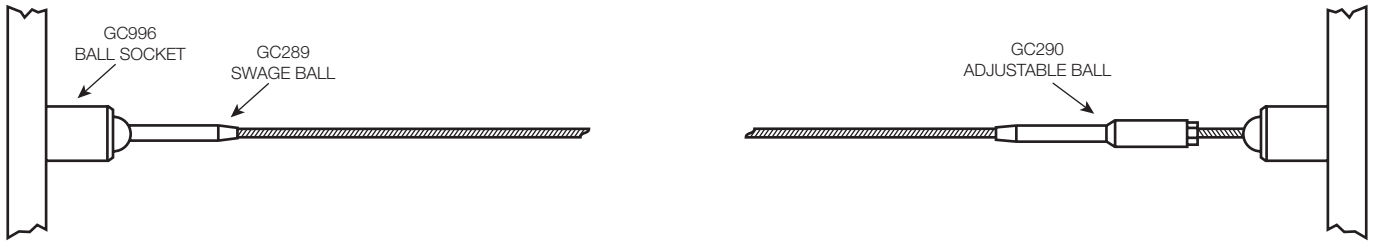




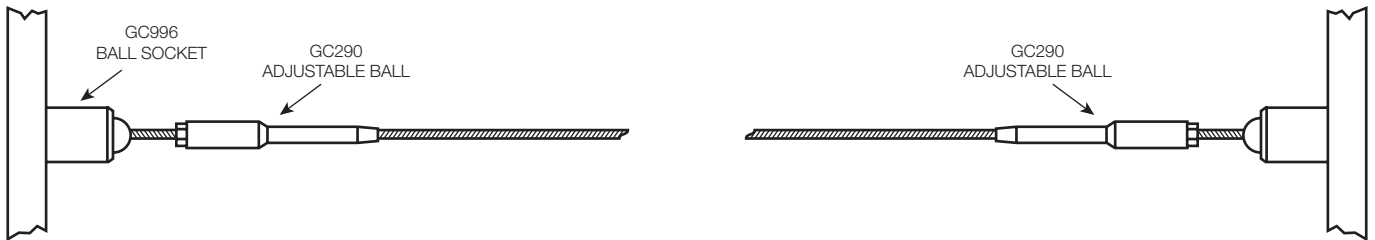
Balustrading is available in many variations, shown here are our most popular.

Should these not meet your requirements, please ring us and we will advise the best option to suit.

System 1: Swaged ball & surface mounted socket up to 5m



System 2: Swaged ball & surface mount sockets 5 – 10m



System 3: Swaged ball & back mounted C-socket up to 5m



System 4: Swaged ball & back mounted C-socket 5 - 10m



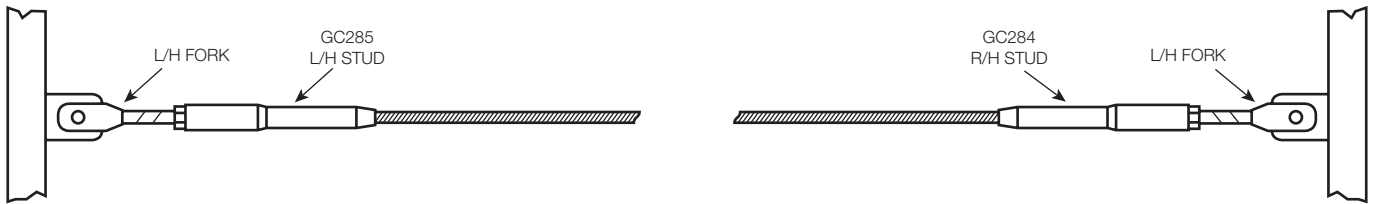
System 5: Swage stud with left & right hand M8 thread and welded spigots



System 6: Swaged fork and tensioner for connection to welded lugs



System 7: Left and right hand slimline adjustable forks for connection to welded lugs



System 8: Left and right hand adjustable forks for connection to welded lugs



System 9: Swage stud with metric thread both ends

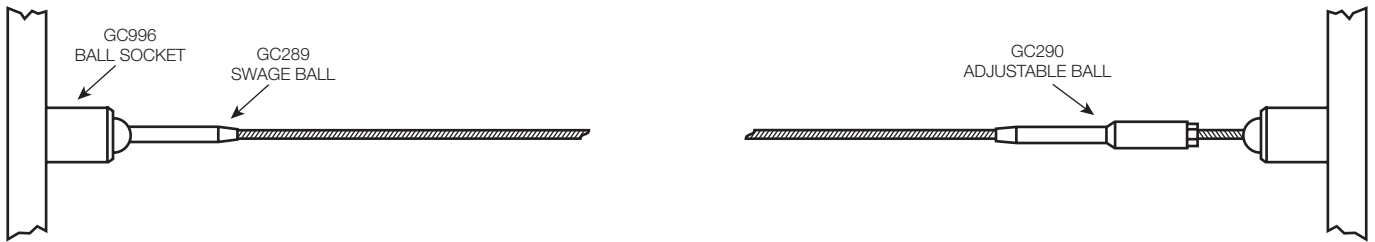


Balustrade Systems 1, 2, 3 & 4

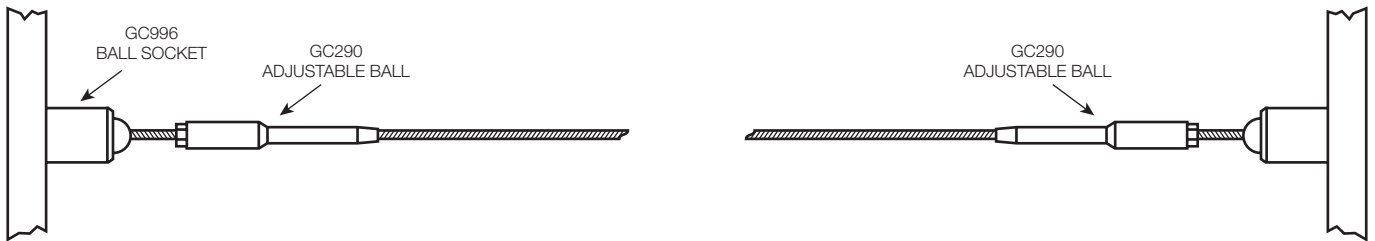
Since its introduction, the ball & socket system has rapidly become one of the most versatile and easy to install balustrading systems available.

- The ball & socket system is very easy to assemble. The wires are simply clicked into position. Once fastened the wires are tensioned by turning one end. They are easy to maintain and adjust.
- Using the ball & socket system makes it very easy to assemble multiple wires at varying angles.
- The design of the ball & socket system is sleek, elegant and extremely functional.
- The ball & socket system is ideal for staircases, vertical and horizontal balustrading. It also provides an open, exposed and uncluttered environment which is ideal for decking.

System 1: Swaged ball & surface mounted socket up to 5m



System 2: Swaged ball & surface mount sockets 5 – 10m



System 3: Swaged ball & back mounted C-socket up to 5m



System 4: Swaged ball & back mounted C-socket 5 - 10m



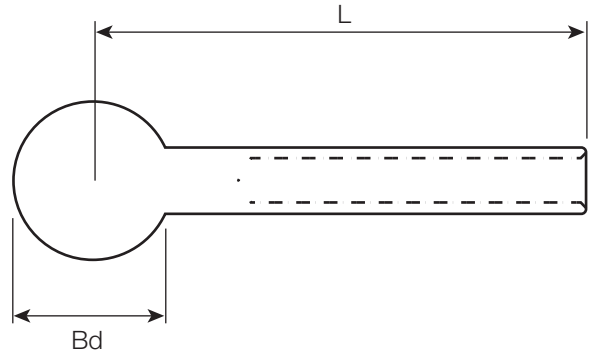
Line drawings and mechanical properties overleaf...

Balustrade Systems 1, 2, 3 & 4

GC289 Fixed Ball

		4mm	5mm
Cable diameter		4	5
Yield Load kN		4.9	4.9
Length	L	47	62
Ball diameter	Bd	16	16
Weight (g)		22	26

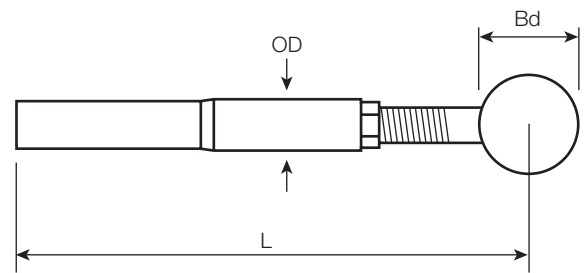
All dimensions in mm



GC290 Adjustable Ball

		4mm	5mm
Cable diameter		4	5
Yield Load kN		4.9	4.9
Length	L	132	140
Adjustment +/-		19	19
Ball diameter	Bd	16	16
Maximum diameter	OD	9.5	9.5
Weight (g)		51	54

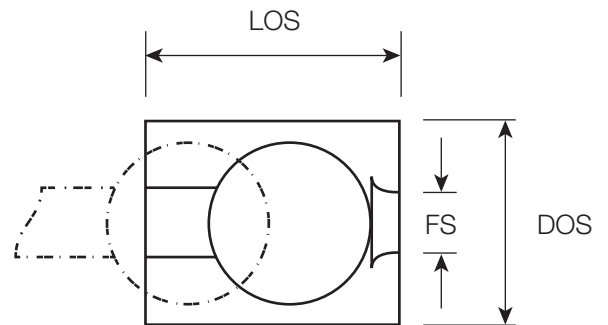
All dimensions in mm



GC996 Surface Mounted Socket

		4mm	5mm
Cable diameter		4	5
Length	LOS	21	21
Socket diameter	DOS	22	22
Thread	FS	M6	M6
Weight (g)		35	35

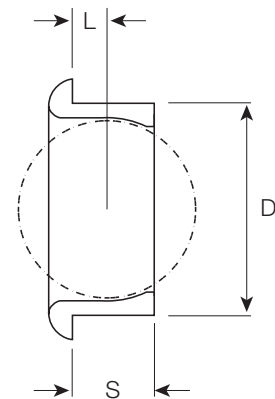
All dimensions in mm



GC998 Back Mounted C-Socket

		4mm	5mm
Cable diameter		4	5
Depth	S	7	7
Hole diameter	D	19	19
Ball centre depth	L	3	3
Weight (g)		7	7

All dimensions in mm



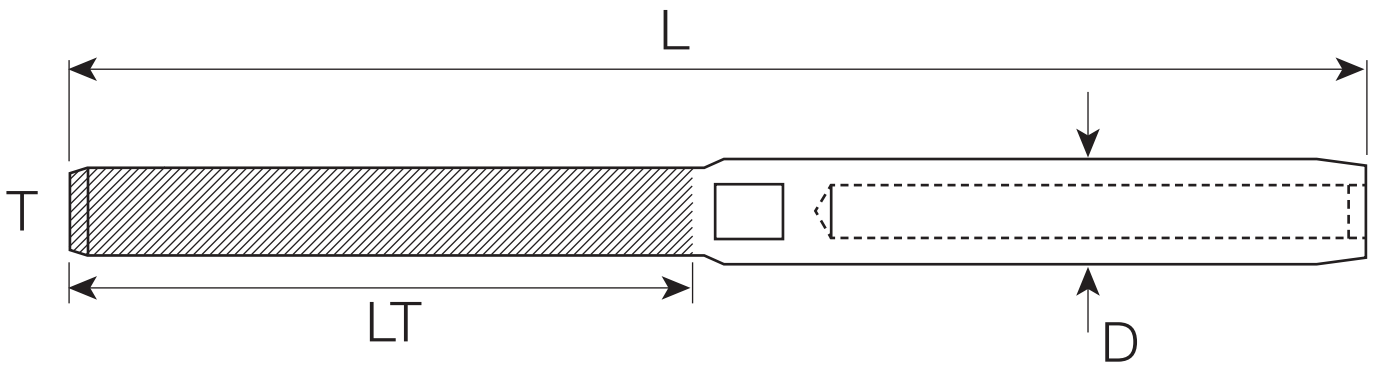
Balustrade System 5

System 5: Swage stud with left & right hand M8 thread and welded spigots



For balustrades, the most popular size for this system is 4mm, however we can also manufacture in 3mm and 5mm. This system can be supplied with straight spigots for horizontal runs or angled spigots if required.

The cable is tensioned by simultaneous rotation at both ends and secured with a lock nut.



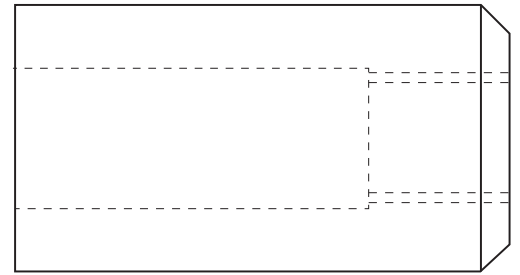
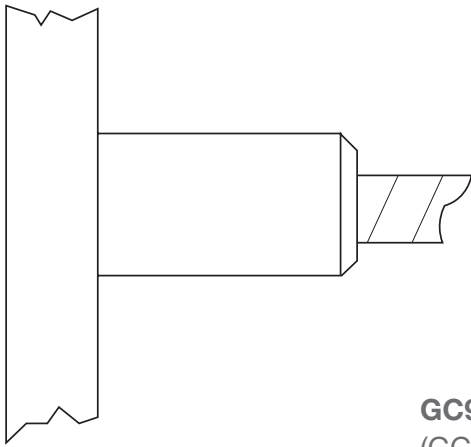
GC224/225 Swaged Stud with short M8 thread
(GC224 right hand thread, GC225 left hand thread)

Wire size		3	4	5
Yield Load (design load)	kN	7.6	7.6	7.6
Break Load	kN	18.7	18.7	18.7
Overall length	L	83	87	98
Thread length	LT	38	38	38
Thread	T	M8	M8	M8
Outer diameter	D	6.3	7.5	9.1
Weight (g)		20	24	32

all dimensions in mm

Spigot line drawings and mechanical properties overleaf...

Balustrade System 5

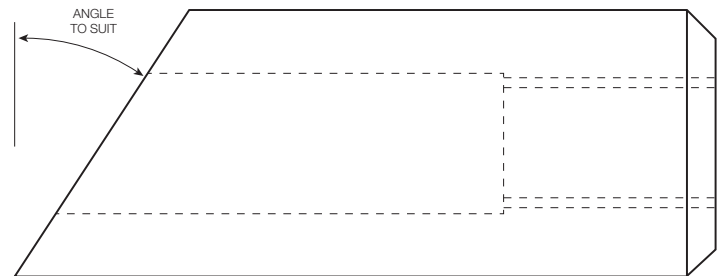
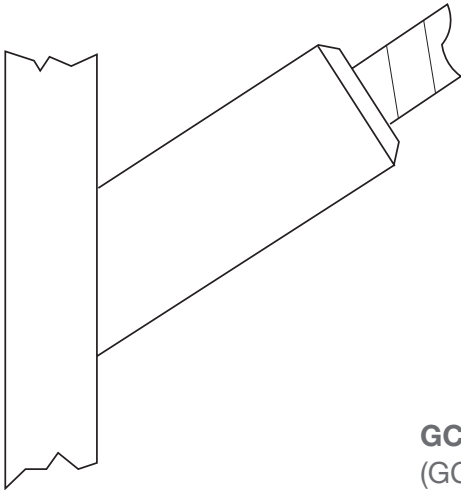


GC976/977 Straight Spigots

(GC976 right hand thread, GC977 left hand thread)

Length	35
Outer diameter	19
Thread	M8
Weight (g)	64

all dimensions in mm
weight is approximate depending on angle



GC978/979 Raked Spigots

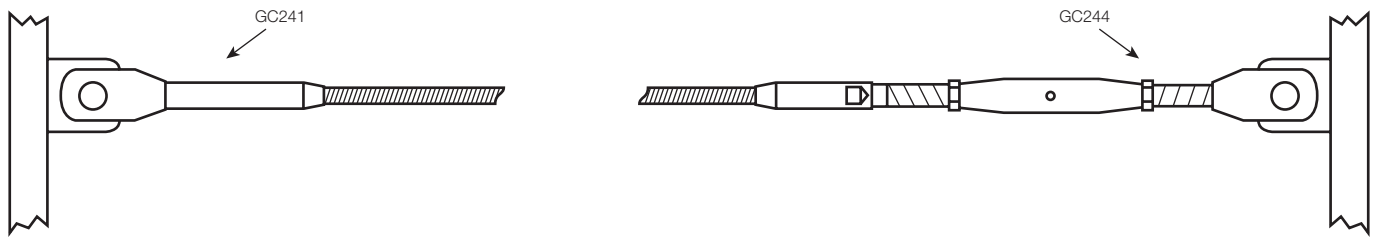
(GC978 right hand thread, GC979 left hand thread)

Length	35
Outer diameter	19
Thread	M8
Weight (g)	75

all dimensions in mm
weight is approximate depending on angle

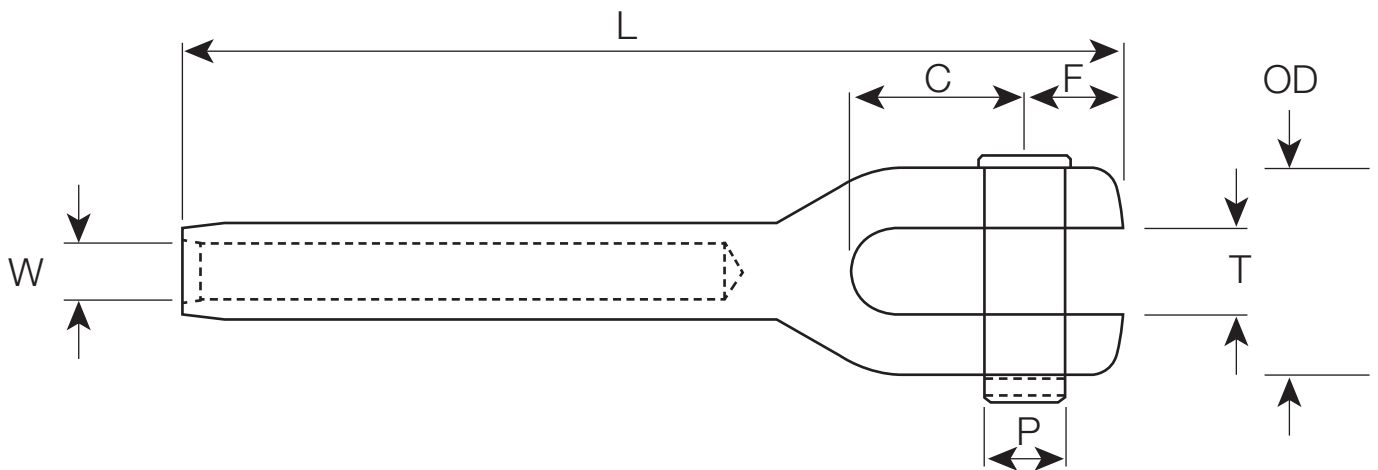
Balustrade System 6

System 6: Swaged fork and tensioner for connection to welded lugs



For balustrades, the most popular size for this system is 5mm, however we can also manufacture in 3mm, 4mm and 6mm.

This system consists of a fixed fork and a tensioner. Unlike some other systems where the two terminals have to be rotated simultaneously, this cable is tensioned by turning the body of the tensioner with the wire remaining stationary.

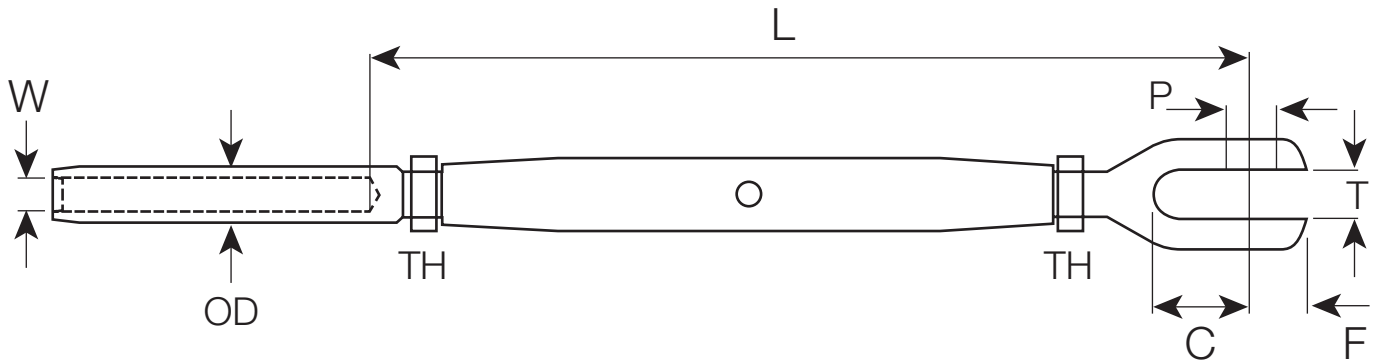


GC241 Forks

Wire size		3	4	5	6
Yield Load (design load)	kN	4.9	7.7	11.7	15.8
Break Load	kN	12.1	19.3	29.1	39.4
Fork length	L	70	83	97	113
Jaw gap	T	6.3	8	10	11
Clevis pin diameter	P	6	8	9.5	11
Projection	F	7	9	11	12
Jaw depth	C	13	16	19	22
Outer diameter	OD	14.3	18	22.2	25.4
Weight (g)		20	36	64	142

all dimensions in mm

GC244 line drawing and mechanical properties overleaf...



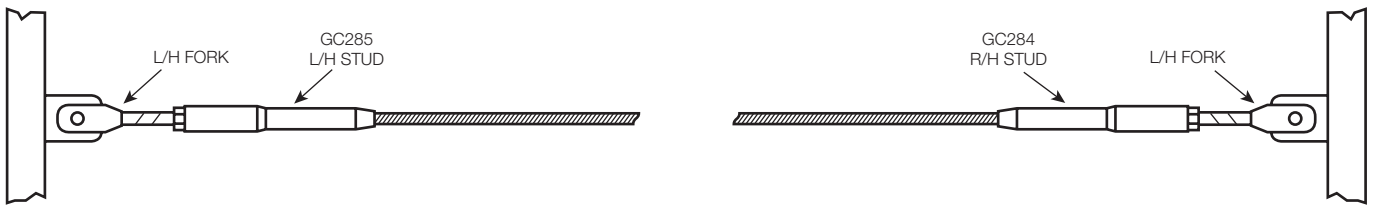
GC244 Swaged Stud & Fork Tensioner

Wire size		3	4	5	6
Yield Load (design load)	kN	4.9	7.7	11.7	15.8
Break Load	kN	12.1	19.3	29.1	39.4
Length	L	160	187	235	255
Adjustment +/-		35	37	50	55
Jaw gap	T	6.3	8	10	11
Clevis pin diameter	P	6	8	9.5	11
Projection	F	7	9	11	12
Jaw depth	C	13	16	19	22
Outer diameter	OD	6.3	7.5	9.1	12.5
Thread (UNF)	TH	1/4"	5/16"	3/8"	7/16"
Weight (g)		79	151	257	386

all dimensions in mm

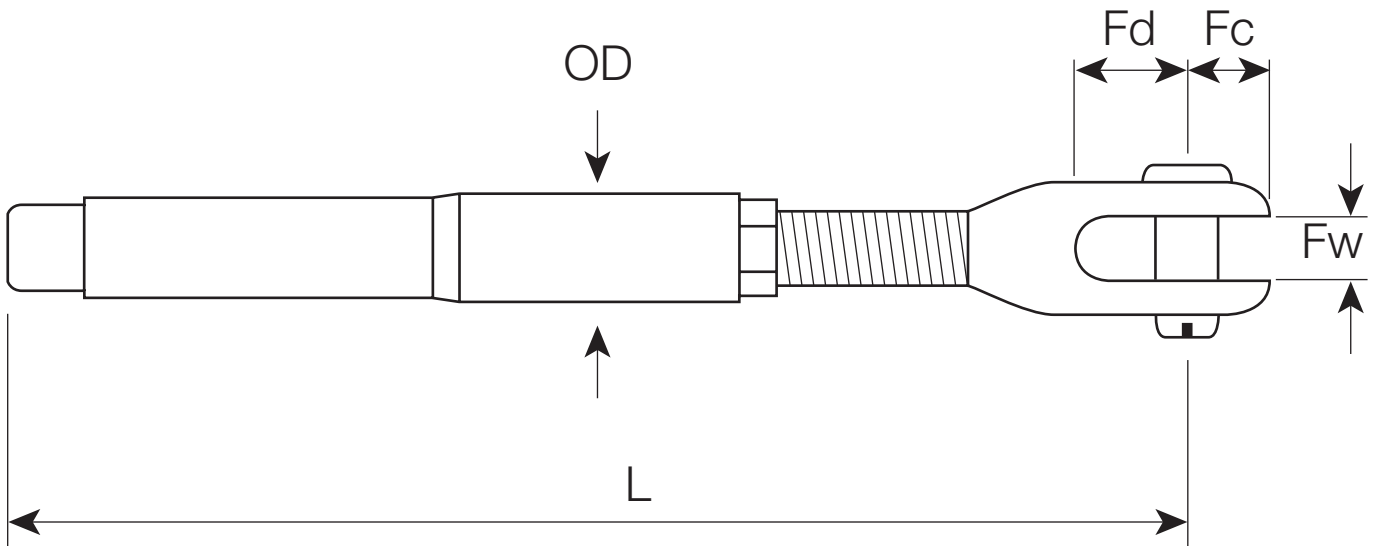
Balustrade System 7

System 7: Left and right hand slimline adjustable forks for connection to welded lugs



For balustrades, the most popular size for this system is 4mm, however we can also manufacture in 3mm, 5mm and 6mm. This slimline system consists of a left and a right hand fork. The cable is tensioned by simultaneous rotation of both studs once the forks have been attached to the welded lugs.

If you are looking for a cost effective solution, this system is worth considering but please pay particular attention to fork dimensions and loadings.



GC284/285 Slimline Adjustable Fork
(GC284 right hand thread, GC285 left hand thread)

Wire size		3mm	4mm	5mm	6mm
Yield Load kN		3.5	4.9	4.9	7.7
Length	L	132	142	150	168
Adjustment +/-		18	18	18	21
Jaw gap	Fw	6	6	6	8
Clevis pin diameter	P	6.3	6.3	6.3	8
Projection	Fc	7	7	7	9
Jaw depth	Fd	13	13	13	16
Maximum diameter	OD	9.4	9.4	9.4	12.7
Weight (g)		49	53	58	96

All dimensions in mm

Balustrade System 8

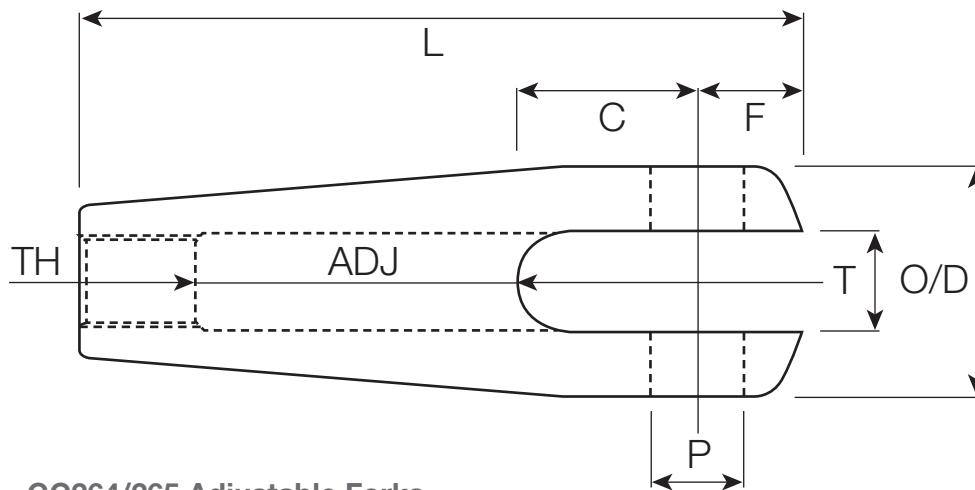
System 8: Left & right hand adjustable forks for connection to welded lugs



For balustrades, the most popular size for this system is 5mm, however we can also manufacture in 3mm, 4mm and 6mm.

This system consists of a left and a right hand fork. The cable is tensioned by simultaneous rotation of the two studs once the forks have been attached to the welded lugs.

In most cases, this system uses a larger thread and pin. The loadings which can be applied are much higher than for system 7. For 3mm wire the thread and pin size are identical for the 2 systems but the design of this fork gives a higher loading.



GC264/265 Adjustable Forks

(GC264 right hand forks, GC265 left hand forks)

Wire size		3	4	5	6
Yield Load (design load)	kN	4.9	7.7	11.7	15.8
Break Load	kN	12.1	19.3	29.1	39.4
Length	L	129	156	189	214
Adjustment +/-		12	16	20	22
Jaw gap	T	7	8.5	10	11
Clevis pin diameter	P	6.4	8	9.5	11
Projection	F	8	10	12	15
Jaw depth	C	15	16	20	23
Outer diameter	O/D	6.3	7.5	9.1	12.5
Thread (UNF)		1/4"	5/16"	3/8"	7/16"
Weight (g)		90	160	190	400

all dimensions in mm

Balustrade System 9

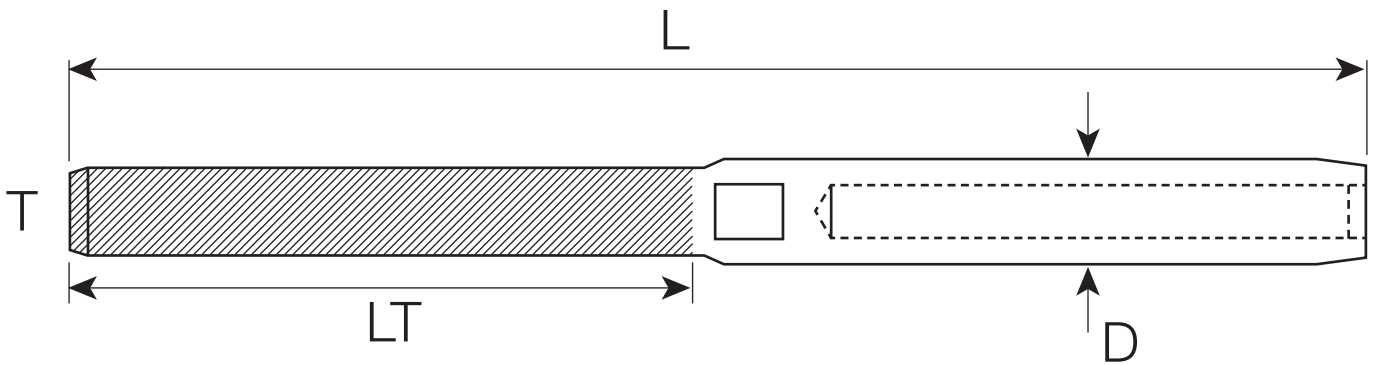
System 9: Swage stud with metric thread both ends



For balustrades, the most popular size for this system is 4mm, however we can also manufacture in 3mm, 5mm and 6mm.

These cables are terminated by a swaged stud with a metric thread at either end. 2 options are available:

1. A right hand metric thread at either end which is passed through the end posts. The cable is tensioned using either a lock nut or dome nut behind the post depending on finish required.
2. A right hand metric thread at one end and a left hand metric thread at the other end. The cable is tensioned by simultaneous rotation at both ends into suitable anchorages (e.g. drilled and tapped holes in the end posts). We would recommend a lock nut be fitted or a proprietary thread locking product be used.



GC220/221 Swaged Stud with metric thread (GC220 are right hand threads, GC221 are left hand threads)

Wire size		3	4	5	6
Yield Load (design load)	kN	4.9	7.7	11.7	15.8
Break Load	kN	12.1	19.3	29.1	39.4
Overall length	L	97	113	122	154
Thread length	LT	47	54	68	75
Thread	T	M6	M8	M8	M10
Outer diameter	D	6.3	7.5	9.1	12.5
Weight (g)		24	36	54	108

all dimensions in mm

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