

Germany lost wax casting dimensional tolerances (Standard No.: VDG P690)

Dimension tolerance		Length, width and height						Center distance	
Scope		D1		D2		D3			
Limit	Caps	Tolerance	Tolerance zone	Tolerance	Tolerance zone	Tolerance	Tolerance zone	D1	D2
0	6	±0.10	0.2	±0.08	0.16	±0.06	0.12	±0.25	±0.16
6	10	±0.12	0.24	±0.10	0.2	±0.06	0.12		
10	14	±0.15	0.3	±0.12	0.24	±0.09	0.18		
14	18	±0.20	0.4	±0.14	0.28	±0.09	0.18		
18	24	±0.25	0.5	±0.17	0.34	±0.12	0.23	±0.32	±0.20
24	30	±0.30	0.6	±0.20	0.4	±0.14	0.27	±0.50	±0.30
30	40	±0.37	0.74	±0.25	0.5	±0.17	0.33		
40	50	±0.44	0.88	±0.30	0.6	±0.20	0.39		
50	65	±0.52	1.04	±0.38	0.76	±0.23	0.46	±0.71	±0.45
65	80	±0.60	1.2	±0.46	0.92	±0.27	0.53	±0.90	±0.60
80	100	±0.68	1.38	±0.53	1.06	±0.30	0.6		
100	120	±0.76	1.52	±0.60	1.2	±0.33	0.66		
120	140	±0.84	1.68	±0.65	1.3	±0.36	0.71	±1.15	±0.85
140	160	±0.92	1.84	±0.72	1.44	±0.38	0.76		
160	180	±1.02	2.04	±0.80	1.6	±0.42	0.81		
180	200	±1.12	2.24	±0.88	1.76	±0.43	0.86	±1.80	±1.00
200	225	±1.28	2.56	±0.95	1.9	±0.47	0.93		
225	250	±1.44	2.88	±1.05	2.1	±0.51	1.02		
250	280	±1.64	3.28	±1.15	2.3	±0.56	1.12	±2.20	±1.25
280	315	±1.84	3.68	±1.25	2.5	±0.63	1.26	±2.60	±1.60
315	355	±2.10	4.2	±1.40	2.6	±0.71	1.42		
355	400	±2.40	4.8	±1.60	3.2	±0.80	1.6		

Geometric tolerance

Geometric tolerance(flatness, depth of parallelism, straightness)			
Basic Size mm	D1 level	D2 level	D3 level
less than 25	0.15	0.10	0.10
25 to 50	0.25	0.20	0.15
more than 50	0.60%	0.40%	0.30%

Wall thickness tolerance	Basic Size mm	Tolerance
	0--6	± 0.2
	6--10	± 0.3
	10--18	± 0.4
	18--30	± 0.6

Proper alignment	
Basic Size mm	Tolerance
<10	<0.25
10-25	± 0.40
25-50	± 0.75
50-100	± 1.20
100-200	± 1.80

- Make:1、 D1, D2, D3 are the dimensional accuracy grade, D1:general dimension toleranc, D2:requiring close tolerance, D3:premium tolerances require additiona operations at extra cost.
- 2、 The above D2 is the general dimension tolerance of our company.
- 3、 0.8-2.0mm machining size is allowed, larger product can be up to 3-4mm.