

INFORME CONDUCTOS RECUPERADOR

Condiciones cálculo

Instalación: Ya dimensionada
Sin_ventilador
Instalación: Equilibrada
Pérdida de carga adicional en Filtros, baterías,...(Pa): 0

Material

Especificación: Fibra_de_vidrio
alfa: 1.125

Condiciones del aire

Temperatura: 20
Altura sobre el nivel del mar: 0

Constructivos

Forma: Rectangular

Tramos

Iden	L real (m)	L equ. (m)	L equ. total(m)	v max (m/s)	a (m)	b (m)	Caudal (m3/h)	v (m/s)	DP/m. (Pa/m)	DP (Pa)
I1	10	0	31.74	4	0,250	0,850	3000	3.92	0,609	25.41
I2	8.9	0	15.95	4	0,250	0,550	1875	3.79	0,659	16.38
I3	5.2	0	0.23	4	0,250	0,450	1625	4.01	0,794	4.31
I4	5	0	0.12	4	0,250	0,400	1375	3.82	0,766	3.92
I5	5.1	0	0.14	4	0,250	0,350	1250	3.97	0,876	4.59
I6	1.8	0	0.26	4	0,250	0,350	1125	3.57	0,723	1.49
I7	3.1	0	0.12	4	0,250	0,300	1000	3.7	0,839	2.7
I8	4.7	0	0.21	4	0,250	0,250	750	3.33	0,770	3.78
I9	3.2	0	0.62	4	0,200	0,200	500	3.47	1,089	4.16
I10	1.2	0	0.79	4	0,200	0,200	375	2.6	0,645	1.28
I11	0.7	0	0.84	4	0,150	0,150	250	3.09	1,248	1.92
I12	8.6	0	11.66	4	0,125	0,125	125	2.22	0,858	17.38
I30	6.1	0	6.91	4	0,125	0,125	125	2.22	0,858	11.16

I29	2.5	0	4.98	4	0,125	0,125	125	2.22	0,858	6.42
I28	6.1	0	8.69	4	0,125	0,125	125	2.22	0,858	12.68
I25	2.5	0	5.36	4	0,150	0,150	250	3.09	1,248	9.81
I26	1	0	1	4	0,125	0,125	125	2.22	0,858	1.71
I27	4.8	0	6.91	4	0,125	0,125	125	2.22	0,858	10.04
I22	2.5	0	6.61	4	0,150	0,150	250	3.09	1,248	11.38
I23	1	0	1	4	0,125	0,125	125	2.22	0,858	1.71
I24	4.2	0	6.91	4	0,125	0,125	125	2.22	0,858	9.53
I21	3.4	0	9.18	4	0,125	0,125	125	2.22	0,858	10.79
I20	6.5	0	11.28	4	0,125	0,125	125	2.22	0,858	15.25
I19	6.5	0	10.46	4	0,125	0,125	125	2.22	0,858	14.55
I16	5	0	7.76	4	0,150	0,150	250	3.09	1,248	15.93
I17	1	0	1	4	0,125	0,125	125	2.22	0,858	1.71
I18	4.7	0	7.62	4	0,125	0,125	125	2.22	0,858	10.57
I13	2.5	0	6.92	4	0,150	0,150	250	3.09	1,248	11.76
I14	1	0	1	4	0,125	0,125	125	2.22	0,858	1.71
I15	4.7	0	6.91	4	0,125	0,125	125	2.22	0,858	9.96
I31	2	0	11.4	4	0,250	0,300	1125	4.17	1,039	13.93
X1	10	0	31.74	4	0,250	0,850	3000	3.92	0,609	25.41
X2	7	0	16.78	4	0,250	0,700	2475	3.93	0,647	15.39
X3	7.8	0	1.5	4	0,250	0,600	2100	3.89	0,669	6.23
X4	1	0	1.01	4	0,250	0,550	1975	3.99	0,724	1.45
X5	1.6	0	0.99	4	0,250	0,500	1825	4.06	0,775	2.01
X6	5.8	0	1.16	4	0,250	0,500	1700	3.78	0,681	4.74
X7	1.4	0	0.94	4	0,250	0,450	1550	3.83	0,729	1.71
X8	5.4	0	1.07	4	0,250	0,350	1300	4.13	0,941	6.08
X9	0.4	0	1.46	4	0,250	0,300	1050	3.89	0,917	1.71
X10	2.1	0	0.88	4	0,250	0,250	900	4	1,073	3.2
X11	3.4	0	1.19	4	0,250	0,250	775	3.44	0,817	3.76
X12	1.8	0	1.19	4	0,200	0,200	525	3.65	1,190	3.56
X13	0.5	0	1.72	4	0,200	0,200	400	2.78	0,725	1.61
X14	2	0	0.82	4	0,150	0,150	250	3.09	1,248	3.52
X15	4.9	0	18.01	4	0,125	0,125	125	2.22	0,858	19.65
X37	5.6	0	10.39	4	0,125	0,125	125	2.22	0,858	13.72
X39	0.5	0	6.09	4	0,125	0,125	150	2.67	1,195	7.88
X36	4.5	0	3.36	4	0,125	0,125	125	2.22	0,858	6.74
X33	1.3	0	0.21	4	0,150	0,150	250	3.09	1,248	1.88
X34	4.3	0	7.34	4	0,125	0,125	125	2.22	0,858	9.99

X35	1	0	10.39	4	0,125	0,125	125	2.22	0,858	9.77
X32	1.3	0	0.35	4	0,125	0,125	125	2.22	0,858	1.42
X31	0.5	0	1.94	4	0,125	0,125	150	2.67	1,195	2.92
X28	1.4	0	-3.13	4	0,150	0,150	250	3.09	1,248	-2.17
X29	3.3	0	7.34	4	0,125	0,125	125	2.22	0,858	9.13
X30	0.5	0	10.39	4	0,125	0,125	125	2.22	0,858	9.34
X25	1.3	0	-3.03	4	0,150	0,150	250	3.09	1,248	-2.16
X26	3.3	0	7.34	4	0,125	0,125	125	2.22	0,858	9.13
X27	0.5	0	10.39	4	0,125	0,125	125	2.22	0,858	9.34
X24	0.5	0	1.67	4	0,125	0,125	150	2.67	1,195	2.59
X23	4.7	0	-0.48	4	0,125	0,125	125	2.22	0,858	3.61
X22	0.5	0	1.23	4	0,125	0,125	150	2.67	1,195	2.07
X21	1.3	0	0	4	0,125	0,125	125	2.22	0,858	1.12
X16	1.3	0	-6.41	4	0,200	0,200	375	2.6	0,645	-3.29
X20	0.5	0	5.87	4	0,125	0,125	125	2.22	0,858	5.47
X17	3.7	0	0.66	4	0,150	0,150	250	3.09	1,248	5.45
X18	0.7	0	7.34	4	0,125	0,125	125	2.22	0,858	6.9
X19	1	0	10.39	4	0,125	0,125	125	2.22	0,858	9.77
R38	3.2	0	6.41	4	0,200	0,200	525	3.65	1,190	11.44

Difusores

Iden	Marca	Modelo	Caudal cat. (m3/h)	P.est. cat. (Pa)	P.tot. cat. (Pa)	v. cat. (m/s)	Seccion (m2)	Caudal final (m3/h)	v. final (m/s)	DP final (Pa)
D1	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D2	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D3	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D4	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D5	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D6	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D7	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D8	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D9	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D10	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48

D11	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D12	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D13	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D14	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D15	TROX	VFL/125	130	54.36	60	3.06	0.0118	125	2.94	55.48
D16	TROX	ADLR-Q-ZH-598x7	1100	29.63	32	1.99	0.1539	1125	2.04	33.49
R1	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R2	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R3	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R4	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R5	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R6	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R7	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R8	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R9	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R10	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R11	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R12	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R13	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R14	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R15	Rejilla	Dato Q	125	-	-	-	-	125	3	10
R16	Rejilla	Dato Q	150	-	-	-	-	150	3	10
R17	Rejilla	Dato Q	150	-	-	-	-	150	3	10
R18	Rejilla	Dato Q	150	-	-	-	-	150	3	10
R19	Rejilla	Dato Q	150	-	-	-	-	150	3	10
R20	Rejilla	Dato Q	525	-	-	-	-	525	3	10

Trayectos

Iden	Equilibra do (Pa)	Diafragm a Alibre/At otal	DP total (Pa)
I1_I2_I3_I4_I5_I6_I7_I8_I9_I10_I11_I12_D1	0	1	142. 81
I1_I2_I3_I4_I5_I6_I7_I8_I9_I10_I11_I30_D2	6.22	0.63	142. 81

I1_I2_I3_I4_I5_I6_I7_I8_I9_I10_I29_D3	12.88	0.57	142.81
I1_I2_I3_I4_I5_I6_I7_I8_I9_I28_D4	7.9	0.61	142.81
I1_I2_I3_I4_I5_I6_I7_I8_I25_I26_D5	13.22	0.57	142.81
I1_I2_I3_I4_I5_I6_I7_I8_I25_I27_D6	4.89	0.65	142.81
I1_I2_I3_I4_I5_I6_I7_I22_I23_D7	15.43	0.55	142.81
I1_I2_I3_I4_I5_I6_I7_I22_I24_D8	7.62	0.61	142.81
I1_I2_I3_I4_I5_I6_I21_D9	20.44	0.53	142.81
I1_I2_I3_I4_I5_I20_D10	17.47	0.54	142.81
I1_I2_I3_I4_I19_D11	22.76	0.52	142.81
I1_I2_I3_I16_I17_D12	23.58	0.52	142.81
I1_I2_I3_I16_I18_D13	14.73	0.56	142.81
I1_I2_I13_I14_D14	32.07	0.49	142.81
I1_I2_I13_I15_D15	23.82	0.51	142.81
I1_I31_D16	69.97	0.53	142.81
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X12_X13_X14_X15_R1	0	1	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X12_X13_X14_X37_R2	5.93	0.64	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X12_X36_R3	18.04	0.54	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X33_X34_R4	16.47	0.55	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X33_X35_R5	16.69	0.55	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X32_R6	30.68	0.49	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X28_X29_R7	30.05	0.49	110.02

X1_X2_X3_X4_X5_X6_X7_X8_X28_X30_R8	29.83	0.49	110.02
X1_X2_X3_X4_X5_X6_X7_X25_X26_R9	36.13	0.48	110.02
X1_X2_X3_X4_X5_X6_X7_X25_X27_R10	35.92	0.48	110.02
X1_X2_X3_X4_X5_X23_R11	45.92	0.46	110.02
X1_X2_X3_X21_R12	51.88	0.45	110.02
X1_X2_X16_X20_R13	57.06	0.44	110.02
X1_X2_X16_X17_X18_R14	50.17	0.45	110.02
X1_X2_X16_X17_X19_R15	47.3	0.45	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X10_X11_X12_X13_X39_R16	15.29	0.58	110.02
X1_X2_X3_X4_X5_X6_X7_X8_X9_X31_R17	32.37	0.52	110.02
X1_X2_X3_X4_X5_X6_X24_R18	42.2	0.5	110.02
X1_X2_X3_X4_X22_R19	49.47	0.48	110.02
X1_X38_R20	63.17	0.52	110.02

Accesorios en tramos

Tramo	Nº	Tipo	Valor1	Valor2	C	Leq (m)
I1	1	Empalme_ventilador.	10		0.1	1.52
I1	2	Codo_biselado_rectangular.	90		0.99	15.11
I2	1	Codo_biselado_rectangular.	90		1.13	14.86
I12	1	Transformacion.	30		0.06	0.22
I12	2	Codo_biselado_rectangular.	90		1.54	5.33
I30	1	Transformacion.	30		0.06	0.22
I29	1	Transformacion.	30		0.06	0.22
I28	1	Transformacion.	30		0.06	0.22
I26	1	Transformacion.	30		0.06	0.22
I27	1	Transformacion.	30		0.06	0.22
I23	1	Transformacion.	30		0.06	0.22

I24	1	Transformacion.	30		0.06	0.22
I21	1	Transformacion.	30		0.06	0.22
I20	1	Transformacion.	30		0.06	0.22
I19	1	Transformacion.	30		0.06	0.22
I17	1	Transformacion.	30		0.06	0.22
I18	1	Codo_radio_uniforme.	90	1	0.27	0.93
I14	1	Transformacion.	30		0.06	0.22
I15	1	Transformacion.	30		0.06	0.22
I31	1	Transformacion.	30		0.25	2.5
X1	1	Empalme_ventilador.	10		0.1	1.52
X1	2	Codo_biselado_rectangular.	90		0.99	15.11
X2	1	Codo_biselado_rectangular.	90		1.05	15.05
X15	3	Codo_biselado_rectangular.	90		1.54	5.33
X15	1	Transformacion.	30		0.07	0.24
X37	1	Codo_biselado_rectangular.	90		1.54	5.33
X37	1	Transformacion.	30		0.07	0.24
X39	1	Codo_biselado_rectangular.	90		1.49	5.35
X39	1	Transformacion.	30		0.03	0.09
X36	1	Codo_biselado_rectangular.	90		1.54	5.33
X36	1	Transformacion.	30		0.07	0.24
X34	1	Codo_biselado_rectangular.	90		1.54	5.33
X34	1	Transformacion.	30		0.07	0.24
X35	1	Codo_biselado_rectangular.	90		1.54	5.33
X35	1	Transformacion.	30		0.07	0.24
X32	1	Codo_biselado_rectangular.	90		1.54	5.33
X32	1	Transformacion.	30		0.07	0.24
X31	1	Codo_biselado_rectangular.	90		1.49	5.35
X31	1	Transformacion.	30		0.03	0.09
X29	1	Codo_biselado_rectangular.	90		1.54	5.33
X29	1	Transformacion.	30		0.07	0.24
X30	1	Codo_biselado_rectangular.	90		1.54	5.33
X30	1	Transformacion.	30		0.07	0.24
X26	1	Codo_biselado_rectangular.	90		1.54	5.33
X26	1	Transformacion.	30		0.07	0.24
X27	1	Codo_biselado_rectangular.	90		1.54	5.33
X27	1	Transformacion.	30		0.07	0.24
X24	1	Codo_biselado_rectangular.	90		1.49	5.35
X24	1	Transformacion.	30		0.03	0.09

X23	1	Codo_biselado_rectangular.	90		1.54	5.33
X23	1	Transformacion.	30		0.07	0.24
X22	1	Codo_biselado_rectangular.	90		1.49	5.35
X22	1	Transformacion.	30		0.03	0.09
X21	1	Codo_biselado_rectangular.	90		1.54	5.33
X21	1	Transformacion.	30		0.07	0.24
X20	1	Codo_biselado_rectangular.	90		1.54	5.33
X20	1	Transformacion.	30		0.07	0.24
X18	1	Codo_biselado_rectangular.	90		1.54	5.33
X18	1	Transformacion.	30		0.07	0.24
X19	1	Codo_biselado_rectangular.	90		1.54	5.33
X19	1	Transformacion.	30		0.07	0.24
X38	1	Codo_biselado_rectangular.	90		1.34	9.03
X38	1	Transformacion.	30		0.09	0.57

Derivaciones

Tramo Común	Tramo Princi pal	Tramo Deriva do	Tipo	Valo r1	Valo r2	C Princi pal	Leq. Princi pal	C Deriva do	Leq. Deriva do
I1	I2	I31	No_conducida_AC= AD+AP.	90		0.08	1.1	0.89	8.9
I2	I3	I13	No_conducida_AC= AD+AP.	90		0.02	0.23	1.51	6.92
I3	I4	I16	No_conducida_AC= AD+AP.	90		0.01	0.12	1.69	7.76
I4	I5	I19	No_conducida_AC= AD+AP.	90		0.01	0.14	2.95	10.24
I5	I6	I20	No_conducida_AC= AD+AP.	90		0.02	0.26	3.19	11.05
I6	I7	I21	No_conducida_AC= AD+AP.	90		0.01	0.12	2.58	8.95
I7	I8	I22	No_conducida_AC= AD+AP.	90		0.02	0.21	1.44	6.61
I8	I9	I25	No_conducida_AC= AD+AP.	90		0.09	0.62	1.17	5.36
I9	I10	I28	No_conducida_AC= AD+AP.	90		0.12	0.79	2.44	8.46
I10	I11	I29	No_conducida_AC= AD+AP.	90		0.18	0.84	1.37	4.76

I11	I12	I30	No_conducida_AC= AD+AP.	90		0.22	0.77	1.93	6.69
I25	I26	I27	No_conducida_AC= AD+AP.	90		0.22	0.77	1.93	6.69
I22	I23	I24	No_conducida_AC= AD+AP.	90		0.22	0.77	1.93	6.69
I16	I17	I18	No_conducida_AC= AD+AP.	90		0.22	0.77	1.93	6.69
I13	I14	I15	No_conducida_AC= AD+AP.	90		0.22	0.77	1.93	6.69
X1	X2	X38	No_conducida_AC= AD+AP.	90		0.12	1.73	-0.46	-3.17
X2	X3	X16	No_conducida_AC= AD+AP.	90		0.11	1.5	-1	-6.41
X3	X4	X21	No_conducida_AC= AD+AP.	90		0.08	1.01	-1.6	-5.56
X4	X5	X22	No_conducida_AC= AD+AP.	90		0.08	0.99	-1.17	-4.2
X5	X6	X23	No_conducida_AC= AD+AP.	90		0.09	1.16	-1.74	-6.05
X6	X7	X24	No_conducida_AC= AD+AP.	90		0.08	0.94	-1.04	-3.76
X7	X8	X25	No_conducida_AC= AD+AP.	90		0.1	1.07	-0.65	-3.03
X8	X9	X28	No_conducida_AC= AD+AP.	90		0.15	1.46	-0.67	-3.13
X9	X10	X31	No_conducida_AC= AD+AP.	90		0.1	0.88	-0.97	-3.49
X10	X11	X32	No_conducida_AC= AD+AP.	90		0.14	1.19	-1.5	-5.21
X11	X12	X33	No_conducida_AC= AD+AP.	90		0.18	1.19	0.04	0.21
X12	X13	X36	No_conducida_AC= AD+AP.	90		0.27	1.72	-0.63	-2.21
X13	X14	X39	No_conducida_AC= AD+AP.	90		0.18	0.82	0.18	0.65
X14	X15	X37	No_conducida_AC= AD+AP.	90		0.51	1.77	1.39	4.82
X33	X34	X35	No_conducida_AC= AD+AP.	90		0.51	1.77	1.39	4.82
X28	X29	X30	No_conducida_AC= AD+AP.	90		0.51	1.77	1.39	4.82

X25	X26	X27	No_conducida_AC= AD+AP.	90		0.51	1.77	1.39	4.82
X16	X17	X20	No_conducida_AC= AD+AP.	90		0.14	0.66	0.09	0.3
X17	X18	X19	No_conducida_AC= AD+AP.	90		0.51	1.77	1.39	4.82