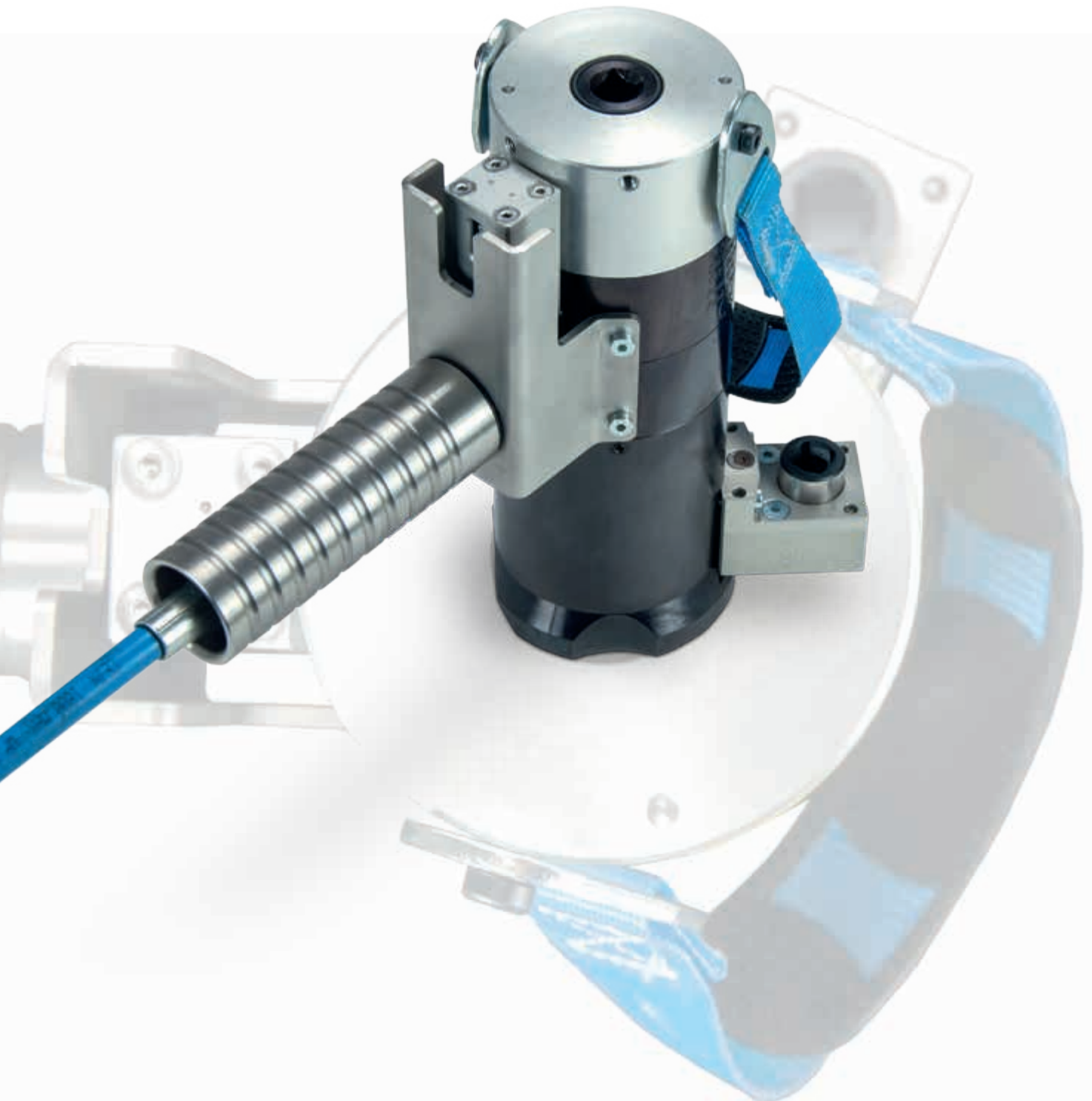
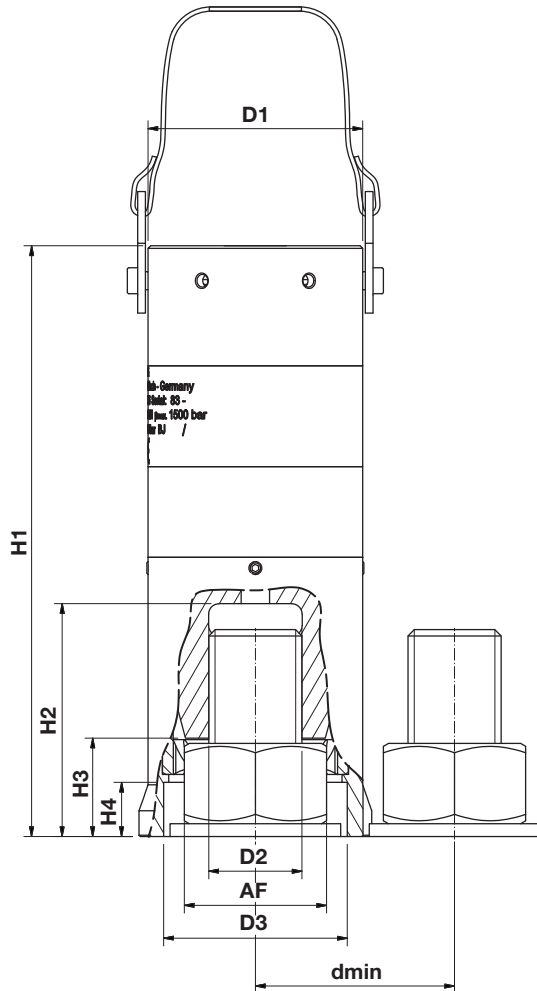


# Tensioner PSD, two-stage



# Tensioner PSD, two-stage

1,500 bar maximum operating pressure



The two-stage hydraulic tensioner allows seamless installation and disassembly from bolts/studs without exerting any torsional load on the bolt/stud. The pre-tensioning force can be set perfectly and with precision.

Plarad tensioners are available in a variety of common manufactured sizes which are listed below. These common sizes and other bespoke tensioners can be easily adapted to perfectly fit your specific joint/flange. Plarad tensioners are available in both single-stage and multi-stage configurations.

Type	D1 Ø (mm)	D2 Ø (mm)	Max. Load (kN)	H1 (mm)	Stroke (mm)	H2 (mm)	SW (mm)	dmin (mm)	D3 (mm)	H3 (mm)	H4 (mm)	Wight (kg)
PSD 30-471	71	M30	471	196	8	70	46	66	62	31	8	5,8
PSD 33-581	79	M33	581	215	10	84	50	71	65	34	16	6,6
PSD 36-678	83	M36	678	228	10	90	55	77	71	38	21	8,2
PSD 39-808	92	M39	808	250	10	96	60	86	80	40	15	10,5
PSD 42-937	98	M42	937	263	10	100	65	90	82	43	15	14,1
PSD 45-1089	106	M45	1089	256	10	103	70	98	91	46	18	16,3
PSD 48-1278	112	M48	1278	269	10	108	75	104	96	48	20	19,8
PSD 56-1695	130	M56	1695	300	10	126	85	119	108	56	25	23,6
PSD 64-2233	146	M64	2233	350	10	157	95	131	125	63	32	32,7

Other sizes and dimensions available on request.

**Advantages and benefits of the Plarad tensioner**

**Safety indicator – green (optional)**

Safe controlled operation: Verification of sufficient engagement of the bolt/stud.

**Automatic piston return**

Swift operation: The puller is automatically returned to its original position once the pressure has been released.

**Stroke limiter – mechanical**

Ultimate safety: The mechanical end stop prevents the over extension of the piston (even under maximum load).

**Rotating socket – spring-loaded**

Prevention of installation damage during the positioning of the tensioner: The spring affords the rotating socket axial flexibility.

**Supporting surface – optimized**

Outstanding versatility in any environment: The tensioner is especially well suited for use in tight spaces thanks to its optimal shape.

**Maximum stroke indicator**

Optical safety: Visual indication of maximum stroke (max distance piston can move out of the tensioner body).

**Cycle counter**

The cycle counter indicates number of cycles performed and will consequently indicate the maximum cycle service point, thus avoiding damage and failures via preventive maintenance.

**Stainless steel handle**

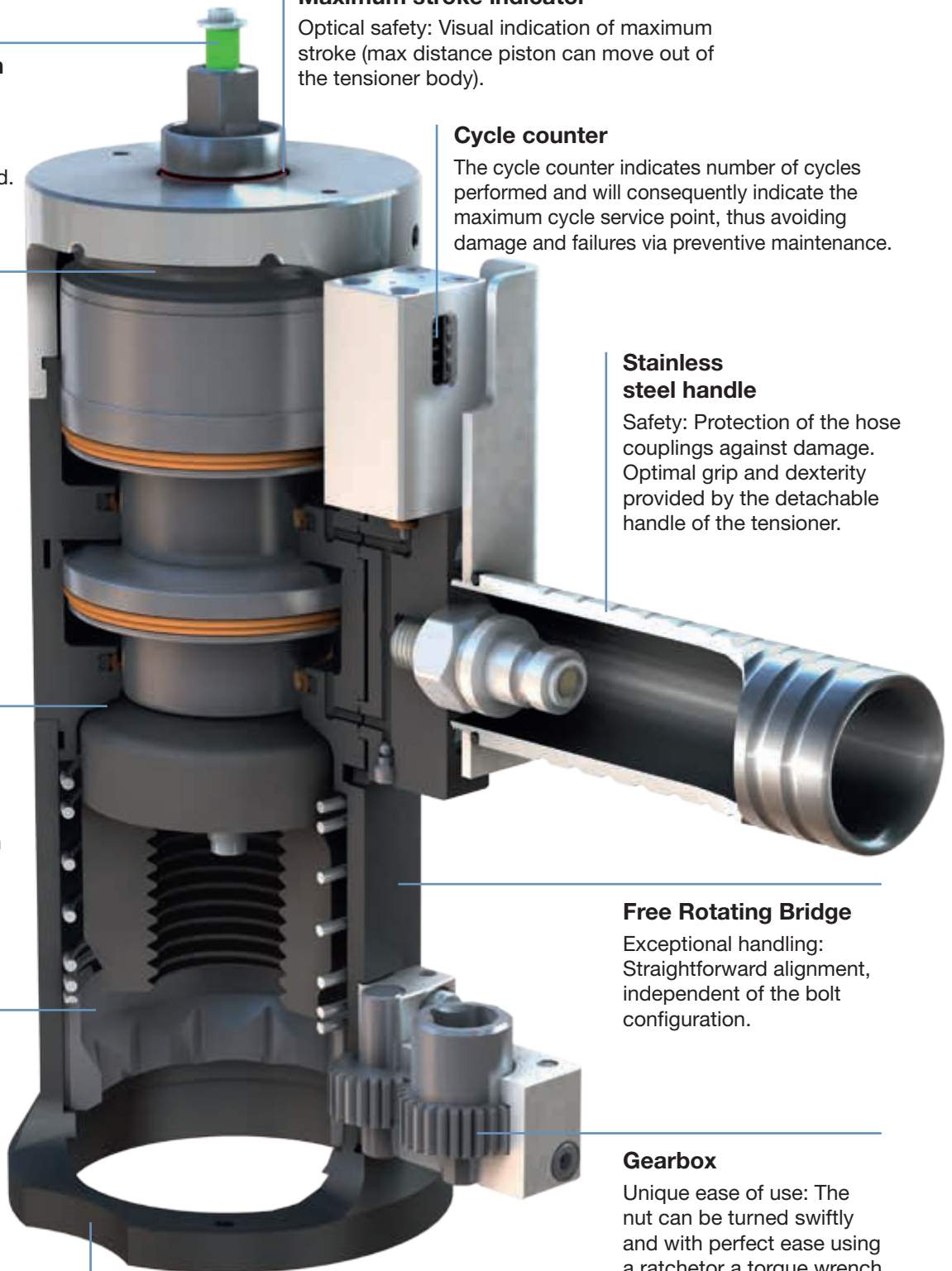
Safety: Protection of the hose couplings against damage. Optimal grip and dexterity provided by the detachable handle of the tensioner.

**Free Rotating Bridge**

Exceptional handling: Straightforward alignment, independent of the bolt configuration.

**Gearbox**

Unique ease of use: The nut can be turned swiftly and with perfect ease using a ratchet or a torque wrench that is driven by a gear drive (maximum input torque: < M36 = 40 Nm, ≥ M36 = 80 Nm).



# Optional accessories



**Bolt/stud engagement indicator**

→ Visible safety



**Spacer rings and spacer washers**

→ Providing greater flexibility for different bolt/stud protrusions



**Rotatable hose coupling**

→ Simplified handling



**We also offer electric and pneumatic power packs (fully automatic with and without documentation) and manual hydraulic pumps that are designed to perfectly match each specific tensioner. Available for all tensioner models.**



... a successful connection!

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