

 Test Report
 No.: SHHL1604018603PL
 Date: APR. 19, 2016
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SHANGHAI LANSHENG LIGHT INDUSTRIAL PRODUCTS IMP. & EXP. CORP. LTD FLOOR 7-11, NO.1230 ZHONG SHAN (NORTH 1) ROAD, SHANGHAI 200437, CHINA

The following sample(s) was/were submitted and identified by the client as:

Sample Description	: FAUCET
SGS Ref. No.	: NBHL1602001259SD
Style/ Item No.	: MY8220,MY2101,MY5104,MY9884,MY5103
Manufacturer	: WENZHOU KINGSDOM SANITARY WARE CO.,LTD
Client Reference Information	: MY8221,MY1107,MY1004,MY6009,MY1581-50,
	MY9508-71,MY1110,MY-S88
Sample Receiving Date	: APR. 12, 2016
Testing Period	: APR. 12, 2016 TO APR. 19, 2016
Test Performed	: SELECTED TEST(S) AS REQUESTED BY APPLICANT
Test Requested	: 1. DIMENSIONAL CHARACTERISTICS
	(ACCORDING TO EN 817:2008 CLAUSE 6)
	2. LEAKTIGHTNESS CHARACTERISTICS
	(ACCORDING TO EN 817:2008 CLAUSE 8)
	3. PRESSURE RESISTANCE CHARACTERISTICS
	(ACCORDING TO EN 817:2008 CLAUSE 9)
	4. MECHANICAL STRENGTH CHARACTERISTICS
	(ACCORDING TO EN 817:2008 CLAUSE 11)
Test Result(s)	: FOR FURTHER DETAILS, PLEASE REFER TO THE
	FOLLOWING PAGE(S)
Conclusion	: THE SUBMITTED SAMPLE MET THE TEST
	REQUIREMENT.

Signed for and on behalf of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Yomoro Gu Authorized Signatory



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Test Conducted:

1. Dimensional characteristics (According to EN 817:2008 Clause 6)

- 2. Leaktightness Characteristics (According to EN 817:2008 Clause 8)
- 3. Pressure resistance characteristics (According to EN 817:2008 Clause 9)
- 4. Mechanical Strength Characteristics (According to EN 817:2008 Clause 11)

	Style No.	Sample Size
Test sample	MY8220	1 piece
	MY2101	1 piece
Referenced sample	MY5104	1 piece
	MY9884	1 piece
	MY5103	1 piece

Test Property	Test Principle / Requirements	Result	Rating	
6 Dimensional characteristics				
6.1 General remarks	The design and construction of components without defined dimensions permit various design solutions to be adopted by the manufacturer. Special cases are covered in 6.5.	See Below	/	
6.2 Inlet dimensions	Inlet dimensions shall be as specified in Table 3.	/	N/A	
6.3 Outlet dimensions	Outlet dimensions shall be as specified in Table 4. When nozzle outlets are used with flow rate regulators conforming to EN 246, the manufacturing tolerances chosen for the connecting threads of the outlets shall be compatible with those of the connecting threads of the flow rate regulators in order to ensure interchangeability.	See Result 1	Pass	
6.4 Mounting dimensions	Mounting dimensions shall be as specified in Table 5.	See Result 1	Pass	



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Test Property	Test Principle / Requirements	Result	Rating
6.5 Special cases	Mechanical mixing valves intended for special	/	N/A
	applications, e.g. for installation on sanitary appliances		
	not conforming with European Standards, or where		
	dimensional interchangeability is not a requirement can		
	incorporate dimensional deviations provided that:		
	- all other requirements of this standard are satisfied;		
	- secure fixing to the mounting surface is provided with		
	all fixing holes covered;		
	- thread connections to the supply pipes comply with		
	EN ISO 228-1;		
	- the air gap dimension E≥25 mm or a backflow		
	prevention device is provided in accordance with EN1717.		
	- the D_1 dimension is coordinated with the sanitary		
	appliance.		
	The manufacturer's literature including the installation		
	instructions supplied with the tapware shall indicate		
	clearly that the tapware is for special application.		
6.6 Flexible hoses	Requirements for flexible hoses for shower outlets	/	N/A
for shower outlets	shall be as specified in EN 1113.		
6.7 Shower Outlets	Requirements for shower outlets shall be as specified	/	N/A
0 Looktightnoog Cho	INEN 1112.		
8 Leakiightness Cha	Apply to the inlet of the mixing value a water pressure	No lookogo or	Daga
o.s Leakiightness	Apply to the line of the mixing value a water pressure of (1.6 ± 0.05) MPa $[(16.0 \pm 0.5)$ have a water pressure it	NO leakage of	Fass
and of the mixing	for $(1,0\pm0,05)$ for a $[(10,0\pm0,5)$ bar and maintain it	seepage	
valvo upstroom of	tor (00 ± 0) s., during this period, move the		
the obturator with	range		
the obturator in the	Bequirments:		
closed position	Verification of leaktightness unstream of the obturator		
	- There shall be no leakage or seenage through the		
	walls throughout the duration of the test		
	Verification of leaktightness of the obturator – There		
	shall be no leakage of the obturator throughout the		
	duration of the test.		





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Test Property	Test Principle / Requirements	Result	Rating
8.4 Leaktightness of the mixing valve downstream of the obturator with the obturator open	With the outlet orifice(s) artificially closed, and the obturator open; Apply to the inlet of the mixing valve a water pressure of $(0,4\pm0,02)$ MPa [$(4,0\pm0,2)$ bar] and maintain it for (60 ± 5) s; during this period, move the temperature control device over its full operating range; Reduce gradually the pressure to $(0, 02\pm0,002)$ MPa [$(0,2\pm0,02)$ bar] and maintain it for (60 ± 5) s. Requirements: Throughout the duration of the test there shall be no leakage, or seepage through the walls.	No leakage or seepage	Pass
8.5 Leaktightness of manually operated diverter:	The acage, or seepage through the waits.8.5 Leaktightness of manually operated diverter:- Flow to bath Apply a static water pressure of $(0,4\pm0,02)$ MPa $[(4,0\pm0,2)$ bar] and maintain it for (60 ± 5) s; Gradually reduce the pressure to $(0,02\pm0,002)$ MPa $[(0,2\pm0,02)$ bar] and maintain it for (60 ± 5) s; There shall be no leakage at the outlet to shower		N/A
	-Flow to shower Apply a static water pressure of $(0,4\pm0,02)$ MPa [$(4,0\pm0,2)$ bar] and maintain it for (60 ± 5) s; Gradually reduce the pressure to $(0,02\pm0,002)$ MPa [$(0,2\pm0,02)$ bar] and maintain it for (60 ± 5) s; There shall be no leakage at the outlet to bath.	No diverter	N/A
8.6 Leaktightness and operation of diverter with automatic return:	- Flow to bath Put the diverter in the flow-to-bath mode with the outlets to bath and shower open; Apply a dynamic pressure of $(0,4\pm0,02)$ MPa [$(4,0\pm0,2)$ bar] and maintain it for (60 ± 5) s; There shall be no leakage at the outlet to shower.	No diverter	N/A
	-Flow to shower Put the diverter in the flow-to-shower mode with the outlets to bath and shower open; Apply a dynamic pressure of $(0,4\pm0,02)$ MPa [$(4,0\pm0,2)$ bar] and maintain it for (60 ± 5) s; Check for leakage at the outlet to bath; Gradually reduce the pressure to $(0,05\pm0,002)$ MPa [$(0,5\pm0,02)$ bar] and maintain it for (60 ± 5) s; There shall be no leakage at the outlet to bath whilst the diverter remains in the flow to shower position; The diverter shall not return to the flow to bath position at any pressure $\ge 0.05\pm0.002$ MPa; The diverter shall return to the flow to bath position when the obturator is closed	No diverter	N/A



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Test Property	Test Principle / Requirements	Result	Rating
	Continuation procedure: flow to bath	No diverter	N/A
	Re-open the mixing valve obturator;		
	Re-apply a dynamic pressure of $(0,05\pm0,002)$ MPa $(0,5\pm0,02)$ have and maintain it for (60 ± 5) c		
	Requirement		
	There shall be no leakage at the outlet to shower.		
8.7 Leaktightness	With the outlet orifice open and the obturator closed,	No leakage or	Pass
of the obturator:	apply a water pressure of $(0,4\pm0,02)$ MPa [$(4\pm0,2)$ bar]	seepage	
cross flow between	to the mixing valve and maintain it for (60 ± 5) s; in this		
not water and cold	full operating rappe:		
Waler	Repeat the test reversing the water supply connection		
	to the other inlet.		
	Throughout the duration of the test, there shall be no		
	leakage or seepage at the outlet or at the end of the		
	unconnected inlet.		
9 Pressure resistanc	e characteristics		
9.4 Mechanical	With the obturator closed;	No permanent	Pass
benaviour	Apply at the mechanical mixing valve linet a static	deformation	
obturator -	maintain it for $(60+5)$ s:		
obturator in the			
closed position	Throughout the duration of the test, there shall be no		
	permanent deformation of any part of the mixing valve.		
9.5 Mechanical	Open the mixing valve obturator fully;	No permanent	Pass
behaviour	For mixing valves with a flow rate regulator fitted, apply	deformation	
downstream of the	at the mixing valve inlet a dynamic water pressure of		
obturator –	$(0,4\pm0,02)$ MPa [(4,0±0,2) bar] and maintain it for		
obturator in the	(60±5) S;		
open position	For mechanical mixing valves without now rate		
	pressure needed to give a flow rate of $(0.4+0.04)$ l/s		
	through the mixing value:		
	For mixing valves with removable flow rate regulator.		
	the test is carried out both with and without this		
	regulator		
	There shall be no permanent deformation in any part of		
	the mechanical mixing valve.		





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Test Property	Test Principle / Requirements	Result	Rating
11 Mechanical Strength Characteristics	There shall be no deformation or other deterioration which impairs the function of the mixing valve. The mixing valve shall satisfy the requirement for	No deformation or other deterioration	Pass
Characteristics	leaktightness.	Leaktightness was satisfied after test	

Remark:

1. N/A= Not applicable



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Result 1 Dimensions Test

a) Outlet dimensions

Dimensions	Measures (mm)	Comments	Result (mm)
E	25 min (Outlet orifice - Lowest point - All mixing valves and outlets)	Dimension from lowest point of the outlet orifice including any flow rate regulator or flow straightener to the mounting surface. Regulations exist in some EU Member States that set dimensions greater than those indicated in this European Standard.	65
D 1	90 min (Horizontal mounted mechanical mixing valve)	Dimension from the centre of outlet orifice including any flow rate regulator or flow straightener.	100
D 3	115 min (Wall mounted mechanical mixing valve separate spout		/
A	G ½ B (Remote outlet)	In accordance with EN ISO 228-1	/
A 4	7.5 min (Shower outlet)	Useful thread length Free length of connection	/
A 5	9.5 min (Shower outlet)		/



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c) Mounting Dimensions

Dimensions	Measures (mm)	Comments	Result (mm)
H 1	24 max (Two hole mechanical mixing valve size ½)	Adjustable centres	1
H 2	29 max (Side spray)	Adjustable centres	/
Н3	33.5 max (Single hole)	/	27.2
J 1	42 min (Side Spray)	Dimension of base or flange	/
J 2	45 min (Bath, bath/shower, basin, bidet, sink)		53
J 3	50 max (Single and multi hole mechanical mixing valve)	Diameter of clamping washer	48
V	32 max (Basin, bidet, sink	Flange projection to rear	26
V 1	35 max (Bath – two hole mechanical mixing valve	/	/
L	Dimension which allows taps and outlets to be fitted on to supports of thickness between 1 mm and 18 mm.	Minimum range of supports, which allows the installation of the mixing valves.	0~30



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Sample Photo:

Test sample (MY8220)



Referenced sample (MY5104)



Referenced sample (MY2101)



Referenced sample (MY9884)





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Referenced sample (MY5103)



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