Pins

EH 22690.

Product Description

To be used as seats, stops and thrust pads.

Material

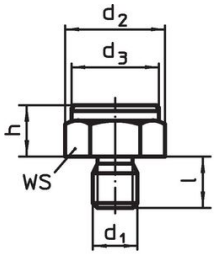
- Steel, case-hardened, blackened

More information

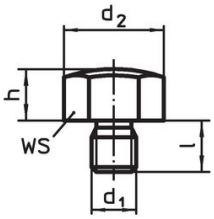
Further products

- Seating Pins, ribbed or pointed
- Pins, with plastic bearing surface

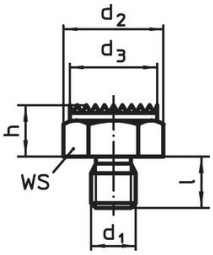
Drawing



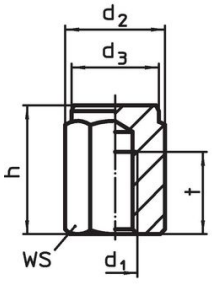
picture 1



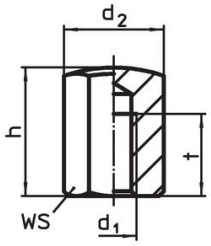
picture 2



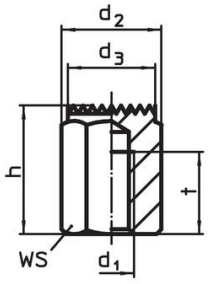
picture 3



picture 4



picture 5



picture 6

Order information

h	Dimensions d_1	d_2	d_3	l	t	WS	Tightening torque max.		Art. No.
		[mm]				[mm]	[Nm]	[g]	
with male thread, bearing surface plain – picture 1									
10 ±0.01	**M 8**	19.4	17	10	–	17	18	21	22690.0021
10 ±0.01	**M10**	21.9	19	12	–	19	32	28	22690.0031
15 ±0.01	**M10**	21.9	19	12	–	19	32	40	22690.0032
10 ±0.01	**M12**	25.2	22	14	–	22	60	40	22690.0001
15 ±0.01	**M12**	25.2	22	14	–	22	60	55	22690.0002
15 ±0.01	**M16**	33.0	30	19	–	30	140	110	22690.0042
20 ±0.01	**M16**	33.0	30	19	–	30	140	140	22690.0043
20 ±0.01	**M20**	40.0	36	24	–	36	290	214	22690.0052
25 ±0.01	**M20**	40.0	36	24	–	36	290	257	22690.0053
20 ±0.01	**M24**	46.0	41	29	–	41	498	300	22690.0062
25 ±0.01	**M24**	46.0	41	29	–	41	498	356	22690.0063
30 ±0.01	**M24**	46.0	41	29	–	41	498	412	22690.0064

[1] The tightening torque of bolts with female thread is for threaded pins, quality 8. The bolt has to be tightened over the total thread length.

Dimensions						WS	Tightening torque max.		Art. No.
h	d_1	d_2	d_3	l	t				
[mm]						[mm]	[Nm]	[g]	
with male thread, bearing surface spherical – picture 2									
10 ±0.10	**M 8**	19.4	–	10	–	17	18	20	22690.0121
10 ±0.10	**M10**	21.9	–	12	–	19	32	27	22690.0131
15 ±0.10	**M10**	21.9	–	12	–	19	32	40	22690.0132
10 ±0.10	**M12**	25.2	–	14	–	22	60	37	22690.0101
15 ±0.10	**M12**	25.2	–	14	–	22	60	53	22690.0102
15 ±0.10	**M16**	33.0	–	19	–	30	140	105	22690.0142
20 ±0.10	**M16**	33.0	–	19	–	30	140	135	22690.0143
20 ±0.10	**M20**	40.0	–	24	–	36	290	206	22690.0152
25 ±0.10	**M20**	40.0	–	24	–	36	290	249	22690.0153
20 ±0.10	**M24**	46.0	–	29	–	41	498	285	22690.0162
25 ±0.10	**M24**	46.0	–	29	–	41	498	342	22690.0163
30 ±0.10	**M24**	46.0	–	29	–	41	498	398	22690.0164
with male thread, bearing surface ribbed – picture 3									
10 ±0.10	**M 8**	19.4	17	10	–	17	18	20	22690.0221
10 ±0.10	**M10**	21.9	19	12	–	19	32	27	22690.0231
15 ±0.10	**M10**	21.9	19	12	–	19	32	39	22690.0232
10 ±0.10	**M12**	25.2	22	14	–	22	60	38	22690.0201
15 ±0.10	**M12**	25.2	22	14	–	22	60	54	22690.0202
15 ±0.10	**M16**	33.0	30	19	–	30	140	106	22690.0242
20 ±0.10	**M16**	33.0	30	19	–	30	140	136	22690.0243
20 ±0.10	**M20**	40.0	36	24	–	36	290	200	22690.0252
25 ±0.10	**M20**	40.0	36	24	–	36	290	243	22690.0253
20 ±0.10	**M24**	46.0	41	29	–	41	498	282	22690.0262
25 ±0.10	**M24**	46.0	41	29	–	41	498	338	22690.0263
30 ±0.10	**M24**	46.0	41	29	–	41	498	395	22690.0264
with female thread, bearing surface plain tolerance l_1 = ±0,01 – picture 4									
15 ±0.01	**M 8**	19.4	17	15	6	17	25[1)]	25	22690.0321
25 ±0.01	**M 8**	19.4	17	25	12	17	25[1)]	42	22690.0323
20 ±0.01	**M10**	21.9	19	20	10	19	46[1)]	40	22690.0333
30 ±0.01	**M10**	21.9	19	30	15	19	46[1)]	61	22690.0335
40 ±0.01	**M10**	21.9	19	40	15	19	46[1)]	85	22690.0337
20 ±0.01	**M12**	25.2	22	20	10	22	82[1)]	52	22690.0301
25 ±0.01	**M12**	25.2	22	25	15	22	82[1)]	65	22690.0302
30 ±0.01	**M12**	25.2	22	30	18	22	82[1)]	79	22690.0303
40 ±0.01	**M12**	25.2	22	40	18	22	82[1)]	111	22690.0304
50 ±0.01	**M12**	25.2	22	50	18	22	82[1)]	142	22690.0305
30 ±0.01	**M16**	33.0	30	30	20	30	206[1)]	141	22690.0343
50 ±0.01	**M16**	33.0	30	50	24	30	206[1)]	256	22690.0345
40 ±0.01	**M20**	40.0	36	40	26	36	407[1)]	268	22690.0353
60 ±0.01	**M20**	40.0	36	60	38	36	407[1)]	415	22690.0355
40 ±0.01	**M24**	46.0	41	40	26	41	698[1)]	341	22690.0363
60 ±0.01	**M24**	46.0	41	60	38	41	698[1)]	530	22690.0365
with female thread, bearing surface spherical – picture 5									
15 ±0.10	**M 8**	19.4	–	15	6	17	25[1)]	24	22690.0421
25 ±0.10	**M 8**	19.4	–	25	12	17	25[1)]	41	22690.0423
20 ±0.10	**M10**	21.9	–	20	10	19	46[1)]	38	22690.0433
30 ±0.10	**M10**	21.9	–	30	15	19	46[1)]	60	22690.0435
40 ±0.10	**M10**	21.9	–	40	15	19	46[1)]	84	22690.0437
20 ±0.10	**M12**	25.2	–	20	10	22	82[1)]	50	22690.0401
25 ±0.10	**M12**	25.2	–	25	15	22	82[1)]	62	22690.0402
30 ±0.10	**M12**	25.2	–	30	18	22	82[1)]	76	22690.0403
40 ±0.10	**M12**	25.2	–	40	18	22	82[1)]	109	22690.0404

[1)] The tightening torque of bolts with female thread is for threaded pins, quality 8. The bolt has to be tightened over the total thread length.

Dimensions						WS	Tightening torque max.		Art. No.
h	d_1	d_2	d_3	l	t				
[mm]						[mm]	[Nm]	[g]	
50 ±0.10	**M12**	25.2	–	50	18	22	82[1)]	141	22690.0405
30 ±0.10	**M16**	33.0	–	30	20	30	206[1)]	136	22690.0443
50 ±0.10	**M16**	33.0	–	50	24	30	206[1)]	252	22690.0445
40 ±0.10	**M20**	40.0	–	40	26	36	407[1)]	261	22690.0453
60 ±0.10	**M20**	40.0	–	60	38	36	407[1)]	408	22690.0455
40 ±0.10	**M24**	46.0	–	40	26	41	698[1)]	327	22690.0463
60 ±0.10	**M24**	46.0	–	60	38	41	698[1)]	514	22690.0465
with female thread, bearing surface ribbed – picture 6									
15 ±0.10	**M 8**	19.4	17	15	6	17	25[1)]	24	22690.0521
25 ±0.10	**M 8**	19.4	17	25	12	17	25[1)]	41	22690.0523
20 ±0.10	**M10**	21.9	19	20	10	19	46[1)]	38	22690.0533
30 ±0.10	**M10**	21.9	19	30	15	19	46[1)]	60	22690.0535
40 ±0.10	**M10**	21.9	19	40	15	19	46[1)]	84	22690.0537
20 ±0.10	**M12**	25.2	22	20	10	22	82[1)]	50	22690.0501
25 ±0.10	**M12**	25.2	22	25	15	22	82[1)]	63	22690.0502
30 ±0.10	**M12**	25.2	22	30	18	22	82[1)]	77	22690.0503
40 ±0.10	**M12**	25.2	22	40	18	22	82[1)]	109	22690.0504
50 ±0.10	**M12**	25.2	22	50	18	22	82[1)]	141	22690.0505
30 ±0.10	**M16**	33.0	30	30	20	30	206[1)]	137	22690.0543
50 ±0.10	**M16**	33.0	30	50	24	30	206[1)]	254	22690.0545
40 ±0.10	**M20**	40.0	36	40	26	36	407[1)]	254	22690.0553
60 ±0.10	**M20**	40.0	36	60	38	36	407[1)]	401	22690.0555
40 ±0.10	**M24**	46.0	41	40	26	41	698[1)]	322	22690.0563
60 ±0.10	**M24**	46.0	41	60	38	41	698[1)]	408	22690.0565

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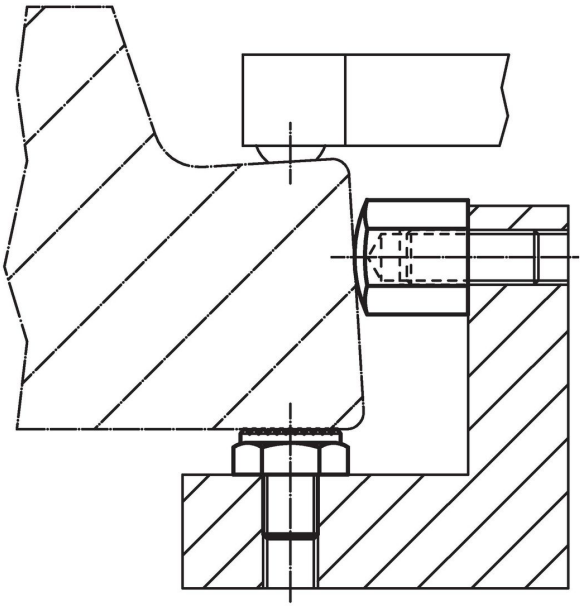
Application example



Compliance

RoHS compliant

Contains lead - compliant according to exceptions 6a / 6b / 6c.

Contains SVHC substances >0,1% w/w

Contains lead - SVHC list [REACH] as of 27.06.2024.

Contains Proposition 65 substances

Lead can cause cancer and reproductive harm from exposure
https://www.P65Warnings.ca.gov/

Free from Conflict Minerals

This product does not contain any substances designated as "conflict minerals" such as tantalum, tin, gold or tungsten from the Democratic Republic of Congo or adjacent countries.