Low Cost Slip Clutch

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SG Transmission

The drag torque on the low cost slip clutch is produced by means of a hysteresis principle. This allows for constant torque levels and eliminates the possibility of high break away torque that occurs with typical friction devices.

Permanent magnets and magnetic particles transmit torque therefore wear is virtually eliminated. Units are provided pre-assembled to a specific torque range and are sealed preventing any particles from contaminating the machine.

These units are primarily used as paper feed separators such as those within copy machines, printers, ATM's, card readers and mailing machines or other feed devices with low torque limiting requirements.

Accurate and stable torque

The drag torque is produced by means of a hysteresis principle. This allows for constant torque levels and eliminates the possibility of high break away torque that occurs with typical friction devices. Consistent torque is maintained because of the hysteresis principle and is consistent within allowable speed range.

Long operational life

Permanent magnets and magnetic particles transmit torque, therefore wear is virtually eliminated.

Easy installation

Units are provided pre-assembled to a specific torque range, so there is nothing to adjust.

No contamination

Units are sealed which prevents any particles from contaminating the machine, and also prevents contamination of the clutch by the machine environment.

Technical data

Series 51-OPL (with shaft)

Fig 1

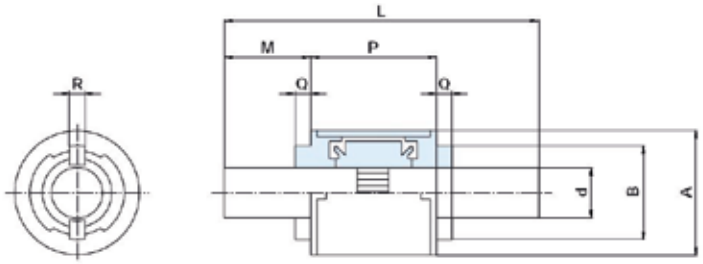
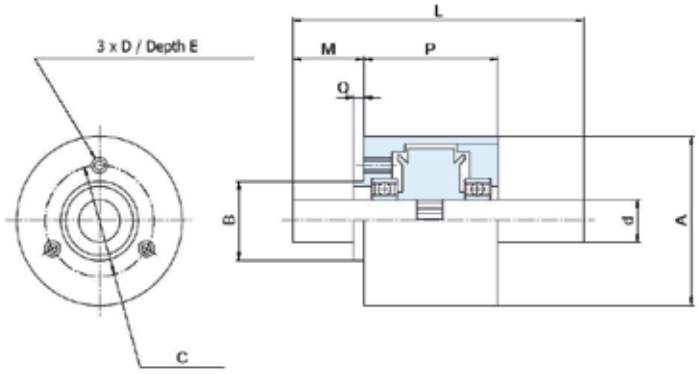


Fig 2



Model		Fig. 1 (Synthetic Bearing)				Fig. 2 (Ball Bearing)				
		0.3N	0.6N	1.2N	1.8N	13N	15N	23N	33N	48N
Static torque (Nm)		0.03	0.06	0.12	0.18	1.00	0.15	0.20	0.30	0.40
Optional torque range (Lbs. in)		.17~.35	.35~.53	.53~1.06	1.06~1.60	.62~.88	.88~1.33	1.33~1.76	1.76~2.66	2.66~3.52
Max allowable speed (r/min.)		300	300	250	200	400	400	300	300	200
Shaft diameter (mm) d-0.03		8	8	8	8	8	8	8	8	8
Radial dimensions (mm)	A	20	20	20	20	32	32	32	32	32
	B	15	15	15	15	15	15	15	15	15
	C	-	-	-	-	21	21	21	21	21
	D	-	-	-	-	M3	M3	M3	M3	M3
	E	-	-	-	-	5	5	5	5	5
Axial dimensions (mm)	L	180	180	180	180	180	180	180	180	180
	M	50	50	50	50	50	50	50	50	50
	P	20	20	27	34	26	26	33	33	40
	Q	2.5	2.5	2.5	2.5	2	2	2	2	2
	R	2.4	2.4	2.4	2.4	-	-	-	-	-

* Weight will vary depending upon shaft length. For reference weight, see OPL-R
* Where the slip clutch is subjected to any radial or axial thrust, we recommend the use of the ball bearing design shown in Fig. 2
* The configuration and shaft length of the slip clutch can be varied to suite particular application requirements.

Technical data

Series 51-OPL-R (through bore)

Fig 1

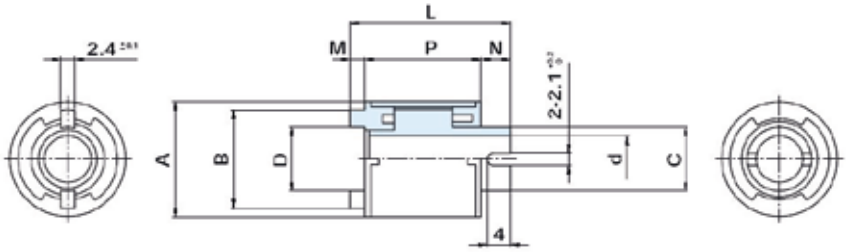
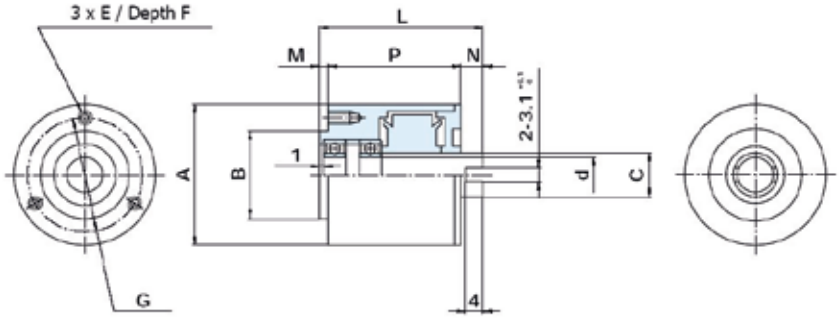


Fig 2



Model		Fig. 1 (Synthetic Bearing)			Fig. 2 (Ball Bearing)			
		0.3r	0.6R	1.2R	1 BR	1.5BR	2BR	3BR
Static torque (Nm)		0.03	0.06	0.12	1.0	0.15	0.20	0.30
Optional torque range (Nm. in)		0.019-0.039	0.039-0.059	0.059-0.119	0.069-0.099	0.099-0.014	0.14-0.197	0.197-0.299
Max allowable speed (r/min.)		300	300	250	400	400	300	300
Shaft diameter (mm) d-0.03		-	-	-	-	-	-	-
Radial dimensions (mm)	A	20	20	20	32	32	32	32
	B	17	17	17	20h8	20h8	20h8	20h8
	C	11	11	11	10	10	10	10
	D	11	11	11	-	-	-	-
	E	-	-	-	M3	M3	M3	M3
	F	-	-	-	5	5	5	5
	G	-	-	-	26+/-.2	26+/-.2	26+/-.2	26+/-.2
Axial dimensions (mm)	L	27.5	27.5	34.5	37	37	44	44
	M	2.5	2.5	2.5	2	2	2	2
	N	5	5	5	5	5	5	5
	P	20	20	27	30	30	37	37
Unit weight (Kg)		0.025	0.025	0.030	0.12	0.12	0.15	0.15

* Where the slip clutch is subjected to any radial or axial thrust, we recommend the use of the ball bearing design shown in Fig. 2.