

Nmae : Check Valve

Testing result:

Item	No.	Standard	Test Process	Result
1、Appearance & Size	1#-4#	Valve surface have no scrash,rust and dirty; Valve inner have no dirty,water, etc	1# : Satisfied 2# : Satisfied 3# : Satisfied 4# : Satisfied	Satisfied
2、Valve inner leaking test	1#-4#	Input 1.0mPa pressure from exist-side of valve, then test the leaking rate at the entry-side of valve, standard rate <500ml/min	1# : <10mL/min 2# : <10mL/min 3# : <10mL/min 4# : <10mL/min	Satisfied
3、air tightness test	1#-4#	Plug up the exist-sde of valve, input 4.6mPa pressure from entry-side of valve, then immerse into water, keep pressure for 1minutes. It's satisfied if no bubble come out.	1# : No bubble 2# : No bubble 3# : No bubble 4# : No bubble	Satisfied
4、pressure difference test of opened valve	1#-4#	Keep valve vertically and horizontally. Input air pressure from entry-side and from 0-5kPa. Record the pressure difference when the valve open.	Vertical location : 1# : 1.42kPa 3# : 1.44kPa 2# : 1.41kPa 4# : 1.46kPa Horizontal location : 1# : 2.74kPa 3# : 2.78kPa 2# : 2.72kPa 4# : 2.80kPa	Satisfied
5.water-flow test	1#-4#	Input air from exist-side of valve, input water from entry-side. Adjust the air pressure until the pressure difference of entry side and exist side = 100kPa, test the water flow of exist-side.Satisfied when water flow>35L/min	After test : 1# : 37.4L/min 2# : 37.6L/min 3# : 37.9L/min 4# : 37.1L/min	Satisfied

6.Anti-vibration test	5#-8#	Fix the valve on vibration tester, follow the GB/2423.10 standard and use vibrational frequency=33Hz, vibrational amplitude=2mm, vibrate it from up and down, from right and left, from front and back for 4hour.Then test the leaking rate and air tightness.	Leaking rate after vibration : 5# : <10mL/min 7# : <10mL/min 6# : <10mL/min 8# : <10mL/min air tightness afer vibration : 5# : No bubble 7# : No bubble 6# : No bubble 8# : No bubble	Satisfied
7.high-temperature resistant test	9#-12#	Put valve into high-temperature cabinet(140±2)for 24hours. Then cool it until room temperature. Test the leaking rate and air tightness	Leaking rate after high temperature : 9# : <10mL/min 11# : <10mL/min 10# : <10mL/min 12# : <10mL/min air tightness after high temperature : 9# : No bubble 11# : No bubble 10# : No bubble 12# : No bubble	Satisfied
8.low-temperature resistance test	13#-16#	Put valve into low-temperature cabinet(-50±3) for 24hours. Then warm it until room temperature. Test the leaking rate and air tightness	Leaking rate after low temperature : 13# : <10mL/min 15# : <10mL/min 14# : <10mL/min 16# : <10mL/min air tightness after low temperature : 13# : No bubble 15# : No bubble 14# : No bubble 16# : No bubble	Satisfied
9.impact resistance test	17#-20#	Under package, drop the valve package from 1m high, then test leaking rate and air tightness	leaking rate after dropping : 17# : <10mL/min 19# : <10mL/min 18# : <10mL/min 20# : <10mL/min air tightness after dropping: 17# : No bubble 19# : No bubble 18# : No bubble 20# : No bubble	Satisfied
10.temperature-changing test	21#-24#	Put valve into low temperature cabinet(-50±3) for 1 hour, then move it into high temperature cabinet(140±2) for 1hour, after 10cycle of this test. Test the leaking rate and air tightness	leaking rate after temperature-changing 21# : <10mL/min 23# : <10mL/min 22# : <10mL/min 24# : <10mL/min air tightness after temperature-changing 21# : No bubble 23# : No bubble 22# : No bubble 24# : No bubble	Satisfied

11.compression strength test	25#-28#	Fully welding the exist-side. Input 6.9mPa water from entry-side of valve, keep pressure for 3min, then test the leaking performance	<p>after tested :</p> <p>25# : no leaking</p> <p>26# : no leaking</p> <p>27# : no leaking</p> <p>28# : no leaking</p>	Satisfied
12.breaking strength test	25#-28#	Fully welding the exist-side of valve. Input 17.5Mpa water from entry-side, keep pressure for 1mins, check the valve broken or not	<p>After tested :</p> <p>25# : no broken</p> <p>26# : no broken</p> <p>27# : no broken</p> <p>28# : no broken</p>	Satisfied
13.durability test	29#-32#	Input the air pressure from exist-side from 0-1.47mPa, frequecy 15times/min, action for 100000cycle. Then test the leaking rate and air tightness	<p>Before tested :</p> <p>Leaking rate :</p> <p>29# : <10mL/min 31# : <10mL/min</p> <p>30# : <10mL/min 32# : <10mL/min</p> <p>air tightness :</p> <p>29# : no bubble 31# : no bubble</p> <p>29# : no bubble 32# : no bubble</p> <p>After tested :</p> <p>Leaking rate :</p> <p>29# : <10mL/min 31# : <10mL/min</p> <p>30# : <10mL/min 32# : <10mL/min</p> <p>Air tightness :</p> <p>29# : no bubble 31# : no bubble</p> <p>29# : no bubble 32# : no bubble</p>	Satisfied