

## Pins

EH 22690.



### Product Description

To be used as seats, stops and thrust pads.

### Material

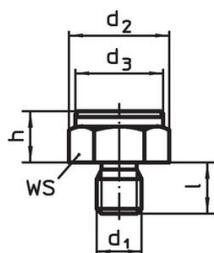
- Steel, case-hardened, blackened

### More information

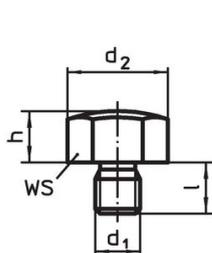
### Further products

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

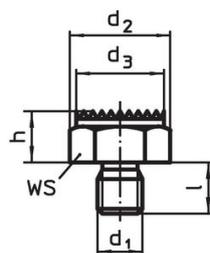
## Drawing



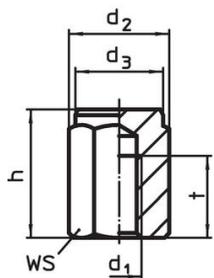
picture 1



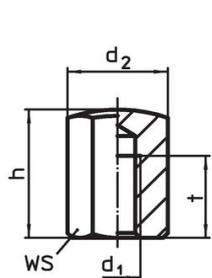
picture 2



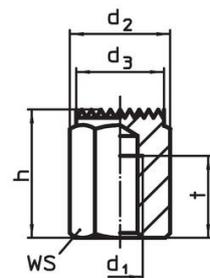
picture 3



picture 4



picture 5



picture 6

## Order information

h	d <sub>1</sub>	Dimensions				WS	Tightening torque max.	g	Art. No.
		d <sub>2</sub>	d <sub>3</sub>	l	t				
[mm]									
with male thread, bearing surface plain – picture 1									
10 ± 0.01	M 8	19.4	17	10	–	17	18	21	<a href="#">22690.0021</a>
10 ± 0.01	M10	21.9	19	12	–	19	32	28	<a href="#">22690.0031</a>
15 ± 0.01	M10	21.9	19	12	–	19	32	40	<a href="#">22690.0032</a>
10 ± 0.01	M12	25.2	22	14	–	22	60	40	<a href="#">22690.0001</a>
15 ± 0.01	M12	25.2	22	14	–	22	60	55	<a href="#">22690.0002</a>
15 ± 0.01	M16	33.0	30	19	–	30	140	110	<a href="#">22690.0042</a>
20 ± 0.01	M16	33.0	30	19	–	30	140	140	<a href="#">22690.0043</a>
20 ± 0.01	M20	40.0	36	24	–	36	290	214	<a href="#">22690.0052</a>
25 ± 0.01	M20	40.0	36	24	–	36	290	257	<a href="#">22690.0053</a>
20 ± 0.01	M24	46.0	41	29	–	41	498	300	<a href="#">22690.0062</a>
25 ± 0.01	M24	46.0	41	29	–	41	498	356	<a href="#">22690.0063</a>
30 ± 0.01	M24	46.0	41	29	–	41	498	412	<a href="#">22690.0064</a>

<sup>1)</sup> 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.

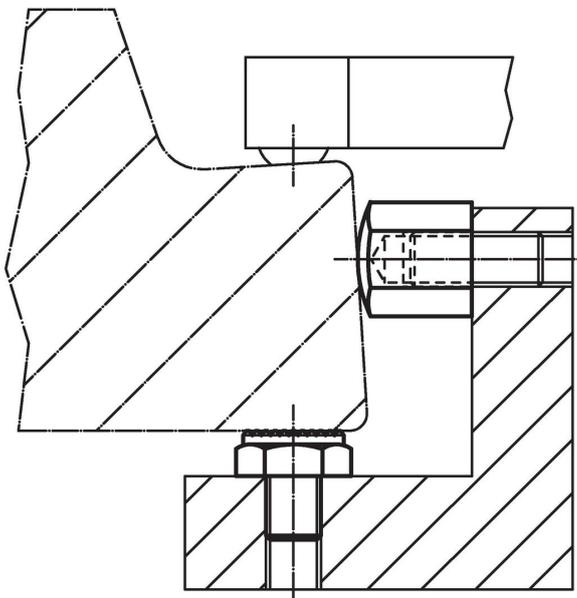
h	d <sub>1</sub>	Dimensions				t	WS [mm]	Tightening torque max. [Nm]	 [g]	Art. No.
		d <sub>2</sub>	d <sub>3</sub>	l	[mm]					
<b>with male thread, bearing surface spherical – picture 2</b>										
10 ±0.10	M 8	19.4	–	10	–	17	18	20	22690.0121	
10 ±0.10	M10	21.9	–	12	–	19	32	27	22690.0131	
15 ±0.10	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	
<b>with male thread, bearing surface ribbed – picture 3</b>										
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	
<b>with female thread, bearing surface plain tolerance l<sub>1</sub> = ±0,01 – picture 4</b>										
15 ±0.01	M 8	19.4	17	15	6	17	25 <sup>1)</sup>	25	22690.0321	
25 ±0.01	M 8	19.4	17	25	12	17	25 <sup>1)</sup>	42	22690.0323	
20 ±0.01	M10	21.9	19	20	10	19	46 <sup>1)</sup>	40	22690.0333	
30 ±0.01	M10	21.9	19	30	15	19	46 <sup>1)</sup>	61	22690.0335	
40 ±0.01	M10	21.9	19	40	15	19	46 <sup>1)</sup>	85	22690.0337	
20 ±0.01	M12	25.2	22	20	10	22	82 <sup>1)</sup>	52	22690.0301	
25 ±0.01	M12	25.2	22	25	15	22	82 <sup>1)</sup>	65	22690.0302	
30 ±0.01	M12	25.2	22	30	18	22	82 <sup>1)</sup>	79	22690.0303	
40 ±0.01	M12	25.2	22	40	18	22	82 <sup>1)</sup>	111	22690.0304	
50 ±0.01	M12	25.2	22	50	18	22	82 <sup>1)</sup>	142	22690.0305	
30 ±0.01	M16	33.0	30	30	20	30	206 <sup>1)</sup>	141	22690.0343	
50 ±0.01	M16	33.0	30	50	24	30	206 <sup>1)</sup>	256	22690.0345	
40 ±0.01	M20	40.0	36	40	26	36	407 <sup>1)</sup>	268	22690.0353	
60 ±0.01	M20	40.0	36	60	38	36	407 <sup>1)</sup>	415	22690.0355	
40 ±0.01	M24	46.0	41	40	26	41	698 <sup>1)</sup>	341	22690.0363	
60 ±0.01	M24	46.0	41	60	38	41	698 <sup>1)</sup>	530	22690.0365	
<b>with female thread, bearing surface spherical – picture 5</b>										
15 ±0.10	M 8	19.4	–	15	6	17	25 <sup>1)</sup>	24	22690.0421	
25 ±0.10	M 8	19.4	–	25	12	17	25 <sup>1)</sup>	41	22690.0423	
20 ±0.10	M10	21.9	–	20	10	19	46 <sup>1)</sup>	38	22690.0433	
30 ±0.10	M10	21.9	–	30	15	19	46 <sup>1)</sup>	60	22690.0435	
40 ±0.10	M10	21.9	–	40	15	19	46 <sup>1)</sup>	84	22690.0437	
20 ±0.10	M12	25.2	–	20	10	22	82 <sup>1)</sup>	50	22690.0401	
25 ±0.10	M12	25.2	–	25	15	22	82 <sup>1)</sup>	62	22690.0402	
30 ±0.10	M12	25.2	–	30	18	22	82 <sup>1)</sup>	76	22690.0403	
40 ±0.10	M12	25.2	–	40	18	22	82 <sup>1)</sup>	109	22690.0404	

<sup>1)</sup> 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	d <sub>1</sub>	Dimensions				t	WS [mm]	Tightening torque max. [Nm]	 [g]	Art. No.
		d <sub>2</sub>	d <sub>3</sub>	l	[mm]					
50 ±0.10	M12	25.2	–	50	18	22	82 <sup>1)</sup>	141	22690.0405	
30 ±0.10	M16	33.0	–	30	20	30	206 <sup>1)</sup>	136	22690.0443	
50 ±0.10	M16	33.0	–	50	24	30	206 <sup>1)</sup>	252	22690.0445	
40 ±0.10	M20	40.0	–	40	26	36	407 <sup>1)</sup>	261	22690.0453	
60 ±0.10	M20	40.0	–	60	38	36	407 <sup>1)</sup>	408	22690.0455	
40 ±0.10	M24	46.0	–	40	26	41	698 <sup>1)</sup>	327	22690.0463	
60 ±0.10	M24	46.0	–	60	38	41	698 <sup>1)</sup>	514	22690.0465	
<b>with female thread, bearing surface ribbed – picture 6</b>										
15 ±0.10	M 8	19.4	17	15	6	17	25 <sup>1)</sup>	24	22690.0521	
25 ±0.10	M 8	19.4	17	25	12	17	25 <sup>1)</sup>	41	22690.0523	
20 ±0.10	M10	21.9	19	20	10	19	46 <sup>1)</sup>	38	22690.0533	
30 ±0.10	M10	21.9	19	30	15	19	46 <sup>1)</sup>	60	22690.0535	
40 ±0.10	M10	21.9	19	40	15	19	46 <sup>1)</sup>	84	22690.0537	
20 ±0.10	M12	25.2	22	20	10	22	82 <sup>1)</sup>	50	22690.0501	
25 ±0.10	M12	25.2	22	25	15	22	82 <sup>1)</sup>	63	22690.0502	
30 ±0.10	M12	25.2	22	30	18	22	82 <sup>1)</sup>	77	22690.0503	
40 ±0.10	M12	25.2	22	40	18	22	82 <sup>1)</sup>	109	22690.0504	
50 ±0.10	M12	25.2	22	50	18	22	82 <sup>1)</sup>	141	22690.0505	
30 ±0.10	M16	33.0	30	30	20	30	206 <sup>1)</sup>	137	22690.0543	
50 ±0.10	M16	33.0	30	50	24	30	206 <sup>1)</sup>	254	22690.0545	
40 ±0.10	M20	40.0	36	40	26	36	407 <sup>1)</sup>	254	22690.0553	
60 ±0.10	M20	40.0	36	60	38	36	407 <sup>1)</sup>	401	22690.0555	
40 ±0.10	M24	46.0	41	40	26	41	698 <sup>1)</sup>	322	22690.0563	
60 ±0.10	M24	46.0	41	60	38	41	698 <sup>1)</sup>	408	22690.0565	

<sup>1)</sup> 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.