

PRESSURE LOSSES

KORAFLEX with forced convection

PRESSURE LOSSES

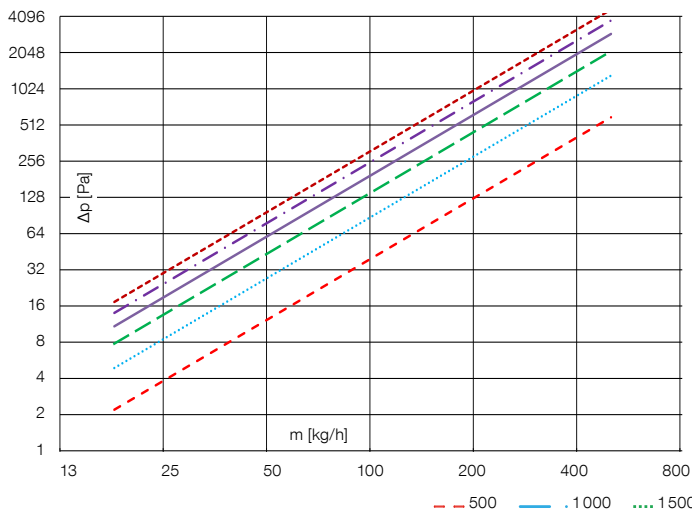
KORAFLEX FVO, FVE type 70/200

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	3.23	10.36	33.20	48.31	95.47	154.82	225.25	305.99	396.46	496.18	604.78	721.91
800	4.50	14.43	46.24	67.28	132.97	215.61	313.70	426.15	552.14	691.03	842.26	1005.39
1000	5.82	18.65	59.79	86.98	171.92	278.78	405.60	550.99	713.89	893.46	1089.00	1299.91
1200	7.18	23.01	73.75	107.30	212.07	343.89	500.34	679.69	880.65	1102.16	1343.37	1603.55
1400	8.57	27.48	88.07	128.14	253.26	410.68	597.51	811.69	1051.68	1316.21	1604.27	1914.98
1600	10.00	32.05	102.71	149.44	295.35	478.94	696.81	946.59	1226.46	1534.96	1870.89	2233.24
1800	11.45	36.70	117.63	171.14	338.25	548.50	798.01	1084.07	1404.59	1757.90	2142.62	2557.60
2000	12.93	41.44	132.80	193.21	381.88	619.24	900.94	1223.89	1585.75	1984.62	2418.97	2887.46
2200	14.43	46.24	148.20	215.62	426.17	691.06	1005.44	1365.85	1769.67	2214.81	2699.54	3222.37
2400	15.95	51.11	163.82	238.34	471.08	763.88	1111.38	1509.77	1956.15	2448.20	2984.00	3561.92
2600	17.49	56.05	179.64	261.35	516.55	837.63	1218.68	1655.53	2145.00	2684.55	3272.07	3905.79
2800	19.05	61.04	195.64	284.63	562.56	912.24	1327.23	1802.99	2336.06	2923.67	3563.52	4253.69
3000	20.62	66.09	211.81	308.17	609.08	987.66	1436.96	1952.06	2529.20	3165.39	3858.15	4605.38

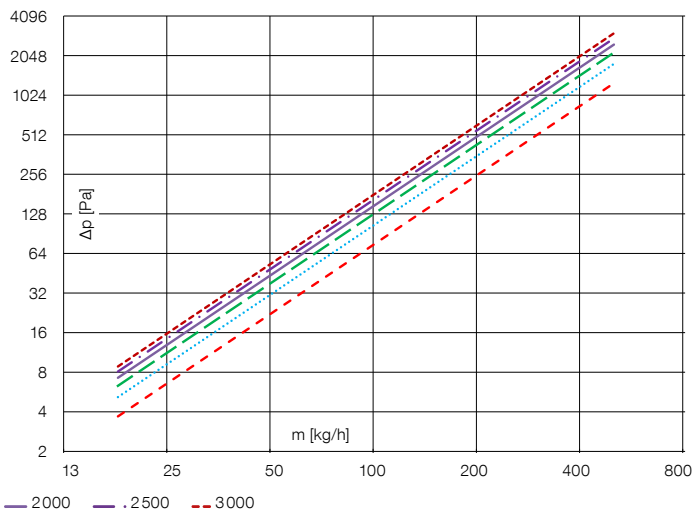
KORAFLEX FVO, FVE type 70/260

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	4.85	16.32	54.96	81.24	165.26	273.51	404.30	556.40	728.85	920.89	1131.87	1361.25
800	5.58	18.78	63.24	93.47	190.15	314.72	465.21	640.22	838.65	1059.62	1302.39	1566.32
1000	6.22	20.94	70.51	104.22	212.02	350.91	518.71	713.84	935.09	1181.47	1452.15	1746.43
1200	6.80	22.89	77.06	113.92	231.74	383.54	566.95	780.23	1022.06	1291.35	1587.21	1908.87
1400	7.33	24.68	83.08	122.81	249.83	413.50	611.23	841.16	1101.88	1392.20	1711.16	2057.93
1600	7.82	26.34	88.67	131.08	266.65	441.33	652.36	897.78	1176.03	1485.90	1826.32	2196.43
1800	8.28	27.89	93.92	138.83	282.42	467.42	690.94	950.87	1245.58	1573.76	1934.32	2326.32
2000	8.72	29.37	98.87	146.15	297.31	492.07	727.38	1001.01	1311.27	1656.76	2036.33	2449.00
2200	9.14	30.76	103.58	153.11	311.46	515.49	761.99	1048.65	1373.67	1735.60	2133.24	2565.55
2400	9.53	32.10	108.07	159.74	324.96	537.84	795.03	1094.11	1433.23	1810.85	2225.73	2676.78
2600	9.91	33.37	112.37	166.10	337.90	559.25	826.68	1137.68	1490.29	1882.95	2314.35	2783.36
2800	10.28	34.60	116.51	172.22	350.34	579.84	857.11	1179.55	1545.15	1952.26	2399.54	2885.81
3000	10.63	35.79	120.49	178.11	362.33	599.69	886.45	1219.93	1598.03	2019.08	2481.66	2984.58

KORAFLEX FVO, FVE type 70/200



KORAFLEX FVO, FVE type 70/260



PRESSURE LOSSES

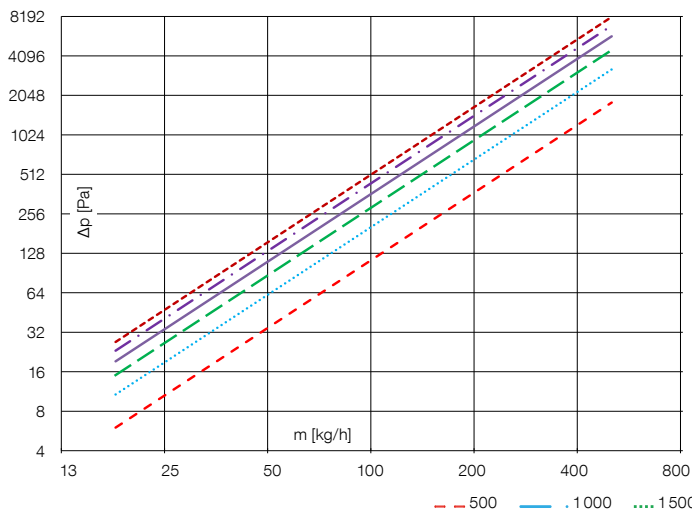
KORAFLEX FVO, FVE type 70/320

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	8.38	27.45	89.98	131.87	264.07	432.21	633.38	865.51	1127.00	1416.59	1733.20	2075.94
800	10.66	34.95	114.55	167.86	336.15	550.18	806.27	1101.76	1434.63	1803.27	2206.30	2642.60
1000	12.86	42.14	138.13	202.42	405.35	663.45	972.25	1328.58	1729.99	2174.51	2660.52	3186.64
1200	14.98	49.11	160.96	235.88	472.35	773.10	1132.94	1548.16	2015.91	2533.91	3100.24	3713.31
1400	17.05	55.89	183.18	268.44	537.56	879.84	1289.36	1761.90	2294.23	2883.73	3528.26	4225.96
1600	19.07	62.51	204.89	300.26	601.28	984.13	1442.20	1970.76	2566.19	3225.57	3946.50	4726.91
1800	21.05	69.01	226.17	331.45	663.73	1086.35	1591.98	2175.44	2832.71	3560.58	4356.38	5217.85
2000	23.00	75.38	247.08	362.08	725.07	1186.74	1739.11	2376.48	3094.50	3889.63	4758.98	5700.06
2200	24.91	81.66	267.64	392.22	785.43	1285.53	1883.88	2574.31	3352.09	4213.42	5155.14	6174.56
2400	26.80	87.84	287.91	421.92	844.91	1382.88	2026.54	2769.26	3605.94	4532.49	5545.52	6642.14
2600	28.66	93.94	307.91	451.23	903.60	1478.93	2167.30	2961.60	3856.40	4847.31	5930.70	7103.49
2800	30.50	99.97	327.66	480.17	961.56	1573.80	2306.32	3151.58	4103.77	5158.24	6311.13	7559.14
3000	32.32	105.93	347.19	508.78	1018.86	1667.58	2443.75	3339.38	4348.31	5465.62	6687.20	8009.59

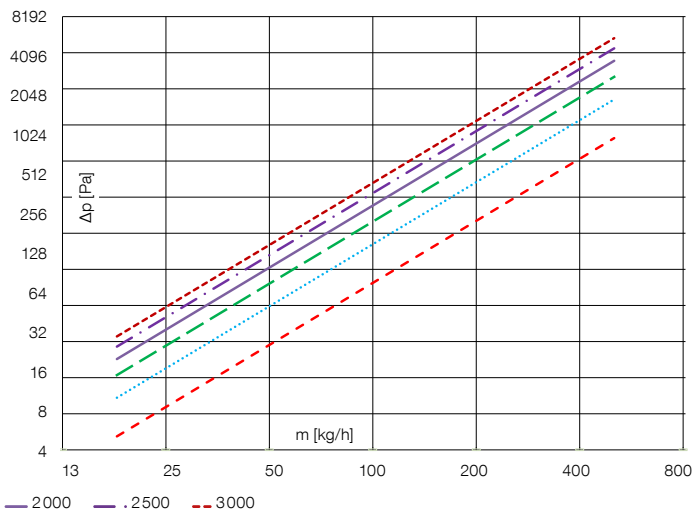
KORAFLEX FVO, FVE type 90/200

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	3.77	12.41	40.84	59.93	120.30	197.24	289.43	395.94	516.04	649.16	794.81	952.59
800	5.13	16.88	55.57	81.55	163.71	268.41	393.86	538.81	702.25	883.40	1081.61	1296.33
1000	6.52	21.44	70.58	103.56	207.90	340.86	500.19	684.26	891.82	1121.88	1373.60	1646.28
1200	7.92	26.07	85.79	125.90	252.73	414.36	608.05	831.81	1084.13	1363.79	1669.79	2001.26
1400	9.34	30.75	101.19	148.49	298.09	488.74	717.19	981.12	1278.73	1608.60	1969.52	2360.49
1600	10.78	35.47	116.75	171.32	343.92	563.88	827.45	1131.95	1475.32	1855.91	2272.32	2723.40
1800	12.23	40.24	132.45	194.36	390.16	639.69	938.70	1284.14	1673.67	2105.42	2577.82	3089.54
2000	13.69	45.05	148.27	217.57	436.77	716.10	1050.83	1437.53	1873.60	2356.92	2885.75	3458.59
2200	15.16	49.89	164.20	240.96	483.70	793.06	1163.76	1592.02	2074.95	2610.21	3195.87	3830.28
2400	16.64	54.76	180.24	264.49	530.95	870.52	1277.42	1747.51	2277.60	2865.14	3508.00	4204.37
2600	18.13	59.66	196.37	288.16	578.47	948.43	1391.75	1903.92	2481.46	3121.59	3821.99	4580.69
2800	19.63	64.59	212.60	311.97	626.25	1026.78	1506.72	2061.19	2686.43	3379.44	4137.69	4959.06
3000	21.13	69.55	228.90	335.89	674.28	1105.52	1622.26	2219.26	2892.45	3638.60	4455.01	5339.37

KORAFLEX FVO, FVE type 70/320



KORAFLEX FVO, FVE type 90/200



PRESSURE LOSSES

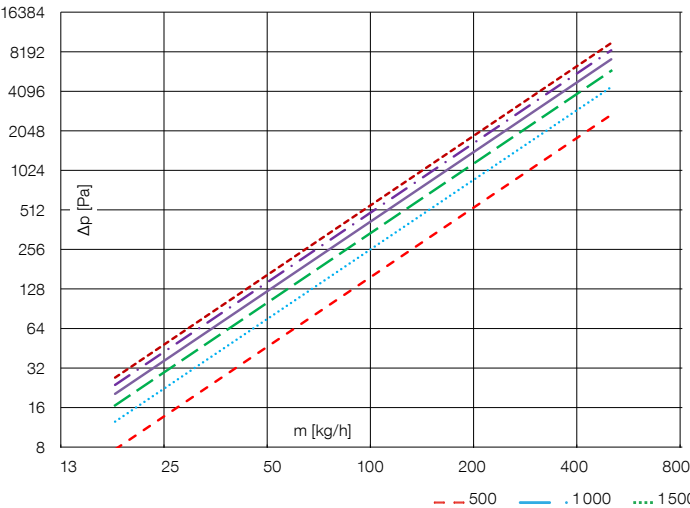
KORAFLEX FVO, FVE type 90/260, 110/260, 130/260 KORAFLEX FVP type 110/320

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	10.51	35.62	120.67	178.74	364.93	605.57	896.96	1236.43	1621.92	2051.74	2524.50	3039.00
800	12.87	43.59	147.70	218.77	446.67	741.21	1097.86	1513.36	1985.19	2511.28	3089.93	3719.66
1000	15.05	50.99	172.77	255.90	522.48	867.00	1284.19	1770.21	2322.11	2937.49	3614.35	4350.96
1200	17.11	57.96	196.37	290.86	593.88	985.48	1459.67	2012.11	2639.43	3338.90	4108.25	4945.51
1400	19.06	64.59	218.83	324.13	661.80	1098.19	1626.62	2242.25	2941.32	3720.79	4578.13	5511.16
1600	20.94	70.94	240.36	356.01	726.89	1206.20	1786.60	2462.77	3230.60	4086.73	5028.39	6053.19
1800	22.74	77.06	261.09	386.72	789.59	1310.25	1940.72	2675.22	3509.28	4439.27	5462.17	6575.37
2000	24.49	82.98	281.15	416.43	850.26	1410.92	2089.82	2880.75	3778.89	4780.33	5881.81	7080.53
2200	26.19	88.73	300.62	445.27	909.14	1508.62	2234.54	3080.25	4040.58	5111.37	6289.12	7570.86
2400	27.84	94.32	319.57	473.34	966.44	1603.72	2375.40	3274.41	4295.28	5433.56	6685.55	8048.08
2600	29.45	99.78	338.05	500.72	1022.34	1696.48	2512.80	3463.81	4543.73	5747.85	7072.27	8513.61
2800	31.02	105.11	356.12	527.48	1076.98	1787.15	2647.08	3648.92	4786.55	6055.03	7450.22	8968.59
3000	32.56	110.33	373.81	553.67	1130.47	1875.90	2778.55	3830.14	5024.27	6355.74	7820.22	9414.00

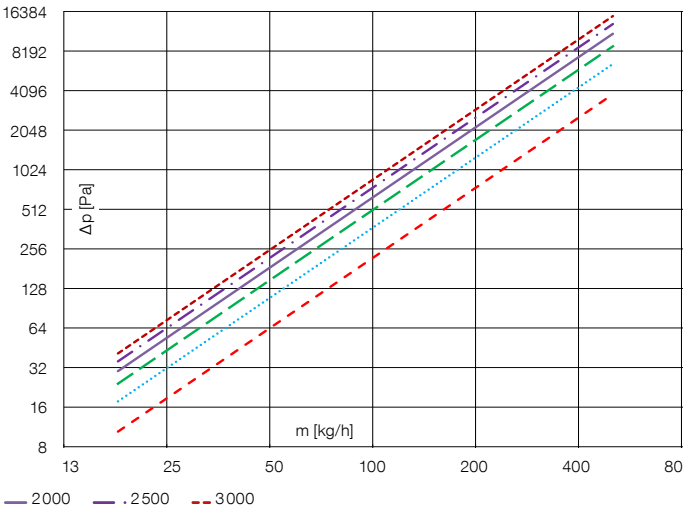
KORAFLEX FVO, FVE type 90/320, 110/320, 130/320

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	14.44	49.36	168.78	250.72	514.64	857.22	1273.42	1759.56	2312.81	2930.85	3611.74	4353.82
800	17.99	61.51	210.29	312.38	641.21	1068.05	1586.60	2192.31	2881.62	3651.66	4500.00	5424.59
1000	21.33	72.94	249.39	370.48	760.46	1266.67	1881.66	2600.01	3417.51	4330.75	5336.86	6433.40
1200	24.52	83.85	286.69	425.88	874.17	1456.08	2163.03	2988.80	3928.54	4978.34	6134.91	7395.41
1400	27.59	94.34	322.54	479.13	983.48	1638.16	2433.51	3362.54	4419.80	5600.87	6902.06	8320.18
1600	30.56	104.47	357.19	530.62	1089.16	1814.19	2695.00	3723.86	4894.73	6202.71	7643.72	9214.23
1800	33.44	114.31	390.84	580.60	1191.77	1985.09	2948.88	4074.66	5355.83	6787.03	8363.78	10082.25
2000	36.24	123.90	423.62	629.30	1291.71	2151.57	3196.19	4416.38	5804.99	7356.22	9065.20	10927.78
2200	38.98	133.26	455.63	676.85	1389.33	2314.16	3437.72	4750.12	6243.67	7912.12	9750.25	11753.58
2400	41.66	142.43	486.97	723.40	1484.87	2473.30	3674.13	5076.78	6673.03	8456.23	10420.76	12561.86
2600	44.29	151.42	517.69	769.04	1578.55	2629.34	3905.93	5397.07	7094.04	8989.74	11078.22	13354.40
2800	46.87	160.24	547.86	813.86	1670.55	2782.58	4133.56	5711.61	7507.48	9513.65	11723.85	14132.68
3000	49.41	168.92	577.53	857.93	1761.01	2933.25	4357.40	6020.89	7914.01	10028.81	12358.69	14897.96

KORAFLEX FVO, FVE type 90/260, 110/260, 130/260 KORAFLEX FVP type 110/320



KORAFLEX FVO, FVE type 90/320, 110/320, 130/320



PRESSURE LOSSES

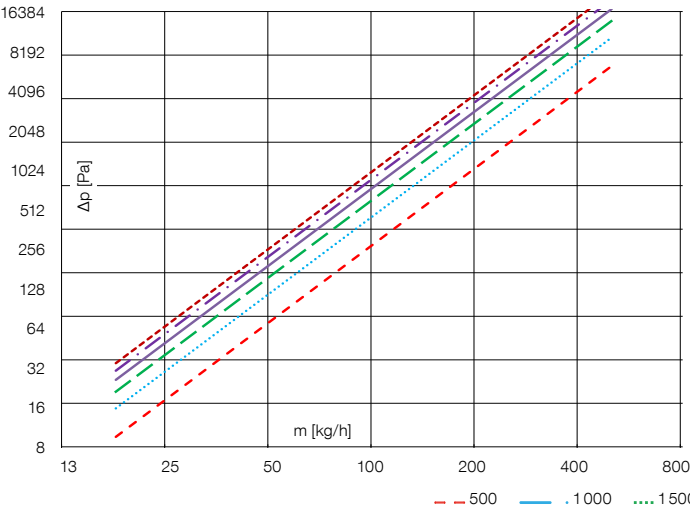
KORAFLEX FVO, FVE type 90/400, 110/400, 130/400

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	20.72	69.70	234.46	346.48	704.50	1165.60	1722.51	2369.99	3103.97	3921.17	4818.85	5794.67
800	25.55	85.94	289.10	427.23	868.68	1437.24	2123.93	2922.30	3827.33	4834.97	5941.84	7145.07
1000	30.05	101.10	340.11	502.61	1021.94	1690.81	2498.67	3437.89	4502.60	5688.02	6990.19	8405.71
1200	34.32	115.45	388.40	573.97	1167.04	1930.87	2853.43	3926.00	5141.87	6495.60	7982.65	9599.14
1400	38.40	129.17	434.53	642.15	1305.67	2160.24	3192.39	4392.38	5752.69	7267.23	8930.92	10739.44
1600	42.32	142.36	478.91	707.73	1439.01	2380.85	3518.39	4840.92	6340.14	8009.35	9842.94	11836.14
1800	46.11	155.11	521.80	771.11	1567.87	2594.06	3833.47	5274.44	6907.92	8726.61	10724.40	12896.10
2000	49.78	167.48	563.41	832.59	1692.90	2800.91	4139.16	5695.03	7458.77	9422.48	11579.58	13924.45
2200	53.36	179.51	603.90	892.43	1814.56	3002.21	4436.63	6104.32	7994.81	10099.65	12411.78	14925.17
2400	56.85	191.26	643.40	950.81	1933.25	3198.58	4726.83	6503.61	8517.75	10760.27	13223.64	15901.43
2600	60.26	202.73	682.01	1007.87	2049.28	3390.55	5010.53	6893.94	9028.97	11406.08	14017.29	16855.79
2800	63.61	213.97	719.83	1063.75	2162.91	3578.55	5288.34	7276.18	9529.59	12038.50	14794.49	17790.38
3000	66.88	225.00	756.91	1118.56	2274.34	3762.92	5560.81	7651.07	10020.58	12658.76	15556.74	18706.99

KORAFLEX FVO, FVE type 80/160 KORAFLEX F4V type 130/340 heating circuit

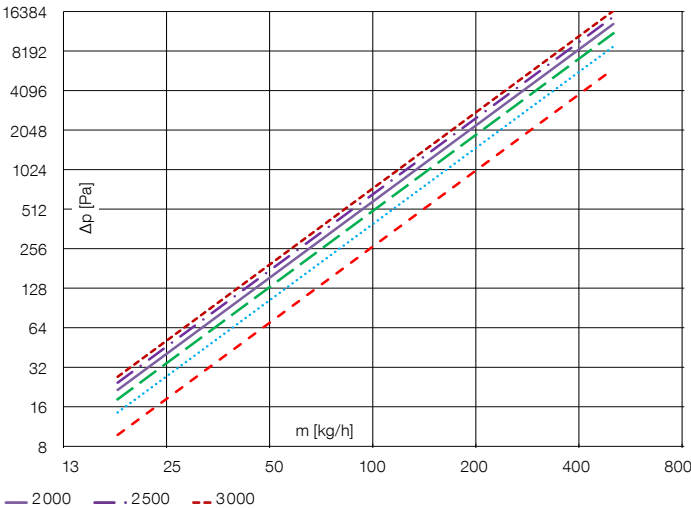
Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	13.27	50.39	191.41	294.15	642.13	1117.34	1717.05	2439.18	3282.07	4244.33	5324.78	6522.38
800	15.63	59.36	225.47	346.48	756.37	1316.14	2022.55	2873.17	3866.03	4999.50	6272.19	7682.87
1000	17.74	67.39	256.00	393.41	858.82	1494.39	2296.48	3262.30	4389.63	5676.61	7121.67	8723.41
1200	19.68	74.76	284.00	436.43	952.73	1657.82	2547.62	3619.05	4869.66	6297.39	7900.47	9677.38
1400	21.49	81.62	310.04	476.45	1040.11	1809.86	2781.26	3950.95	5316.26	6874.92	8625.02	10564.89
1600	23.18	88.07	334.53	514.08	1122.25	1952.78	3000.90	4262.97	5736.09	7417.84	9306.15	11399.21
1800	24.79	94.17	357.73	549.73	1200.07	2088.19	3208.99	4558.57	6133.85	7932.22	9951.47	12189.66
2000	26.32	99.99	379.84	583.70	1274.24	2217.26	3407.33	4840.33	6512.97	8422.49	10566.54	12943.08
2200	27.79	105.57	401.01	616.25	1345.28	2340.87	3597.29	5110.18	6876.07	8892.05	11155.64	13664.66
2400	29.20	110.93	421.37	647.54	1413.59	2459.73	3779.94	5369.65	7225.20	9343.55	11722.07	14358.49
2600	30.56	116.10	441.02	677.72	1479.48	2574.39	3956.15	5619.96	7562.01	9779.10	12268.50	15027.82
2800	31.88	121.10	460.02	706.92	1543.23	2685.31	4126.60	5862.10	7887.82	10200.44	12797.10	15675.31
3000	33.16	125.95	478.44	735.24	1605.04	2792.87	4291.88	6096.90	8203.76	10609.00	13309.66	16303.15

KORAFLEX FVO, FVE type 90/400, 110/400, 130/400



KORAFLEX FVO, FVE type 80/160

KORAFLEX F4V type 130/340 heating circuit



PRESSURE LOSSES

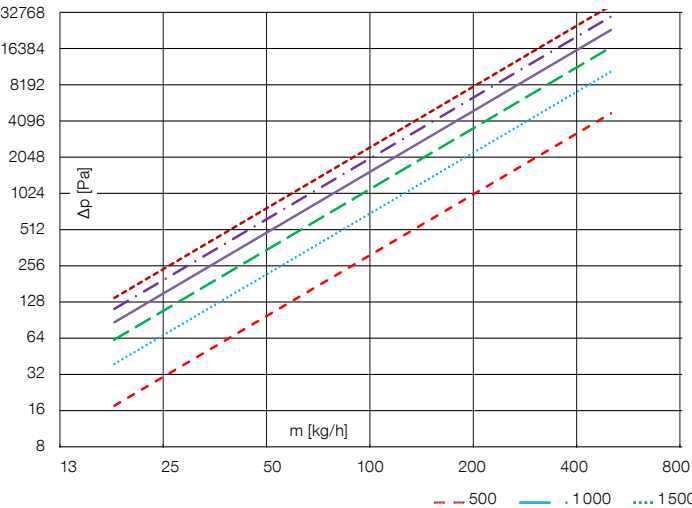
KORAFLEX FVO, FVE, F2V type 110/200

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	8.38	27.45	89.98	131.87	264.07	432.21	633.38	865.51	1127.00	1416.59	1733.20	2075.94
800	10.66	34.95	114.55	167.86	336.15	550.18	806.27	1101.76	1434.63	1803.27	2206.30	2642.60
1000	12.86	42.14	138.13	202.42	405.35	663.45	972.25	1328.58	1729.99	2174.51	2660.52	3186.64
1200	14.98	49.11	160.96	235.88	472.35	773.10	1132.94	1548.16	2015.91	2533.91	3100.24	3713.31
1400	17.05	55.89	183.18	268.44	537.56	879.84	1289.36	1761.90	2294.23	2883.73	3528.26	4225.96
1600	19.07	62.51	204.89	300.26	601.28	984.13	1442.20	1970.76	2566.19	3225.57	3946.50	4726.91
1800	21.05	69.01	226.17	331.45	663.73	1086.35	1591.98	2175.44	2832.71	3560.58	4356.38	5217.85
2000	23.00	75.38	247.08	362.08	725.07	1186.74	1739.11	2376.48	3094.50	3889.63	4758.98	5700.06
2200	24.91	81.66	267.64	392.22	785.43	1285.53	1883.88	2574.31	3352.09	4213.42	5155.14	6174.56
2400	26.80	87.84	287.91	421.92	844.91	1382.88	2026.54	2769.26	3605.94	4532.49	5545.52	6642.14
2600	28.66	93.94	307.91	451.23	903.60	1478.93	2167.30	2961.60	3856.40	4847.31	5930.70	7103.49
2800	30.50	99.97	327.66	480.17	961.56	1573.80	2306.32	3151.58	4103.77	5158.24	6311.13	7559.14
3000	32.32	105.93	347.19	508.78	1018.86	1667.58	2443.75	3339.38	4348.31	5465.62	6687.20	8009.59

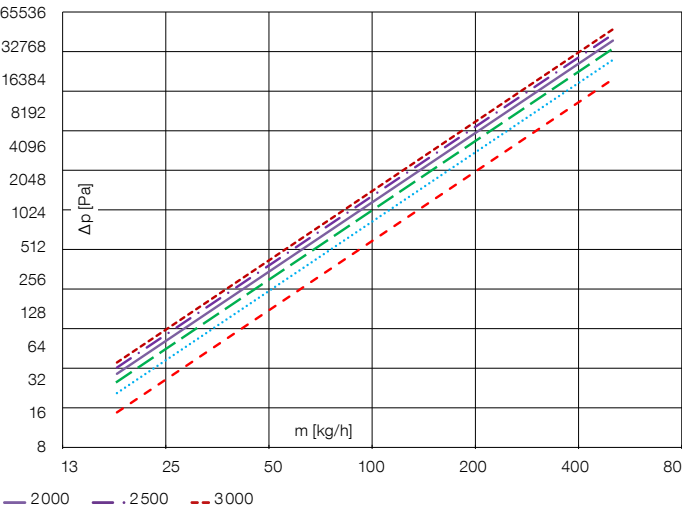
KORAFLEX F2V type 130/340

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	15.36	53.59	186.95	279.54	580.62	975.28	1458.26	2025.73	2674.68	3402.65	4207.60	5087.74
800	21.91	76.44	266.69	398.76	828.25	1391.23	2080.20	2889.69	3815.40	4853.85	6002.10	7257.61
1000	28.86	100.69	351.29	525.25	1090.99	1832.56	2740.09	3806.37	5025.75	6393.62	7906.12	9559.91
1200	36.15	126.11	439.98	657.87	1366.44	2295.24	3431.90	4767.39	6294.63	8007.86	9902.23	11973.56
1400	43.72	152.55	532.22	795.80	1652.93	2776.46	4151.43	5766.91	7614.36	9686.78	11978.32	14483.93
1600	51.56	179.89	627.63	938.44	1949.22	3274.14	4895.57	6800.63	8979.23	11423.14	14125.44	17080.17
1800	59.63	208.05	725.88	1085.35	2254.35	3786.67	5661.93	7865.21	10384.85	13211.33	16336.64	19753.92
2000	67.92	236.96	826.73	1236.14	2567.56	4312.78	6448.58	8957.97	11827.68	15046.86	18606.39	22498.45
2200	76.40	266.55	929.98	1390.52	2888.22	4851.40	7253.94	10076.73	13304.83	16926.05	20930.14	25308.27
2400	85.07	296.79	1035.45	1548.24	3215.81	5401.65	8076.69	11219.65	14813.89	18845.83	23304.07	28178.78
2600	93.90	327.62	1143.02	1709.07	3549.88	5962.79	8915.71	12385.17	16352.79	20803.58	25724.95	31106.05
2800	102.90	359.01	1252.55	1872.84	3890.03	6534.16	9770.04	13571.95	17919.75	22797.03	28189.98	34086.71
3000	112.05	390.93	1363.93	2039.38	4235.95	7115.20	10638.82	14778.81	19513.24	24824.22	30696.72	37117.81

KORAFLEX FVO, FVE, F2V type 110/200



KORAFLEX F2V type 130/340



PRESSURE LOSSES

KORAFLEX F4V type 130/340 cooling circuit

Length L [mm]	Mass flow rate m [kg/h]											
	20	40	80	100	150	200	250	300	350	400	450	500
	Exchanger pressure losses Δp [Pa]											
600	20.39	67.79	225.39	331.82	670.06	1103.23	1624.18	2227.81	2910.14	3668.00	4498.73	5400.07
800	29.14	96.90	322.17	474.30	957.77	1576.94	2321.59	3184.40	4159.71	5242.99	6430.43	7718.79
1000	38.45	127.84	425.03	625.74	1263.59	2080.45	3062.87	4201.17	5487.91	6917.07	8483.66	10183.40
1200	48.22	160.32	533.03	784.73	1584.65	2609.07	3841.11	5268.64	6882.32	8674.61	10639.25	12770.88
1400	58.39	194.14	645.48	950.29	1918.97	3159.52	4651.48	6380.19	8334.31	10504.73	12883.86	15465.20
1600	68.92	229.16	761.90	1121.69	2265.08	3729.37	5490.43	7530.92	9837.49	12399.38	15207.60	18254.52
1800	79.78	265.25	881.91	1298.35	2621.83	4316.75	6355.18	8717.05	11386.91	14352.29	17602.82	21129.63
2000	90.93	302.33	1005.18	1479.84	2988.32	4920.16	7243.52	9935.54	12978.60	16358.49	20063.38	24083.18
2200	102.36	340.32	1131.48	1665.77	3363.79	5538.35	8153.63	11183.90	14609.31	18413.87	22584.26	27109.13
2400	114.04	379.15	1260.58	1855.85	3747.61	6170.31	9084.00	12460.04	16276.30	20514.98	25161.23	30202.41
2600	125.95	418.77	1392.32	2049.79	4139.26	6815.14	10033.33	13762.17	17977.26	22658.90	27790.71	33358.73
2800	138.09	459.14	1526.53	2247.38	4538.27	7472.08	11000.50	15088.78	19710.18	24843.11	30469.60	36574.35
3000	150.45	500.21	1663.09	2448.42	4944.23	8140.48	11984.52	16438.52	21473.32	27065.40	33195.20	39846.04

KORAFLEX F4V type 130/340 cooling circuit

