

# m·connect

## Tension rod & compression strut systems

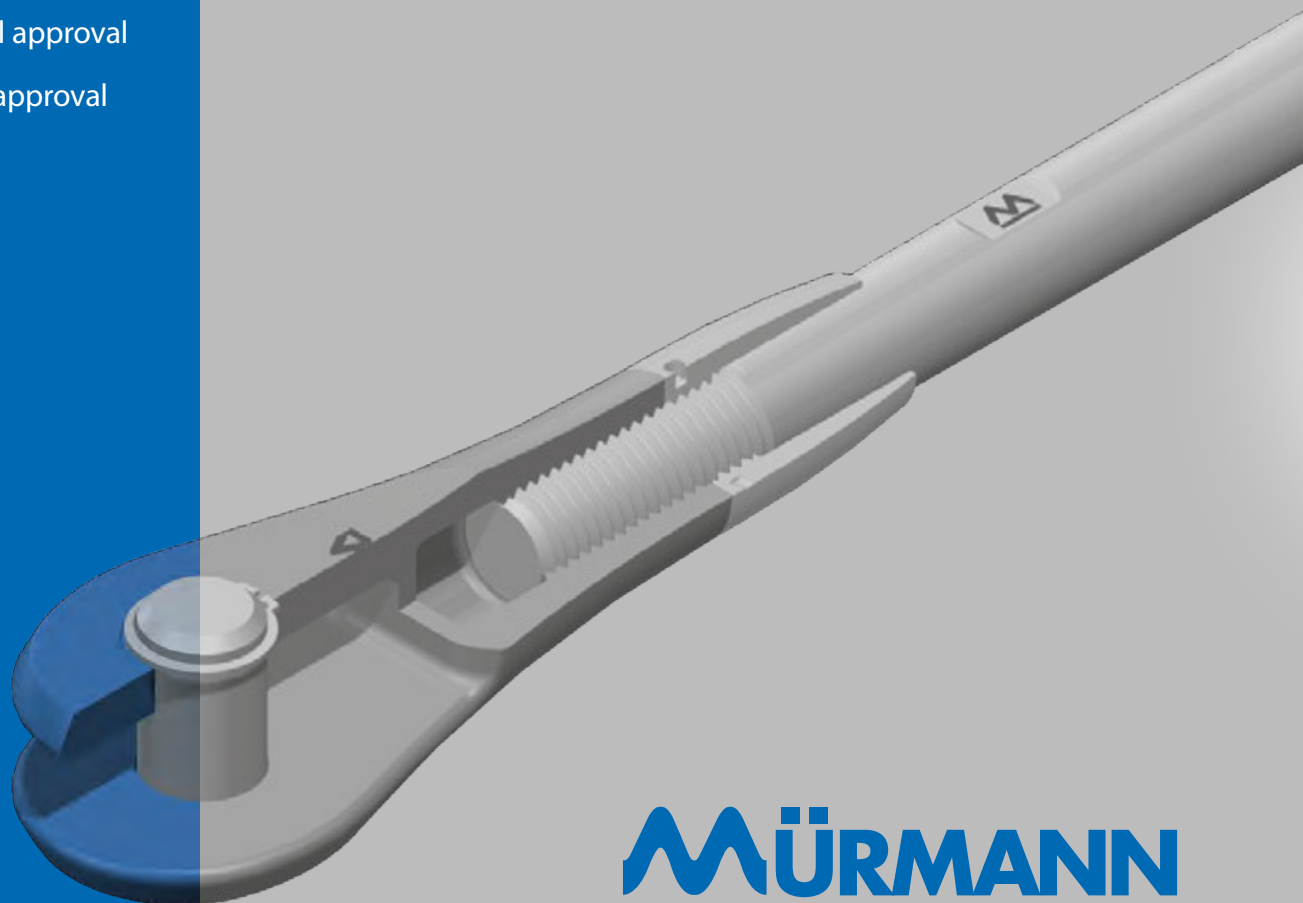


**Steel grade**  
**S460 / S560**

European technical approval

German technical approval

Modern architecture in steel, timber  
and facade construction



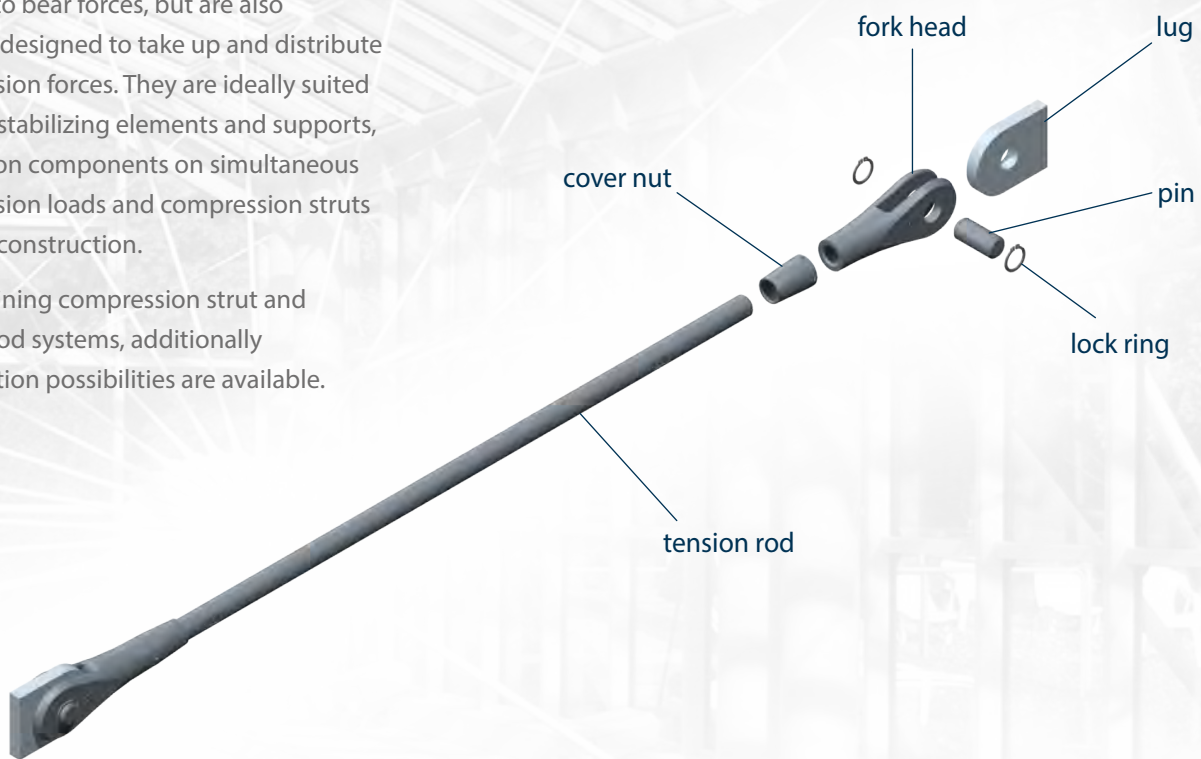
**MÜRMAN**  
GEWINDETECHNIK

# Tension rod and compression strut systems with German technical approval / European technical approval (ETA)

**The m•connect tension rod systems are the ideal components to distribute tension forces in an economical and at the same time elegant manner. They are suited to all types of suspension and anchoring.**

The m•connect compression strut systems are able to bear forces, but are also specially designed to take up and distribute compression forces. They are ideally suited to act as stabilizing elements and supports, suspension components on simultaneous compression loads and compression struts in frame construction.

By combining compression strut and tension rod systems, additionally construction possibilities are available.



## m•connect product range

### S460

Tension rod system S460 • carbon steel  
Compression strut system S460 • carbon steel  
Tension rod system S460 • stainless steel  
Compression strut system S460 • stainless steel

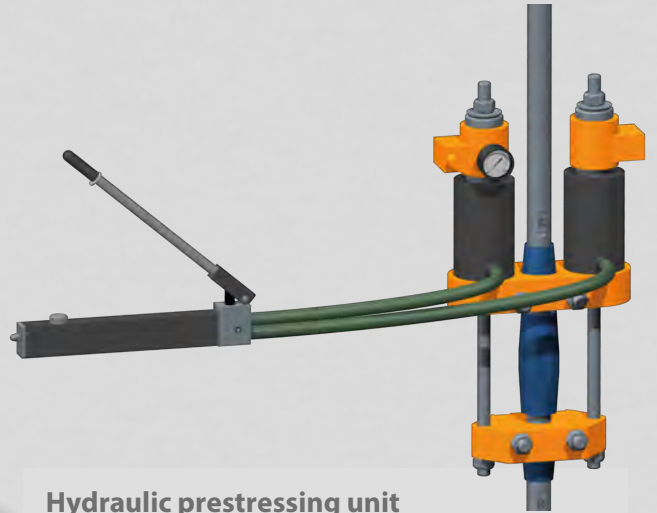
### S560

Tension rod system S560 • carbon steel  
Compression strut system S560 • carbon steel  
Tension rod system S560 • stainless steel  
Compression strut system S560 • stainless steel





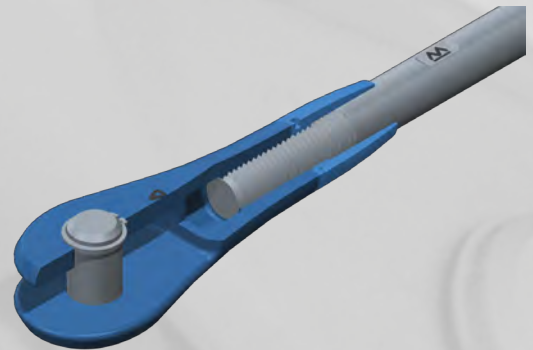
**Attachment and connecting elements** for the tension rod and compression strut systems can be custom made upon request.



**Hydraulic prestressing unit** for a **defined preload** of tension rod systems and supervising on-site ensure a safe and professional installation.



m-connect is integrated in all common **BIM Softwares**, e.g. **Tekla** or **AVEVA Bocard**. Parts for your design drawings can be provided as a **2D** or **3D** file.



**Optimal anti-corrosion protection** of the thread through closed fork head body and additional cover nut.



**Integrated measuring technology** ensures a **permanent monitoring** of the tension rod system and offers maximum safety for the complete building structure.



A **diversity of surfaces** are available, e.g. raw/black, primed, hot dip galvanized, painted, powder-coated or with a special fire protection coating (F30 or F60).





# S460 and S560

## Tension rod and compression strut system

in stainless steel and carbon steel

### S460 – Tension rod and compression strut system

European technical approval / ETA-06/0236 and German technical approval / Z-14.441

System / Thread	M6	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48	M56x4	M64x4	M72x4	M80x4	M90x4	M100x4
Tension resistance acc. to EN 1993 [kN]	9	16,4	26,1	37,4	69,7	109	156	248	361	504	662	933	1198	1527	1893	2406	2954
Min. breaking load [kN]	12	21,5	35,2	51,1	97,7	151	216	344	501	698	919	1295	1662	2120	2627	3340	4100
Adjustment per fork head ±[mm]	5	6	8	10	12,5	12,5	15	15	20	25	25	30	35	40	40	45	50
Thickness of lug [mm]	4	5	6	8	10	12	15	20	22	25	30	35	40	50	55	60	70

### S560 – Tension rod and compression strut system

German technical approval / Z-14.441

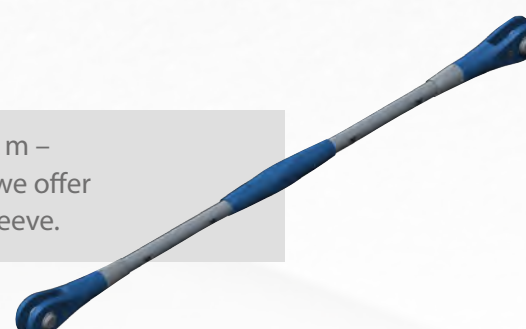
The new system **S560** offers a significant **higher tension resistance** for the same rod diameter or allows the **reducing of the rod diameter** by keeping the same tension resistance. The system S560 allows a **weight reduced, more filigree design of the structure**.

System / Thread	M6	M8	M10	M12	M16	M20	M24	M27	M30	M36	M42	M48	M52	M56x4	M60x4	M64x4	M72x4	M76x4	M80x4	M85x4	M90x4	M95x4	M100x4	M105x4	M110x4	M115x4	M120x4
Tension resistance acc. to EN 1993 [kN]	11	19	30	44	82	128	184	240	293	426	585	769	918	1119	1297	1488	1909	2140	2383	2706	3050	3413	3798	4034	4396	4820	5263
Min. breaking load [kN]	14	26	41	60	113	177	255	333	406	592	812	1067	1273	1553	1800	2065	2650	2970	3308	3756	4333	4738	5271	5600	6100	6690	7305
Adjustment per fork head ±[mm]	5	6	8	10	12,5	12,5	15	15	15	20	25	25	27,5	30	32,5	35	40	40	40	42,5	45	47,5	50	50	55	55	60
Thickness of lug [mm]	5	6	8	10	15	18	20	22	25	30	35	40	45	50	55	55	65	70	70	75	80	85	90	90	95	100	110

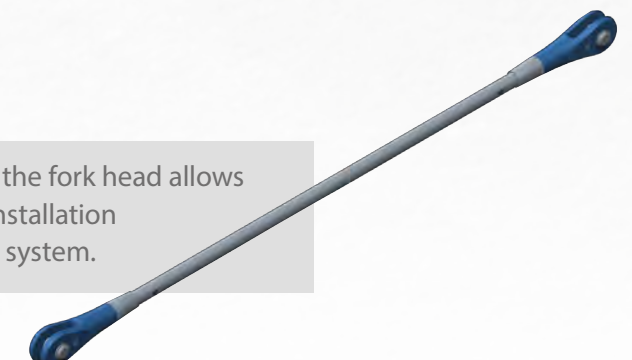
Preassembled systems reduce the installation time on-site significantly.



Single rod length up to 12 m – for longer system length we offer the use of a connecting sleeve.



Right hand / left hand thread in the fork head allows an adjustment to the accurate installation length and a prestressing of the system.



# The good connection reliably and efficiently

For over 5 decades **Mürmann Gewindetechnik GmbH** is well known as a leading manufacturer for threaded parts. The company name is a synonymous in the market for highest quality and reliability.



## Types of threads and dimensions

The standard range of threaded parts are:

- |   |                        |
|---|------------------------|
| • Metric threads                        | M2 to M100             |
| • Metric fine threads                   | M6 x 0,5 to M100 x 4   |
| • trapezoidal threads (incl. nuts)      | TR8 x 1,5 to TR90 x 12 |
| • trapezoidal fine threads (incl. nuts) | from TR10 x 2          |
| • inch threads                          |                        |
| • pipe threads                          |                        |
| • tie-rods                              |                        |
| • U-bolt clamps                         |                        |

Connection elements and special parts according to customer drawings.



## Production process of threads

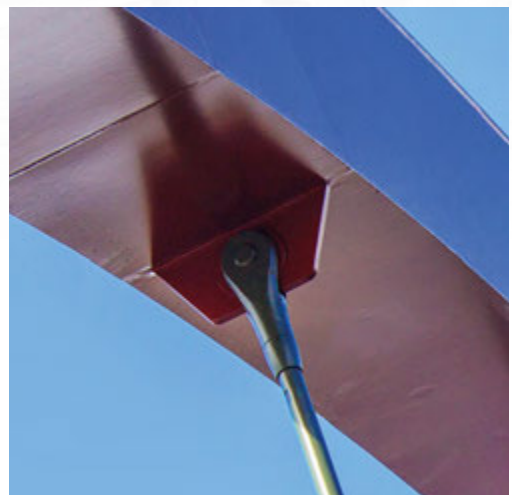
External thread: cutting, whirling, rolling, chasing

Internal thread: tapping, chasing, milling

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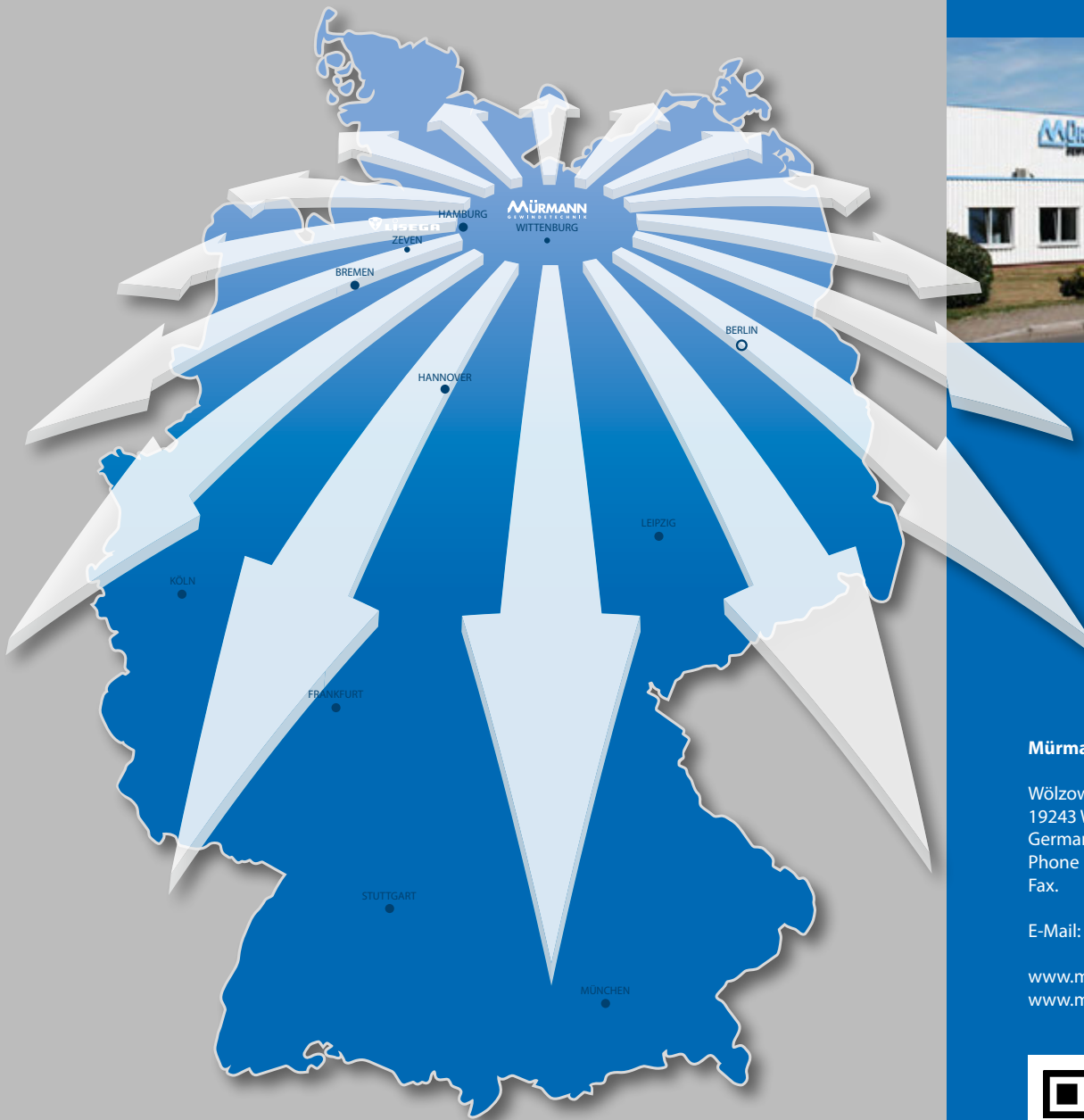


# References



Upper row: Green Point Stadium in Cape Town / South Africa  
Middle row: BBI Infotower in Berlin / Germany  
Lower row: Hängstag Vägbro Väg 27 Viared in Kråkered / Sweden

# Location



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Beyond national borders m-connect tension rod and compression strut systems are used in architecturally iconic buildings and create new possibilities for slender, filigree structures.

Our experienced technical support and sales personnel will be glad to assist you worldwide in every stage of your project – from the initial planning/ design phase and supervising the installation to the acceptance of construction works.

MÜRMANN Gewindetechnik GmbH  
is part of the LISEGA Group