

Pins

EH 22690.



Product Description

To be used as seats, stops and thrust pads.

Material

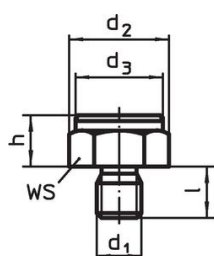
- Steel, case-hardened, blackened

More information

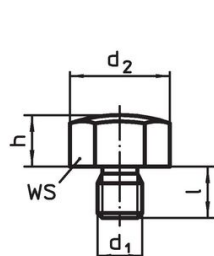
Further products

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

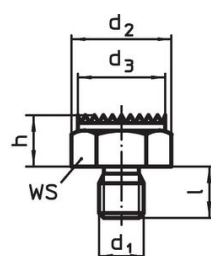
Drawing



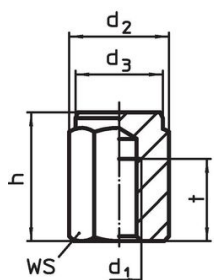
picture 1



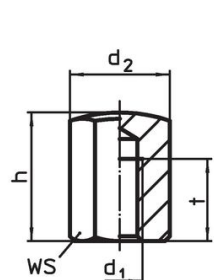
picture 2



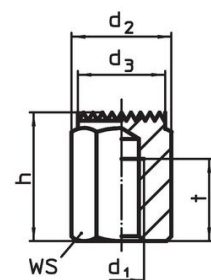
picture 3



picture 4




picture 5




picture 6


Order information

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 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.

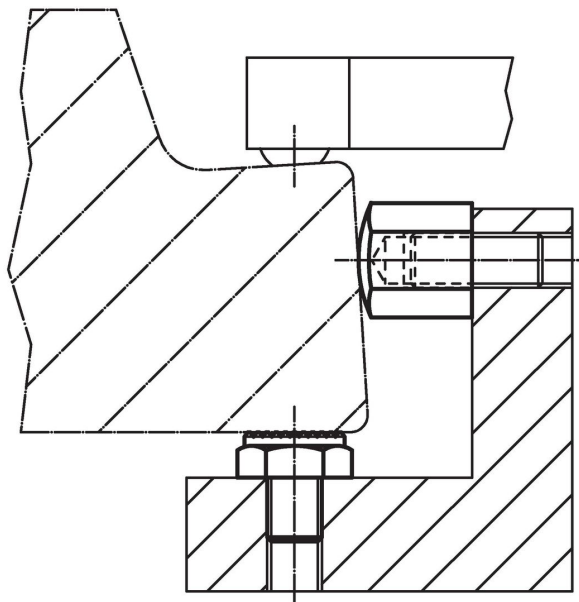
h	Dimensions					WS [mm]	Tightening torque max. [Nm]	 [g]	Art. No.
	d ₁	d ₂ [mm]	d ₃	l	t				
with male thread, bearing surface spherical – picture 2									
10 ±0.10	M 8	19.4	–	10	–	17	18	20	22690.0121
10 ±0.10	M10	21.9	–	12	–	19	32	27	22690.0131
15 ±0.10	M10	21.9	–	12	–	19	32	40	22690.0132
10 ±0.10	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.

h	Dimensions					WS [mm]	Tightening torque max. [Nm]	 [g]	Art. No.
	d ₁	d ₂	d ₃	l	t				
		[mm]							
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

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.

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 23.01.2024.

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.