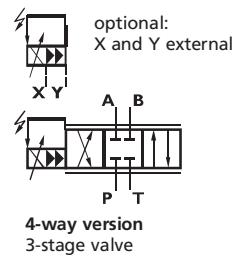
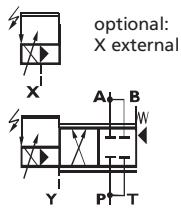
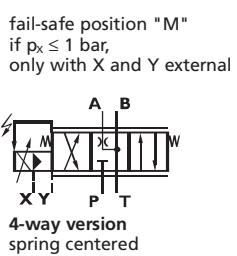
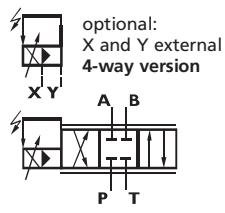


## PERFORMANCE SPECIFICATIONS FOR STANDARD MODELS

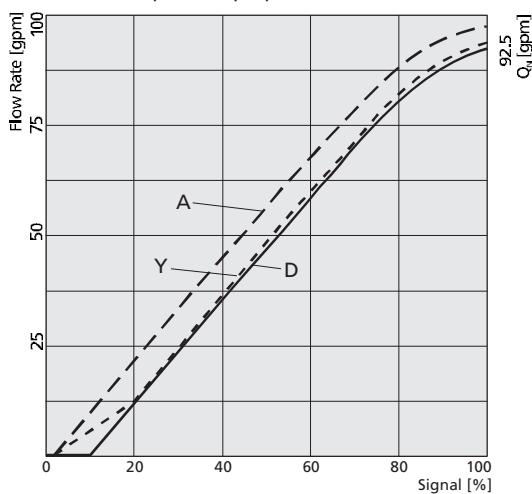
English [Metric]		D663 - . . . . L . . . . B		D663 - . . . . P . . . . M	
Mounting Pattern					
Valve Body Version					
Pilot Stage					
Pilot Connection	selectable, internal or external				
Mass		lb [kg]			
Rated Flow	( $\pm 10\%$ ) at $\Delta p_N = 75$ psi per land	gpm [l/min]			
Operating Pressure	max.				
Main Stage:	port P, A, B port T with Y internal port T with Y external	psi [bar]	5,000 [350] 2,000 [140] 5,000 [350]	X and Y 4,000 [280] 5,000 [350] 2,000 [140]	5,000 [350] 3,000 [210] 5,000 [350] 4,000 [280] — 3,000 [210]
Pilot Stage:	regular version with dropping orifice (on request)	psi [bar]	4,000 [280] 5,000 [350]		
Response Time*	for 0 to 100% stroke	[ms]	37.0		13.0
Threshold*		[%]	< 0.1		< 0.2
Hysteresis*		[%]	< 0.5		< 1.0
Null Shift	with $\Delta T = 55$ K	[%]	< 1.0		< 1.5
Null Leakage Flow*	max. (~ critical lap)	gpm [l/min]	1.5 [5.6]		1.3 [5.0]
Pilot Leakage Flow*		gpm [l/min]	0.69 [2.6]		0.53 [2.0]
Pilot Flow*	for 100% step input	gpm [l/min]	0.69 [2.6]		7.9 [30.0]
Main Spool Stroke		in [mm]	0.20 [ $\pm 5.0$ ]		0.20 [ $\pm 5.0$ ]
Spool Drive Area		in <sup>2</sup> [cm <sup>2</sup> ]	0.43 [2.8]		1.77 [11.4]

\* measured at 3,000 psi [210 bar] pilot or operating pressure, respectively, fluid viscosity of 32 mm<sup>2</sup>/s and fluid temperature of 104°F [40°C]



## PERFORMANCE SPECIFICATIONS FOR STANDARD MODELS

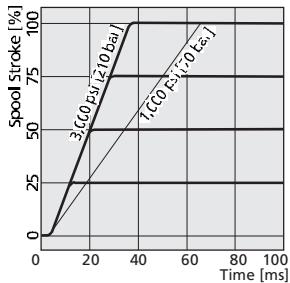
Flow vs. Signal Curve  
at  $\Delta p_N = 75$  psi per land [5 bar]



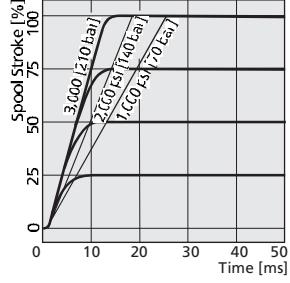
Spool version A: ~critical lap, linear characteristic  
Spool version D: 10% overlap, linear characteristic  
Spool version Y: ~critical lap, curvilinear characteristic

Typical characteristic curves measured at 3,000 psi [210 bar] pilot or operating pressure, fluid viscosity of 32 mm<sup>2</sup>/s and fluid temperature of 104°F [40°C]

D663 - . . . . L . . . . B  
Step Response



D663 - . . . . P . . . . M



Frequency Response

