

BELLHOUSINGS AND ACCESSORIES

DAMPING ELEMENTS

DAMPING RODS

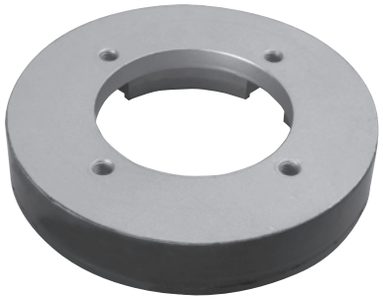
- Reduce the sound level and dampen vibrations
- Finished for IEC motors IMB 35 (MDS), NEMA motors, PTFL foot brackets (PTFL-DS) and PTFS foot brackets (PTFS-DS)
- Available from stock
- Special lengths and designs possible on request
- Material: Rubber (NR) / steel



Order code damping rods	
Type	**Size**
MDS	225 M

DAMPING FLANGES

- HBE damping flanges are applied in connection with HBE bellhousings or pump brackets between hydraulic pumps and E-motors
- They consist of two aluminium components, which are connected to each other by a moulded-on rubber coating (perbunan-NBR) without metallic contact
- The materials applied are resistant to mineral oils and are suitable for working temperatures up to + 80°C, temporary +100°C
- For optimisation, two different shore hardnesses are available: S = standard H = hard



Order code damping flanges		
Type	**Size**	**Pump face code**
DF	250	586/1

DAMPING RINGS

- For application between bellhousing and tank vertically or horizontally
- Damping rings consist of two vulcanised perbunan coated combined aluminium rings
- Application: mineral oil up to max. +80°C
- Noise reduction: approx. 3 – 5 dB (A)
- Sealing lips moulded-on, no additional sealing necessary

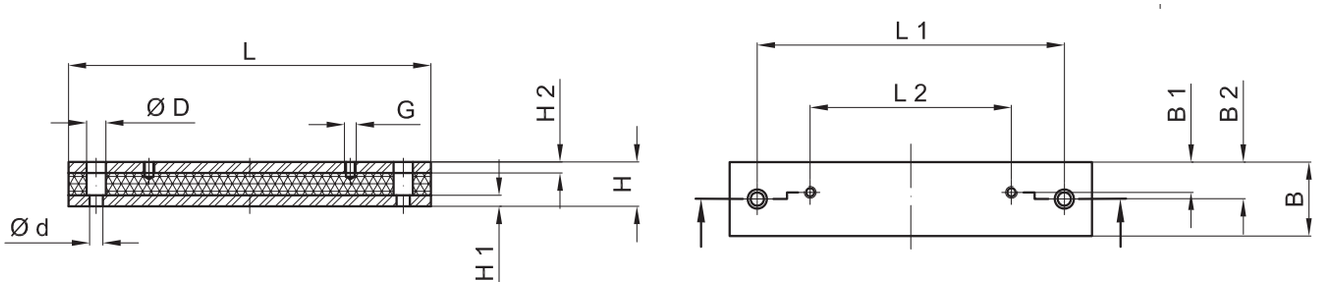


Order code damping rings		
Type	**Size**	**Option**
DA	400	/2

Exemplary illustration of a breakaway quick-closing device

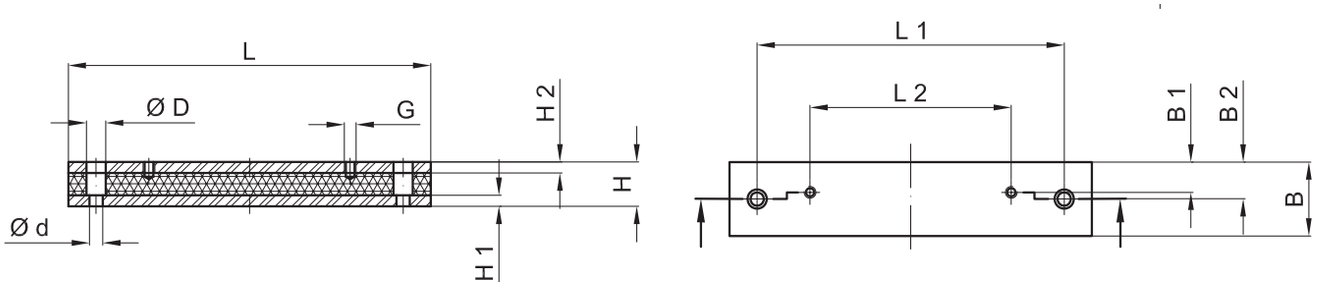
DAMPING RODS

TYPE MDS FOR ELECTRIC MOTORS FRAME IM B 35



Art. No.	Type	IEC motor size	Dimensions [mm]												
			L	L1	L2	H	H1	H2	B	B1	B2	ø d	ø D	G	Shore° A
4420	MDS 71	71	196	156	90	40	10	10	50	21	25	14	20	M6	
4421	MDS 80	80	180	156	100	40	10	10	50	22	25	14	20	M8	
4447	DSM 80 SO	80	176	146	100	40	10	10	50	22	25	14	20	M8	
4421	MDS 90 S	90 S	180	156	100	40	10	10	50	22	25	14	20	M8	
4423	MDS 90 L	90 L	240	205	125	40	10	10	50	24	25	14	20	M8	
4424	MDS 100 L	100 L	240	205	140	40	10	10	50	24	25	14	20	M10	
4425	MDS 112 M	112 M	240	205	140	40	10	10	50	20	25	14	20	M10	
4427	MDS 132 S	132 S	285	245	140	45	10	10	50	20	25	14	20	M10	
4427	MDS 132 M	132 M	285	245	178	45	10	10	50	20	25	14	20	M10	
4428	MDS 160 M	160 M	340	300	210	60	15	15	70	28	35	18	26	M12	
4429	MDS 160 L	160 L	416	370	254	60	15	15	70	28	35	18	26	M12	55°
4430	MDS 180 M	180 M	416	370	241	60	15	15	70	35	35	18	26	M12	
4431	MDS 180 L	180 L	446	400	279	60	15	15	70	35	35	18	26	M12	
4432	MDS 200 L	200 L	496	430	305	60	15	15	70	35	35	22	33	M16	
4433	MDS 225 S	225 S	496	430	286	60	15	15	70	35	35	22	33	M16	
4434	MDS 225 M	225 M	496	445	311	60	15	15	70	35	35	22	33	M16	
4435	MDS 250 M	250 M	496	445	349	60	15	15	100	50	50	22	33	M20	
4436	MDS 280 S	280 S	580	530	368	60	15	15	100	50	50	22	33	M20	
4436	MDS 280 M	280 M	580	530	419	60	15	15	100	50	50	22	33	M20	
4441	DSM 280 S-SO	280 S	614	570	368	60	15	15	100	50	50	22	33	M20	
4437	DSM 280 M-SO	280 M	614	570	419	60	15	15	100	50	50	22	33	M20	
4438	MDS 315 S	315 S	614	570	406	60	15	15	100	60	60	22	33	M24	
4443	MDS 315 M	315 M	614	570	457	60	15	15	100	60	60	22	33	M24	70°
4389	DSM 315 S	315 S	614	570	406	60	15	15	120	60	60	22	33	M24	
4389	DSM 315 M	315 M	614	570	457	60	15	15	120	60	60	22	33	M24	
4446	MDS 315 L	315 L	704	660	508	60	15	15	100	60	60	22	33	M24	
4446-1	DSM 315 L	315 L	704	660	508	60	15	15	120	60	60	22	33	M24	
4449	MDS 355 M	355 M	826	782	630	60	15	15	100	60	60	22	33	M24	

TYPE MDS FOR ELECTRIC MOTORS FRAME NEMA TC + TD

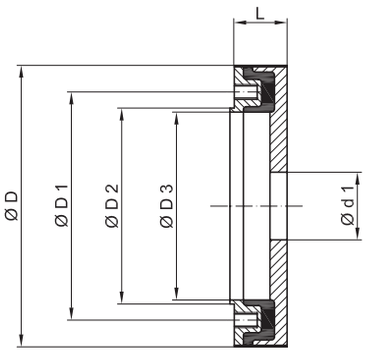


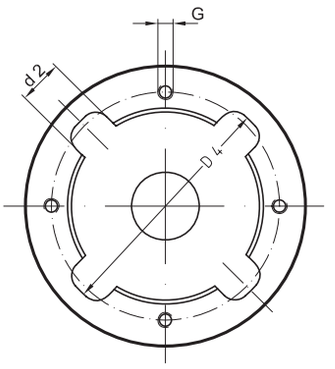
Art. No.	Type	Motor size	Dimensions [mm]												
			L	L1	L2	H	H1	H2	B	B1	B2	ø d	ø D	G	Shore° A
4422	MDS 143 TC/TD NEMA	143 TC/TD	190	160	101.6	40	10	10	50	20	25	14	20	M8	
5692	MDS 145 TC/TD NEMA	145 TC/TD	225	185	127.0	40	10	10	50	20	25	14	20	M8	
5693	MDS 182 TC/TD NEMA	182 TC/TD	225	185	114.3	40	10	10	50	20	25	14	20	M10	
5695	MDS 184+213 TC/TD NEMA	184+213 TC/TD	254	216	139.7	45	10	10	50	20	25	14	20	M10	
4455	MDS 215 TC/TD NEMA	215 TC/TD	285	245	177.8	45	10	10	50	20	25	14	20	M10	
4392	MDS 254 TC/TD NEMA	254 TC/TD	330	295	209.5	45	10	10	50	20	25	14	20	M12	
4444	MDS 256 TC/TD NEMA	256 TC/TD	375	340	254.0	45	15	15	50	20	25	14	20	M12	55°
5691	MDS 284 TC/TSC/TD NEMA	284 TC/TSC/TD	406	362	241.3	60	15	15	70	30	35	18	26	M12	
5691	MDS 286 TC/TSC/TD NEMA	286 TC/TSC/TD	406	362	279.4	60	15	15	70	30	35	18	26	M12	
4452	MDS 324 TC/TSC/TD NEMA	324 TC/TSC/TD	416	370	267.0	60	15	15	70	35	35	18	26	M12	
4453	MDS 326 TC/TSC/TD NEMA	326 TC/TSC/TD	458	410	305.0	60	15	15	70	35	35	18	26	M16	
4440	MDS 364 TC/TSC/TD NEMA	364 TC/TSC/TD	446	400	285.8	60	15	15	70	30	35	18	26	M16	
5690	MDS 365 TC/TSC/TD NEMA	365 TC/TSC/TD	458	410	311.1	60	15	15	70	35	35	18	26	M16	
5689	MDS 404 TC/TSC/TD NEMA	404 TC/TSC/TD	500	445	311.1	60	15	15	100	50	50	27	40	M16	
5703	MDS 405 TC/TSC/TD NEMA	405 TC/TSC/TD	533	476	349.0	60	15	15	100	50	50	27	40	M16	70°
4448	MDS 444 TC/TSC/TD NEMA	444 TC/TSC/TD	580	530	368.3	60	15	15	100	50	50	25	40	M16	
5688	MDS 445 TC/TSC/TD NEMA	445 TC/TSC/TD	660	605	419.1	60	15	15	100	50	50	25	40	M16	

TYPE PTFL-DS / PTFS-DS FOR FOOT FLANGES

Art. No.	Type	Foot flange size	Dimensions [mm]												
			L	L1	L2	H	H1	H2	B	B1	B2	ø d	ø D	G	Shore° A
4498	PTFL-DS 160	PTFL 160	176	130	50	40	10	10	50	10	25	14	20	M8	
4483	PTFL-DS 200	PTFL 200	176	130	60	40	10	10	50	15	25	14	20	M10	
4484	PTFL-DS 250	PTFL 250	230	140	60	40	10	10	50	15	25	14	20	M12	55°
4485	PTFL-DS 300	PTFL 300	270	170	80	40	10	10	50	15	25	14	20	M12	
4486	PTFL-DS 350	PTFL 350	305	200	110	60	10	10	70	25	35	18	26	M16	
4490	PTFS-DS 200	PTFS 200	245	205	150	40	10	10	50	19	25	14	20	M10	
4491	PTFS-DS 250	PTFS 250	300	260	185	40	10	10	50	21	25	14	20	M12	
4492	PTFS-DS 300	PTFS 300	340	300	225	45	10	10	50	21	25	14	20	M12	
4493	PTFS-DS 350	PTFS 350	390	345	265	60	15	15	70	29	35	18	26	M16	55°
4494	PTFS-DS 400	PTFS 400	425	380	300	60	15	15	70	29	35	18	26	M16	
4495	PTFS-DS 450	PTFS 450	470	425	335	60	15	15	70	35	35	18	26	M16	
4496	PTFS-DS 550	PTFS 550	565	515	415	60	15	15	70	35	35	18	26	M16	
4497	PTFS-DS 660	PTFS 660	655	605	495	60	15	15	100	50	50	22	33	M20	70°

DAMPING FLANGES



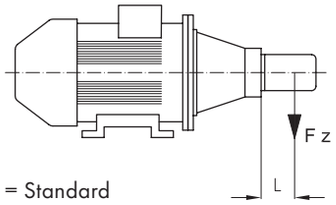


DF 200- 400

Art. No.*	Type	Dimensions [mm]								
		ø D	ø D1	ø D2	ø D3	ø D4	ø $d1_{min}$	d2	L	G
5410	DF 200/../30/../1	142	102	90	85	120	32	25	30	M8 x 10
5412	DF 250/16/35/../1	186	150	130	125	156	32	28	35	M10 x 15
5415	DF 300/32/40/../1	222	175	147	140	190	33	55	40	M12 x 16
5420	DF 350/63/45/../1	258	195	172	165	230	48	60	45	M12 x 16
5425	DF 400/84/60/../1	365	248	212	200	335	120	45	60	M20 x 23

*standard version "S"

RADIAL WEIGHT LOAD



S = Standard
H = Hard

$$Fzul. = \frac{(F[N] \times L)}{\text{effective SPA}^{**}}$$

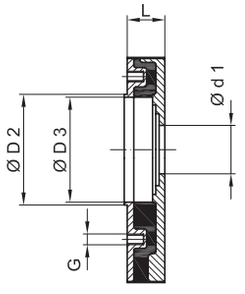
Damping flange	DF 200/...		DF 250/16		DF 300/32		DF 350/63		DF 400/84	
	S	H	S	H	S	H	S	H	S	H
Centroidal distance for radial load L [mm]	70		100		100		200		200	
Permittable weight load $F_{zul.}$[N]***	300	400	1100	1300	1600	1900	1400	2000	3000	4000

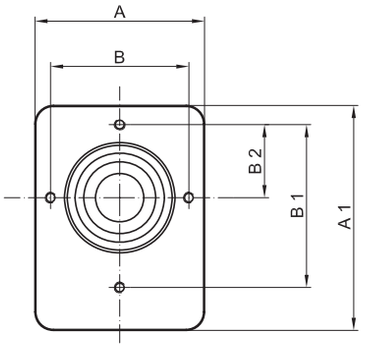
** Centroidal distance

*** for operating temperature up to 60°C

DF-ZRP/1-2

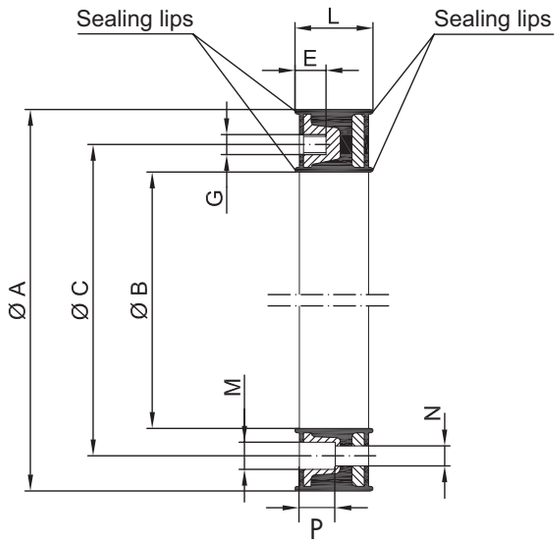
Rectangular damping flange for external gear pumps of types 1and 2 for application in connection with bellhousings or pump brackets for steady or mobile applications

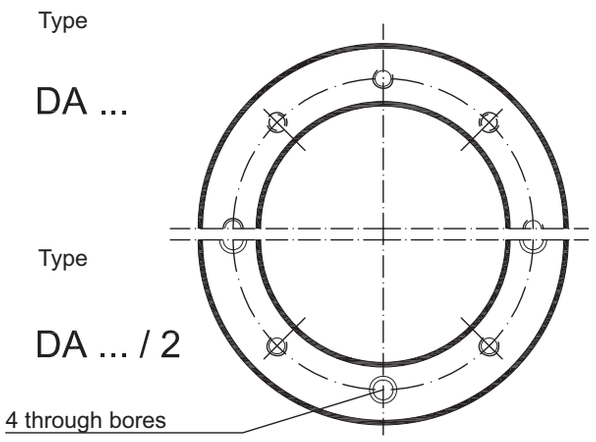




Dimensions [mm]									
Typ	A	A1	B	B1	B2	ø D2	ø D3	ø $d1_{min}$	G	L
DF ZRP/1-2	92	122	75	87.5	37.5	60	57	25	M8	20

DAMPING RINGS





Only for vertical assembly

Art. No.	IEC motor size	Type	Dimensions [mm]								
			ø A	ø B	ø C	G	E	L	M	N	P
4324	71	DA 160	160	111	130	M8	16	38	–	–	–
4325	80/90	DA 200	200	146	165	M10	20	43	–	–	–
4326	100/112	DA 250*	250	191	215	M12	20	48	–	–	–
4327	132	DA 300*	300	235	265	M12	20	53	–	–	–
4328	160/180	DA 350*	350	261	300	M16	24	64	–	–	–
4329	200	DA 400*	400	308	350	M16	24	62	–	–	–
4330	225S/225M	DA 450*	450	352	400	M16	32	69	–	–	–
4331	250M/280S/280M	DA 550*	550	452	500	M16	32	72	–	–	–
4332	315S/315M	DA 660*	660	552	600	M20	32	72	–	–	–
4341	71	DA 160/2	160	111	130	M8	16	38	14.5	9	15
4340	80/90	DA 200/2	200	146	165	M10	20	43	16.5	11	20
4333	100/112	DA 250/2*	250	191	215	M12	26	48	18.5	14	20
4334	132	DA 300/2*	300	235	265	M12	26	53	18.5	14	20
4335	160/180	DA 350/2*	350	261	300	M16	24	64	24.5	18	20
4336	200	DA 400/2*	400	308	350	M16	24	62	24.5	18	20
4337	225S/225M	DA 450/ 2*	450	352	400	M16	32	69	26	18	20
4338	250M/280S/280M	DA 550/ 2*	550	452	500	M16	32	72	26	18	20
4339	315S/315M	DA 660/ 2*	660	552	600	M20	32	72	33	22	30

*incl. breakaway quick-closing device