

## Wixroyd Rotary and Torque Dampers

### 5100-43

#### SOLUTION FOR CONTROLLED OPENING AND CLOSING MOTION

Wixroyd Rotary and Torque Dampers offer solutions for controlled opening and closing of lids, drawers, covers and much more, they offer a wide range of solutions for a variety of applications creating smooth movement and function.

Though unnoticed in many applications, rotary and torque dampers are a vital part of many products bringing quality, safety and durability. Rotary and torque dampers provide quality movement enhancing both touch and feel. Available in unidirectional (single) damping, or bidirectional (double) versions. Also available with or without gears.



Rotary Dampers Nos. 5100 to 5106.



Disk Dampers Nos. 5120 to 5126

#### ROTARY DAMPERS

Rotary dampers utilise the principle of fluid resistance to reduce the speed of moving parts. The oil viscosity is utilised to provide the "braking force" of the damper. The torque or the "braking force" can be adjusted by changing the viscosity of the oil. The advantages to the rotary type dampers are the small compact size of the units.

#### Applications:

Loading trays for CD, DVD, VCR, MD players.  
 Arm rests, ashtrays, center consoles, glove boxes, handles and storage compartments in passenger vehicles.  
 Camcorders, cellular phones and small personal devices.



Torque Dampers Nos. 5130 to 5143

#### GENERAL SPECIFICATION

Series	Max. Speed	Max. Cycle Rate	Nominal Torque Rating	Operating Temperature	Storage Temperature
5100 to 5106	50 rpm	10 cycles/min	At 20rpm, 23°C (73°F)	0-50°C (32-122°F)	-20-60°C (-4-140°F)
5120 to 5126	50 rpm	12 cycles/min	At 20rpm, 23°C (73°F)	-10-50°C (14-122°F)	-20-60°C (-4-140°F)

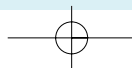
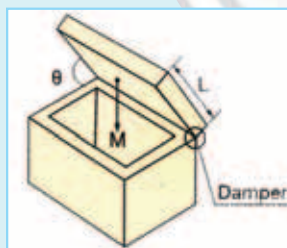
#### Torque Calculation:

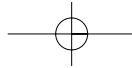
To calculate the torque for your application, the following measurements listed below are necessary.

$$T \text{ (torque)} = L/2 \times 9,8 \times M \text{ (N.m)}$$

$$= L/2 \times M \text{ (Kgf.cm)}$$

L = Length from pivot point to end of lid.  
 M = Weight of the lid (kg).





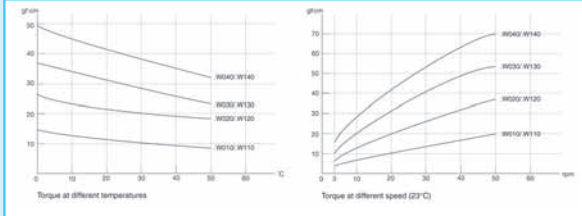
# Wixroyd Rotary Dampers

technical information - torque graphs

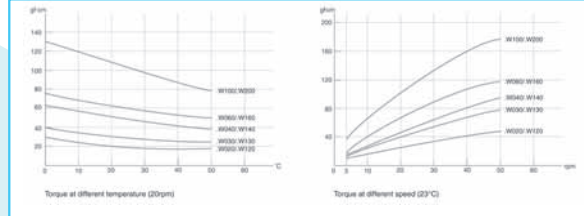


## 5100-26

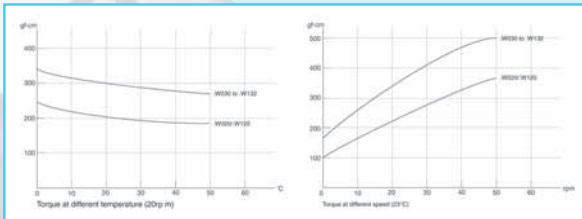
### 5100 - Torque Graphs for Temperature and Speed



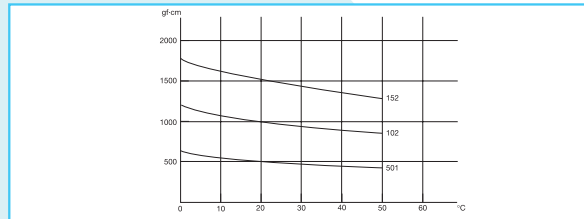
### 5102 - Torque Graphs for Temperature and Speed



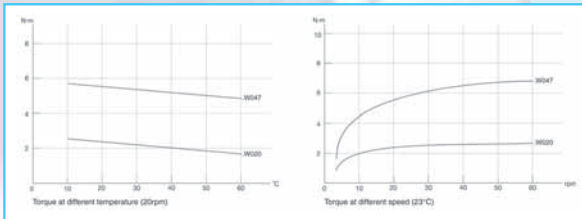
### 5104 - Torque Graphs for Temperature and Speed



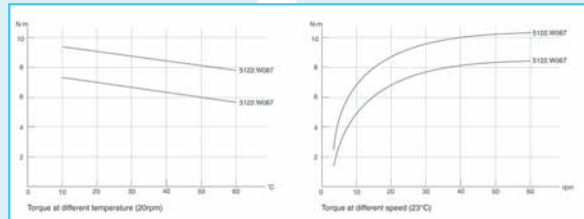
### 5106 - Torque Graphs for Temperature and Speed



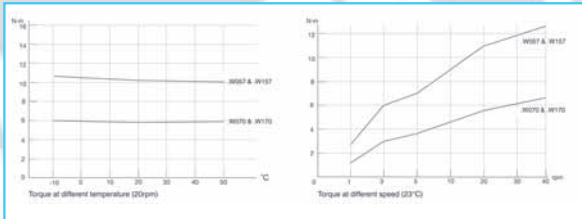
### 5120 - Torque Graphs for Temperature and Speed



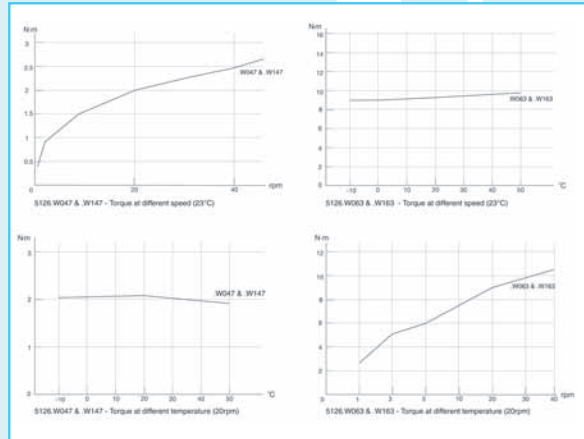
### 5122 - Torque Graphs for Temperature and Speed



### 5124 - Torque Graphs for Temperature and Speed



### 5126 - Torque Graphs for Temperature and Speed



HINGES

