

# DFT® HI-100®

## Materials of Construction\* and Application Guide

BODY				
Body / Bonnet <i>(normally matches pipe)</i>	A105		F22 or F11	A479-316
Cage: 1/4" to 2"	Cast Stellite® #6			
Cage: 2-1/2" & Larger	WC6 w/Stellite® #6 Hardfacing		CF8M/Stellite® #6	
Cartridge	A351 CF8M			
Guide Pin	A193 B7		A193 B8M	
Gland/ Follower	303 SS			
TRIM STYLE				
Trim Code	(A)	(B)	(C)	(D)
Stem Trim	17-4 PH		A286	A286
Ball: 1/4" to 4"	PSZ Ceramic	440C	Stellite®	Stellite®
Ball: 6" and Larger	Stellite® #6			
Seat: 1/4" to 2"	440C		Stellite® #6	Stellite® #6
Seat: 2-1/2" & Larger	440C		316 SS/Stellite®	316 SS/Stellite®
Wear Bushing	440C		Stellite® #6	

APPLICATION	TRIM CODE	APPLICATION	TRIM CODE
Boiler Feed Pump Bypass	A	Drum Level Control	B
Auxiliary Steam Control	C	Attemperator Spray Control	C
Sootblower Control (Hi-Temp)	D	Turbine Bypass	C
Feed Water Control	B	Turbine and Boiler Drain	B

\*Standard materials of construction are shown. These materials can be modified for special applications. Contact the factory for more information. DFT® and HI-100® are Registered Trademarks of DFT Inc. All other trademarks are the properties of their respective owners and are used for purposes of identification only.

## Flow Characteristics

### HI-100®/MSV-100®/Ultra-Trol®

#### Flow Characteristics

The classic DFT design has a linear flow characteristic. This characteristic gives the best flow control over the widest range. DFT's venturi-ball design is the only design that actually works with the physics of the fluid flow. Incoming flow enters through the nozzle to the control area. The smoothly converging nozzle lowers turbulence as the flow moves around the curved control path. Note that only rounded surfaces and cones are used for the control function. As the flow exits the valve, the diverging nozzle controls expansion and recovery so that no turbulence is added to the flow stream. This design provides a superior, smooth flow control. The preferred operating range of the valve is between 15% and 90% open.

