PERMANENT MAGNET HYSTERESIS CLUTCHES & BRAKES

SG Transmission, 20 Longfield Road, South Church Enterprise Park, Bishop Auckland, County Durham, UK, DL14 6XB
Tel: +44 (0)1388 770 360 Fax: +44 (0)1388 779 197 sales@sgtransmission.com www.sgtransmission.com

SG Transmission
Electromagnetic Clutch & Brake Solutions

Features

Accurate & Dependable Torque

Since torque is transmitted via a hysteresis field, there is minimal difference between the static and the dynamic torque. These units are unaffected by friction and wear, therefore torque is substantially more accurate and repeatable than friction tensioners

Stable Torque

A Consistent torque is maintained regardless of allowable slip speed due to the hysteresis principle.

Long Life

There is virtually no wear because permanent magnets and hysteresis disks transmit the torque by magnetic flux without physical contact.

Simple Installation

Units are provided bearing mounted and pre-assembled.

No Contamination

Units are sealed which protect against contamination from equipment. There are also no wear particles from operation to contaminate equipment.

No Electrical Power Needed

The PHR Series clutches and brakes operate on a permanent magnet principle. External electrical connection is not required, therefore units function independantly from power fluctuation.

Constant Torque (Adjustable)

Units can deliver set torque regardless of speed range. Each Unit's torque settings may be manually adjusted
over a wide rane providing great flexibility.

Vertical and Horizontal Operation Possible

Units can be mounted in any axis and can be run either clockwise or counter-clockwise without affecting
performance.

LIGHT TORQUE

HYSTERESIS BRAKE (SERIES 52-PHT-S)

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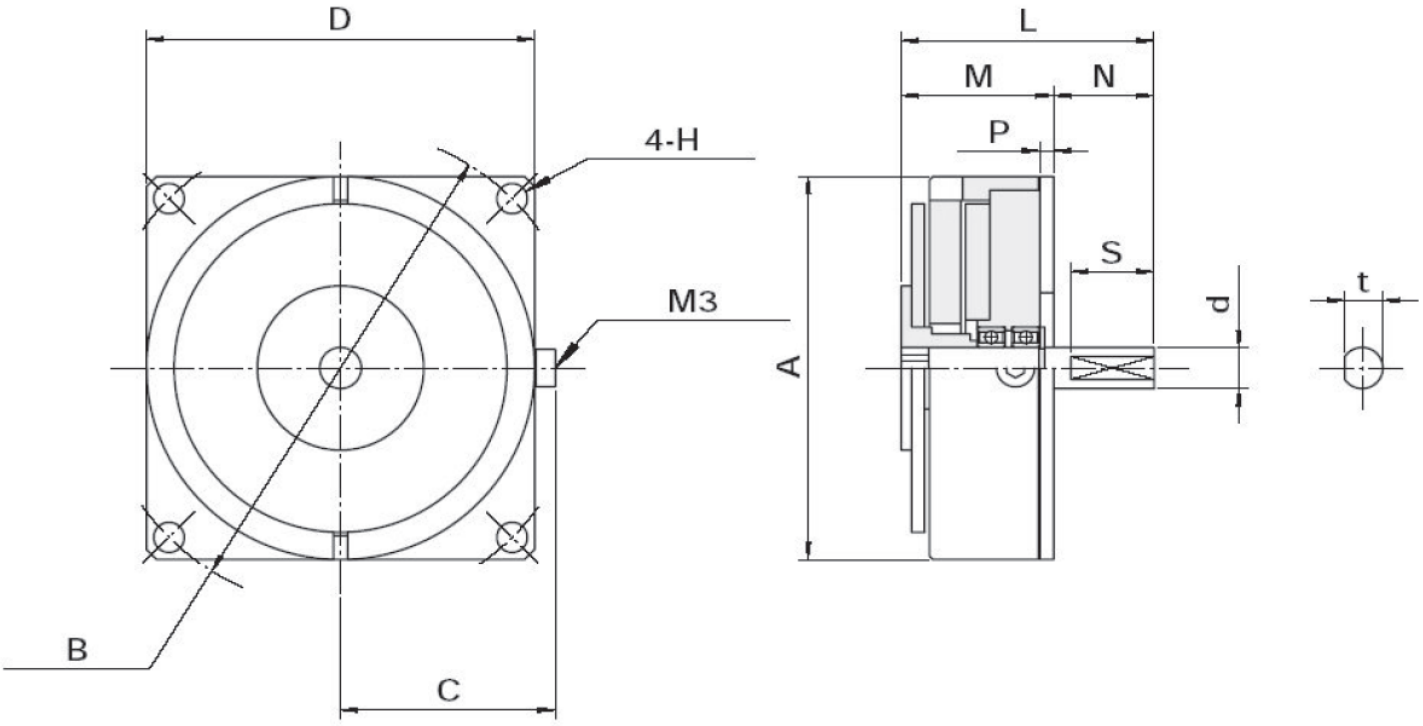

Model 52-PHT			0.02S	0.05S	0.5S
Torque Range (Nm)			*0-0.003	*0-0.0075	0.001 - 0.060
Max Slip Speed (r/min.)			1800	1800	1800
Max Heat Dissipation (W)			2.5	3	10
Moment of Inertia		(Kgm2)	0.0011	0.0048	0.103
		(Kgfcm 2)	0.0045	0.0190	0.410
Shaft DIA (mm)		dg6	3	3	-
		t	2.6	2.6	5.5
Radial Dimensions (mm)	A		26	32	56
	B		34 +/- 0.2	40 +/- 0.2	70 +/- 0.2
	C		16.5	19.5	31.5
	D		30	35	56
	H		3.4	3.4	4.4
	L		28	28	36.5
	M		16.7	18	22
Axial Dimensions (mm)	N		11.3	10	14.5
	P		2	2	2
	S		8	8	8
Weight (Kg)			0.06	0.09	0.35

HYSTERESIS BRAKE OR CLUTCH (SERIES 52-PHT-D)

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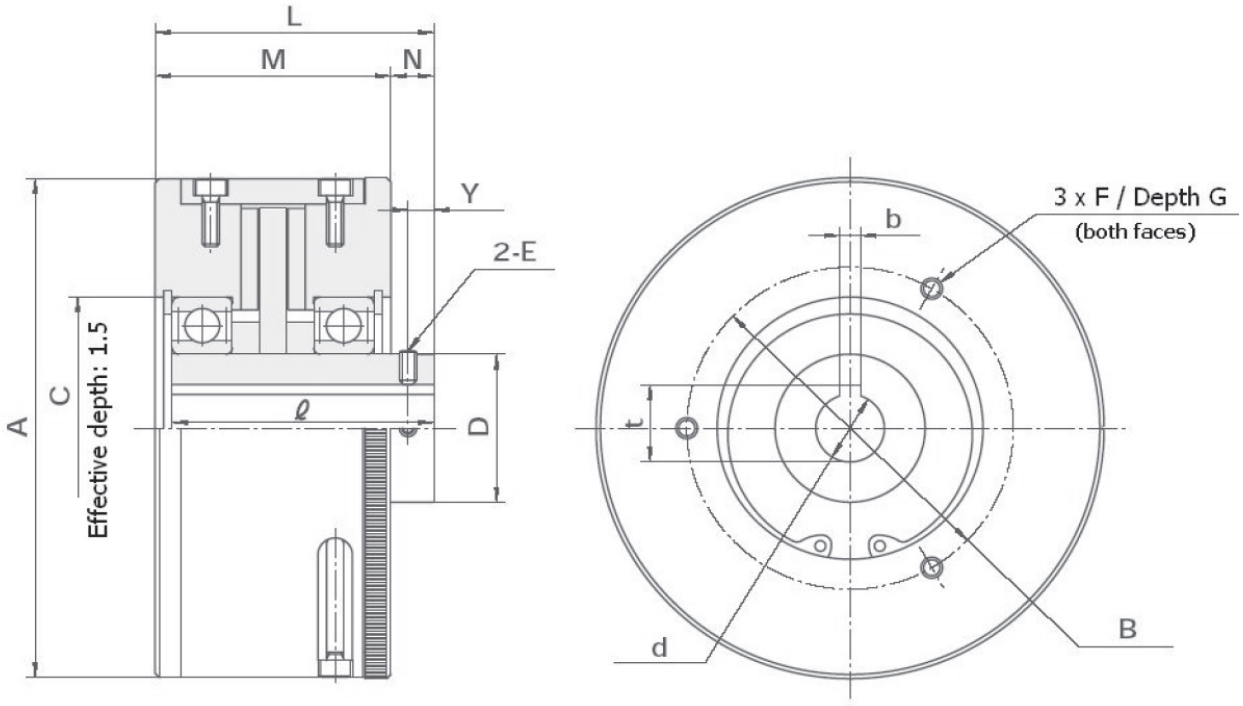

Model 52-PHT			1.2D	2.5D	5D
Torque Range (Nm)			0.01 - 0.17	0.01 - 0.37	0.02 - 0.5
Max Slip Speed (r/min.)			1800	1800	1800
Max Heat Dissipation (W)			15	20	30
Moment of Inertia	JX 10-4	Body side	1.3	4.5	7.5
	(Kgfcm 2)	Shaft side	0.078	0.243	0.4
Bore DIA & Length (mm) dH7 x 1			6 x 37.5	6 x 40	8 x 43
KEYWAY bjs9 x t + 0.1/-0			-	-	3 x 9.4
Radial Dimensions (mm)	A		47	60	70
	B		32 +/- 0.2	40 +/- 0.2	46 +/- 0.2
	CH7		22	28	28
	D		18	12	15
	E		M3	M3	M3
	F		M3	M3	M3
	T		6	6	6
Axial Dimensions (mm)	L		39.5	42	45
	M		32.5	35	37
	N		7	7	8
	Y		3	3	4
Weight (Kg)			0.3	0.57	0.84

MODEL 52-PHT

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MODEL			10D	30D	70D
Torque Range (Nm)			0.5 - 0.99	0.2 - 2.99	2.99 - 7.0
Max Slip Speed (r/min.)			1800	1000	700
Max Heat Dissipation (W)			45	70	150
Moment of Inertia	JX 10-4	Body side	11.5	55	230
	(Kgfcm 2)	Shaft side	1.075	6.25	27.5
Bore DIA & Length (mm) dH7 x 1			15 x 53.7	16 x 61	16 x 64
KEYWAY bjs9 x t + 0.1/-0			5 x 17.3	5 x 18.3	5 x 18.3
Radial Dimensions (mm)	A		82	118	166
	B		60 +/- 0.2	76.2 +/- 0.2	105 +/- 0.2
	CH7		47	62	62
	D		25	35	35
	E		M4	M4	M4
	F		M4	M5	M5
	T		10	12	12
Axial Dimensions (mm)	L		57.2	65	68
	M		50.1	55	59
	N		7.1	10	9
	Y		3.5	6	6
Weight (Kg)			1.6	3.6	7.9

* No torque except miniscule bearing contact and seal drag.