

JUNGBLODT

SPEZIALSCHRAUBEN SEIT 1848

KPMBOLT™ ENGINEERING



Engineering for highest loads
Design for easy handling

KPMBOLT™ ENGINEERING

The designed connection scheme is easy to operate
and can bear high loads.



We are an experienced German engineering company with a focus on globally unique bolting solutions based on the principle of mechanical Multi-Jackbolt Pretensioners for absorbing the greatest forces.

Our field of activity covers all areas in which large, secure and, above all, releasable bolted connections are required. We calculate, develop, design and produce the best technical and economical bolting solutions for large dimensions and high, precisely adjustable and releasable pretensioning forces in accordance with the specific requirements of our customers and on the basis of our high-quality mechanical Multi-Jackbolt Pretensioners.

We offer our services and products throughout Europe. Our customers are advised personally and competently on site by our sales engineers and distribution partners and are also supported during the installation of their bolting solution or during maintenance work.

KPMBOLT™ Multi-Jackbolt Pretensioners (MJP) are the ideal solution for highly loaded bolted connections, where a defined pretensioning force is to be generated exactly and held reliably – and can also be released again without any problems! They are designed according to ISO 878-2 and are used for general bolting applications in all areas of industry.

KPMBOLT™ Radial Pretensioning Bolts are the ideal solution on large couplings for the safe transmission of high torques.

The pretensioning and loosening of Multi-Jackbolt Pretensioners (MJP) is done with torque wrenches. These simple hand tools allow effortless, controlled and precise generation of the desired tensioning torque on the jackbolts and thus the achievement of the desired pretensioning force.

Founded in 2018 - Experience since 1848

Benefit from our many years of experience as a technology leader for highly stressed large diameter bolted joints.



Engineering for highest loads – Design for easy handling

AS

AS Multi-Jackbolt Pretensioners

Mechanical Multi-Jackbolt Pretensioners (MJP) are the perfect solution for purely axial pretensioning. MJP are designed according to ISO 898-2 and are used for general bolting applications in all areas of industry. Due to the captive mounted KPMBOLT™ Jackbolts they are best suited for highly dynamic applications such as turbine runners. The hexabular head of the jackbolts is extremely wear-resistant and safe to handle.

The pretension of the KPMBOLT™ Jackbolts generates a high thrust force. The small friction diameters guarantee a minimal torque M_t .

The Nut Body transfers the loads; it is positioned by hand on the threaded bolt.

The Thrust Washer protects the component from high stress.

The clamping force results from the thrust forces of the KPMBOLT™ Jackbolts and the reaction force of the threaded bolt.

The preload force F_p in the screw bolt corresponds to the sum of the Jackbolt forces; it is purely axial and therefore torsion-free.



KPMBOLT Multi-Jackbolt Pretensioners (MJP) are protected by patent:
China Patent No.: 202522022988 B

Standard Series

ASM – MJP can replace grade 8 nuts to apply preload to bolts.

- operational temperature from -25 up to +250 °C
- standard diameters M30 ... M150
- for pretensioning forces F_{pre} 214 ... 5250 kN



ASH – MJP can replace grade 10 nuts to apply preload to bolts.

- operational temperature from -25 up to +250 °C
- standard diameters M30 ... M150
- for pretensioning forces F_{pre} 285 ... 5750 kN



CHHM – MJP is a superbolt for securing the top of the piston rod.

- operational temperature from -25 up to +250 °C
- standard diameters M30 ... M125
- for pretensioning forces F_{pre} 210 ... 3070 kN



CHSM-MJP is used in environments where the space above the screw head is limited.

- operational temperature from -25 up to +250 °C
- standard diameters M30 ... M150
- for pretensioning forces F_{pre} 135 ... 1550 kN



Standard Series

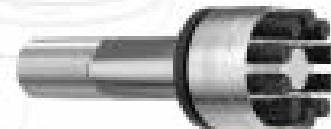
BSM – Bolt Type MUP has a preload comparable to that of Grade 8 nuts.

- operational temperature from -25 up to +250 °C
- standard diameters M30 .. M150
- for pretensioning forces FV nom. 214 .. 4880 kN



BSH – Bolt Type MUP features higher strength, with its preload comparable to that of Grade 10 nuts.

- operational temperature from -25 up to +250 °C
- standard diameters M30 .. M90
- for pretensioning forces FV nom. 286 .. 2700kN



FNM– Flexnuts replace Grade 8 nuts and protect bolts

- operational temperature from -25 up to +250 °C
- standard diameters M30 .. M150
- Flexnuts cannot apply torque directly

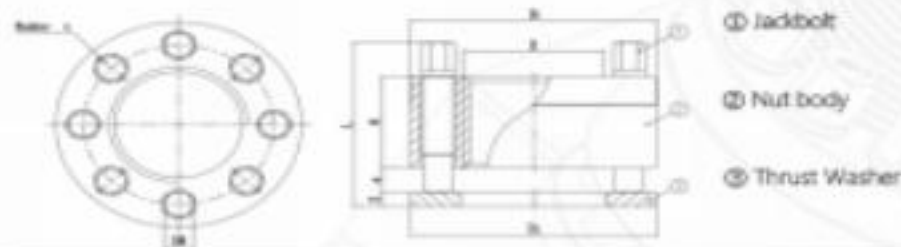


FNH– Flexnuts replace Grade 10 nuts and protect bolts

- operational temperature from -25 up to +250 °C
- standard diameters M30 .. M150
- flexnuts cannot apply torque directly



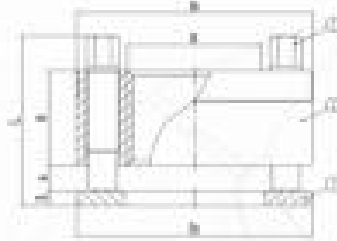
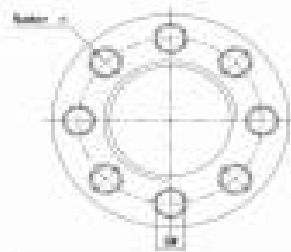
ASM - Multi-Jackbolt Pretensioners (MJP)



Part No.	Nut body		Jackbolt				Thrust Washer		Total Height	Preload total		Torque
	D	D ₁ mm	H mm	SW mm	n	a mm	D ₂ mm	S mm		L mm	F _{max} kN	
ASM-30X3.5	M30	58	24	8	6	6	56	5	45	214	285	42
ASM-33X3.5	M33	61	24	8	8	6	59	5	45	285	380	42
ASM-36X4	M36	69	32	9	6	9	66	5	57	343	457	80
ASM-39X4	M39	73	32	9	8	9	72	5	57	457	610	80
ASM-42X4.5	M42	77	32	9	8	9	76	5	57	457	610	80
ASM-45X4.5	M45	84	38	11	8	10	83	6	68	700	935	141
ASM-48X5	M48	87	38	11	8	10	86	6	68	700	935	141
ASM-52X5	M52	94	38	11	8	10	92	6	68	700	935	141
ASM-56X5.5	M56	100	38	11	8	10	98	6	68	700	935	141
ASM-60X5.5	M60	107	38	11	10	10	105	6	68	875	1160	141
ASM-64X6	M64	117	53	15	8	13	115	8	92	1270	1690	352
ASM-68X6	M68	121	53	15	8	13	119	8	92	1270	1690	352
ASM-72X6	M72	125	56	15	8	10	123	8	92	1270	1690	352
ASM-76X6	M76	132	56	15	12	10	130	8	92	1900	2530	352
ASM-80X6	M80	133	56	15	12	10	131	8	92	1900	2530	352
ASM-85X6	M85	138	56	15	12	10	136	8	92	1900	2530	352
ASM-90X6	M90	146	59	15	14	14	144	8	99	2260	2950	352
ASM-100X6	M100	164	61	15	16	12	162	8	99	2530	3380	352
ASM-110X6	M110	178	79	18	12	15	176	10	125	3150	4200	674
ASM-120X6	M120	189	81	18	16	13	187	10	125	4200	5600	674
ASM-125X6	M125	194	81	18	16	13	192	10	125	4200	5600	674
ASM-130X6	M130	205	94	18	18	15	203	10	140	4700	6300	674
ASM-140X6	M140	215	94	18	20	15	213	10	140	5250	7000	674
ASM-150X6	M150	225	94	18	20	15	223	12	142	5250	7000	674

The maximum tensile force, F_{max}, exerts a long-term effective action on the bolted joint, including the operating load. Based on our design and manufacturing capabilities, we are also able to meet other application requirements, such as those for special materials, special surface treatments, or special thread clearance.

ASH - Multi-Jackbolt Pretensioners (MJP)



- ① Jackbolt
- ② Nut body
- ③ Thrust Washer

Part No.	Nut body			Jackbolt			Thrust Washer		Total Height	Preload total		Torque	
	D	D ₁	H	SW	n	a	D ₂	S		L	F _{nom}		F _{max}
ASH-DXP	mm	mm	mm	mm		mm	mm	mm	mm	mm	kN	kN	Nm
ASH-30X3.5	M30	58	24	8	8	6	56	5	45	285	380	42	
ASH-33X3.5	M33	66	32	9	6	9	65	5	57	345	460	80	
ASH-36X4	M36	69	32	9	8	9	66	5	57	455	610	80	
ASH-39X4	M39	73	32	9	10	9	72	5	57	570	760	80	
ASH-42X4.5	M42	77	32	9	12	9	76	5	57	685	915	80	
ASH-45X4.5	M45	84	38	11	8	11	83	6	68	700	935	141	
ASH-48X5	M48	87	38	11	10	11	86	6	68	875	1170	141	
ASH-52X5	M52	94	38	11	12	11	92	6	68	1050	1400	141	
ASH-56X5.5	M56	100	38	11	12	11	98	6	68	1050	1400	141	
ASH-60X5.5	M60	113	53	15	8	13	111	8	92	1270	1690	352	
ASH-64X6	M64	117	53	15	10	13	115	8	92	1580	2100	352	
ASH-68X6	M68	121	59	15	12	14	119	8	99	1900	2530	352	
ASH-72X6	M72	125	59	15	12	14	122	8	99	1900	2530	352	
ASH-76X6	M76	132	61	15	14	12	130	8	99	2260	2950	352	
ASH-80X6	M80	133	61	15	14	12	132	8	99	2260	2950	352	
ASH-85X6	M85	139	61	15	16	12	136	8	99	2530	3370	352	
ASH-90X6	M90	146	61	15	16	12	144	8	99	2530	3370	352	
ASH-100X6	M100	164	61	15	18	12	162	8	99	2900	3750	352	
ASH-110X6	M110	178	79	18	16	15	176	10	125	4200	5600	674	
ASH-120X6	M120	189	81	18	18	13	187	10	125	4700	6300	674	
ASH-125X6	M125	194	81	18	18	13	192	10	125	4700	6300	674	
ASH-130X6	M130	206	94	18	20	15	203	10	140	5250	7000	674	
ASH-140X6	M140	215	94	18	22	15	213	10	140	5750	7700	674	
ASH-150X6	M150	225	94	18	22	15	223	12	142	5750	7700	674	

The maximum tensile force, F_{max}, exerts a long-term effective action on the bolted joint, including the operating load. Based on our design and manufacturing capabilities, we are also able to meet other application requirements, such as those for special