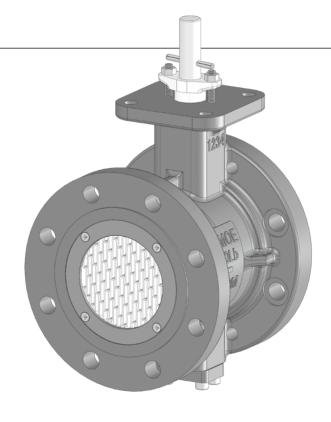
# **DTM**





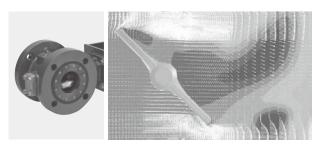






## **General Description**

The Ultimate Rotary Control DTM provides high accurate control under most critical process conditions including higher pressure drop liquid/gas applications. DTM series valves can be supplied with or without integrated cavitation breaker in order to reduce noise level by max. 30 dB. Valves in this series also exhibit higher anticavitation capability.

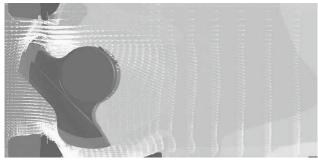


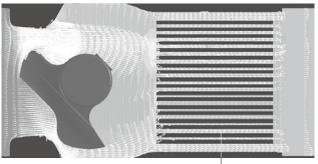
#### **Conventional Butterfly Valve**

Local static pressure drop and quick pressure recovery causes cavitation



#### **DTM Series**





Cavitation breaker

(Note) Colors show the pressure distribution. Red means a high pressure and blue means a low pressure.

#### **Features and Benefits**

The ultimate rotary control DTM valve provides accurate control and low noise levels, even at high velocities.

#### Wide rangeability, 125:1

Improves flow control with a wide range of control from closed to fully open.

## Noise reduction by 20dB or more

Features the latest anti-cavitation technology pioneered by TOMOE that delivers superior control and low turbulence in the line. As a result, there is a 20dB reduction in flow induced valve noise and associated damage to piping and equipment compared to conventional valves.

## Can handle high differential pressure

Capable of handling extremely high differential pressure with control in the opening range of 0 - 30% and differential pressures greater than 2MPa.

## High performance seat structure

Excellent durability and high performance characteristics achieved with metal seat design. Seat leakage of Class V and Rate A for a soft seal.

#### **Ease of maintenance**

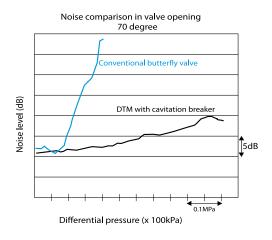
Designed for easy maintenance – for example, seat and cavitation breaker can be replaced simply and quickly.

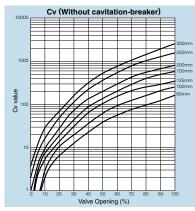
# High performance diaphragm actuator

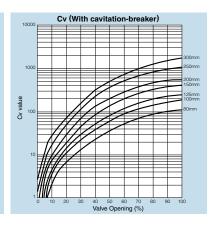
A new high performance diaphragm pneumatic actuator that is compact, highly accurate and has proven long life in the field has been designed to manage the DTM valve actuation process with optimum efficiency.

#### **Optional RPTFE seat**

The DTM is also available with an RPTFE seat which provides zero leakage to ISO 5208 Rate A.







## **Standard Specifications**

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Valve type		Rotary control butterfly valve (with low noise characteristics)	
Valve nominal size		80, 100, 125, 150, 200, 250, 300mm	
Pressure rating		ASME B 16.5 Class 150, 300	
Flange accommodation		JIS10, 16, 20, 30K, ASME B 16.5 CLASS 150, 300	
Body Style		Double flanged	
Face-to-face dimensions		IEC 60534-3-2 (JIS B 2005-3-2)	
Flow characteristics		Equal percent, CV linear (option)	
Rangeability		With cavitation breaker 100:1 Without cavitation breaker 125:1	
Flow direction		Flow to retainer side	
Max. working pressure / Closed		Class 150 : 2MPa / Class 300 : 5.1MPa	
Max. differential pressure / Open by 30%		Class 150 : 0.8MPa / Class 300 : 2MPa	
Seat leakage		ASME B 16.104 / FCI 70 - 2 Class V	ISO 5208 Rate A
			(Zero leakage)
Temperature range		-29 to 400 degrees C	-10 to 230 degrees C
Standard materials	Body	WCB or CF8M	
	Disc	CF8M	
	Stem	Stainless steel 630	
	Seat ring	Stainless steel 316	RPTFE
	Grand packing	Graphite	
Applicable gaskets		-Seat gasket	
		Any standard seat gasket is applicable.	
		-Spiral gasket	
		ASME flange: Standard spiral gasket wth inner & outer lings is applicable.	
		JIS flange: Tomoe original spiral gasket is applicable.	
Actuator		Manual gear, diaphragm actuator, pneumatic cylinder, motorised	

<sup>\*</sup>It is possible that seat leakage occur when fluid (e.g. powder and/or liquid) is solidified by working temperature and other cause. Consult us.
Please note that use with vertical line such as bottom area of discharge spout of hopper, and tank.

<sup>\*</sup>Flange outer diameter and thickness may differ from standard dimensions.