

# Metal CS Rings - Internal Pressure - Spring Energised:

# CSI

Seal dimension						Groove dimensions				Load	SB
AS		RS		MT	DC	DG	GD	WG	R	M-Spring	
Axial section	Tolerance on AS (cross section) **	Radial section	Material code Spring Load	Material thickness Jacket	Diame-trical clearance	Diameter Groove (range)	Groove Depth (min/max)	Width Groove (min)	Radius (max)	N/mm Circum-ference *	Spring Back in mm
1,57	±0,05	1,52	M/H	0,15	0,15	20-280	1,27-1,32	2,05	0,35	200	0,10
2,00	±0,05	1,85	M/H	0,25	0,20	20-300	1,60-1,68	2,50	0,40	180	0,12
2,39	±0,05	2,24	M/H	0,25	0,20	25-400	1,91-2,01	3,10	0,50	160	0,15
2,79	±0,05	2,64	M/H	0,38	0,25	25-500	2,23-2,34	3,60	0,50	200	0,18
3,18	±0,08	2,90	M/H	0,38	0,30	25-600	2,54-2,67	4,10	0,75	160	0,20
3,96	±0,08	3,60	M/H	0,41	0,41	32-750	3,18-3,30	5,10	1,20	210	0,25
4,78	±0,10	4,49	M/H	0,51	0,46	75-900	3,84-3,99	6,20	1,20	250	0,28
5,60	±0,10	5,19	M/H	0,51	0,48	75-1000	4,48-4,70	7,30	1,20	200	0,30
6,35	±0,10	5,81	M/H	0,64	0,51	100-1800	5,08-5,28	8,30	1,50	340	0,36
7,90	±0,10	7,25	M/H	0,97	0,70	150-3000	6,32-6,58	10,40	1,50	300	0,40
9,53	±0,10	8,66	M/H	0,97	0,75	300-3000	7,62-8,03	12,40	1,50	430	0,43
12,70	±0,13	11,53	M/H	1,27	1,00	600-7600	10,16-10,67	16,50	1,50	500	0,56

\* Load and springback figures are based on Inconel/Inconel Jacket and Spring. Actual load figures and to a lesser extend springback can differ hugely from the given data. Tolerances on groove depth, plating, diametrical clearance and differences in material batches can create differences of up to 100% for the smaller cross sections, down to 50% for the bigger cross section.

Load figures only valid for "M" (medium duty) spring

\*\* In case spring is placed after forming or plating, usually for seals with a diameter > 200 mm, the + tolerance on AS will be slightly higher than standard (see table page 35). Tolerance on diameter can be half of additional tolerance on AS. In both cases there will be no impact on build-in situation nor on sealing performance.

