 (203, 305)	6, 8, 10 (152, 203, 254)
36 (914)	900	12, 15 (305, 381)	
48 (1219)	1200	12, 15, 18 (305, 381, 457)	
60 (1524)	1500	15, 18, 21 (381, 457, 533)	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59ND Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59ND design provides two air patterns and premium performance in perimeter curtain wall application. An aerodynamic extruded aluminum pattern controller provides a fixed horizontal discharge and produces a tight blanket of air into the room, maximizing coanda effect and induction of room air. A central down-blow section which incorporates two pattern controllers (shipped in wide open position), provides an adjustable vertical discharge along the wall or glass in perimeter applications.
- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" (610, 914, 1219 and 1524) to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" (152) round, 8" (203) and 10" (254) flat oval.
- Plenum is corrosion resistant steel.
- Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- ☐ Internal Insulation. Model 59NDI
 - ☐ FGI 1/4" (6) Coated Fiberglass (default)
 - ☐ FFI 3/8" (10) Fiber-Free Foam
- ☐ ID Inlet Damper

- ☐ PF Plaster Frame
- Supplementary T-Bars
 - ☐ T1 One (inlet side)
 - ☐ T0 One (opposite inlet side)
 - ☐ T2 Two (Both sides)
- Mounting Clips
 - ☐ M1 One side (2 opposite inlet side)
 - ☐ M2 Both sides (4)
- Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
 - ☐ FNLA 1 3/4" (44)
 - ☐ FNLC 1 5/8" (41)
 - ☐ FNLD 1 25/32" (45)
- ☐ EQT Earthquake Tabs
- ☐ EC 3" (76) Extended inlet collar w/bead
- Non-standard Plenum Height
 - ☐ H7 7" (178) high
 - ☐ H11 11" (279) high
- ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
- ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

5900

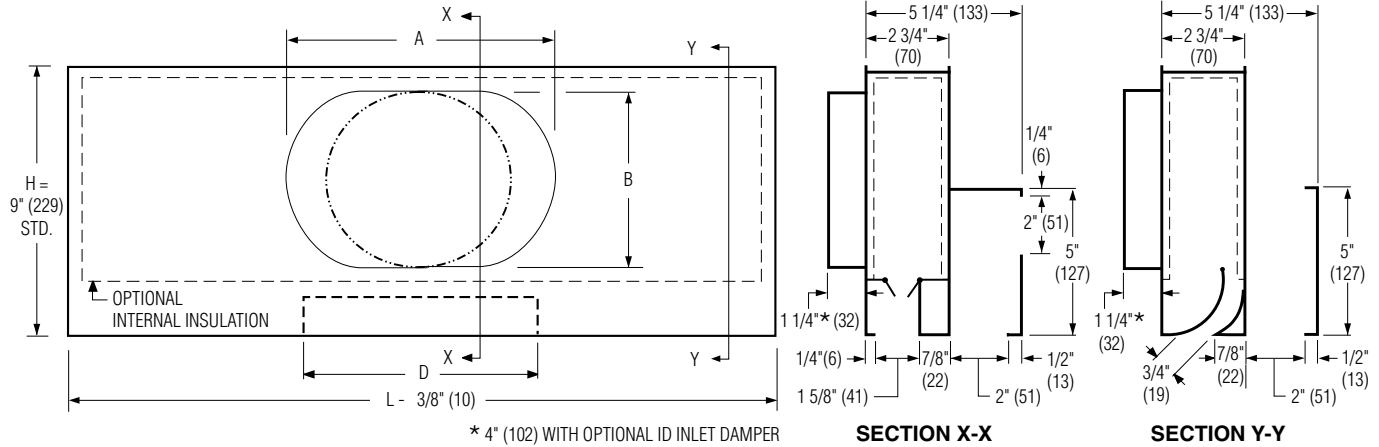
5 - 11 - 09

59ND



N SERIES PLENUM SLOT DIFFUSER

SUPPLY / RETURN • PREMIUM PERFORMANCE
HORIZONTAL / VERTICAL DISCHARGE
MODEL: 59NDR(I)



Nominal Length L		Available Down-Blow Slot Dim. D	Available Inlet Sizes
Imperial Modules	Metric Modules		
24 (610)	600	8, 12 (203, 305)	6, 8, 10 (152, 203, 254)
36 (914)	900	12, 15 (305, 381)	
48 (1219)	1200	12, 15, 18 (305, 381, 457)	
60 (1524)	1500	15, 18, 21 (381, 457, 533)	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59NDR Supply/Return Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59NDR design provides two air patterns and premium performance in perimeter curtain wall application. An aerodynamic extruded aluminum pattern controller provides a fixed horizontal discharge and produces a tight blanket of air into the room, maximizing coanda effect and induction of room air. A central down-blow section which incorporates two pattern controllers (shipped in wide open position), provides an adjustable vertical discharge along the wall or glass in perimeter applications.
An integral return air section returns room air into the ceiling plenum, with minimal short-circuiting of supply air. Standard (SR) side inlet return section also acts as a light shield and prevents see through.
- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" round, 8" and 10" flat oval.

5. Plenum is corrosion resistant steel.

6. Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- ☐ a. Internal Insulation. Model 59NDR
b. ☐ FGI 1/4" (6) Coated Fiberglass (default)
☐ FFI 3/8" (10) Fiber-Free Foam

- ☐ ID Inlet Damper
- ☐ PF Plaster Frame
- Supplementary T-Bars
☐ T1 One (inlet side)
☐ T0 One (opposite inlet side)
☐ T2 Two (Both sides)
- Mounting Clips
☐ M1 One side (2 opposite inlet side)
☐ M2 Both sides (4)
- Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
☐ FNLA 1 3/4" (44)
☐ FNLC 1 5/8" (41)
☐ FNLD 1 25/32" (45)
- ☐ EQT Earthquake Tabs
- ☐ EC 3" (76) Extended inlet collar w/bead
- ☐ TR Top inlet return section
- Non-standard Plenum Height
☐ H7 7" (178) high
☐ H11 11" (279) high
- ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
- ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

5900

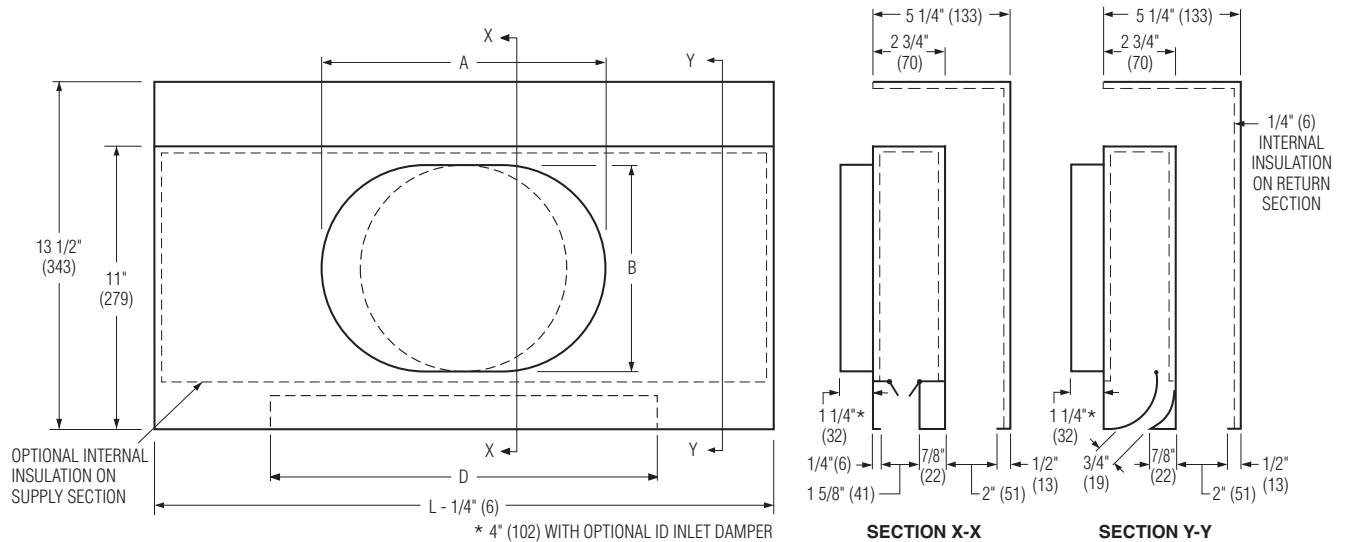
5 - 11 - 09

59NDR



N SERIES PLENUM SLOT DIFFUSER

SUPPLY / RETURN • PREMIUM PERFORMANCE
HORIZONTAL / VERTICAL DISCHARGE
MODEL: 59NDR(I)-SPL



Nominal Length L		Available Down-Blow Slot Dim. D	Available Inlet Sizes
Imperial Modules	Metric Modules		
24 (610)	600	8, 12 (203, 305)	6, 8, 10 (152, 203, 254)
36 (914)	900	12, 15 (305, 381)	
48 (1219)	1200	12, 15, 18 (305, 381, 457)	
60 (1524)	1500	15, 18, 21 (381, 457, 533)	

Nominal Inlet Size	A	B
6 (152)	—	5 7/8 (149)
8 (203)	—	7 7/8 (200)
10 (254)	11 (279)	7 7/8 (200)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59NDR Supply/Return Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59NDR design provides two air patterns and premium performance in perimeter curtain wall application. An aerodynamic extruded aluminum pattern controller provides a fixed horizontal discharge and produces a tight blanket of air into the room, maximizing coanda effect and induction of room air. A central down-blow section which incorporates two pattern controllers (shipped in wide open position), provides an adjustable vertical discharge along the wall or glass in perimeter applications.

An integral return air section returns room air into the ceiling plenum, with minimal short-circuiting of supply air. Wrap over design with internal insulation reduces cross-talk.

- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" to suit imperial ceiling grids. Metric units are available.
- Plenum is corrosion resistant steel.
- Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- a. ☐ Internal Insulation on supply section. Model 59NDR1
b. ☐ FGI 1/4" (6) Coated Fiberglass (default)
☐ FFI 3/8" (10) Fiber-Free Foam

- ☐ ID Inlet Damper
- ☐ PF Plaster Frame
- Supplementary T-Bars
☐ T1 One (inlet side)
☐ T0 One (opposite inlet side)
☐ T2 Two (Both sides)
- Mounting Clips
☐ M1 One side (2 opposite inlet side)
☐ M2 Both sides (4)
- Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
☐ FNLA 1 3/4" (44)
☐ FNLC 1 5/8" (41)
☐ FNLD 1 25/32" (45)
- ☐ EQT Earthquake Tabs
- ☐ EC 3" (76) Extended inlet collar w/bead
- ☐ FS Diamond Flow Sensor w/extended collar bead. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
- ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

7 - 27 - 17

5900

NEW

59NDR-SPL

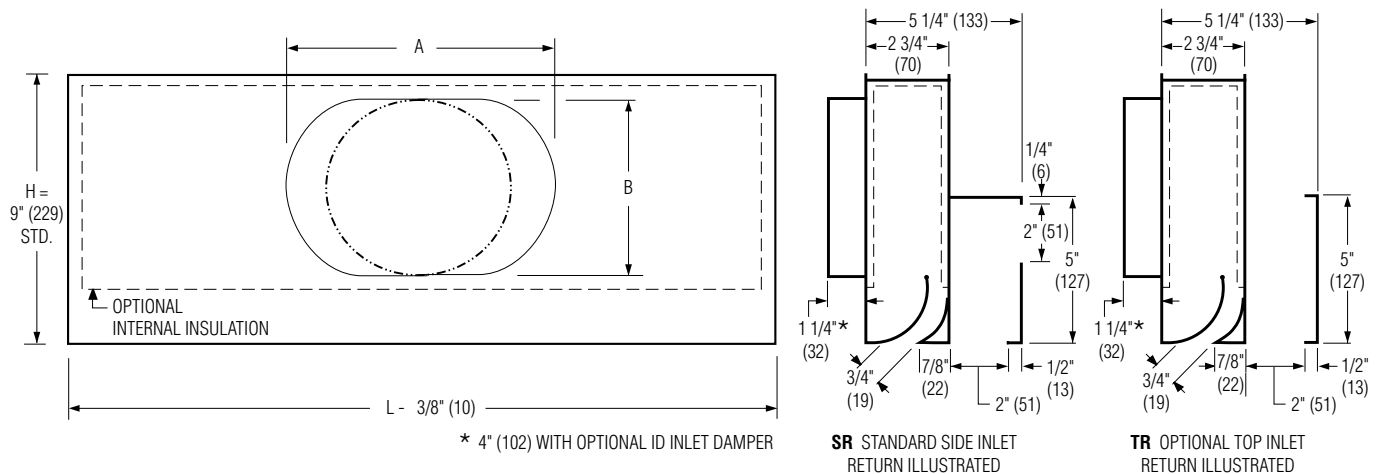


N SERIES PLENUM SLOT DIFFUSER

SUPPLY / RETURN • PREMIUM PERFORMANCE

HORIZONTAL DISCHARGE

MODEL: 59NR(I)



Nominal Length L		Available Inlet Sizes
Imperial Modules	Metric Modules	
24 (610)	600	6, 8, 10 (152, 203, 254)
36 (914)	900	
48 (1219)	1200	
60 (1524)	1500	

Nominal Inlet Size	Std. Dimension H = 9		Opt. Dimension H = 11		Opt. Dimension H = 7	
	A	B	A	B	A	B
6 (152)	—	5 7/8 (149)	—	5 7/8 (149)	7 (178)	4 (102)
8 (203)	9 (229)	5 7/8 (149)	—	7 7/8 (200)	10 1/8 (257)	4 (102)
10 (254)	12 1/8 (308)	5 7/8 (149)	11 (279)	7 7/8 (200)	13 1/4 (337)	4 (102)

Inlets are round or oval as dimensioned.

DESCRIPTION:

- The 59NR Supply/Return Plenum Slot Ceiling Diffusers have been designed for standard lay-in T-Bar application.
- The 59NR design provides premium performance. An aerodynamic extruded aluminum pattern controller provides a fixed horizontal discharge and produces a tight blanket of air into the room, maximizing coanda effect and induction of room air.
An integral return air section returns room air into the ceiling plenum, with minimal short-circuiting of supply air. Standard (SR) side inlet return section also acts as a light shield and prevents see through.
- The design is excellent for VAV, heating and cooling applications.
- Standard nominal lengths are 24", 36", 48" and 60" to suit imperial ceiling grids. Metric units are available. Standard H9 plenum height is 9" (229). Standard inlet sizes are 6" round, 8" and 10" flat oval.
- Plenum is corrosion resistant steel.
- Finish: BK Black pattern controllers and exposed edges.

OPTIONS (see submittal 59N_BS-ACC for details):

- ☐ EX External Foil Back Insulation
- ☐ Internal Insulation. Model 59NRI
 - ☐ FGI 1/4" (6) Coated Fiberglass (default)
 - ☐ FFI 3/8" (10) Fiber-Free Foam
- ☐ ID Inlet Damper

- ☐ PF Plaster Frame
- Supplementary T-Bars
 - ☐ T1 One (inlet side)
 - ☐ T0 One (opposite inlet side)
 - ☐ T2 Two (Both sides)
- Mounting Clips
 - ☐ M1 One side (2 opposite inlet side)
 - ☐ M2 Both sides (4)
- Fineline/Bolt-Slot T-Bar Ceiling Construction (24" [610] and 48" [1219] nominal length only)
Cross notch not available
T-Bar Height
 - ☐ FNLA 1 3/4" (44)
 - ☐ FNLC 1 5/8" (41)
 - ☐ FNLD 1 25/32" (45)
- ☐ EQT Earthquake Tabs
- ☐ EC 3" (76) Extended inlet collar w/bead
- ☐ TR Top inlet return section
- Non-standard Plenum Height
 - ☐ H7 7" (178) high
 - ☐ H11 11" (279) high
- ☐ FS Diamond Flow Sensor w/extended collar bead. Requires H11 option. 6" (152) and 8" (203) round inlet sizes only. (Not available on models with internal insulation).
- ☐ SP Special features _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

5900

5 - 11 - 09

59NR

ACCESSORIES FOR 59N AND 59BS SERIES PLENUM SLOT DIFFUSERS

☐ PF Slot Diffuser Plaster Frame

Slot diffuser mounting frames allow plenum slot diffusers to be installed in drywall or plaster ceilings. Installation of the frame in the ceiling is by others.

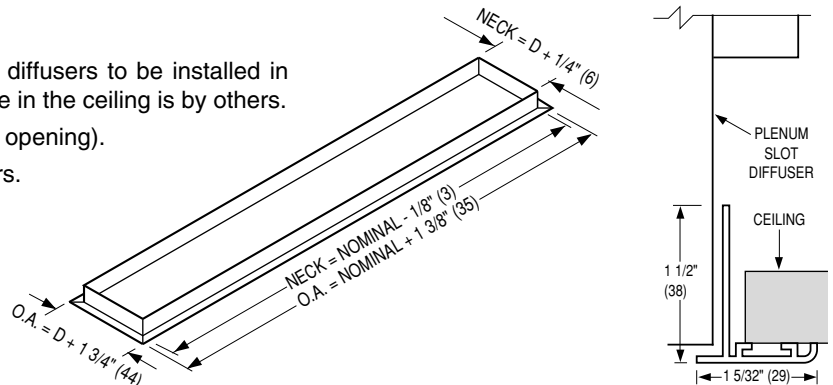
(Note: Diffuser will not fit through a plaster frame opening).

Material: Extruded aluminum with mitered corners.

Recommended Ceiling Opening dimensions:

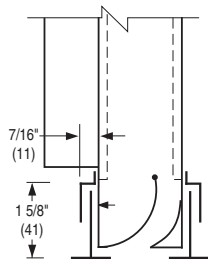
Width = Diffuser Width (D) + 1/2" (13)

Length = Nominal Diffuser Length + 1/4" (6)



Mounting Clips

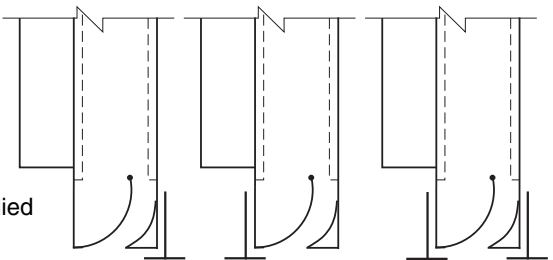
- ☐ **M1** One Side
(2 opposite inlet side)
- ☐ **M2** Both sides
(4)



Supplementary T-Bars

- ☐ **T1** One on inlet side
- ☐ **T0** One opposite inlet side
- ☐ **T2** Two on both sides

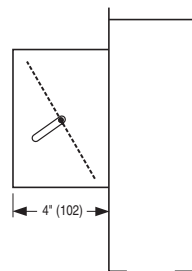
Note: Center T-Bars are supplied by Nailor as standard.



☐ ID Inlet Damper

(Supply models only)

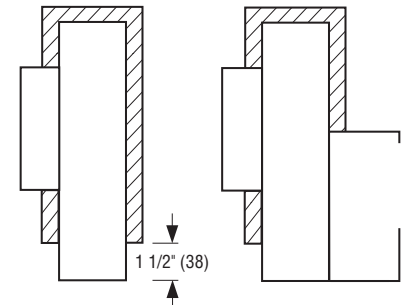
The single blade damper is an economical factory installed option that permits air balancing of the device at the plenum inlet. Ceiling access is required.



External Foil Back Insulation

- ☐ **EX** 1/2" (13) thick

1/2" (13) thick fiberglass blanket with a reinforced aluminum foil scrim-craft (FSK) facing, providing a vapor barrier.

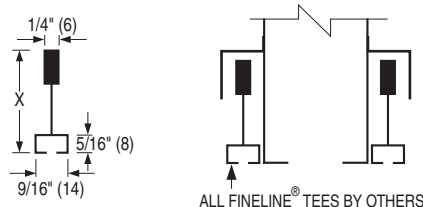


Fineline/Bolt-Slot T-Bar Ceiling Construction

(24" [610] and 48" [1219] Nominal length only)

Plenum length = Nominal - 5/8" (16)

- ☐ **FNLA** ☐ **FNLC** ☐ **FNLD**



T-Bar Type (Manufacturer)		X
FNLA	Armstrong Silhouette	1 3/4" (44)
FNLC	Chicago Metallic Ultraline	1 5/8" (41)
FNLD	Donn Fineline	1 25/32" (45)

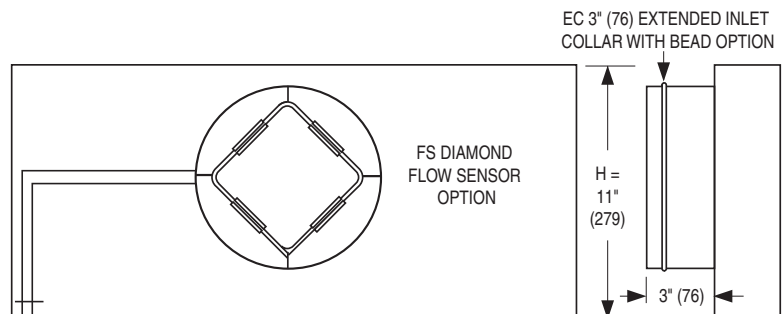
Fineline® is a registered trademark of USG Interiors Inc.

- ☐ **EC** Extended Inlet Collar with Bead

- ☐ **FS** Diamond Flow Sensor with Extended Inlet Collar and Bead

Optional multi-point Diamond Flow sensor provides accurate field balancing. Gauge taps are conveniently located flush in the slot face eliminating the need for ceiling access. Includes 3" (76) extended inlet collar. 6" (152) and 8" (203) round inlet sizes only.

Units with FS option are 11" (279) high.



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

4 - 28 - 14

59N

5 - 11 - 09

59N_BS-ACC

PERFORMANCE DATA:

MODELS: 59BS(I) and 59BSR(I) • VERTICAL PATTERN

24" (610) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.018	.033	.051	.073	.100	.130	.165	.204
	Static Pressure	.012	.022	.035	.050	.068	.088	.112	.138
	Noise Criteria	—	—	—	—	—	20	25	29
	Vertical Throw	5	6	7	8	9	9	10	11

36" (914) Long

8" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.016	.028	.043	.062	.085	.111	.140	.173
	Static Pressure	.011	.020	.032	.046	.062	.081	.103	.127
	Noise Criteria	—	—	—	—	—	20	23	27
	Vertical Throw	6	7	8	9	10	11	12	13

48" (1219) Long

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.024	.042	.066	.094	.129	.168	.212	.262
	Static Pressure	.016	.029	.045	.065	.088	.115	.146	.180
	Noise Criteria	—	—	—	—	20	24	26	31
	Vertical Throw	7	9	10	11	12	13	14	15

60" (1524) Long

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.029	.051	.080	.115	.157	.205	.259	.320
	Static Pressure	.017	.031	.048	.069	.094	.123	.156	.192
	Noise Criteria	—	—	—	—	22	27	32	37
	Vertical Throw	8	10	11	12	13	14	15	17

Return Section

R Models	Airflow, CFM/Ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

Performance Notes:

- Vertical throws are given at 50 fpm terminal velocities for a free jet under isothermal conditions.
- Throw correction factors for different ΔT 's.
20°F cooling x 1.40
10°F heating x 0.85
15°F heating x 0.72
20°F heating x 0.60
- All pressures are in inches w.g..
- Tested with pattern controller set fully open for vertical discharge. Straight flexible duct connection.
- Noise Criteria [NC] values based on a room absorption of 10 dB, re 10^{-12} watts. Dash (—) in space denotes an Noise Criteria level less than 15.
- Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70-2023.

PERFORMANCE DATA

MODELS 59N(I) AND 59NR(I) • HORIZONTAL PATTERN • 9" (229) HIGH PLENUM (STD.)

24" (610) Long

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.039	.070	.110	.158	.215	.281	.355	.439
	Static Pressure	.033	.059	.093	.134	.182	.238	.303	.372
	Noise Criteria	—	16	22	27	31	34	36	39
	Horizontal Throw	3-5-13	5-9-15	6-11-17	8-12-19	10-15-20	11-14-21	12-16-23	13-17-24
8" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.023	.041	.064	.092	.125	.163	.207	.255
	Static Pressure	.021	.038	.059	.084	.115	.150	.190	.234
	Noise Criteria	—	—	17	23	26	29	31	34
	Horizontal Throw	3-5-13	5-9-15	6-11-17	8-12-19	10-15-20	11-14-21	13-16-23	13-17-24

36" (914) Long

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.057	.101	.157	.227	.309	.403	.511	.630
	Static Pressure	.044	.078	.121	.174	.237	.310	.393	.484
	Noise Criteria	—	20	26	29	32	35	39	43
	Horizontal Throw	4-8-16	7-11-18	8-13-21	11-16-23	12-17-25	13-18-26	15-19-27	16-20-29
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.035	.062	.096	.139	.189	.247	.312	.386
	Static Pressure	.030	.053	.082	.118	.161	.211	.267	.329
	Noise Criteria	—	—	22	25	28	32	35	39
	Horizontal Throw	4-8-16	7-11-18	8-13-21	11-16-23	12-17-25	13-18-26	15-19-27	16-20-29

48" (1219) Long

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.039	.069	.107	.155	.211	.275	.348	.430
	Static Pressure	.030	.053	.083	.119	.162	.211	.268	.330
	Noise Criteria	—	—	20	24	29	33	36	40
	Horizontal Throw	5-9-18	8-13-22	10-15-24	13-18-26	16-20-28	17-21-30	18-22-32	20-24-33
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.028	.050	.079	.113	.154	.201	.255	.315
	Static Pressure	.024	.042	.066	.095	.130	.169	.214	.264
	Noise Criteria	—	—	18	22	27	30	33	37
	Horizontal Throw	5-9-18	8-13-22	10-15-24	13-18-26	16-20-28	17-21-30	18-22-32	20-24-33

60" (1524) Long

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.048	.085	.133	.191	.260	.340	.430	.532
	Static Pressure	.034	.060	.094	.135	.184	.241	.305	.376
	Noise Criteria	—	17	23	27	32	36	39	43
	Horizontal Throw	8-12-20	10-15-24	13-19-26	14-20-29	18-22-31	19-23-33	20-25-35	22-27-36
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.034	.061	.095	.137	.187	.244	.309	.381
	Static Pressure	.027	.048	.075	.108	.148	.193	.244	.301
	Noise Criteria	—	15	20	24	29	32	35	39
	Horizontal Throw	8-12-20	10-15-24	13-19-26	14-20-29	18-22-31	19-23-33	20-25-35	22-27-36

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

Performance Data Notes:

- Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- All pressures are in inches w.g..
- Tested with one-way fixed horizontal discharge in the direction of the inlet and center down-blow deflector full open. Straight flexible duct connection.
- Noise Criteria [NC] values based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (—) in space denotes an Noise Criteria level less than 15.
- Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70-2023.

PERFORMANCE DATA NOTES:

Model Series 5700

Performance Data Notes:

- 1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- 2. All pressures are in inches w.g..
- 3. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- 4. Noise Criteria [NC] values are based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (–) in space denotes an Noise Criteria level less than 15.
- 5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Models 59ND(I),59NDR(I)

Performance Data Notes:

- 1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- 2. Total and Static Pressure are in inches w.g.
- 3. Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.
- 4. Dash (—) in space indicates an NC level of less than 15.
- 5. Tested with one-way fixed horizontal discharge in the direction of the inlet and center down-blow deflector full open. Straight flexible duct connection.
- 6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2023.

PERFORMANCE DATA:

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 9" (229) HIGH PLENUM (STD.)

24" (610) Long with 8" (203) Down-Blow

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.035	.059	.089	.122	.162	.205	.253	.307
	Static Pressure	.029	.048	.071	.097	.127	.160	.196	.236
	Noise Criteria	—	—	16	21	26	31	34	37
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15
8" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.024	.041	.061	.085	.111	.142	.175	.213
	Static Pressure	.022	.037	.055	.076	.099	.126	.155	.188
	Noise Criteria	—	—	—	18	21	25	28	31
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15

36" (914) Long with 12" (305) Down-Blow

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.057	.095	.143	.198	.262	.333	.413	.501
	Static Pressure	.043	.070	.103	.141	.184	.231	.284	.342
	Noise Criteria	18	22	27	31	35	38	42	45
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.032	.054	.082	.115	.155	.198	.248	.302
	Static Pressure	.027	.045	.068	.095	.127	.162	.202	.246
	Noise Criteria	—	—	18	23	27	30	34	37
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28

48" (1219) Long with 12" (305) Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.044	.077	.118	.167	.224	.290	.364	.446
	Static Pressure	.035	.061	.093	.131	.175	.226	.283	.346
	Noise Criteria	—	19	24	28	32	36	39	42
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.041	.069	.106	.148	.198	.255	.318	.389
	Static Pressure	.036	.061	.093	.130	.173	.222	.277	.338
	Noise Criteria	—	—	16	22	26	30	34	37
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32

60" (1524) Long with 15" (381) Down-Blow

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.050	.088	.135	.192	.260	.337	.424	.521
	Static Pressure	.036	.063	.096	.136	.184	.237	.298	.365
	Noise Criteria	—	20	26	31	36	40	43	46
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.052	.087	.129	.179	.235	.299	.369	.447
	Static Pressure	.045	.074	.109	.150	.196	.248	.305	.368
	Noise Criteria	—	18	23	27	31	35	39	42
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PERFORMANCE DATA:

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 9" (229) HIGH PLENUM (STD.)

36" (914) Long with 15" (381) Down-Blow

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.050	.086	.132	.184	.247	.317	.396	.483
	Static Pressure	.036	.061	.092	.127	.169	.215	.267	.324
	Noise Criteria	15	21	26	30	35	38	42	44
	Horizontal Throw	2-5-13	4-8-17	6-10-21	7-13-24	9-15-27	11-17-29	13-19-31	14-21-33
	Vertical Throw	2-5-13	4-8-16	6-10-18	8-13-20	10-15-22	12-17-23	14-19-23	16-21-23
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.030	.051	.079	.111	.150	.193	.243	.296
	Static Pressure	.025	.042	.065	.091	.122	.157	.197	.240
	Noise Criteria	—	15	20	24	28	32	35	37
	Horizontal Throw	2-5-13	4-8-17	6-10-21	7-13-24	9-15-27	11-17-29	13-19-31	14-21-33
	Vertical Throw	2-5-13	4-8-16	6-10-18	8-13-20	10-15-22	12-17-23	14-19-23	16-21-23

48" (1219) Long with 15" (381) Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.039	.068	.104	.148	.199	.258	.323	.396
	Static Pressure	.030	.052	.079	.112	.150	.194	.242	.296
	Noise Criteria	—	15	21	26	30	34	37	40
	Horizontal Throw	3-6-12	5-8-15	6-9-19	8-11-21	9-13-24	10-15-26	11-17-28	13-19-29
	Vertical Throw	3-6-15	5-9-18	7-12-22	9-15-25	11-17-27	13-19-30	14-21-31	16-23-32
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.037	.063	.095	.133	.179	.230	.286	.350
	Static Pressure	.032	.055	.082	.115	.154	.197	.245	.299
	Noise Criteria	—	—	19	23	27	31	34	38
	Horizontal Throw	3-6-12	5-8-15	6-9-19	8-11-21	9-13-24	10-15-26	11-17-28	13-19-29
	Vertical Throw	3-6-15	5-9-18	7-12-22	9-15-25	11-17-27	13-19-30	14-21-31	16-23-32

48" (1219) Long with 18" (457) Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.038	.066	.102	.145	.194	.251	.315	.387
	Static Pressure	.029	.050	.077	.109	.145	.187	.234	.287
	Noise Criteria	—	16	21	26	30	34	37	40
	Horizontal Throw	4-6-11	5-7-15	6-9-19	7-11-22	9-13-25	10-15-27	11-17-29	12-19-31
	Vertical Throw	2-5-14	5-8-18	7-11-21	8-14-24	10-16-26	12-18-28	14-20-30	15-22-31
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.039	.065	.099	.138	.184	.236	.293	.357
	Static Pressure	.034	.057	.086	.120	.159	.203	.252	.306
	Noise Criteria	—	15	20	24	28	32	35	38
	Horizontal Throw	4-6-11	5-7-15	6-9-19	7-11-22	9-13-25	10-15-27	11-17-29	12-19-31
	Vertical Throw	2-5-14	5-8-18	7-11-21	8-14-24	10-16-26	12-18-28	14-20-30	15-22-31

60" (1524) Long with 18" (457) Down-Blow

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.051	.090	.139	.198	.268	.348	.438	.539
	Static Pressure	.037	.065	.100	.142	.192	.248	.312	.383
	Noise Criteria	15	21	26	31	36	40	43	46
	Horizontal Throw	5-8-16	7-11-20	9-14-23	11-16-26	13-19-28	15-20-30	16-22-32	18-23-33
	Vertical Throw	3-6-12	5-8-16	6-10-20	8-12-23	9-14-26	11-16-28	12-18-30	13-20-32
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.043	.076	.115	.163	.218	.281	.351	.430
	Static Pressure	.036	.063	.095	.134	.179	.230	.287	.351
	Noise Criteria	—	15	21	27	32	36	39	42
	Horizontal Throw	5-8-16	7-11-20	9-14-23	11-16-26	13-19-28	15-20-30	16-22-32	18-23-33
	Vertical Throw	3-6-12	5-8-16	6-10-20	8-12-23	9-14-26	11-16-28	12-18-30	13-20-32

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PERFORMANCE DATA

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 7" (178) HIGH PLENUM (OPT.)

24" (610) Long with 8" Down-Blow

6" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.050	.082	.119	.162	.209	.263	.321	.385
	Static Pressure	.043	.068	.098	.131	.168	.208	.252	.300
	Noise Criteria	—	—	23	26	29	33	37	40
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24
8" Oval Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.036	.059	.086	.118	.154	.194	.238	.287
	Static Pressure	.033	.053	.077	.104	.135	.170	.208	.249
	Noise Criteria	—	—	20	23	26	29	33	36
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24

36" (914) Long with 12" Down-Blow

6" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.054	.093	.141	.198	.264	.340	.424	.518
	Static Pressure	.037	.062	.093	.129	.170	.217	.269	.326
	Noise Criteria	—	22	26	30	34	38	41	46
	Horizontal Throw	3-5-11	4-7-15	6-9-18	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.048	.082	.122	.170	.224	.286	.355	.430
	Static Pressure	.041	.068	.101	.139	.183	.231	.286	.345
	Noise Criteria	—	—	22	26	30	33	37	40
	Horizontal Throw	3-5-11	4-7-15	6-9-19	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20

48" (1219) Long with 12" Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.063	.108	.164	.232	.310	.400	.501	.613
	Static Pressure	.049	.084	.127	.177	.236	.303	.379	.462
	Noise Criteria	—	20	24	28	32	36	40	43
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.047	.083	.128	.183	.248	.322	.406	.500
	Static Pressure	.039	.069	.107	.153	.207	.268	.338	.416
	Noise Criteria	—	—	21	25	29	33	37	41
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25

60" (1524) Long with 15" Down-Blow

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.078	.136	.207	.292	.392	.506	.635	.778
	Static Pressure	.057	.098	.148	.207	.277	.355	.444	.542
	Noise Criteria	—	24	29	33	37	41	45	48
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.071	.123	.188	.267	.358	.462	.579	.709
	Static Pressure	.059	.102	.155	.219	.293	.377	.472	.577
	Noise Criteria	—	21	26	30	34	38	42	45
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PERFORMANCE DATA

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 7" (178) HIGH PLENUM (OPT.)

36" (914) Long with 15" Down-Blow

6" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.060	.102	.153	.213	.281	.359	.446	.541
	Static Pressure	.043	.071	.105	.144	.187	.236	.290	.349
	Noise Criteria	—	—	23	27	31	35	38	42
	Horizontal Throw	2-3-10	3-5-14	4-7-17	5-8-19	6-10-22	7-12-24	9-13-26	10-15-28
	Vertical Throw	1-3-9	2-3-10	3-4-15	4-5-18	5-7-20	6-8-22	6-9-24	7-10-25
8" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.046	.078	.116	.161	.213	.271	.336	.407
	Static Pressure	.038	.064	.095	.131	.171	.217	.267	.322
	Noise Criteria	—	—	22	26	30	33	36	40
	Horizontal Throw	2-3-10	3-5-14	4-7-17	5-8-19	6-10-22	7-12-24	9-13-26	10-15-28
	Vertical Throw	1-3-9	2-3-10	3-4-15	4-5-18	5-7-20	6-8-22	6-9-24	7-10-25

48" (1219) Long with 15" Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.057	.099	.150	.211	.281	.362	.452	.552
	Static Pressure	.044	.074	.112	.156	.207	.265	.330	.401
	Noise Criteria	—	—	23	27	31	34	38	42
	Horizontal Throw	7-10-17	9-13-21	10-15-24	12-17-27	13-19-29	15-21-31	16-23-33	17-24-34
	Vertical Throw	2-4-11	4-6-14	6-9-17	7-11-20	9-13-22	11-15-23	12-17-25	14-19-25
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.050	.086	.131	.184	.245	.315	.394	.481
	Static Pressure	.043	.073	.110	.153	.204	.262	.326	.397
	Noise Criteria	—	—	22	26	29	33	37	40
	Horizontal Throw	7-10-17	9-13-21	10-15-24	12-17-27	13-19-29	15-21-31	16-23-33	17-24-34
	Vertical Throw	2-4-11	4-6-14	6-9-17	7-11-20	9-13-22	11-15-23	12-17-25	14-19-25

48" (1219) Long with 18" Down-Blow

8" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.056	.096	.146	.205	.273	.350	.437	.533
	Static Pressure	.042	.072	.108	.150	.199	.254	.314	.382
	Noise Criteria	—	20	24	27	31	35	38	42
	Horizontal Throw	2-4-11	4-6-14	5-9-18	7-11-21	8-13-23	10-14-26	11-16-28	12-18-29
	Vertical Throw	2-3-7	4-4-9	3-6-12	5-7-14	5-9-15	7-9-17	7-11-19	8-12-19
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.052	.089	.134	.188	.249	.318	.396	.482
	Static Pressure	.045	.076	.113	.157	.208	.265	.328	.398
	Noise Criteria	—	—	22	25	29	33	36	40
	Horizontal Throw	2-4-11	4-6-14	5-9-18	7-11-21	8-13-23	10-14-26	11-16-28	12-18-29
	Vertical Throw	2-3-7	4-4-9	3-6-12	5-7-14	5-9-15	7-9-17	7-11-19	8-12-19

60" (1524) Long with 18" Down-Blow

8" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.072	.124	.189	.267	.357	.460	0.576	0.705
	Static Pressure	.051	.086	.130	.182	.242	.309	0.385	0.469
	Noise Criteria	—	23	28	32	37	40	44	48
	Horizontal Throw	7-19-17	8-14-21	10-15-24	14-18-27	14-20-29	16-22-32	18-23-34	20-25-35
	Vertical Throw	3-6-14	5-9-17	7-12-20	9-14-23	11-16-25	13-18-27	14-20-28	16-22-29
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.064	.110	.167	.234	.312	.401	0.501	0.612
	Static Pressure	.052	.089	.134	.187	.248	.317	0.395	0.480
	Noise Criteria	—	21	25	30	34	38	42	45
	Horizontal Throw	7-19-17	8-14-21	10-15-24	14-18-27	14-20-29	16-22-32	18-23-34	20-25-35
	Vertical Throw	3-6-14	5-9-17	7-12-20	9-14-23	11-16-25	13-18-27	14-20-28	16-22-29

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PERFORMANCE DATA:

MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 11" (279) HIGH PLENUM (OPT.)
24" (610) Long with 8" (203) Down-Blow

6" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.028	.050	.078	.112	.152	.199	.251	.310
	Static Pressure	.022	.039	.061	.088	.120	.157	.199	.245
	Noise Criteria	—	—	15	20	25	30	33	36
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15
8" Round Inlet	Airflow, CFM	60	80	100	120	140	160	180	200
	Total Pressure	.019	.034	.053	.076	.104	.136	.172	.212
	Static Pressure	.017	.031	.048	.069	.094	.123	.155	.192
	Noise Criteria	—	—	—	15	20	25	28	31
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15

36" (914) Long with 12" (305) Down-Blow

6" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.040	.070	.110	.159	.216	.282	.357	.441
	Static Pressure	.027	.047	.074	.107	.145	.190	.240	.296
	Noise Criteria	—	15	21	26	31	34	38	41
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28
8" Round Inlet	Airflow, CFM	90	120	150	180	210	240	270	300
	Total Pressure	.023	.040	.063	.090	.123	.160	.203	.250
	Static Pressure	.018	.033	.051	.073	.100	.131	.165	.204
	Noise Criteria	—	—	15	20	25	28	32	35
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28

48" (1219) Long with 12" (305) Down-Blow

8" Round Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.037	.065	.102	.147	.200	.261	.331	.408
	Static Pressure	.029	.052	.082	.118	.160	.209	.264	.327
	Noise Criteria	—	16	21	25	29	33	36	39
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32
10" Oval Inlet	Airflow, CFM	120	160	200	240	280	320	360	400
	Total Pressure	.024	.043	.067	.097	.132	.172	.217	.268
	Static Pressure	.021	.038	.059	.084	.115	.150	.190	.235
	Noise Criteria	—	—	—	19	23	27	31	34
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32

60" (1524) Long with 15" (381) Down-Blow

8" Round Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.039	.069	.108	.156	.213	.278	.352	.434
	Static Pressure	.028	.049	.076	.110	.150	.196	.248	.306
	Noise Criteria	—	—	20	25	30	34	37	40
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35
10" Oval Inlet	Airflow, CFM	150	200	250	300	350	400	450	500
	Total Pressure	.026	.047	.073	.106	.144	.188	.238	.293
	Static Pressure	.022	.039	.060	.087	.118	.154	.194	.241
	Noise Criteria	—	—	—	21	26	30	33	36
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35

Return Section

R Models	Airflow, CFM/ft.	30	40	50	60	70	80	90	100
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PERFORMANCE DATA NOTES:

Model Series 5700

Performance Data Notes:

- 1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- 2. All pressures are in inches w.g..
- 3. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.
- 4. Noise Criteria [NC] values are based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (–) in space denotes an Noise Criteria level less than 15.
- 5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

Models 59ND(I),59NDR(I)

Performance Data Notes:

- 1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- 2. Total and Static Pressure are in inches w.g.
- 3. Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.
- 4. Dash (—) in space indicates an NC level of less than 15.
- 5. Tested with one-way fixed horizontal discharge in the direction of the inlet and center down-blow deflector full open. Straight flexible duct connection.
- 6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2023.