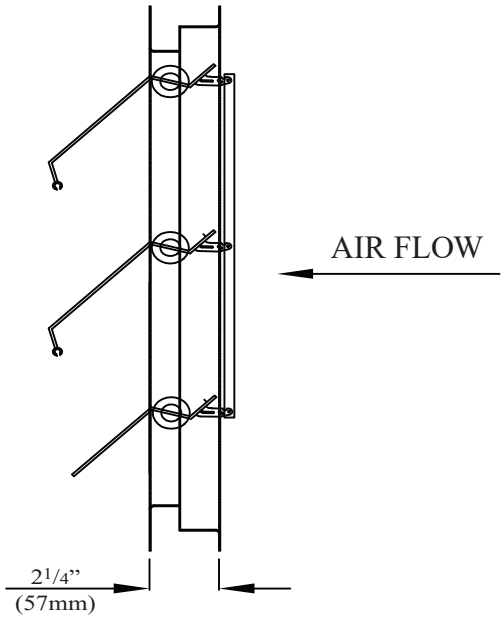
AIR CONTROL DAMPER
MODEL PRD 170
PRESSURE RELIEF DAMPER

STANDARD CONSTRUCTION

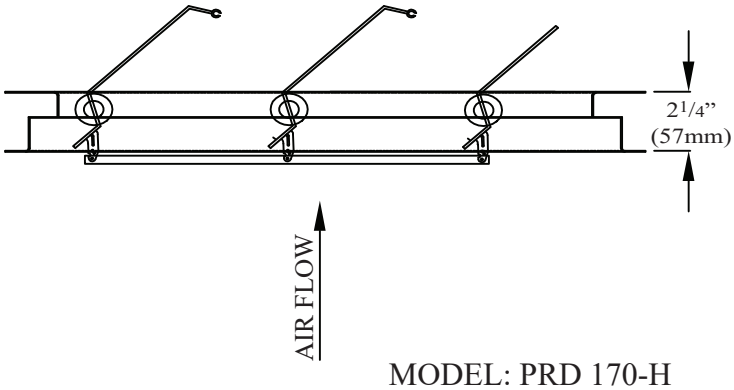
FRAME
EXTRUDED ALUMINUM CONSTRUCTION, 0.087" (2.2mm) THICK, 2 1/4" DEPTH.
BLADES
EXTRUDED ALUMINUM CONSTRUCTION 0.079" (2mm) THICK.
COUNTER BALANCE
ZINC PLATED BAR ON THE BLADE (EXCEPT THE TOP BLADE) ADJUSTABLE FOR FINAL "ON THE JOB" SETTING.
SEALS
VINYL BLADE CUSHION SEALS MECHANICALLY LOCKED INTO THE BLADE.
BEARINGS & AXLES
CORROSION RESISTANT HEAVY DUTY DIE CAST ALUMINUM AXLES WITH BRONZE BEARINGS
LINKAGE
0.118" (3mm) ALUMINUM TIE BARS IN THE AIR STREAM.
FINISH
MILL.



MODEL: PRD 170

TEMPERATURE LIMITS
-40°F (-40°C) MINIMUM & 250°F (121°C) MAXIMUM.

MOUNTING
VERTICAL & HORIZONTAL.



MODEL: PRD 170-H

OPTIONS:

1) FLANGED: 30mm Extruded Aluminum Flange.
2) SEALS: Neoprene Rubber Foam
3) SLEEVES: All types of sleeve for duct mounting

NOTE:
WHEN USED IN FAN DISCHARGE APPLICATION DAMPER SHOULD BE LOCATED AT LEAST 1/2 FAN DIAMETER FROM FAN DISCHARGE.

CONSTRUCTION SIZES

MINIMUM SINGLE SECTION:
6" (152mm) W x 12"(305mm) H
MAXIMUM SINGLE SECTION:
Vertical Mount: 48"(1219mm) W x 50"(1270mm) H
Horizontal Mount: 36"(914mm) W x 36"(914mm) H
MAXIMUM MULTIPLE SECTION:
Unlimited

TESTING WAS PERFORMED BY:
AMCA INTERNATIONAL IN
ACCORDANCE TO AMCA STD 500.-D

AIR MOVEMENT PRODUCTS

AIR CONTROL DAMPER
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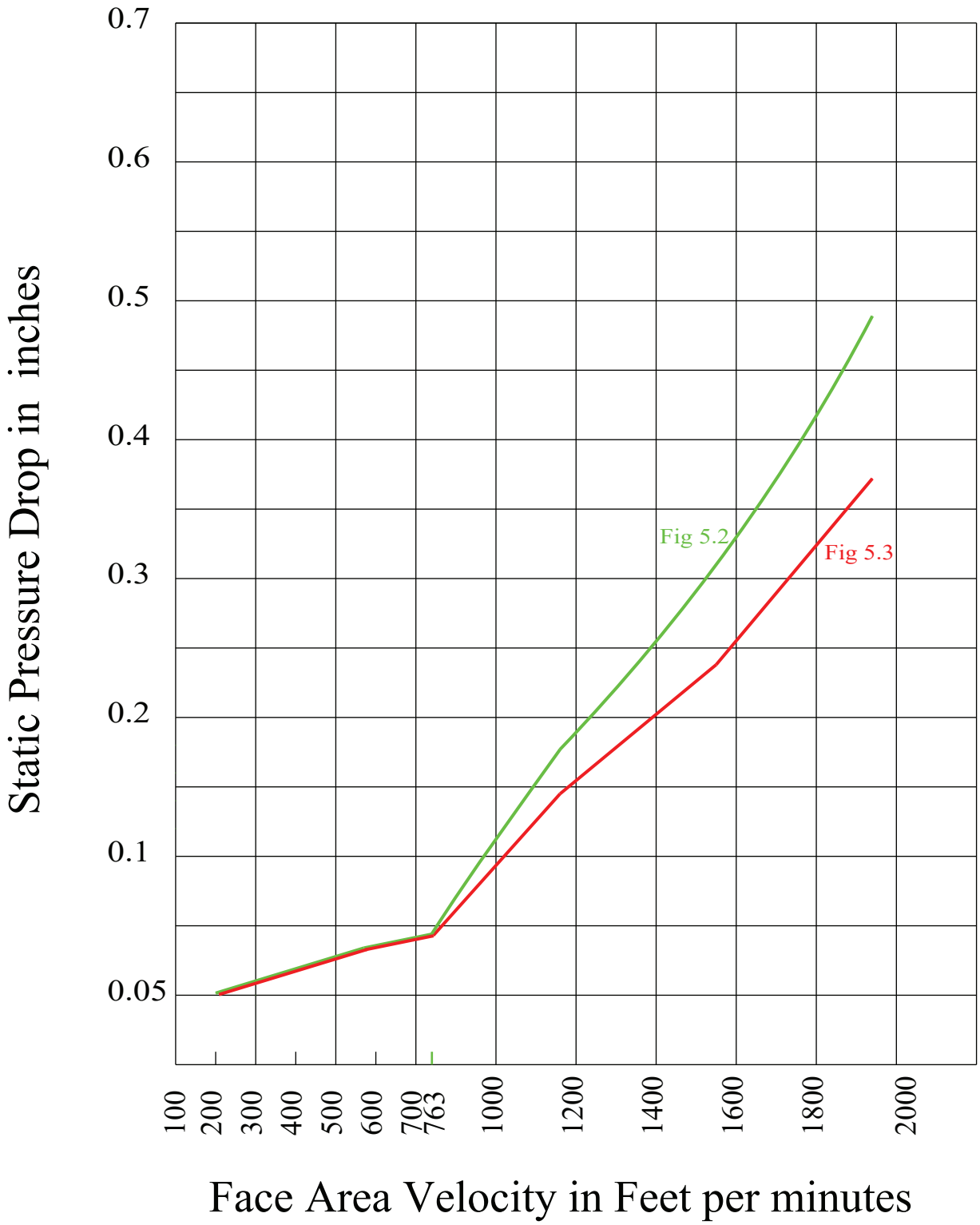
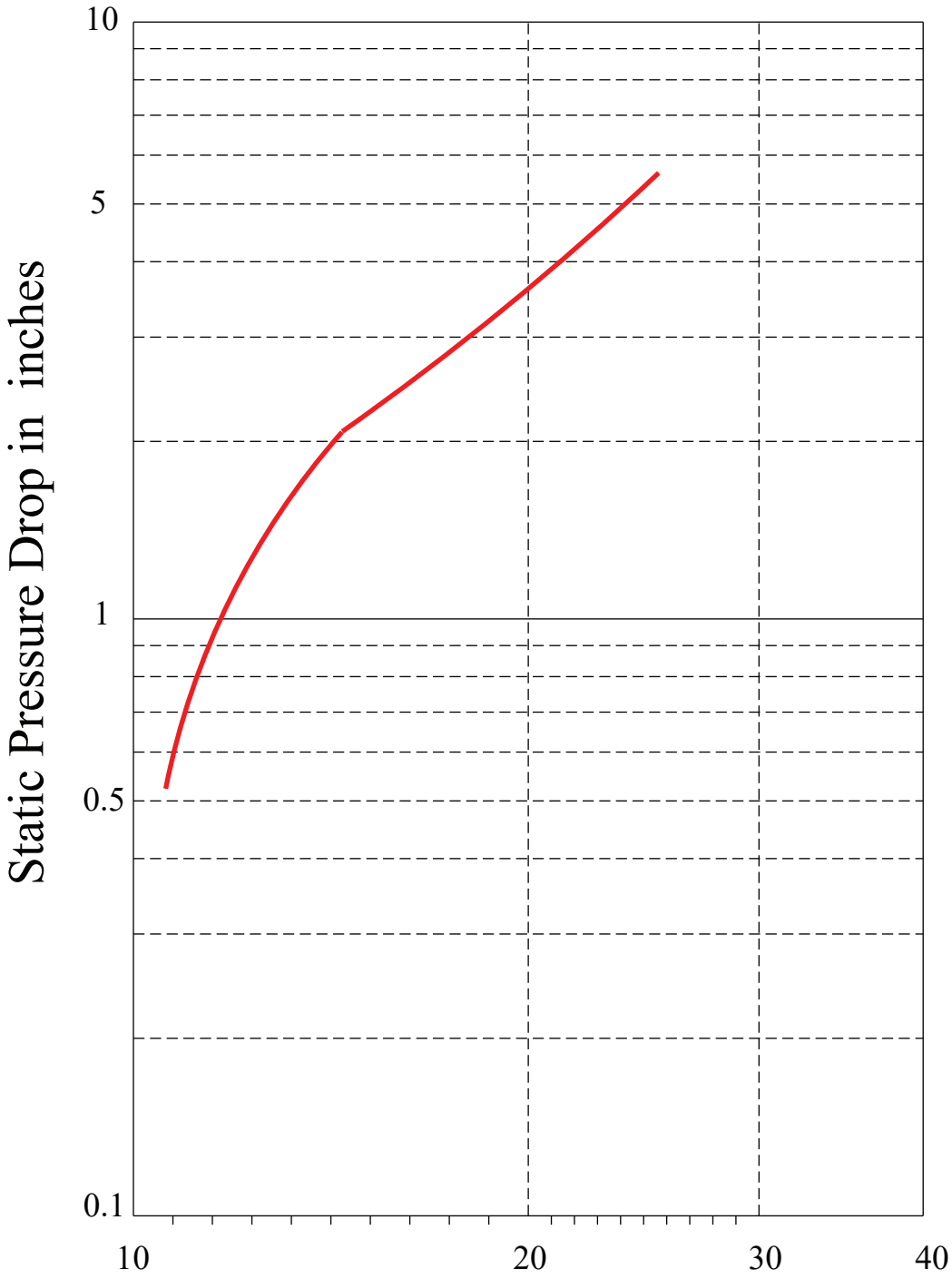
AIR PERFORMANCE



AIR CONTROL DAMPER
MODEL PRD 170
AIR LEAKAGE - DAMPER BLADES CLOSED



Air Leakage in CFM/ft² through FACE AREA

Tested by AMCA according to AMCA STD Fig 5.5

AIR CONTROL DAMPER
MODEL PRD 170
AIR PERFORMANCE

These pressure drop testing were conducted in accordance with AMCA Standard 500-D-98 using the two configurations shown. Actual pressure drop found in any HVAC system is a combination of many factors.
This pressure drop information along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in a given HVAC system.
Tests work were carried out in AMCA laboratories under test No. 20275 ID1 & ID2 at damper size 36"x 36".

During the test at fig 5.2, the damper reached a full open position at 763 fpm @ 0.072".

Leakage tests work were carried out in AMCA laboratories under test No. 20276 at damper size 48"x 48"

AMCA Test Figures

Figure 5.3 Illustrates a fully ducted damper. This configuration has the lowest pressure drop of the test configurations because entrance and exit losses are minimized by straight duct runs upstream and downstream of the damper.

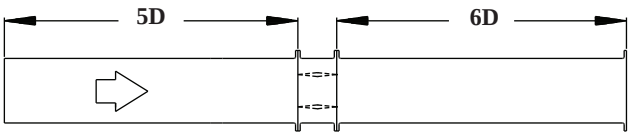


Figure 5.2 Illustrates a ducted damper exhausting air into an open area. This configuration has a higher pressure drop than Figure 5.3 because exit losses are not minimized.