



MATERIAL TEST CERTIFICATE

TO: Unimech Engineering (M) Sdn. Bhd.

DATE: JUN 11, 2021

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3W (1/2" 2")	BODY	bronze(C83600)	84.77	4.32	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	58.13	1.99	0.11	0.11	0.03	0.03	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	brass (CW617N)	58.13	1.99	0.11	0.11	0.03	0.03	/	/	/
	STEM	brass (CW617N)	58.13	1.99	0.11	0.11	0.03	0.03	/	/	/
RESULT											
ACCEPTABLE											

bronze  
safety valve  
without  
lever  
50psi

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3WL (3/4" 1" 1-1/2")	BODY	bronze(C83600)	84.77	4.32	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	58.13	1.99	0.11	0.11	0.03	0.03	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	bronze(C83600)	84.77	4.32	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	STEM	brass (CW617N)	58.13	1.99	0.11	0.11	0.03	0.03	/	/	/
RESULT											
ACCEPTABLE											

bronze  
safety valve  
with lever  
50psi

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
HOP-411 (1/4" 3/8")	BODY	brass (CW617N)	58.16	2.00	0.11	0.11	0.03	0.03	/	/	/
	SEAT	brass (CW617N)	58.16	2.00	0.11	0.11	0.03	0.03	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	Ring	SS304	/	/	/	/	/	/	/	/	/
	STEM	brass (CW617N)	58.16	2.00	0.11	0.11	0.03	0.03	/	/	/
	RESULT										
ACCEPTABLE											

brass mini  
safety valve  
50psi

For and on behalf of  
**AETVC INDUSTRIAL LIMITED**  
愛爾特實業有限公司

.....  
Authorized Signature(s)  
AUTHORISED SIGNATURE



MATERIAL TEST CERTIFICATE

TO: Unimech Engineering (M) Sdn. Bhd.

DATE: JUN 21, 2021

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3W (3/4" 1-1/2")	BODY	bronze(C83600)	84.51	4.29	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	57.381	1.795	0.245	0.110	0.030	0.030	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	brass (CW617N)	57.381	1.795	0.245	0.110	0.030	0.030	/	/	/
	STEM	brass (CW617N)	57.381	1.795	0.245	0.110	0.030	0.030	/	/	/
RESULT											
ACCEPTABLE											

BRONZE  
SAFETY W/OUT  
LEAK  
150 PSI

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3WL (1/2" 3/4" 1-1/2")	BODY	bronze(C83600)	84.51	4.29	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	57.381	1.795	0.245	0.110	0.030	0.030	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	bronze(C83600)	84.51	4.29	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	STEM	brass (CW617N)	57.381	1.795	0.245	0.110	0.030	0.030	/	/	/
RESULT											
ACCEPTABLE											

BRONZE  
SAFETY W/OUT  
WITH LEAK  
150 PSI

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
HOP-411 (1/4" 3/8")	BODY	brass (CW617N)	58.14	2.02	0.11	0.11	0.03	0.03	/	/	/
	SEAT	brass (CW617N)	58.14	2.02	0.11	0.11	0.03	0.03	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	Ring	SS304	/	/	/	/	/	/	/	/	/
	STEM	brass (CW617N)	58.14	2.02	0.11	0.11	0.03	0.03	/	/	/
	RESULT										
ACCEPTABLE											

BRASS MIN  
SAFETY W/OUT  
LEAK

For and on behalf of  
**AETVC INDUSTRIAL LIMITED**  
愛爾特實業有限公司

.....  
Authorised Signature(s)  
AUTHORISED SIGNATURE



MATERIAL TEST CERTIFICATE

TO: Unimech Engineering (M) Sdn. Bhd.

DATE: AUG 20, 2021

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3W (3/4" 1" 1-1/4")	BODY	bronze(C83600)	84.78	4.31	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	58.12	1.99	0.11	0.11	0.03	0.03	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	brass (CW617N)	58.12	1.99	0.11	0.11	0.03	0.03	/	/	/
	STEM	brass (CW617N)	58.12	1.99	0.11	0.11	0.03	0.03	/	/	/
RESULT											
ACCEPTABLE											

BRONZE  
SAFETY W/ W  
WITH OUT  
LEVER  
NO PBT

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
A3WL (1/2")	BODY	bronze(C83600)	84.78	4.31	0.32	4.10	≤0.001	0.20	5.80	0.04	/
	SEAT	brass (CW617N)	58.12	1.99	0.11	0.11	0.03	0.03	/	/	/
	DISC	RPTFE	/	/	/	/	/	/	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	CAP	bronze(C83600)	84.75	4.32	0.31	4.10	≤0.001	0.20	5.80	0.04	/
	STEM	brass (CW617N)	58.12	1.99	0.11	0.11	0.03	0.03	/	/	/
RESULT											
ACCEPTABLE											

BRONZE  
SAFETY W/ W  
WITH LEVER  
NO PBT

MODEL	PARTS	MATERIAL	Cu	Pb	Fe	Sn	Al	Ni	Zn	S	P
HOP-411 (3/8" 3/4")	BODY	brass (CW617N)	58.15	2.01	0.11	0.11	0.03	0.03	/	/	/
	SEAT	brass (CW617N)	58.15	2.01	0.11	0.11	0.03	0.03	/	/	/
	SPRING	SS304	/	/	/	/	/	/	/	/	/
	Ring	SS304	/	/	/	/	/	/	/	/	/
	STEM	brass (CW617N)	58.15	2.01	0.11	0.11	0.03	0.03	/	/	/
	RESULT										
ACCEPTABLE											

BRASS MINI  
SAFETY W/ W  
PBT

For and on behalf of  
**AETV INDUSTRIAL LIMITED**  
愛爾特實業有限公司

.....  
Authorized Signature(s)  
AUTHORISED SIGNATURE