Ball-Ended Thrust Screws • headless, round ball

EH 22720.

Product Description

Ball-ended thrust screws with thermoplastic ball are used for pressure sensitive pieces.
Ball-ended thrust screws can also be used for positioning and clamping, tightening or supporting of non-parallel surfaces.

Material

Ball
- Ball-bearing steel, hardened
- Stainless steel, hardened
- Thermoplastic POM, white

Screw
- Heat-treated steel, 1200 ±100 N/mm^2
- Stainless steel 1.4305

More information

Notes

Ball not secured against rotating.
Special types on request.

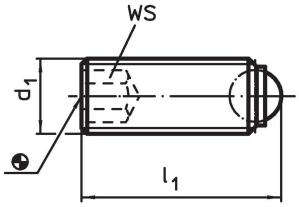
References

Thread lock on request, please refer to appendix - Technical Data -

Further products

- Ball-Ended Thrust Screws, headless, with fine-pitch thread
- Ball-Ended Thrust Screws, headless, round ball and hexalobular socket

Drawing



Order information

Dimensions			WS	Load capacity for static load[1] max.	min.	max.		Art. No.
d_1	l_1	Ball diameter						
[mm]			[mm]	[kN]	[°C]		[g]	
round ball, Heat-treated steel								
M 3	**5.0**	1.5	1.5	2.5	–	250	0.1	**22720.0032**
M 3	**7.5**	1.5	1.5	2.5	–	250	0.2	**22720.0033**
M 3	**10.0**	1.5	1.5	2.5	–	250	0.3	**22720.0034**
M 4	**6.0**	2.5	2.0	3.5	–	250	0.3	**22720.0042**
M 4	**8.0**	2.5	2.0	3.5	–	250	0.4	**22720.0043**
M 4	**10.0**	2.5	2.0	3.5	–	250	0.5	**22720.0044**
M 4	**12.0**	2.5	2.0	3.5	–	250	0.7	**22720.0045**
M 4	**16.0**	2.5	2.0	3.5	–	250	1.0	**22720.0046**
M 5	**8.0**	3.0	2.5	4.5	–	250	0.7	**22720.0052**
M 5	**10.0**	3.0	2.5	4.5	–	250	0.9	**22720.0053**
M 5	**12.0**	3.0	2.5	4.5	–	250	1.1	**22720.0054**
M 5	**16.0**	3.0	2.5	4.5	–	250	1.6	**22720.0055**
M 5	**20.0**	3.0	2.5	4.5	–	250	2.0	**22720.0056**
M 5	**25.0**	3.0	2.5	4.5	–	250	2.6	**22720.0058**
M 6	**10.8**	4.0	3.0	9.0	–	250	1.3	**22720.0062**
M 6	**12.8**	4.0	3.0	9.0	–	250	1.7	**22720.0063**
M 6	**16.8**	4.0	3.0	9.0	–	250	2.3	**22720.0064**
M 6	**20.8**	4.0	3.0	9.0	–	250	3.0	**22720.0065**
M 6	**25.8**	4.0	3.0	9.0	–	250	3.8	**22720.0066**
M 8	**11.2**	5.5	4.0	15.0	–	250	2.5	**22720.0081**
M 8	**13.2**	5.5	4.0	15.0	–	250	2.8	**22720.0082**
M 8	**17.2**	5.5	4.0	15.0	–	250	4.0	**22720.0083**
M 8	**21.2**	5.5	4.0	15.0	–	250	5.2	**22720.0084**

[1] Statements on load capacity are not valid for the stainless steel type (except the type fitted with thermoplastic balls).

Dimensions			WS	Load capacity for static load[1] max.				Art. No.
d_1	l_1	Ball diameter			min.	max.		
[mm]			[mm]	[kN]	[°C]		[g]	
M 8	**26.2**	5.5	4.0	15.0	–	250	6.7	**22720.0085**
M 8	**31.2**	5.5	4.0	15.0	–	250	8.3	**22720.0086**
M10	**13.7**	7.0	5.0	20.0	–	250	4.7	**22720.0101**
M10	**17.7**	7.0	5.0	20.0	–	250	6.0	**22720.0102**
M10	**21.7**	7.0	5.0	20.0	–	250	8.0	**22720.0103**
M10	**26.7**	7.0	5.0	20.0	–	250	10.0	**22720.0104**
M10	**31.7**	7.0	5.0	20.0	–	250	13.0	**22720.0105**
M10	**36.7**	7.0	5.0	20.0	–	250	15.0	**22720.0106**
M10	**41.7**	7.0	5.0	20.0	–	250	18.0	**22720.0108**
M12	**18.0**	8.5	6.0	30.0	–	250	9.2	**22720.0121**
M12	**22.0**	8.5	6.0	30.0	–	250	11.0	**22720.0122**
M12	**27.0**	8.5	6.0	30.0	–	250	14.0	**22720.0123**
M12	**32.0**	8.5	6.0	30.0	–	250	18.0	**22720.0124**
M12	**42.0**	8.5	6.0	30.0	–	250	25.0	**22720.0126**
M12	**52.0**	8.5	6.0	30.0	–	250	32.0	**22720.0128**
M16	**23.3**	12.0	8.0	60.0	–	250	22.0	**22720.0161**
M16	**28.3**	12.0	8.0	60.0	–	250	27.0	**22720.0162**
M16	**38.3**	12.0	8.0	60.0	–	250	41.0	**22720.0164**
M16	**53.3**	12.0	8.0	60.0	–	250	61.0	**22720.0166**
M20	**34.2**	15.0	10.0	90.0	–	250	52.0	**22720.0202**
M20	**44.2**	15.0	10.0	90.0	–	250	73.0	**22720.0204**
M20	**54.2**	15.0	10.0	90.0	–	250	94.0	**22720.0205**
M20	**64.2**	15.0	10.0	90.0	–	250	114.0	**22720.0206**
M24	**39.7**	18.0	12.0	120.0	–	250	89.0	**22720.0242**
M24	**54.7**	18.0	12.0	120.0	–	250	133.0	**22720.0244**
M24	**84.7**	18.0	12.0	120.0	–	250	223.0	**22720.0246**
round ball, Stainless steel								
M 3	**5.0**	1.5	1.5	2.5	–	250	0.1	**22720.0747**
M 3	**7.5**	1.5	1.5	2.5	–	250	0.2	**22720.0748**
M 3	**10.0**	1.5	1.5	2.5	–	250	0.3	**22720.0749**
M 4	**6.0**	2.5	2.0	3.5	–	250	0.3	**22720.0750**
M 4	**8.0**	2.5	2.0	3.5	–	250	0.4	**22720.0752**
M 4	**10.0**	2.5	2.0	3.5	–	250	0.5	**22720.0754**
M 4	**12.0**	2.5	2.0	3.5	–	250	0.7	**22720.0756**
M 4	**16.0**	2.5	2.0	3.5	–	250	1.0	**22720.0758**
M 5	**8.0**	3.0	2.5	4.5	–	250	0.7	**22720.0760**
M 5	**10.0**	3.0	2.5	4.5	–	250	0.9	**22720.0761**
M 5	**12.0**	3.0	2.5	4.5	–	250	1.1	**22720.0762**
M 5	**16.0**	3.0	2.5	4.5	–	250	1.6	**22720.0763**
M 5	**20.0**	3.0	2.5	4.5	–	250	2.0	**22720.0764**
M 5	**25.0**	3.0	2.5	4.5	–	250	2.6	**22720.0765**
M 6	**10.8**	4.0	3.0	9.0	–	250	1.3	**22720.0770**
M 6	**12.8**	4.0	3.0	9.0	–	250	1.7	**22720.0772**
M 6	**16.8**	4.0	3.0	9.0	–	250	2.3	**22720.0774**
M 6	**20.8**	4.0	3.0	9.0	–	250	3.0	**22720.0775**
M 6	**25.8**	4.0	3.0	9.0	–	250	3.8	**22720.0776**
M 8	**11.2**	5.5	4.0	15.0	–	250	2.5	**22720.0780**
M 8	**13.2**	5.5	4.0	15.0	–	250	2.8	**22720.0782**
M 8	**17.2**	5.5	4.0	15.0	–	250	4.0	**22720.0783**
M 8	**21.2**	5.5	4.0	15.0	–	250	5.2	**22720.0784**
M 8	**26.2**	5.5	4.0	15.0	–	250	6.7	**22720.0785**
M 8	**31.2**	5.5	4.0	15.0	–	250	8.3	**22720.0786**
M10	**13.7**	7.0	5.0	20.0	–	250	4.7	**22720.0790**
M10	**17.7**	7.0	5.0	20.0	–	250	6.0	**22720.0792**
M10	**21.7**	7.0	5.0	20.0	–	250	8.0	**22720.0793**
M10	**26.7**	7.0	5.0	20.0	–	250	10.0	**22720.0794**
M10	**31.7**	7.0	5.0	20.0	–	250	13.0	**22720.0795**
M10	**36.7**	7.0	5.0	20.0	–	250	15.0	**22720.0796**
M10	**41.7**	7.0	5.0	20.0	–	250	18.0	**22720.0798**
M12	**18.0**	8.5	6.0	30.0	–	250	9.2	**22720.0800**

[1] Statements on load capacity are not valid for the stainless steel type (except the type fitted with thermoplastic balls).

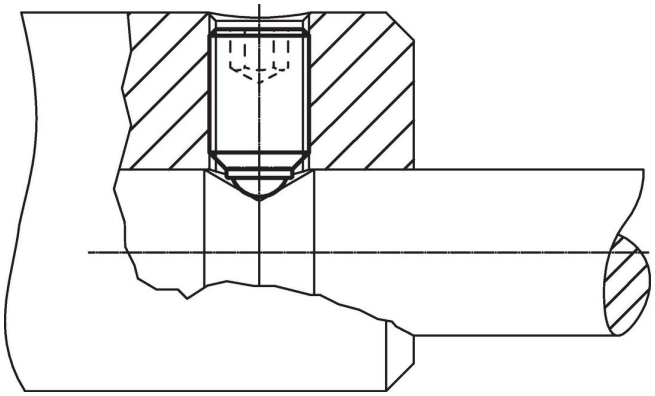
Dimensions			WS	Load capacity for static load[1] max.				Art. No.
d_1	l_1	Ball diameter			min.	max.		
[mm]			[mm]	[kN]	[°C]		[g]	
M12	**22.0**	8.5	6.0	30.0	–	250	11.0	**22720.0802**
M12	**27.0**	8.5	6.0	30.0	–	250	14.0	**22720.0803**
M12	**32.0**	8.5	6.0	30.0	–	250	18.0	**22720.0804**
M12	**42.0**	8.5	6.0	30.0	–	250	25.0	**22720.0806**
M12	**52.0**	8.5	6.0	30.0	–	250	32.0	**22720.0808**
M16	**23.3**	12.0	8.0	60.0	–	250	22.0	**22720.0810**
M16	**28.3**	12.0	8.0	60.0	–	250	27.0	**22720.0812**
M16	**38.3**	12.0	8.0	60.0	–	250	41.0	**22720.0814**
M16	**53.3**	12.0	8.0	60.0	–	250	61.0	**22720.0816**
round ball from thermoplastic, Stainless steel								
M 4	**6.0**	2.5	2.0	0.3	-30	80	0.2	**22720.0252**
M 4	**8.0**	2.5	2.0	0.3	-30	80	0.4	**22720.0253**
M 4	**10.0**	2.5	2.0	0.3	-30	80	0.5	**22720.0254**
M 4	**12.0**	2.5	2.0	0.3	-30	80	0.6	**22720.0255**
M 4	**16.0**	2.5	2.0	0.3	-30	80	0.9	**22720.0256**
M 5	**8.0**	3.0	2.5	0.5	-30	80	0.8	**22720.0262**
M 5	**10.0**	3.0	2.5	0.5	-30	80	0.7	**22720.0263**
M 5	**12.0**	3.0	2.5	0.5	-30	80	1.0	**22720.0264**
M 5	**16.0**	3.0	2.5	0.5	-30	80	1.5	**22720.0265**
M 5	**20.0**	3.0	2.5	0.5	-30	80	1.9	**22720.0266**
M 5	**25.0**	3.0	2.5	0.5	-30	80	2.5	**22720.0267**
M 6	**10.8**	4.0	3.0	0.9	-30	80	1.1	**22720.0272**
M 6	**12.8**	4.0	3.0	0.9	-30	80	1.4	**22720.0273**
M 6	**16.8**	4.0	3.0	0.9	-30	80	2.1	**22720.0274**
M 6	**20.8**	4.0	3.0	0.9	-30	80	2.8	**22720.0275**
M 6	**25.8**	4.0	3.0	0.9	-30	80	3.6	**22720.0276**
M 8	**11.2**	5.5	4.0	1.5	-30	80	1.9	**22720.0281**
M 8	**13.2**	5.5	4.0	1.5	-30	80	2.3	**22720.0282**
M 8	**17.2**	5.5	4.0	1.5	-30	80	3.6	**22720.0283**
M 8	**21.2**	5.5	4.0	1.5	-30	80	4.6	**22720.0284**
M 8	**26.2**	5.5	4.0	1.5	-30	80	6.3	**22720.0285**
M 8	**31.2**	5.5	4.0	1.5	-30	80	7.7	**22720.0286**
M10	**13.7**	7.0	5.0	2.0	-30	80	3.5	**22720.0291**
M10	**17.7**	7.0	5.0	2.0	-30	80	4.9	**22720.0292**
M10	**21.7**	7.0	5.0	2.0	-30	80	6.8	**22720.0293**
M10	**26.7**	7.0	5.0	2.0	-30	80	9.2	**22720.0294**
M10	**31.7**	7.0	5.0	2.0	-30	80	12.0	**22720.0295**
M10	**36.7**	7.0	5.0	2.0	-30	80	14.0	**22720.0296**
M10	**41.7**	7.0	5.0	2.0	-30	80	16.0	**22720.0297**
M12	**18.0**	8.5	6.0	3.0	-30	80	7.1	**22720.0301**
M12	**22.0**	8.5	6.0	3.0	-30	80	8.8	**22720.0302**
M12	**27.0**	8.5	6.0	3.0	-30	80	12.0	**22720.0303**
M12	**32.0**	8.5	6.0	3.0	-30	80	16.0	**22720.0304**
M12	**42.0**	8.5	6.0	3.0	-30	80	23.0	**22720.0306**
M12	**52.0**	8.5	6.0	3.0	-30	80	30.0	**22720.0308**
round ball from thermoplastic, Heat-treated steel								
M 4	**6.0**	2.5	2.0	0.3	-30	80	0.2	**22720.0342**
M 4	**8.0**	2.5	2.0	0.3	-30	80	0.4	**22720.0343**
M 4	**10.0**	2.5	2.0	0.3	-30	80	0.5	**22720.0344**
M 4	**12.0**	2.5	2.0	0.3	-30	80	0.6	**22720.0345**
M 4	**16.0**	2.5	2.0	0.3	-30	80	0.9	**22720.0346**
M 5	**8.0**	3.0	2.5	0.5	-30	80	0.8	**22720.0352**
M 5	**10.0**	3.0	2.5	0.5	-30	80	0.7	**22720.0353**
M 5	**12.0**	3.0	2.5	0.5	-30	80	1.0	**22720.0354**
M 5	**16.0**	3.0	2.5	0.5	-30	80	1.5	**22720.0355**
M 5	**20.0**	3.0	2.5	0.5	-30	80	1.9	**22720.0356**
M 5	**25.0**	3.0	2.5	0.5	-30	80	2.5	**22720.0358**
M 6	**10.8**	4.0	3.0	0.9	-30	80	1.1	**22720.0362**
M 6	**12.8**	4.0	3.0	0.9	-30	80	1.4	**22720.0363**
M 6	**16.8**	4.0	3.0	0.9	-30	80	2.1	**22720.0364**

[1] Statements on load capacity are not valid for the stainless steel type (except the type fitted with thermoplastic balls).

Dimensions			WS	Load capacity for static load[1] max.				Art. No.
d_1	l_1	Ball diameter			min.	max.		
[mm]			[mm]	[kN]	[°C]		[g]	
M 6	**20.8**	4.0	3.0	0.9	-30	80	2.8	22720.0365
M 6	**25.8**	4.0	3.0	0.9	-30	80	3.6	22720.0366
M 8	**11.2**	5.5	4.0	1.5	-30	80	1.9	22720.0381
M 8	**13.2**	5.5	4.0	1.5	-30	80	2.3	22720.0382
M 8	**17.2**	5.5	4.0	1.5	-30	80	3.6	22720.0383
M 8	**21.2**	5.5	4.0	1.5	-30	80	4.6	22720.0384
M 8	**26.2**	5.5	4.0	1.5	-30	80	6.3	22720.0385
M 8	**31.2**	5.5	4.0	1.5	-30	80	7.7	22720.0386
M10	**13.7**	7.0	5.0	2.0	-30	80	3.5	22720.0401
M10	**17.7**	7.0	5.0	2.0	-30	80	4.9	22720.0402
M10	**21.7**	7.0	5.0	2.0	-30	80	6.8	22720.0403
M10	**26.7**	7.0	5.0	2.0	-30	80	9.2	22720.0404
M10	**31.7**	7.0	5.0	2.0	-30	80	12.0	22720.0405
M10	**36.7**	7.0	5.0	2.0	-30	80	14.0	22720.0406
M10	**41.7**	7.0	5.0	2.0	-30	80	16.0	22720.0408
M12	**18.0**	8.5	6.0	3.0	-30	80	7.1	22720.0421
M12	**22.0**	8.5	6.0	3.0	-30	80	8.8	22720.0422
M12	**27.0**	8.5	6.0	3.0	-30	80	12.0	22720.0423
M12	**32.0**	8.5	6.0	3.0	-30	80	16.0	22720.0424
M12	**42.0**	8.5	6.0	3.0	-30	80	23.0	22720.0426
M12	**52.0**	8.5	6.0	3.0	-30	80	30.0	22720.0428

[1] Statements on load capacity are not valid for the stainless steel type (except the type fitted with thermoplastic balls).

Application example



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