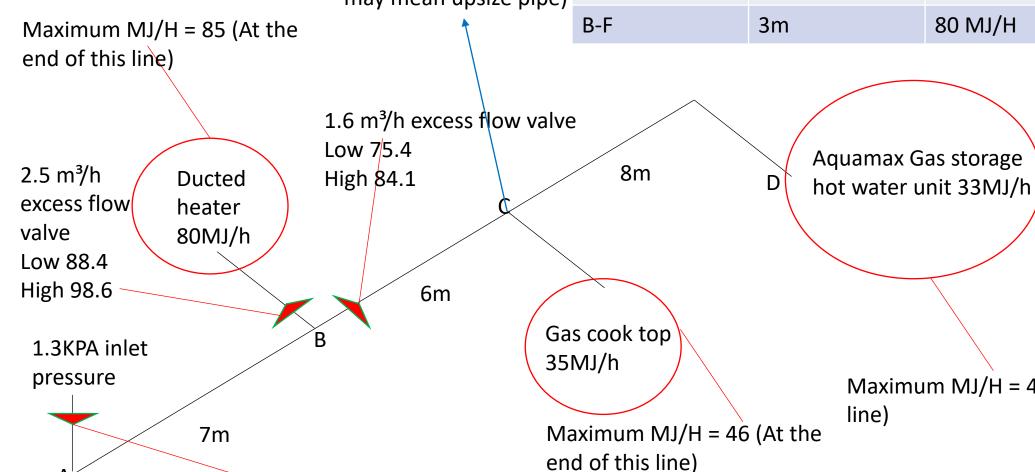
Total MJ/h = 148

line was to be broken the excess flow would not shut off, due to not enough of flow (This may mean upsize pipe)

A-D	21m	148MJ/H	32mm
A-B	7m	148MJ/H	32mm
B-C	6m	68MJ/H	26mm
C-D	8m	33MJ/H	20mm
C-E	3m	35MJ/H	15mm
B-F	3m	80 MJ/H	15mm



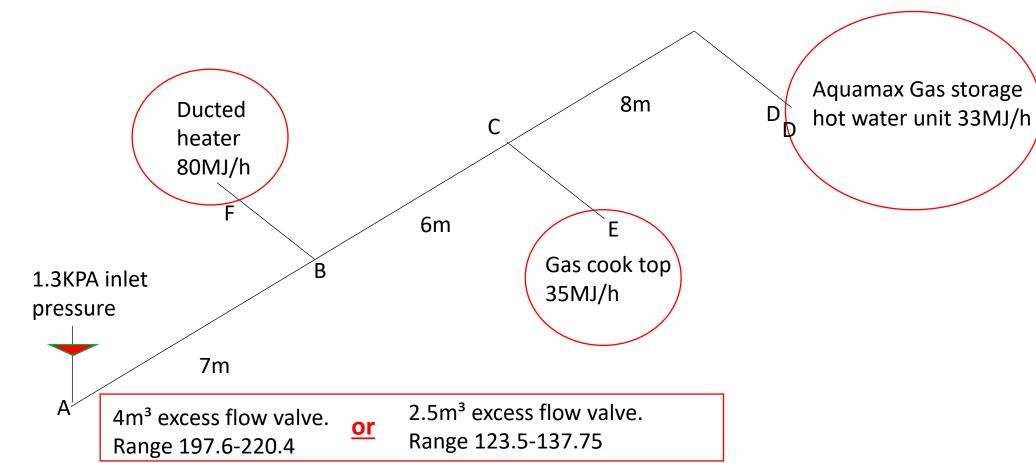
4 m³/h excess flow valve

From this point if the

Maximum MJ/H = 46 (At the end of this

Total MJ/h = 148
Total amount at any point that is 32mm 173 MJ/H

A-D	21m	148MJ/H	32mm
A-B	7m	148MJ/H	32mm
B-C	6m	68MJ/H	32mm
C-D	8m	33MJ/H	32mm
C-E	3m	35MJ/H	32mm
B-F	3m	80 MJ/H	32mm



Total MJ/h = 148
Total amount at any point that is 32mm 173 MJ/H

If you up size to 40mm and get 330 MJ/H it works but 40mm pipe everywhere is a bit excessive.

Natural Gas

Pressure Drop 0.075kPa (Meter Pressure 1.1kPa)

Straight Pipe Length (m)	16mm	20mm	26mm	32mm ↑	40mm	50mm	63mm
2	90	196	359	731	1397	2687	5316
4	60	132	241	492	940	1809	3577
6	48	104	191	390	745	1435	2838
8	41	89	162	331	632	1217	2407
10	36	78	143	292	557	1071	2119
12	32	70	129	263	502	965	1910
14	30	64	118	240	459	884	1749
16	27	60	109	223	426	819	1620
18	26	56	102	208	398	766	1515
20	24	53	96	196	375	721	1426
25	21	46	85	(173)	330	635	1256

Total MJ/h = 148

2.5 m³/h

pressure

valve

excess flow

2.75KPA inlet

Maximum MJ/H = 85

Ducted

heater

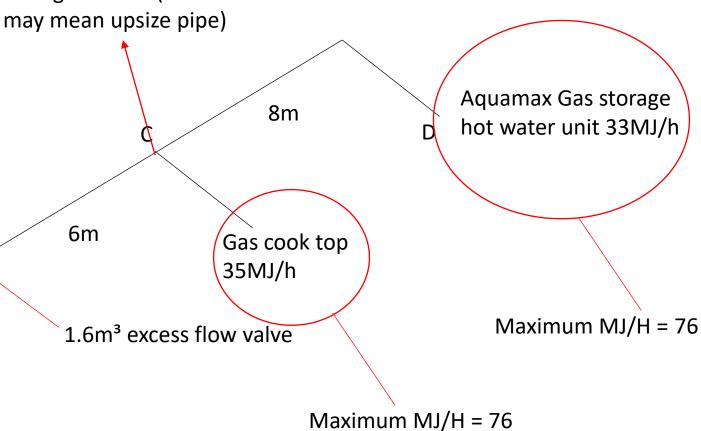
80MJ/h

7m

4m³ excess flow valve

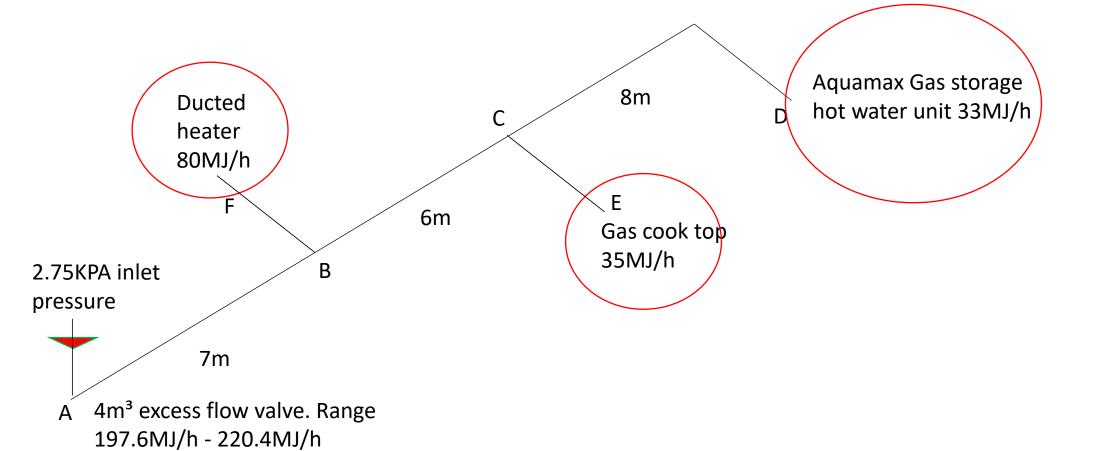
From this point if the line was to be broken the excess flow would not shut off, due to not enough of flow (This may mean upsize pipe)

A-D	148MJ/H	20mm
A-B	148MJ/H	20mm
B-C	68MJ/H	16mm
C-D	33MJ/H	16mm



Total MJ/h = 148
Total amount at any point that is 26mm 304 MJ/H

A-D	21m	148MJ/H	26mm
A-B	7m	148MJ/H	26mm
B-C	6m	68MJ/H	26mm
C-D	8m	33MJ/H	26mm
C-E	3m	35MJ/H	26mm
B-F	3m	80 MJ/H	26mm



Total MJ/h = 148

Total amount at any point that is 26mm 304 MJ/H

According to the sizing table you can run 20mm but if you up size to 26mm this will allow you to have only 1 excess flow valve.

Pressure Drop 0.75kPa (Meter Pressure 2.75kPa)

Straight Pipe Length (m)	16mm	20mm	26mm ↑	32mm	40mm	50mm	63mm
2	322	702	12 <mark>87</mark>	2624	5011	9643	19075
4	217	473	866	1766	3372	6490	12837
6	172	375	687	1400	2675	5147	10182
8	146	318	583	1188	2269	4367	8639
10	128	280	513	1046	1998	3844	7604
12	116	252	462	942	1800	3464	6852
14	106	231	423	863	1648	3172	6274
16	98	214	392	800	1527	2939	5813
18	92	200	367	748	1428	2748	5435
20	86	188	345	704	1344	2587	5117
25	76	(166)	304	620	1184	2278	4505

Sizing Charts found here at this link for Duo pex

https://www.auspex.com.au/technical-data/duopex-gas/sizing-tables/#natural-gas