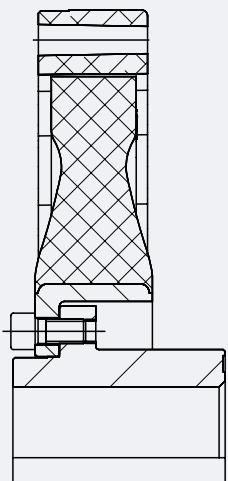


# Stromag Periflex® VN Disc Coupling

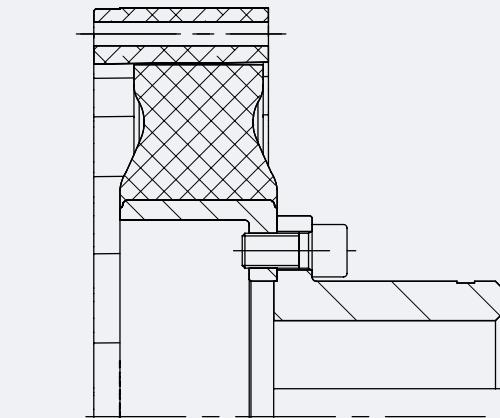
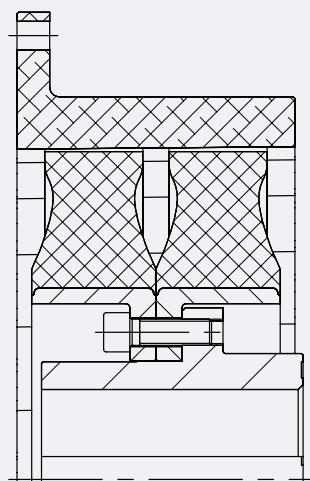


# Highly flexible Stromag Periflex® VN Disc Coupling

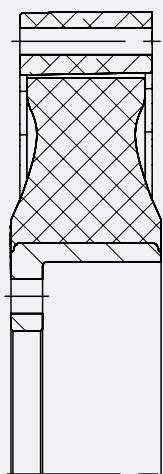
## Series overview: Stromag Periflex® Disc Couplings



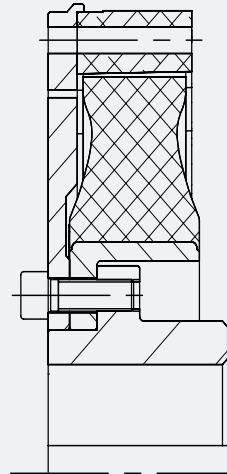
**Periflex® VN / -VP...G Series**  
Nominal torque range 160 – 63,000 Nm



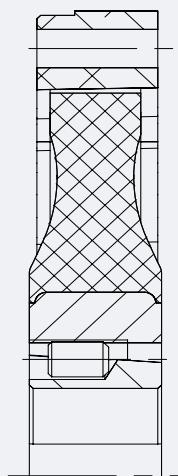
**Periflex® VN / -VP...R Series; radial installations**  
Nominal torque range 160 – 63,000 Nm



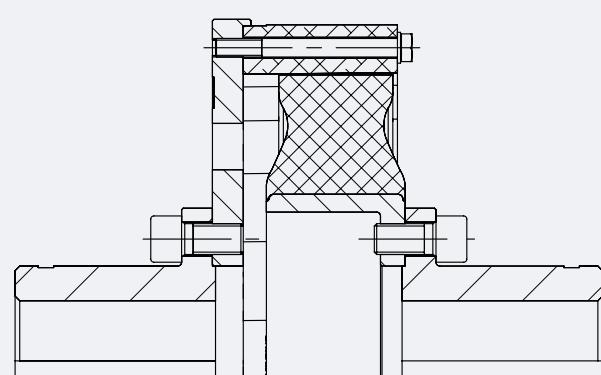
**Periflex® VN / -VP ....G/ON Series**  
Nominal torque range 160 – 63,000 Nm



**Periflex® VN / -VP...GB Series  
with antirotation stop**  
Nominal torque range 160 – 63,000 Nm



**Periflex® VN...S Series**  
Nominal torque range 160 – 8000 Nm



**Periflex® VN / -VP...W Series; shaft coupling**  
Nominal torque range 160 – 63,000 Nm

# Highly flexible Stromag Periflex® VN Disc Coupling

All issues containing details on Stromag Periflex® Disc Couplings prior to this publication may no longer apply.

We reserve the right to modify measurements and designs without prior notice.

Stromag products conform to the quality standard under DIN ISO 9001.

Content	Page
The Stromag Periflex® Disc Coupling concept	4
Instructions for the designer	
• Use in potentially explosive environments	5
• Classification rules	
Instructions on choosing the coupling size	6
Installation instructions and scope of delivery	7
Periflex® VN/-VP NR and Periflex® VN/-VP ECO ratings tables	8
Periflex® VN and Periflex® VP Series	12
Stromag Periflex® Disc Coupling characteristics	32
Coupling design, question sheet	34
Use in potentially explosive environments, question sheet	35

# Highly flexible Stromag Periflex® VN Disc Coupling

## The Stromag Periflex® Disc Coupling concept

Stromag Periflex® VN couplings are highly flexible elastomer couplings with linear spring characteristics ideal for diesel engine drives.

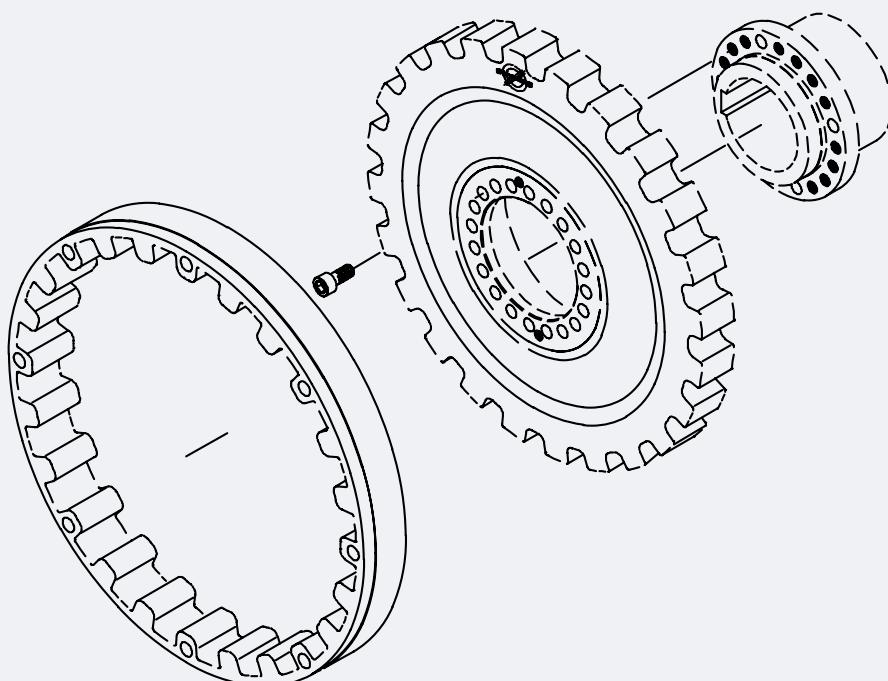
The Series covers the torque range 160 – 63,000 Nm. The external companion dimensions conform as standard to the flywheel connections under the SAE standard J620. The larger couplings are basically designed with metric flywheel connections.

Stromag Periflex® VN coupling allows fast and simple connection of a flange, specifically a flywheel, to a shaft. Some designs also allow the connection of two shafts.

Stromag Periflex® VN coupling is a coupling that features an axial plug-in connection for easy installation and removal, for both the entire coupling and the flexible element.

At the fully intermeshing teeth on the connection ring, the disc tyre can be displaced along its axis by several millimetres when no torque is applied.

Each Stromag Periflex® VN size comes with a range of elastomer qualities and torsional spring stiffnesses. These allow precise configurations for drives susceptible to torsional vibrations.



## Application fields

Stromag Periflex® VN couplings are designed for use on piston engines. The connection ring can be bolted directly to the flywheel of an engine or compressor.

Its axial plug-in design presents particular advantages e.g. for installations under bell covers.

Other application fields are electrical assemblies, compressors, construction machinery, engine and shipbuilding and general machinery.

# Highly flexible Stromag Periflex® VN Disc Coupling

## Instructions for the designer

The Stromag Periflex® VN coupling hubs are made of steel or ductile cast iron. The connection ring is made of aluminium. The disc tyres consist of a steel or ductile cast iron angular ring with a volume of vulcanized elastomer. The variants of natural rubber (NR) can be used at temperatures of -50°C to +80°C.

The variants of temperature resistant material (ECO) can be used at temperatures of -40°C to +120°C. In addition, ECO is resistant to ozone and oil.

Damping work may cause the flexible element to reach temperatures higher than ambient. This must be considered when the coupling is to be fitted with a guard or cowl, and adequate ventilation and heat dissipation must be provided.

The Stromag Periflex® VN coupling can be delivered with EN 10204 acceptance as defined in the classification societies rules.

The coupling complies with the requirements under API 671 with consideration to our list of deviations TM 800.0010.

This list of deviations is available from the Stromag GmbH departments.

## Use in potentially explosive environments

The coupling conforms to the requirements under Directive 2014/34/EU and can be used as follows:

- a. Zone 1 (gas, Category 2G) in Groups IIA, IIB, and IIC, T4
- b. Zone 2 (gas, Category 3G) in Groups IIA, IIB, and IIC, T4
- c. Zone 22 (dust, Category 3D) for dusts with a minimum ignition energy > 3 mJ, T 125 °C

The Stromag Periflex® VN coupling compliance with the requirements for each of these zones / categories is documented in the form of the following codes on our products:

**Use in gas atmospheres:**

 II 2G c T4

**Use in dust atmospheres:**

 II 3D c 125 °C

Use in potentially explosive environments must be based on the request form annexed to this catalogue.

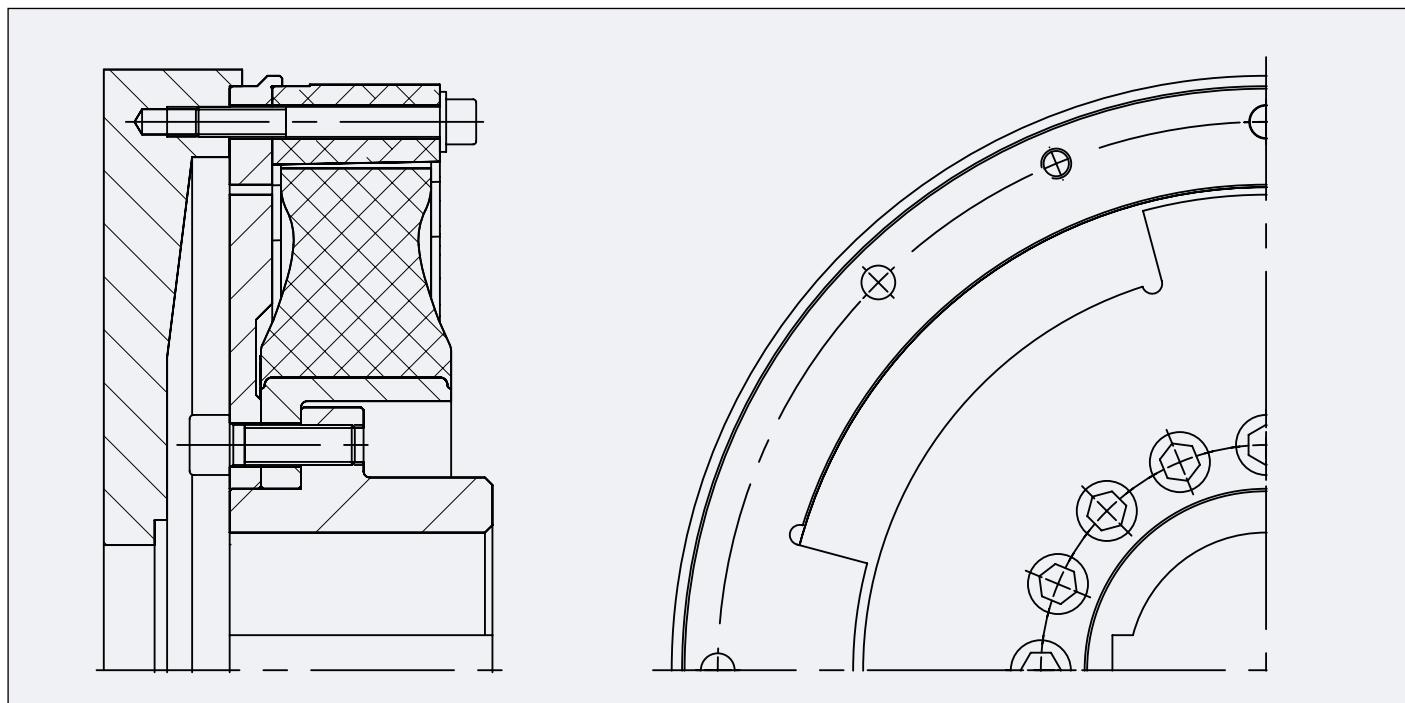
## Classification rules

The acceptance of a coupling by a classification society must observe the rules issued by this society. Under certain circumstances, the coupling characteristics may differ from the definitions provided in this catalogue. Prepared data sheets are available on request. A number of classification societies prescribe fail-safe devices on ships main drives.

# Highly flexible Stromag Periflex® VN Disc Coupling

## Fail-safe device

The Stromag Periflex® VN coupling is available with a fail-safe device. A rupture in the flexible element causes claws to intermesh, forming a torsionally rigid, backlash connection between the drive and output sides. Temporary emergency operation is possible with limited torque. The permissible torques and speeds must be calculated separately on the basis of torsional vibrations transferred via a torsionally rigid structure.



## Instructions on choosing the coupling size

The static and dynamic characteristics of Stromag Periflex® VN couplings are available. These can help to choose the suitable coupling size for the specific application. The key factors are the loads induced by the transferred power and torsional vibrations. Stationary operating modes must be based on  $T_{KN}$ ,  $T_{KW}$ , and  $P_{KV}$ , nonstationary operating modes on the  $T_{Kmax}$  values.

Stromag GmbH departments can provide support, specifically in calculating the torsional vibrations. We therefore ask you to complete and send us the question sheet annexed to this catalogue.

As a rule, flexible couplings are a safety feature in the form of a predetermined breaking point on a drive train. Hence, overloading a drive train generally leads to failure of the flexible coupling element. This behaviour is intentional and protects the entire system from unforeseen damage. Any consequential damage arising from this safety function of the coupling must be considered in advance by the system designer and monitored or eliminated with suitable measures.

# Highly flexible Stromag Periflex® VN Disc Coupling

## Installation instructions and scope of delivery

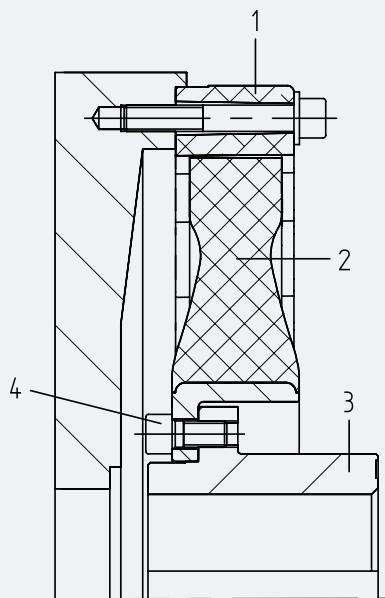
The Stromag Periflex®VN coupling is fitted with a connection ring (1) that allows it to be bolted directly to the engine's flywheel. The hub (3) of the disc tyre (2) is secured to the machine with bolts (4).

The drive and output sides are moved together to the prescribed distance (maybe blind installation), in this situation the tyre's teeth must engage over the entire length of the connection ring.

The maximum displacements can be taken from the dimensions and ratings tables.

### Delivery of the standard version includes:

- 1 = connection ring
- 2 = disc tyre
- 3 = hub
- 4 = bolts



## Storing flexible rubber elements

When stored properly, flexible rubber elements retain their properties over several years. It is essential here that the stored parts are protected against oxygen, ozone, light, heat, moisture, and solvents. Solvents, fuels, lubricants, chemicals, acids, disinfectants, and similar may not be stored in the same room. The storage temperature should not be lower than +10°C and not higher than +25°C.

All UV light sources are harmful and must be avoided. Equipment that generates ozone, e.g. light sources and electric motors, must be kept away from the storage location. The relative air humidity should not exceed 65 %.

Further details can be taken from DIN 7716 und ISO 2230.

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN NR Series output table

Coupling size	Tyre	Nominal torque	Max torque	Adm. alternating torque	Adm. radial displacement	Radial stiffness	Torsional stiffness	Relative damping	Adm. damping power	SAE connection	Max Speed
		T <sub>KN</sub> Nm	T <sub>Kmax</sub> 1) Nm	T <sub>KW</sub> Nm	ΔK <sub>r</sub> mm	C <sub>r</sub> dyn 4) N/mm	C <sub>T</sub> dyn 2) 4) Nm/rad	ψ 2) 4)	P <sub>KV60</sub> 3) 5) W	n <sub>max</sub> rpm	
Periflex® VN 183	VN 18311	160	480	80	0,4	375	1150	0,80	104	6 ½"	5000
	VN 18331	200	480	100		600	1510	0,96	104		
	VN 18321	200	480	100		730	1900	1,00	104		
	VN 18341	200	480	100		900	2240	1,20	104		
	VN 18351	200	480	100		1500	3910	1,30	104		
Periflex® VN 230	VN 23011	250	750	125	0,5	400	1510	0,80	156	8"	4000
	VN 23031	315	750	155		650	2000	0,96	156		
	VN 23021	315	750	155		800	2760	1,00	156		
	VN 23041	315	750	155		950	3260	1,20	156		
	VN 23051	315	750	155		1600	5690	1,30	156		
Periflex® VN 280	VN 28011	400	1200	200	0,6	350	2280	0,80	221	10"	3600
	VN 28031	500	1200	250		750	3300	0,96	221		
	VN 28021	500	1200	250		900	4160	1,00	221		
	VN 28041	500	1200	250		1060	4920	1,20	221		
	VN 28051	500	1200	250		1750	8580	1,30	221		
Periflex® VN 283	VN 28311	630	1900	315	0,6	500	3760	0,80	234	10"	3600
	VN 28331	800	1900	400		1050	5450	0,96	234		
	VN 28321	800	1900	400		1270	7200	1,00	234		
	VN 28341	800	1900	400		1500	8120	1,20	234		
	VN 28351	800	1900	400		2450	14170	1,30	234		
Periflex® VN 350	VN 35011	1000	3000	500	0,7	750	7660	0,80	260	11 ½"	3600
	VN 35031	1250	3000	625		1200	11100	0,96	260		
	VN 35021	1250	3000	625		1500	13990	1,00	260		
	VN 35041	1250	3000	625		1800	16540	1,20	260		
	VN 35051	1250	3000	625		3000	28860	1,30	260		
Periflex® VN 358	VN 35811	1600	4800	800	0,5	3400	16700	0,80	260	11 ½"	3600
	VN 35831	2000	4800	1000		5100	24200	0,96	260		
	VN 35821	2000	4800	1000		6300	33200	1,00	260		
	VN 35841	2000	4800	1000		7650	36060	1,20	260		
	VN 35851	2000	4800	1000		12600	58500	1,30	260		
Periflex® VN 430	VN 43011	1600	4800	800	0,9	660	7800	0,80	494	14"	3000
	VN 43031	2000	4800	1000		1400	11300	0,96	494		
	VN 43021	2000	4800	1000		1700	13900	1,00	494		
	VN 43041	2000	4800	1000		2000	16840	1,20	494		
	VN 43051	2000	4800	1000		3300	29380	1,30	494		
Periflex® VN 433	VN 43311	2500	7500	1250	0,8	1400	18630	0,80	520	14"	3000
	VN 43331	3150	7500	1550		2300	27000	0,96	520		
	VN 43321	3150	7500	1550		2870	34020	1,00	520		
	VN 43341	3150	7500	1550		3450	40230	1,20	520		
	VN 43351	3150	7500	1550		5700	70200	1,30	520		
Periflex® VN 436	VN 43611	4000	12000	2000	0,7	2300	25400	0,80	572	14"	3000
	VN 43631	5000	12000	2500		3800	34600	0,96	572		
	VN 43621	5000	12000	2500		4750	46600	1,00	572		
	VN 43641	5000	12000	2500		5700	53640	1,20	572		
	VN 43651	5000	12000	2500		9400	93600	1,30	572		
Periflex® VN 439	VN 43911	3200	10000	1600	0,7	1750	36230	0,80	390	14"	3000
	VN 43931	4000	10000	2000		2600	52500	0,96	390		
	VN 43941	4000	10000	2000		3900	76000	1,20	390		
	VN 43951	4000	10000	2000		6500	136500	1,30	390		
	VN 43951	4000	10000	2000							
Periflex® VN 544	VN 54411	6300	19000	3150	0,8	3100	62790	0,80	622	18"	2400
	VN 54431	8000	19000	4000		5100	91000	0,96	622		
	VN 54421	8000	19000	4000		7600	114700	1,00	622		
	VN 54441	8000	19000	4000		11400	135600	1,20	622		
	VN 54451	8000	19000	4000		17100	226400	1,30	622		
Periflex® VN 549	VN 54911	8000	17000	4000	0,8	6000	88320	0,80	650	18"	2400
	VN 54931	9000	20000	4500		9000	128000	0,96	650		
	VN 54921	9500	21000	4750		11250	161300	1,00	650		
	VN 54941	11000	22000	5500		13500	204700	1,20	650		
	VN 54951	12000	25000	6000		22000	332800	1,30	650		
Periflex® VN 666	VN 66611	16000	48000	8000	0,8	6100	111800	0,80	1100	21"	1800
	VN 66631	20000	48000	10000		10200	162000	0,96	1100		
	VN 66621	20000	48000	10000		15200	205000	1,00	1100		
	VN 66641	20000	48000	10000		22800	241400	1,20	1100		
	VN 66651	20000	48000	10000		34200	428500	1,30	1100		
Periflex® VN 726	VN 72611	28500	68500	14250	0,8	7080	225000	0,80	1300	24"	1500
	VN 72631	31500	75500	15750		11800	300000	0,96	1300		
	VN 72621	31500	75500	15750		17630	370000	1,00	1300		
	VN 72641	31500	75500	15750		26450	530000	1,20	1300		
	VN 72651	31500	75500	15750		39670	950000	1,30	1300		

# Highly flexible Stromag Periflex® VN Disc Coupling

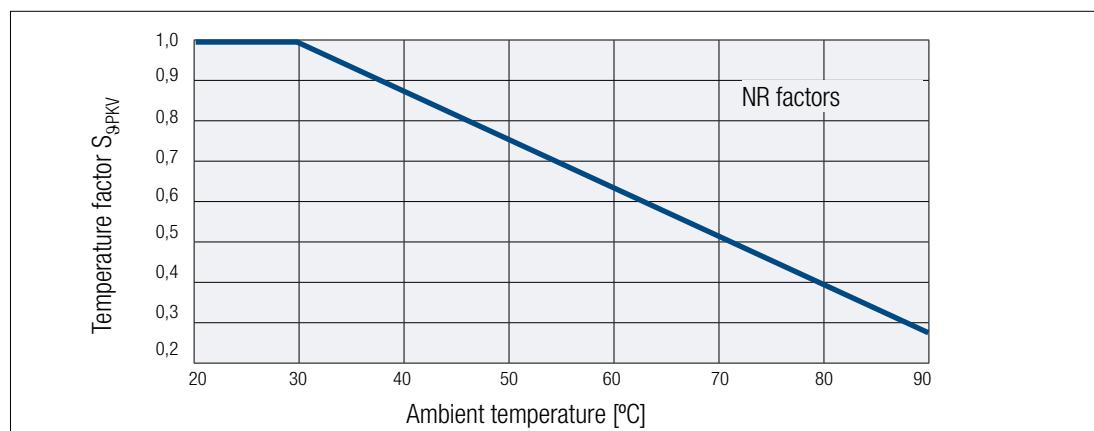
## Stromag Periflex® VP NR Series ratings table

Coupling size	Tyre	Nominal torque	Max torque	Adm. alternating torque	Adm. radial displacement	Radial stiffness	Torsional stiffness	Relative damping	Adm. damping power	SAE connection	Max Speed
		$T_{KN}$ Nm	$T_{Kmax}$ 1) Nm	$T_{KW}$ Nm	$\Delta K_r$ mm	$C_{r,dyn}$ 4) N/mm	$C_{T,dyn}$ 2) 4) Nm/rad	$\psi$ 2) 4)	$P_{KV,60}$ 3) 5) W		$n_{max}$ rpm
<b>Periflex® VP 433</b>	VN 43311	5000	15000	2500	0,8	2800	37260	0,80	1040	18"	2400
	VN 43331	6300	15000	3100		4600	54000	0,96	1040		
	VN 43321	6300	15000	3100		5740	68040	1,00	1040		
	VN 43341	6300	15000	3100		6900	80460	1,20	1040		
	VN 43351	6300	15000	3100		11400	140400	1,30	1040		
<b>Periflex® VP 436</b>	VN 43611	8000	24000	4000	0,7	4600	50800	0,80	1140	18"	2400
	VN 43631	10000	24000	5000		7600	69200	0,96	1140		
	VN 43621	10000	24000	5000		9500	93200	1,00	1140		
	VN 43641	10000	24000	5000		11400	107300	1,20	1140		
	VN 43651	10000	24000	5000		18800	187200	1,30	1140		
<b>Periflex® VP 439</b>	VN 43911	6400	20000	3200	0,7	3500	72460	0,80	780	18"	2400
	VN 43931	8000	20000	4000		5200	105000	0,96	780		
	VN 43941	8000	20000	4000		7800	152000	1,20	780		
	VN 43951	8000	20000	4000		13000	273000	1,30	780		
<b>Periflex® VP 544</b>	VN 54411	12600	38000	6300	0,8	6200	125600	0,80	1240	21"	1800
	VN 54431	16000	38000	8000		10200	182000	0,96	1240		
	VN 54421	16000	38000	8000		15200	229300	1,00	1240		
	VN 54441	16000	38000	8000		22800	271200	1,20	1240		
	VN 54451	16000	38000	8000		34200	452800	1,30	1240		
<b>Periflex® VP 549</b>	VN 54911	16000	34000	8000	0,8	12000	176600	0,80	1300	21"	1800
	VN 54931	18000	40000	9000		18000	256000	0,96	1300		
	VN 54921	19000	42000	9500		22500	322600	1,00	1300		
	VN 54941	22000	44000	11000		27000	400400	1,20	1300		
	VN 54951	24000	50000	12000		44000	665600	1,30	1300		
<b>Periflex® VP 666</b>	VN 66611	32000	96000	16000	0,8	12200	223600	0,80	2200	24"	1800
	VN 66631	40000	96000	20000		20400	324000	0,96	2200		
	VN 66621	40000	96000	20000		30400	410000	1,00	2200		
	VN 66641	40000	96000	20000		45600	482800	1,20	2200		
	VN 66651	40000	96000	20000		68400	857000	1,30	2200		
<b>Periflex® VP 726</b>	VN 72611	57000	137000	28500	0,8	14160	450000	0,80	2600	metrisch	1500
	VN 72631	63000	151000	31500		23600	600000	0,96	2600		
	VN 72621	63000	151000	31500		35260	740000	1,00	2600		
	VN 72641	63000	151000	31500		52900	1060000	1,20	2600		
	VN 72651	63000	151000	31500		79340	1900000	1,30	2600		

1) The values listed in the tables refer to the disc tyre characteristics.

2) For:  $T_w = 0,2 \cdot T_{KN}$ ;  $T = 0,8 \cdot T_{KN}$ ;  $f = 10 \text{ Hz}$ ;  $\vartheta = 30^\circ\text{C}$

3) This value must be reduced by the temperature factor when the coupling temperatures are higher than  $30^\circ\text{C}$ .



4) Tolerances on the materials may be as high as  $\pm 15\%$ .

5)  $P_{KV,60}$  value represents the damping power that can be absorbed over a period of 60 minutes.

The damping power that can be absorbed permanently is  $P_{KV,\infty} = 0,5 \cdot P_{KV,60}$ .

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN ECO Series ratings table

Coupling size	Tyre	Nominal torque	Max torque	Adm. alternating torque	Adm. radial displacement	Radial stiffness	Torsional stiffness	Relative damping	Adm. damping power	SAE connection	Max Speed
		T <sub>KN</sub> Nm	T <sub>Kmax</sub> 1) Nm	T <sub>KW</sub> Nm	ΔK <sub>r</sub> mm	C <sub>r dyn</sub> 4) N/mm	C <sub>T dyn</sub> 2) 4) Nm/rad	ψ 2) 4)	P <sub>KV 60</sub> 3) 5) W		n <sub>max</sub> rpm
<b>Periflex® VN 183</b>	VN 18314 VN 18324	150 200	450 480	75 100	0,4	375 730	1550 3650	0,8 1,0	104 104	6 ½" 8"	5000 4000
<b>Periflex® VN 230</b>	VN 23014 VN 23024	230 315	690 750	120 155	0,5	400 800	1650 4500	0,8 1,0	156 156	8" 7 ½" 10"	4000 4400 3600
<b>Periflex® VN 280</b>	VN 28014 VN 28024	360 500	1100 1200	180 250	0,6	350 900	2600 6200	0,8 1,0	221 221	10" 11 ½"	3600 3600
<b>Periflex® VN 283</b>	VN 28314 VN 28324	570 800	1700 1900	290 400	0,6	500 1270	4100 8300	0,8 1,0	234 234	10" 11 ½"	3600 3600
<b>Periflex® VN 350</b>	VN 35014 VN 35024	1000 1250	3000 3000	500 625	0,7	750 1500	8450 21850	0,8 1,0	260 260	11 ½" 14"	3600 3000
<b>Periflex® VN 358</b>	VN 35814 VN 35824	1400 2000	4200 4800	700 1000	0,5	3400 6300	16800 38200	0,8 1,0	260 260	11 ½" 14"	3600 3000
<b>Periflex® VN 430</b>	VN 43014 VN 43024	1400 2000	4200 4800	700 1000	0,9	660 1700	8200 20800	0,8 1,0	494 494	14" 18"	3000 2400
<b>Periflex® VN 433</b>	VN 43314 VN 43324	2300 3150	6900 7500	1150 1550	0,8	1400 2870	21750 35200	0,8 1,0	520 520	14" 18"	3000 2400
<b>Periflex® VN 436</b>	VN 43614 VN 43624	3600 5000	10800 12000	1800 2500	0,7	2300 4750	34300 53600	0,8 1,0	572 572	14" 16" 18"	3000 2600 2400
<b>Periflex® VN 439</b>	VN 43914 VN 43924	2300 4000	6900 7500	1150 2000	0,7	1750 3300	37500 60950	0,8 1,0	390 390	14" 16" 18"	3000 2600 2400
<b>Periflex® VN 544</b>	VN 54414 VN 54424	5700 8000	17000 19000	2900 4000	0,8	3100 7600	61000 104100	0,8 1,0	622 622	18" 21"	2400 1800
<b>Periflex® VN 549</b>	VN 54914 VN 54924	7200 9000	15300 20000	3600 4500	0,8	6000 11250	81400 141500	0,8 1,0	650 650	18" 21"	2400 1800
<b>Periflex® VN 666</b>	VN 66614 VN 66624	14400 20000	43200 48000	7200 10000	0,8	6100 15200	121500 235800	0,8 1,0	1100 1100	21" 24"	1800 1500

# Highly flexible Stromag Periflex® VN Disc Coupling

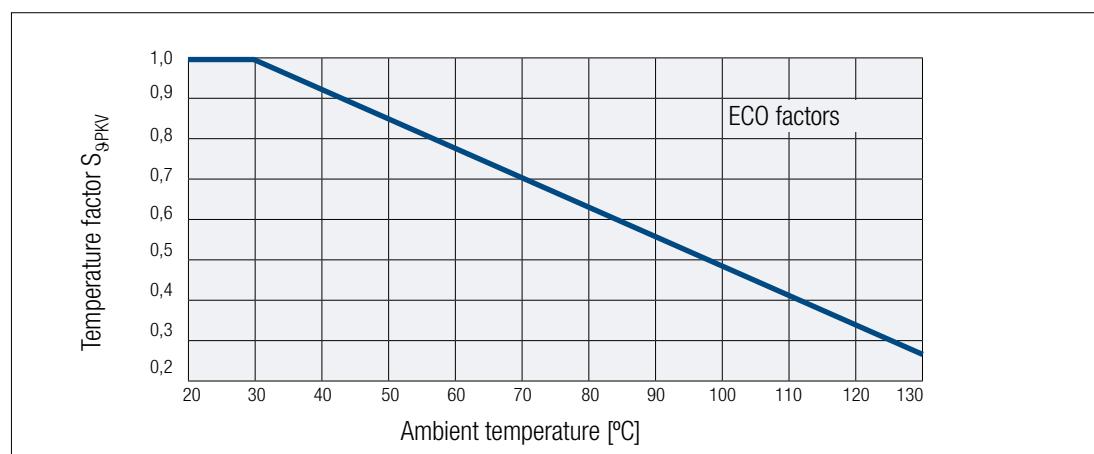
## Stromag Periflex® VP ECO Series ratings table

Coupling size	Tyre	Nominal torque	Max torque	Adm. alternating torque	Adm. radial displacement	Radial stiffness	Torsional stiffness	Relative damping	Adm. damping power	SAE connection	Max Speed
		$T_{KN}$ Nm	$T_{Kmax}$ (1) Nm	$T_{KW}$ Nm	$\Delta K_r$ mm	$C_{r,dyn}$ (4) N/mm	$C_{T,dyn}$ (2) (4) Nm/rad	$\psi$ (2) (4)	$P_{KV60}$ (3) (5) W		$n_{max}$ rpm
Periflex® VP 433	VN 43314 VN 43324	4600 6300	13800 15000	2300 3100	0,8	2800 5740	43500 70400	0,8 1,0	1040 1040	18"	2400
Periflex® VP 436	VN 43614 VN 43624	7200 10000	21600 24000	3600 5000	0,7	4600 9500	68600 107200	0,8 1,0	1140 1140	18"	2400
Periflex® VP 439	VN 43914 VN 43924	4600 8000	13800 15000	2300 4000	0,7	3500 6600	75000 121900	0,8 1,0	780 780	18"	2400
Periflex® VP 544	VN 54414 VN 54424	11400 16000	34000 38000	5800 8000	0,8	6200 15200	122000 208000	0,8 1,0	1240 1240	21"	1800
Periflex® VP 549	VN 54914 VN 54924	14400 18000	30600 40000	7200 9500	0,8	12000 22500	162800 282900	0,8 1,0	1300 1300	21"	1800
Periflex® VP 666	VN 66614 VN 66624	28800 40000	86400 96000	14400 20000	0,8	12200 30400	243000 471500	0,8 1,0	2200 2200	24"	1500

1) The values listed in the tables refer to the disc tyre characteristics.

2) For:  $T_w = 0,2 \cdot T_{KN}$ ;  $T = 0,8 \cdot T_{KN}$ ;  $f = 10 \text{ Hz}$ ;  $\vartheta = 30^\circ\text{C}$

3) This value must be reduced by the temperature factor when the coupling temperatures are higher than  $30^\circ\text{C}$ .



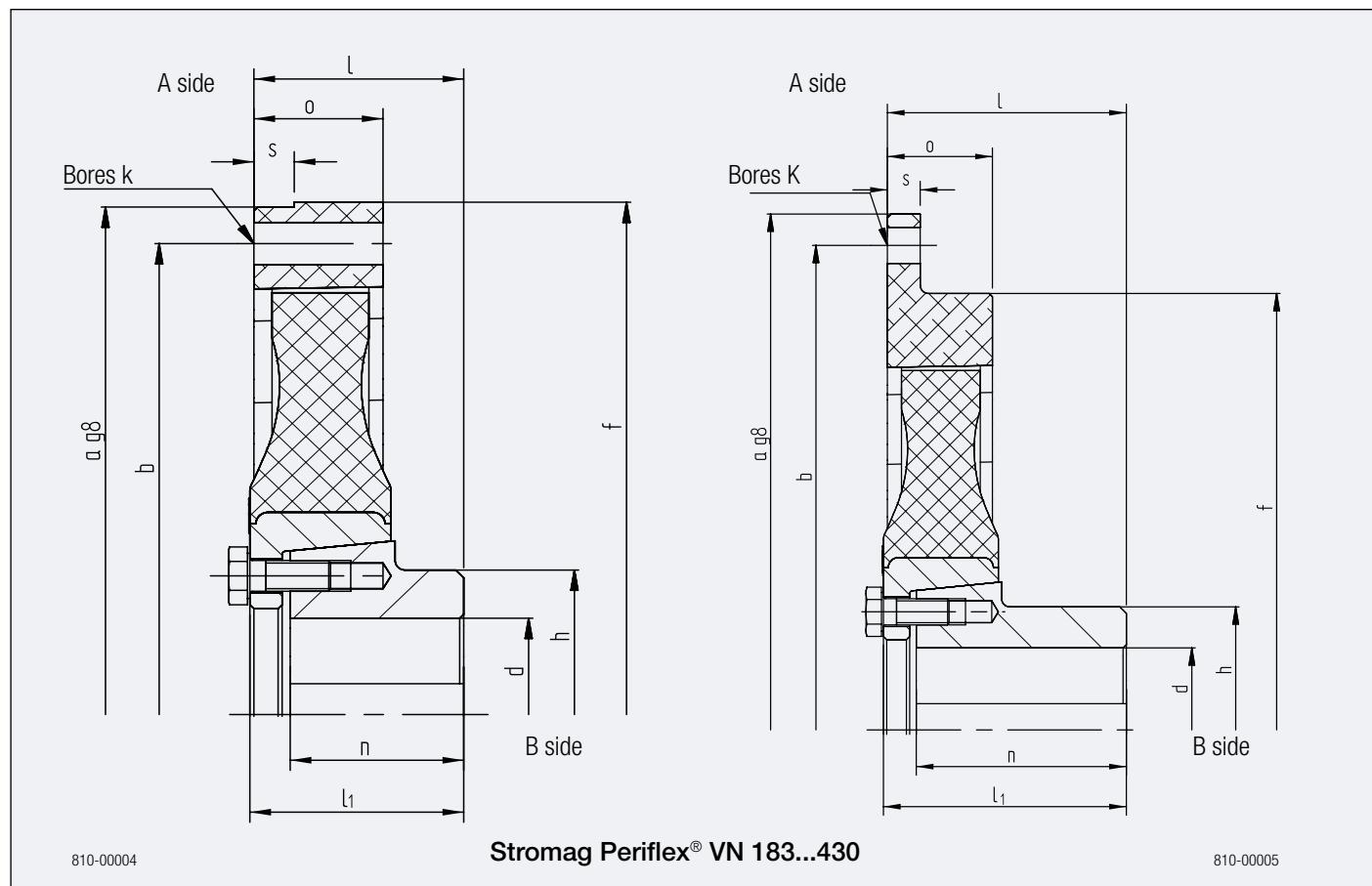
4) Tolerances on the materials may be as high as  $\pm 15\%$ .

5)  $P_{KV60}$  value represents the damping power that can be absorbed over a period of 60 minutes.

The damping power that can be absorbed permanently is  $P_{KV\infty} = 0,5 \cdot P_{KV60}$ .

# **Highly flexible Stromag Periflex® VN Disc Coupling**

## **Stromag Periflex® VN...G Series**



Size		Periflex® VN 183			Periflex® VN 230		Periflex® VN 280		Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430	
Tyre		VN 18311			VN 23011		VN 28011		VN 28311		VN 35011		VN 35811		VN 43011	
		VN 18331			VN 23031		VN 28031		VN 28331		VN 35031		VN 35831		VN 43031	
		VN 18321			VN 23021		VN 28021		VN 28321		VN 35021		VN 35821		VN 43021	
		VN 18341			VN 23041		VN 28041		VN 28341		VN 35041		VN 35841		VN 43041	
		VN 18351			VN 23051		VN 28051		VN 28351		VN 35051		VN 35851		VN 43051	
SAE Connection		6½"	7½"	8"	8"	10"	10"	11½"	10"	11½"	11½"	14"	11½"	14"	14"	18"
Diameter mm	a	215,9	241,3	263,5	263,5	314,4	314,4	352,4	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5
	b	200	222,3	244,5	244,5	295,3	295,3	333,4	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9
	d <sub>max</sub>	45	45	45	50	50	60	60	70	70	85	85	95	95	95	95
	f	218	218	218	266	266	316	316	316	316	355	355	355	355	468	468
	h	70	70	70	75	75	90	90	98	98	119	119	132	132	132	132
Bore k mm		6x9	8x9	6x11	6x11	8x11	8x11	8x11	8x11	8x11	8x11	8x13,5	8x11	8x13,5	8x13,5	6x17,5
Lengths mm	<sup>1)</sup>	40	40	52	52	72,8	72,8	106,6	72,8	106,6	106,6	92,4	106,6	92,4	92,4	82,7
	<sub>1</sub>	45	45	57	53	74	76	110	—*	—*	—*	—*	—*	—*	—*	—*
	n	35	35	47	43	64	65	99	82	105	105	105	105	105	105	105
	o	25	25	25	32	32	40	40	40	40	55	55	55	55	54	80
	s	8	8	8	10	10	10	10	10	10	10	12	10	12	15	20
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	0,0076	0,0103	0,0134	0,0203	0,0329	0,0429	0,0574	0,0485	0,0625	0,0818	0,2033	0,0842	0,1915	0,2945	0,7205
	J <sub>B</sub> side <sup>2)</sup>	0,0036	0,0036	0,0038	0,0079	0,0083	0,0186	0,0199	0,0235	0,0245	0,0547	0,0546	0,0855	0,0849	0,1265	0,1255
Mass kg <sup>2)</sup>		2,7	2,59	3,3	4,2	5,2	7,0	8,5	7,6	8,9	13,4	15,7	15,8	17,7	19,8	26,4

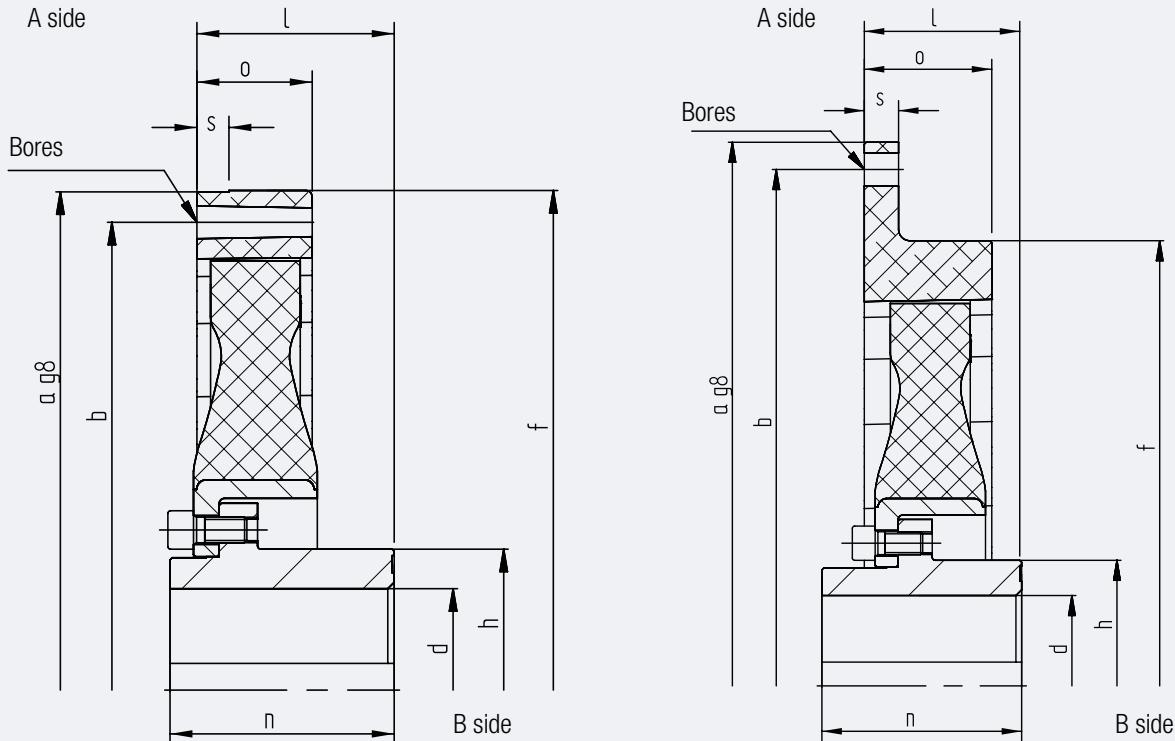
**\*)** Dim I, not applicable on this version

1) Dim I can be modified by moving the connection ring within specified tolerances

- 1) Dim. I can be in
- 2) at max bore d.

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...G Series



810-00000

### Stromag Periflex® VN 283...726

810-00001

Size		Periflex® VN 433		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544		Periflex® VN 549		Periflex® VN 666		Periflex® VN 726	
Tyre		VN 43311		VN 43611			VN 43911			VN 54411		VN 54911		VN 66611		VN 72611	
		VN 43331		VN 43631			VN 43931			VN 54431		VN 54931		VN 66631		VN 72631	
		VN 43321		VN 43621			-			VN 54421		VN 54921		VN 66621		VN 72621	
		VN 43341		VN 43641			VN 43941			VN 54441		VN 54941		VN 66641		VN 72641	
		VN 43351		VN 43651			VN 43951			VN 54451		VN 54951		VN 66651		VN 72651	
SAE Connection		14"	18"	14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	24"	
Diameter mm	a	466,7	571,5	466,7	517,5	571,5	466,7	517,5	571,5	571,5	673,1	571,5	673,1	673,1	733,4	733,4	
	b	438,2	542,9	438,2	489	542,9	438,2	489	542,9	542,9	641,4	542,9	641,4	641,4	692,2	692,2	
	d <sub>max</sub>	110	110	120	120	120	130	130	130	160	160	180	180	190	250		
	f	468	468	468	468	468	-	455	455	572	572	572	572	692	761		
	h	154	154	168	168	168	185	185	185	225	225	300	300	270	350		
Bore k mm		8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20	24x20		
Lengths mm	I <sup>1)</sup>	92,4	82,7	92,4	130,7	130,7	92,4	130,7	130,7	140	130,7	140	213	213	295		
	I <sub>1</sub>	-*	-*	-*	135	135	-*	-*	-*	-*	-*	-*	-*	-*	-*		
	n	105	105	105	130	130	105	130	130	130	130	130	150	190	190		
	o	80	80	80	80	80	65	70	70	90	140	90	140	142	142		
	s	15	20	15	20	20	8	25	25	20	25	15	25	15	31		
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	0,353	0,679	0,375	0,528	0,701	0,253	0,512	0,748	1,023	2,254	1,009	2,055	3,608	4,865		
	J <sub>B</sub> side <sup>2)</sup>	0,230	0,229	0,306	0,320	0,320	0,315	0,333	0,333	0,890	0,852	1,299	1,324	2,578	6,296		
Mass kg <sup>2)</sup>		28,7	33,4	33,4	38,4	40,7	30,9	38,8	42	62,2	75,6	77,2	91,7	131,5	136,3		

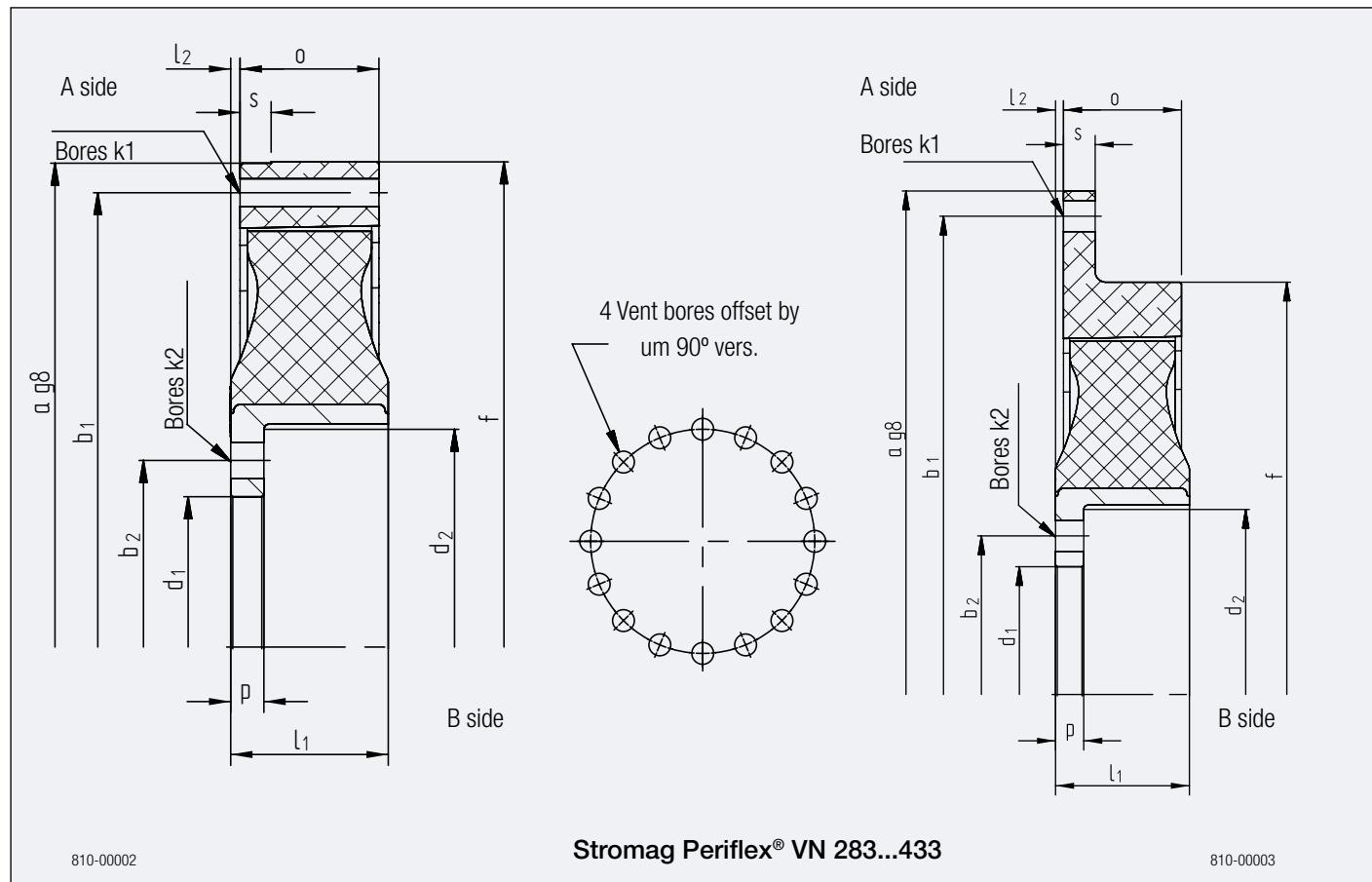
\*) Dim I<sub>1</sub> not applicable on this version

1) Dim. I can be modified by moving the connection ring within specified tolerances

2) at max. bore d

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...G/ON Series



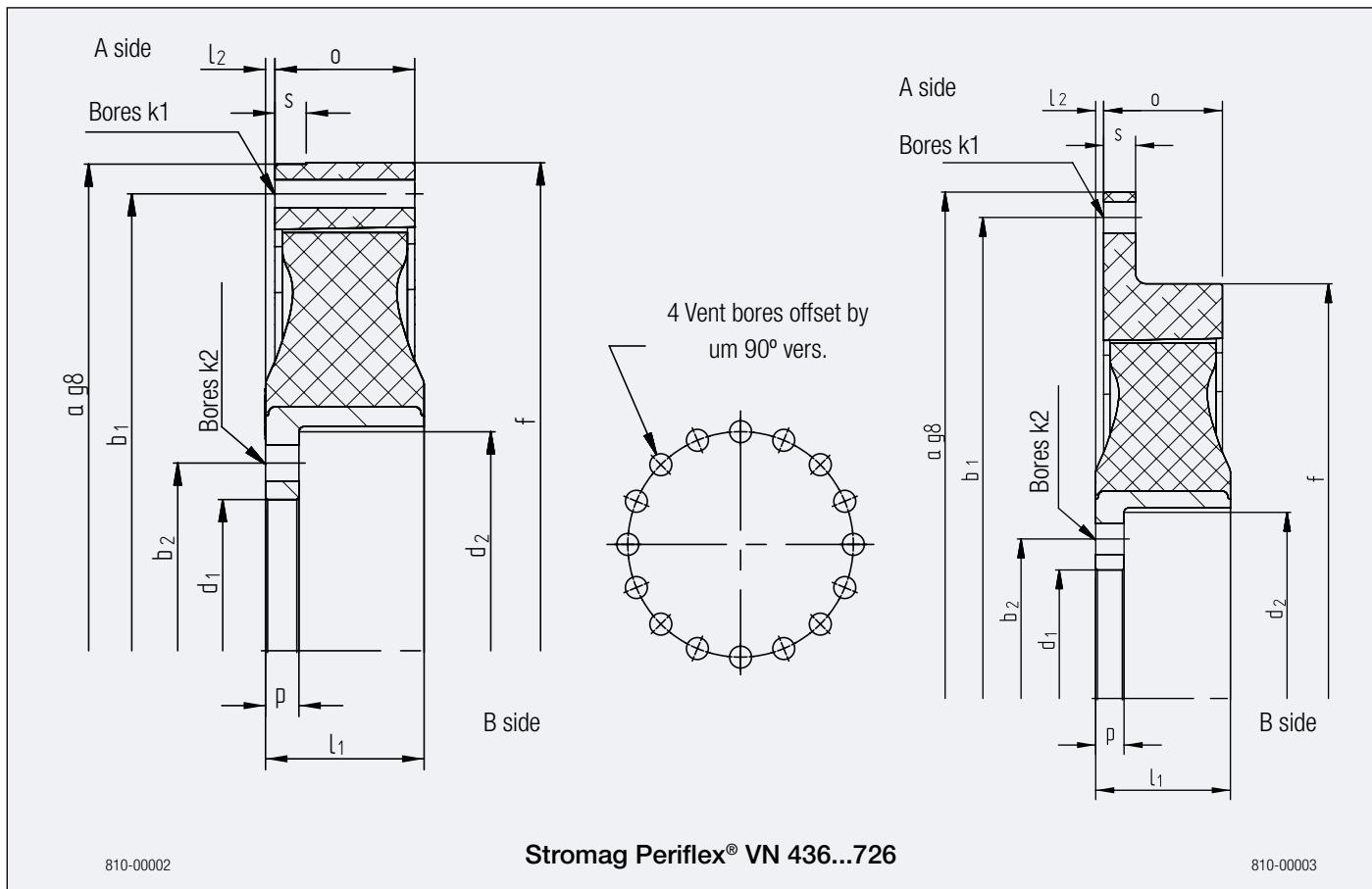
810-00002

810-00003

Size		Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430		Periflex® VN 433	
Tyre		VN 28311		VN 35011		VN 35811		VN 43011		VN 43311	
		VN 28331		VN 35031		VN 35831		VN 43031		VN 43331	
		VN 28321		VN 35021		VN 35821		VN 43021		VN 43321	
		VN 28341		VN 35041		VN 35841		VN 43041		VN 43341	
		VN 28351		VN 35051		VN 35851		VN 43051		VN 43351	
SAE Connection		10"	11½"	11½"	14"	11½"	14"	14"	18"	14"	18"
Diameter mm	a	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5	466,7	571,5
	b <sub>1</sub>	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9	438,2	542,9
	b <sub>2</sub>	117	117	140	140	150	150	150	150	180	180
	d <sub>1</sub>	95	95	115	115	125	125	125	125	145	145
	d <sub>2</sub>	133	133	165	165	205	205	175	175	210	210
	f	316	316	355	355	355	355	468	468	468	468
Bore k <sub>1</sub> mm	k <sub>2</sub>	8x11 16x11	8x11 16x11	8x11 16x13,5	8x13,5 16x13,5	8x11 20x13,5	8x13,5 20x13,5	8x13,5 20x13,5	6x17,5 20x13,5	8x13,5 16x17,5	6x17,5 16x17,5
Lengths mm	l <sub>1</sub>	40	40	44	44	48	48	58	58	76	76
	l <sub>2</sub>	—	—	—	—	—	—	—	—	4,5	4,5
	o	40	40	55	55	55	55	54	67	80	80
	p	10	10	12	12	12	12	12	12	16	16
	s	10	10	10	12	10	12	15	18	15	18
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side	0,0485 0,0172	0,0625 0,0172	0,0998 0,0365	0,2030 0,0365	0,1000 0,0584	0,2010 0,0584	0,2905 0,1005	0,6345 0,1005	0,419 0,182	0,747 0,182
Mass kg		4,8	5,38	7,0	9,4	9,0	11,4	13,1	18,5	19,8	24,0

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...G/ON Series



Stromag Periflex® VN 436...726

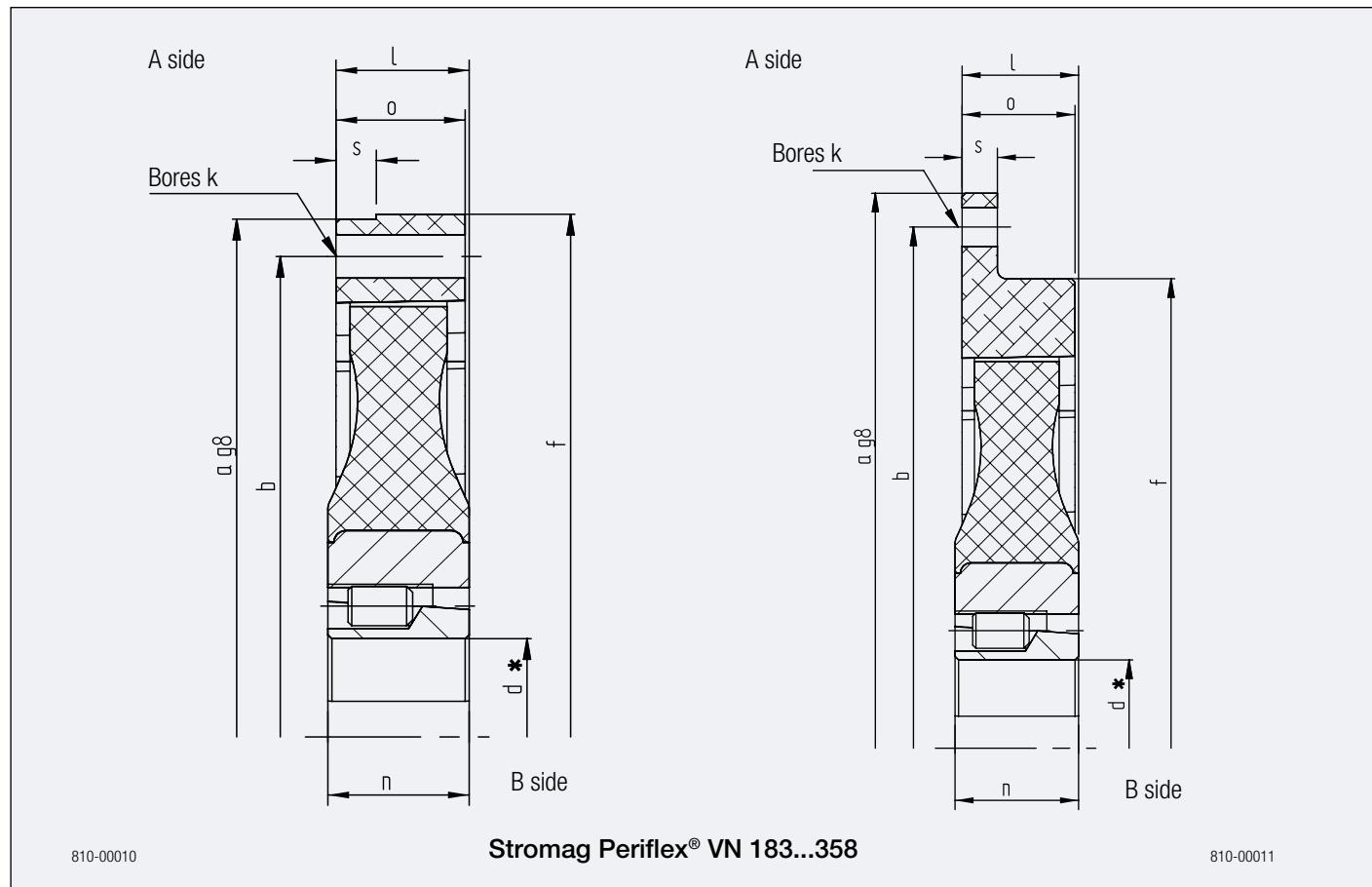
810-00003

Size		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544		Periflex® VN 549		Periflex® VN 666		Periflex® VN 726	
Tyre		VN 43611			VN 43911			VN 54411		VN 54911		VN 66611		VN 72611	
SAE Connection		14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	24"	
Diameter mm	a	466,7	517,5	571,5	466,7	517,5	571,5	571,5	673,1	571,5	673,1	673,1	733,4	733,4	
	b <sub>1</sub>	438,2	489	542,9	438,2	489	542,9	542,9	641,4	542,9	641,4	641,4	692,2	692,2	
	b <sub>2</sub>	190	190	220	220	220	220	270	270	270	270	320	320	398	
	d <sub>1</sub>	155	155	185	185	185	185	230	230	230	230	275	275	330	
	d <sub>2</sub>	220	220	250	250	250	250	296	296	300	300	364	364	42	
	f	468	468	464	455	455	572	572	572	572	572	692	692	761	
Bore mm	k <sub>1</sub>	8x13,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20	24x20	
	k <sub>2</sub>	20x17,5	20x17,5	20x17,5	12x22	12x22	12x22	24x17,5	24x17,5	24x22	24x22	24x22	24x22	30x21*	
Lengths mm	l <sub>1</sub>	90	90	90	63	63	63	100	100	87,5	87,5	126,5	126,5	150	
	l <sub>2</sub>	5,0	5,0	5,0	—	—	—	5,0	5,0	—	—	—	—	—	
	o	80	80	80	65	70	70	90	140	90	140	142	142	174	
	p	16	16	16	18	18	18	22	22	22,5	22,5	30	30	36	
	s	15	20	20	8	25	25	20	25	20	25	15	31	16	
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	0,442	0,579	0,753	0,253	0,512	0,748	1,095	2,155	1,101	2,161	3,608	4,095	4,865	
	J <sub>B</sub> -side	0,243	0,243	0,243	0,202	0,202	0,202	0,560	0,560	0,742	0,742	1,703	1,703	3,616	
Mass kg		23,9	26,3	28,5	16,35	21,4	24,6	36,2	48,2	40,1	52,1	77,1	80,9	107,5	

\*) contains 2 vent. bores

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...S Series



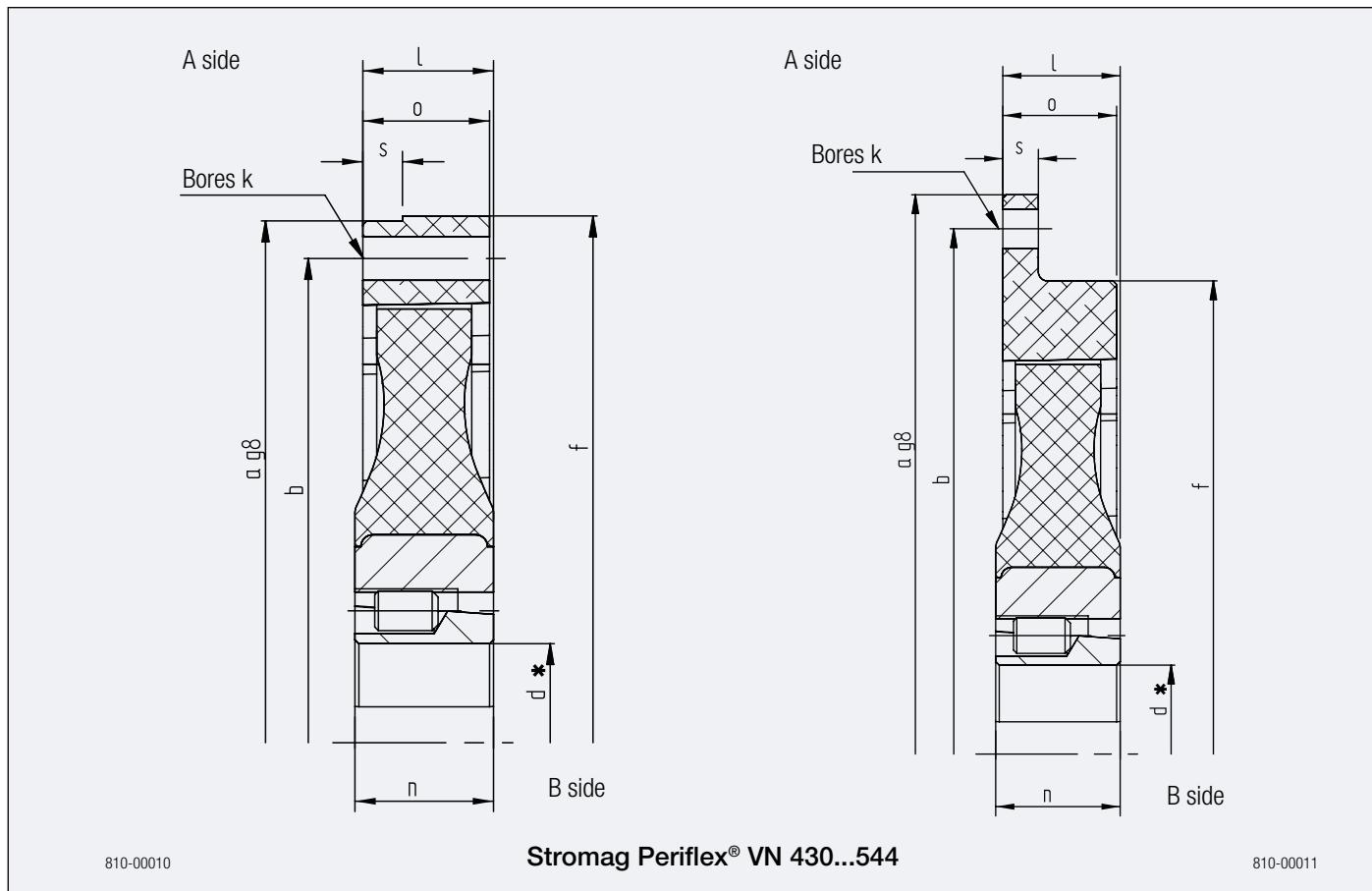
810-00010

810-00011

Size		Periflex® VN 183			Periflex® VN 230			Periflex® VN 280			Periflex® VN 283			Periflex® VN 350			Periflex® VN 358		
Tyre		VN 18311			VN 23011			VN 28011			VN 28311			VN 35011			VN 35811		
SAE Connection		6½"	7½"	8"	8"	10"	10"	11½"	10"	11½"	10"	11½"	11½"	14"	11½"	14"			
Clamping bush		2012	2012	2012	2012	2012	2517	2517	3020	3020	3020	3020	3020	3525	3525	3525			
Diameter mm	a	215,9	241,3	263,5	263,5	314,4	314,4	352,4	314,4	352,4	314,4	352,4	466,7	352,4	466,7				
	b	200	222,3	244,5	244,5	295,3	295,3	333,4	295,3	333,4	295,3	333,4	438,2	333,4	438,2				
	d*	50	50	50	50	60	60	75	75	75	75	75	95	95	95				
	f	218	218	218	266	266	316	316	316	316	316	355	355	355	355				
Bore k mm		6x9	8x9	6x11	6x11	8x11	8x11	8x11	8x11	8x11	8x11	8x11	8x13,5	8x11	8x13,5				
Lengths mm	<sup>1)</sup>	30	30	30	34	34	44	41,5	51	51	56,5	56,5	67	67	67				
	n	31,8	31,8	31,8	31,8	31,8	45	45	51	51	51	51	64	64	64				
	o	25	25	25	32	32	40	40	40	40	40	55	55	55	55				
	s	8	8	8	10	10	10	10	10	10	10	12	10	10	12				
Mass moment of inertia kg m²	J <sub>A</sub> side	0,0076	0,0103	0,0134	0,0203	0,0329	0,0483	0,0621	0,0485	0,0625	0,0818	0,2030	0,0842	0,2040	0,1220				
J <sub>B</sub> side		0,0032	0,0032	0,0032	0,0076	0,0076	0,0166	0,0166	0,0235	0,0235	0,0559	0,1143							
Mass kg		2,29	2,59	2,78	3,97	4,97	5,67	6,1	6,6	7,2	11,2	14,2	16,4	20,3					
d* max. bore of the taper lock bushing																			
1) Dim. I can be modified by moving the connection ring within specified tolerances																			

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...S Series



810-00010

810-00011

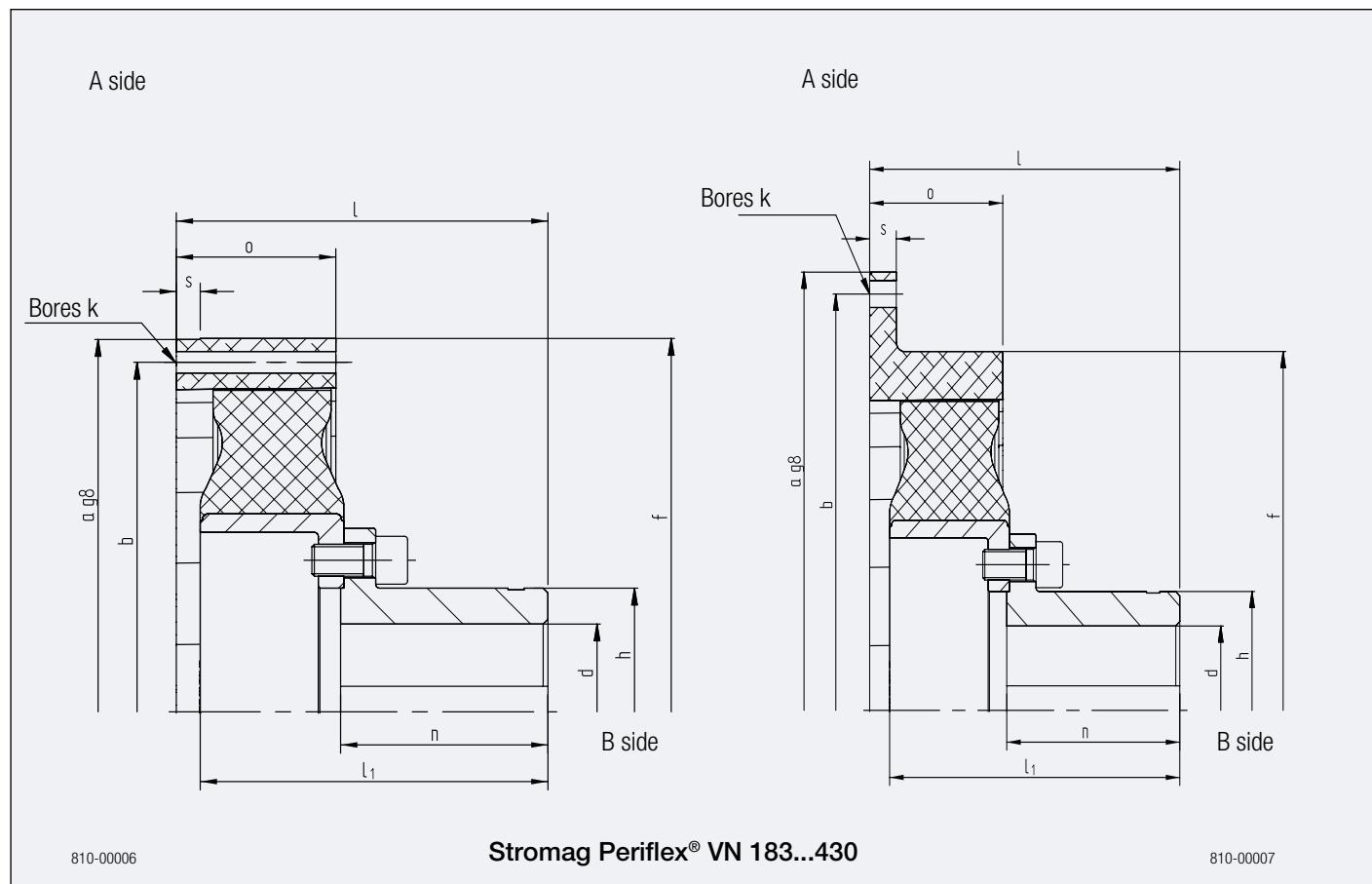
Size		Periflex® VN 430		Periflex® VN 433		Periflex® VN 436		Periflex® VN 544	
Tyre		VN 43011		VN 43311		VN 43611		VN 54411	
		VN 43031		VN 43331		VN 43631		VN 54431	
		VN 43021		VN 43321		VN 43621		VN 54421	
		VN 43041		VN 43341		VN 43641		VN 54441	
		VN 43051		VN 43351		VN 43651		VN 54451	
SAE Connection		14"	18"	14"	18"	14"	16"	18"	21"
Clamping bush		3535	3535	4030	4030	4535	4535	5040	5040
Diameter mm	a b d* f	466,7 436,2 90 468	571,5 542,9 90 468	466,7 438,2 110 468	571,5 542,9 110 468	466,7 438,2 125 468	517,5 489 125 468	571,5 542,9 125 468	571,5 542,9 125 572
Bore k mm		8x13,5	6x17,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5
Lengths mm	I <sup>1)</sup> n o s	87,5 89 54 15	100 89 80 20	78 76 80 15	78 76 80 20	85 90 80 15	85 90 80 20	99,5 102 105 20	99,5 102 140 25
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side	0,2905 0,1425	0,7205 0,1425	0,419 0,264	0,747 0,264	0,442 0,356	0,579 0,356	0,753 0,356	1,235 1,086
Mass kg		20,7	27,7	30,6	35,5	36	38,4	40,6	73,0

d\* max. bore of the taper lock bushing

1) Dim. I can be modified by moving the connection ring within specified tolerances

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...R Series



810-00006

810-00007

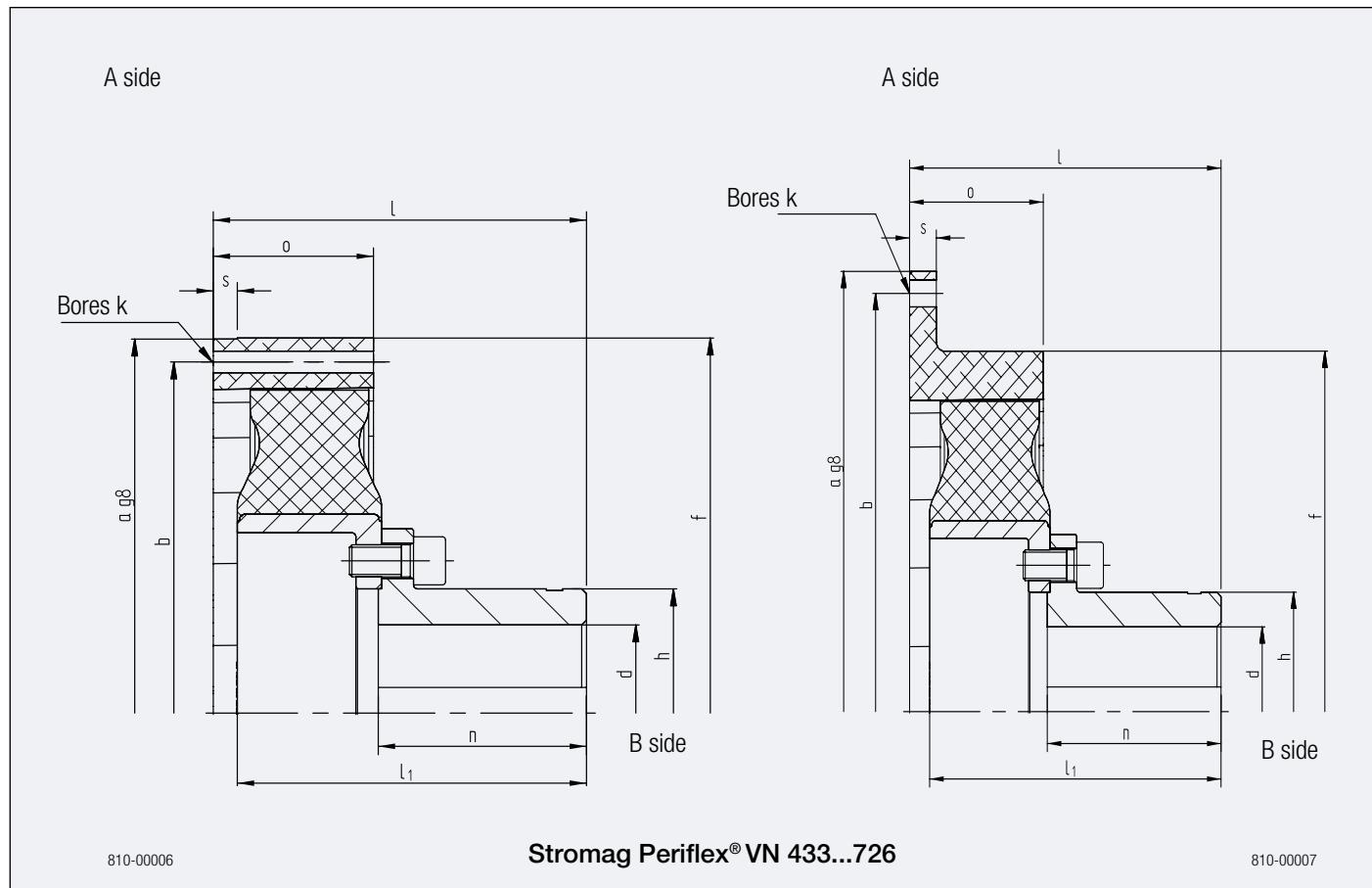
Size		Periflex® VN 183			Periflex® VN 230		Periflex® VN 280		Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430	
Tyre		VN 18311			VN 23011		VN 28011		VN 28311		VN 35011		VN 35811		VN 43011	
		VN 18331			VN 23031		VN 28031		VN 28331		VN 35031		VN 35831		VN 43031	
		VN 18321			VN 23021		VN 28021		VN 28321		VN 35021		VN 35821		VN 43021	
		VN 18341			VN 23041		VN 28041		VN 28341		VN 35041		VN 35841		VN 43041	
		VN 18351			VN 23051		VN 28051		VN 28351		VN 35051		VN 35851		VN 43051	
SAE-Connection		6½"	7½"	8"	8"	10"	10"	11½"	10"	11½"	11½"	14"	11½"	14"	14"	18"
Diameter mm	a	215,9	241,3	263,5	263,5	314,4	314,4	352,4	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5
	b	200	222,3	244,5	244,5	295,3	295,3	333,4	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9
	d <sub>max</sub>	43	43	43	50	50	55	55	65	65	80	80	85	85	85	85
	f	218	218	218	266	266	316	316	316	316	355	355	355	355	468	468
	h	61	61	61	70	70	75	75	90	90	112	112	120	120	120	120
Bore k mm		6x9	8x9	6x11	6x11	8x11	8x11	8x11	8x11	8x11	8x11	8x13,5	8x11	8x13,5	8x13,5	6x17,5
Lengths mm	<sup>1)</sup>	108	108	113	113	125	125	158	158	160	160	170	170	178	178	178
	l <sub>1</sub>	93	93	93	98	98	110	110	156	156	147	147	164	164	161	161
	n	60	60	65	65	70	70	105	105	105	105	105	105	105	105	105
	o	45	45	45	48,5	48,5	55	55	55	40	55	55	55	55	80	80
	s	8	8	8	10	10	10	10	10	10	10	10	12	12	15	20
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	0,0125	0,0429	0,0539	0,0286	0,097	0,0617	0,1421	0,0634	0,0625	0,0998	0,1980	0,1028	0,2063	0,3925	0,7205
	J <sub>B</sub> side <sup>2)</sup>	0,0036	0,0036	0,0036	0,008	0,008	0,0173	0,0173	0,0248	0,0248	0,0533	0,0533	0,0870	0,0870	0,1225	0,1225
Mass kg <sup>2</sup>		3,3	4,75	5,8	4,8	7,8	7,2	10,0	9,1	9,9	13,1	15,5	16,5	18,9	21,4	26,3

1) Dim. l can be modified by moving the connection ring within specified tolerances

2) at max. bore d

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...R Series



810-00006

810-00007

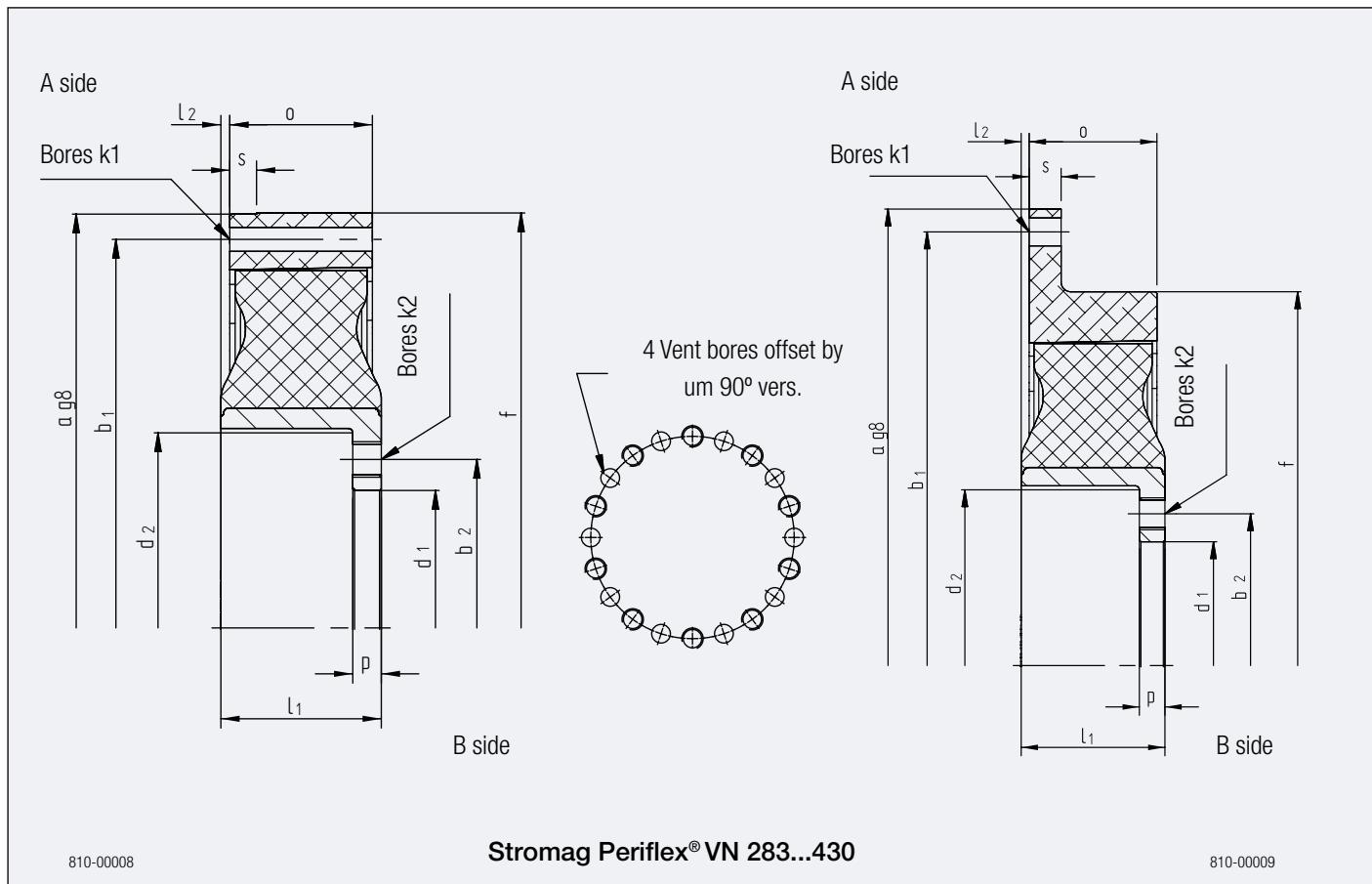
Size		Periflex® VN 433		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544		Periflex® VN 549		Periflex® VN 666		Periflex® VN 726	
Tyre		VN 43311			VN 43611			VN 43911			VN 54411		VN 54911		VN 66611		VN 72611
		VN 43331			VN 43631			VN 43931			VN 54431		VN 54931		VN 66631		VN 72631
		VN 43321			VN 43621			VN 43941			VN 54421		VN 54921		VN 66621		VN 72621
		VN 43341			VN 43641			VN 43951			VN 54441		VN 54941		VN 66641		VN 72641
		VN 43351			VN 43651						VN 54451		VN 54951		VN 66651		VN 72651
SAE Connection		14"	18"	14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	24"	
Diameter mm	a b $d_{max}$ f h	466,7 438,2 100 468 145	571,5 542,9 100 468 145	466,7 438,2 110 468 155	517,5 542,9 110 468 155	571,5 542,9 130 468 182	466,7 438,2 130 468 182	517,5 542,9 130 468 182	571,5 542,9 130 455 182	571,5 542,9 160 455 182	673,1 641,4 160 572 225	571,5 542,9 150 572 220	673,1 641,4 150 572 220	673,1 641,4 190 592 270	733,4 692,2 250 761 350	733,4 692,2 250 761 350	
Bore k mm		8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0	24x20,0		
Lenghts mm	<sup>1)</sup> l <sub>1</sub> n o s	209 199 125 80 15	209 199 125 80 20	233 218 130 100 15	233 218 130 100 20	207 188 130 105 15	227 208 150 120 25	227 208 150 120 25	319,5 306 210 105 15	319,5 306 210 105 25	307 293,5 210 105 20	307 293,5 210 105 25	325 310 210 105 20	325 310 190 142 15	427 404 260 174 16	427 404 260 174 16	
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side <sup>2)</sup>	0,419 0,241	0,747 0,241	0,522 0,320	0,661 0,320	0,850 0,320	0,569 0,342	0,686 0,342	0,922 1,024	1,235 1,024	1,917 1,162	1,241 1,162	1,923 1,162	3,608 2,623	4,208 2,623	4,865 6,447	
Mass kg <sup>2)</sup>		32,2	37,1	38,6	41,0	43,5	39,9	43,9	47,1	78,6	51,2	80,6	88,2	133,2	138,0	218,0	

1) Dim. l can be modified by moving the connection ring within specified tolerances

2) at max. bore d

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...R/ON Series



810-00008

### Stromag Periflex® VN 283...430

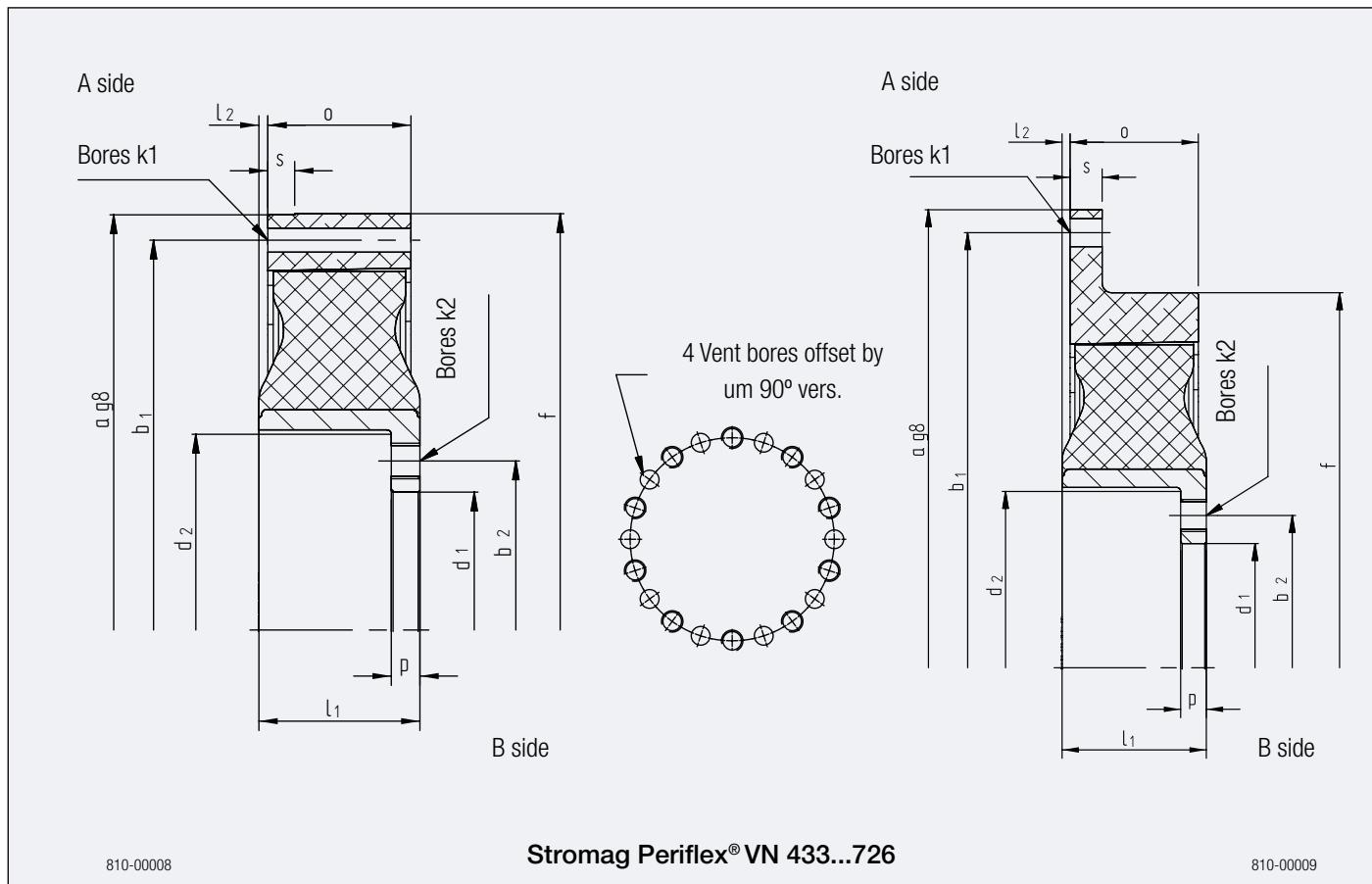
810-00009

Size		Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430	
Tyre		VN 28311 VN 28331 VN 28321 VN 28341 VN 28351		VN 35011 VN 35031 VN 35021 VN 35041 VN 35051		VN 35811 VN 35831 VN 35821 VN 35841 VN 35851		VN 43011 VN 43031 VN 43021 VN 43041 VN 43051	
SAE Conenction		10"	11½"	11½"	14"	11½"	14"	14"	18"
Durchmesser mm	a	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5
	b <sub>1</sub>	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9
	b <sub>2</sub>	117	117	140	140	150	150	150	150
	d <sub>1</sub>	95	95	115	115	125	125	125	125
	d <sub>2</sub>	140	140	170	170	175	175	180	180
	f	316	316	355	355	355	355	468	468
Bore mm	k <sub>1</sub> k <sub>2</sub>	8x11 8xM14	8x11 8xM14	8x11 12xM16	8x13,5 12xM16	8x11 10xM16*	8x13,5 10xM16*	8x13,5 10xM16	6x17,5 10xM16
Lengths mm	l <sub>1</sub> l <sub>2</sub> o p s	40 — 40 10 10	40 — 40 10 10	44 — 55 12 12	44 — 55 12 12	48 — 55 12 10	48 — 55 12 12	58 — 70 12 15	58 — 70 12 18
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side	0,0485 0,0172	0,0630 0,0172	0,0970 0,0365	0,1980 0,0365	0,1000 0,0580	0,2010 0,5800	0,3545 0,1005	0,6345 0,1005
Mass kg		4,8	5,4	7,6	10,0	9,0	11,4	14,4	18,5

\*) contains 5 vent bores

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...R/ON Series



810-00008

### Stromag Periflex® VN 433...726

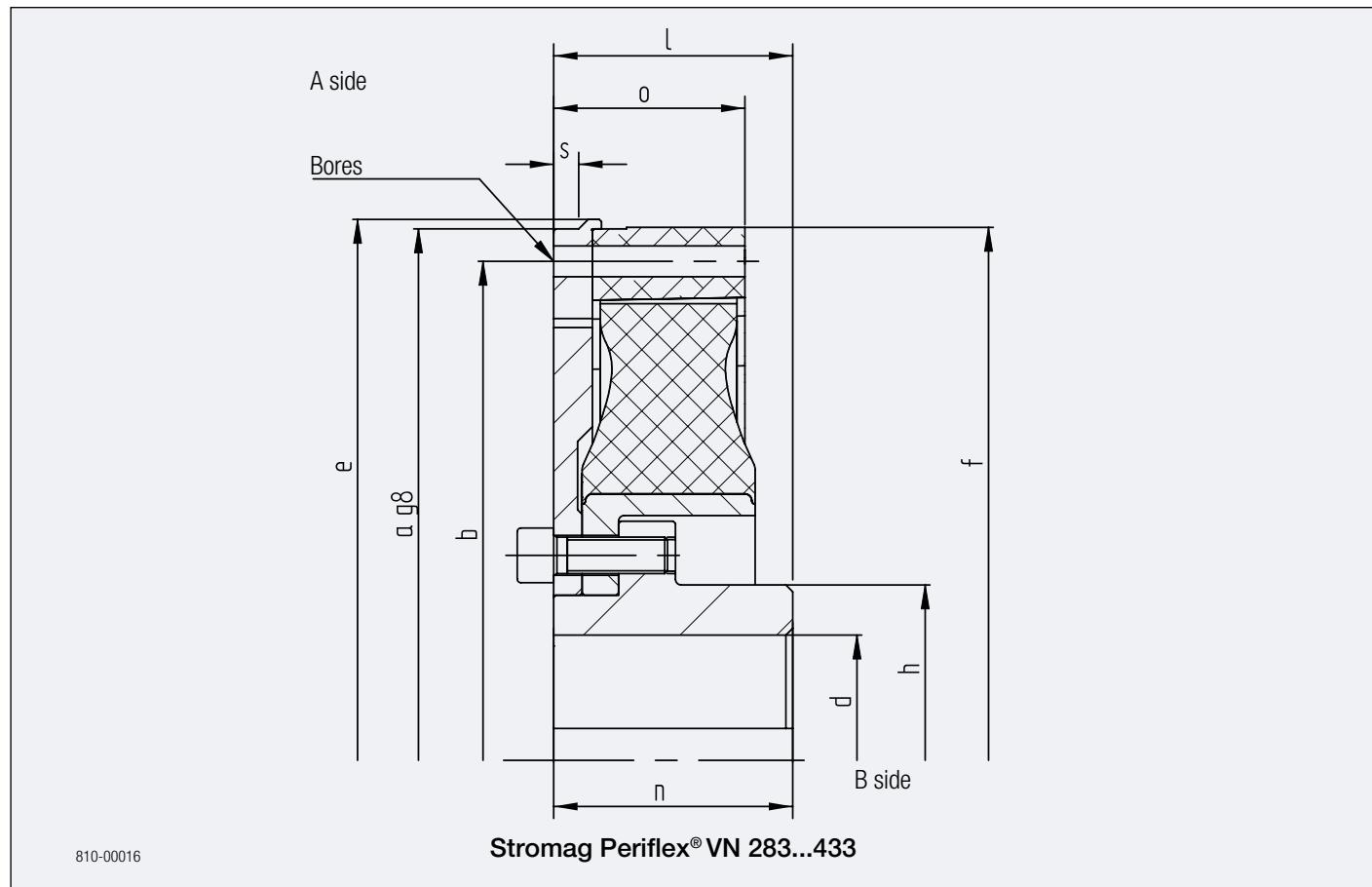
810-00009

Size		Periflex® VN 433		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544			Periflex® VN 549		Periflex® VN 666		Periflex® VN 726	
Tyre		VN 43311			VN 43611			VN 43911			VN 54411			VN 54911		VN 66611		VN 72611
		VN 43331			VN 43631			VN 43931			VN 54431			VN 54931		VN 66631		VN 72631
		VN 43321			VN 43621			VN 43941			VN 54421			VN 54921		VN 66621		VN 72621
		VN 43341			VN 43641			VN 43951			VN 54441			VN 54941		VN 66641		VN 72641
		VN 43351			VN 43651			VN 43951			VN 54451			VN 54951		VN 66651		VN 72651
SAE Conenction		14"	18"	14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	24"		
Durchmesser mm	a	466,7	571,5	466,7	517,5	571,5	466,7	517,5	571,5	571,5	673,1	571,5	673,1	673,1	733,4	733,4		
	$b_1$	438,2	542,9	438,2	489	542,9	438,2	489	542,9	542,9	641,4	542,9	641,4	641,4	692,2	692,2		
	$b_2$	180	180	190	190	190	220	220	220	270	270	270	270	320	398			
	$d_1$	145	145	155	155	155	185	185	185	230	230	230	230	275	330			
	$d_2$	215	215	230	230	230	253	253	253	310	310	310	310	364	442			
	f	468	468	468	468	468	468	455	455	572	572	572	572	692	761			
Bore mm	$k_1$	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0	24x20			
	$k_2$	12xM20	12xM20	10xM20	10xM20	10xM20	8xM20	8xM20	20xM20	20xM20	20xM20	20xM20	20xM20	20xM27	28xM24*			
Lengths mm	$l_1$	76	76	90	90	90	63	63	100	100	87,5	87,5	126,5	126,5	150			
	$l_2$	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	$o$	80	80	100	100	100	105	120	120	105	105	105	142	142	174			
	$p$	16	16	16	16	16	18	18	22	22	22,5	22,5	30	30	36			
	$s$	15	20	15	20	15	20	15	25	15	25	20	15	31	16			
Mass moment of inertia kg m <sup>2</sup>	$J_A$ side	0,421	0,732	0,522	0,661	0,850	0,569	0,686	0,922	1,235	1,917	1,241	1,923	3,608	4,208	4,865		
	$J_B$ side	0,182	0,182	0,243	0,243	0,243	0,202	0,202	0,560	0,560	0,560	0,742	0,742	1,703	1,703	3,796		
Mass kg		20,6	25,2	25,5	26,9	31,2	23,1	25,1	28,3	37,7	45,1	41,5	49,0	77,1	81,9	112,1		

\*) contains 2 vent bores

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...GB Series

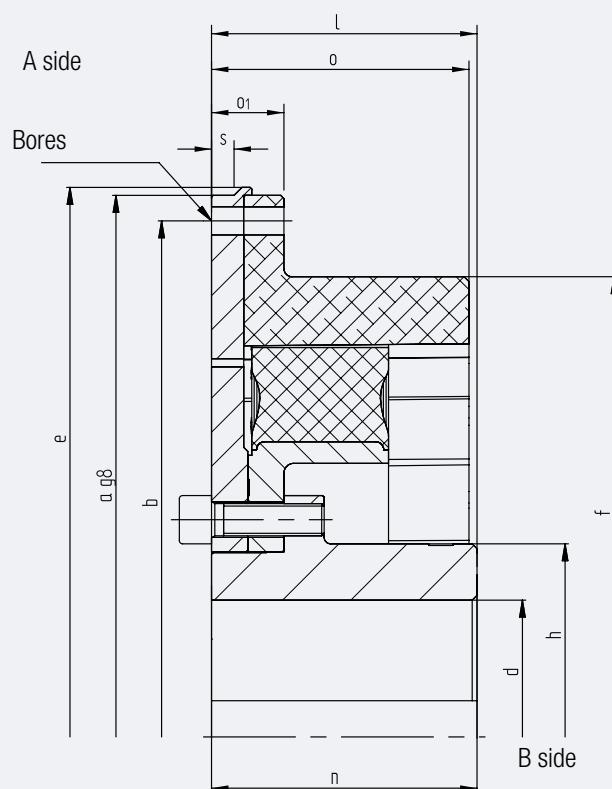


810-00016

Size		Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430		Periflex® VN 433	
Tyre		VN 28311		VN 35011		VN 35811		VN 43011		VN 43311	
		VN 28331		VN 35031		VN 35831		VN 43031		VN 43331	
		VN 28321		VN 35021		VN 35821		VN 43021		VN 43321	
		VN 28341		VN 35041		VN 35841		VN 43041		VN 43341	
		VN 28351		VN 35051		VN 35851		VN 43051		VN 43351	
SAE Connection		10"	11½"	11½"	14"	11½"	14"	14"	18"	14"	18"
Diameter mm	a	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5	466,7	571,5
	d <sub>max</sub>	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9	438,2	542,9
	e	70	70	85	85	95	95	95	110	110	110
	f	316	360	360	475	360	475	475	580	475	—
	h	316	316	355	355	355	355	468	468	468	468
		98	98	119	119	132	132	132	132	154	154
Bore k mm		8x11	8x11	8x11	8x13,5	8x11	8x13,5	8x13,5	6x17,5	8x13,5	6x17,5
Lengths mm	l	82	105	105	105	105	105	105	105	105	105
	n	82	105	105	105	105	105	105	105	105	105
	o	52	52	56	56	67	67	67	84	84	84
	o <sub>1</sub>	—	22	—	—	—	—	—	—	—	—
	s	7	7	7	12	7	12	8	13	11	15
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side <sup>2)</sup>	0,114 0,039	0,184 0,039	0,163 0,091	0,457 0,091	0,182 0,121	0,476 0,121	0,658 0,197	1,722 0,197	0,869 0,396	2,111 0,396
Mass kg <sup>2)</sup>		13,4	16,6	19,7	26,5	22,6	29,4	33,0	50,9	50,2	67,9
2) at max. bore d											

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...GB Series



Stromag Periflex® VN 436...726

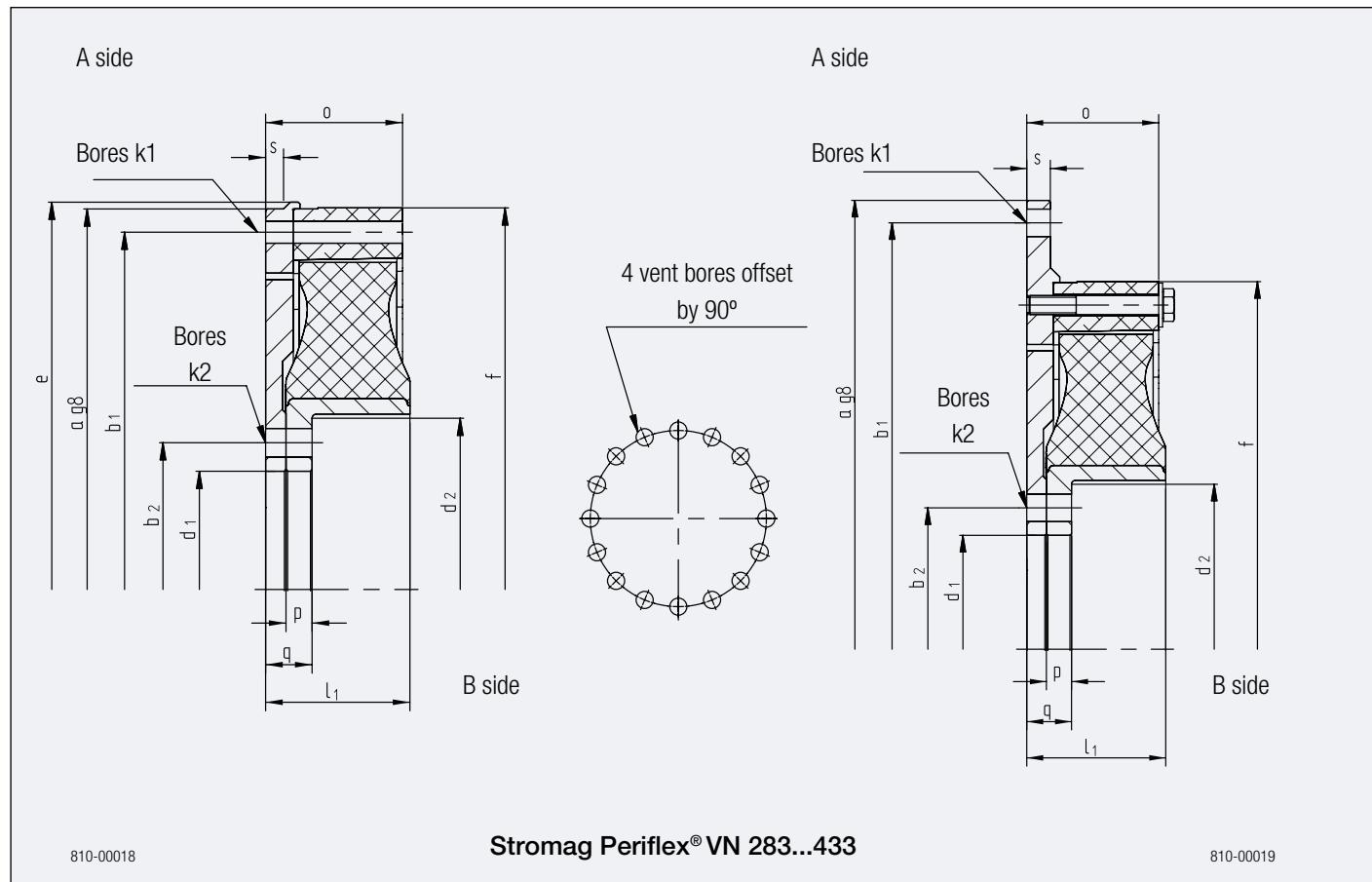
810-00017

Size		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544		Periflex® VN 549		Periflex® VN 666		Periflex® VN 726	
Tyre		VN 43611 VN 43631 VN 43621 VN 43641 VN 43651			VN 43911 VN 43931 VN 43941 VN 43951			VN 54411 VN 54431 VN 54421 VN 54441 VN 54451		VN 54911 VN 54931 VN 54921 VN 54941 VN 54951		VN 66611 VN 66631 VN 66621 VN 66641 VN 66651		VN 72611 VN 72631 VN 72621 VN 72641 VN 72651	
SAE Connection		14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	24"	
Diameter mm	a	466,7	517,5	571,5	466,7	517,5	571,5	571,5	673,1	571,5	673,1	673,1	733,4	733,4	
	b	438,2	489	542,9	438,2	489	542,9	542,9	641,4	542,9	641,4	641,4	692,2	692,2	
	d <sub>max</sub>	120	120	120	130	130	130	160	160	180	180	190	190	190	
	e	475	526	—	—	—	—	580	683	580	683	692	744	744	
	f	468	468	468	464	455	464	572	572	572	572	692	692	692	
	h	168	168	168	185	185	185	225	225	300	300	270	270	270	
Bore k mm		8x13,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0		
Lengths mm	l	130	130	130	105	130	130	130	165	130	165	190	190		
	n	130	130	130	105	130	130	130	165	130	165	190	190		
	o	100	100	100	85	91	85	125	160	125	160	164	164		
	o <sub>1</sub>	—	40	—	—	—	—	—	45	—	45	—	57		
	s	15	15	15	15	15	15	14	14	14	14	12	12		
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	0,965	1,596	2,419	0,851	1,565	2,414	2,222	4,876	2,228	4,882	5,845	7,676		
	J <sub>B</sub> side <sup>2)</sup>	0,491	0,491	0,491	0,483	0,483	0,483	1,305	1,305	1,796	1,796	3,474	3,474		
Mass kg <sup>2)</sup>		58,4	71,8	82,2	53,3	68,4	79,5	93,5	125,2	124,8	163,9	180,4	194,8		
2) at max. bore d															

other dimensions on request

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...GB/ON Series



810-00018

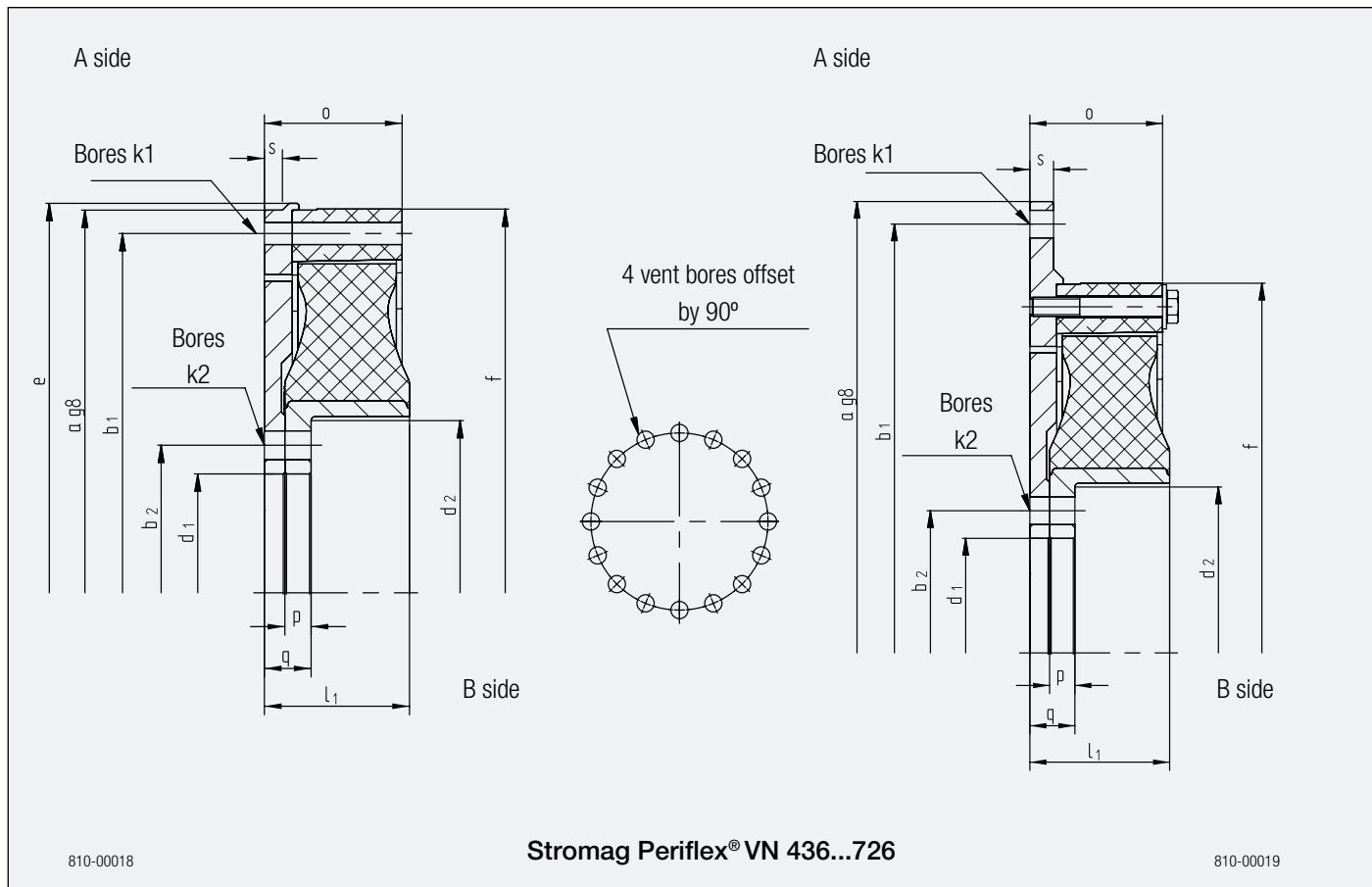
### Stromag Periflex® VN 283...433

810-00019

Size	Periflex® VN 283		Periflex® VN 350		Periflex® VN 358		Periflex® VN 430		Periflex® VN 433		
Tyre	VN 28311		VN 35011		VN 35811		VN 43011		VN 43311		
	VN 28331		VN 35031		VN 35831		VN 43031		VN 43331		
	VN 28321		VN 35021		VN 35821		VN 43021		VN 43321		
	VN 28341		VN 35041		VN 35841		VN 43041		VN 43341		
	VN 28351		VN 35051		VN 35851		VN 43051		VN 43351		
SAE connection		10"	11½"	11½"	14"	11½"	14"	14"	18"	14"	18"
Diameter mm	a	314,4	352,4	352,4	466,7	352,4	466,7	466,7	571,5	466,7	571,5
	b <sub>1</sub>	295,3	333,4	333,4	438,2	333,4	438,2	438,2	542,9	438,2	542,9
	b <sub>2</sub>	117	117	140	140	150	150	125	125	180	180
	d <sub>1</sub>	95	95	115	115	125	125	150	150	145	145
	d <sub>2</sub>	133	133	165	165	175	175	175	175	210	210
	e	320	360	360	—	360	—	475	—	475	—
Bore mm	k <sub>1</sub>	8x11	8x11	8x13,5	8x11	8x13,5	8x13,5	6x17,5	8x13,5	6x17,5	8x17,5
	k <sub>2</sub>	16x11	16x11	16x13,5	16x13,5	20x13,5	20x13,5	20x13,5	20x13,5	16x17,5	16x17,5
Lengths mm	l <sub>1</sub>	52	52	57	57	63	63	69	69	88,5	88,5
	o	52	52	56	56	67	67	67	67	84	84
	p	10	10	12	12	12	12	12	12	16	16
	q	22	22	25	25	27	27	23	23	28,5	28,5
	s	7	7	12	7	12	12	8	13	11	15
Mass moment of inertia kgm <sup>2</sup>	J <sub>A</sub> side	0,1140	0,1840	0,1630	0,4570	0,1820	0,4760	0,6480	1,7220	0,755	1,524
	J <sub>B</sub> side	0,0330	0,0330	0,0740	0,0740	0,0950	0,0950	0,1730	0,1730	0,315	0,315
Mass kg	10,6	13,1	14,3	21,1	15,8	22,6	27,0	44,5	35,6	47,0	47,0

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...GB/ON Series



810-00018

Stromag Periflex® VN 436...726

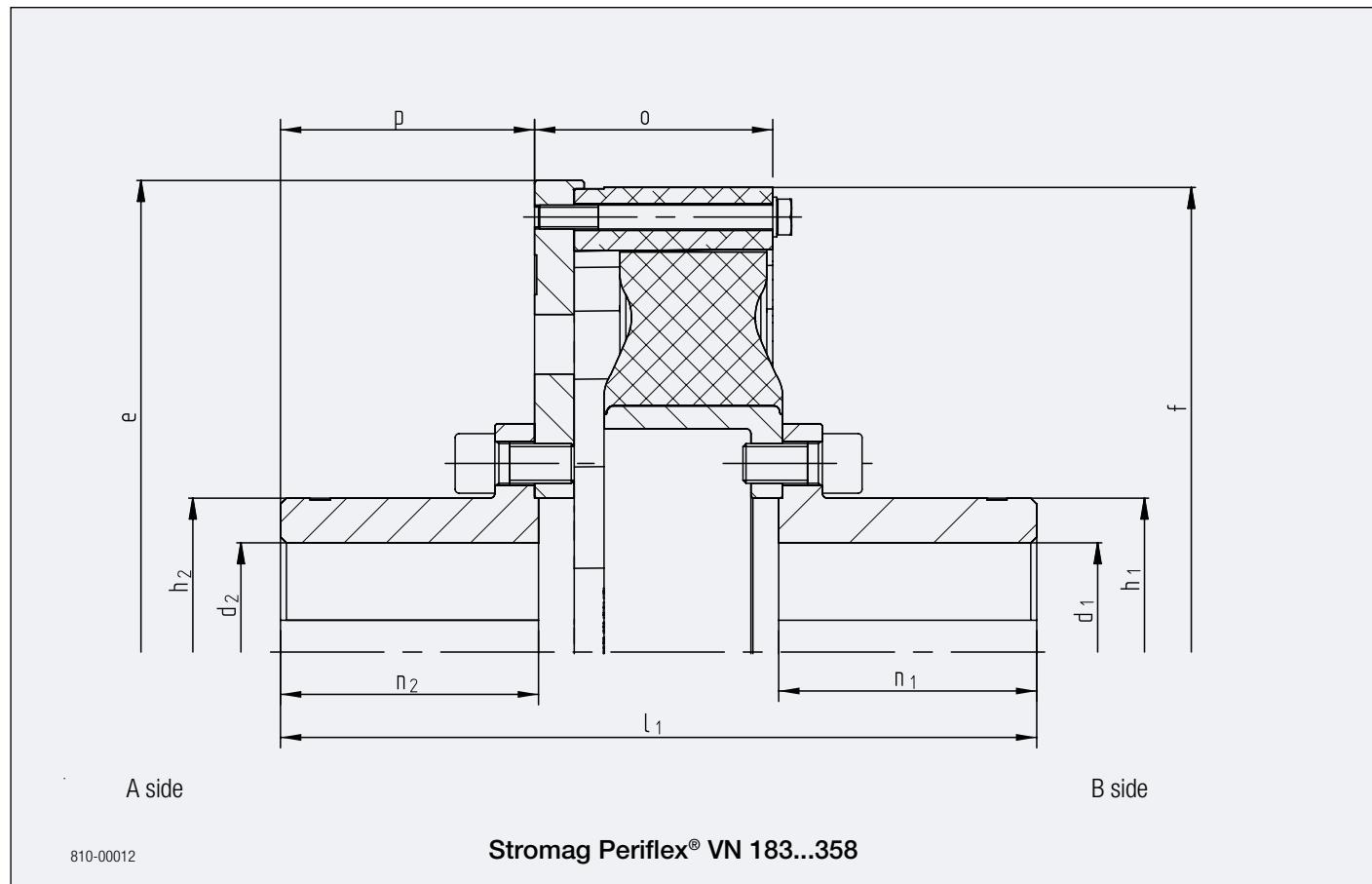
810-00019

Size		Periflex® VN 436			Periflex® VN 439			Periflex® VN 544			Periflex® VN 549			Periflex® VN 666			Periflex® VN 726		
Tyre		VN 43611 VN 43631 VN 43621 VN 43641 VN 43651			VN 43911 VN 43931 VN 43941 VN 43951			VN 54411 VN 54431 VN 54421 VN 54441 VN 54451			VN 54911 VN 54931 VN 54921 VN 54941 VN 54951			VN 66611 VN 66631 VN 66621 VN 66641 VN 66651			VN 72611 VN 72631 VN 72621 VN 72641 VN 72651		
SAE connection		14"	16"	18"	14"	16"	18"	18"	21"	18"	21"	21"	24"	21"	24"	24"			
Diameter mm	a	466,7	517,5	571,5	466,7	517,5	571,5	571,5	673,1	571,5	673,1	673,1	733,4	other dimensions on request					
	b <sub>1</sub>	438,2	489	542,9	438,2	489	542,9	542,9	641,4	542,9	641,4	641,4	692,2	other dimensions on request					
	b <sub>2</sub>	190	190	190	220	220	220	270	270	270	270	320	320	other dimensions on request					
	d <sub>1</sub>	155	155	155	185	185	185	230	230	230	230	275	275	other dimensions on request					
	d <sub>2</sub>	220	220	220	250	250	250	296	296	300	300	364	364	other dimensions on request					
	e	475	526	—	475	526	—	580	683	683	683	692	744	other dimensions on request					
	f	468	468	464	455	464	572	572	572	572	572	692	692	other dimensions on request					
Bore mm	k <sub>1</sub>	8x13,5	8x13,5	6x17,5	8x13,5	8x13,5	6x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20	24x20					
	k <sub>2</sub>	20x17,5	20x17,5	20x17,5	12x22	12x22	12x22	24x17,5	24x17,5	24x22	24x22	24x22	30x21*	30x21*					
Lengths mm	l <sub>1</sub>	106	106	106	85	85	85	122,5	122,5	110	110	159,5	159,5	other dimensions on request					
	o	100	100	100	85	90	85	125	160	125	160	164	164	other dimensions on request					
	p	16	16	16	18	18	18	22	22	22,5	22,5	30	30	other dimensions on request					
	q	32	32	32	40	40	40	44,5	44,5	45	45	63	63	other dimensions on request					
	s	15	15	15	15	15	15	14	14	14	14	12	12	other dimensions on request					
Mass moment of inertia kgm <sup>2</sup>	J <sub>A</sub> side	0,965	1,596	2,419	0,851	1,565	2,414	2,231	4,705	2,237	4,711	5,845	7,676	other dimensions on request					
	J <sub>B</sub> side	0,378	0,378	0,378	0,326	0,326	0,326	0,956	0,956	1,137	1,137	2,584	2,584	other dimensions on request					
Mass kg	45,0		58,4	68,8	33,6	44,8	43,6	67,1	93,4	71,0	97,3	125,2	139,6	other dimensions on request					

\*) contains 2 vent bores

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...W Series



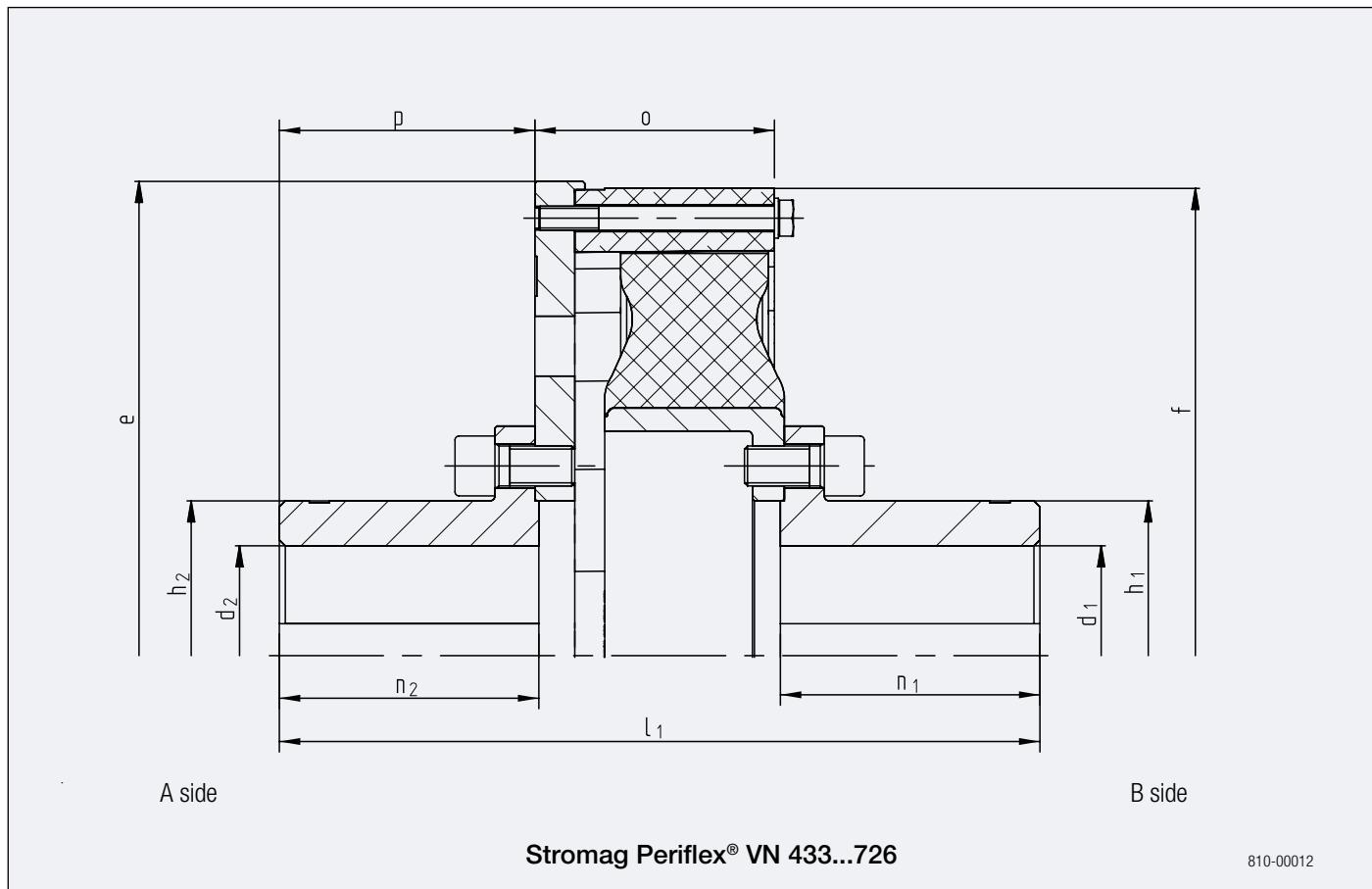
Size		Periflex® VN 183	Periflex® VN 230	Periflex® VN 280	Periflex® VN 283	Periflex® VN 350	Periflex® VN 358
Tyre	VN 18311	VN 23011	VN 28011	VN 28311	VN 35011	VN 35811	
	VN 18331	VN 23031	VN 28031	VN 28331	VN 35031	VN 35831	
	VN 18321	VN 23021	VN 28021	VN 28321	VN 35021	VN 35821	
	VN 18341	VN 23041	VN 28041	VN 28341	VN 35041	VN 35841	
	VN 18351	VN 23051	VN 28051	VN 28351	VN 35051	VN 35851	
Diameter mm	$d_{1\max}$	43	50	55	65	80	85
	$d_{2\max}$	43	50	55	65	80	85
	e	222	271	322	322	360	360
	f	218	266	316	316	355	355
	$h_1$	61	70	75	90	112	120
	$h_2$	61	70	75	90	112	120
Lengths mm	$ ^{(1)}$	174	186	203	280	279	289
	$n_1$	60	65	70	105	105	105
	$n_2$	60	65	70	105	105	105
	$o$	53	58,5	65	75	71	71
	$p$	58	63	68	103	103	103
Mass moment of inertia kg m²	$J_A$ side <sup>(2)</sup>	0,0282	0,0716	0,1468	0,1920	0,3190	0,3290
	$J_B$ side <sup>(2)</sup>	0,0038	0,0080	0,0177	0,0275	0,0530	0,0870
Mass kg <sup>2</sup>		6,6	9,4	15,2	22,1	30,1	33,8

1) Dim. l can be modified by moving the connection ring within specified tolerances

2) at max. bore  $d_1$  and  $d_2$

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN...W Series



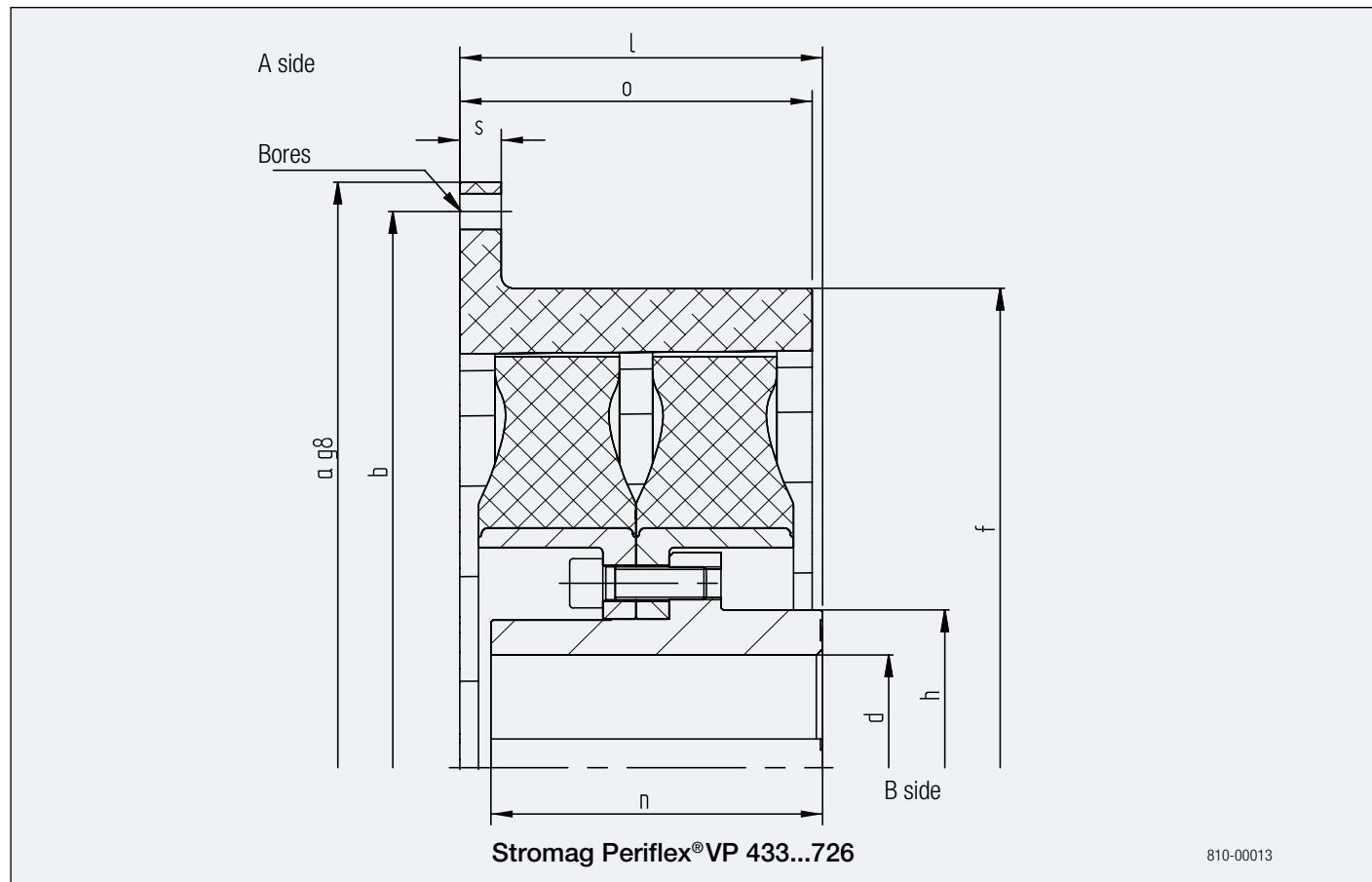
Size		Periflex® VN 430	Periflex® VN 433	Periflex® VN 436	Periflex® VN 439	Periflex® VN 544	Periflex® VN 549	Periflex® VN 666	Periflex® VN 726
Tyre	VN 43011	VN 43311	VN 43611	VN 43911	VN 54411	VN 54911	VN 66611	VN 72611	
	VN 43031	VN 43331	VN 43631	VN 43931	VN 54431	VN 54931	VN 66631	VN 72631	
	VN 43021	VN 43321	VN 43621	VN 43941	VN 54421	VN 54921	VN 66621	VN 72621	
	VN 43041	VN 43341	VN 43641	VN 43941	VN 54441	VN 54941	VN 66641	VN 72641	
	VN 43051	VN 43351	VN 43651	VN 43951	VN 54451	VN 54951	VN 66651	VN 72651	
Diameter mm	$d_{1\max}$ $d_{2\max}$ e f $h_1$ $h_2$	85 85 475 468 120 120	100 100 475 468 145 145	110 110 475 468 155 155	130 130 475 468 182 182	160 160 584 572 225 225	150 150 584 572 220 220	190 190 683 692 270 270	other dimensions on request
Lengths mm	<sup>1)</sup> $n_1$ $n_2$ $o$ $p$	297 105 105 86 103	352 125 125 100 123	381 130 130 120 128	352 130 130 125 125	548 210 210 140 206	533 210 210 125 206	536 190 190 169 183,5	
Mass moment of inertia kg m²	$J_A$ side <sup>2)</sup> $J_B$ side <sup>2)</sup>	1,015 0,123	1,271 0,241	1,350 0,318	1,385 0,352	3,648 1,024	3,486 1,200	8,985 2,623	
Mass kg <sup>2)</sup>		47,8	69,3	75,7	81,6	158,0	162,6	254,8	

1) Dim. I can be modified by moving the connection ring within specified tolerances

2) at max. bore  $d_1$  and  $d_2$

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VP..G Series



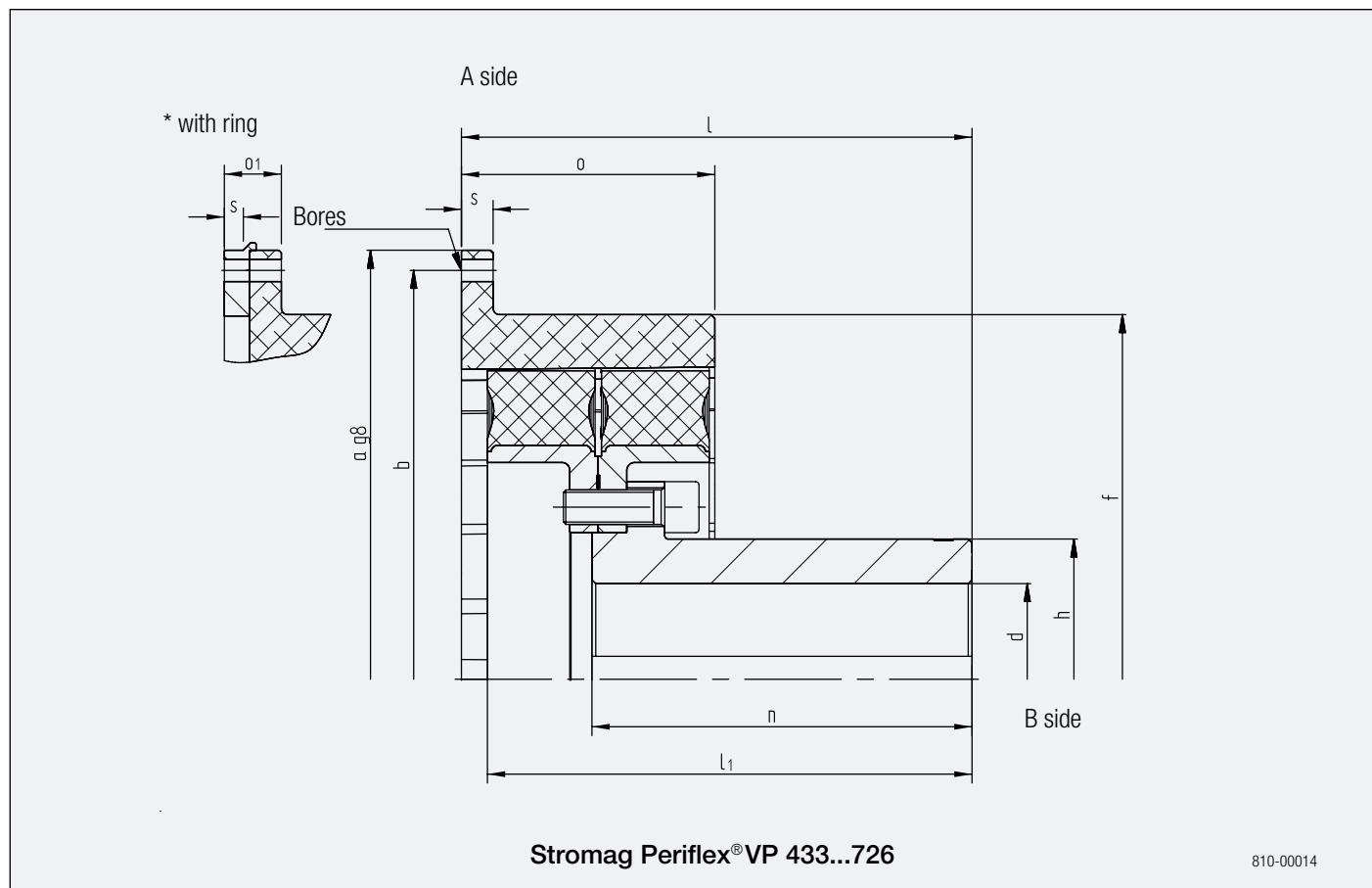
Size		Periflex® VP 433	Periflex® VP 436	Periflex® VP 439	Periflex® VP 544	Periflex® VP 549	Periflex® VP 666	Periflex® VP 726
Tyre	VN 43311	VN 43611	VN 43911	VN 54411	VN 54911	VN 66611	VN 72611	
	VN 43331	VN 43631	VN 43931	VN 54431	VN 54931	VN 66631	VN 72631	
	VN 43321	VN 43621		VN 54421	VN 54921	VN 66621	VN 72621	
	VN 43341	VN 43641	VN 43941	VN 54441	VN 54941	VN 66641	VN 72641	
	VN 43351	VN 43651	VN 43951	VN 54451	VN 54951	VN 66651	VN 72651	
SAE Connection		18"	18"	18"	21"	21"	24"	-
Diameter mm	a	571,5	571,5	571,5	673,1	673,1	733,4	995
	b	542,9	542,9	542,9	641,4	641,4	692,2	950
	d <sub>max</sub>	100	110	130	160	180	190	250
	f	468	468	455	572	572	692	803
	h	154	168	185	225	300	270	350
Bore k mm		12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0	32x21,0
Lengths mm	<sup>1)</sup>	175	180	180	244	285	286	370
	n	160	160	160	220	200	250	350
	o	170	170	180	220	220	276	324
	s	20	20	25	25	25	31	32
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	1,186	1,228	1,205	3,120	3,132	7,702	15,850
	J <sub>B</sub> side <sup>2)</sup>	0,439	0,582	0,568	1,587	2,384	4,545	8,730
Mass kg <sup>2)</sup>		61,7	70,0	67,3	125,0	151,0	229,6	367,4

1) Dim. I can be modified by moving the connection ring within specified tolerances

2) at max. bore d<sub>1</sub> and d<sub>2</sub>

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VP...R Series



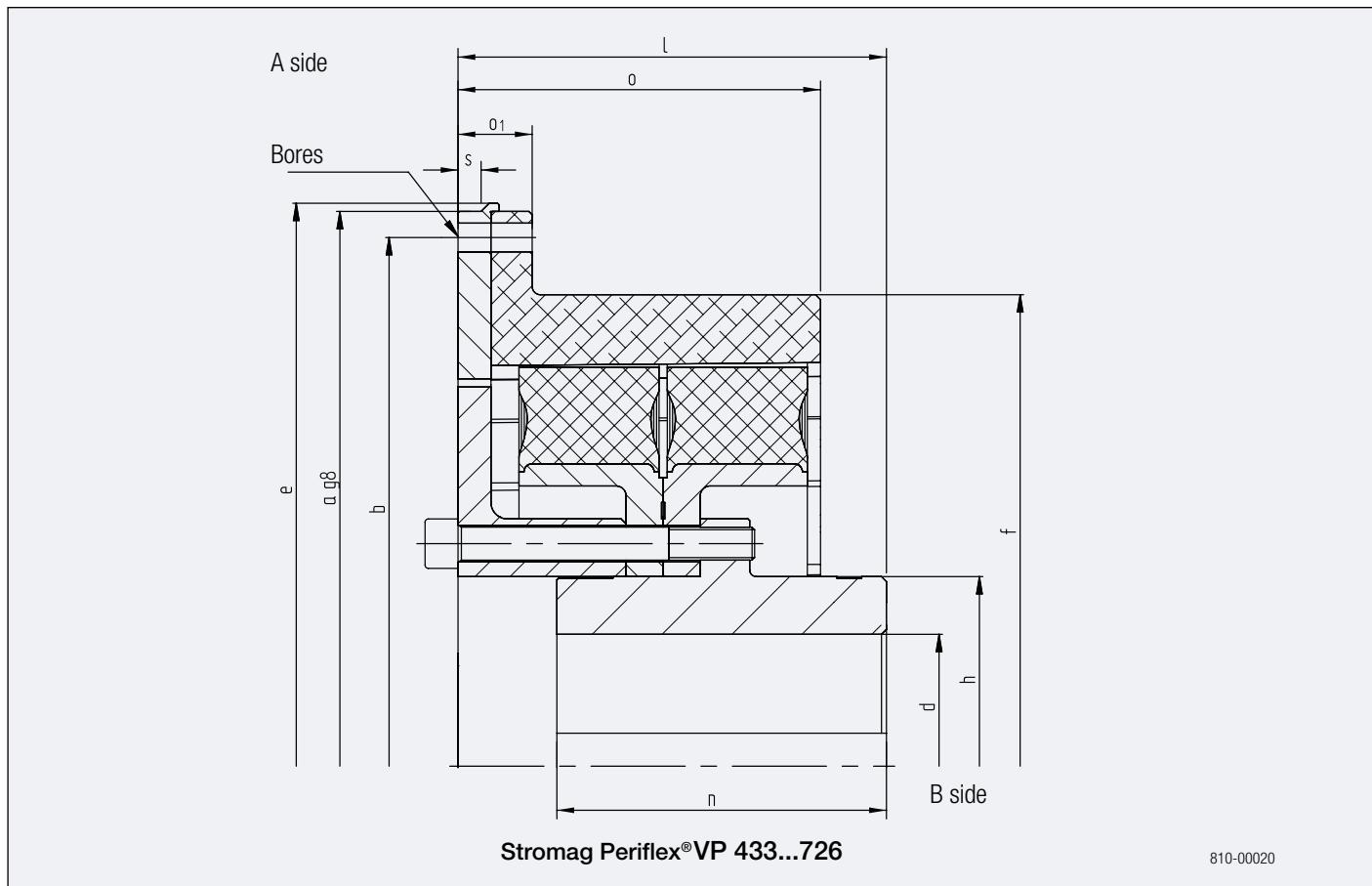
Size		Periflex® VP 433	Periflex® VP 436	Periflex® VP 439	Periflex® VP 544	Periflex® VP 549	Periflex® VP 666	Periflex® VP 726
Tyre	VN 43311	VN 43611	VN 43911	VN 54411	VN 54911	VN 66611	VN 72611	
	VN 43331	VN 43631	VN 43931	VN 54431	VN 54931	VN 66631	VN 72631	
	VN 43321	VN 43621		VN 54421	VN 54921	VN 66621	VN 72621	
	VN 43341	VN 43641	VN 43941	VN 54441	VN 54941	VN 66641	VN 72641	
	VN 43351	VN 43651	VN 43951	VN 54451	VN 54951	VN 66651	VN 72651	
SAE Connection		18"	18"	18"	21"	21"	24"	-
Diameter mm	a	571,5	571,5	571,5	673,1	673,1	733,4	995
	b	542,9	542,9	542,9	641,4	641,4	692,2	950
	d <sub>max</sub>	100	110	130	160	150	190	250
	f	468	468	455	572	572	692	803
	h	145	155	182	225	220	270	350
Bore k mm		12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0	32x21
Lengths mm	<sup>1)</sup>	344	350	328	336	403	390	514
	I <sub>1</sub>	321	335	308	312	382,5	370	-
	n	250	250	250	220	300	250	350
	o	170	190	180	220	220	276	324
	o <sub>1</sub>	-	40	-	-	-	-	-
	s	20	15	25	25	25	31	32
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side	1,186	2,208	1,205	3,268	2,952	7,748	15,850
	J <sub>B</sub> side <sup>2)</sup>	0,453	0,817	0,651	1,577	2,119	4,519	9,070
Mass kg <sup>2)</sup>		66,3	86,4	79,7	126,4	149,0	228,2	379,3

1) Dim. I can be modified by moving the connection ring within specified tolerances

2) at max. bore d

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VP..GB Series

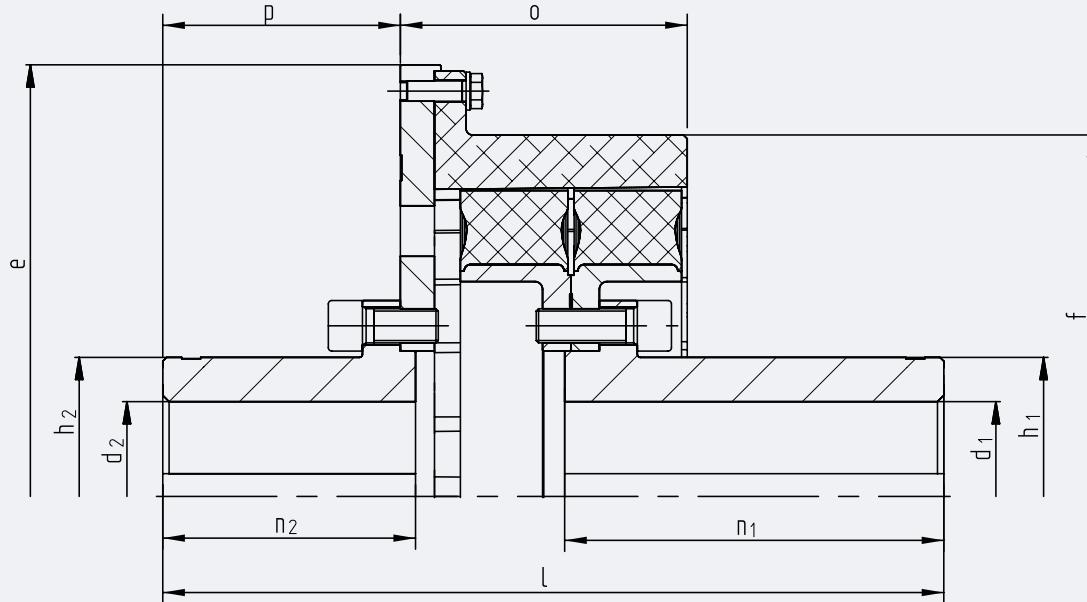


Size	Periflex® VP 433	Periflex® VP 436	Periflex® VP 439	Periflex® VP 544	Periflex® VP 549	Periflex® VP 666	Periflex® VP 726
Tyre	VN 43311	VN 43611	VN 43911	VN 54411	VN 54911	VN 66611	VN 72611
	VN 43331	VN 43631	VN 43931	VN 54431	VN 54931	VN 66631	VN 72631
	VN 43321	VN 43621	–	VN 54421	VN 54921	VN 66621	VN 72621
	VN 43341	VN 43641	VN 43941	VN 54441	VN 54941	VN 66641	VN 72641
	VN 43351	VN 43651	VN 43951	VN 54451	VN 54951	VN 66651	VN 72651
SAE Connection	18"	18"	18"	21"	21"	24"	–
Diameter mm	a b $d_{max}$ e f h	571,5 542,9 100 – 468 154	571,5 542,9 110 – 468 168	571,5 542,9 130 – 464 185	673,1 641,4 160 683 572 225	673,1 641,4 160 683 572 225	733,4 692,2 190 744 692 270
Bore k mm	12x17,5	12x17,5	12x17,5	12x17,5	12x17,5	12x20,0	32x21
Lengths mm	i n o o, s	192 160 187 – 15	212 160 202 – 15	197 160 197 – 15	264 220 240 45 14	260 200 240 45 14	308 250 298 53 12
Mass moment of inertia kg m²	$J_A$ side $J_B$ side <sup>2)</sup>	3,433 0,679	3,514 0,819	3,152 1,009	5,670 2,372	5,682 2,709	11,283 6,340
Mass kg <sup>2</sup>	122,4	133,4	119,0	192,4	197,3	323,9	

2) at max. bore d

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VP...W Series



A side

B side

Stromag Periflex® VP 433...726

810-00015

Size		Periflex® VP 433	Periflex® VP 436	Periflex® VP 439	Periflex® VP 544	Periflex® VP 549	Periflex® VP 666	Periflex® VP 726
Tyre	VN 43311	VN 43611	VN 43911	VN 54411	VN 54911	VN 66611	VN 72611	
	VN 43331	VN 43631	VN 43931	VN 54431	VN 54931	VN 66631	VN 72631	
	VN 43321	VN 43621	VN 43941	VN 54421	VN 54921	VN 66621	VN 72621	
	VN 43341	VN 43641	VN 43941	VN 54441	VN 54941	VN 66641	VN 72641	
	VN 43351	VN 43651	VN 43951	VN 54451	VN 54951	VN 66651	VN 72651	
Diameter mm	d <sub>max</sub> d <sub>2max</sub>	100 100	110 110	130 130	160 160	150 150	190 190	other dimensions on request
	e	475	526	526	683	683	744	
	f	468	468	455	572	572	692	
	h <sub>1</sub>	145	155	182	225	220	270	
	h <sub>2</sub>	145	155	182	225	220	270	
Lengths mm	<sup>1)</sup> n <sub>1</sub> n <sub>2</sub> o p	519 250 160 190 155	524 250 160 209 155	503 250 160 175 155	569 220 210 247 206	618 300 200 227 188	659 250 250 303 242	
Mass moment of inertia kg m <sup>2</sup>	J <sub>A</sub> side J <sub>B</sub> side <sup>2)</sup>	1,744 0,612	2,819 0,603	2,171 0,651	8,101 1,577	7,916 2,078	15,177 4,519	
Mass kg <sup>2)</sup>		102,6	128,0	98,0	234,4	255,8	378,3	

1) Dim. l can be modified by moving the connection ring within specified tolerances

2) at max. bore d<sub>1</sub> and d<sub>2</sub>

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN coupling characteristics

<b>T<sub>KN</sub></b>	The coupling's nominal torque can be permanently transferred over the whole permitted speed range. It must be higher than the system's nominal torque T <sub>N</sub>	T <sub>KN</sub> ≥ T <sub>N</sub>
	An application factor of 1.2 is recommended for the simple design of a drive system based exclusively on the nominal torque.	T <sub>KN</sub> ≥ T <sub>N</sub> • 1,2
<b>T<sub>Kmax</sub></b>	The coupling's max torque T <sub>Kmax</sub> can be endured as a peak load and may not be exceeded by peak torques T <sub>max1</sub> when the system is operating in normal, nonstationary mode.  A system's normal nonstationary modes are unavoidable and occur repeatedly (e.g. starting/stopping, resonance passes, switchovers, accelerations, etc.).	T <sub>Kmax</sub> ≥ T <sub>max1</sub>
	Overloading the Stromag Periflex® VN coupling with peak torques T <sub>max2</sub> in a system's anomalous nonstationary mode shortens the service life and is tolerated in individual cases.  A system's anomalous nonstationary modes are avoidable and are not part of the planned operating scheme (e.g. emergency stops, sync failure, short circuits, etc.).	T <sub>Kmax</sub> • 1,5 ≥ T <sub>max2</sub>
<b>T<sub>Kw</sub></b>	The admissible permanent alternating torque describes the amplitude of the max permanent periodic torque fluctuation.  This torque may be superimposed on a base load equal to T <sub>KN</sub> . This requires in addition an analysis of the max damping power P <sub>Kw</sub> .	
<b>ΔK<sub>a</sub></b>	Max axial displacement of the coupling. The shafts' axial displacement ΔW <sub>a</sub> must be less than ΔK <sub>a</sub> .  The axial displacement for Stromag Periflex® VN couplings depends on the installed connection ring. The disc tyre must always lie over its full width in the connection ring.	ΔK <sub>a</sub> ≥ ΔW <sub>a</sub>
<b>ΔK<sub>r</sub></b>	Max radial displacement of the coupling.  The shafts' radial displacement ΔW <sub>r</sub> must be less than ΔK <sub>r</sub> .	ΔK <sub>r</sub> ≥ ΔW <sub>r</sub>
<b>ΔK<sub>w</sub></b>	Max angular displacement of the coupling.  The shafts' angular displacement ΔW <sub>w</sub> must be less than ΔK <sub>w</sub> .  A Δ <sub>kw</sub> value of 0.5° is permitted for Periflex® VN couplings. This value, however, may be utilised to the full only when there are no other options for shaft displacement.	ΔK <sub>w</sub> ≥ ΔW <sub>w</sub>

# Highly flexible Stromag Periflex® VN Disc Coupling

## Stromag Periflex® VN coupling characteristics

### **C<sub>a</sub>**

The axial spring stiffness represents the ratio of axial reaction force to axial displacement.

$$C_a = 0$$

### **C<sub>r</sub>**

The radial stiffness represents the ratio of radial reaction force to radial displacement.

The specified values apply to the coupling at operating temperature, with a surface temperature of about 30°C.

### **C<sub>Tdyn</sub>**

The dynamic torsional spring stiffness represents the ratio of torque amplitude to torque angle during an oscillation.

$$C_{T\text{dyn}} = \frac{T_{\text{el}}}{\varphi_w}$$

The torque amplitude is superimposed on an initial load (coupling torque). The Stromag Periflex® VN coupling's  $C_{T\text{dyn}}$  value remains constant over the coupling torque (linear characteristic curve), but changes with the amplitude, frequency, and temperature of the flexible element.

The specified nominal values for  $C_{T\text{dyn}}$  are based on a coupling torque of  $0.8 \cdot T_{KN}$ , an alternating torque of  $0.2 \cdot T_{KN}$ , and a frequency of 10 Hz on a coupling at operating temperature, with a surface temperature of about 30°C.

### **C<sub>Tdyn warm</sub>**

takes into account that high power dissipation causes the coupling to heat up.

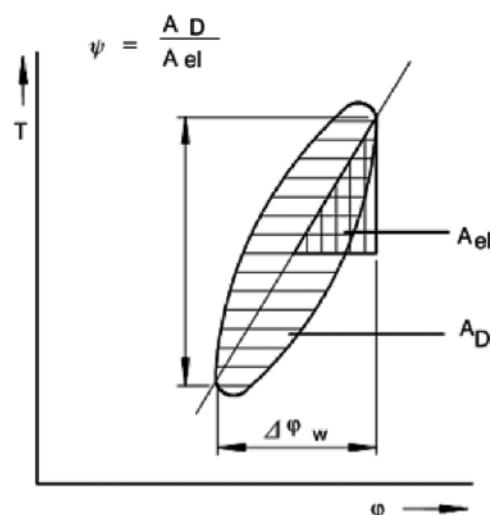
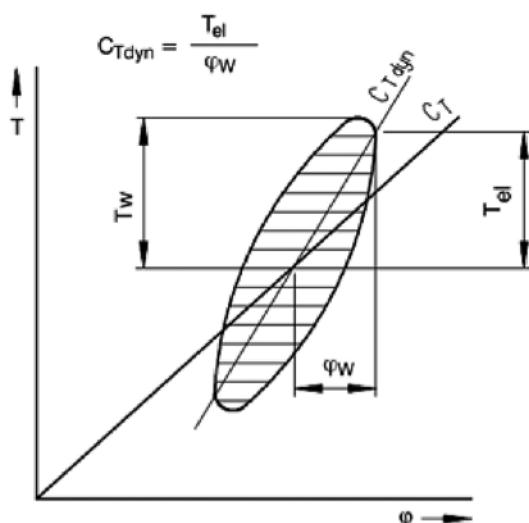
$$C_{T\text{dyn warm}} = 0,7 \cdot C_{T\text{dyn}}$$

### **C<sub>Tdyn A</sub>**

takes into account the effects of a small alternating torque amplitude.

$$C_{T\text{dyn A}} = 1,35 \cdot C_{T\text{dyn}}$$

Calculations of torsional vibrations in the system are recommended to include  $C_{T\text{dyn warm}}$  (0,7), und  $C_{T\text{dyn A}}$  (1,35)



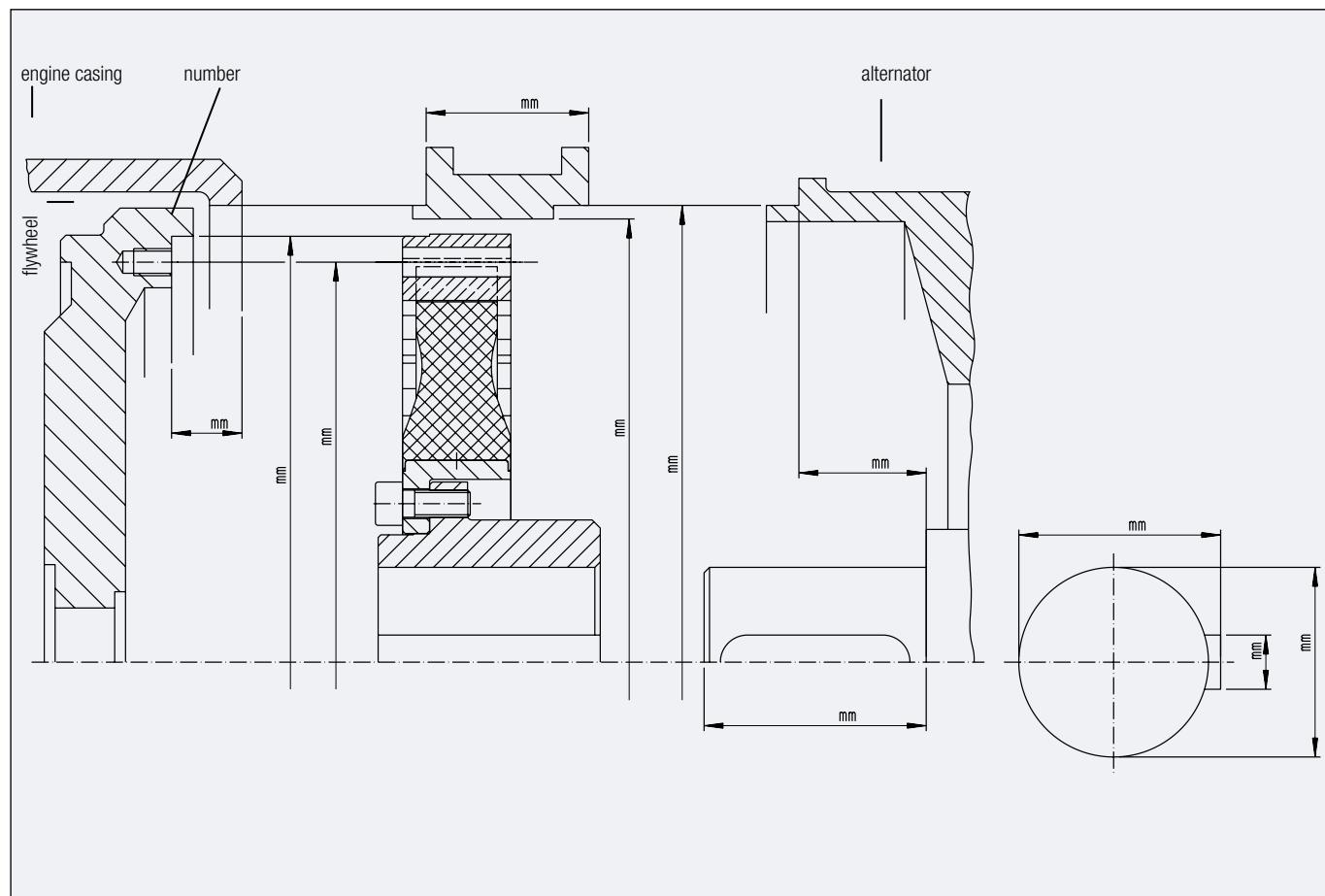
# Highly flexible Stromag Periflex® VN Disc Coupling

## Coupling design, question sheet

Engine side		
Engine type		
Engine power	P [kW]	
Engine speed	n [rpm]	
Inline /V engine	R/V (Angle)	
Number of cylinders	z	
Moments of inertia (engine + flywheel)	J [kgm <sup>2</sup> ]	
Driven side		
Kind of application (alternator, pump, compressor, etc.)		
Type		
Moments of inertia	J [kgm <sup>2</sup> ]	
Shaft diameter	d [mm]	
Shaft lenght	l [mm]	

## Stromag Periflex® VN coupling

Installation space: enter required measurements in the diagram below



# Highly flexible Stromag Periflex® VN Disc Coupling

## Use in potentially explosive environments, question sheet

Applications		<input type="radio"/>	Group II (above ground)
Potentially explosive atmosphere of air and		<input type="radio"/>	gas
		<input type="radio"/>	dust
Zone (Category)	gas	<input type="radio"/>	Zone 1 (Category 2G)
		<input type="radio"/>	Zone 2 (Category 3G)
	dust	<input type="radio"/>	Zone 22 not electrically conducting (Category 3D)
Temperature category in atmosphere with gas	gas	<input type="radio"/>	T1
		<input type="radio"/>	T2
		<input type="radio"/>	T3
		<input type="radio"/>	T4
Max surface temperature	dust	<input type="radio"/>	125 °C
		<input type="radio"/>	< 120 °C
		<input type="radio"/>	-20 °C to + 40 °C
Ambient temperature		<input type="radio"/>	other ambient temperatures only with certain restrictions

Europe	North America	Asia Pacific
<b>Germany</b>	<b>USA</b>	<b>China</b>
Hansastraße 120 59425 Unna - Germany +49 (0) 23 03 102 0 <i>Clutches &amp; Brakes, Couplings, Geared Cam Limit Switches, Discs, Wind Brakes</i>	31 Industrial Park Road New Hartford, CT 06057 - USA 860-238-4783 <i>Electromagnetic Clutches &amp; Brakes</i>	T40B -5, No. 1765 Chuan Qiao Road Pudong 201206, Shanghai - China Tel +86 21-60580600 <i>Clutches &amp; Brakes, Electromagnetic Clutches &amp; Brakes, Couplings, Industrial Caliper &amp; Drum Brakes, Discs, Geared Cam Limit Switches, Wind Brakes</i>
Dessauer Str. 10 06844 Dessau-Roßlau - Germany +49 (0) 340 2190 0 <i>Electromagnetic Clutches &amp; Brakes</i>	300 Indiana Highway 212 Michigan City, IN 46360 – USA 219-874-5248 <i>Couplings</i>	<b>India</b> Gat No.: 448/14, Shinde Vasti, Nigroje Tal Khed, Pune- 410 501 +91 2135 622100 <i>Clutches &amp; Brakes, Electromagnetic Clutches &amp; Brakes, Couplings, Industrial Caliper &amp; Drum Brakes, Discs, Geared Cam Limit Switches, Wind Brakes</i>
<b>France</b>	<b>2800 Fisher Rd.</b> Wichita Falls, TX 940-723-3400 <i>Geared Cam Limit Switches, Industrial Caliper &amp; Drum Brakes</i>	
Avenue de l'Europe 18150 La Guerche sur L'Aubois - France +33 (0)2 48 80 72 72 <i>Industrial Caliper &amp; Drum Brakes</i>		
<b>Great Britain</b>		
11 Fleming Close Park Farm Industrial Estate Wellingborough NN8 6UF +44 (0)1933 675494 <i>Electromagnetic Clutches &amp; Brakes, Industrial Caliper Brakes</i>		

## The Brands of Altra Industrial Motion

Couplings	Electric Clutches & Brakes	Heavy Duty Clutches & Brakes	Gearing
<b>Ameridrives</b> <a href="http://www.ameridrives.com">www.ameridrives.com</a>	<b>Inertia Dynamics</b> <a href="http://www.idicb.com">www.idicb.com</a>	<b>Industrial Clutch</b> <a href="http://www.indclutch.com">www.indclutch.com</a>	<b>Bauer Gear Motor</b> <a href="http://www.bauergears.com">www.bauergears.com</a>
<b>Bibby Turboflex</b> <a href="http://www.bibbyturboflex.com">www.bibbyturboflex.com</a>	<b>Matrix</b> <a href="http://www.matrix-international.com">www.matrix-international.com</a>	<b>Twiflex</b> <a href="http://www.twiflex.com">www.twiflex.com</a>	<b>Boston Gear</b> <a href="http://www.bostongear.com">www.bostongear.com</a>
<b>Guardian Couplings</b> <a href="http://www.guardiancouplings.com">www.guardiancouplings.com</a>	<b>Stromag</b> <a href="http://www.stromag.com">www.stromag.com</a>	<b>Stromag</b> <a href="http://www.stromag.com">www.stromag.com</a>	<b>Delroyd Worm Gear</b> <a href="http://www.delroyd.com">www.delroyd.com</a>
<b>Huco</b> <a href="http://www.huco.com">www.huco.com</a>	<b>Warner Electric</b> <a href="http://www.warnerelectric.com">www.warnerelectric.com</a>	<b>Svendborg Brakes</b> <a href="http://www.svendborg-brakes.com">www.svendborg-brakes.com</a>	<b>Nuttall Gear</b> <a href="http://www.nuttallgear.com">www.nuttallgear.com</a>
<b>Lamiflex Couplings</b> <a href="http://www.lamiflexcouplings.com">www.lamiflexcouplings.com</a>	<b>Linear Products</b>	<b>Wichita Clutch</b> <a href="http://www.wichitaclutch.com">www.wichitaclutch.com</a>	<b>Overrunning Clutches</b>
<b>Stromag</b> <a href="http://www.stromag.com">www.stromag.com</a>	<b>Warner Linear</b> <a href="http://www.warnerlinear.com">www.warnerlinear.com</a>	<b>Belted Drives</b>	<b>Formsprag Clutch</b> <a href="http://www.formsprag.com">www.formsprag.com</a>
<b>TB Wood's</b> <a href="http://www.tbwoods.com">www.tbwoods.com</a>	<b>Engineered Bearing Assemblies</b>	<b>TB Wood's</b> <a href="http://www.tbwoods.com">www.tbwoods.com</a>	<b>Marland Clutch</b> <a href="http://www.marland.com">www.marland.com</a>
<b>Geared Cam Limit Switches</b>	<b>Kilian</b> <a href="http://www.kilianbearings.com">www.kilianbearings.com</a>		<b>Stieber Clutch</b> <a href="http://www.stieberclutch.com">www.stieberclutch.com</a>
<b>Stromag</b> <a href="http://www.stromag.com">www.stromag.com</a>			



[www.stromag.com](http://www.stromag.com)

Hansastraße 120  
59425 Unna - Germany  
+49 2303 102-0