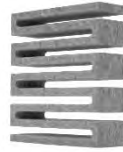


# Coil-spring vs Z-spring Comparison

## TYPE-A



Characteristics	Unit	TYPE-A
Outer diameter	mm	φ31
Inner diameter	mm	φ19
Free length	mm	L 40
Spring constant	N	19.6
Shrinkage allowance	mm	7

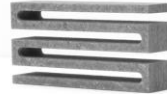


Characteristics	Unit	TYPE-A
Width	mm	36
Thickness	mm	13
Length	mm	40
Spring constant	N	19.6
Shrinkage allowance	mm	7

## TYPE-B



Characteristics	Unit	TYPE-B
Outer diameter	mm	φ50
Inner diameter	mm	φ20
Free length	mm	L 25
Spring constant	N	19.6
Shrinkage allowance	mm	5



Characteristics	Unit	TYPE-B
Width	mm	50
Thickness	mm	12
Length	mm	25
Spring constant	N	19.6
Shrinkage allowance	mm	5

## TYPE-C

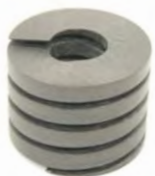


Characteristics	Unit	TYPE-C
Outer diameter	mm	φ50
Inner diameter	mm	φ30
Free length	mm	L 27.5
Spring constant	N	24.5
Shrinkage allowance	mm	5



Characteristics	Unit	TYPE-C
Width	mm	50
Thickness	mm	13.5
Length	mm	27.5
Spring constant	N	24.5
Shrinkage allowance	mm	5

## TYPE-D



Characteristics	Unit	TYPE-D
Outer diameter	mm	φ50
Inner diameter	mm	φ20
Free length	mm	L 40
Spring constant	N	34.4
Shrinkage allowance	mm	7



Characteristics	Unit	TYPE-D
Width	mm	50
Thickness	mm	20
Length	mm	40
Spring constant	N	34.4
Shrinkage allowance	mm	7

※Please note the natural length will be slightly shorter when used for the first time.  
 ※Do not use beyond the maximum of shrinkage allowance for spring's deformation.