

Inspection Standards and Requirements								
		ISO5208:2008 / GB/T13927			API598-2004			
Shell strength	Medium temperature	5~40			5~40			
	Medium	Water, kerosene, air, suitable gas			Water, kerosene, air, suitable gas			
	Test pressure	Nominal pressure (PN)×1.5			Nominal pressure×1.5			
	Minimum duration of the test	DN	Seconds		NPS	Check valve	Others	
		≤50	15		≤2"	60	15	
		65~200	60		2½"~6"	60	60	
≥250		180		8"~12"	60	120		
Assessment	No visible leakage allowed			No visible leakage allowed				
Back seal	Test pressure	DN	PN	Pressure	NPS	Class	Pressure	
		≤80	All	0.6Mpa	All	≤300	0.4~0.7Mpa	
		100~200	≤5.0	0.6Mpa				
		100~200	>5.0	PN ×1.1		>300	Class x 1.1	
	≥250	All	PN ×1.1	No visible leakage allowed				
Assessment	No visible leakage allowed			No visible leakage allowed				
High pressure sealing test	Test pressure	DN	PN	Pressure	Class	Ductile iron	Steel	
		≤80	All	PN ×1.1 (liquid) 0.5~0.7Mpa (air)	150	1.7 Mpa	Class x 1.1	
		100~200	≤5.0	PN ×1.1 (liquid) 0.5~0.7Mpa (air)				
		100~200	>5.0	PN ×1.1 (liquid)	300	4.4 Mpa		
		≥250	All	PN ×1.1 (liquid)				
		Minimum duration of the test	DN	Metal seal	Resilient seal	NPS		Check valve
	≤50	15	15	15	≤2"	60		15
	65~200	30	15	15	2½"~6"	60	60	
	250~450	60	30	30	8"~12"	60	120	
	≥500	120	60	60	≥14"	120	120	
	Assessment	Class (level)	Liquid leakage	Air leakage	NPS	Liquid & Air	Liquid & Air	
		A	No visible leakage allowed (mm3/s)		≤2"	"Liquid: 3 cm3/in·min Air: 0.042 m3/in·h"	0 drop(bubble)/ min	
		B	DN x 0.01	DN x 0.3	2½"~6"		12 & 24	
		C	DN x 0.03	DN x 3	8"~12"		20 & 40	
D		DN x 0.1	DN x 30	≥14"	2 & 4 / in·min			
Low pressure sealing test	Medium	Air, suitable gas			Air, suitable gas			
	Test pressure	0.5~0.7 Mpa			0.4~0.7 Mpa			
	Minimum duration of the test	DN	Metal seal	Resilient seal	NPS	Check valve	Others	
		≤50	15	15	≤2"	60	15	
		65~200	30	15	2½"~6"	60	60	
		250~450	60	30	8"~12"	60	120	
	≥500	120	60	≥14"	120	120		
	Assessment	Class (level)	Air leakage		NPS	Air leakage		
		A	No visible leakage allowed (mm3/s)		≤2"	0.042 m3/in·h	0 bubble /min	
		B	DN x 0.3		2½"~6"		24	
C		DN x 3		8"~12"	40			
D		DN x 30		≥14"	4 / in·min			