



UNICON EQUIPMENT  
SALES, INC.

# AIR-YNX™

Pressure Independent Airflow Regulator

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# PRESSURE INDEPENDENT AIRFLOW REGULATOR AIR-YNX™

## A. DESCRIPTION

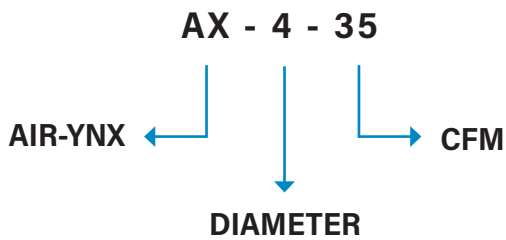
The UES Model AIR-YNX is a pressure independent airflow regulator that automatically balances the airflow rate over a specified operating differential pressure range. AIR-YNX is used in HVAC duct systems to provide automatic balancing of airflow. AIR-YNX has an innovative, self-adjusting orifice which enables it to continuously self-balance. AIR-YNX can be used in several different applications within cooling and heating such as supply, return or exhaust duct systems. Whenever dynamic balancing and consistent airflow control is required AIR-YNX provides the solution.

## B. CHARACTERISTICS

- Product is UL labeled and complies with UL 2043 standard for fire test for heat and visible smoke
- Self-adjusting in pressure ranges from 0.2"-0.8" wg or 50-200 pa (higher pressures from 0.6"-2.4" wg or 150-597 pa available)
- Airflow is easily adjustable using a T10 torx screwdriver
- Operating range between -25°F to +140°F
- Available for new construction and renovation
- Direct fit use in round ducts

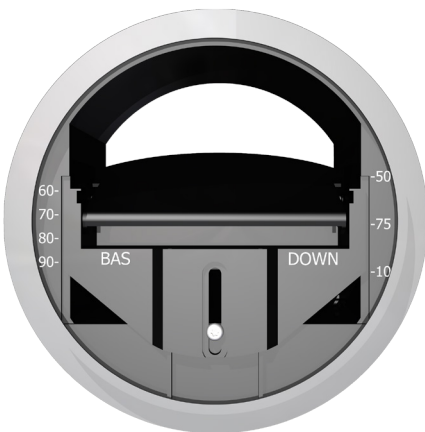


## SELECTION SAMPLE



## C. AIRFLOW RANGES AND SIZES

AIR-YNX is manufactured with airflow ranges (CFM) as listed in the table.



NOMINAL DIAMETER	MODEL	AIRFLOW RANGE (CFM)
3	AX-3-	10, 15, 20, 25, 30
4	AX-4-	10, 15, 20, 25, 30
4	AX-4-	30, 35, 45, 55, 60
5	AX-5-	10, 15, 20, 25, 30
5	AX-5-	30, 35, 45, 55, 60
5	AX-5-	60, 70, 90, 105
6	AX-6-	10, 15, 20, 25, 30
6	AX-6-	30, 35, 45, 55, 60
6	AX-6-	60, 70, 90, 105
6	AX-6-	105, 125, 140, 145, 160, 175
8	AX-8-	10, 15, 20, 25, 30
8	AX-8-	30, 35, 45, 55, 60
8	AX-8-	60, 70, 90, 105
8	AX-8-	105, 125, 140, 145, 160, 175
8	AX-8-	175, 205, 235, 265, 295
10	AX-10-	10, 15, 20, 25, 30
10	AX-10-	30, 35, 45, 55, 60
10	AX-10-	60, 70, 90, 105
10	AX-10-	105, 125, 140, 145, 160, 175
10	AX-10-	175, 205, 235, 265, 295

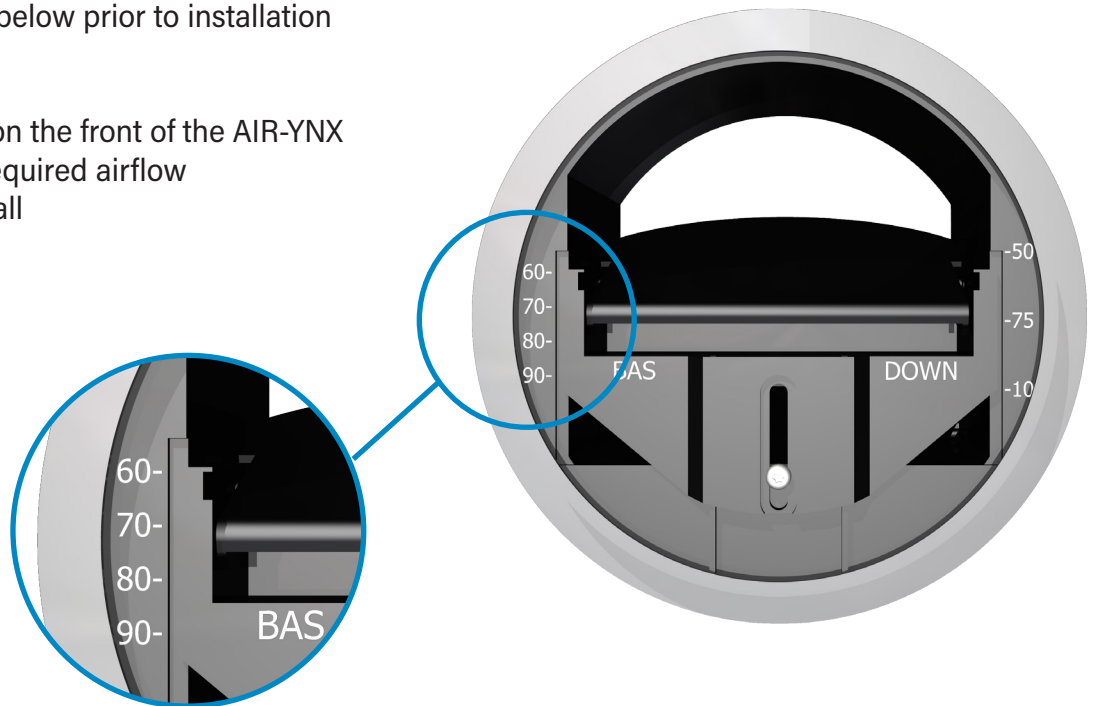
# PRESSURE INDEPENDENT AIRFLOW REGULATOR AIR-YNX™

## D. INSTALLATION

### D-1. AIRFLOW SETTINGS AND ADJUSTMENTS

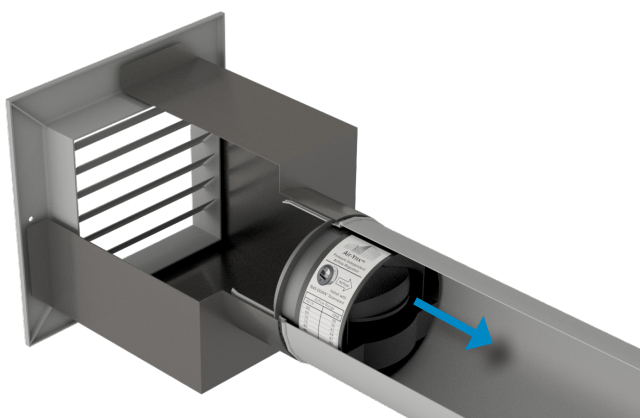
AIR-YNX is shipped set at a specified airflow; however, field adjustment can be made. For field adjustment follow the instructions listed below prior to installation of AIR-YNX in the duct:

- Loosen the T10 Torx screw on the front of the AIR-YNX
- Adjust the AIR-YNX to the required airflow
- Tighten the screw then install

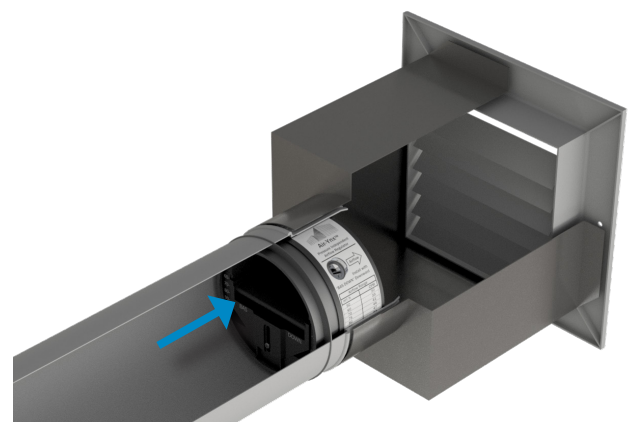


### D-2. MOUNTING

Model AIR-YNX shall be installed in vertical or horizontal rigid ducts or register boxes without the use of screws, rivets or any other fastening device. A lip seal that is part of the AIR-YNX will ensure airtightness. In horizontal ducts AIR-YNX must be installed with "BAS DOWN" as marked on the front of the product. It is essential to comply with the direction of airflow as marked on the sleeve. When installed properly, AIR-YNX will provide the specified flow rate instantly and continuously. When using AIR-YNX in conjunction with a diffuser the minimum installation distance is 3x duct length in supply mode and 1x duct length in exhaust mode.



■ Installation in Exhaust Duct



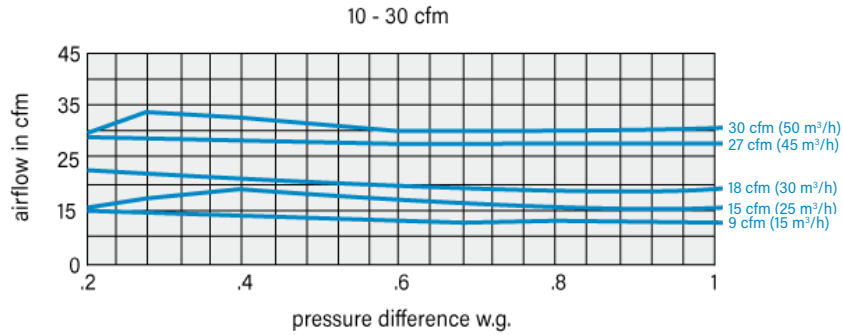
■ Installation in Supply Duct

# PRESSURE INDEPENDENT AIRFLOW REGULATOR AIR-YNX™

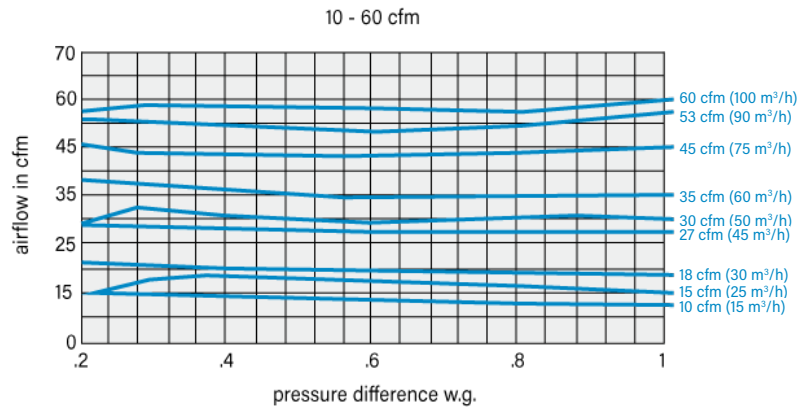
## E. PERFORMANCE AND TABLES

The tables shown on pages 3 and 4 indicate the airflow variations in CFM for diameters 3, 4, 5, 6, 8 and 10 inches according to the pressure differential. The airflow values given are averages and may vary by 15% with CFM less than 30 and 10% with CFM greater than 30.

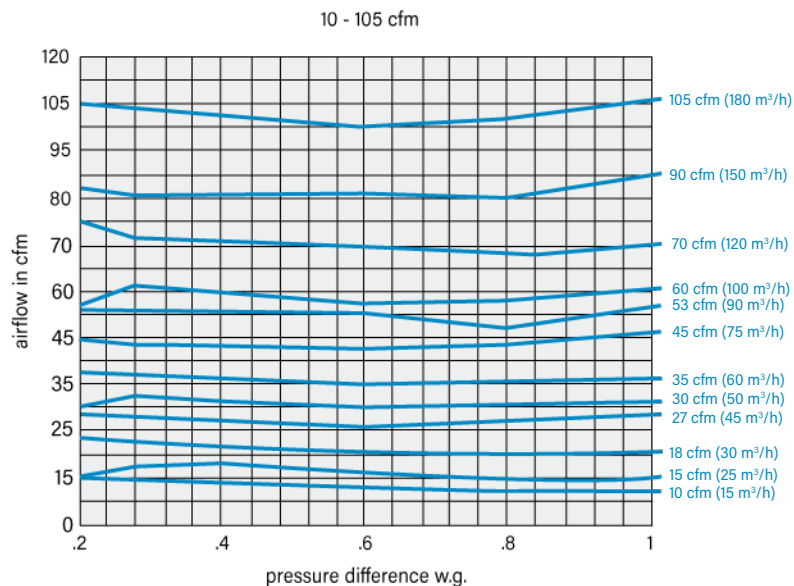
### AIR-YNX™ DIAMETER: 3 inches (75 mm)



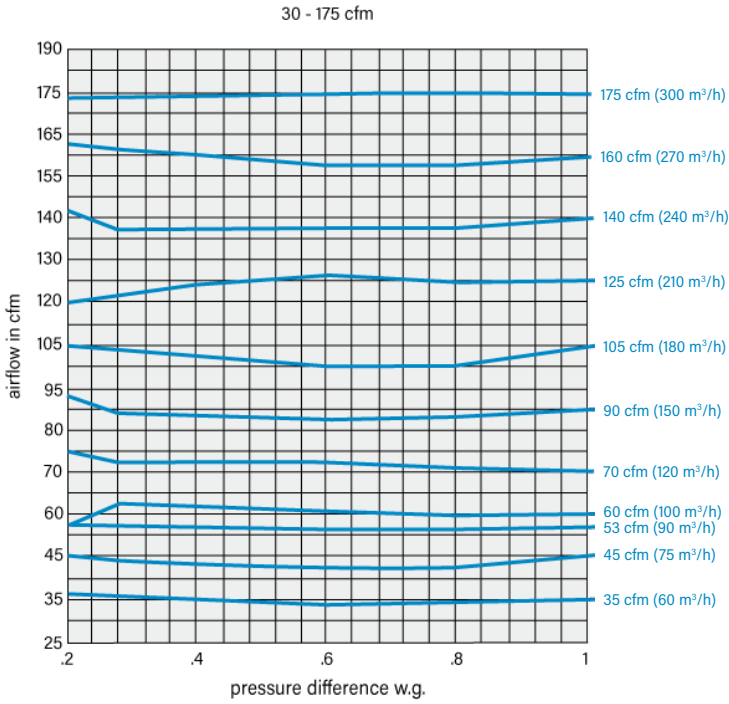
### AIR-YNX™ DIAMETER: 4 inches (100 mm)



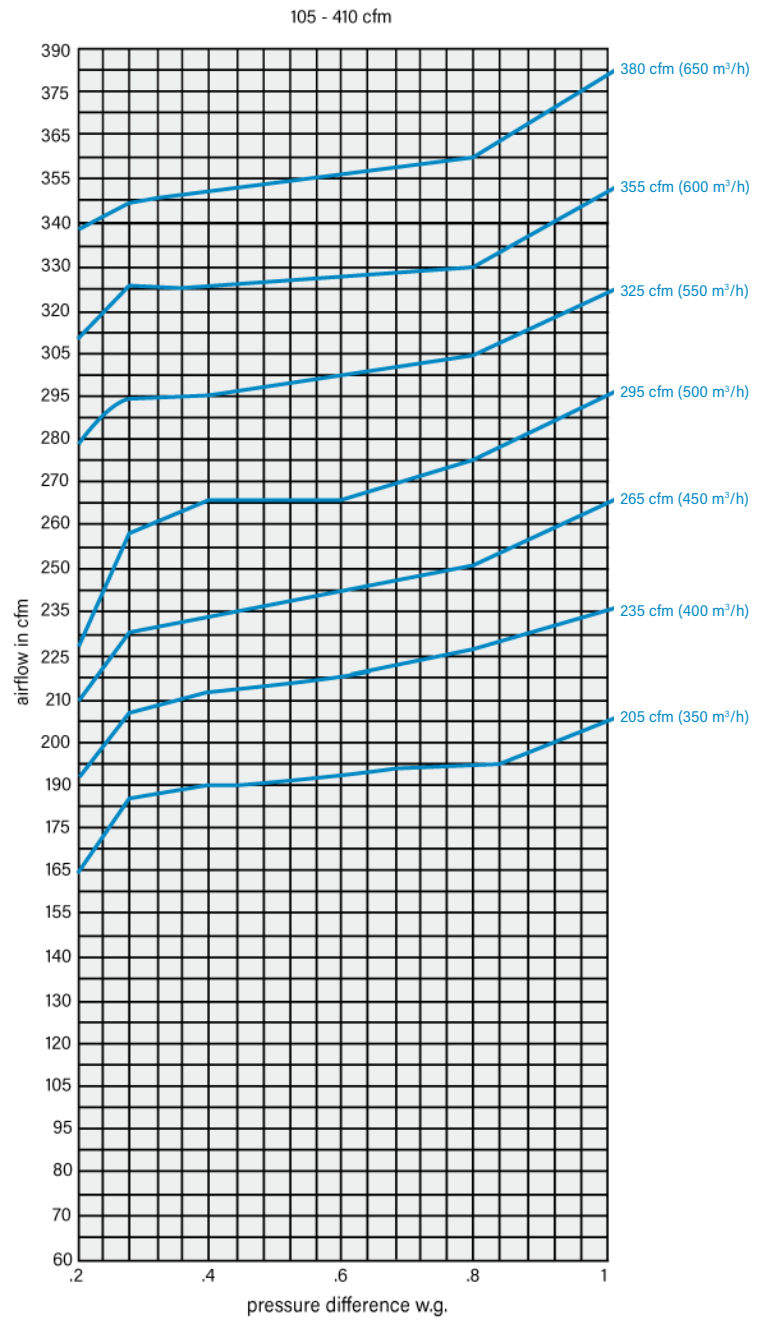
### AIR-YNX™ DIAMETER: 5 inches (125 mm)



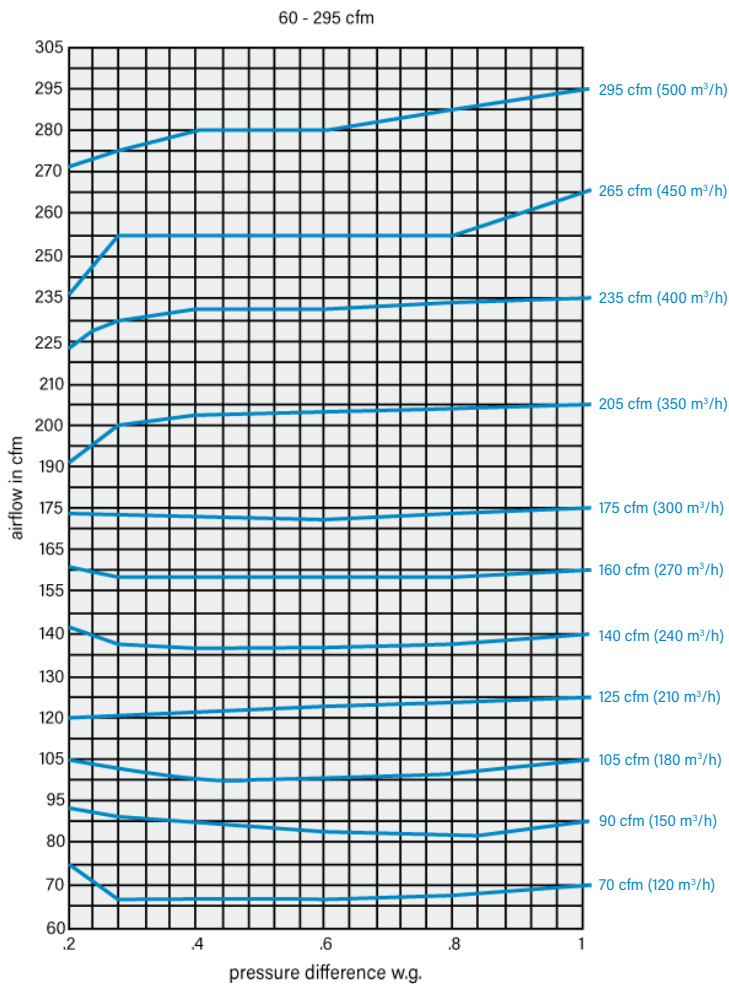
## AIR-YNX™ DIAMETER: 6 inches (150 mm)



## AIR-YNX™ DIAMETER: 10 inches (250 mm)



## AIR-YNX™ DIAMETER: 8 inches (200 mm)



### F. WARRANTY

Seller warrants its product to buyer. AIR-YNX™ shall be free from defects in material and workmanship for a period of 5-years from date of shipment so as long as it is paid for, utilized under normal conditions and properly installed. Warranty not applied to conditions beyond sellers control.



# MODEL AXSFDG FOR SUPPLY/EXHAUST DUCTS

## AIR-YNX™

### PRESSURE INDEPENDENT AIRFLOW REGULATOR

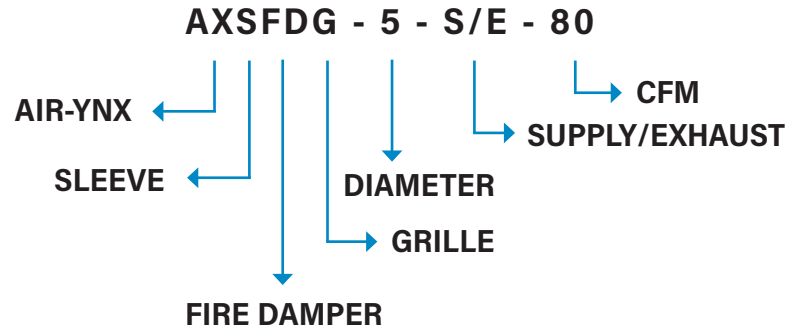
## G. AVAILABLE OPTIONS

### G-1. GENERAL DESCRIPTION

Model consists of an AIR-YNX™ and Fire Damper, which is installed in a heavy-gauge, galvanized steel sleeve, and supplied with a single deflection aluminum grille. The arrangement is sized to fit inside of the standard duct riser openings.

AIR-YNX™ is used in a variety of applications to provide an innovative solution for balancing by maintaining constant airflow while achieving and maintaining the fire integrity rating of the duct system.

### SELECTION SAMPLE



### AXSFDG SELECTION TABLE

SLEEVE NOMINAL (W X H)	AIR-YNX MODEL AX DIAMETER	AIRFLOW (CFM) MIN - MAX	AIRFLOW RANGE (CFM)
6 x 6	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
6 x 6	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
8 x 8	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
10 x 10	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
10 x 10	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295
12 x 12	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
12 x 12	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
12 x 12	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
12 x 12	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295
12 x 12	10	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295

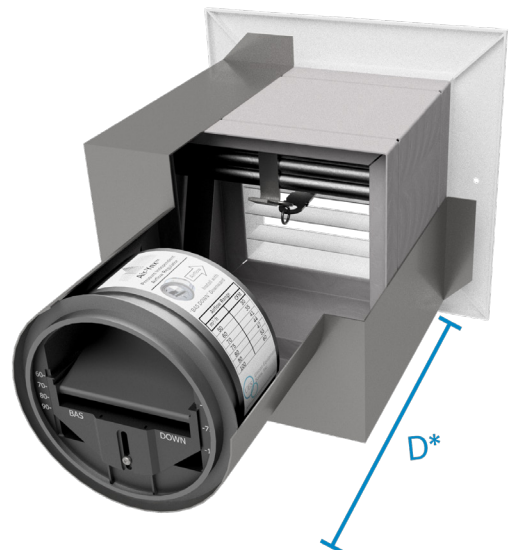
All dimensions in inches  
 D dimension for AX-4 is 9.5", all others are 10.5"  
 Custom sizes are available

## COMPONENTS

**AIR-YNX™:** The UES Model AIR-YNX™ is a pressure independent airflow regulator that automatically balances the airflow rate over a specified operating differential pressure range. AIR-YNX™ is used in HVAC duct systems to provide automatic balancing of airflow. AIR-YNX™ has an innovative, self-adjusting orifice which enables it to continuously self-balance. AIR-YNX™ can be used in several different applications within cooling and heating such as supply, return or exhaust duct systems. Whenever dynamic balancing and consistent airflow control is required AIR-YNX™ provides the solution.

**Grille:** Manufactured from aluminum and supplied with a single deflection grille (double deflection available as an option).

**Fire Damper:** Manufactured from galvanized steel and has a fire resistance rating of 1-1/2 hour.



# MODEL AXS-S-G FOR SUPPLY DUCT AIR-YNX™ PRESSURE INDEPENDENT AIRFLOW REGULATOR

## G. AVAILABLE OPTION

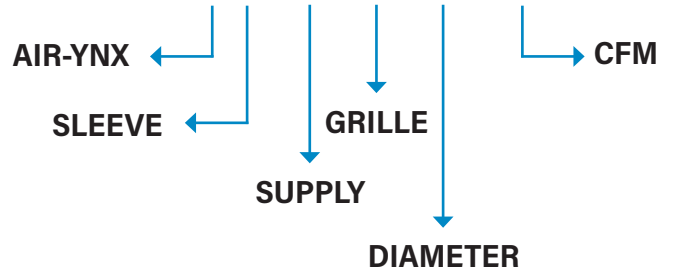
### G-2. GENERAL DESCRIPTION

Model consists of an AIR-YNX™ installed in a heavy-gauge, galvanized steel sleeve and supplied with a single deflection aluminum grille. This arrangement is sized to fit inside standard duct riser openings.

AIR-YNX™ is used in a variety of applications to provide an innovative solution for balancing by maintaining constant airflow.

## SELECTION SAMPLE

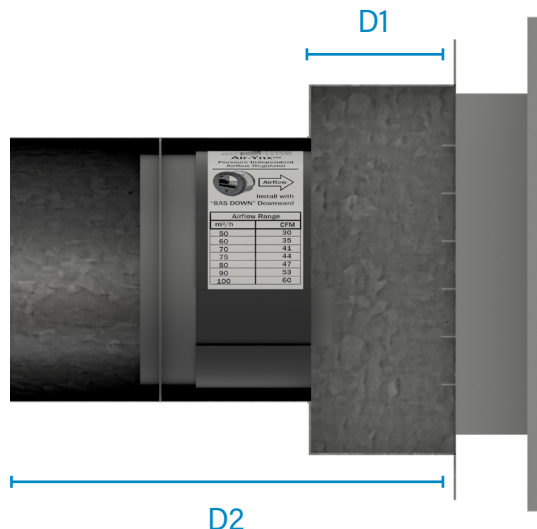
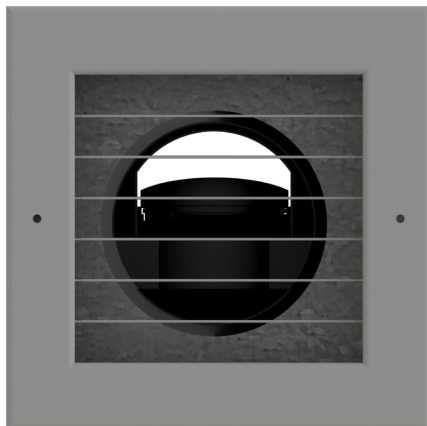
**AXS - S - G - 5 - 80**



## AXS-S-G SELECTION TABLE

SLEEVE NOMINAL (W X H)	MODEL AX NOMINAL DIAMETER	AIRFLOW (CFM) MIN - MAX	AIRFLOW RANGE (CFM)
6 x 4	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
6 x 6	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
6 x 6	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
8 x 8	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
10 x 10	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
10 x 10	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295
12 x 12	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
12 x 12	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
12 x 12	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
12 x 12	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295
12 x 12	10	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295

All dimensions in inches  
Sleeve with 3/8" undercut  
D1 dimension is 1-5/8"  
D2 dimension is 5-1/2"



■ Installation in Supply Duct with Grille



# MODEL AXS-E-G FOR EXHAUST DUCT AIR-YNX™ PRESSURE INDEPENDENT AIRFLOW REGULATOR

## G. AVAILABLE OPTION

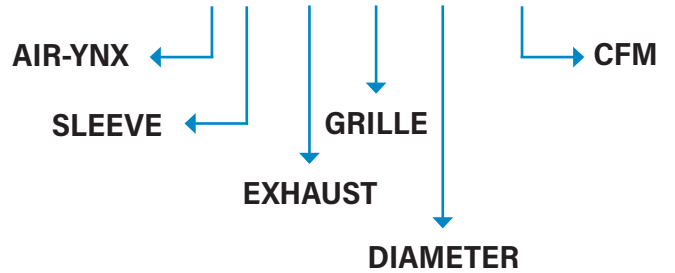
### G-3. GENERAL DESCRIPTION

Model consists of an AIR-YNX™ installed in a heavy-gauge, galvanized steel sleeve and supplied with a single deflection aluminum grille. This arrangement is sized to fit inside standard duct riser openings.

AIR-YNX™ is used in a variety of applications to provide an innovative solution for balancing by maintaining constant airflow.

## SELECTION SAMPLE

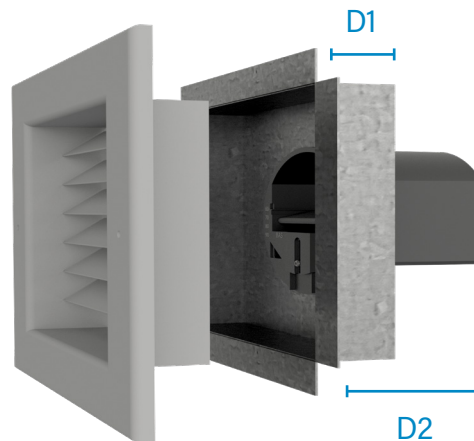
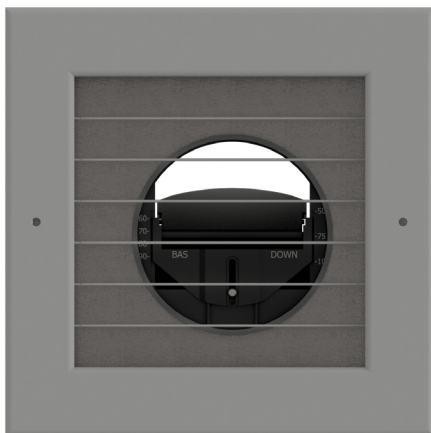
**AXS - E - G - 5 - 80**



## AXS-E-G SELECTION TABLE

SLEEVE NOMINAL (W X H)	MODEL AX NOMINAL DIAMETER	AIRFLOW (CFM) MIN - MAX	AIRFLOW RANGE (CFM)
6 x 4	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
6 x 6	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
6 x 6	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
8 x 8	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
8 x 8	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
10 x 10	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
10 x 10	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
10 x 10	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295
12 x 12	4	10 - 60	10, 15, 20, 25, 30, 35, 45, 55, 60
12 x 12	5	10 - 105	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105
12 x 12	6	10 - 175	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175
12 x 12	8	10 - 295	10, 15, 20, 25, 30, 35, 45, 55, 60, 70, 90, 105, 125, 140, 145, 160, 175, 205, 235, 265, 295

All dimensions in inches  
Sleeve with 3/8" undercut  
D1 dimension is 1-5/8"  
D2 dimension is 4-1/2" for size 4. All other sizes are 5-1/2"



■ Installation in Exhaust Duct with Grille

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