

Toleranslar Tolerances hjk hjk hk

KARE , DİKDÖRTGEN VE YUVARLAK BORULARIN EBAT TOLERANSLARI

DIMENSIONAL TOLERANCESS OF SQUARE AND RECTANCULAR, CIRCULAR HOLLOW SECTIONS

Karakteristik Özellikler Characteristics	EN 10219		BS 933		ASTM A500		DIN 2395 & TS6475							
	Kare ve Dikdörtgen Square and Rectangular	Yuvarlak Circular	Kare ve Dikdörtgen Square and Rectangular	Yuvarlak Circular	Kare ve Dikdörtgen Square and Rectangular	Yuvarlak Circular	Kare ve Dikdörtgen Square and Rectangular						Yuvarlak Circular	
Diştan Dışa Outside Dimensions (D,B,H)	$H,B < 100, \pm 1 \% \text{ ve / and}$ $\text{min} \pm 0,5 \text{ mm}$ $100 \leq H,B < 200, \pm 0,8 \%$	$\pm 1 \% \text{ ve / and}$ $\text{min} \pm 0,5 \text{ mm}$ $\text{max} \pm 10 \text{ mm}$	$\pm 0,75 \% \text{ ve / and}$ $\text{min} \pm 0,4$	$\leq 63,5 \quad 0,51 \text{ min}$ $> 63,5 \quad 0,84 \text{ min}$ $\leq 88,9$ $> 88,9 \quad 0,76 \text{ mm}$ $\leq 139,7$	$\leq 48,3 \pm 0,50 \%$ $> 48,3 \pm 0,75 \%$	10x20	$\pm 0,20$	50x90	$\pm 0,80$	10x10	$\pm 0,10$	$4 \leq D \leq 18 \quad \pm 0,12$ $20 \leq D \leq 30 \quad \pm 0,15$ $32 \leq D \leq 40 \quad \pm 0,20$ $45 \leq D \leq 55 \quad \pm 0,30$ $60 \leq D \leq 80 \quad \pm 0,40$ $90 \leq D \leq 100 \quad \pm 0,50$ $108 \leq D \leq 120 \quad \pm 0,60$		
						10x30	$\pm 0,25$	50x70	$\pm 0,80$	15x15	$\pm 0,20$			
						15x25	$\pm 0,25$	50x10	$\pm 0,80$	20x20	$\pm 0,20$			
						20x30	$\pm 0,25$	60x80	$\pm 0,60$	25x25	$\pm 0,25$			
						20x40	$\pm 0,30$	60x120	$\pm 0,80$	30x30	$\pm 0,25$			
Et Kalınlığı Wall Thickness(T)	$T \leq 5 \text{ mm}, \pm 10 \%$ $T > 5 \text{ mm}, \pm 0,50 \%$		$T \leq 3 \text{ mm}, \pm 10 \%$ $T > 3 \text{ mm}, \pm 8 \%$	$\pm 10 \%$	$\pm 10 \% \text{ with}$ $\text{max of} \pm 0,35 \text{ mm}$	25x40	$\pm 0,30$	60x100	$\pm 0,80$	40x40	$\pm 0,30$	TS 6475 $\pm 10 \%$		
						30x40	$\pm 0,30$	80x100	$\pm 0,80$	50x50	$\pm 0,40$			
						30x50	$\pm 0,30$	90x100	$\pm 0,80$	60x60	$\pm 0,50$			
						40x60	$\pm 0,40$	25x50	$\pm 0,30$	70x70	$\pm 0,60$			
						40x80	$\pm 0,60$	30x60	$\pm 0,40$	80x80	$\pm 0,75$			
İç Büküklük / Dış Büküklük / Concavity / Convexity	$\text{Max } 0,8 \% \text{ ve / and}$ $\text{with min } 0,5 \text{ mm}$		$\pm 1 \% \text{ of D or B}$	Dış ve iç büküklük alt oldukları profil kenarını boyut toleransını aşmamalıdır Concavity and convexity shall not exceed the tolerances on side dimensions	Dış ve iç büküklük alt oldukları profil kenarının boyut toleransını aşmamalıdır. Concavity and convexity shall not exceed the tolerances on side dimensions	40x10	$\pm 0,80$	30x70	$\pm 0,40$	100x100	$\pm 0,80$			
Diklik Squareness of Side	$90^\circ \pm 1^\circ$		$90^\circ \pm 1^\circ$		$90^\circ \pm 2^\circ$		$90^\circ \pm 1^\circ$							
Dış Köşe Yarıçapı External Corner Profile (R)	$T \leq 6 \quad 1,6T-2,4T$ $6 < T \leq 10 \quad 2,0T-3,0T$ $10 < T \quad 2,4T-3,6T$		$3 \times T$		$3 \times T$		DIN 2395 $T \leq 2,5 \quad R=1$ $T \geq 3,0 \quad R=2T$		TS6475 $T \leq 2,5 \quad R=2T$ $T \geq 3,0 \quad R=3T$					
Dairesellikten Sapma Out-of roundness		$(D_{\text{max}}-D_{\text{min}}) / D \leq 0,02$												
Bunulma Twist	$2 \text{ mm} + 0,5 \text{ mm/m}$		$2 \text{ mm} + 0,5 \text{ mm/m}$		$\leq 38,1 \quad 1,39 \text{ mm}$ $> 38,1 \quad 1,72 \text{ mm}$ $\leq 63,5$ $> 63,5 \quad 2,09 \text{ mm}$ $\leq 101,6$ $> 101,6 \quad 2,42 \text{ mm}$ $\leq 152,4$		$1^\circ / \text{m}$							
Doğrusallıktan Sapma Straightness	Toplam uzunluğun % 0,15'i % of the total length	-	Toplam uzunluğun % 0,20'si 0,20 % of the total length		$2,08 \text{ mm} / \text{m}$		Toplam Uzunluğun % 0,25'i 0,25 % of the total length							
Ağırlık Mass	$\pm 6 \text{ birim boy}$ $\pm 6 \% \text{ on individual lengths}$	Toplam uzunluğun % 20'si 0,20 % of the total length												
Kesin Boy Exact Length	$< 6000 \quad + 5 \text{ mm}$ $\geq 6000 \quad + 15 \text{ mm}$ ≤ 10000 $> 10000 \quad + 5 \text{ mm} + 1 \text{ mm/m}$		$\leq 500 \quad 2 \text{ mm}$ $> 500 \quad \leq 2000 \quad 3 \text{ mm}$ $> 2000 \quad \leq 5000 \quad 5 \text{ mm}$ $> 5000 \quad \leq 7000 \quad 10 \text{ mm}$ $> 7000 \text{ (anlaşmaya göre /}$ by agreement)		$\leq 6700 \quad \text{max: } 12,7 \text{ mm}$ $\text{min: } 6,4 \text{ mm}$ $> 6700 \quad \text{max: } 19,0 \text{ mm}$ $\leq 13400 \quad \text{min: } 6,4 \text{ mm}$		$\leq 500 \quad 2 \text{ mm}$ $> 500 \quad \leq 2000 \quad 3 \text{ mm}$ $> 2000 \quad \leq 5000 \quad 5 \text{ mm}$ $> 5000 \quad \leq 7000 \quad 10 \text{ mm}$ $> 7000 \text{ (anlaşmaya göre /}$ by agreement)		$\leq 500 \quad 2 \text{ mm}$ $> 500 \quad \leq 2000 \quad 3 \text{ mm}$ $> 2000 \quad \leq 5000 \quad 5 \text{ mm}$ $> 5000 \quad \leq 7000 \quad 10 \text{ mm}$ $> 7000 \text{ (anlaşmaya göre /}$ by agreement)					