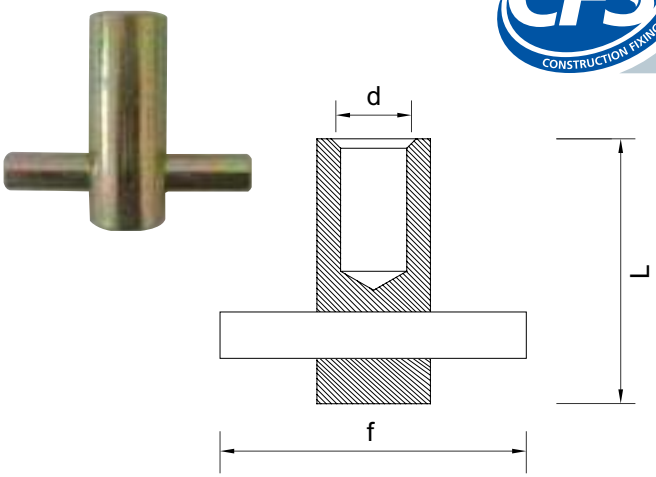
Crosspin Sockets

- Zinc Plated or Stainless Steel Solid Rod and Crosspin
- M thread
- The socket is anchored into the concrete unit using a crosspin provided through the cross-hole.
- In stainless steel, this socket provides the highest corrosion resistance as there is protection by solid stainless steel
- Sockets used in axially require no further reinforcement
- These sockets may also be used as lifting sockets



Part No Zinc Plated	Part No Stainless Steel	Dimensions of socket		
		d	L	F
		mm		
CFS-LSRB-10-50	CFS-LSRBS-10-50	M10	50	75
CFS-LSRB-12-50	CFS-LSRBS-12-50	M12	50	75
CFS-LSRB-12-75	CFS-LSRBS-12-75	M12	75	75
CFS-LSRB-16-75	CFS-LSRBS-16-75	M16	75	75
CFS-LSRB-20-75	CFS-LSRBS-20-75	M20	75	90
CFS-LSRB-24-100	CFS-LSRBS-24-100	M24	100	100

Essential Steps:

Lifting – Check Lifting Load Capacity Table page 2-26

Fixing – Check Fixing Load Capacity Table page 3-9

Shear Pull – Include Shear Reinforcement page 3-9

Fixing Design Capacities for Solid Crosspin Sockets

These tables are for these sockets to be used as fixing devices. They should be compared to the design loads on a socket.

These tables show a typical situation and you should check your situation is within these parameters. If your situation falls out of these parameters, please contact CFS of bespoke advice and calculations.

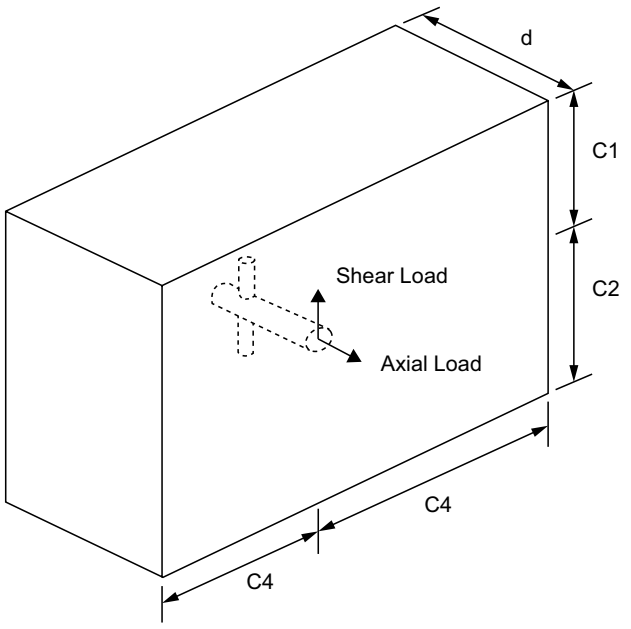
Part No Zinc Plated	Part No Stainless Steel	Typical Installation Conditions			Axial Load			Shear Load					
		Edge Distances		Element Thickness	8,702 psi			without rebar			with rebar		
					Min Concrete Strength (N/mm2)					8,702 psi			
		C1, C2	C3, C4	d	30	45	60	30	45	60	30	45	60
		mm			kN								
Uncracked Concrete							4,181 lbs			1,574 lbs			
CFS-LSRB-10-50	CFS-LSRBS-10-50	80	55	80	13.1	16.1	18.6	5	6.1	7	10.2	12.3	12.3
CFS-LSRB-12-50	CFS-LSRBS-12-50	90	55	80	13.8	17	19.6	5	6.1	7	10.2	12.3	12.3
CFS-LSRB-12-75	CFS-LSRBS-12-75	125	90	100	23.1	23.1	23.1	10.5	12.8	14.8	17.6	19.4	19.4
CFS-LSRB-16-75	CFS-LSRBS-16-75	120	80	100	23.3	28.6	33	9.2	11.3	13	17.6	21.9	21.9
CFS-LSRB-20-75	CFS-LSRBS-20-75	120	75	100	22.9	28	32.3	8.6	10.5	12.1	17.6	21.9	21.9
CFS-LSRB-24-100	CFS-LSRBS-24-100	160	100	130	33.2	40.7	46.9	13.7	16.8	19.4	40.7	48.3	48.3
Cracked Concrete													
CFS-LSRB-10-50	CFS-LSRBS-10-50	80	55	80	9.4	10	10	3.5	4.3	5	9.4	11.5	12.3
CFS-LSRB-12-50	CFS-LSRBS-12-50	90	55	80	9.9	12.1	14	3.5	4.3	5	9.9	12.1	12.3
CFS-LSRB-12-75	CFS-LSRBS-12-75	125	90	100	18.6	22.8	23.1	7.4	9.1	10.5	17.6	21.9	21.9
CFS-LSRB-16-75	CFS-LSRBS-16-75	120	80	100	16.7	20.4	23.6	6.5	8	9.2	16.7	20.4	21.9
CFS-LSRB-20-75	CFS-LSRBS-20-75	120	75	100	16.3	20	23.1	6.1	7.4	8.6	16.3	20	21.9
CFS-LSRB-24-100	CFS-LSRBS-24-100	160	100	130	23.7	29	33.5	9.7	11.9	13.7	37.9	46.4	48.3

Where there is axial load and shear load at the same time, please ensure that each of the axial and shear components are less than the capacities and also that:

$$\frac{\text{Axial Component}}{\text{Axial Capacity}} + \frac{\text{Shear Component}}{\text{Shear Capacity}} \leq 1.2$$

Whre two or more sockets are in use, they should be spaced at a minimum of 2 x C3 apart.

Crosspin Shear Reinforcement if required, include reinforcement shown on page 3-10



C1 = Edge distance towards the free edge where the shear force acts

C2 = Edge distance in the direction away from the force

C3 and C4 = Edge distances perpendicular to the shear force action

Please note that the socket should be orientated with the pin parralel to the shear force action as shown here.