

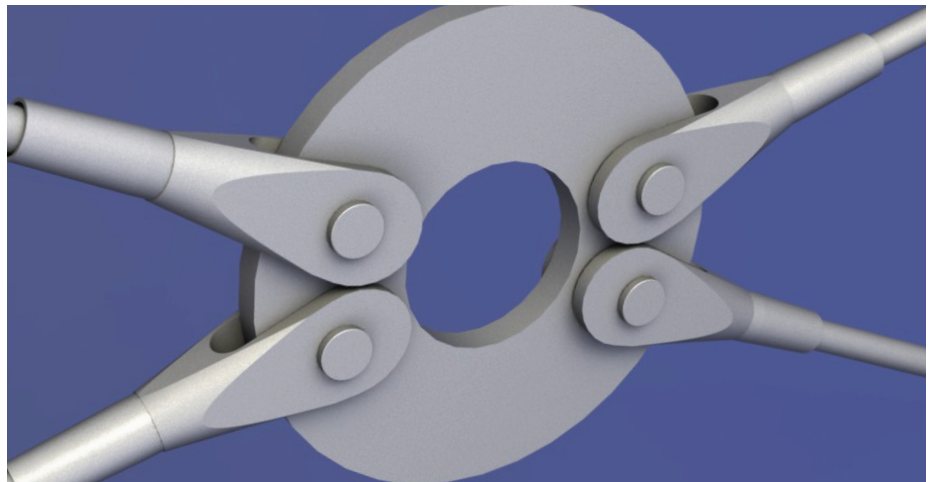
Macalloy Central Connection Solutions

Macalloy

BAR & CABLE SYSTEMS

Central Connections.

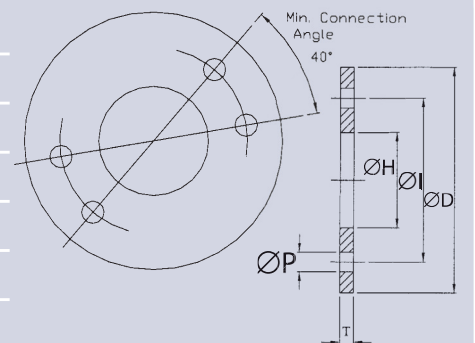
In most situations, such as in wind-bracing applications, where tendons are required to cross each other, a circular disc is used as shown below. Full dimensions are given in Table 1.



Macalloy Standard Central Connection Disc

Table 1 – Disc Connection

Connection Disc	D/10	D/12	D/16	D/20	D/24	D/30	D/36	D/42	D/48	D/56
System Size	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56
ØD	130	164	218	248	294.8	386	444	502	572	694
ØI	96	120	160	180	210	280	320	360	410	500
T	10	10	12	15	20	22	30	35	40	45
ØP	11.5	13	17	21.5	25.5	31.5	37.5	43.5	49.5	57.5
ØH (optional)	50	70	90	105	115	160	185	205	235	290



Bespoke Connections.

A simpler, lower-priced alternative is to use a central node where one bar passes through the central connector (bottom left).

As an aesthetic alternative, Macalloy have often been asked to provide a smaller ring-type connector, often used in a horizontal plane. This is manufactured from a circular hollow section or tube, with gusset plates welded around the perimeter to allow the forks to connect to the node (bottom centre)

All of the solutions are available in both carbon and stainless steel, with a choice of finishes, including painted, powder coated or polished.

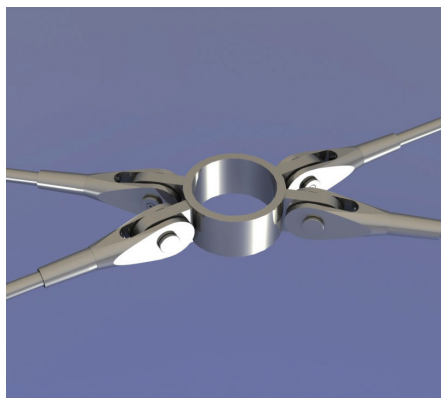
As standard, all of our connection discs are designed to accommodate a crossover angle of 40° or greater; where smaller angles are required, disc sizes need to be increased, in order to avoid the forks clashing with each other. In these cases, a butterfly plate (bottom right) can often be a more economical solution, as it can be designed to be as small as possible to carry the required load; often

providing a cost- and weight-saving over an increased size disc.

Your preferred company logo, lettering and designs can be accommodated, using the latest laser cutting, chemical etching or screen-printing techniques. For further support and advice, please contact our technical team.



Macalloy Elongated Cross-Connector



Macalloy Ring Connector



Macalloy Butterfly Plate

EXPERIENCE

INNOVATION

QUALITY

Macalloy Cross Couplers

Coupler Connector

More recently, Macalloy have developed a new product which offers an aesthetic and cost-effective solution to central connection requirements.

The cross-coupler system has been developed to offer an elegant solution to crossover nodes whilst eliminating the need for central fork connections. It consists of an elongated coupler, with a slot machined to allow a bar to pass through it.

The threads on the connecting bars simply screw into the coupler. Lock covers are then provided to cover any excess thread and gently taper from the coupler's diameter down to the diameter of the bar.

They are available in carbon steel (plain, galvanized and painted finishes) or stainless steel polished to our standard range of finishes.

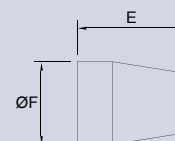
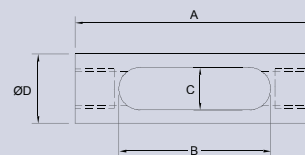
A range of thread sizes are accommodated from M10 to M64 as standard.



Macalloy Cross-Coupler

Table 2 – Component Dimensions

Cross-Coupler	CC10	CC12	CC16	CC20	CC24	CC30	CC36	CC42	CC48	CC56	CC64
System Size	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56	M64
A	73	82	105	128	148	183	217	249	283	328	376
B	47	52	67	82	94	117	139	159	181	210	242
C	12	14	18	22	26	32	38	44	50	58	66
ØD	19	25	29	35	43	52	62	72	82	96	110
Lock Cover	LCC10	LCC12	LCC16	LCC20	LCC24	LCC30	LCC36	LCC42	LCC48	LCC56	LCC64
System Size	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56	M64
E	29	31	37	43	74	105	111	117	123	136	144
ØF	18.5	24	28	34	42	51	61	71	81	95	109



To discuss other sizes or special requirements, please contact Macalloy's Technical department.

This publication provides the technical details currently used by Macalloy in the manufacture of its components.

The company reserves the right to amend technical details as and where necessary in line with its policy of continuous development.

Macalloy, Caxton Way, Dinnington, Sheffield S25 3QE, U.K. Tel: +44 (0)1909 519200. Fax: +44 (0)1909 519201

Website: www.macalloy.com Email: sales@macalloy.com

Published November 2010



is a Registered Trade Mark of McCalls Special Products Ltd.

EXPERIENCE

INNOVATION

QUALITY