

BOLT TENSIONERS 1000 - 1500 BAR



FEATURES

EUROPRESS bolt tensioners are made of an hydraulic part with a supporting base (bridge) to which a threaded puller and a polygonal wrench in its various sizes may be added. This allows to cover a large number of tie rods and to optimize the number of bolt tensioners necessary. According to their technical characteristics, they differ as:

UTN series at 1000 bar, provide a traction force of about the 70% of the break point of a steel bolt grade 8.8 of the biggest size (value of max thread in the chart). They are equipped with **K13M** coupler.

UTH series at 1000 bar, with most of these you can obtain a traction force equal to 70% of the yield stress of a steel bolt grade 10.9 of the maximum size (value of max thread in the chart). They are equipped with **K13M** coupler.

UTV series at 1500 bar, that can develop a traction force of about the 70% of the break point of a steel bolt grade 10.9 of the biggest size (value of max thread in the chart). They have reduced overall dimensions if referred to the 1000 bar series, due to their high working pressure. They are equipped with a **K15M** coupler, and have a second auxiliary hole (1/4" BSP) that can be joined with a quick coupler (to be ordered separately) for in line connections.

All tensioners are supplied with **tommy bar** to operate the threaded puller and the polygonal wrench.

The gas nitriding treatment (Nitreg) provided to all steel of EUROPRESS products makes them particularly fit for working outside or in aggressive locations, thanks to their high resistance to corrosion.

APPLICATIONS

The big advantage of tensioning is given by the fact that it is possible to charge in advance a tie rod with the required load in an extremely precise manner, thus avoiding the force losses due to the frictions of the traditional torque tightening. Their great facility in use, the possibility to save time and staff and their precision are all factors that make this technique particularly useful in those sectors where a perfect coupling or flange tightness is essential for the safety of people and machinery.

In particular in the industrial and oil sectors and in all situations where it is necessary to tighten with extreme accuracy nuts or threaded tie rods.

They are widely used to tighten valves, pumps, heat exchangers, flanges, etc.



Tensioning system for roof's supporting structure while building the new Rome's Music Auditorium. On this job were used bolt tensioner cylinders specially manufactured from Euro Press Pack. (Rome Italy, 2001)



If you use a tensioning system where you choose to tension in various steps (50%, 33% or even 25% of the points) for space reasons, take care to alternate the tensioners and to locate them in opposite positions.



To operate in complete safety be careful that the threaded screw sticks out of the nut at least as much as the measure of the diameter of the tensioner.



The tensioner maximum capacity refers to its maximum working pressure; for smaller loads reduce the pressure in a proportional way.

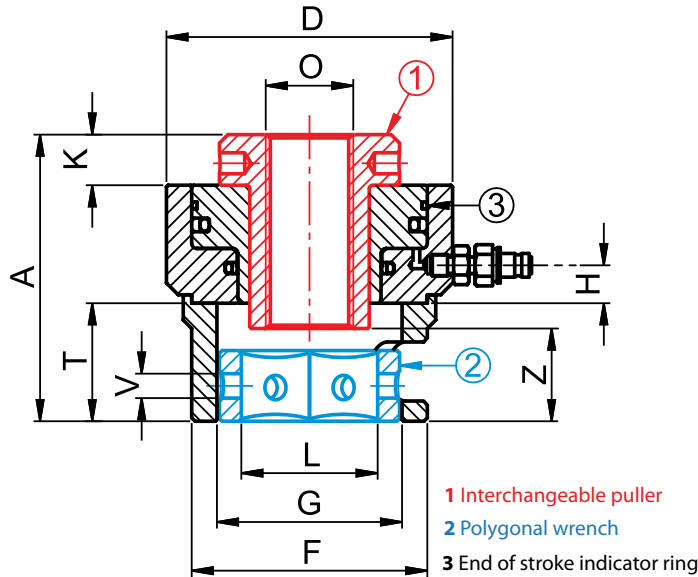
BOLT TENSIONERS 1000 BAR

MATCHING CHART

			
COMPLETE BOLT TENSIONER	Hydraulic part	Threaded puller	Polygonal wrench
UTN4864M48	UTN4864	UTB484	UTC48
UTN4864M56		UTB564	UTC56
UTN4864M64		UTB644	UTC64
UTN6476M64	UTN6476	UTB645	UTC64
UTN6476M72		UTB725	UTC72
UTN6476M76		UTB765	UTC76
UTN76100M76	UTN76100	UTB766	UTC76
UTN76100M80		UTB806	UTC80
UTN76100M90		UTB906	UTC90
UTN76100M100		UTB1006	UTC100

COMPLETE BOLT TENSIONER	Hydraulic part	Threaded puller	Polygonal wrench
UTH1624M16	UTH1624	UTB161	UTC16
UTH1624M20		UTB201	UTC20
UTH1624M24		UTB241	UTC24
UTH2739M27	UTH2739	UTB272	UTC27
UTH2739M30		UTB302	UTC30
UTH2739M36		UTB362	UTC36
UTH2739M39		UTB392	UTC39
UTH3952M39	UTH3952	UTB393	UTC39
UTH3952M42		UTB423	UTC42
UTH3952M52		UTB523	UTC52
UTH4864M48	UTH4864	UTB484	UTC48
UTH4864M56		UTB564	UTC56
UTH4864M64		UTB644	UTC64
UTH6476M64	UTH6476	UTB645	UTC64
UTH6476M72		UTB725	UTC72
UTH6476M76		UTB765	UTC76
UTH76100M76	UTH76100	UTB766	UTC76
UTH76100M80		UTB806	UTC80
UTH76100M90		UTB906	UTC90
UTH76100M100		UTB1006	UTC100

TENSIONERS 1000 BAR

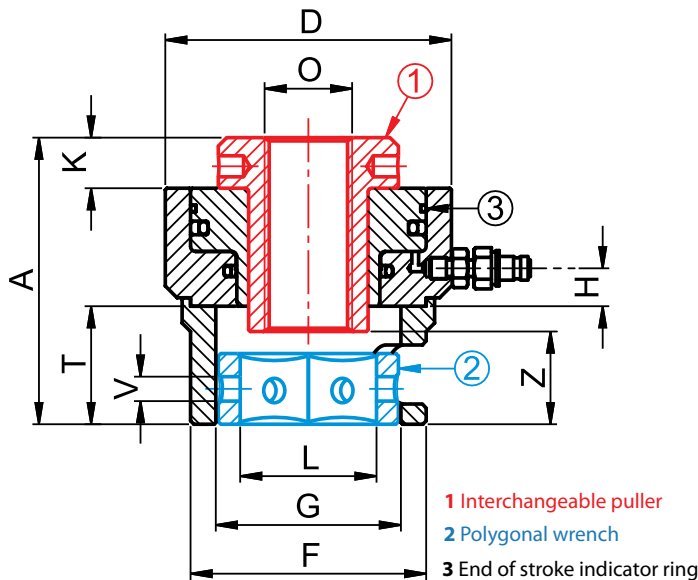


Force	99 - 4369 kN
Stroke:	15 mm
Max working pressure	1000 bar
Threaded puller	M16 - M100

SELECTION CHART

SELECTION CHART				MODEL									Threaded puller	Polygonal wrench			Weight
Operating force @ pressure	Oil volume	Screw			A	Ø D	Ø F	Ø G	H	T	Z	K		O	L	Ø V	
kN	bar	cm³	mm														
659	519	191	M48	UTN4864M48	185	195	165	130	20	80	65	35	M48 x 5	76	12,5	24	
909	715		M56	UTN4864M56									M56 x 5,5	86			
1198	942		M64	UTN4864M64									M64 x 6	96			
1198	626	287	M64	UTN6476M64	200	240	200	150	25	95	80	40	M64 x 6	96		37	
1549	810		M72	UTN6476M72									M72 x 6	106			
1742	910		M76	UTN6476M76									M76 x 6	111			
1742	601	438	M76	UTN76100M76	230	295	245	190	30	115	100	45	M76 x 6	111	20,5	59	
1946	672		M80	UTN76100M80									M80 x 6	116			
2504	864		M90	UTN76100M90									M90 x 6	131			
2898	1000		M100	UTN76100M100									M100 x 6	146			
99	381	39	M16	UTH1624M16	122	85	70	55	22	40	25	20	M16 x 2	24,5	8,5	3,4	
154	595		M20	UTH1624M20									M20 x 2,5	30,5			
222	857		M24	UTH1624M24									M24 x 3	36,5			
289	542	80	M27	UTH2739M27	145	125	100	80	21	60	45	25	M27 x 3	41,5	10,5	7,5	
353	661		M30	UTH2739M30									M30 x 3,5	46,5			
515	963		M36	UTH2739M36									M36 x 4	55,5			
534	1000		M39	UTH2739M39									M39 x 4	60,5			
615	632		M39	UTH3952M39									M39 x 4	60,5			
706	727	146	M42	UTH3952M42	165	170	135	110	17,5	70	55	30	M42 x 4,5	66	12	15	
972	1000		M52	UTH3952M52									M52 x 5	81			
928	553		M48	UTH4864M48									M48 x 5	76			
1278	762	252	M56	UTH4864M56	185	215	165	130	20	80	65	35	M56 x 5,5	86	12,5	27	
1679	1000		M64	UTH4864M64									M64 x 6	96			
1685	701		M64	UTH6476M64									M64 x 6	96			
2179	907	360	M72	UTH6476M72	200	255	200	150	25	95	80	40	M72 x 6	106		39	
2403	1000		M76	UTH6476M76									M76 x 6	111			
2450	561		M76	UTH76100M76									M76 x 6	111			
2736	626	655	M80	UTH76100M80	230	340	245	190	30	115	100	45	M80 x 6	116	20,5	71	
3522	806		M90	UTH76100M90									M90 x 6	131			
4369	1000		M100	UTH76100M100									M100 x 6	146			

TENSIONERS 1500 BAR



Force	99 - 3522 kN
Stroke	12 mm
Max working pressure	1500 bar
Threaded puller	M16 - M90

MATCHING CHART

COMPLETE BOLT TENSIONER	Hydraulic part	Threaded puller	Polygonal wrench
UTV1624M16	UTV1624	UTB161V	UTC16V
UTV1624M20		UTB201V	UTC20V
UTV1624M24		UTB241V	UTC24V
UTV2736M27	UTV2736	UTB272V	UTC27V
UTV2736M30		UTB302V	UTC30V
UTV2736M36		UTB362V	UTC36V
UTV3945M39	UTV3945	UTB393V	UTC39V
UTV3945M42		UTB423V	UTC42V
UTV3945M45		UTB453V	UTC45V
UTV4860M48	UTV4860	UTB484V	UTC48V
UTV4860M56		UTB564V	UTC56V
UTV4860M60		UTB604V	UTC60V
UTV6472M64	UTV6472	UTB645V	UTC64V
UTV6472M68		UTB684V	UTC68V
UTV6472M72		UTB724V	UTC72V
UTV7690M76	UTV7690	UTB766V	UTC76V
UTV7690M80		UTB806V	UTC80V
UTV7690M90		UTB906V	UTC90V

SELECTION CHART

Operating force @ pressure	Stroke	Oil volume	Screw	MODEL						* Minimum centre distance between bordering stud bolts	Threaded puller	Polygonal wrench		Weight	
					kN/ bar	mm	cm³	mm	A			Ø D	Ø F		Ø G
236/1500	6	9,4	M16	UTV1624M16	117	73	65	49	25	42	12	M16 x 2	24,5	8,5	2,5
			M20	UTV1624M20						46		M20 x 2,5	30,5		
			M24	UTV1624M24						50		M24 x 3	36,5		
530/1500	12	42,4	M27	UTV2736M27	145	108	90	73	35	64	15	M27 x 3	41,5	10,5	6
			M30	UTV2736M30						68		M30 x 3,5	46,5		
			M36	UTV2736M36						73		M36 x 4	55,5		
804/1500	12	64,3	M39	UTV3945M39	168	138	120	98	30	89	18	M39 x 4	60,5	12,5	12,2
			M42	UTV3945M42						92		M42 x 4,5	66		
			M45	UTV3945M45						95		M45 x 4,5	71		
1472/1500	12	117,8	M48	UTV4860M48	175	175	145	120	30	110	20	M48 x 5	76	12,5	18,8
			M56	UTV4860M56						116		M56 x 5,5	86		
			M60	UTV4860M60						120		M60 x 5,5	91		
2050/1500	12	164	M64	UTV6472M64	190	205	173	138	30	132	25	M64 x 6	96	16,5	27,3
			M68	UTV6472M68						135		M68 x 6	101		
			M72	UTV6472M72						138		M72 x 6	106		
3581/1500	12	286,5	M76	UTV7690M76	227	270	235	175	38	160	30	M76 x 6	111	20,5	58,7
			M80	UTV7690M80						163		M80 x 6	116		
			M90	UTV7690M90						172		M90 x 6	131		

* This means the minimum centre distance allowing for the installation of one single tensioner without any interference problems. If using a multiple tensioning system, this distance is equal to the figure in column ØD (external diameter)

HAND PUMPS, POWER PACKS, ACCESSORIES 1000 - 1500 BAR UP PRESSES

HOW TO CHOOSE A SYSTEM

The best system can be chosen according to the oil quantity of the bolt tensioner or set of bolt tensioners and the drive speed required. Various types of EUROPRESS pumps can be chosen and combined according to the desired working pressure, their reservoir, capacity and the valve function.

A gauge with eventually its gauge adaptor and a hose complete with coupler (with the correct working pressure according to the chosen bolt tensioner), must always be combined with the pump.



1000 BAR SYSTEMS

Operation + gauge	Single stage	Double stage	Delivery	Tank	Valve	Adjustable relief valve
PS10010G	•		1,0 cm ³	0,42 l	By pass	-
PL16#10+ZPS53+G16		•	32/1,6 cm ³	2,3/4,3/7,8 l	By pass	-
MLP2#TA+ZPS12+G16	-	-	0,5/0,1 l/min	2,6/5,0/10 l	Pedal 3/3	-
MDM21GJRT		•	2,3/0,3 l/min	2,6 l	Manual 3/2	•
MEC#M21GRT	•		0,6 l/min	5/10/20/40 l	Manual 3/2	•

HOSE to connect pump with tensioner: **SN#FT**.

1500 BAR SYSTEMS

Operation + gauge	Single stage	Double stage	Delivery	Tank	Valve	Adjustable relief valve
PL16#16+ZPF14+G16		•	32/1,6 cm ³	2,3/4,3/7,8 l	By pass	-
MLP2#VAG (*)	-	-	0,44/0,08 l/min	2,6/5,0/10 l	Pedal 3/3	-
MDM21GJRV (*)		•	1,8/0,2 l/min	2,6 l	Manual 3/2	•

(*)Power packs supplied with coupler **K15M**

HOSE to connect hand pump to bolt tensioner:

SM#PFV hose type SM @ 1800 bar with RN32 at one end (pump side) and RN32 + K15X at the other end (tensioner side)

HOSE to connect power pack to bolt tensioner:

SM#FFV hose type SM @ 1800 bar + RN32 and K15X at both ends.

UP PRESSES



FEATURES

Made of steel and equipped with a hydraulic part, they are produced on request and can be customised according to specific needs. The hydraulic part is made of standard products with single or double acting cylinder, single or double phase pump and gauge to guarantee more safety to the system.



Our Technical Department is at your disposal to study special presses as per customer requirements.

Special customised press