

ARROW UNITED INDUSTRIES SUBMITTAL DATA TRANSITIONS AND COLLARS

**MODELS 117A, D17A & 117X, D17X
FIRE DAMPERS FOR ROUND OR
OVAL DUCTWORK IN LOW
PRESSURE HVAC SYSTEMS
(Max. Pressure: 2 in. wg)**

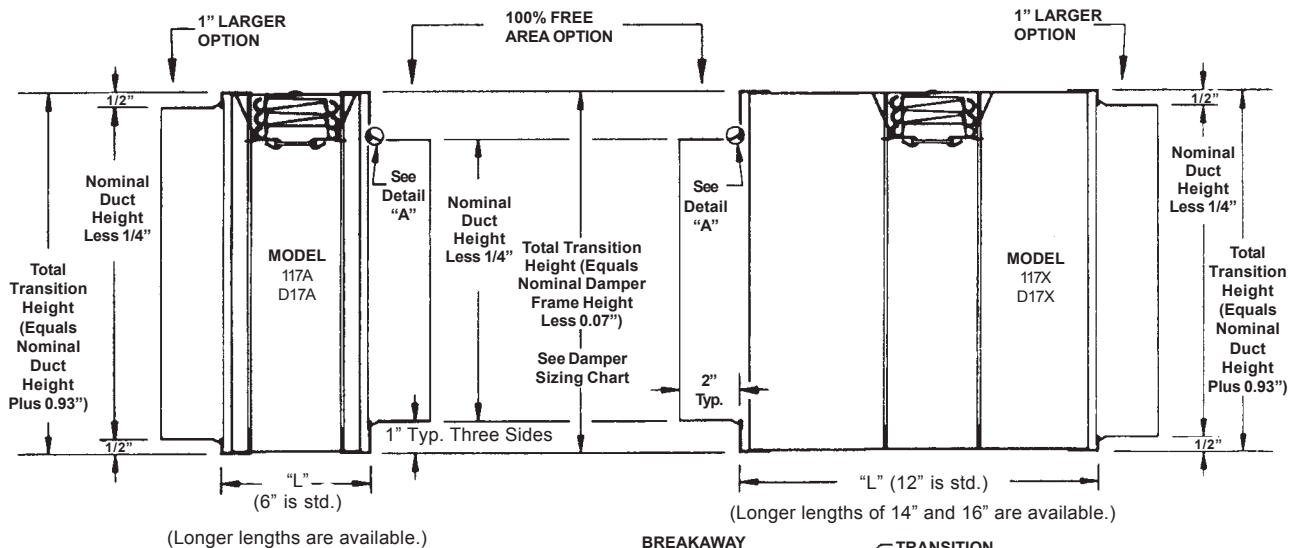
**VERTICAL DAMPERS SHOWN BELOW; TRANSI-
TIONS AND COLLARS CAN BE SUPPLIED FOR
HORIZONTAL UNITS, ALSO.**

TRANSITIONS AVAILABLE FOR EITHER:

- 100% FREE AREA
(Blade-stack out of the airstream),
- OR
- 1" -LARGER DAMPER SIZE THAN DUCT SIZE
(Blade-stack in the airstream).

TRANSITIONS AVAILABLE FOR EITHER:

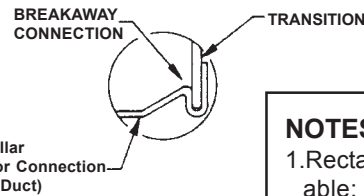
- BOTH ENDS OF DAMPER,
- OR
- ONE END OF DAMPER



IMPORTANT
For round duct diameters up to 36" and for oval duct sizes up to 71"W x 30"H, Arrow's 22 Ga. duct connection collar (crimped to the damper transition) constitutes a UL approved duct-to-sleeve "Breakaway" connection, thus allowing a rigid connection joint to be utilized between the damper's duct connection collar and the round or oval ductwork.

UNDERWRITERS LABORATORIES INC.
CLASSIFIED
FIRE DAMPERS
FIRE RESISTANCE RATING 1-1/2 HR.
SEE UL CLASSIFIED BUILDING MATERIALS INDEX

California State Fire Marshal
Listing No. 3225-1328:100



DETAIL "A"

NOTES:
1. Rectangular collars are not available; an "A" or "B" Style damper (without transitions) should be used. If 100% free area for rectangular ductwork is desired, a "C" Style damper should be used.
2. Sealed/caulked units are not available. Sealant/caulking indicates a High Pressure HVAC System; therefore, a "C" Style damper should be used.

STANDARD MATERIALS & CONSTRUCTION:

DAMPER: Model 117A, D17A, or 117X, D17X.
TRANSITION ["CAP"]: 20 Ga. galvanized steel, riveted to damper frame (or sleeve).
DUCT CONNECTION COLLAR: 22 Ga. galvanized steel, crimped to transition.

PROJECT:

LOCATION:

ARCHITECT:

ENGINEER:

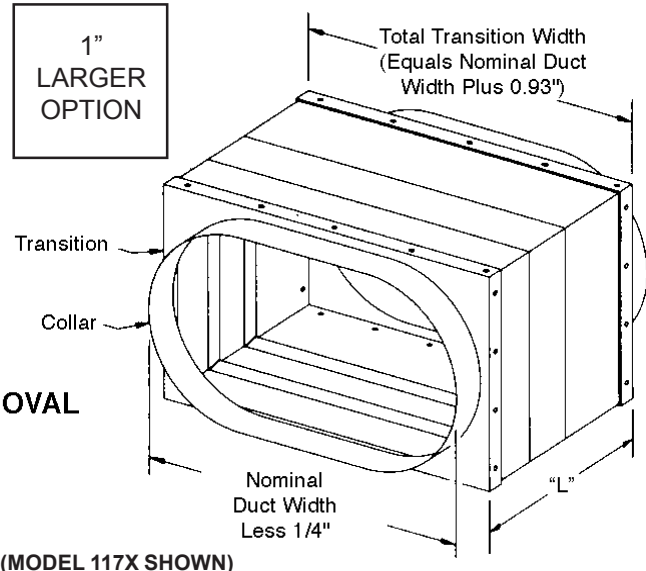
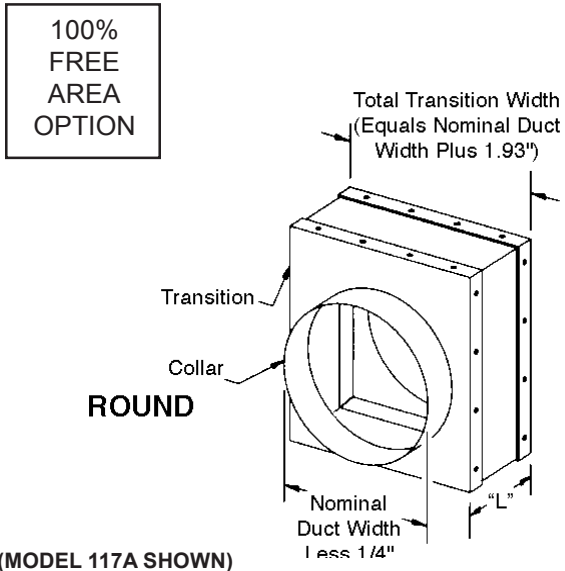
CONTRACTOR:

PO NUMBER:

DATE:

ARROW UNITED INDUSTRIES SUBMITTAL DATA TRANSITIONS AND COLLARS

MODELS 117A, D17A & 117X, D17X FIRE DAMPERS FOR ROUND OR OVAL DUCTWORK



DIMENSIONAL DATA (DUCT DIMENSIONS):

MINIMUM SIZE: 4" Diameter (Vertical and Horizontal)

MAXIMUM SIZE - VERTICAL:

117AV and 117XV Single Panel:

MAXIMUM SIZE - HORIZONTAL:

58"W x 54" H (100% Free Area), or
59"W x 59"H (1" larger).

D17AV and D17XV Single Panel:

40"W x 37"H (100% Free Area), or
41"W x 41"H (1" larger).

117AV and D17AV Multiple Panel:

118"W x 75"H (100% Free Area), or
119"W x 79"H (1" larger).

117AH and 117XH Single Panel:

46"W x 42"H (100% Free Area) or
47"W x 47"H (1" larger).

D17AH and D17XH Single Panel:

34"W x 31"H (100% Free Area), or
35"W x 35"H (1" larger).

117AH Multiple Panel:

95"W x 37"H (100% free Area), or
96"W x 41"H (1" larger).

D17AH Multiple Panel:

95"W x 31"H (100% Free Area), or
96"W x 35"H (1" larger).

NOTE: Dampers should be ordered by nominal duct size.
Fractional duct dimension (1/8" min.) will require the same fractional addition to the corresponding damper transition dimension.

DAMPER SIZING CHART FOR 100% FREE AREA OPTION

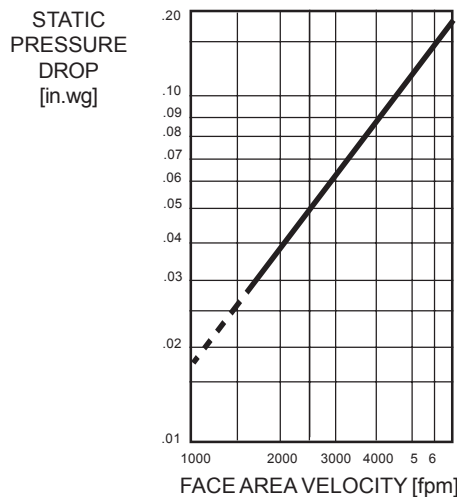
WIDTH: Add 2" to Nominal Duct Width.

HEIGHT:

IF NOMINAL DUCT HEIGHT IS:	INCHES TO ADD FOR NOMINAL DAMPER FRAME HEIGHT:
4" THRU 18"	3"
19" THRU 28"	4"
29" THRU 40"	5"
41" THRU 42"	6"
43" THRU 54"	6"
55" THRU 57"	4"
58" THRU 75"	5"

With 100% Free Area, Pressure Drop is determined by FACE Area Velocity (in lieu of Free Area Velocity)

FACE AREA VELOCITY [fpm]
FLOW [cfm]
FACE AREA [sq. ft.]



FOR 1"-LARGER OPTION, NOMINAL DAMPER FRAME DIMENSIONS ARE ALWAYS 1" LARGER THAN NOMINAL DUCT DIMENSIONS.