

DFT® HI-100®

MATERIALS OF CONSTRUCTION*			
COMPONENT	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
Body	A105	A182 F22 or F11	A479 316
Bonnet/Bottom Cover	A105	A182 F22 or F11	A479 316
Stem	410SS Heat Treated & Hardened		17-4PH
Cage - 1/4" to 2" 2-1/2" & Larger	Stellite® #6		
	Valve Body Base Material w/ Stellite® #6 Hardfacing		
Cartridge	316 SS		
Guide Pin	A193 B7		A193 B8M
Gland	303 SS		
Follower	Carbon Steel		316 SS
TRIM STYLE			
	Standard	Feedwater	Steam
Ball - 1/4" to 4" 6" & Larger	440C	Ultra-Loy™ Ceramic	Stellite®
	Stellite®		
Seat - 1/4" to 2" 2-1/2" & Larger	422 SS Heat Treated & Hardened		Stellite®
			316 SS/Stellite®
Wear Bushing	422 SS Heat Treated & Hardened		17-4PH
SEALS			
	Low Temperature <350° F (177° C)		350 - 1000° F (177 - 538° C)
Packing	Teflon Chevron Style		Graphite
Bonnet or Bottom Cover and Guide Pin Seal	Spiral Wound Gasket 304/Graphite		
Seat Seal	Spiral Wound Gasket 304/Graphite		
Wear Bushing Seal			
MANUAL VALVES			
Yoke	Carbon Steel		Stainless Steel
Handwheel	Cast Iron		
Stem Nut	Bronze		

*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 10% and 90% open.

