

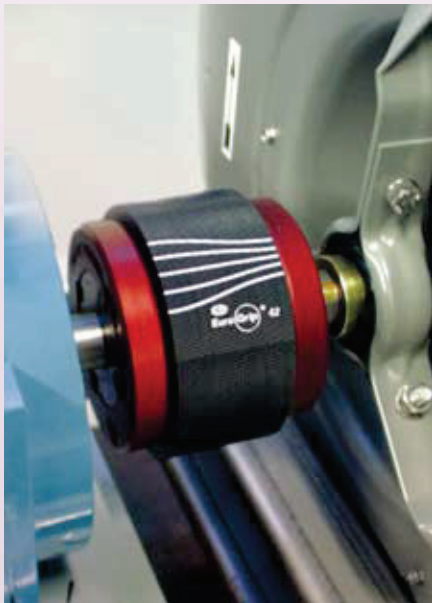


FLEXIBLE COUPLINGS FOR HIGH VIBRATION DAMPING



EUROGRIP® *Flexible couplings*

EuroGrip® flexible couplings are designed to connect two shafts subject to misalignment and axial movement and relieve the stress that would result from a rigid coupling. They consist of a rubber sleeve and two metal end pieces. Their design is unique, with their OGEE lines allowing the coupling to act as a torque/life indicator for the drive. Gates EuroGrip® flexible couplings are available in sizes 19, 28, 42, 48 and 60 and are bored to suit a taper bush or a plain bore and keyway. They have high vibration damping capacity, which makes them especially suitable for direct drive applications in e.g. pumps and compressors. Their high compliance is especially appreciated by designers of speed control systems, where resonance can be a problem. The zero backlash characteristics result in high positioning accuracy and repeatability, allowing a wide range of applications in the linear actuator market.



Construction

- Unique OGEE lines on the sleeve are an indicator of torque and product life.
- Sleeves are made of a high-performance elastomeric compound. The sleeve design allows the coupling to act as a predictable fuse in the system.
- End pieces are made of a high-grade aluminium to reduce weight and inertia. The aluminium end pieces are anodised to increase wear resistance and strength. Available either with finished bore and keyway or to suit a taper bush.
- Temperature ranges from -25°C to +100°C.

Advantages

- High vibration damping. Damping increases with load, which will prevent resonance.
- Quiet in operation.
- Zero backlash and, consequently, high positioning accuracy.
- Easy to install and to replace. Can be inspected without stopping the drive.
- Built-in safety measure: the driven machine will stop when the coupling fails.
- High tolerance of combinations of radial and angular misalignment.
- Durable.
- Low inertia.
- Compact design.
- Light weight.

NOTE

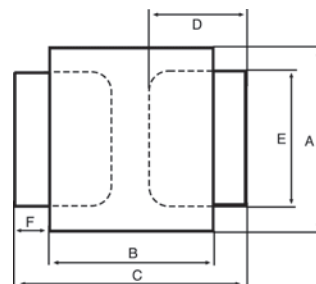
For correct usage of the EuroGrip® flexible couplings, please request Gates' EuroGrip® manual (E2/20103).



Sleeve dimensions

The principal dimensions of a EuroGrip® sleeve are the outside diameter, the sleeve length and the total coupling length. Gates EuroGrip® couplings are made in sizes 19, 28, 42, 48 and 60.

Coupling size code	Nominal shaft mm	Sleeve OD mm (A)	Sleeve length mm (B)	Sleeve weight g	Coupling total length mm (C)
19	19	46	28	35	48
28	28	77	38	125	60
42	42	102	48	250	80
48	48	126	58	450	94
60	60	150	65	750	105



End piece dimensions

The principal dimensions of a EuroGrip® end piece are the taper bush size, the bore, the end piece length and the shoulder diameter.

Coupling size code	Back fixed taper bush	Front fixed taper bush	Standard bore mm	End piece length mm (D)	Shoulder diameter mm (E)	Shoulder thickness mm (F)	Over tooth diameter mm	Inertia J kgm ²	Weight with MPB ⁽²⁾ g
19 ⁽¹⁾	MPB ⁽²⁾	MPB ⁽²⁾	14 / 19	22	42	9	36	0.000009	50
28	1108	1008	24 / 28	28	72	11	62	0.000105	200
42	1615	1215	38 / 42	38	96	16	84	0.000469	550
48	2017	1615	48	45	118	18	104	0.001330	1000
60	2517	2017	55 / 60	50	136	20	120	0.002572	1350

(1) Size 19 available with bore and key only. All other EuroGrip® couplings (sizes 28, 42, 48 and 60) available with bore and key or to suit taper bush. Size 28 with 1108 taper bush requires a shallow key.

(2) MPB = Minimum Plain Bore.

NOTE

End pieces are keyed according to ISO. Bore is to tolerance H7 fit (ISO). End pieces are also available with unfinished bore.

Part numbers

Coupling	Part	Part number	Part	Part number 9902 -
19	Sleeve	9901-51901	14 mm bore end piece	01914
			19 mm bore end piece	01919
			MPB end piece	01900
28	Sleeve	9901-52801	24 mm bore end piece	02824
	End piece for taper bush - back fixed (1108)	9902-02801	28 mm bore end piece	02828
	End piece for taper bush - front fixed (1008)	9902-02802	MPB end piece	02800
42	Sleeve	9901-54201	38 mm bore end piece	04238
	End piece for taper bush - back fixed (1615)	9902-04201	42 mm bore end piece	04242
	End piece for taper bush - front fixed (1215)	9902-04202	MPB end piece	04200
48	Sleeve	9901-54801	48 mm bore end piece	04848
	End piece for taper bush - back fixed (2017)	9902-04801	MPB end piece	04800
	End piece for taper bush - front fixed (1615)	9902-04802		
60	Sleeve	9901-56001	55 mm bore end piece	06055
	End piece for taper bush - back fixed (2517)	9902-06001	60 mm bore end piece	06060
	End piece for taper bush - front fixed (2017)	9902-06002	MPB end piece	06000