

TOLLERANCES

GENERAL TOLERANCES FOR LINEAR AND ANGULAR DIMENSIONS (UNI ISO 22768-1)

LINEAR DIMENSIONS								
PERMISSIBLE DEVIATION IN mm FOR RANGES IN NOMINAL LENGTHS								
TOLERANCE CLASS	DA 0.5 - 3	DA 3 - 6	DA 6 - 30	DA 30 - 120	120 ÷ 400	400 ÷ 1000	1000 ÷ 2000	2000 ÷ 4000
FINE -f	±0.05	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5	-
MEDIUM -m	±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2
COARSE -c	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	±4
VERY COARSE -v	-	±0.5	±1	±1.5	±2.5	±4	±6	±8

INTERNAL RADIUS AND CHAMFER HEIGHTS			
PERMISSIBLE DEVIATION IN mm FOR RANGE IN NOMINAL LENGTHS			
TOLERANCE CLASS	DA 0.5 - 3	DA 3 - 6	OLTRE 6
FINE - f	±2	±0.5	±1
MEDIUM -m	±0.4	±1	±2
COARSE -c			
VERY COARSE -v			

ANGULAR DIMENSIONS					
PERMISSIBLE DEVIATION IN DEGREES AND MINUTES FOR RANGES IN NOMINAL LENGTHS					
TOLERANCE CLASS	DA 0 - 10	DA 10 - 50	DA 50 - 120	DA 120 - 400	OLTRE 400
FINE -f	±1°	±0° 30'	±0° 20'	±0° 10'	±0° 5'
MEDIUM - m	±1° 30'	±1°	±0° 30'	±0° 15'	±0° 10'
COARSE -c					
VERY COARSE -v					
	±3°	±2°	±1°	±0° 30'	±0° 20'

GENERAL GEOMETRICAL TOLERANCES (UNI ISO 22768-2)

STRAIGHTNESS AND FLATNESS						
RANGES IN NOMINAL LENGTHS IN mm						
TOLERANCE CLASS	DA 0 - 10	DA 10 - 30	DA 30 - 100	DA 100 ÷ 300	300 ÷ 1000	1000 ÷ 3000
H	0.02	0.05	0.1	0.2	0.3	0.4
K	0.05	0.1	0.2	0.4	0.6	0.8
L	0.1	0.2	0.4	0.8	1.2	1.6

PERPENDICULARITY				
RANGES IN NOMINAL LENGTHS IN mm				
TOLERANCE CLASS	DA 0 - 100	DA 100 - 300	DA 300 - 1000	DA 1000 - 3000
H	0.2	0.3	0.4	0.5
K	0.4	0.6	0.8	1
L	0.6	1	1.5	2

SIMMETRY				
RANGES IN NOMINAL LENGTHS IN mm				
TOLERANCE CLASS	DA 0 - 100	DA 100 - 300	DA 300 - 1000	DA 1000 - 3000
H	0.5			
K	0.6		0.8	1
L	0.6	1	1.5	2

RUN -OUT	
TOLERANCE CLASS	TOLERANCES IN mm
H	0.1
K	0.2
L	0.5