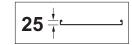
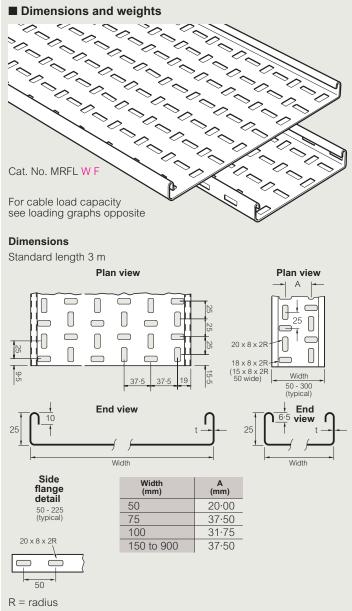
# Swifts® MRF medium duty return flange straight lengths





#### Gauges and weights

The gauge 't' for each cable tray width and finish can vary by product and range

Non-standard gauges and finishes are available to special order, contact us on +44 (0) 845 605 4333

Cat. Nos.	Width (mm)	Weight (kg)	Gauge G	t (mm) PG
MRFL 50 F	50	2.0	0.7	0.7
MRFL 75 F	75	2.6	0.7	0.7
MRFL 100 F	100	3.0	0.8	0.7
MRFL 150 F	150	3.9	0.8	0.8
MRFL 225 F	225	6.8	1.0	0.8
MRFL 300 F	300	9.2	1.2	1.0
MRFL 450 F	450	16.5	1.2	1.2
MRFL 600 F	600	21.6	1.2	1.2
MRFL 750 F	750	33.7	1.5	1.4
MRFL 900 F	900	39.7	1.5	1.4

All weights given are in kilograms (kg) and are for a 3m straight length in hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

giron noight of a	ie ienemig ie	
Deep galvanised	(D) x 1.06	
Stainless steel	(S) x 0.94	
Pre-galvanised	(PG) x 0·96	
Powder coated	(E) x 0.97	

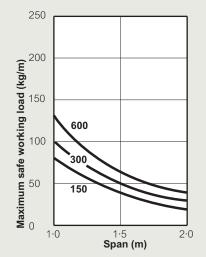
#### Loading graphs

Load tests carried out to BS EN 61537

The loads shown on all graphs are the safe recommended maximum loads that can be applied and must include wind, snow and any other external forces in addition to the cable load

The graphs show the maximum load for tray installed at a support spacing within its recommended range

When the graph line is above the intersection of the required load and span lines, the support equipment is suitable for use within those load and span conditions



For lengths 450 mm wide and greater, the addition of fishplate Cat. No. WF F across the underside of the length-to-length joint provides added strength and increases the safe working load, see p. 101

#### Finishes and standards

Standard stocked finish :

G

Hot dip galvanised after manufacture to BS EN ISO 1461 Pre-galvanised steel to BS EN 10346 : 2009 grade DX51D PG

#### Additional finishes :

- D
- Deep galvanised high silicon steel made from BS EN 10025-5 : 2004 Grade S355JOWP Stainless steel to BS EN 10088 2 grade 1·4404 S
- (equivalent to 316L31) Ε
  - Powder coated (to customer's specification)

#### Note

50 mm wide not available in deep galvanised (D) finish



Sheared steel (particularly stainless steel) does have relatively sharp edges and protective gloves must be worn during handling

All dimensions (mm) are nominal

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

#### Coupler sets : see p. 47-48

Fishplates : see p. 101

### Swifts<sup>®</sup> cable tray couplers and fasteners MRF straight length to straight length couplers



#### Standard couplers

Couplers are required for joining together MRF straight lengths or cut lengths of tray without the need for further drilling

MRFC standard couplers are supplied in pairs MRFC 50 standard coupler is supplied singly

Supplied without fasteners - use M6 nuts, bolts and washers (see opposite)

As an alternative coupling method, use quick bolt couplers (Cat. No. MRQBCF), which are supplied with quick bolt fasteners (Cat. No. QBF) and a tool, see p. 48

#### Installation (typical)

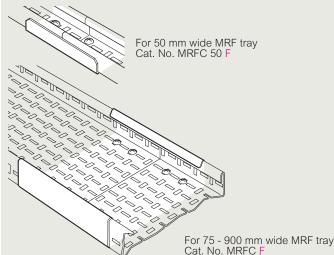


Illustration : SRF shown, MRF similar

Cat. Nos.	Tray range
MRFC F 50 <sup>(1)</sup>	MRF
MRFC F (2)	MRF

(1) MRFC 50 for 50 mm wide tray only (2) MRFC for 75-900 mm wide tray only

#### Assembly

#### For 50 mm wide MRF tray

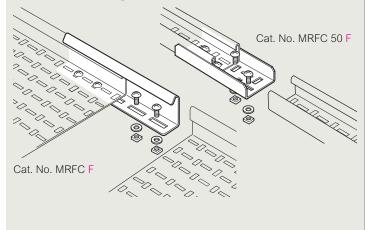
Bring together two lengths and locate the coupler across the underside of the tray joint as shown

Insert two roofing bolts through aligning slots in each tray bed and into the coupler (four bolts per coupler) and secure with roofing washers and nuts

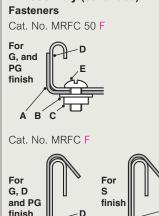
#### For 75 - 900 mm wide MRF tray

Bring together two lengths and fit a coupler on the outside of adjacent flanges at both sides of the tray joint

Locate the coupler as shown and insert two roofing bolts through aligning slots in each tray bed and coupler (four bolts per coupler), and secure with roofing washers and nuts



# Assembly (continued)



F

Coupler Roofing washer

В

C D E F

G H

- M6 square nut
- Straight length M6 x 12 roofing bolt M6 form A washer M6 hexagon nut

- M6 x 12 pan head screw

#### **Fastener finishes**

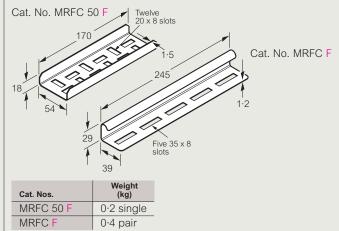
ΔR

For lengths and fittings with G, D and PG finishes fasteners are galvanised or zinc plated. For trays and fittings with S finish, fasteners are corrosion resistant stainless Grade A470 For lengths and fittings with E finish the choice of material for fasteners will depend on the installation environment – contact us on +44 (0) 845 605 4333

# Note

For quick bolt couplers and fasteners, see p. 48

#### Dimensions and weights



#### Weights

All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

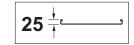
0	0	,		0
Deep ga	lvanised	(D)	Х	1.06
Stainless	s steel	(S)	Х	0.94
Pre-galv	anised	(PG	3) X	0.96
Powder	coated	(E)	́х	0.97

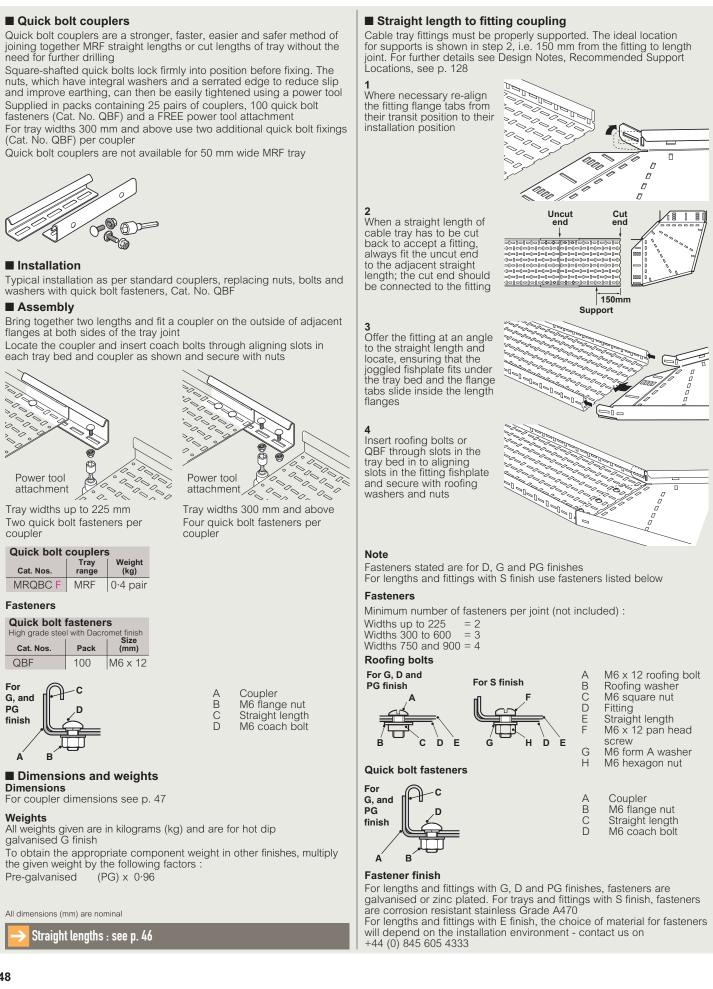
All dimensions (mm) are nominal

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

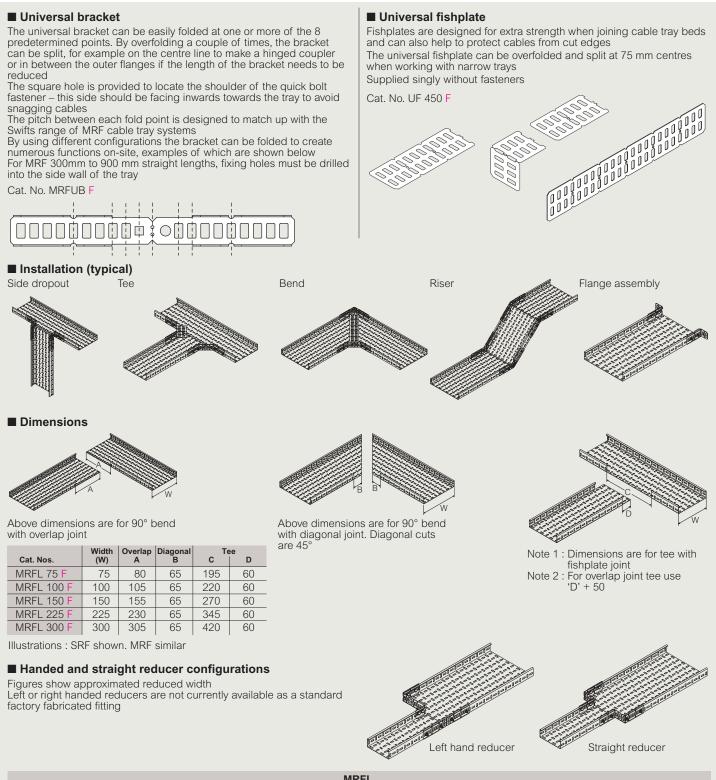
#### Swifts<sup>®</sup> cable tray couplers and fasteners MRF straight length to straight length couplers (continued) and straight length to fitting coupling







# Swifts® MRF medium duty fittings universal bracket and fishplate



	MRFL													
Smaller Size	50	mm	75	mm	100	mm	150	) mm	225	mm	300	mm	450	mm
Larger Size	Handed	Straight												
75 mm	25	12	_	_	_	_	-	_	-	-	-	_	_	-
100 mm	50	25	25	12	_	_	-	_	-	-	-	_	_	-
150 mm	100	50	75	37	50	25	-	_	-	-	-	_	_	-
225 mm	-	87	150	75	125	62	75	37	-	-	-	_	_	_
300 mm	-	_	_	112	_	100	150	75	75	37	-	_	_	_
450 mm	-	_	_	_	_	_	-	150	-	112	150	75	_	_
600 mm	-	-	-	-	-	-	-	-	-	-	-	150	150	75
All dimensions (mm) are nominal														

## Swifts<sup>®</sup> MRF medium duty fittings flat bends – 90°, 60°, 45° and 30°





Z Width

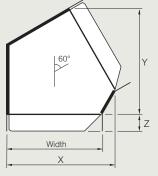
Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFB 50 F	50	172	172	55	0.3
MRFB75F	75	197	197	55	0.4
MRFB 100 F	100	221	221	55	0.6
MRFB150F	150	272	272	55	0.8
MRFB 225 F	225	345	345	55	1.3
MRFB 300 F	300	420	420	55	1.8
MRFB 450 F	450	570	570	55	4.2
MRFB 600 F	600	720	720	55	5.8
MRFB750F	750	870	870	55	11.7
MRFB 900 F	900	1020	1020	55	15.8

Also consider the versatile adjustable bend for widths 50 mm - 300 mm, see p. 52-53  $\rm Note$ 

50 mm wide not available in D finish

#### 60° flat bends – dimensions and weights

Cat. No. MRFB W 60 F

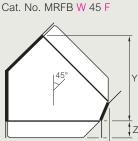


Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFB 50 60 F	50	108	148	55	0.3
MRFB7560F	75	133	169	55	0.5
MRFB 100 60 F	100	158	191	55	0.6
MRFB 150 60 F	150	208	234	55	0.8
MRFB 225 60 F	225	283	299	55	1.3
MRFB 300 60 F	300	358	364	55	1.4
MRFB 450 60 F	450	509	494	55	3.0
MRFB 600 60 F	600	659	624	55	4.6
MRFB 750 60 F	750	809	754	55	6.6
MRFB 900 60 F	900	959	884	55	9.1

Also consider the versatile adjustable bend for widths 50 mm - 300 mm, see p. 52-53 Note

50 mm wide not available in D finish

# ■ 45° flat bends – dimensions and weights



Width X

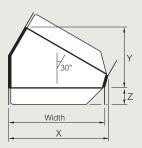
					14/-1-1-4
Cat. Nos.	Width	х	Y	z	Weight (kg)
MRFB 50 45 F	50	83	120	55	0.2
MRFB7545F	75	108	138	55	0.4
MRFB 100 45 F	100	133	156	55	0.5
MRFB 150 45 F	150	183	191	55	0.8
MRFB 225 45 F	225	258	244	55	1.2
MRFB 300 45 F	300	333	297	55	1.1
MRFB 450 45 F	450	483	403	55	2.3
MRFB 600 45 F	600	633	509	55	3.5
MRFB 750 45 F	750	783	615	55	5.1
MRFB 900 45 F	900	933	721	55	6.8

Also consider the versatile adjustable bend for widths 50 mm - 300 mm, see p. 52-53

Note

50 mm wide not available in D finish

#### ■ 30° flat bends – dimensions and weights Cat. No. MRFB W 30 F



Cat. Nos.	Width	X	Y	z	Weight (kg)
MRFB 50 30 F	50	63	85	55	0.2
MRFB 75 30 F	75	88	98	55	0.2
MRFB 100 30 F	100	113	110	55	0.3
MRFB 150 30 F	150	163	135	55	0.5
MRFB 225 30 F	225	238	173	55	0.8
MRFB 300 30 F	300	313	210	55	1.1
MRFB 450 30 F	450	463	285	55	1.6
MRFB 600 30 F	600	613	360	55	2.5
MRFB 750 30 F	750	763	435	55	3.6
MRFB 900 30 F	900	913	510	55	4.8

Also consider the versatile adjustable bend for widths 50 mm - 300 mm, see p.  $52\mathchar`-53$ 

#### Note

50 mm wide not available in D finish

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture),
D (deep galvanised), PG (pre-galvanised steel),
S (stainless steel), E (powder coated)

MRF adjustable bends : see p. 52-53

# **I**legrand

## Swifts<sup>®</sup> MRF medium duty fittings flat bends – 90°, 60°, 45° and 30°



#### ■ Dimensions and weights – flat bends 90°, 60°, 45° and 30° Dimensions

- X = Length of fitting from each end (excluding integral coupler)
- Y = Length of fitting from each end (excluding integral coupler)
- Z = End extension of integral coupler

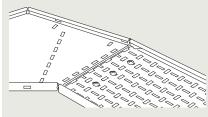
#### Weights

All weights given are in kilograms (kg) and are for hot dip galvanised G finish

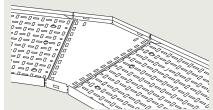
To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galvanised	(D) x	1.06
Stainless steel	(S) x	0.94
Pre-galvanised	(PG) x	0.96
Powder coated	(E) x	0.97

#### ■ Assembly – flat bends 90°, 60°, 45° and 30° Coupling detail – 90°



Coupling detail - 60°, 45° and 30°



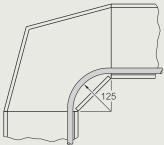
#### Flat bend to straight length coupling

Flat bends have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling Each flat bend to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

#### **Fastener finishes**

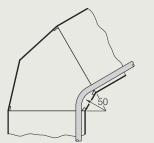
For flat bends with G, D and PG finishes, fasteners are galvanised or zinc plated. For flat bends with S finish, fasteners are stainless steel For flat bends with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

■ Assembly – flat bends 90°, 60°, 45° and 30° (continued) Minimum bend radius for cables – flat bends 90°



Minimum cable radius = 125 mm

Minimum bend radius for cables – flat bends 60°, 45° and 30°



Minimum cable radius = 125 mm

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture),
D (deep galvanised), PG (pre-galvanised steel),
S (stainless steel), E (powder coated)

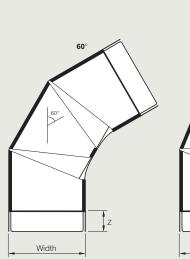
All dimensions (mm) are nominal

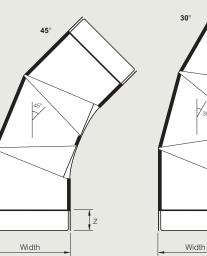
MRF adjustable bends : see p. 52–53

### Swifts® MRF medium duty fittings adjustable flat bends – 50 to 300 mm wide

Dimensions and weights

Cat. No. MRFAB W F





, 30°

Ιz

Cat. Nos.	Width	z	Weight (kg)
MRFAB 50 F	50	55	0.3
MRFAB75F	75	55	0.5
MRFAB 100 F	100	55	0.6
MRFAB 150 F	150	55	1.0
MRFAB 225 F	225	55	1.9
MRFAB 300 F	300	55	3.0

For widths 450-900 mm use 60°, 45° and 30° flat bends, see p. 50-51 For widths 300 mm and below use adjustable flat bends for all angles up to 90°. Fixed angle flat bends are also available, see p. 50-51 Note

50 mm wide not available in D finish

#### Dimensions

Z = End extension of integral coupler

#### Weights

All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galvanised	$(D) \rightarrow$	< 1·06
Stainless steel	(S) >	< 0.94
Pre-galvanised	(PG) >	< 0.96
Powder coated	(E) >	< 0.97

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)



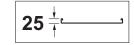
MRF flat bends : see p. 50-51

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### Swifts® MRF medium duty fittings adjustable flat bends – 50 to 300 mm wide



#### Assembly

#### Adjusting bend to any angle between 30° and 90°

Adjustable flat bends can be adjusted to any angle between 30° and 90°, refer to the diagram opposite

Insert fasteners through both slots X in the outer sections of the bed and the associated slots Z in the centre section of the bed. Adjust the bendable sections equally until the required angle is formed

#### Setting bend to specific angles

Adjustable flat bends can be set to specific fixed angles or they can be adjusted to any angle between 30° and 90° in increments of 7.5° Note

When setting the adjustable flat bend to the required angle, ensure that the bendable inner flanges on the centre section engage in the return flanges on the outer sections

Angle (°)	Fastener holes
30	A + A
37.5	A + B
45	B + B
52·5	B + C
60	C + C
67.5	C + D
75	D + D
82.5	D + E
90	E + E

Refer to the table and the diagram below Insert fasteners through both slots X in the outer sections of the bend and the appropriate holes (A to E) in the centre section of the bed (2 off M6 fasteners included)

#### Assembly (continued)

#### Fastener finishes

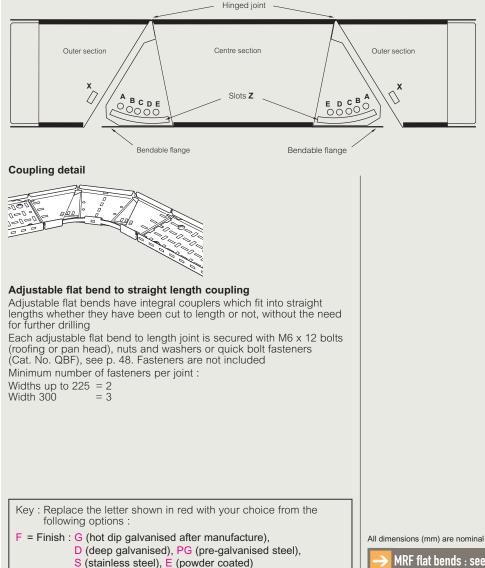
For adjustable flat bends with G, D and PG finishes, fasteners are

For adjustable flat bends with S finish, fasteners are stainless steel For adjustable flat bends with S finish, fasteners are stainless steel For adjustable flat bends with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

#### Minimum bend radius for cables

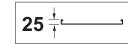


For details on how to set adjustable flat bends to angles, see below and opposite

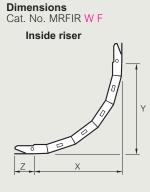


MRF flat bends : see p. 50-51

### Swifts<sup>®</sup> MRF medium duty fittings inside and outside risers – 90°, 60°, 45° and 30°



### 90° inside and outside risers – dimensions and weights





Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFIR 50 F	50	260	260	55	0.5
MRFIR 75 F	75	260	260	55	0.6
MRFIR 100 F	100	260	260	55	0.7
MRFIR 150 F	150	260	260	55	0.9
MRFIR 225 F	225	260	260	55	1.3
MRFIR 300 F	300	260	260	55	1.7
MRFIR 450 F	450	260	260	55	3.0
MRFIR 600 F	600	260	260	55	4.0
MRFIR 750 F	750	260	260	55	6.6
MRFIR 900 F	900	260	260	55	7.9

Cat. Nos. given in the table are for inside risers. For outside risers substitute MRFIR for MRFOR. All fixed risers radius = 260 mm

#### ■ 60° inside and outside risers – dimensions and weights

Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFIR 50 60 F	50	269	155	55	0.4
MRFIR 75 60 F	75	269	155	55	0.5
MRFIR 100 60 F	100	269	155	55	0.5
MRFIR 150 60 F	150	269	155	55	0.7
MRFIR 225 60 F	225	269	155	55	1.0
MRFIR 300 60 F	300	269	155	55	1.3
MRFIR 450 60 F	450	269	155	55	2.4
MRFIR 600 60 F	600	269	155	55	3.2
MRFIR 750 60 F	750	269	155	55	4.0
MRFIR 900 60 F	900	269	155	55	4.8

Cat. Nos. given in the table are for inside risers. For outside risers substitute MRFIR for MRFOR. All fixed risers radius = 260 mm

#### ■ 45° inside and outside risers – dimensions and weights

Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFIR 50 45 F	50	220	91	55	0.4
MRFIR 75 45 F	75	220	91	55	0.4
MRFIR 100 45 F	100	220	91	55	0.5
MRFIR 150 45 F	150	220	91	55	0.6
MRFIR 225 45 F	225	220	91	55	0.8
MRFIR 300 45 F	300	220	91	55	1.1
MRFIR 450 45 F	450	220	91	55	2.0
MRFIR 600 45 F	600	220	91	55	2.7
MRFIR 750 45 F	750	220	91	55	3.3
MRFIR 900 45 F	900	220	91	55	4.0

Cat. Nos. given in the table are for inside risers. For outside risers substitute MRFIR for MRFOR. All fixed risers radius = 260 mm

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture),
D (deep galvanised), PG (pre-galvanised steel),
S (stainless steel), E (powder coated)

#### 30° inside and outside risers – dimensions and weights

Cat. Nos.	Width	X	Y	z	Weight (kg)
MRFIR 50 30 F	50	157	42	55	0.3
MRFIR 75 30 F	75	157	42	55	0.3
MRFIR 100 30 F	100	157	42	55	0.4
MRFIR 150 30 F	150	157	42	55	0.5
MRFIR 225 30 F	225	157	42	55	0.7
MRFIR 300 30 F	300	157	42	55	0.9
MRFIR 450 30 F	450	157	42	55	1.6
MRFIR 600 30 F	600	157	42	55	2.1
MRFIR 750 30 F	750	157	42	55	2.7
MRFIR 900 30 F	900	157	42	55	3.2

Cat. Nos. given in the table are for inside risers. For outside risers substitute MRFIR for MRFOR. All fixed risers radius = 260 mm

#### Dimensions

- X = Length of fitting from each end (excluding integral coupler)
- Y = Length of fitting from each end (excluding integral coupler)
- Z = End extension of integral coupler

#### Weights

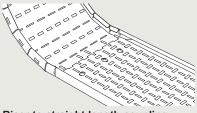
All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galvanise	ed (D)	Х	1.06
Stainless steel	(S)	Х	0.94
Pre-galvanised	(PG)	х	0.96
Powder coated	ÈΕ) ΄	х	0.97

#### Assembly

**Coupling detail** 



### Riser to straight length coupling

 $90^{\circ}$  risers have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling Each riser to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

Minimum number of fasteners per joint :

Widths up to 225 = 2

- Widths 300 to 600 = 3
- Widths 750 and 900 = 4

### Fastener finishes

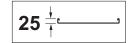
For risers with G, D and PG finishes, fasteners are galvanised or zinc plated For risers with S finish, fasteners are stainless steel

For risers with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

All dimensions (mm) are nominal

MRF adjustable risers : see p. 55

### Swifts® MRF medium duty fittings adjustable risers



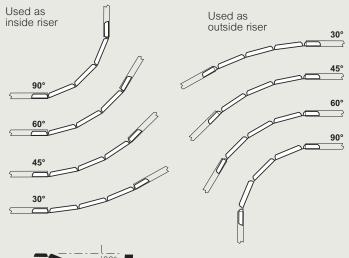
#### Dimensions and weights

The adjustable riser can be used as an inside or outside riser for any angle up to 90°

Minimum radius = 200 mm Maximum radius = 300 mm Overall length when flat = 554 mm

### Dimensions







Cat. Nos.	Width	Weight (kg)
MRFAR 50 F	50	0.4
MRFAR75F	75	0.5
MRFAR 100 F	100	0.6
MRFAR 150 F	150	0.9
MRFAR 225 F	225	1.2
MRFAR 300 F	300	2.0
MRFAR 450 F	450	3.0
MRFAR 600 F	600	4.1
MRFAR 750 F	750	5.2
MRFAR 900 F	900	6.2

#### Note

50 mm wide not available in D finish

#### Weights

All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

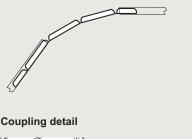
Deep galvanised	(D) x	1.06
Stainless steel	(S) x	0.94
Pre-galvanised	(PG) x	0.96
Powder coated	(E) x	0.97

Key : Replace the letter shown in red with your choice from the following options :

#### F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

#### Assembly

As many riser segments as necessary may be inserted into the end of the straight length, thus avoiding the need for cutting





#### Adjustable riser to straight length coupling

Adjustable risers fit into straight lengths whether they have been cut to lengths or not, without the need for further drilling

Each riser to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

Minimum number of fasteners per joint :

Widths up to 225 Widths 300 to 600 = 2 = 3

Widths 750 and 900 = 4

Fastener finishes For adjustable riser with G, D and PG finishes, fasteners are galvanised or zinc plated

For adjustable riser with S finish, fasteners are stainless steel For adjustable riser with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

All dimensions (mm) are nominal

MRF inside and outside risers : see p. 54

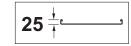
### Swifts® MRF medium duty fittings extra long adjustable risers



#### Assembly Dimensions and weights The extra long adjustable riser can be used as an inside or outside As many riser segments as necessary may be inserted into the end of riser for any angle up to 90° the straight length, thus avoiding the need for cutting Minimum radius = 200 mm Maximum radius = 650 mm Overall length when flat = 1087 mm Dimensions Cat. No. MRFAXR W F Used as inside riser for any angle up to 90° Coupling detail Used as outside riser for any angle up to 90° 1-1-1 Extra long adjustable riser to straight length coupling Used to avoid obstacles on site Extra long adjustable risers fit into straight lengths whether they have been cut to length or not, without the need for further drilling Each riser to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included Minimum number of fasteners per joint : Widths up to 225 = 2 Widths 300 to 600 = 3 Widths 750 and 900 = 4 **Fastener finishes** For adjustable risers with G, D and PG finishes, fasteners are galvanised or zinc plated For adjustable risers with S finish, fasteners are stainless steel For adjustable risers with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333 Weight (kg) Width Cat. Nos. MRFAXR 50 F 50 0.7 MRFAXR75F 75 1.0 MRFAXR 100 F 100 1.2 MRFAXR 150 F 150 1.7 MRFAXR 225 F 225 2.5 MRFAXR 300 F 300 4.2 MRFAXR 450 F 450 6.2 MRFAXR 600 F 600 8.2 MRFAXR750F 750 10.3 MRFAXR 900 F 900 12.4 Note 50 mm wide not available in D finish Weights All weights given are in kilograms (kg) and are for hot dip galvanised G finish To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors : Deep galvanised (D) x 1.06 Stainless steel (S) x 0.94 Pre-galvanised (PG) x 0.96 Powder coated (E) × 0.97 Key : Replace the letter shown in red with your choice from the following options : F = Finish : G (hot dip galvanised after manufacture), All dimensions (mm) are nominal D (deep galvanised), PG (pre-galvanised steel), MRF inside and outside risers : see p. 54 S (stainless steel), E (powder coated)

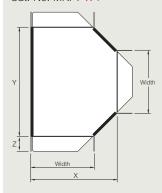
### Swifts® MRF medium duty fittings equal tees

# **L**legrand



#### Dimensions and weights Dimensions

Cat. No. MRFT W F



X = Length of fitting from each end (excluding integral coupler) Y = Length of fitting from each end (excluding integral coupler)

Z = End extension of integral coupler

Cat. Nos.	Width	x	Y	z	Weight (kg)
MRFT 50 F	50	172	295	55	0.6
MRFT 75 F	75	197	320	55	0.8
MRFT 100 F	100	221	344	55	0.9
MRFT 150 F	150	271	394	55	1.3
MRFT 225 F	225	346	469	55	2.0
MRFT 300 F	300	420	542	55	2.8
MRFT 450 F	450	570	692	55	5.7
MRFT 600 F	600	720	842	55	9.0
MRFT 750 F	750	870	992	55	16.4
MRFT 900 F	900	1020	1142	55	21.9

#### Note

50 mm wide not available in D finish

#### Weights

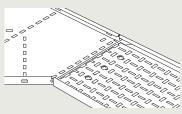
All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

J	
(D) x	1.06
(S) x	0.94
(PG) x	0.96
(E) x	0.97
	(D) x (S) x (PG) x (E) x

## Assembly





#### Equal tee to straight length coupling

Equal tees have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling Each equal tee to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

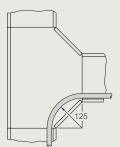
Minimum number of fasteners per joint :

#### **Fastener finishes**

For equal tees with G, D and PG finishes, fasteners are galvanised or zinc plated

For equal tees with S finish, fasteners are stainless steel For equal tees with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

#### Minimum bend radius for cables



Minimum cable radius = 125 mm

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

All dimensions (mm) are nominal

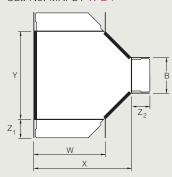
MRF unequal tees : see p. 58

# Swifts® MRF medium duty fittings

unequal tees

#### Dimensions and weights

# Dimensions Cat. No. MRFUT W B F



X = Length of fitting from each end (excluding integral coupler) Y = Length of fitting from each end (excluding integral coupler)

 $Z_1 = End$  extension of integral coupler

 $Z_2$  = End extension of integral coupler

#### Note

50 mm wide not available in D finish

			Dimensions (mm)				
Width (W)	Width (B)	Cat. Nos.	х	I Y I	<b>Z</b> 1	<b>Z</b> 2	Weight (kg)
50	75	MRFUT 50 75 F	172	320	55	55	0.7
	100	MRFUT 50 100 F	172	344	55	55	0.7
	150	MRFUT 50 150 F	172	394	55	55	0.8
	225	MRFUT 50 225 F	172	469	55	55	1.0
	300	MRFUT 50 300 F	172	542	55	55	1.2
	450	MRFUT 50 450 F	172	692	55	55	2.0
	600	MRFUT 50 600 F	172	842	55	55	2.4
	750	MRFUT 50 750 F	172	992	55	55	2.9
	900	MRFUT 50 900 F	172	1142	55	55	3.4
	50	MRFUT 75 50 F	197	294	55	55	0.7
	100	MRFUT 75 100 F	197	344	55	55	0.8
	150	MRFUT 75 150 F	197	394	55	55	1.0
	225	MRFUT 75 225 F	197	469	55	55	1.2
75	300	MRFUT 75 300 F	197	542	55	55	1.4
	450	MRFUT 75 450 F	197	692	55	55	2.2
	600	MRFUT 75600 F	197	842	55	55	2.7
	750	MRFUT 75 750 F	197	992	55	55	3.3
	900	MRFUT 75900 F	197	1142	55	55	3.7
	50	MRFUT 100 50 F	221	294	55	55	0.8
	75	MRFUT 100 75 F	221	320	55	55	0.9
	150	MRFUT 100 150 F	221	394	55	55	1.1
	225	MRFUT 100 225 F	221	469	55	55	1.3
100	300	MRFUT 100 300 F	221	542	55	55	1.5
	450	MRFUT 100 450 F	221	692	55	55	2.4
	600	MRFUT 100 600 F	221	842	55	55	3.0
	750	MRFUT 100 750 F	221	992	55	55	3.7
	900	MRFUT 100 900 F	221	1 1 4 2	55	55	4.1
	50	MRFUT 150 50 F	271	294	55	55	1.0
	75	MRFUT 150 75 F	271	320	55	55	1.1
	100	MRFUT 150 100 F	271	344	55	55	1.1
	225	MRFUT 150 225 F	271	469	55	55	1.6
150	300	MRFUT 150 300 F	271	542	55	55	1.8
	450	MRFUT 150 450 F	271	692	55	55	2.9
	600	MRFUT 150 600 F	271	842	55	55	3.5
	750	MRFUT 150 750 F	271	992	55	55	3.8
	900	MRFUT 150 900 F	271	1142	55	55	4.1

			D	imensio	ons (mm	ı)	
Width (W)	Width (B)	Cat. Nos.	х	Y	<b>Z</b> 1	<b>Z</b> 2	Weight (kg)
	50	MRFUT 225 50 F	346	294	55	55	1.3
	75	MRFUT 225 75 F	346	320	55	55	1.4
225	100	MRFUT 225 100 F	346	344	55	55	1.5
	150	MRFUT 225 150 F	346	394	55	55	1.7
	300	MRFUT 225 300 F	346	542	55	55	2.3
	450	MRFUT 225 450 F	346	692	55	55	3.7
	600	MRFUT 225 600 F	346	842	55	55	4.5
	750	MRFUT 225 750 F	346	992	55	55	5.2
	900	MRFUT 225 900 F	346	1142	55	55	6.0
	50	MRFUT 300 50 F	420	294	55	55	1.6
	75	MRFUT 300 75 F	420	320	55	55	1.7
	100	MRFUT 300 100 F	420	342	55	55	1.8
300	150	MRFUT 300 150 F	420 420	392	55	55	2.0
300	225 450	MRFUT 300 225 F MRFUT 300 450 F	420	467 692	55 55	55 55	2·4 4·5
	430 600	MRFUT 300 450 F	420	842	55	55	5.4
	750	MRFUT 300 750 F	420	992	55	55	6.1
	900	MRFUT 300 900 F	420	1142	55	55	7.1
	50	MRFUT 450 50 F	570	294	55	55	2.7
	75	MRFUT 450 75 F	570	320	55	55	2.9
	100	MRFUT 450 100 F	570	342	55	55	3.1
	150	MRFUT 450 150 F	570	392	55	55	3.5
450	225	MRFUT 450 225 F	570	467	55	55	4.1
	300	MRFUT 450 300 F	570	542	55	55	4.7
	600	MRFUT 450 600 F	570	842	55	55	7.2
	750	MRFUT 450 750 F	570	992	55	55	10.1
	900	MRFUT 450 900 F	570	1142	55	55	12.6
	50	MRFUT 600 50 F	720	294	55	55	3.3
	75	MRFUT 600 75 F	720	320	55	55	3.7
	100	MRFUT 600 100 F	720	342	55	55	3.9
	150	MRFUT 600 150 F	720	392	55	55	4.4
600	225	MRFUT 600 225 F	720	467	55	55	5.2
	300	MRFUT 600 300 F	720	542	55	55	6.0
	450	MRFUT 600 450 F	720	692	55	55	7.5
	750	MRFUT 600 750 F	720	992	55	55	10.0
	900	MRFUT 600 900 F	720	1142	55	55	15.6
	50	MRFUT 750 50 F	870	294	55	55	4.2
	75	MRFUT 750 75 F MRFUT 750 100 F	870	320	55	55	4.4
	100 150	MRFUT 750 100 F	870 870	342 392	55 55	55 55	4·7 6·7
750	225	MRFUT 750 225 F	870	467	55	55	8·1
750	300	MRFUT 750 300 F	870	542	55	55	9.3
	450	MRFUT 750 450 F	870	692	55	55	11.3
	600	MRFUT 750 600 F	870	842	55	55	12.2
	900	MRFUT 750 900 F	870	1142	55	55	13.8
	50	MRFUT 900 50 F	1020	294	55	55	4.9
	75	MRFUT 900 75 F	1020	320	55	55	5.1
	100	MRFUT 900 100 F	1020	342	55	55	5.5
	150	MRFUT 900 150 F	1020	392	55	55	6.2
900	225	MRFUT 900 225 F	1020	467	55	55	7.2
	300	MRFUT 900 300 F	1020	542	55	55	11.6
	450	MRFUT 900 450 F	1020	692	55	55	13.6
	600	MRFUT 900 600 F	1020	842	55	55	16.0
	750	MRFUT 900 750 F	1020	992	55	55	17.0
Key : R	eplace th	e letter shown in re	d with	your ch	oice fr	om the	

25

Key : Replace the letter shown in red with your choice from the following options :

# F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

# Swifts® MRF medium duty fittings

unequal tees

# **L**legrand



#### Dimensions and weights (continued)

#### Weights

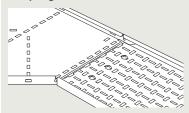
All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galv	anised	(D)	Х	1.06
Stainless s	steel	(S)	Х	0.94
Pre-galvar	nised	(PG)	Х	0.96
Powder co	pated	(F)	х	0.97

#### Assembly

#### **Coupling detail**



#### Unequal tee to straight length coupling

Unequal tees have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling

Each unequal tee to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

Minimum number of fasteners per joint : Widths up to 225 = 2

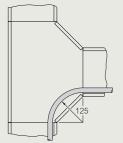
Widths 300 to 600 = 3 Widths 750 and 900 = 4

Fastener finishes For unequal tees with G, D and PG finishes, fasteners are galvanised or zinc plated

For unequal tees with S finish, fasteners are stainless steel For unequal tees with E finish, the choice of material for fasteners will

depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

#### Minimum bend radius for cables

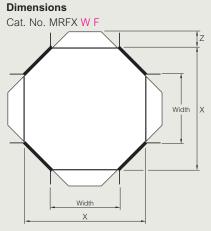


Minimum cable radius = 125 mm

# Swifts<sup>®</sup> MRF medium duty fittings 4 way crosspieces



### Dimensions and weights



X = Length of fitting from each end (excluding integral coupler) Y = Length of fitting from each end (excluding integral coupler) Z = End extension of integral coupler

Cat. Nos.	Width	х	z	Weight (kg)
MRFX 50 F	50	295	55	0.8
MRFX 75 F	75	320	55	1.0
MRFX 100 F	100	344	55	1.2
MRFX 150 F	150	394	55	1.7
MRFX 225 F	225	469	55	2.4
MRFX 300 F	300	542	55	3.3
MRFX 450 F	450	692	55	6.9
MRFX 600 F	600	842	55	10.2
MRFX 750 F	750	992	55	18.4
MRFX 900 F	900	1 1 4 2	55	23.5

#### Note

50 mm wide not available in D finish

#### Weights

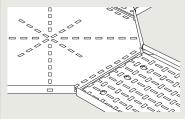
All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galva	anised	(D)	Х	1.06
Stainless s	teel	(S)	Х	0.94
Pre-galvan	ised	(PG)	Х	0.96
Powder co	ated	(E)	Х	0.97

### Assembly

Coupling detail



#### 4 way crosspiece to straight length coupling

Crosspieces have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling

Each crosspiece to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

Minimum number of fasteners per joint :

Widths up to 225	= 2
Widths 300 to 600	= 3

### Widths 750 and 900 = 4

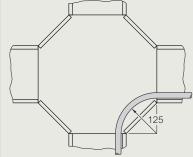
#### Fastener finishes

For crosspieces with G, D and PG finishes, fasteners are galvanised or zinc plated

For crosspieces with S finish, fasteners are stainless steel

For crosspieces with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

#### Minimum bend radius for cables



Minimum cable radius = 125 mm

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)

### Swifts® MRF medium duty fittings straight reducers

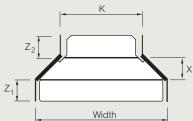




#### Dimensions and weights

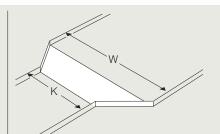
### Dimensions





- X = Length of fitting from each end (excluding integral coupler) Z<sub>1</sub> = End extension of integral coupler  $Z_2 = End extension of$
- integral coupler K = Reduced width

			Dimensions (mm)			
Width	Width (K)	Cat. Nos.	х	Z1	<b>Z</b> 2	Weight (kg)
75	50	MRFR 75 50 F	100	55	55	0.2
100	50	MRFR 100 50 F	100	55	55	0.2
100	75	MRFR 100 75 F	100	55	55	0.2
150	50	MRFR 150 50 F	100	55	55	0.3
	75	MRFR15075F	100	55	55	0.3
	100	MRFR 150 100 F	100	55	55	0.3
	50	MRFR 225 50 F	150	55	55	0.5
225	75	MRFR 22575F	100	55	55	0.4
	100	MRFR 225 100 F	100	55	55	0.4
	150	MRFR 225 150 F	100	55	55	0.4
	50 75	MRFR 300 50 F MRFR 300 75 F	150 150	55 55	55 55	0·5 0·6
300	100	MRFR 300 100 F	100	55	55	0.0
500	150	MRFR 300 150 F	100	55	55	0.5
	225	MRFR 300 225 F	100	55	55	0.6
	50	MRFR 450 50 F	300	55	55	1.2
	75	MRFR 450 75 F	300	55	55	1.2
450	100	MRFR 450 100 F	300	55	55	1.3
450	150	MRFR 450 150 F	150	55	55	0.9
	225	MRFR 450 225 F	150	55	55	0.9
	300	MRFR 450 300 F	100	55	55	0.8
	50	MRFR 600 50 F	300	55	55	1.9
	75	MRFR 600 75 F	300	55	55	1.6
	100	MRFR 600 100 F	300	55	55	1.6
600	150	MRFR 600 150 F	300	55	55	1.7
	225	MRFR 600 225 F	300	55	55	1.8
	300	MRFR 600 300 F	150	55	55	1.2
	450	MRFR 600 450 F	100	55	55	1.3
	50	MRFR 750 50 F	450	55	55	2.6
	75 100	MRFR 750 75 F	450	55	55 55	2·6 2·7
-	150	MRFR 750 100 F MRFR 750 150 F	450 300	55 55	55	2.7
750	225	MRFR 750 225 F	300	55	55	2.8
	300	MRFR 750 300 F	300	55	55	2.8
	450	MRFR 750 450 F	150	55	55	3.9
	600	MRFR 750 600 F	100	55	55	4.0
900	50	MRFR 900 50 F	450	55	55	3.6
	75	MRFR 900 75 F	450	55	55	3.9
	100	MRFR 900 100 F	450	55	55	3.9
	150	MRFR 900 150 F	450	55	55	4.0
	225	MRFR 900 225 F	450	55	55	4.2
	300	MRFR 900 300 F	300	55	55	5.2
	450	MRFR 900 450 F	300	55	55	5.5
	600	MRFR 900 600 F	300	55	55	5.9
	750	MRFR 900 750 F	100	55	55	6.2



To create the Cat No., add the main run width (W), the reduced run width (K) and the finish (F)

Example : For a hot dip galvanised reducer reducing from 300 mm to 150 mm : MRFR 300 150 G

#### Weights

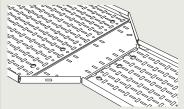
All weights given are in kilograms (kg) and are for hot dip galvanised G finish

To obtain the appropriate component weight in other finishes, multiply the given weight by the following factors :

Deep galvanised	(D) >	< 1.06
Stainless steel	(S) >	< 0·94
Pre-galvanised	(PG) >	< 0·96
Powder coated	(E) >	< 0·97

### Assembly

### Coupling detail



#### Reducer to straight length coupling

Reducers have integral couplers which fit into straight lengths whether they have been cut to length or not, without the need for further drilling Each reducer to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers or quick bolt fasteners (Cat. No. QBF), see p. 48. Fasteners are not included

Minimum number of fasteners per joint :

Widths up to 225	= 2
Widths 300 to 600	= 3
Widths 750 and 900	= 4

#### Fastener finishes

For reducers with G, D and PG finishes, fasteners are galvanised or zinc plated

For reducers with S finish, fasteners are stainless steel For reducers with E finish, the choice of material for fasteners will depend on the installation environment. For further information, contact us on +44 (0) 845 605 4333

All dimensions (mm) are nominal

Key : Replace the letter shown in red with your choice from the following options :

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), PG (pre-galvanised steel), S (stainless steel), E (powder coated)