

# Project report: System ssący - serwerownia C S.5



## System provider:

Company:  
Address:  
Town:  
Phone:

## Customer:

Szczeciński Park Naukowo – Technologiczny Sp. z o.o.  
ul. Niemierzyńska 17a  
71-441 Szczecin

## Comment:

Budowa i wyposażenie I etapu POMERANIA TECHNOPARK w Szczecinie przy ul. Niemierzyńskiej

EN 54-20 class	EN 54-20 compliant	possible reasons
C	Yes	
B	Yes	
A	Yes	

Project name:	System ssący - serwerownia C S.5
Project build date:	2013-09-06 14:57:36
Fan level:	III
Ambient temperature [°C]	20
Ambient pressure [hPa]	950

	Tube network I	Tube network II
Maximum smoke sensor sensitivity according EN 54-20 class C	0.666	0.666
Maximum smoke sensor sensitivity according EN 54-20 class B	0.116	0.116
Maximum smoke sensor sensitivity according EN 54-20 class A	0.039	0.039
Maximum transport time [s]	19	19
Overall sampling tube length [m]	17.80	18.20
Number of sampling points	10	10



Part	Description	RL	TL	S[C]	S[B]	S[A]	P	FI	ø	t	L-cap	Comment:
	(ASD) ASD 535		0.00					1.24		0		
A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	1.80	1.80				219	0.62		0		
A2	(BE 25 PVC) Bend 90° D=25 mm PVC		1.80									
A3	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.40	2.20									
A4	(BE 25 PVC) Bend 90° D=25 mm PVC		2.20									
A5	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.40	2.60									
A6	(BE 25 PVC) Bend 90° D=25 mm PVC		2.60									
A7	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	1.60	4.20									
A8	(TP 25 PVC) T-piece D=25 mm PVC		4.20									
A8.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	5.10									
A8.A2	(TP 25 PVC) T-piece D=25 mm PVC		5.10									
A8.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	6.00									
A8.A2.A2	(TP 25 PVC) T-piece D=25 mm PVC		6.00									
A8.A2.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	6.90									
A8.A2.A2.A2	(TP 25 PVC) T-piece D=25 mm PVC		6.90									
A8.A2.A2.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	7.80									
A8.A2.A2.A2.A2	(BE 25 PVC) Bend 90° D=25 mm PVC		7.80									
A8.A2.A2.A2.A3	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	9.80									
A8.A2.A2.A2.A3 - 1	-1- Sampling point / clip	0.50	8.30	6.670	1.160	0.400	207	0.06	2.00	11		
A8.A2.A2.A2.A3 - 2	-2- Sampling point / clip	1.30	9.60	6.670	1.160	0.400	206	0.06	2.50	19		
A8.A2.A2.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	8.90									
A8.A2.A2.A2.B1 - 1	-1- Sampling point / clip	0.50	7.40	6.670	1.160	0.400	207	0.06	2.00	8		
A8.A2.A2.A2.B1 - 2	-2- Sampling point / clip	1.30	8.70	6.670	1.160	0.400	207	0.06	2.50	15		
A8.A2.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	8.00									
A8.A2.A2.B1 - 1	-1- Sampling point / clip	0.50	6.50	6.660	1.160	0.400	207	0.06	2.00	6		
A8.A2.A2.B1 - 2	-2- Sampling point / clip	1.30	7.80	6.660	1.160	0.400	207	0.06	2.50	14		
A8.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	7.10									
A8.A2.B1 - 1	-1- Sampling point / clip	0.50	5.60	6.650	1.160	0.390	208	0.06	2.00	5		
A8.A2.B1 - 2	-2- Sampling point / clip	1.30	6.90	6.650	1.160	0.390	208	0.06	2.50	13		
A8.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	6.20									
A8.B1 - 1	-1- Sampling point / clip	0.50	4.70	6.630	1.150	0.390	209	0.06	2.00	5		
A8.B1 - 2	-2- Sampling point / clip	1.30	6.00	6.630	1.150	0.390	209	0.06	2.50	12		
B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	1.80	1.80				219	0.62		0		
B2	(BE 25 PVC) Bend 90° D=25 mm PVC		1.80									
B3	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.40	2.20									
B4	(BE 25 PVC) Bend 90° D=25 mm PVC		2.20									
B5	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.80	3.00									
B6	(BE 25 PVC) Bend 90° D=25 mm PVC		3.00									
B7	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	1.60	4.60									
B8	(TP 25 PVC) T-piece D=25 mm PVC		4.60									
B8.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	5.50									
B8.A2	(TP 25 PVC) T-piece D=25 mm PVC		5.50									
B8.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	6.40									
B8.A2.A2	(TP 25 PVC) T-piece D=25 mm PVC		6.40									
B8.A2.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	7.30									

Part	Description	RL	TL	S[C]	S[B]	S[A]	P	FI	ø	t	L-cap	Comment:
B8.A2.A2.A2	(TP 25 PVC) T-piece D=25 mm PVC		7.30									
B8.A2.A2.A2.A1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	0.90	8.20									
B8.A2.A2.A2.A2	(BE 25 PVC) Bend 90° D=25 mm PVC		8.20									
B8.A2.A2.A2.A3	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	10.20									
B8.A2.A2.A2.A3 - 1	-1- Sampling point / clip	0.50	8.70	6.670	1.160	0.400	206	0.06	2.00	12		
B8.A2.A2.A2.A3 - 2	-2- Sampling point / clip	1.30	10.00	6.670	1.160	0.400	206	0.06	2.50	19		
B8.A2.A2.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	9.30									
B8.A2.A2.A2.B1 - 1	-1- Sampling point / clip	0.50	7.80	6.670	1.160	0.400	206	0.06	2.00	8		
B8.A2.A2.A2.B1 - 2	-2- Sampling point / clip	1.30	9.10	6.670	1.160	0.400	206	0.06	2.50	16		
B8.A2.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	8.40									
B8.A2.A2.B1 - 1	-1- Sampling point / clip	0.50	6.90	6.660	1.160	0.400	206	0.06	2.00	7		
B8.A2.A2.B1 - 2	-2- Sampling point / clip	1.30	8.20	6.660	1.160	0.400	206	0.06	2.50	14		
B8.A2.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	7.50									
B8.A2.B1 - 1	-1- Sampling point / clip	0.50	6.00	6.650	1.160	0.390	207	0.06	2.00	6		
B8.A2.B1 - 2	-2- Sampling point / clip	1.30	7.30	6.650	1.160	0.390	207	0.06	2.50	13		
B8.B1	(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	2.00	6.60									
B8.B1 - 1	-1- Sampling point / clip	0.50	5.10	6.630	1.150	0.390	208	0.06	2.00	5		
B8.B1 - 2	-2- Sampling point / clip	1.30	6.40	6.630	1.150	0.390	208	0.06	2.50	13		
RL: Relative length of this part (distance to previous SP or bend) [m] TL: Total length of the part end to the ASD [m] S[C]: smoke sensitivity [%/m] for this sampling hole, when the smoke sensor alarm level is chosen as proposed in this report. S[B]: smoke sensitivity [%/m] for this sampling hole, when the smoke sensor alarm level is chosen as proposed in this report. S[A]: smoke sensitivity [%/m] for this sampling hole, when the smoke sensor alarm level is chosen as proposed in this report. P: Pressure [Pa] FI: airflow [Liter/s] of this sampling point t: transport time to the ASD [s] L-cap: Length of the capillary / stub [m]												

**Material list:**

<b>Part</b>	<b>Number</b>	<b>Length [m]</b>	<b>Rod length [m]</b>	<b>Number of rods</b>	<b>Comment:</b>
(ASD) ASD 535	1				
(TU 25 PVC) Sampling tube D=25 mm PVC, l=5 m	26	36.00			
(SO 25 PVC) Socket D=25 mm PVC	9				
(BE 25 PVC) Bend 90° D=25 mm PVC	8				
(TP 25 PVC) T-piece D=25 mm PVC	8				
(EC 25 PVC) End cap D=25 mm PVC	10				
(CLIP 2.0 PA) Sampling hole clip d=2.0 mm red PA	10				
(CLIP 2.5 PA) Sampling hole clip d=2.5 mm red PA	10				
(PC 25 PP) Pipe clamp type Goema halogen-free	36				