Llegrand

Swifts® XRF extra heavy duty return flange

straight lengths





Dimensions

Standard length 3 m





Gauges and weights The gauge 't' for each cable tray width and finish varies by product and range

Non-standard gauges and finishes are available to special order, contact us on +44 (0) 345 605 4333

Cat. Nos.	Width (mm)	Weight (kg)	Gauge t (mm) G finish only
XRFL 100 F	100	9.0	1.2
XRFL 150 F	150	10.2	1.2
XRFL 225 F	225	13.0	1.2
XRFL 300 F	300	15.3	1.5
XRFL 450 F	450	26.4	1.5
XRFL 600 F	600	32.5	2.0

All weights given are in kilograms (kg) and are for a 3 m 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 :

-				-
Deep g	galvanised	(D)	Х	1.06
Stainle	ss steel	(S)	Х ()·94

Loading graphs

Load tests carried out to BS EN 61537 and shown in kg/m Cable fill figure is the maximum physical load of cables that can be fitted into tray and is based on 1700kg/m³ as detailed in the BEAMA "Best Practice guide to cable ladder and cable tray systems" 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 graph shows the maximum load for tray installed at a support

spacing within its recommended range



On XRF lengths the graph shows the maximum safe working load when a fishplate is fitted across the underside of each length-to-length joint. Typical cable loads which are normally 50% of the maximum would not réquire a fishplate

Finishes and standards

Standard stocked finish :

G Hot dip galvanised after manufacture to BS EN ISO 1461 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)



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), S (stainless steel)

Fishplates : see p. 105

Coupler sets : see p. 85

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Straight lengths : see p. 84

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Swifts® XRF extra heavy duty fittings

flat bends – 90°, 60°, 45° and 30°





Cat. Nos.	Width	x	Y	z	Weight (kg)
XRFB 100 F	100	280	280	55	1.6
XRFB150F	150	330	330	55	2.0
XRFB 225 F	225	405	405	55	2.8
XRFB 300 F	300	480	480	55	3.6
XRFB 450 F	450	690	690	55	8.7
XRFB 600 F	600	840	840	55	12.2

■ 60° dimensions and weights

Cat. No. XRFB W 60 F



					Weight
Cat. Nos.	Width	Х	Y	Z	(kg)
XRFB 100 60 F	100	190	242	55	1.2
XRFB 150 60 F	150	240	286	55	1.6
XRFB 225 60 F	225	315	351	55	2.1
XRFB 300 60 F	300	390	416	55	2.8
XRFB 450 60 F	450	570	598	55	6.5
XRFB 600 60 F	600	720	727	55	9.2

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), S (stainless steel)

■ 45° dimensions and weights

Cat. No. XRFB W 45 F



Cat. Nos.	Width	х	Y	z	Weight (kg)
XRFB 100 45 F	100	153	198	55	1.0
XRFB 150 45 F	150	203	233	55	1.2
XRFB 225 45 F	225	278	286	55	1.6
XRFB 300 45 F	300	353	339	55	2.1
XRFB 450 45 F	450	520	488	55	5.0
XRFB 600 45 F	600	670	594	55	6.9

■ 30° dimensions and weights

Cat. No. XRFB W 30 F



Cat. Nos.	Width	x	Y	z	Weight (kg)
XRFB 100 30 F	100	124	140	55	0.8
XRFB 150 30 F	150	174	165	55	0.9
XRFB 225 30 F	225	249	202	55	1.2
XRFB 300 30 F	300	324	240	55	1.6
XRFB 450 30 F	450	482	345	55	3.5
XRFB 600 30 F	600	632	420	55	5.0

flat bends - 90°, 60°, 45° and 30° (continued)





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 (S) x 0.94 Stainless steel

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



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, **p. 85**. Fasteners are not included Minimum number of fasteners per joint :

Widths up to 225 Widths 300 to 600 = 2

 $= \bar{3}$

Fastener finishes

For bends with G and D finishes, fasteners are galvanised or zinc Plated For bends with S finish, fasteners are stainless steel

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



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



Width (mm)	Radius (mm)
100 to 300	180
450 and 600	240

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), S (stainless steel)

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Swifts® XRF extra heavy duty fittings

inside and outside risers - 90°, 60°, 45° and 30°

■ 90° dimensions and weights



Cat. Nos.	Width	х	Y	z	Weight (kg)
XRFIR 100 F	100	241	241	55	2.2
XRFOR 100 F	100	240	240	55	2.6
XRFIR 150 F	150	241	241	55	2.5
XRFOR 150 F	150	240	240	55	2.9
XRFIR 225 F	225	241	241	55	2.9
XRFOR 225 F	225	240	240	55	3.3
XRFIR 300 F	300	241	241	55	3.3
XRFOR 300 F	300	240	240	55	3.8
XRFIR 450 F	450	295	295	55	6.2
XRFOR 450 F	450	293	293	55	6.6
XRFIR 600 F	600	295	295	55	7.6
XRFOR 600 F	600	293	293	55	8.1

■ 60° dimensions and weights

Dimensions Cat. No. XRFIR W 60 F

60° inside riser

Cat. No. XRFOR W 60 F 60° outside riser





Cat. Nos.	Width	X	Y	z	Weight (kg)
XRFIR 100 60 F	100	172	99	55	2.0
XRFOR 100 60 F	100	230	133	55	1.4
XRFIR 150 60 F	150	172	99	55	2.1
XRFOR 150 60 F	150	230	133	55	2.5
XRFIR 225 60 F	225	172	99	55	2.4
XRFOR 225 60 F	225	230	133	55	2.8
XRFIR 300 60 F	300	172	99	55	2.8
XRFOR 300 60 F	300	230	133	55	3.1
XRFIR 450 60 F	450	212	122	55	4.9
XRFOR 450 60 F	450	270	161	55	5.3
XRFIR 600 60 F	600	212	122	55	6.0
XRFOR 600 60 F	600	270	161	55	6.4

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), S (stainless steel)

45° dimensions and weights

Dimensions Cat. No. XRFIR W 45 F

45° inside riser

Х





Cat. Nos.	Width	x	Y	z	Weight (kg)
XRFIR 100 45 F	100	234	97	55	1.2
XRFOR 100 45 F	100	233	96	55	1.3
XRFIR 150 45 F	150	234	97	55	1.7
XRFOR 150 45 F	150	233	96	55	1.7
XRFIR 22545 F	225	234	97	55	2.0
XRFOR 22545F	225	233	96	55	2.2
XRFIR 300 45 F	300	234	97	55	2.3
XRFOR 300 45 F	300	233	96	55	2.4
XRFIR 450 45 F	450	266	110	55	4.1
XRFOR 450 45 F	450	265	110	55	4.3
XRFIR 600 45 F	600	266	110	55	5.1
XRFOR 600 45 F	600	265	110	55	5.3

30° dimensions and weights Dimensions Cat. No. XRFIR W 30 F Cat. No. XRFOR W 30 F

30°

inside riser





Cat. Nos.	Width	х	Y	z	Weight (kg)
XRFIR 100 30 F	100	201	54	55	1.1
XRFOR 100 30 F	100	200	54	55	1.1
XRFIR 150 30 F	150	201	54	55	1.3
XRFOR 150 30 F	150	200	54	55	1.5
XRFIR 225 30 F	225	201	54	55	1.9
XRFOR 225 30 F	225	200	54	55	1.7
XRFIR 300 30 F	300	201	54	55	1.9
XRFOR 300 30 F	300	200	54	55	2.0
XRFIR 450 30 F	450	217	58	55	3.4
XRFOR 450 30 F	450	217	58	55	3.5
XRFIR 600 30 F	600	217	58	55	4.1
XRFOR 600 30 F	600	217	58	55	4.2

outside riser

80

All dimensions (mm) are nominal

inside and outside risers - 90°, 60°, 45° and 30° (continued)

Dimensions and weights – inside and outside risers 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 : Stainless steel (S) x 0.94 Deep galvanised (D) x 1.06

Assembly – inside and outside risers 90°, 60°, 45° and 30° Coupling detail



Riser to straight length coupling

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, **p. 85**. Fasteners are not included Minimum number of fasteners per joint :

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

Fastener finishes

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

Minimum bend radius for cables - 90°, 60°, 45° and 30°

Width (W) (mm)	Radius (R) (mm)
100	180
150	180
225	180
300	180
450	240
600	240

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

F = Finish : G (hot dip galvanised after manufacture), D (deep galvanised), S (stainless steel)

All dimensions (mm) are nominal



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Swifts® XRF extra heavy duty fittings

equal tees



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

		Weight			
Cat. Nos.	Width	X	Y	z	(kg)
XRFT 100 F	100	280	460	55	2.7
XRFT 150 F	150	330	510	55	3.4
XRFT 225 F	225	405	585	55	4.4
XRFT 300 F	300	480	660	55	5.7
XRFT 450 F	450	690	930	55	13.3
XRFT 600 F	600	840	1 0 8 0	55	18.2

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

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, p. 85. Fasteners are not included Minimum number of fasteners per joint :

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

Fastener finishes

For equal tees with G and D finishes, fasteners are galvanised or zinc plated. For equal tees with S finish, fasteners are stainless steel

Minimum bend radius for cables



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), S (stainless steel)



Swifts® XRF extra heavy duty fittings

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Ζ2

Cat. Nos

XRFUT 100 150 F

XRFUT 100 225 F

XRFUT 100 300 F

XRFUT 100 450 F

unequal tees

Dimensions and weights Dimensions

Z,

Width (W)

100



W

Width

(B)

150

225

300

450



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

Z = End extension of integral coupler

Z

55

55

55

55

Weight (kg)

2.9

3.2

3.6

4.4

Dimensions (mm)

Y

510

585

660

810

X

280

280

280

280



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, **p. 85**. Fasteners are not included Minimum number of fasteners per joint :

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

Assembly

Coupling detail

Fastener finishes

For unequal tees with G and D finishes, fasteners are galvanised or zinc plated. For unequal tees with S finish, fasteners are stainless steel

Minimum bend radius for cables



	600	XRFUT 100 600 F	280	960	55	5.2
	100	XRFUT 150 100 F	330	460	55	2.9
	225	XRFUT 150 225 F	330	585	55	3.6
150	300	XRFUT 150 300 F	330	660	55	4.1
	450	XRFUT 150 450 F	330	810	55	6.6
	600	XRFUT 150 600 F	330	960	55	7.8
	100	XRFUT 225 100 F	405	460	55	3.9
	150	XRFUT 225 150 F	405	510	55	3.8
225	300	XRFUT 225 300 F	405	660	55	4.7
	450	XRFUT 225 450 F	405	810	55	7.8
	600	XRFUT 225 600 F	405	960	55	9.1
	100	XRFUT 300 100 F	480	460	55	4.1
	150	XRFUT 300 150 F	480	510	55	4.5
300	225	XRFUT 300 225 F	480	585	55	5.0
	450	XRFUT 300 450 F	480	810	55	8.9
	600	XRFUT 300 600 F	480	960	55	10.3
	100	XRFUT 450 100 F	690	580	55	8.3
	150	XRFUT 450 150 F	690	630	55	9.2
450	225	XRFUT 450 225 F	690	705	55	10.2
	300	XRFUT 450 300 F	690	780	55	11.2
	600	XRFUT 450 600 F	690	1080	55	15.3
	100	XRFUT 600 100 F	840	580	55	10.2
	150	XRFUT 600 150 F	840	630	55	11.0
600	225	XRFUT 600 225 F	840	705	55	12.2
	300	XRFUT 600 300 F	840	780	55	13.4
	450	XRFUT 600 450 F	840	930	55	15.8

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 :

(D) x 1.06 (S) x 0.94 Deep galvanised Stainless steel

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), S (stainless steel)

All dimensions (mm) are nominal

XRF equal tees : see p. 90







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Swifts® XRF extra heavy duty fittings

4 way crosspieces





Dimensions



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

Cat. Nos.	Width	x	z	Weight (kg)
XRFX 100 F	100	460	55	2.7
XRFX 150 F	150	510	55	4.3
XRFX 225 F	225	585	55	5.5
XRFX 300 F	300	660	55	6.8
XRFX 450 F	450	930	55	16.1
XRFX 600 F	600	1080	55	22.1

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) $\times 1.06$ Stainless steel (S) $\times 0.94$ Assembly



4 way crosspiece to straight length coupling

4 way 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 4 way crosspiece to length joint is secured with M6 x 12 bolts (roofing or pan head), nuts and washers, **p. 85**. Fasteners are not included

Minimum number of fasteners per joint : Widths up to 225 = 2 Widths 300 to 600 = 3

Fastener finishes

For 4 way crosspieces with G and D finishes, fasteners are galvanised or zinc plated. For 4 way crosspieces with S finish, fasteners are stainless steel

Minimum bend radius for cables



Width (mm)	Radius (mm)
100 to 300	180
450 and 600	240

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), S (stainless steel)

Swifts® XRF extra heavy duty fittings

straight reducers





Dimensions and weights

Dimensions





X = Length of fitting from each end (excluding integral coupler) Z₁ = End extension of integral coupler Z_2 = End extension of integral coupler

	10/2 -141-		Dimensions (mm)			
Width	(K)	Cat. Nos.	х	Z 1	Z 2	(kg)
150	100	XRFR 150 100 F	100	55	55	0.8
225	100	XRFR 225 100 F	100	55	55	0.8
220	150	XRFR 225 150 F	100	55	55	0.9
	100	XRFR 300 100 F	150	55	55	1.2
300	150	XRFR 300 150 F	100	55	55	1.0
	225	XRFR 300 225 F	100	55	55	1.1
225 100 XRFR 150 XRFR 300 150 XRFR 225 XRFR 450 150 XRFR 225 XRFR 300 XRFR 150 XRFR 150 XRFR 150 XRFR 150 XRFR 150 XRFR 100 XRFR 100 XRFR 100 XRFR 150 XRFR	100	XRFR 450 100 F	250	55	55	2.0
	XRFR 450 150 F	150	55	55	1.5	
430	225	XRFR 450 225 F	150	55	55	1.6
	300	XRFR 450 300 F	100	55	55	1.5
	100	XRFR 600 100 F	300	55	55	2.7
	150	XRFR 600 150 F	250	55	55	2.5
600	225	XRFR 600 225 F	200	55	55	2.2
	300	XRFR 600 300 F	150	55	55	2.1
	450	XRFR 600 450 F	100	55	55	2.3

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 : XRFR 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) x 1.06Stainless steel (S) x 0.94

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), S (stainless steel)



Reducers 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, **p. 85**. Fasteners are not included Minimum number of fasteners per joint :

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

Fastener finishes

For straight reducers with G and D finishes, fasteners are galvanised or zinc plated. For straight reducers with S finish, fasteners are stainless steel

All dimensions (mm) are nominal