FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Client Ref. : --
Report No. : 200859PC200066A

REPORT ON TESTING OF RUBBER FLEXIBLE JOINT WITH FLANGE END

Information Supplied by Client

Client	:	Wah Hung Fire Prevention Equipment Co., Limited
Address	:	G/F, No.129, Tai Nan Street, Prince Edward, Kowloon, Hong Kong
Sample Description	:	Rubber Flexible Joint
Item No.	:	WH034A
Brand	:	SUN
Body Marking	:	SUN (DN **)
Country of Origin	:	China
Model	:	WHRUF2-PN16
Manufacturer	:	Wah Nan Fire Fighting Equipment Co., Ltd.

Laboratory Information

Lab. Sample I.D.	:	PC200066/1-6
Date Received	:	07 April 2020
Date Test Started	:	19 April 2020
Date Test Completed	:	05 May 2020
Test Method	:	BS EN 12266-1 : 2012 & BS EN 1092-1 : 2007 + A1 : 2013

Test Results

Sample Item	Nominal Size (DN)	Body Marking
1	50mm	SUN DN50
2	65mm	SUN DN65
3	80mm	SUN DN80
4	100mm	SUN DN100
5	150mm	SUN DN150
6	200mm	SUN DN200

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Test Results

1.0 Dimension

Base on Manufacturer Requirement

Lab. Sample I.D	Nominal Size DN mm (inch)	Height (mm)	Manufacturer Requirement	Results
PC200066/1	50mm (2")	173	173	Pass
PC200066/2	65m (2-1/2")	173	173	Pass
PC200066/3	80 mm (3")	180	180	Pass
PC200066/4	100mm (4")	225	225	Pass
PC200066/5	150mm (6")	225	225	Pass
PC200066/6	200 (8")	328	328	Pass

(BS EN 1092-1 : 2007 + A1 : 2013, table 9)

Lab. Sample I.D	Nominal Size DN mm(inch)	Dimension (mm)				
		flange (BS EN 1092-1 : 2007 +A1 : 2013, table 13)				
		D	K	L	C	number of bolt
PC200066/1	50mm (2")	165	125	18	20.6	4
BS EN Requirement		165 ± 4.0	125 ± 1.0	18 + 1.0 / 0	20 +1.0 / -1.3	4
PC200066/2	65m (2-1/2")	185	145	18	20.8	4
BS EN Requirement		185 ± 4.0	145 ± 1.0	18 + 1.0 / 0	20 +1.0 / -1.3	4
PC200066/3	80 mm (3")	200	160	18	20	8
BS EN Requirement		200 ± 4.0	160 ± 1.0	18 + 1.0 / 0	20 +1.0 / -1.3	8
PC200066/4	100mm (4")	220	180	18	22.7	8
BS EN Requirement		220 ± 4.0	180 ±1.0	18 + 1.0 / 0	22 ± 1.5	8
PC200066/5	150mm (6")	285	240	22	23.7	8
BS EN Requirement		285 ± 4.0	240 ±1.0	22 + 1.0 / 0	24 ± 1.5	8
PC200066/6	200 (8")	340	295	22.3	25.9	12
BS EN Requirement		340 ± 4.0	295 ±1.0	22 + 1.0 / 0	26 ± 1.5	12

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2.0 Pressure Test

(BS EN 12266 - 1 : 2012, Clause 4b, table 1)

Lab. Sample I.D	Nominal Size DN mm(inch)	Shell Test				Results
		Nominal Pressure PN (bar)	Test Pressure (bar)	Duration (min)	Observation	
PC200066/1	50mm (2")	16	24	10	No leakage	Pass
PC200066/2	65m (2-1/2")	16	24	10	No leakage	
PC200066/3	80 mm (3")	16	24	10	No leakage	
PC200066/4	100mm (4")	16	24	10	No leakage	
PC200066/5	150mm (6")	16	24	10	No leakage	
PC200066/6	200 (8")	16	24	10	No leakage	
BS EN 12266-1 : 2012 Clause A.3 Requirement		16	16 X 1.5 = 24	10	No leakage during the test period	

3. Summary of Results (apply only to sample tested)

Dimension -- Pass
Pressure Test -- Pass

Remarks :
1.) The test results relate only to the samples tested.
2.) The test sample is shown in the photograph on page 4 of this report.
3.) This report is to supersede our previous test report no. 200859PC200066.

Checked by : _____ Date : -7 JUL 2020 Certified by : _____ Date : -7 JUL 2020

Ng Shu Shing Chris
Assistant Manager (Plumping Components)

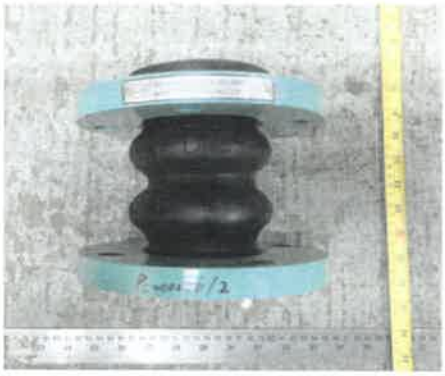
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Test Sample
Sample I.D.: PC200066/1



Test Sample
Sample I.D.: PC200066/2



Test Sample
Sample I.D.: PC200066/3



Test Sample
Sample I.D.: PC200066/4



Test Sample
Sample I.D.: PC200066/5



Test Sample
Sample I.D.: PC200066/6

End of Report

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