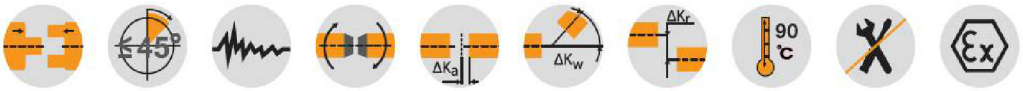
BoWex-ELASTIC® HE3 und HE4
Highly flexible flange couplings

Axial plug-in, available in different kinds of hardness



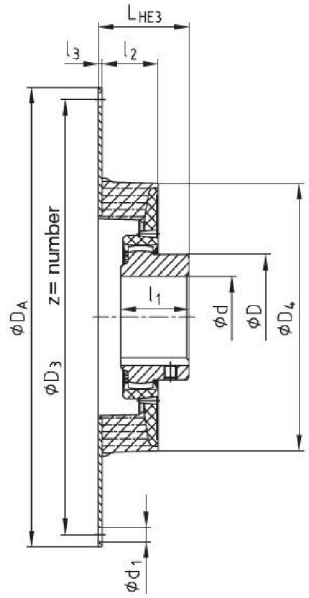
BoWex-ELASTIC® Type HE3 and HE4

Size	Bore d [mm]		Flange connection according to SAE - J 620										Dimensions [mm]							Weight with pilot bored coupling [kg]	Mass moment of inertia with pilot bored coupling	
	Pilot bored	max.	6 ½"	7 ½"	8"	10"	11 ½"	14"	16"	18"	21"	24"	l_3	l_2	D_4	D	l_1	L_{HE3}	L_{HE4}		J_A [kgm²]	J_L [kgm²]
42 HE	-	42	●	●									2	33	145	65	42	55	40	1,7	0,0057	0,0014
				●																1,8	0,0060	0,0020
48 HE	-	48			●								2	37	163	68	50	68	42	2,0	0,0062	0,0020
						●														2,2	0,0065	0,0020
G 65 HE	21	65				●							3	45	205	96	55	73	50	5,3	0,0242	0,0076
							●													5,7	0,0372	0,0076
GG 65 HE	21	65			●								3	48	220	96	55	73	50	5,3	0,0251	0,0085
						●														5,6	0,0273	0,0085
							●													5,9	0,034	0,0085
80 HE	31	80				●														11,4	0,0388	0,0305
G 80 HE	31	80					●						4	66	300	124	90	122	70	11,6	0,0702	0,0465
100 HE	38	100						●					4	80	350	152	110	150	82	24,1	0,1951	0,1019
125 HE	45	125						●					-	92	416	192	140	186	103	45,8	0,3013	0,2861
									●				6					192	109	47,7	0,4123	0,2861
G 125 HE	45	125							●				6	89	440	192	140	179	91	48,4	0,4781	0,2916
										●										50,5	0,6380	0,2916
150 HE	44	160								●			6	140	470	225	150	205	160	66,7	0,6918	0,5192
											●										1,1410	0,5192
G 150 HE	44	160								●			6	140	504	225	150	205	160	76	0,754	0,651
											●										1,246	0,651
200 HE	46	180									●		6	149	568	250	175	240	160	100	1,535	1,145
												●									1,514	1,145
200D HE	46	180									●		25	325	568	250	300	350	-	355	16,75	2,98
												●									22,89	2,98
G200 HE	46	180									●		6	149	600	250	175	240	160	105	1,727	1,347
												●									2,106	1,347
G200D HE	46	180									●		25	325	600	250	300	350	-	370	18,65	3,28
												●									25,12	3,28

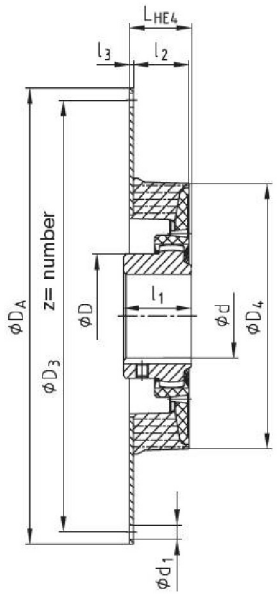
Ordering example:

BoWex-ELASTIC® 80	HE3	40	10	112	U
Coupling size	Type	Elastomer hardness	Flange Ø D_A acc. to SAE or special	Mounting length LHE	Unbored or with finish bore

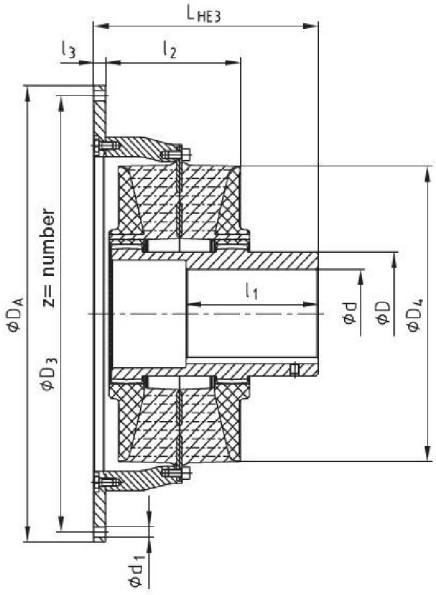
Type HE3



Type HE4



Type D



Flange dimensions acc. to SAE J 620 [mm]

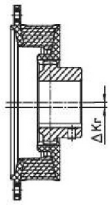
Size	D_A	D_3	z	d_1
6 ½"	215,90	200,02	6	9
7 ½"	241,30	222,25	8	9
8"	263,52	244,47	6	11
10"	314,32	295,27	8	11
11 ½"	352,42	333,37	8	11
14"	466,72	438,15	8	13
16"	517,50	489,00	8	13
18"	571,50	542,90	6	17
21"	673,10	641,35	12	17
24"	733,42	692,15	12	21

Displacements

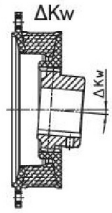
For other operating speeds or higher operating temperatures the permissible radial displacement is calculated as follows:

$$\Delta Kr_{perm.} = \Delta Kr \bullet St \bullet \sqrt{1500 / nx}$$

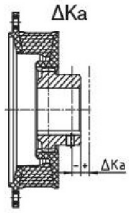
Radial displacement ΔKr



Angular displacement ΔKw



Axial displacement ΔKa



Displacements

Size		42 HE			48 HE			65 HE/G 65 HE			80 HE/G 80 HE			100 HE			125 HE/G 125 HE			150 HE/G 150 HE			200HE/G 200 HE		
Elastomer hardness [Shore A]		T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T70 Sh	T40 Sh	T50 Sh	T65 Sh	T40 Sh	T50 Sh	T65 Sh
Perm. radial displacement ΔKr [mm]	n=1500 rpm	1,1	1,0	0,5	1,2	1,1	0,5	1,6	1,5	0,7	1,8	1,7	0,8	2,2	2,0	1,0	2,5	2,3	1,1	2,8	2,5	1,3	3,0	2,7	1,5
	max. [1]	3,6	3,3	1,5	3,8	3,5	1,7	5,1	4,7	2,2	5,7	5,3	2,4	6,5	6,0	3,0	7,5	6,9	3,3	8,0	7,5	4,0	8,5	8,0	4,5
Perm. angular displacement ΔKw [°]	n=1500 rpm	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5	1,0	0,75	0,5
	n=3000 rpm	0,5	0,4	0,25	0,5	0,4	0,25	0,5	0,4	0,25	0,5	0,4	0,25	0,5	0,4	0,25	0,5	0,4	0,25						
Perm. angular displacement ΔKw [mm]	max. [1]	1,5			1,5			1,5			1,5			1,5			1,5			1,5			1,5		
Perm. axial displacement ΔKa [mm]		± 2			± 2			± 2			± 2			± 3			± 3			± 5			± 5		

[1] for short-term starting operation

Process of assembly, screw type with quality, tightening torques according to KTR assembly instructions (see www.ktr.com).