Disc Springs, Data Sheet

group 3 including load input surfaces

Mubea

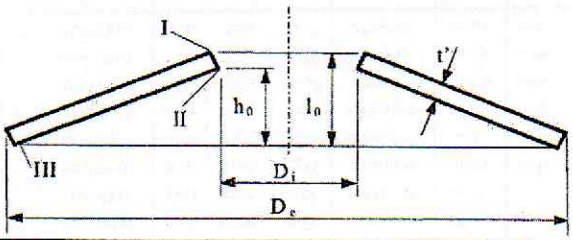
Stand 20.11.99

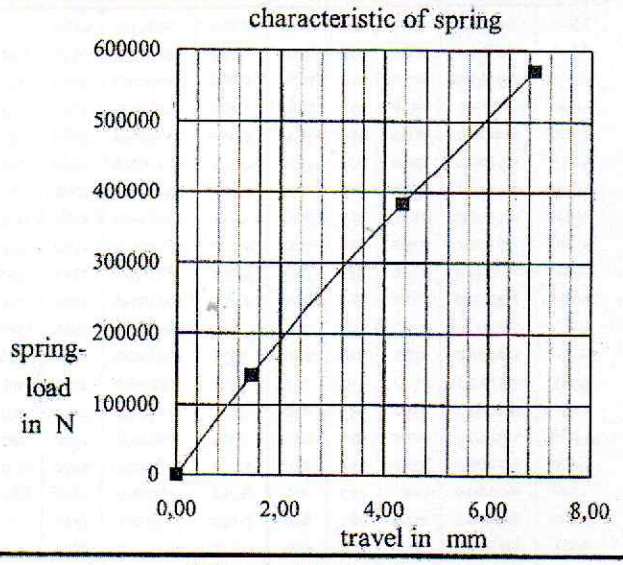
part./drawing no.: **19 0040**

customer:

30.07.2008
KDD

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dimensions

outer diam.:	D_e=	250,000	mm
inner diam.:	D_i=	127,000	mm
thickness:	t=	16,000	mm
red. thickness:	t'=	14,900	mm
spring height:	l_0=	21,800	mm

1 spring 1

data

		h_0=	5,800	mm
h_0/t=	0,363	h_0=	6,900	mm
h_0/t=	0,463	D_e/D_i=	1,969	

Wire centered springs

wire diameter:	0,00	mm
groove depth:	0,00	mm

load-point	load points of one spring: height l mm	travel s mm	load F N	calculated stresses: σ_I MPa	σ_{II} MPa	σ_{III} MPa	σ_{OM} MPa	load points of one spring: height l mm	travel s mm	load F N
0	21,800							21,800		
1	20,350	1,450	141529	-949	406	517	-474	20,350	1,450	141529
2	17,450	4,350	383017	-2655	1408	1428	-1421	17,450	4,350	383017
Flat	**14,900**	**6,900**	**570770**	**-3944**	**2500**	**2096**	**-2253**	**14,900**	**6,900**	**570770**

specification

material:	1.8159 (51 CrV 4)	Youngs-modulus:	206000 MPa
surface finish:	shot peening	temperature:	20 °C
corrosion prot.:	phosphated and oiled		

remarks

Load tolerance: +5 / -5% at 75% of h0 of one spring

tolerance inner diam.:	127,000	mm	to	127,400	mm
tolerance outer diam.:	249,480	mm	to	250,000	mm