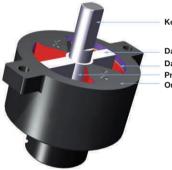
#### Introduction

### **Rotary Dampers**

Our Rotary Dampers are sealed maintenance free units. They are available with fixed or adjustable damping rates. The damping can be clockwise, anticlockwise or in both directions.

The outer body is either plastic or metal depending upon model size. The output connection can be direct onto the keyed output shaft or indirect via a plastic gear (available with 4 standard modules). Plastic racks with modules of 0.5 to 1 are also available. Applications include office machinery, lids and flaps, floppy disc drives, piano lids, CD players, auto glove-boxes, vending machines, medical equipment, furniture industry and a multitude of others.



**Keyed Output Shaft** 

Damping Vane
Damping Orifice
Pressure Chamber
Outer Body

Our Rotary Dampers guarantee the smooth controlled opening and closing of small lids, covers and flaps. They can be mounted directly on the pivot axis or can be used to provide linear damping by using a plastic gear and rack. They enable mechanisms to operate with a smooth controlled motion giving that "touch of quality" to whatever product they are used on.

Our rotary dampers are filled with a special high viscosity fluid (silicone type) and sealed for life. The fluid is passed through an orifice or groove by a



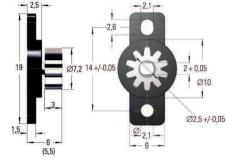
rotating vane to provide damping resistance. The damping torque generated is determined by the fluid viscosity and by the orifice configuration.

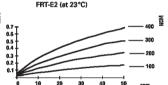
Lifetime: With a max. rotational speed of 50 revs/min and a maximum of 10 cycles/min (12 cycles/min with the FDT/FDN types) the rotary dampers still provide more than 80% of their damping torque after a run of 50000 cycles.

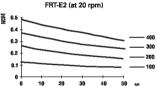
# Rotary Dampers Bi - Directional

Body: Polycarbonate plastic Gear: Polyacetal Plastic Fluid: Silicone









#### Material: Polycarbonate plastic Temperature range: 0° C to 50° C

Tooth: Involute
Module: 0.6
Pressure angle: 20°
Number of teeth: 10
P.C.D.: 6 mm

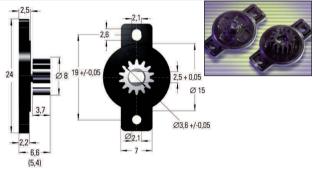
0.6 mod matching plastic racks available up to 1 metre. Units are supplied with removable gear.

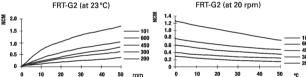
DISCOUNTS			
1 - 24	List Price		
25 - 49	-15%		
50 - 99	-25%		
100 - 249	-35%		
250 - 499	-50%		
500 +	-60%		

PART NUMBER	Damping Torque Ncm	Each 1-24
HPCFRTE2100G1	0.1 ± 0.05	£5.22
HPCFRTE2200G1	0.2 ± 0.07	£5.22
HPCFRTE2300G1	0.3 ± 0.08	£5.22
HPCFRTE2400G1	0.4 ± 0.10	£5.22

### **Body: Polycarbonate plastic** Gear: Polyacetal Plastic Fluid: Silicone

### **Rotary Dampers Bi - Directional**





#### Material: polycarbonate plastic Temperature range: 0° C to 50° C

Tooth: Involute Module: 0.5 20° Pressure angle: Number of teeth: P.C.D.: 7 mm

		Price
	500 +	-60%
	250 - 499	-50%
	100 - 249	-35%
	50 - 99	-25%
	25 - 49	-15%
	1 - 24	List Price

0.5 mod matching plastic racks available up to 1 metre. Units are supplied with removable gear.

PART NUMBER	Damping Torque Ncm	Price Each 1-24
HPCFRTG2200G1	0.20 ± 0.07	£5.22
HPCFRTG2300G1	0.30 ± 0.08	£5.22
HPCFRTG2450G1	0.45 ± 0.10	£5.22
HPCFRTG2600G1	0.60 ± 0.12	£5.22
HPCFRTG2101G1	1.00 ± 0.20	£5.22

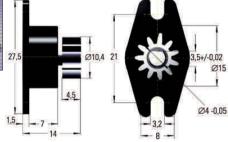


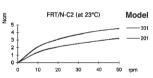
# **Rotary Dampers**

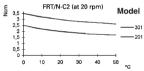
Body: Polycarbonate plastic Gear: Polyacetal Plastic Fluid: Silicone

Bi - Directional & Uni - Directional Fluid: S









#### Material: polycarbonate plastic Temperature range: 0° C to 50° C

Tooth: Involute
Module: 0.8
Pressure angle: 20°
Number of teeth: 11
P.C.D.: 8.8 mm

0.8 mod matching plastic racks available up to 1 metre. Units are supplied with removable gear.

0.8 mod flexible racks available up to 2 metre.

<b>DISCOUNTS</b>			
1 - 24	List Price		
25 - 49	-15%		
50 - 99	-25%		
100 - 249	-35%		
250 - 499	-50%		
500 +	-60%		

PART NUMBER		Damping Torque Ncm		
Bi-directional damping	R-hand damping (clockwise)	L-hand damping (anti-clockwise)		Price Each
HPCFRTC2201G1			2 ± 0.6	£12.02
HPCFRTC2301G1			3 ± 0.8	£12.02
	HPCFRNC2R201G1	HPCFRNC2L201G1	2 ± 0.6	£14.30
	HPCFRNC2R301G1	HPCFRNC2L301G1	3 ± 0.8	£14.30

6.44

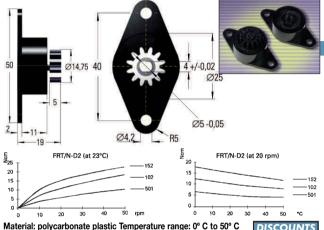
**<b>Aechanical** Rotary Dampers



Body: Polycarbonate plastic Gear: Polyacetal Plastic

# **Rotary Dampers**

Fluid: Silicone Bi - Directional & Uni - Directional



Material: polycarbonate plastic Temperature range: 0° C to 50° C

Tooth: Involute

Module: 1.0

 Pressure angle:
 20°

 Number of teeth:
 12

 P.C.D.:
 12.75 mm

DIS	SCC	UNTS
1 -	- 24	List Price
25 -	- 49	-15%
50 -	- 99	-25%
100 -	- 249	-35%
250 -		-50%
50	) +	-60%

PART NUMBER		Damping Torque Ncm		
Bi-directional damping	R-hand damping (clockwise)	L-hand damping (anti-clockwise)		Price Each 1-24
	HPCFRND2R501G1	HPCFRND2L501G1	5 ± 1	£46.62
	HPCFRND2R102G1	HPCFRND2L102G1	10 ± 2	£46.62
	HPCFRND2R152G1	HPCFRND2L152G1	15 ± 3	£46.62
HPCFRTD2501G1	·		5 ± 1	£40.85
HPCFRTD2102G1			10 ± 2	£40.85
HPCFRTD2152G1			15 ± 3	£40.85

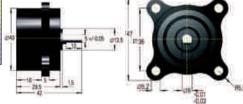
<sup>1</sup> mod matching plastic racks available up to 1 metre. Units are supplied with removable gears. 1 mod flexible racks are available up to 2 metre.

# **Rotary Dampers**

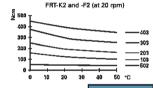
**Body: Polycarbonate plastic** Gear: Polyacetal Plastic Fluid: Silicone

### Bi - Directional & Uni - Directiona





FRT-K2 and -F2 (at 23°C) 303 203 103 200 100 502 rpm



### Material: polycarbonate plastic Temperature range: 0° C to 50° C

Weight max.: 0.116 kg

DISCOUNTS		
1 - 9	List Price	
10 - 24	-10%	
25 - 49	-15%	
50 +	-30%	

PART NUMBER		Damping		
Bi-directional damping	R-hand damping (clockwise)	L-hand damping (anti-clockwise)	Torque Ncm (Nom. 20 rpm. 23° C)	Price Each 1-9
HPCFRTK2502			50 ± 10	£83.83
HPCFRTK2103			100 ± 20	£83.83
HPCFRTK2203			200 ± 40	£83.83
HPCFRTK2303			300 ± 80	£82.83
HPCFRTK2403			400 ± 100	£83.83
	HPCFRNK2R502	HPCFRNK2L502	50 ± 10	£92.28
	HPCFRNK2R103	HPCFRNK2L103	100 ± 20	£92.28
	HPCFRNK2R203	HPCFRNK2L203	200 ± 40	£92.28