DUCT & FITTINGS

Straight Duct

OPTIONS:
- Custom lengths available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- Refer to Uangyih-tech Flanges System section for adapters, drains and test port
- Raw end available.
- PSP duct.
- Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

STANDARD LENGTHS ("L")

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>&quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 450</td>
<td>1200</td>
</tr>
<tr>
<td>500 TO 3000</td>
<td>2400</td>
</tr>
</tbody>
</table>

Type no. PUDTPA
DUCT & FITTINGS

Straight Duct with Straight Tap

OPTIONS:
- Custom lengths available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- Multiple and offset taps available
- Raw end available.
- PSP duct.
- Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

MIN DISTANCE TO DUCT END
"D1"= 100 - 1450 : 50mm MIN
"D1"= 1500 - 3000 : 100mm MIN

STANDARD LENGHTS ("L")

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>&quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 450</td>
<td>1200</td>
</tr>
<tr>
<td>500 TO 3000</td>
<td>2400</td>
</tr>
</tbody>
</table>

STRAIGHT TAP
"L1" MIN = "D2"+100mm
"L1" MAX = 2400mm
"D2" MAX = 2200

DUCT & FITTINGS

Straight Duct with Conical Tap

OPTIONS:
- Custom lengths available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- Multiple and offset taps available
- Raw end available.
- PSP duct.
- Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

**MIN DISTANCE TO DUCT END**
- "D1" = 100 - 1450 : 75mm MIN
- "D1" = 1500 - 3000 : 125mm MIN

STANDARD LENGHTS ("L")

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>&quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 450</td>
<td>1200</td>
</tr>
<tr>
<td>500 TO 3000</td>
<td>2400</td>
</tr>
</tbody>
</table>

CONICAL TAP
- "L1" MIN = "D2" + 150mm
- "L1" MAX = 2400mm
- "D2" MAX = 2150
DUCT & FITTINGS

Straight Duct with Shoe Tap

OPTIONS:

☐ Custom lengths available.

☐ Duct greater than 2100 diameter requires
  Uangyih-tech Engineering review and approval.

☐ Multiple and offset taps available

☐ Raw end available.

☐ PSP duct.

☐ Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

MIN DISTANCE TO DUCT END
"D1"= 100 - 1450 : 75mm MIN
"D1"=1500 - 3000 : 125mm MIN

STANDARD LENGTHS ("L")

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>&quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 450</td>
<td>1200</td>
</tr>
<tr>
<td>500 TO 3000</td>
<td>2400</td>
</tr>
</tbody>
</table>

Shoe TAP
"L1" MIN = "D2"+100mm(Shoe length)+150mm
"L1" MAX = 2400mm
"D2" MAX = 2150

REV:01/08/10
°L2 MIN DISTANCE
"D1" = 100 - 2350 : 100mm MIN
"D1" = 2400 - 3000 : 175mm MIN

**L3** *150mm MIN

**100mm MIN
"L2"

STANDARD LENGHTS ("L")

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>&quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 450</td>
<td>1200</td>
</tr>
<tr>
<td>500 TO 3000</td>
<td>2400</td>
</tr>
</tbody>
</table>

45° LATERAL TAP

"L1" MIN = ("D2" x 1.1414) + 100mm + "L4"

"L1" MAX = 2400mm

"D2" MAX = 1500

OPTIONS:

- Custom lengths available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- Multiple and offset taps available
- Raw end available.
- PSP duct.
- Not coated duct.
OPTIONS:

- Standard gores and radii are shown, custom number of gores, custom radii, and throat extensions are available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- PSP duct.
- Not coated duct.

**90° ELBOW**

STANDARD RADIUS AT THE DUCT CENTERLINE

"R" = 1.5 x "D" OR "R" = 1 x "D"

DUE TO MANUFACTURING LIMITATIONS, THE FOLLOWING FULL RADIUS ELBOWS ARE NOT AVAILABLE:

- 90° ELBOW GREATER THAN 1500 DIA.
- 60° ELBOW GREATER THAN 2050 DIA.
- 45° ELBOW GREATER THAN 2650 DIA.

LARGE ELBOWS ABOVE THESE LIMITS WILL BE MANUFACTURED AS SMALLER FITTINGS.

**EXAMPLE:** AN 2150 DIA. 90° ELBOW WILL BE SUPPLIED AS TWO 45° ELBOWS

---

**Gored Elbow**

OPTIONS:

- Standard gores and radii are shown, custom number of gores, custom radii, and throat extensions are available.
- Duct greater than 2100 diameter requires Uangyih-tech Engineering review and approval.
- PSP duct.
- Not coated duct.

**90° ELBOW**

STANDARD RADIUS AT THE DUCT CENTERLINE

"R" = 1.5 x "D" OR "R" = 1 x "D"

DUE TO MANUFACTURING LIMITATIONS, THE FOLLOWING FULL RADIUS ELBOWS ARE NOT AVAILABLE:

- 90° ELBOW GREATER THAN 1500 DIA.
- 60° ELBOW GREATER THAN 2050 DIA.
- 45° ELBOW GREATER THAN 2650 DIA.

LARGE ELBOWS ABOVE THESE LIMITS WILL BE MANUFACTURED AS SMALLER FITTINGS.

**EXAMPLE:** AN 2150 DIA. 90° ELBOW WILL BE SUPPLIED AS TWO 45° ELBOWS

---

**Uangyih-tech Standard Diameter**

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>SF1</th>
<th>SF2</th>
<th>SF1</th>
<th>SF2</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-150</td>
<td>SF1=25</td>
<td>SF2=25</td>
<td>SF1=0</td>
<td>SF2=0</td>
</tr>
<tr>
<td>200-500</td>
<td>SF1=20</td>
<td>SF2=20</td>
<td>SF1=0</td>
<td>SF2=0</td>
</tr>
<tr>
<td>550 UP</td>
<td>SF1=0</td>
<td>SF2=0</td>
<td>SF1=0</td>
<td>SF2=0</td>
</tr>
</tbody>
</table>

**1/2 RADIUS ELBOWS ARE NOT AVAILABLE.**
**Concentric and Eccentric Reducer**

**OPTIONS:**
- □ Custom length available.
- □ PSP duct.
- □ Not coated duct.

**WITH ANGLE RINGS**
*(AVAILABLE 100 - 3000)*

**ECCENTRIC**

Formula to calculate the minimum length for an eccentric reducer

\[ L1 = L2 + L4 + L5 \]

Use this chart for minimum length of "L2" (Shorter taper or "L2" length can be fabricated, but will effect air flow)

<table>
<thead>
<tr>
<th>AMOUNT OF REDUCTION</th>
<th>MINIMUM LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;D1&quot; minus &quot;D2&quot;</td>
<td>&quot;L2&quot;</td>
</tr>
<tr>
<td>150 AND LESS</td>
<td>300 mm</td>
</tr>
<tr>
<td>175 TO 225</td>
<td>450 mm</td>
</tr>
<tr>
<td>250 TO 325</td>
<td>600 mm</td>
</tr>
<tr>
<td>350 TO 425</td>
<td>750 mm</td>
</tr>
</tbody>
</table>

**CONCENTRIC**

Formula to calculate the minimum length for an concentric reducer

\[ L1 = L2 + L4 + L5 \]

Use this chart for minimum length of "L2" (Shorter taper or "L2" length can be fabricated, but will effect air flow)

<table>
<thead>
<tr>
<th>AMOUNT OF REDUCTION</th>
<th>MINIMUM LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;D1&quot; minus &quot;D2&quot;</td>
<td>&quot;L2&quot;</td>
</tr>
<tr>
<td>225 AND LESS</td>
<td>300 mm</td>
</tr>
<tr>
<td>250 TO 350</td>
<td>450 mm</td>
</tr>
<tr>
<td>375 TO 475</td>
<td>600 mm</td>
</tr>
<tr>
<td>500 TO 600</td>
<td>750 mm</td>
</tr>
</tbody>
</table>

**Use this chart for minimum length of "L4" & "L5"**

<table>
<thead>
<tr>
<th>DUCT DIAMETER</th>
<th>MINIMUM LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;D1&quot; or &quot;D2&quot;</td>
<td>&quot;L4&quot; or &quot;L5&quot;</td>
</tr>
<tr>
<td>100 TO 1450</td>
<td>75 mm</td>
</tr>
<tr>
<td>1500 TO 2350</td>
<td>100 mm</td>
</tr>
<tr>
<td>2400 TO 3000</td>
<td>125 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DUCT DIAMETER</th>
<th>MINIMUM LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;D1&quot; or &quot;D2&quot;</td>
<td>&quot;L4&quot; or &quot;L5&quot;</td>
</tr>
<tr>
<td>100 TO 1450</td>
<td>75 mm</td>
</tr>
<tr>
<td>1500 TO 2350</td>
<td>100 mm</td>
</tr>
<tr>
<td>2400 TO 3000</td>
<td>125 mm</td>
</tr>
</tbody>
</table>

**REV: 01/08/10**

DUCT & FITTINGS

Offset

OPTIONS:
☐ Custom length available.
☐ PSP duct.
☐ Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

Type no. PUOFPA
RECTANGULAR DUCT

Concentric Round to Rectangular Transition

OPTIONS:

☐ PSP duct.
☐ Not coated duct.

WITH ANGLE RINGS
(AVAILABLE 100 - 3000)

NOTES:

☐ RAW END AVAILABLE.

☐ ROUND DUCT GREATER THAN 2100mm DIAMETER REQUIRES UANGYIH-TECH ENGINEERING REVIEW AND APPROVAL.

☐ RECTANGULAR DUCT WIDTH OR HEIGHT OF 2450mm AND LARGER REQUIRES UANGYIH-TECH ENGINEERING REVIEW.

FOR ECCENTRIC ROUND TO RECTANGULAR FITTING, USE THE CUSTOM FITTING ORDER SHEET.
CUSTOM FITTING

CONTROL DEVICES

90 DEGREE REDUCING TEE

90 DEGREE WYE

ELBOW WITH HEEL TAP

ECCENTRIC ROUND TO RECTANGULAR TRANSITION

REV: 01/08/10
CONTROL DEVICES

100 - 450 Industrial Single Blade Balancing Damper

SPECIFICATIONS
- Floating ring - stainless steel
- Manual actuation
- PP edge seal, 100 - 300
- Welded blade stop, 350 - 450
- Liquid tight axle seals

OPTIONS
- Custom hole pattern
- Electric / pneumatic actuators
- PSP duct.
- Not coated duct.

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>BLADE</th>
<th>BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 TO 300</td>
<td>2.0t</td>
<td>1.0t</td>
</tr>
<tr>
<td>350 TO 450</td>
<td>3.0t</td>
<td>2.0t</td>
</tr>
</tbody>
</table>

Type no. PUDHPA

REV: 01/08/10
Micro Adjustable Damper Option
FOR 100 - 450 INDUSTRIAL SINGLE BLADE BALANCING

OPTIONS:
☐ PSP duct.
☐ Not coated duct.

Type no. PUDZPA
CONTROL DEVICE

350-1250 Heavy Duct industrial Single Blade Damper

SPECIFICATIONS

- 1000-1250 welded stainless steel rings.
- 500-950 float stainless steel rings.
- Mounting holes straddle vertical centerline.
- Liquid tight shaft seals-thermoplastic sleeve bearings.
- 35mm stainless steel axles - 1000 TO 1250 6mm stainless steel blade, 350 TO 950 4mm stainless steel blade.

OPTIONS

- Pneumatic actuator.
- Electric actuator.
- Custom hole pattern.
- PSP duct.
- Not coated duct.

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>BLADE</th>
<th>BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>350-950</td>
<td>4.0t</td>
<td>2.0t</td>
</tr>
<tr>
<td>1000-1250</td>
<td>6.0t</td>
<td>3.0t</td>
</tr>
</tbody>
</table>

WITH ANGLE RINGS
(AVAILABLE 350-1250)

CONTROL DEVICE

350-1250 Heavy Duct industrial
Sealed Bearing Single Blade Damper

SPECIFICATIONS
- 1000-1250 welded stainless steel rings.
- 500-950 float stainless steel rings.
- Mounting holes straddle vertical centerline.
- Liquid tight shaft seals-thermoplastic sleeve bearings.
- 35mm stainless steel axles - 6mm stainless steel blade.
- Welded blade stops with seal.

OPTIONS
- Pneumatic actuator.
- Electric actuator.
- Custom hole pattern.
- PSP duct.
- Not coated duct.

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>BLADE</th>
<th>BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>350-450</td>
<td>4.0t</td>
<td>2.0t</td>
</tr>
<tr>
<td>500-950</td>
<td>6.0t</td>
<td>2.0t</td>
</tr>
<tr>
<td>1000-1250</td>
<td>6.0t</td>
<td>3.0t</td>
</tr>
</tbody>
</table>

WITH ANGLE RINGS
(AVAILABLE 350-1250)

REV:01/08/10

1300 DIA. Larger Reinforced Heavy Duty Industrial Single Blade Damper

SPECIFICATIONS
- Stainless steel blade with stiffening ribs.
- Stainless steel body.
- Welded stainless steel rings.
- Gear drive actuator with lock out, 10’ intervals.
- Mounting holes straddle vertical centerline.
- Welded blade stops.
- Liquid tight shaft seals, thermoplastic sleeve bearings.
- Available to 3000mm dia. - dampers larger than 2100mm dia. require engineering review & approval.

OPTIONS
- Pneumatic actuator.
- Electric actuator.
- Custom hole pattern.
- Custom actuator mounting kit.
- PSP duct.
- Not coated duct.

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>BLADE</th>
<th>BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300 TO 2100</td>
<td>10.0t</td>
<td>6.0t</td>
</tr>
</tbody>
</table>

WITH ANGLE RINGS
(AVAILABLE 1300-3000)
CONTROE DEVICE

Heavy Duty Rectangular Parallel Blade Control Damper

SPECIFICATIONS

- FRAME 200mm STANDARD LENGTH WITH 50mm FLANGES - 3mm STAINLESS STEEL CENTER SUPPORT AS REQUIRED.
- MOUNTING HOLES (12 x 18 SLOT) LOCATED BETWEEN 75mm TO 102mm ON CENTER.
- BLADES - 3mm STAINLESS STEEL.
- AXLES - 20mm DIAMETER STAINLESS STEEL.
- LIQUID TIHGHT SHAFT SEALS.

OPTIONS

- PNEUMATIC / ELECTRIC ACTUATOR.
- GEAR DRIVE.

Heavy Duty Rectangular Opposed Blade Control Damper

SPECIFICATIONS

- FRAME 200mm STANDARD LENGTH WITH 50mm FLANGES - 3mm STAINLESS STEEL CENTER SUPPORT AS REQUIRED.
- MOUNTING HOLES (12 x 18 SLOT) EQUAL TO OR LESS THAN 102mm ON CENTER.
- BLADES - 2.0mm STAINLESS STEEL.
- AXLES - 20mm STAINLESS STEEL.
- LIQUID TIHGHT SHAFT SEALS.

OPTIONS

- PNEUMATIC / ELECTRIC ACTUATOR.
- GEAR DRIVE.
Heavy Duty Rectangular Industrial Backdraft Damper

SPECIFICATIONS

- FRAME 200mm STANDARD LENGTH WITH 50mm FLANGES - 3mm STAINLESS STEEL CENTER SUPPORT AS REQUIRED.
- FLANGE MOUNTING HOLES (12 x 18 SLOT) EQUAL TO OR LESS THAN 102 ON CENTER.
- BLADES - 1.5mm STAINLESS STEEL.
- AXLES - 20mm DIAMETER STAINLESS STEEL.
- LIQUID TIGHT SHAFT SEALS.
- MANUAL ADJUSTABLE COUNTERWEIGHTS.

CENTER SUPPORT REQUIRED FOR BLADES LONGER THAN 1200mm ("L1")
CONTROL DEVICE

Heavy Duty Rectangular Industrial Fire Damper

SPECIFICATIONS

- FRAME 250mm STANDARD LENGTH WITH 50mm FLANGES - 3mm STAINLESS STEEL.
- FLANGE MOUNTING HOLES (12 x 18 SLOT) EQUAL TO OR LESS THAN 102 ON CENTER.
- BLADES - 2.0mm STAINLESS STEEL.
- AXLES - 13mm DIAMETER STAINLESS STEEL.
- LIQUID TIHGHT SHAFT SEALS.
- MANUAL ADJUSTABLE COUNTERWEIGHTS.

Type no. PFD-M

"L1" & "L2" DISTANCE
"L1" & "L2" MIN = 200mm
"L1" & "L2" MAX = 700mm