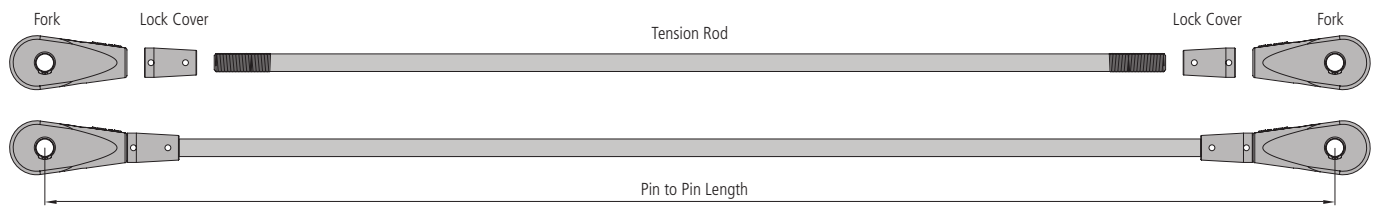


HMR750 Tension Rod System

The HMR 750 tension rod system offers modern architecture, an innovative and elegant design, improved corrosion protection, higher capacity loads and improved safety during installation.



Mechanical Properties

Thread size	Unit	M12	M16	M20	M24	M30	M36	M42	M48	M56	M64	M76	M85	M90	M100	
Minimum Yield Stress	N/mm ²	540						540								
Minimum Breaking Stress	N/mm ²	720						750								
Min. Elongation	%	17						17								

Capacity Loads

Thread size	Unit	M12	M16	M20	M24	M30	M36	M42	M48	M56	M64	M76	M85	M90	M100
Bar diameter	mm	12	15	19	23	28	34	40	45	54	62	74	83	90	100
Capacity Load	kN	43	81	126	182	290	423	605	795	1157	1539	2213	2799	3154	3928
Bar weight	kg/m	0,89	1,39	2,23	3,26	4,83	7,13	9,87	12,49	17,98	23,70	33,76	42,47	47,75	61,65
Maximum bar length	mm	7,850	8,850	11,800											

Capacity loads of tension rods as per DIN EN 1993-1-8, Table 3.4 and DIN EN 1993-1-1 section 6.2.3 with partial safety factors $\gamma_{M0} = 1,0$ and $\gamma_{M2} = 1,25$

Longer lengths can be achieved by using coupler or turnbuckle joints.
All system components are designed to take the full capacity of the tension rod.

Length Adjustments / Minimum thread engagement

Thread size	Unit	M12	M16	M20	M24	M30	M36	M42	M48	M56	M64	M76	M85	M90	M100
System with two fork connectors	mm	± 12	± 16	± 20	± 24	± 30	± 36	± 42	± 48	± 56	± 61	± 71	± 78	± 80	± 85
Turnbuckle	mm	± 20	± 25	± 25	± 30	± 30	± 40	± 40	± 40	± 50	± 50	± 50	± 50	± 60	± 60
Cross Coupler	mm	± 11	± 15	± 16	± 19	± 22	± 27	± 32	± 35	± 42	± 48	± 57	± 62	± 67	± 74

The pin to pin length is the distance between the centre of each pin. Once installed the tendons can be adjusted by rotating the rod.
Further adjustment can be achieved by using a turnbuckle.

Corrosion Protection

HMR tension rod systems are available in the following surface finishes:

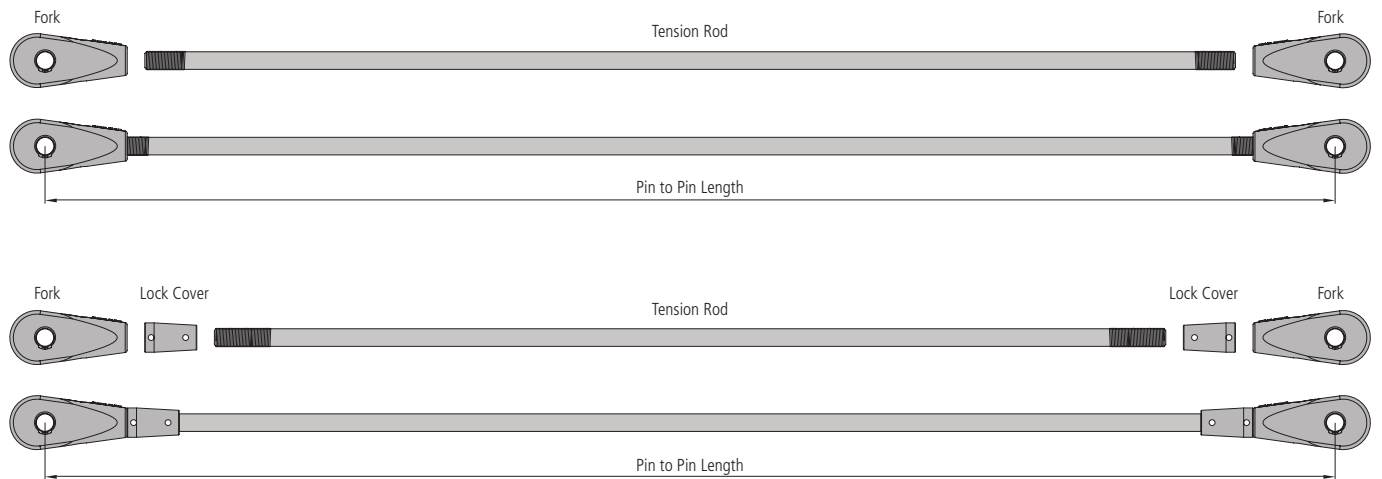
Carbon steel* ■ Hot dip galvanised ■ Powder coated ■ Painted ■ Duplex coated

* All fittings are supplied in a hot dip galvanised finish to EN 1461.

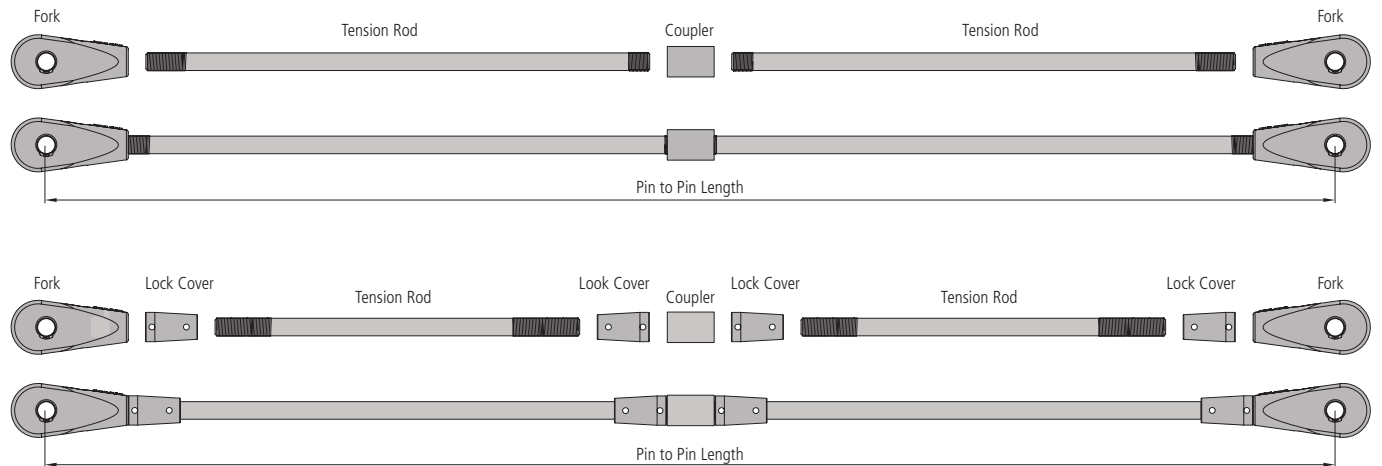
System Overview

Whether it be truss systems, back-braced façades, suspensions or cross bracings' the diversity of applications of HMR750 tension rods provide a high-quality solution for virtually any application.

Basic system

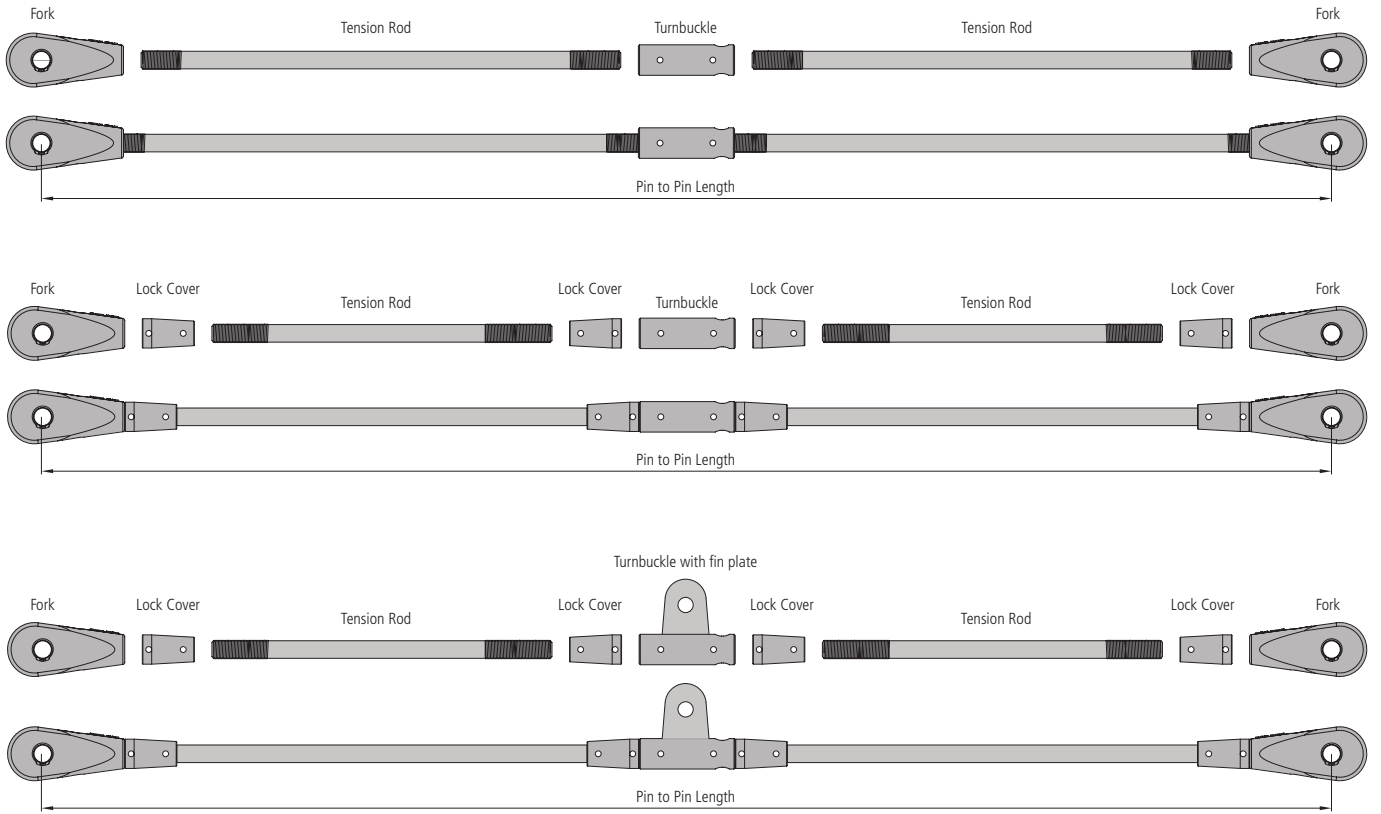


System with coupler

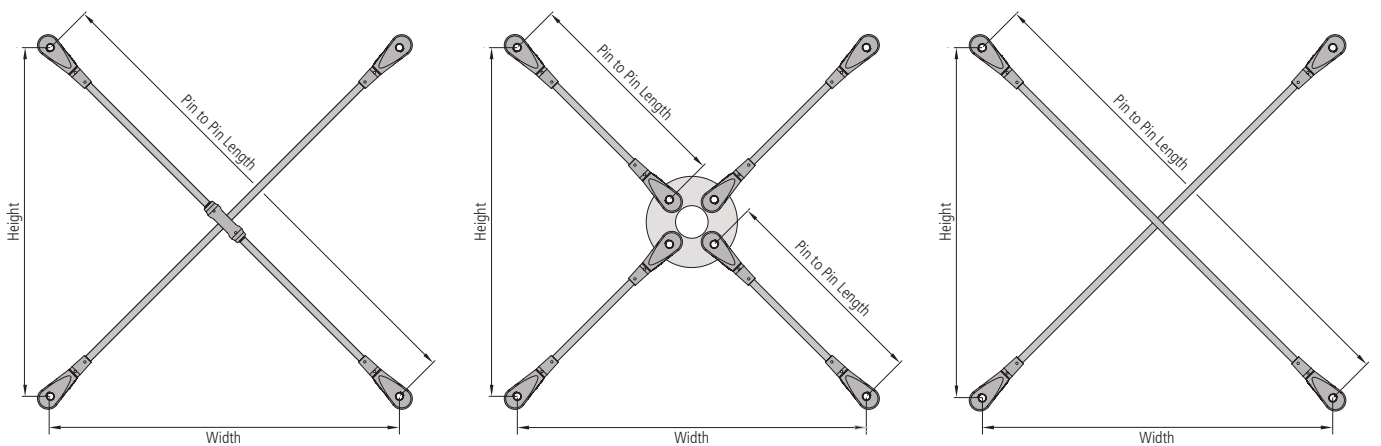


System Overview

System with turnbuckle



Cross Bracings



With Cross Coupler

With Connection Disc

Basic Cross Bracing