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G-3® CATALOG

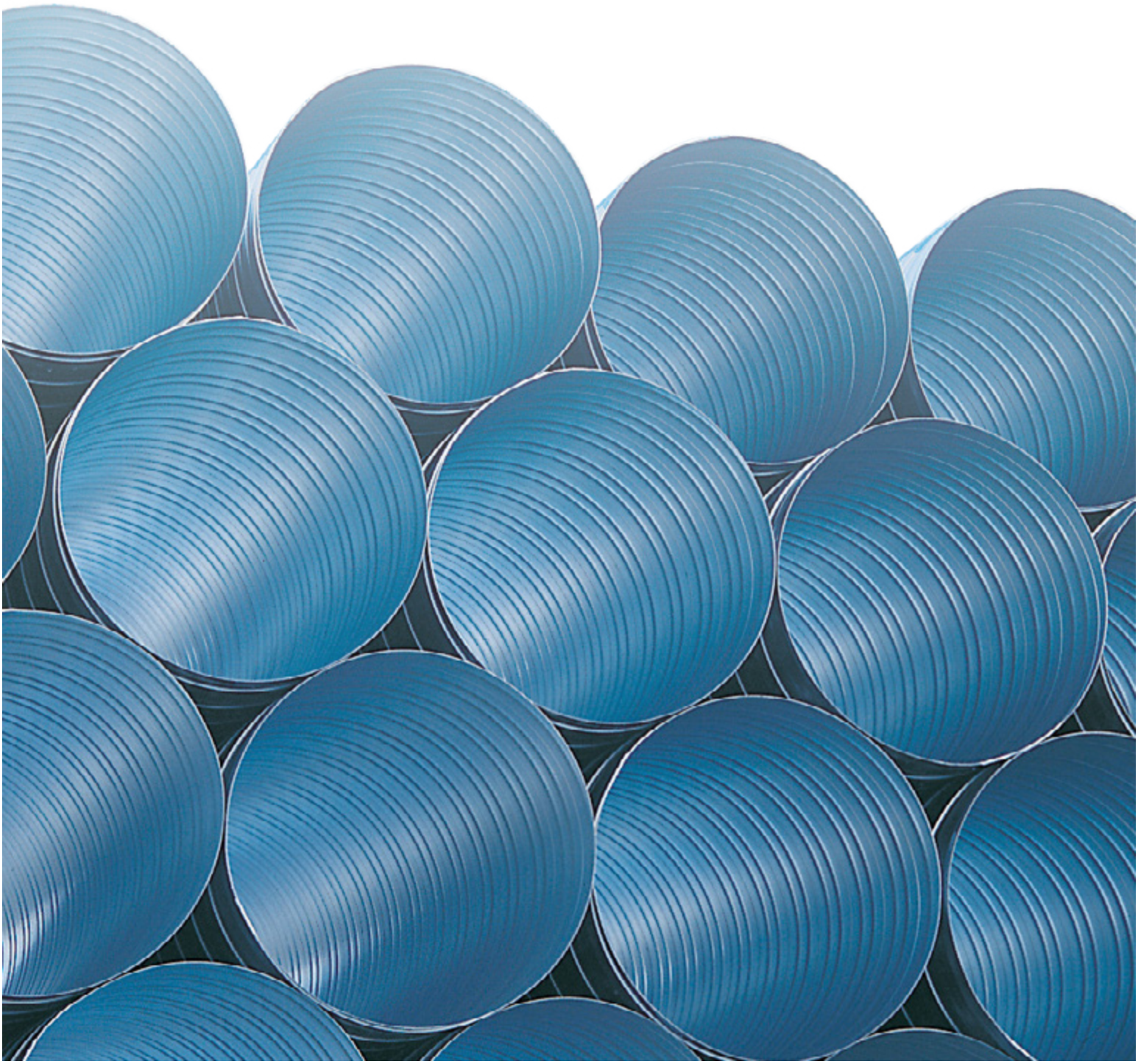

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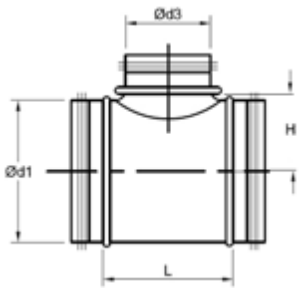
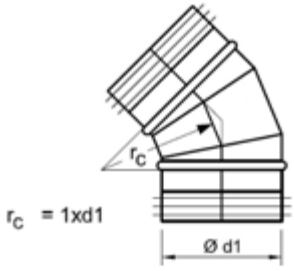
Diagram Abbreviations and Ordering





Nominal inside diameter (duct size) ..... ØD

Nominal outside diameter (fitting size) Ød1, Ød2, Ød3, Ød4

Material thickness (gauge) ..... t

Installed height ..... H

Center line radius ..... r_c

Installed length L

Fitting slip dimension ..... e

All measurements in inches (in or ") unless otherwise noted.

All angles in degrees (º).

Ordering example: RCG-07-05

Ød1	Ød2	**L**
(inch)	**(inch)**	**(inch)**
5	3	2⅝
5	4	2⅜
6	3	3⅜
6	4	2⅞
7	4	3½
7	5	3
7	6	2½

→ installed length

→ nominal diameters added to order code

Nomenclature Abbreviations

Model Nomenclature

Gasketed end connection or nongasketed? Example: BS vs. BSG:

BS
Gustafson G-0 Elbow
Nongasketed

BSG
Gustafson G-3 Elbow
Gasketed

DUCT	SR = single wall round, spiral duct
ELBOWS	B = elbow S = radius of 1.5 (standard) w/o "S" radius = 1.0 radius (nonstandard) F = fabricated (aka not stamped) G = gasketed
REDUCERS	R = reducer C = concentric or center taper F = female G = gasketed L = long
TAPS	P = pressed S = saddle G = gasketed V = 45º B = boot-style R = non-specific C = concentric or center taper
TEES	B = boot-style T = tee G = gasketed C = concentric/center P = pressed
TAKE-OFFS	IL = initial leg R = bell mouth type or *radiused* G = gasketed
CROSSING TEES	X = cross C = center P = pressed G = gasketed B = boot-style
LATERAL TEES	T = tee V = 45º G = gasketed 45 = angle of take-off X = take-off each side
Y-BRANCH	Y = wye V = 45º G = gasketed
END CAPS	E = end cap S = fits inside duct G = gasketed P = fits outer duct F = female H = handle
DAMPERS	D = damper S = full blade R = slotted damper blade T = gasketed blade G = gasketed I = insulated
COUPLINGS	MF = outer coupling NP = inner coupling

Gustafson G-3® Connection

Design by Diameter

Gasket connection for diameters 26" and smaller

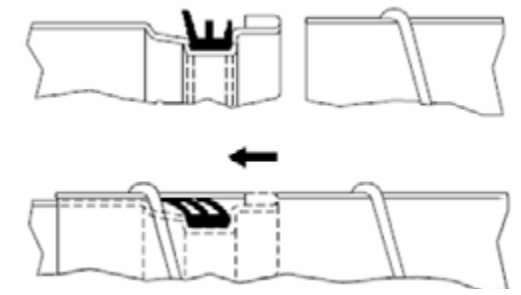
“Leading Edge” for diameters 28" and larger

The Gustafson G-3 self-sealing duct system is based on a triple-lip profile, EPDM rubber gasket. This gasket is located in a groove at the end of the fitting. This design ensures that the rubber gasket is always held in the correct position.

When the fitting is inserted into the spiral duct, the gasket folds back forming a seal against the inside of the spiral duct eliminating the need for any duct sealer.

In order to achieve optimum sealing for all diameters, various gasket sizes are used as shown in the table below.

The standard Gustafson G-3 gasket is made from a material resistant to ozone, UV rays, and temperature fluctuations. A silicone gasket for special applications is also available. The standard Gustafson G-3 gasket is rated for temperatures from -20ºF to +212ºF (silicone gasket rated for temperatures from -94ºF to +302ºF).



Benefits of the Gustafson G-3 Duct System

- A complete line of self-sealing spiral duct and fittings
- Factory installed gasket - no loose parts
- Fast and easy installation
- Installation not contingent on weather
- Performance rated from -20ºF to +212ºF
- Triple lipped gasket minimizes the risk of leakage in the event of damage
- Meets SMACNA’s Leakage Class 3
- Gasket U.L. classified rating (Flame Spread 0/ Smoke Developed 5) in accordance with ASTM standard E84-91a
- Rolled over edges for easier installation, reduces risk of injury and adds strength
- Adjustability - fittings can be rotated 360º during installation and still maintain the seal’s integrity

Gasket Size by Diameter

Size	7	9	11	14	20	30
Dia (inch)	3-7	8-11	12-20	22-36	38-58	60

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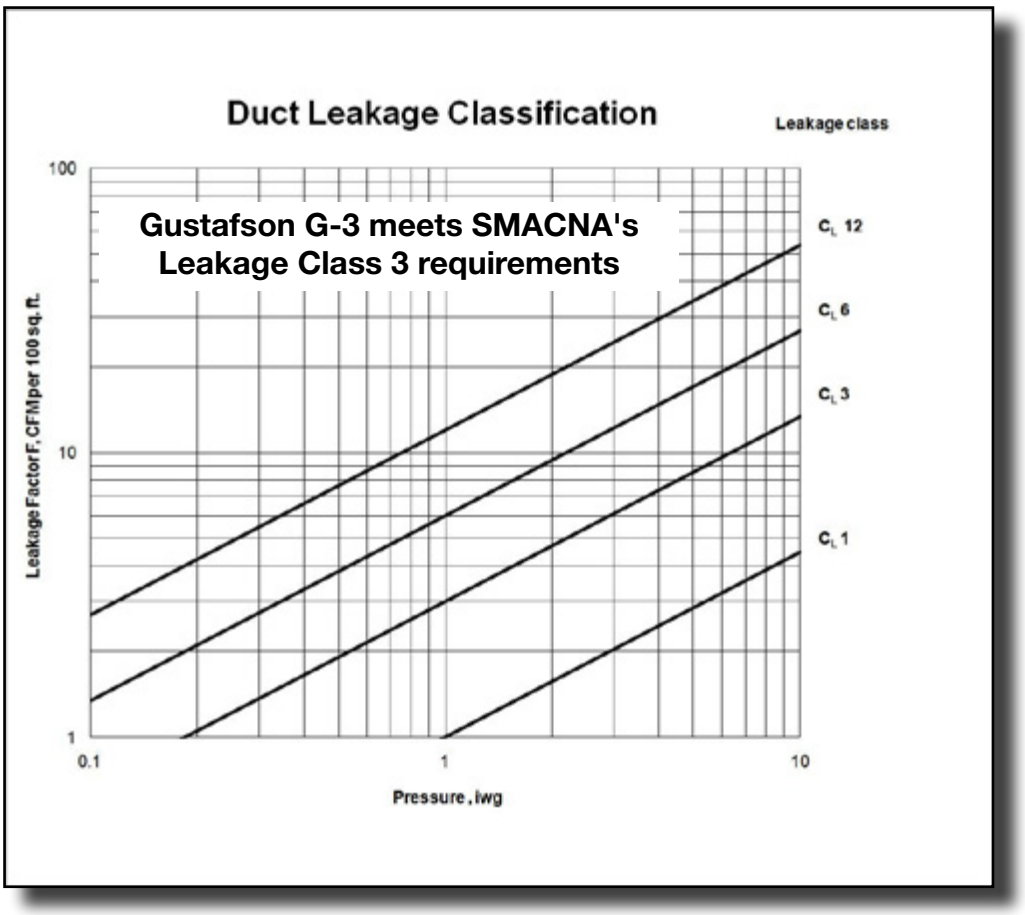
Duct System Leakage Classification

The graph below represents a selected series of leakage classes as defined by the formula C_L=F/P0.65. The formula defines leakage class as the relationship between leak rate, duct surface area, and pressure.

Since the calculation of leakage class is based on several relevant factors while percent leakage is based only on overall system air flow, leakage class is a more comprehensive method of assigning allowable leakage rates. This enables the designer to address all major system factors by simply assigning a leakage class.

Gustafson G-3 meets SMACNA's Leakage Class 3 requirements without the use of any duct sealants.



F = Leak rate per unit of duct surface (cfm/100 sq. ft.)
C_L = Leakage Class
P = Static pressure (iwg)

1985 SMACNA Duct Leakage Guide; used with permission of SMACNA

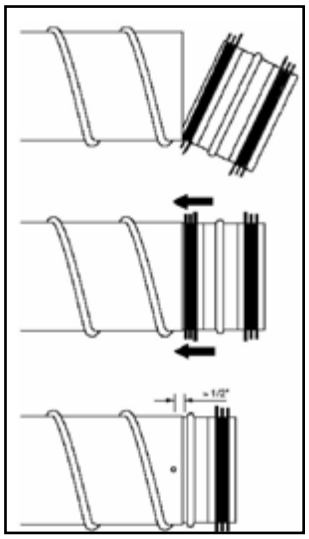
Assembly Instructions

Preparations for assembly
Check that ducts and fittings to be used in the system are Gustafson G-3 and are undamaged. All Gustafson G-3 fittings must be used with calibrated spiral duct certified by Gustafson.

Do not use ducts or fittings that have been damaged in such a way that they jeopardize the air tightness or structural strength of the system.

Store ducts and fittings in a well-ordered and weatherproof storage area to minimize the risk of damage.

Cut ducts at right angles. Carefully remove any burrs from cut edges. Installation is easier and the risk of damaging the gasket is reduced if there are no burrs.



Assembly
Start by inserting the turned-over edge of the fitting into the duct.

Check that the first lip of the gasket is in contact with the edge of the duct all the way around and sticks straight out so that the lip is not twisted in one direction or the other.

Push the end of the fitting into the duct. Turning the fitting slightly aids insertion. (Removal, if necessary, is also aided by turning.)

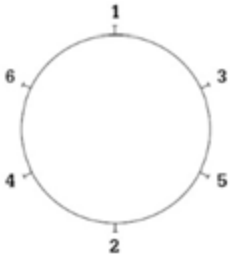
Secure the fitting in the duct using self-tapping screws or airtight pop rivets.

Fasteners should be positioned 1/2" from the bead to prevent damage to the gasket.

Placement of the fastening screws should be opposite from one another evenly spaced around the circumference, much like the procedure for tightening lug nuts on a tire (see diagram). Start where the distance between the duct and the fitting is largest. Screws should be placed approximately 1/2" from the bead in order to avoid damaging the Gustafson G-3 gasket. In the event of incorrect installation, holes caused by screws or pop rivets must be sealed before reassembly.

Quantities and sizes to be used are listed in the below table.

Duct Dia. (inch)	Screw Dia. (inch)	Quantity
3 - 5	⅛	2
6 - 10	⅛	3
12 - 24	⅛	4
26 - 50	⅛	6
52 - 60	⅛	8



Always start the first fastener at the largest radial gap between fitting and duct. Be sure to achieve even distribution around the circumference.

Carefully seal any holes left by measurements, removed screws, pop rivets, etc.

Rectangular to Round Conversion

b\a	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3	3.8	4.6	5.2	5.7	6.2	6.6	7.0	7.3	7.7	8.0	8.3	8.5	8.8	9.0	9.3	9.5	9.7	9.9	10.1
4	4.4	5.3	6.1	6.7	7.3	7.8	8.3	8.7	9.1	9.5	9.8	10.1	10.4	10.7	11.0	11.3	11.5	11.8	12.0
5	4.9	6.0	6.9	7.6	8.3	8.9	9.4	9.9	10.3	10.8	11.2	11.5	11.9	12.2	12.6	12.9	13.2	13.5	13.8
6	5.3	6.6	7.6	8.4	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.2	13.6	14.0	14.4	14.7	15.0	15.3
7	5.7	7.1	8.2	9.1	9.9	10.7	11.3	11.9	12.5	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.1	16.5	16.8
8	6.1	7.6	8.7	9.8	10.7	11.5	12.2	12.9	13.5	14.1	14.6	15.1	15.6	16.1	16.5	17.0	17.4	17.8	18.2
9	6.4	8.0	9.3	10.4	11.3	12.2	13.0	13.7	14.4	15.0	15.6	16.2	16.7	17.2	17.7	18.2	18.6	19.0	19.5
10	6.7	8.4	9.8	10.9	12.0	12.9	13.7	14.5	15.2	15.9	16.5	17.1	17.7	18.3	18.8	19.3	19.8	20.2	20.7
11	7.0	8.8	10.2	11.5	12.6	13.5	14.4	15.3	16.0	16.8	17.4	18.1	18.7	19.3	19.8	20.4	20.9	21.4	21.8
12	7.3	9.1	10.7	12.0	13.1	14.2	15.1	16.0	16.8	17.6	18.3	19.0	19.6	20.2	20.8	21.4	21.9	22.4	22.9
13	7.6	9.5	11.1	12.4	13.7	14.7	15.7	16.7	17.5	18.3	19.1	19.8	20.5	21.1	21.8	22.4	22.9	23.5	24.0
14	7.8	9.8	11.5	12.9	14.2	15.3	16.4	17.3	18.2	19.1	19.9	20.6	21.3	22.0	22.7	23.3	23.9	24.5	25.0
15	8.0	10.1	11.8	13.3	14.6	15.8	16.9	17.9	18.9	19.8	20.6	21.4	22.1	22.9	23.5	24.2	24.8	25.4	26.0
16	8.3	10.4	12.2	13.7	15.1	16.4	17.5	18.5	19.5	20.4	21.3	22.1	22.9	23.7	24.4	25.1	25.7	26.4	27.0
17	8.5	10.7	12.5	14.1	15.6	16.8	18.0	19.1	20.1	21.1	22.0	22.9	23.7	24.4	25.2	25.9	26.6	27.2	27.9
18	8.7	11.0	12.9	14.5	16.0	17.3	18.5	19.7	20.7	21.7	22.7	23.5	24.4	25.2	26.0	26.7	27.4	28.1	28.8
19	8.9	11.2	13.2	14.9	16.4	17.8	19.0	20.2	21.3	22.3	23.3	24.2	25.1	25.9	26.7	27.5	28.2	28.9	29.6
20	9.1	11.5	13.5	15.2	16.8	18.2	19.5	20.7	21.9	22.9	23.9	24.9	25.8	26.6	27.5	28.3	29.0	29.8	30.5
22	9.5	12.0	14.1	15.9	17.6	19.1	20.4	21.7	22.9	24.0	25.1	26.1	27.1	28.0	28.9	29.7	30.5	31.3	32.1
24	9.8	12.4	14.6	16.5	18.3	19.9	21.3	22.7	23.9	25.1	26.2	27.3	28.3	29.3	30.2	31.1	32.0	32.8	33.6
26	10.1	12.8	15.1	17.1	19.0	20.6	22.1	23.5	24.9	26.1	27.3	28.4	29.5	30.5	31.5	32.4	33.3	34.2	35.1
28	10.4	13.2	15.6	17.7	19.6	21.3	22.9	24.4	25.8	27.1	28.3	29.5	30.6	31.7	32.7	33.7	34.6	35.6	36.4
30	10.7	13.6	16.1	18.3	20.2	22.0	23.7	25.2	26.6	28.0	29.3	30.5	31.7	32.8	33.9	34.9	35.9	36.8	37.8
32	11.0	14.0	16.5	18.8	20.8	22.7	24.4	26.0	27.5	28.9	30.2	31.5	32.7	33.9	35.0	36.1	37.1	38.1	39.0
34	11.3	14.4	17.0	19.3	21.4	23.3	25.1	26.7	28.3	29.7	31.1	32.4	33.7	34.9	36.1	37.2	38.2	39.3	40.3
36	11.5	14.7	17.4	19.8	21.9	23.9	25.7	27.4	29.0	30.5	32.0	33.3	34.6	35.9	37.1	38.2	39.4	40.4	41.5
38	11.8	15.0	17.8	20.2	22.4	24.5	26.4	28.1	29.8	31.3	32.8	34.2	35.6	36.8	38.1	39.3	40.4	41.5	42.6
40	12.0	15.3	18.2	20.7	22.9	25.0	27.0	28.8	30.5	32.1	33.6	35.1	36.4	37.8	39.0	40.3	41.5	42.6	43.7
42	12.3	15.6	18.5	21.1	23.4	25.6	27.6	29.4	31.2	32.8	34.4	35.9	37.3	38.7	40.0	41.3	42.5	43.7	44.8
44	12.5	15.9	18.9	21.5	23.9	26.1	28.1	30.0	31.8	33.5	35.1	36.7	38.1	39.5	40.9	42.2	43.5	44.7	45.8
46	12.7	16.2	19.3	21.9	24.4	26.6	28.7	30.6	32.5	34.2	35.9	37.4	38.9	40.4	41.8	43.1	44.4	45.7	46.9

$De = 1.30\ [(ab)^{0.625}/(a+b)^{0.250}]$

a = length of one side of rectangular duct (inch)
b = length of adjacent side of rectangular duct (inch)
De= circular equivalent of rectangular duct for equal friction and capacity (inch)

Source: 2001 ASHRAE Fundamentals, p. 32.10

Example

Convert rectangular duct 22" x 12" to equivalent round

a = 22, b = 12; from above table

De= 17.6, use 18" diameter

Specifications

MATERIAL (*) not available in pressed construction
- Galvanized steel conforming to ASTM standards A653 and A924
- Stainless steel type 304L conforming to ASTM standard A240*
- Stainless steel type 316L conforming to ASTM standard A240*
- Aluminum T3003*

SURFACE FINISH
- Galvanized steel (galvanized in accordance with latest SMACNA HVAC Duct Construction Standards).
- Stainless steel type 304L - Mill Finish
- Stainless steel type 316L - 2B Mill Finish
- Coated with an average thickness of 4 mils (0.004 inch) inside and out. Coating to meet or exceed 1,000 hour Salt Spray Test per ASTM B117-97.
  - · PVC coating (duct only)
  - · Epoxy coating (duct and/or fittings)
- Antimicrobial - Coating containing antimicrobial compound complies with UL standard - not to exceed flame or smoke developed ratings of 25/50 and is EPA listed.

THICKNESS
Material thickness constructed from galvanized steel in accordance with the latest SMACNA's HVAC Duct Construction Standards for +10" water gauge pressure.

CONSTRUCTION
A. Duct is of spiral lock seam construction with a mechanically formed seam locking indentation evenly spaced along the spiral seam. All spiral duct 8" diameter and larger shall incorporate multiple corrugations between spiral seams.
B. Fittings shall be manufactured using one or more of the following construction methods:
   - Overlapped edges stitch welded along the entire length of the fitting
   - Standing seam gore locked and internally sealed
   - Button punched and internally sealed
   - Elbows 3" through 12" diameter will be die stamped and continuously stitch welded.

CONNECTIONS
Fitting ends shall be sized to slip-fit into spiral duct of the same nominal size. Fitting to fitting connections shall be made by use of duct size “MF” couplings. Duct to duct connections require fitting size “NP” couplings.

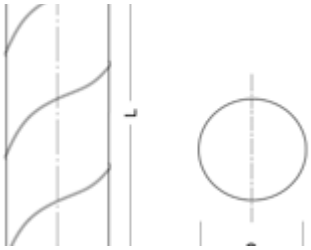
JOINT SEALING
Fitting ends are equipped with factory installed, triple-lipped gaskets. When installed in spiral duct per manufacturer’s installation instructions, the gasket creates a seal against the interior of the spiral duct. The system tightness shall be factory warranted to meet SMACNA's Leakage Class 3 performance.

If no gasket is used, all joints must be sealed by the installer during the installation process. The type of sealant used as well as the method and level of application should be as directed by the specification and in accordance with the sealant manufacturer’s published installation instructions.

GASKET
The gasket shall be EPDM rubber. The gasket is located in a groove at the end of the fitting and securely fastened. In order to achieve optimum sealing for all diameters, different size gaskets shall be used. The gasket shall be classified by Underwriters Laboratories for flame spread and smoke developed in accordance with ASTM E84-91a. A silicone gasket meeting the same performance may be offered by duct manufacturer for special applications.

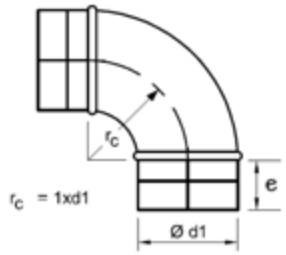
NOTE: For systems under negative pressure, please refer to the Industrial Catalog or an Gustafson representative.

Tolerance, Gauge, & e-dimensions



Tolerance for spiral duct

ØD (inch)	ØD Tolerance (inch) min. max.	t* (gauge)	t** (gauge)
3	2.950 - 2.969	28	28
4	3.950 - 3.969	28	28
5	4.950 - 4.969	28	28
6	5.950 - 5.969	28	28
7	6.950 - 6.972	28	28
8	7.950 - 7.972	28	28
9	8.950 - 8.972	28	28
10	9.950 - 9.976	28	28
11	10.950 - 10.976	28	28
12	11.950 - 11.976	28	28
13***	12.950 - 12.976	28	28
14	13.950 - 13.976	28	28
15***	14.936 - 14.969	26	26
16	15.936 - 15.969	26	26
17***	16.936 - 16.969	26	26
18	17.936 - 17.969	26	26
19***	18.936 - 18.967	26	26
20	19.936 - 19.972	26	26
22	21.936 - 21.972	26	26
24	23.936 - 23.976	26	26
26	25.936 - 25.976	24	24
28	27.934 - 27.976	24	24
30	29.924 - 29.969	24	24
32	31.924 - 31.976	24	24
34	33.924 - 33.976	24	24
36	35.924 - 35.988	24	24
38	37.912 - 37.976	24	24
40	39.912 - 39.976	24	24
42	41.912 - 41.976	24	24
44	43.912 - 43.988	22	22
46	45.912 - 45.998	22	22
48	47.912 - 47.988	22	22
50	49.912 - 49.988	22	22
52	51.913 - 51.992	22	22
54	53.913 - 53.992	22	22
56	55.909 - 55.992	22	22
58	57.909 - 57.992	22	22
60	59.909 - 59.992	22	22



Tolerance for fittings

$Ød_1$ (inch)	$Ød_1$ Tolerance (inch) min. - max.	t* (gauge)	Pressed t** (gauge)	Fabricated t** (gauge)	e (inch)
3	2.902 - 2.917	28	24	------	1.625
4	3.902 - 3.917	28	24	------	1.625
5	4.902 - 4.917	28	24	------	1.625
6	5.898 - 5.917	28	24	------	1.625
7	6.894 - 6.913	28	24	------	1.625
8	7.890 - 7.913	28	24	------	1.625
9	8.886 - 8.909	28	24	------	1.625
10	9.882 - 9.909	28	24	------	2.375
11	10.882 - 10.909	28	24	------	2.375
12	11.882 - 11.909	28	24	------	2.375
13***	12.878 - 12.909	28	------	------	2.375
14	13.878 - 13.909	28	------	24	2.375
15***	14.862 - 14.898	26	------	------	3.125
16	15.862 - 15.898	26	------	24	3.125
17***	16.862 - 16.898	26	------	------	3.125
18	17.862 - 17.898	26	------	24	3.125
19***	18.862 - 18.898	24	------	------	3.125
20	19.858 - 19.898	24	------	24	3.125
22	21.858 - 21.898	24	------	24	3.125
24	23.854 - 23.898	24	------	24	3.125
26	25.854 - 25.898	22	------	22	3.125
28	27.846 - 27.894	22	------	22	4.000
30	29.839 - 29.886	22	------	22	4.000
32	31.835 - 31.886	22	------	22	4.000
34	33.835 - 33.886	22	------	22	4.000
36	35.831 - 35.886	22	------	22	4.000
38	37.819 - 37.874	22	------	20	4.000
40	39.819 - 39.874	22	------	20	4.750
42	41.819 - 41.874	22	------	20	4.750
44	43.815 - 43.874	20	------	20	4.750
46	45.815 - 45.874	20	------	20	4.750
48	47.815 - 47.874	20	------	20	4.750
50	49.815 - 49.874	20	------	20	4.750
52	51.811 - 51.874	20	------	20	4.750
54	53.811 - 53.874	20	------	20	4.750
56	55.799 - 57.862	20	------	20	4.750
58	57.799 - 57.862	20	------	20	4.750
60	59.795 - 59.862	20	------	20	4.750

* In accordance with the latest SMACNA HVAC Duct Construction Standards for +10" wg

** Gustafson Manufacturing Standard

*** " — — " = Not currently available

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Tolerances for Spiral

Material Specifications
Gustafson components are made of galvanized sheet ASTM A653/A924.

Duct and fittings are also available in the following materials:

- G60
- G90
- 304 stainless steel ASTM A240*
- 316 stainless steel ASTM A240*
- Coated
- Agion
- Antimicrobial
- Aluminum*

(*) not available in pressed construction

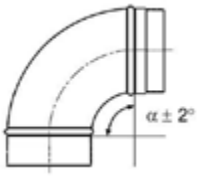
Length Tolerances

Length -L, H, e, D, d	Tolerances
inch	inch
1 - 10	± ⅜
12 - 16	± ⅝
18 - 28	± ¾
30 - 50	± 1
52 - 60	± 1 ¼

Weight Tolerance
±10%

Thickness Tolerance
±10%

Angular Tolerance



Surface/Finish
Die stamped products of G90 construction.

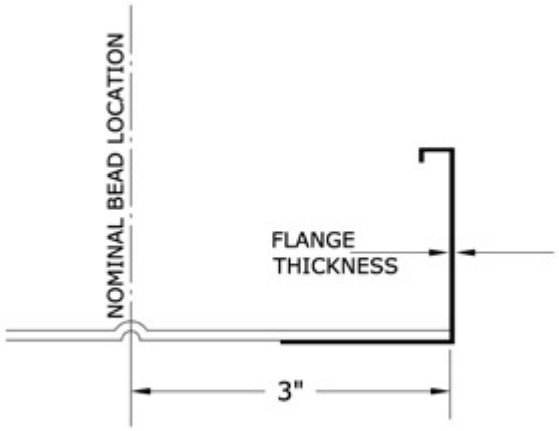
Stainless steel 316L fittings provided with a 2B mill finish.

Coated products have a minimum surface hardness of 2H when tested per ASTM D33-63-92A with an average thickness of 4 mils inside and out. Epoxy is used on duct and fittings or a PVC can be applied on duct.

Fitting Slip Dimension

Our products are designed with a male/female slip connections. For gasket (G-3) connections, refer to the e-dimension listed in the chart on page 11. If flanges are utilized, add 3" per flange plus flange thickness to the published L (length) dimension as shown elsewhere in this catalog as depicted in the diagram to the right.

Factory-applied Flange	
Collar Length	Make-up Length
3"	3" + flange thickness



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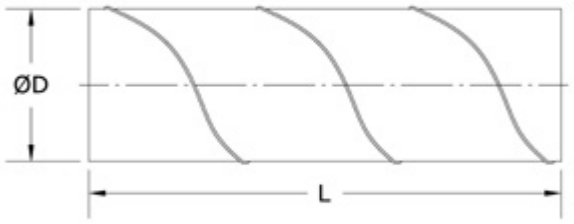
Spiral Duct

SR



Description

spiral lock seam duct

- SMACNA RL-1 spiral seam
- evenly spaced integral seam locking feature
- multiple corrugations on all duct 8" diameter and larger
- standard length: 120"
- built in accordance with the latest SMACNA HVAC Duct Construction Standard for +10 iwg
- available in diameters 3"- 60"

Dimensions

Standard length is 120" or 10'. Also available in lengths of 12" to 240"; aluminum is the exception with a maximum 120" length.

Order Example

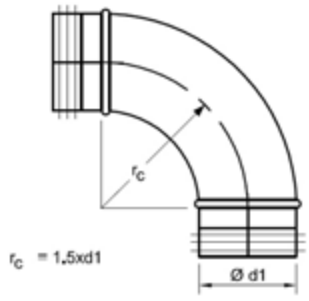
SR - ØD - L

Elbows

BSG 90 / BSFG 90

Description

90° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



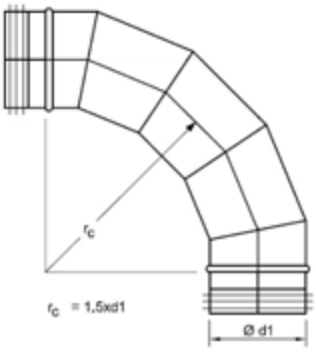
Order Example

Gustafson G-3
BSG 90 - Ød1

Gustafson Nongasketed
BS 90 - Ød1

Description

90° elbow
- 5-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 48"
- note: BSF/G 90 elbows 50-inch diameter and larger will be supplied as two BSF/G 45° elbows and an MF coupling



Order Example

Gustafson G-3
BSFG 90 - Ød1

Gustafson Nongasketed
BSF 90 - Ød1

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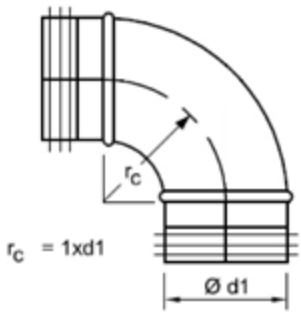
Elbows

BG 90 / BFG 90

Description

90° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



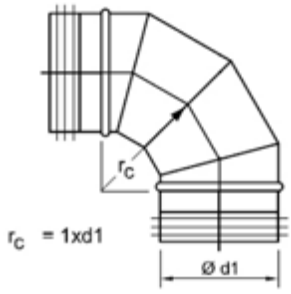
Order Example

Gustafson G-3
BG 90 - Ød1

Gustafson Nongasketed
B 90 - Ød1

Description

90° elbow
- 4-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 48"
- note: BF/G 90 elbows 50-inch diameter and larger will be supplied as two BF/G 45° elbows and an MF coupling



Order Example

Gustafson G-3
BFG 90 - Ød1

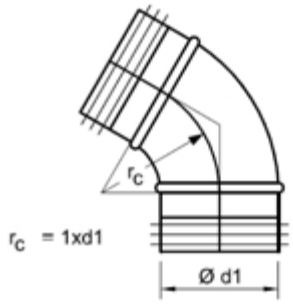
Gustafson Nongasketed
BF 90 - Ød1

Elbows

BG 60 / BFG 60

Description

60° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



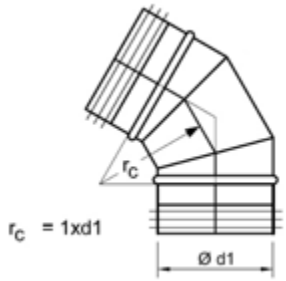
Order Example

Gustafson G-3
BG 60 - Ød1

Gustafson Nongasketed
B 60 - Ød1

Description

60° elbow
- 3-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"-60"



Order Example

Gustafson G-3
BFG 60 - Ød1

Gustafson Nongasketed
BF 60 - Ød1

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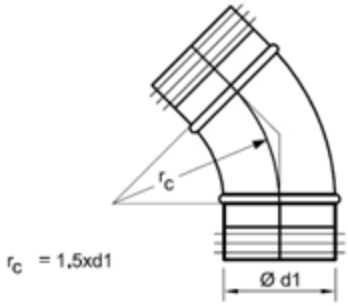
Elbows

BSG 45 / BSFG 45

Description

45° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



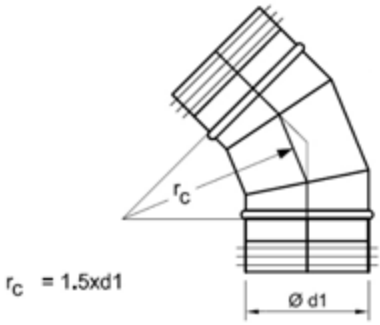
Order Example

Gustafson G-3
BSG 45 - Ød1

Gustafson Nongasketed
BS 45 - Ød1

Description

45° elbow
- 3-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 60"



Order Example

Gustafson G-3
BSFG 45 - Ød1

Gustafson Nongasketed
BSF 45 - Ød1

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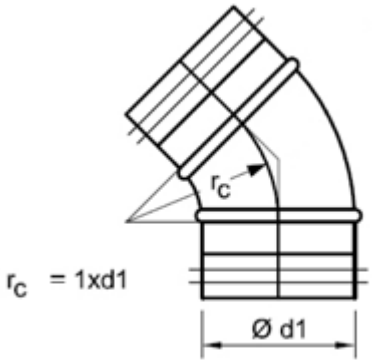
Elbows

BG 45 / BFG 45

Description

45° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



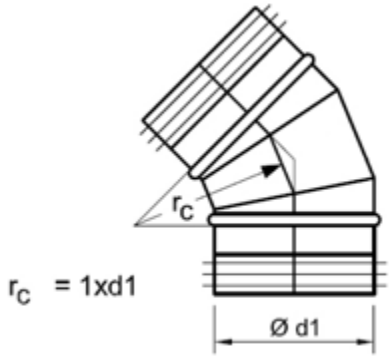
Order Example

Gustafson G-3
BG 45 - Ød1

Gustafson Nongasketed
B 45 - Ød1

Description

45° elbow
- 3-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 60"



Order Example

Gustafson G-3
BFG 45 - Ød1

Gustafson Nongasketed
BF 45 - Ød1

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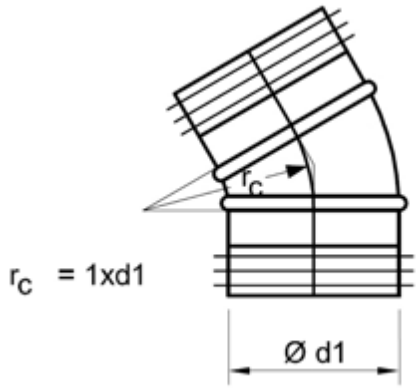
Elbows

BG 30 / BFG 30

Description

30° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



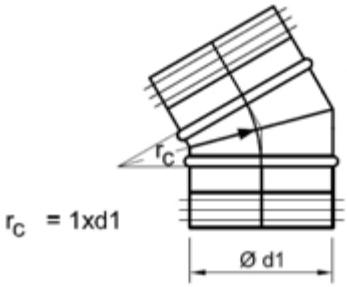
Order Example

Gustafson G-3
BG 30 - Ød1

Gustafson Nongasketed
B 30 - Ød1

Description

30° elbow
- 2-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 60"



Order Example

Gustafson G-3
BFG 30 - Ød1

Gustafson Nongasketed
BF 30 - Ød1

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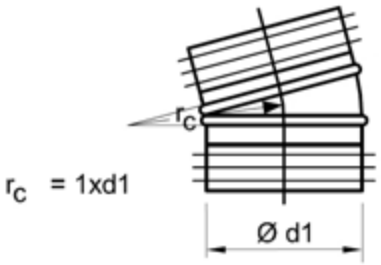
Elbows

BG 15 / BFG 15

Description

15° elbow
- die stamped
- continuous stitch welded
- rolled edges
- galvanized steel only
- available in diameters 3"- 12"
- note: 11" diameter is fabricated



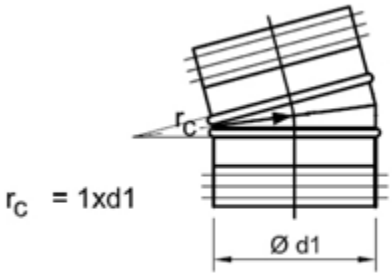
Order Example

Gustafson G-3
BG 15 - Ød1

Gustafson Nongasketed
B 15 - Ød1

Description

15° elbow
- 2-piece gored, standing seam
- gore locked and internally sealed
- available in diameters 14"- 60"



Order Example

Gustafson G-3
BFG 15 - Ød1

Gustafson Nongasketed
BF 15 - Ød1

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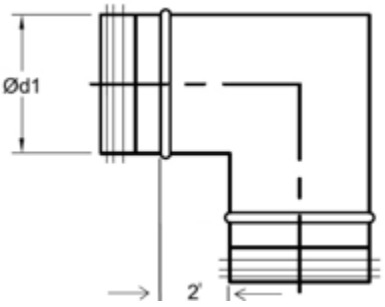
Elbows

BMG / BMVG

Description

mitered elbow
- rolled edge
- 2" standard throat length
- available in diameters 4"- 60"



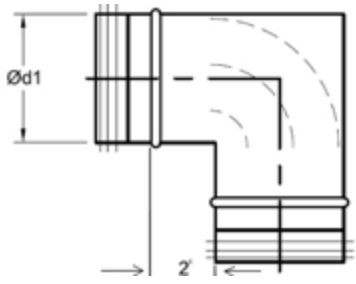
Order Example

Gustafson G-3
BMG - Ød1

Gustafson Nongasketed
BM - Ød1

Description

mitered elbow with vanes
- rolled edge
- 2" standard throat length
- turning vanes evenly spaced
- available in diameters 4"- 60"
- number of vanes vary by diameter
  - Ø 4"-10" = 2 vanes
  - Ø 12"-14" = 3 vanes
  - Ø 16"-20" = 4 vanes
  - Ø 22"-60" = 5 vanes



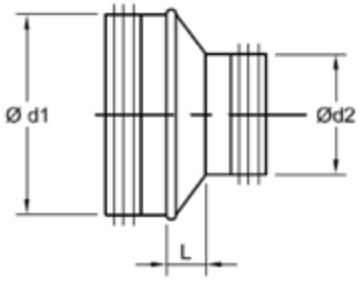
Order Example

Gustafson G-3
BMVG - Ød1

Gustafson Nongasketed
BMV - Ød1

Reducers

RCG



Description

concentric reducer
• galvanized construction only

Dimension **(fabricated)**

Ød1	Ød2	L
inch	inch	inch
9	6	2
10	5	2⅝
12	9	2
14	8	3⅜
16	8	3⅞
16	10	3
16	12	2
16	14	2
18	8	5
18	10	4
18	12	3
18	14	2
18	16	2
20	8	6
20	10	5
20	12	4
20	14	3
20	16	2
20	18	2

Dimension **(die stamped)**

Ød1	Ød2	L
inch	inch	inch
4	3	¾
5	3	1
5	4	⅞
6	3	1¾
6	4	1¼
6	5	¾
7	4	2
7	5	1½
7	6	1
8	4	2¼
8	5	1⅝
8	6	1¼
8	7	¾
9	7	2⅛
9	8	1⅛
10	6	2¼
10	7	1⅝
10	8	1⅛
10	9	⅝
12	8	2⅛
12	10	1⅛
14	10	2⅜
14	12	1⅜

Order Example

Gustafson G-3
RCG - Ød1-Ød2

Gustafson Nongasketed
RC - Ød1-Ød2

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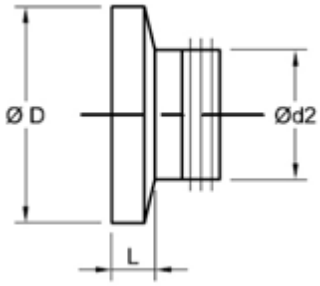
Reducers

RCFG



Description

concentric reducer
- ØD = duct size slips over fitting end
- galvanized construction only

Dimension **(fabricated)**

Ød1	Ød2	L
inch	inch	inch
9	6	3¼
10	5	4¼
12	8	4⅜
12	9	4⅜
14	8	5⅜
16	8	7⅛
16	10	6⅛
16	12	5⅛
16	14	5⅛
18	8	8⅛
18	10	7⅛
18	12	6⅛
18	14	5⅛
18	16	5⅛
20	8	9⅛
20	10	8⅛
20	12	7⅛
20	14	6⅛
20	16	5⅛
20	18	5⅛

Dimension **(die stamped)**

Ød1	Ød2	L
inch	inch	inch
4	3	2⅜
5	3	2⅝
5	4	2⅜
6	3	3⅜
6	4	2⅞
6	5	2⅜
7	4	3½
7	5	3
7	6	2½
8	4	3¾
8	5	3¼
8	6	2⅞
8	7	2⅜
9	7	3¾
9	8	2¾
10	6	3⅞
10	7	3¼
10	8	2¾
10	9	2¼
12	10	2¾
14	10	4¾
14	12	3⅝

Order Example

Gustafson G-3
RCFG - ØD-Ød2

Gustafson Nongasketed
RCF - ØD-Ød2

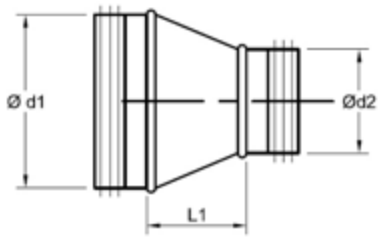
Reducers

RCLG/RLG

Description

fabricated concentric reducer
• L1 = (Ød1 - Ød2)*

(*) minimum 4"



Order Example

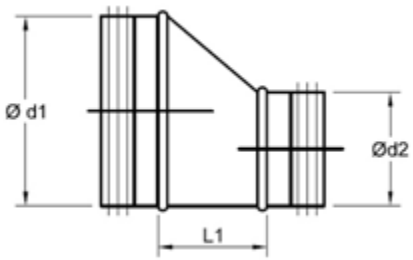
Gustafson G-3
RCLG - Ød1- Ød2

Gustafson Nongasketed
RCL - Ød1- Ød2

Description

fabricated eccentric reducer
• L1 = (Ød1 - Ød2)*

(*) minimum 4"



Order Example

Gustafson G-3
RLG - Ød1- Ød2

Gustafson Nongasketed
RL - Ød1- Ød2

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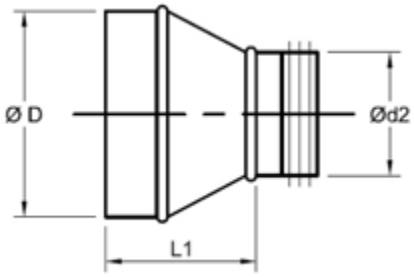
Reducers

RCLFG/RLFG

Description

fabricated concentric reducer
- ØD end slips onto fitting end
- L1 = (ØD - Ød2)* + e dimension

(*) minimum 4"



Order Example

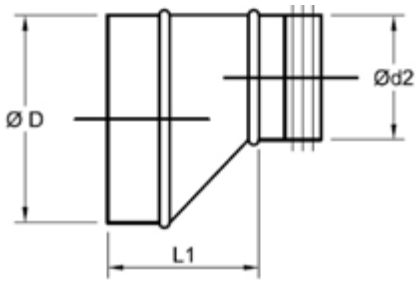
Gustafson G-3
RCLFG - ØD - Ød2

Gustafson Nongasketed
RCLF - ØD - Ød2

Description

fabricated eccentric reducer
- ØD end slips onto fitting end
- L1 = (ØD - Ød2)* + e dimension

(*) minimum 4"



Order Example

Gustafson G-3
RLFG - ØD - Ød2

Gustafson Nongasketed
RLF - ØD - Ød2

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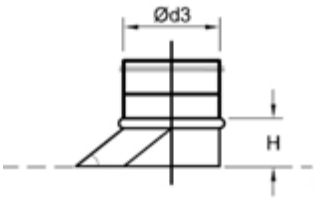
Taps

Description

45° boot-style tap
• installed on flat side of duct or plenum

Dimensions

If Ød3 ≤ 8" H = 4"
If Ød3 = 9"-14", H = 7"
If Ød3 = 15"-26", H = 10"
If Ød3 = 27"-46", H = 13"
If Ød3 = 47"-60", H = 16"



Order Example

Gustafson G-3
TBSG - Ød3

Gustafson Nongasketed
TBS - Ød3

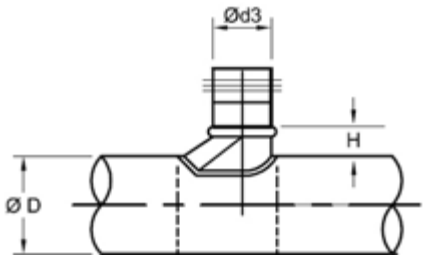
TBSG/TBSRG

Description

45° combination boot-style saddle tap

Dimensions

If Ød3 ≤ 8", H = 4"
If Ød3 = 9"-14", H = 7”
If Ød3 = 15"-26", H = 10"
If Ød3 = 27"-46", H = 13"
If Ød3 = 47"-60", H = 16"



Order Example

Gustafson G-3
TBSRG - ØD - Ød3

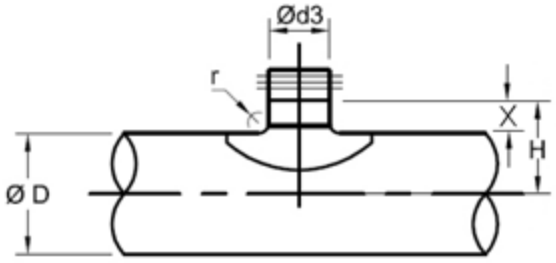
Gustafson Nongasketed
TBSR - ØD - Ød3

Taps

PSG

pressed PSG

fabricated PSG



Description

saddle tap

- pressed:
  - radius entry
  - limited to galvanized steel only
  - available in Ød3 or tap diameters 3"-16", fabricated exceptions listed below
  - X-dimensions listed on right
- fabricated
  - sizes listed below
  - X = 1"

Fabricated Sizes										
Ød3	**ØD**									
	8	9	10	12	14	16	18	20	22	24
3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7					✓	✓	✓	✓	✓	✓
12										✓
14					✓	✓	✓	✓	✓	✓

Order Example

Gustafson G-3
PSG - ØD - Ød3

Gustafson Nongasketed
PS - ØD - Ød3

Dimension

- H = X + 0.5(ØD)

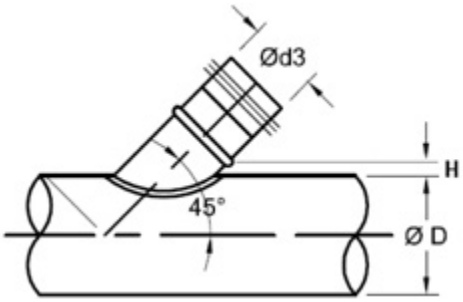
X - Dimensions		
Ød3 (inch)	**Pressed (inch)**	**Fab (inch)**
3	⅜	1
4	¾	1
5	¾	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
12	1⅛	1
14	n/a	1
16	¾	1
18	n/a	1
20	n/a	1
22	n/a	1
24	n/a	1
For Ød3 ≥ 24", X = 1"		

Taps

PSVG45/PSVGF45

Description

fabricated 45º lateral tap for round
- H = 2.5"
- special order: 15º, 30º, 60º
  i.e. PSVU 15° - aa - bb



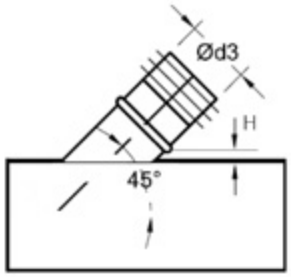
Order Example

Gustafson G-3
PSVG45 - ØD - Ød3

Gustafson Nongasketed
PSV45 - ØD - Ød3

Description

fabricated 45° lateral tap for flat surface
- H = 2.5"
- special order: 15º, 30º, 60º
  i.e. PSVGF 15° - aa - bb



Order Example

Gustafson G-3
PSVGF45 - Ød3

Gustafson Nongasketed
PSVF45 - Ød3

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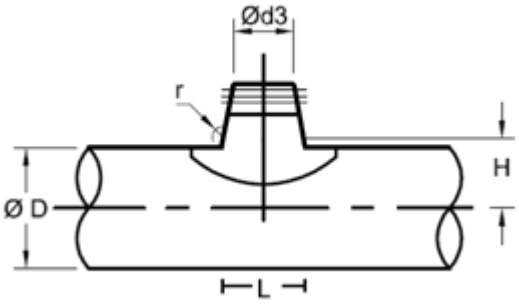
Taps

PSCG/CTFG

Description

conical saddle tap
- H = 6"
- L = Ød3 + 2"



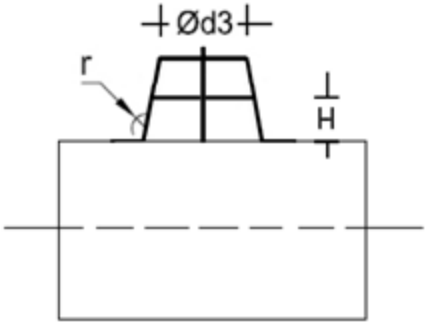
Order Example

Gustafson G-3
PSCG - ØD- Ød3

Gustafson Nongasketed
PSC - ØD- Ød3

Description

conical tap for flat surface
- H = 6"
- flat lip = ⅜"- ⅝" depending on diameter
- offered in standard 2" reducing pairs
  ex. CTFG 8-6



Order Example

Gustafson G-3
CTFG - Ød3

Gustafson Nongasketed
CTF - Ød3

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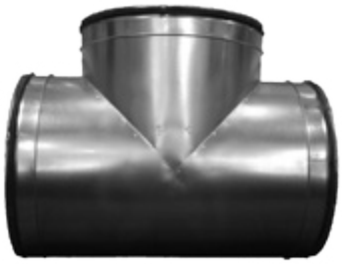
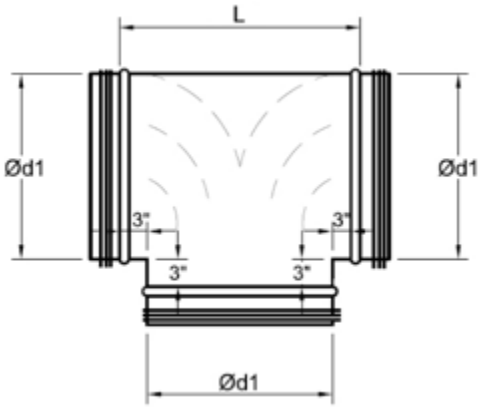
Tees

BHTG/BHTRG



Description

bullhead tee
- L = Ød1 + 6"



Order Example

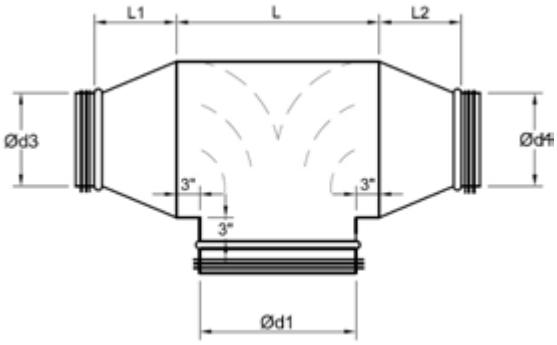
Gustafson G-3
BHTG - Ød1

Gustafson Nongasketed
BHT - Ød1

Description

bullhead reducing tee
- L = Ød1 + 6"
- L1 = (Ød1 - Ød3)*
- L2 = (Ød1 - Ød4)*

(*) minimum 4"



Order Example

Gustafson G-3
BHTRG - Ød1- Ød3- Ød4

Gustafson Nongasketed
BHTR - Ød1- Ød3- Ød4

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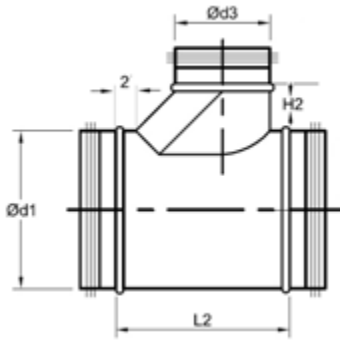
Tees

Description

45° boot-style tee
- assembled with TBSRG tap
- Ød3 ≤ Ød1 diameter
- L2 = Ød3 + H2 + 4"
- If Ød3 ≤ 8", H2 = 4",
  If Ød3 = 9-14", H2 = 7",
  If Ød3 = 15-26", H2 = 10",
  If Ød3 = 27-46", H2 = 13", and
  If Ød3 = 47-60", H2 = 16".
- option: 45° boot-style cross (model: XBG)



Order Example

Gustafson G-3
TBG - Ød1- Ød3

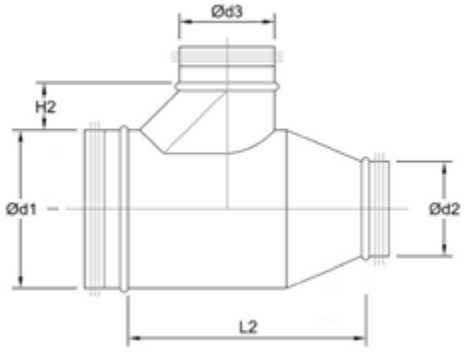
Gustafson Nongasketed
TB - Ød1- Ød3

TBG/TBRG

Description

45° boot-style tee with reducer
- assembled with TBSRG tap
- Ød3 ≤ Ød1 diameter
- L2 = (Ød3 + H2 + 4") + (Ød1 - Ød2)*
- If Ød3 ≤ 8", H2 = 4",
  If Ød3 = 9-14", H2 = 7",
  If Ød3 = 15-26", H2 = 10",
  If Ød3 = 27-46", H2 = 13", and
  If Ød3 = 47-60", H2 = 16".
- option: 45° boot-style reducing cross (model: XBRG)

(*) minimum of 4"



Order Example

Gustafson G-3
TBRG - Ød1- Ød2 - Ød3

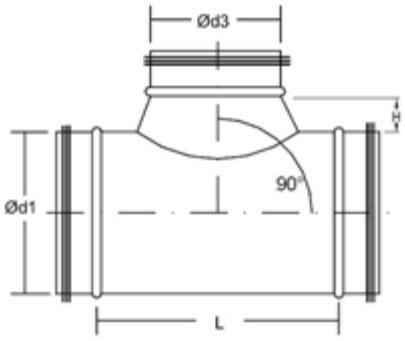
Gustafson Nongasketed
TBR - Ød1 - Ød2- Ød3

Tees

TCCG/TCCRG

Description

conical tee
- L = Ød3 + 8"
- H = 6"
- Ød1 must be 2" or larger than Ød3
- option: conical cross (model: XCCG)



Order Example

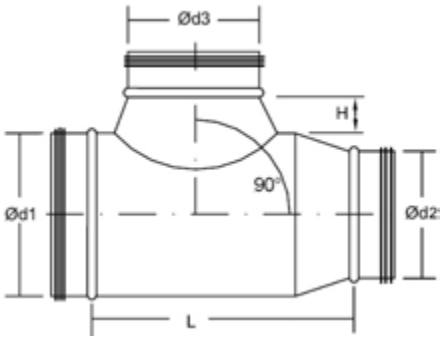
Gustafson G-3
TCCG - Ød1 -Ød3

Gustafson Nongasketed
TCC - Ød1 -Ød3

Description

conical reducing tee
- L = (Ød3 + 8") + (Ød1 - Ød2)*
- H = 6"
- Ød1 must be 2" or larger than Ød3
- option: reducing conical cross (model: XCCRG)

(*) minimum of 4"



Order Example

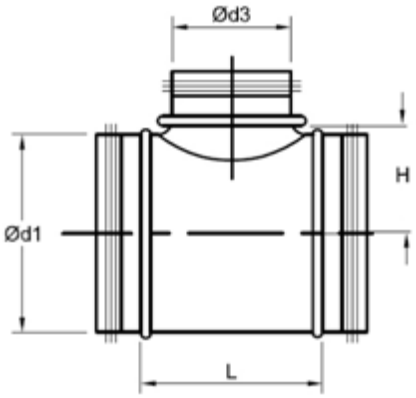
Gustafson G-3
TCCRG - Ød1-Ød2 -Ød3

Gustafson Nongasketed
TCCR - Ød1 -Ød2 -Ød3

Tees

Description

assembled tee with die-stamped or fabricated PSG
- L = Ød3 + 6"
- see page 28 for tap height details
- option: cross (model: XCPG)



Order Example

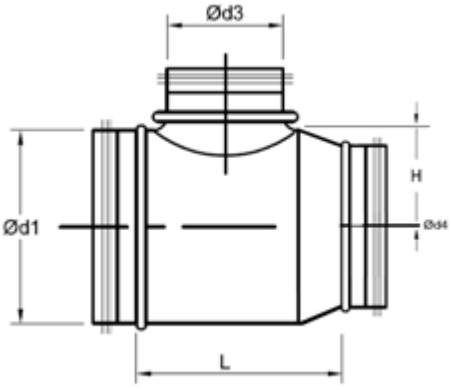
Gustafson G-3	Gustafson Nongasketed
TCPG - Ød1- Ød3	TCP - Ød1- Ød3

TCPG/TCPRG

Description

assembled reducing tee with die-stamped or fabricated PSG
- L = (Ød3 + 6") + (Ød1 - Ød2)*
- see page 28 for tap height details
- option: reducing cross (model: XCPRG)

(*) minimum of 4"



Order Example

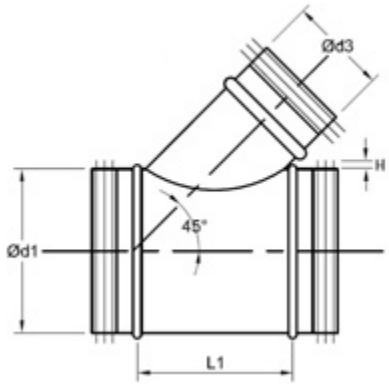
Gustafson G-3	Gustafson Nongasketed
TCPRG - Ød1- Ød2 - Ød3	TCPR - Ød1 - Ød2- Ød3

Tees

TVG45/TVRG45

Description

45° lateral tee
- L1 = Ød3[1/sin(a)] + 4"
- H = 2.5" (constant)(throat height)
- special order: 15°- 30°- 60°
  i.e. TVU 15° - aa - bb
- option: 45° lateral cross (model: XVG45)



Order Example

Gustafson G-3
TVG45 - Ød1 -Ød3

Gustafson Nongasketed
TV45 - Ød1 -Ød3

Description

45° lateral reducing tee
- L = Ød3[1/sin(a)] + 4"+ (Ød1 - Ød2)*
- H = 2.5" (constant)(throat height)
- option: 45° lateral reducing cross (model: XVRG45)

(*) minimum of 4

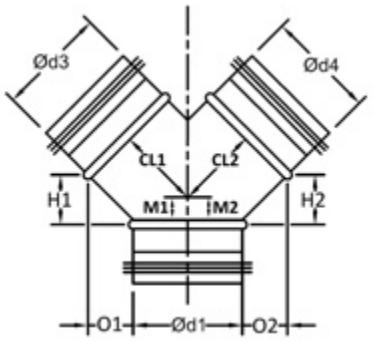
Order Example

Gustafson G-3
TVRG45 Ød1-Ød2-Ød3

Gustafson Nongasketed
TVR45 Ød1-Ød2-Ød3

Y-branch

YVG45



Description

directional split fitting: 45°
- special order: 15°, 30°, 60°
  i.e. YVG 15° - aa - bb - cc
- special order: Ød3 or Ød4 < Ød1
- special order: Ød3 ≤ Ød4

Dimension

$$H1 = \left[\frac{(d3 \times 0.5) + (d1 \times 0.9)}{TAN(45)}\right] \times COS(45) - \frac{d3 \times 0.5}{SIN(45)}$$

$$O1 = \left[\frac{(d3 \times 0.5) + (d1 \times 0.8)}{TAN(45)}\right] \times SIN(45) - (d1 \times 0.5)$$

$$H2 = \left[\frac{(d4 \times 0.5) + (d1 \times 0.9)}{TAN(45)}\right] \times COS(45) - \frac{d4 \times 0.5}{SIN(45)}$$

$$O2 = \left[\frac{(d4 \times 0.5) + (d1 \times 0.8)}{TAN(45)}\right] \times SIN(45)] - (d1 \times 0.5)$$

$$M1 = H1 + (d3 \times 0.5)(COS(45)) - (d1 \times 0.5) + O1 - (d3 \times 0.5)(COS(45))$$

$$M2 = H2 + (d4 \times 0.5)(COS(45)) - (d1 \times 0.5) + O2 - (d4 \times 0.5)(COS(45))$$

$$CL1 = \frac{(d1 \times 0.5) + O1 - (d3 \times 0.5)(COS(45))}{COS(45)}$$

$$CL2 = \frac{(d1 \times 0.5) + O2 - (d4 \times 0.5)(COS(45))}{COS(45)}$$

Order Example

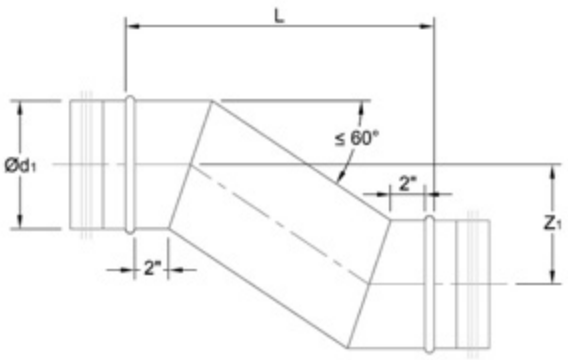
Gustafson G-3
YVG45 - Ød1 - Ød3 - Ød4

Gustafson Nongasketed
YV45 - Ød1 - Ød3 - Ød4

Note: These dimensions apply for 45° only.
Please call for dimensions on special orders.

Offset

OSETG



Description

one-piece offset
- 60° max angle of convergence
- max offset Z1 ≤ (Ød1) / 2
- max length L = 60"

Note: SMACNA recommends that offsets be 30° or less

Order Example

Gustafson G-3
OSETG - Ød1 - L - Z

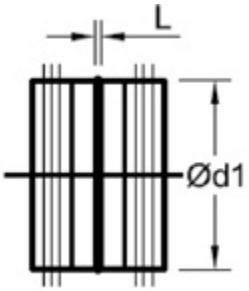
Gustafson Nongasketed
OSET - Ød1 - L - Z

Couplings

NPG/MF

Description

coupling used for joining spiral duct
- If Ø 3"-20", L = ⅜",
  If Ø 22"-26", L = ½"
  If Ø 28"-60", L = ⅝"



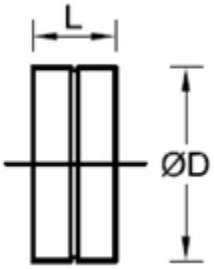
Order Example

Gustafson G-3
NPG - Ød1

Gustafson Nongasketed
NP - Ød1

Description

coupling for joining fittings
- If Ø 3"-9", L = 3⅝",
  If Ø 10"-14", L = 5⅛",
  If Ø 16"-26", L = 6⅝",
  If Ø 28"-38", L = 8⅝",
  If Ø 40"-60", L = 10⅛"



Order Example

Gustafson Nongasketed
MF - ØD

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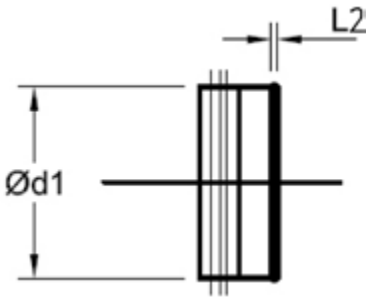
End Caps

ESG/EPF

Description

end cap for spiral duct
- If Ø 3"-20", L = ⅜",
  If Ø 22"-26", L = ½"
  If Ø 28"-60", L = ⅝"



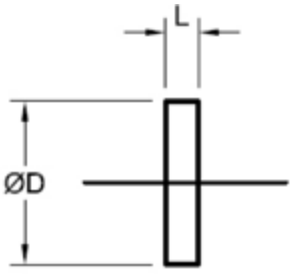
Order Example

Gustafson G-3
ESG - Ød1

Gustafson Nongasketed
ES - Ød1

Description

end cap for fittings
- If Ø 3"-9", L = 1⅝",
  If Ø 10"-14", L = 2⅜",
  If Ø 16"-26", L = 3⅛",
  If Ø 28"-38", L = 4",
  If Ø 40"-60", L = 4¾"



Order Example

Gustafson Nongasketed
EPF - ØD

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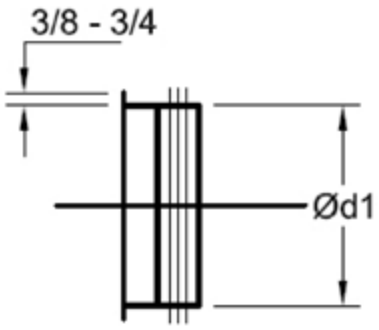
Take-offs

Description

take-off/starting collar
- installed on flat side of duct or plenum
- available in diameters 3"- 60"



Order Example

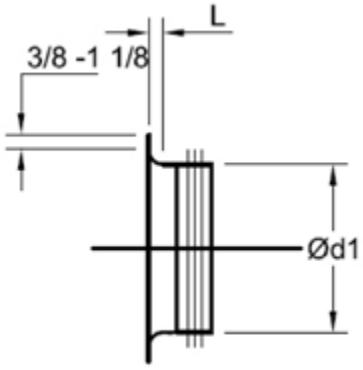
Gustafson G-3
ILG - Ød1

Gustafson Nongasketed
IL - Ød1

ILG/ILRG

Description

stamped radiused bellmouth take-off
- available in 4"-16" (not including 11")
- installed on flat side of duct or plenum



Order Example

Gustafson G-3
ILRG - Ød1

Gustafson Nongasketed
ILR - Ød1

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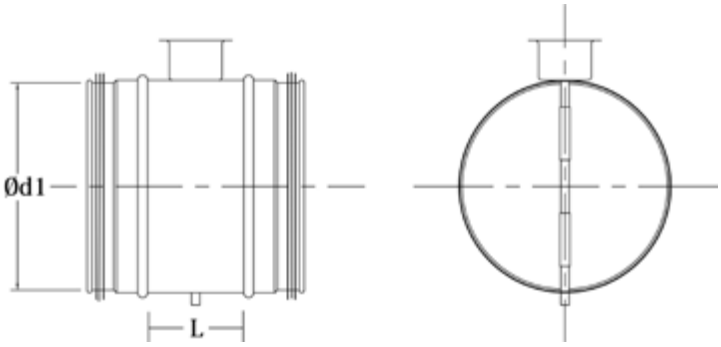
Dampers

DSG/DSWG

DSG

DSWG



Description

manual balancing damper w/full blade

- for use in systems where a complete shut-off of air flow is not required
- gasketed shaft-mounted load bearing bushing to minimize air leakage
- integral shaft-blade assembly
- 2" sheet metal insulation stand-off
- locking blade quadrant w/damper position indicator
- damper cup height = 2"
- full fitting body assembly with bead stop

Also available:
DSWG– DS(G) damper with cable-operating option. Equipped with 20' cable.

Note: Dampers with Ød1 > 14" equipped with extended handle and a reinforced damper blade.

Dampers with Ød1 > 24" have 2" bracket in place of cup-shaped stand-off.

Order Example

Gustafson G-3	**Gustafson Nongasketed**
DSG - Ød1	DS - Ød1
DSWG - Ød1	DSW - Ød1

Dimension

Ød1	'L'	Shaft
inch	inch	mm²
4	3.9	8*
5	3.9	8*
6	3.9	8*
7	3.9	8*
8	3.9	8*
9	3.9	8*
10	3.5	8*
12	3.5	8*
14	3.5	8*
16	3.75	8*
18	3.75	8*
20	3.75	8*
22	3.75	8*
24	3.75	8*
26	3.75	8*
28	3.75	8*
30	3.75	8*
32	10.4	25.4**
34	10.4	25.4**
36	10.4	25.4**

** 2" shaft extensions available*
*** 1" square tube shaft*

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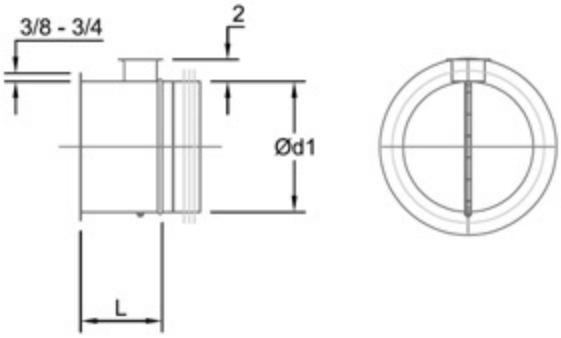
Take-offs

Description

gasketed take-off with damper
- lengths (in):
  - diameters 4" - 9" : L= 5½"
  - diameters 10" - 14" : L= 5⅝"
  - diameters 16" - 24" : L= 6⅜"
- shaft = 8 mm²
- 2" shaft extension available



Order Example

Gustafson G-3
DSILG - Ød1

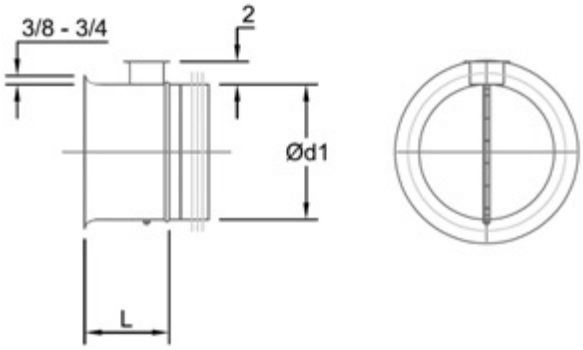
Gustafson Nongasketed
DSIL - Ød1

DSILG/DSILRG

Description

gasketed bellmouth take-off with damper
- assembled with ILR(U) radiused bellmouth take-off
- lengths:
  - diameters 4" - 9" : L= 7⅞"
  - diameters 10" - 14" : L= 9"
  - diameters 16" : L = 10¼"
- shaft = 8 mm²
- 2" shaft extension available

Note: 11" is not available



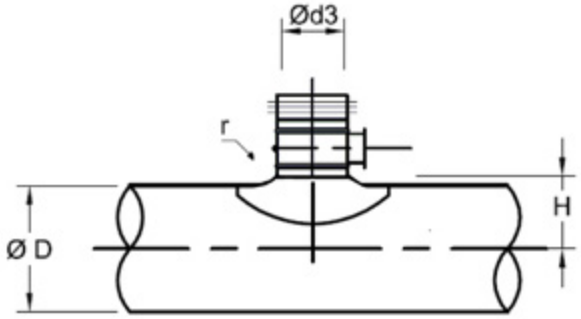
Order Example

Gustafson G-3
DSILRG - Ød1

Gustafson Nongasketed
DSILR - Ød1

Dampers

DSPSG



Description

damper (DS) with saddle tap base
- shaft = 8 x 8 mm²
- 2" shaft extensions available
- L = [PSG(L) + “e” dimension] + [DSG(L) + “e” dimension]
- refer to page 11 for “e” dimensions
- refer to page 27 for PSG construction details (pressed/fabricated)

Available in the following sizes (✓):

Available Sizes											
ØD	**Ød3**										
	3	4	5	6	7	8	9	10	12	14	16
4	✓	✓									
5	✓	✓	✓								
6	✓	✓	✓	✓							
7	✓	✓	✓	✓	✓						
8		✓	✓	✓	✓	✓					
9		✓	✓	✓	✓	✓	✓				
10		✓	✓	✓	✓	✓	✓	✓			
12		✓	✓	✓	✓	✓	✓	✓	✓		
14		✓	✓	✓		✓	✓	✓	✓	✓	
16		✓	✓	✓		✓	✓	✓	✓	✓	✓
18		✓	✓	✓		✓	✓	✓	✓	✓	✓
20		✓	✓	✓		✓	✓	✓	✓	✓	✓
22		✓	✓	✓		✓	✓	✓	✓	✓	✓
24		✓	✓	✓		✓	✓	✓	✓	✓	✓

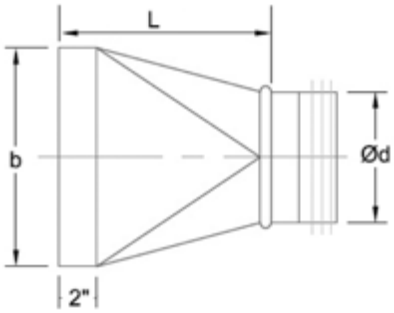
Order Example

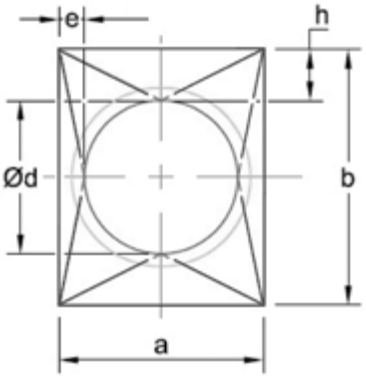
Gustafson G-3
DSPSG - ØD - Ød3

Gustafson Nongasketed
DSPS - ØD - Ød3

Square-to-Round

RRTG





Description

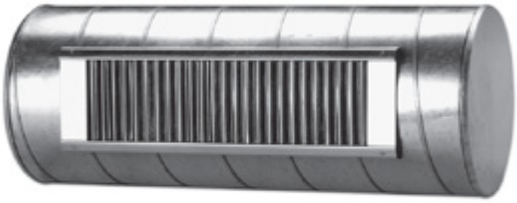
square to round transition
- available in Ø 4"- 60"
- 2" raw edge rectangular end
- L = length, minimum 12"
- a = rectangular width
- b = rectangular height
- special order: offset styles available

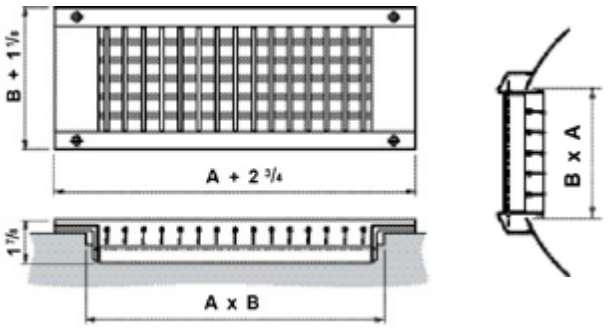
Order Example

Gustafson G-3
RRTG - a - b - Ød1 - L

Gustafson Nongasketed
RRT - a - b - Ød1 - L

Duct-mounted register DMR





Description

supply/return register with adjustable double deflection blades and volume damper (loose)

- designed for direct mounting
- rectangular register taps are not required
- register made of galvanized sheet steel
- damper made of electro-galvanized sheet steel
- performance data available on request

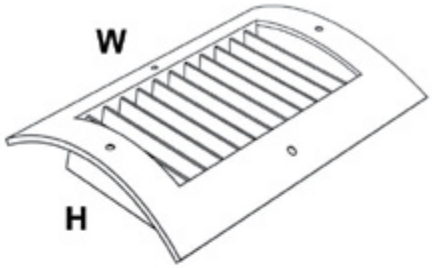
Register nom. size (in)	Min. duct diameter (in)	Free area (ft²)	Duct opening A x B (in)	Weight (lb)
13 ×3	6	0.18	12 3/4 ×3	2.4
17 ×3	6	0.25	16 3/4 ×3	3.1
21 ×3	6	0.30	20 5/8 ×3	3.7
25 ×3	6	0.36	24 5/8 ×3	4.2
33 ×3	6	0.48	32 1/2 ×3	5.3
41 ×3	8	0.60	40 3/8 ×3	6.4
49 ×3	8	0.73	48 1/4 ×3	7.1
13 ×6	12	0.36	12 3/4 ×6	3.1
17 ×6	12	0.48	16 3/4 ×6	4.2
21 ×6	12	0.60	20 5/8 ×6	5.1
25 ×6	12	0.73	24 5/8 ×6	5.7
33 ×6	12	1.00	32 1/2 ×6	7.7
41 ×6	12	1.20	40 3/8 ×6	8.6
49 ×6	12	1.46	48 1/4 ×6	9.7
13 ×9	20	0.60	12 3/4 ×8 7/8	4.8
17 ×9	20	0.80	16 3/4 ×8 7/8	6.6
21 ×9	20	1.00	20 5/8 ×8 7/8	7.5
25 ×9	20	1.20	24 5/8 ×8 7/8	8.2
33 ×9	20	1.60	32 1/2 ×8 7/8	11.2
41 ×9	20	2.00	40 3/8 ×8 7/8	12.8
49 ×9	20	2.41	48 1/4 ×8 7/8	13.9

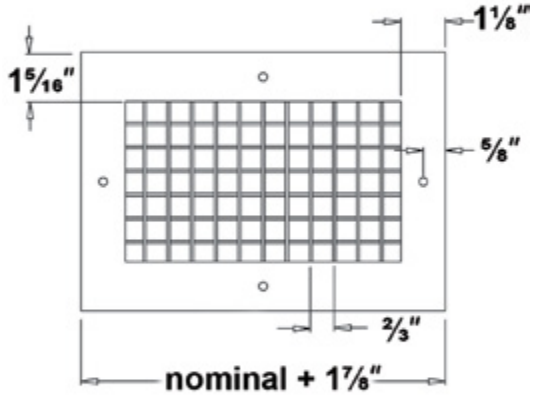
Order Example

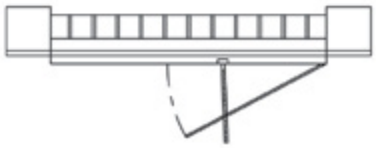
Gustafson Nongasketed
DMR - A x B

Curved register

CREG







Description

The CREG is a supply/return register with a curved face

- adjustable double deflection blades
- allows for 4-way airflow and half length screwdriver operated volume adjusting scoop
- duct diameter must be 4" larger than height (H) of diffuser.
- performance data available on request

Materials and finish

Galvanized sheet steel (standard).
Custom finishes are available. Call for details.

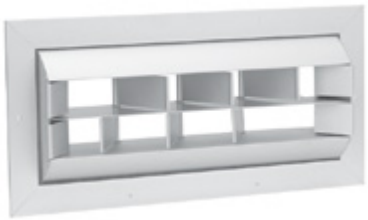
Register nom. size W x H (in)	Min. duct diameter (in)	Free area (ft^2)	Duct opening W X H (in)	Weight (lbs)
12 x 4	8	0.231	12 x 4	1.8
14 x 4	8	0.271	14 x 4	2.1
12 x 6	10	0.362	12 x 6	2.5
14 x 6	10	0.425	14 x 6	2.9
16 x 6	10	0.488	16 x 6	3.3

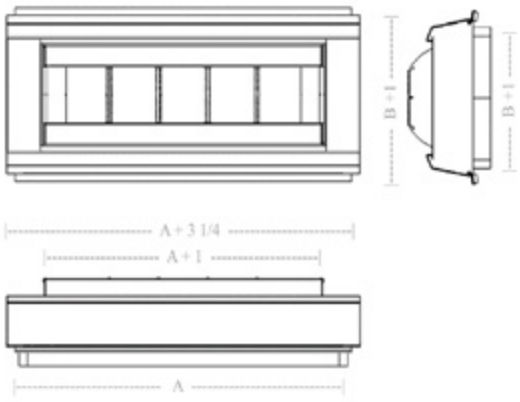
Order Example

Gustafson Nongasketed
CREG - W x H - Duct Diameter - Material - Finish

Drum louver

DRLAA





Description

quality moisture-proof construction through-out with a gasket locked into a frame channel for a positive seal around the barrel
• extruded vanes – spaced 3 inches apart on bolt pivots to firmly hold deflection settings
• adjustable pattern – vanes pivot easily to reduce
• rotating barrel - 60° total, 30° up or down from the horizontal center line
• aluminum mill finish frame and barrel
• performance data available on request

A Width (In)	B Height (In)			
	6	10	12	15
9	X			
12	X			
15	X			X
18	X			
20		X	X	
21				X
24	X	X	X	X
27				X
30	X	X	X	X
36	X	X	X	X
42		X	X	X
48	X	X	X	X
54		X	X	X
60	X	X	X	X
66		X	X	X
72		X	X	X

Order Example

Gustafson Nongasketed
DRLAA - A x B

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