ANEXO A - COMPARAÇÃO DE REFERÊNCIAS APUD STEINKE; KANDLIKAR, 2006.

Autor	Fluido/ Forma	D_H (μm)	$\alpha_c = a/b$	*Re*	*fRe*	C*	L/D_H	Adiab/ diab**	Perdas	Concorda com laminar
D.B. Tuckerman, R.F.W. Pease, High-performance heat sinking for VSLI, IEEE Electron Device Lett. EDL-2 (1981) 126–129	Água/ R	92–96	0.17–0.19	291–638	14.0–20.8	0.73–1.06	104–109	D	N	S
L.J. Missaggia, J.N. Walpole, Z.L. Liau, R.J. Phillips, Microchannel heat sinks for two-dimensional high-power-density diode laser arrays, IEEE J. Quantum Electron. 25 (9) (1989) 1988–1992.	Água/ R	160	0,25	2350	611,6	33,54	6	D	N	N
R.A. Riddle, R.J. Contolini, A.F. Bernhardt, Design calculations for the microchannel heatsink, in: Proc. of the Technical Program – National Electronic Packaging and Production Conference, vol. 1, 1991, pp. 161–171.	Água/ R	86–96	0.06–0.16	96–982	15.8–80.6	0.79–4.06	156–180	D	N	N
M.M. Rahman, F. Gui, Experimental measurements of fluid flow and heat transfer in microchannel cooling passages in a chip substrate, in: Proc. of the ASME International Electronics Packaging Conference, September 29–October 2 1993, Binghamton, NY, USA, ASME publications 4-2, 1993, pp. 685–692.	Água/ R	299–491	3.00–6.00	275–3234	2279.8–8720.2	121.89 - 507.10	94–154	D	N	N
M.M. Rahman, F. Gui, Design, fabrication, and testing of microchannel heat sinks for aircraft avionics cooling, in: Proc. of the Intersociety Energy Conversion Engineering Conference, vol. 1, 1993, pp. 1–6.	Água, R11/ R	299–491	3.00–6.00	275–3234	2279.8–8720.2	121.89 - 507.10	94–154	D	N	N
F. Gui, R.P. Scaringe, Enhanced heat transfer in the entrance region of microchannels, in: Proc. of the Intersociety Energy Conversion Engineering Conference, 1995, pp. 289–294.	Água/ Tr	338–388	0.73–0.79	834–9955	18.4–76.8	1.28–5.33	119–136	D	N	N
X.F. Peng, B.X.Wang, G.P. Peterson, H.B. Ma, Experimental investigation of heat transfer in flat plates with rectangular microchannels, Int. J. Heat Mass Transfer 38 (1) (1995) 127–137.	Metanol/ R	311–646	0.29–0.86	1530–13455	DI	DI	70–145	D	N	N
X.F. Peng, G.P. Peterson, Effect of thermofluid and geometrical parameters on convection of liquids through rectangular microchannels, Int. J. Heat Mass Transfer 38 (4) (1995) 755–758.	Água/ R	311	0,29	214–337	DI	DI	145	D	N	N
J.M. Cuta, C.E. McDonald, A. Shekarriz, Forced convection heat transfer in parallel channel array microchannel heat exchanger, in: ASME, HTD, Advances in Energy Efficiency, Heat/Mass Transfer Enhancement, vol. 338, 1996, pp. 17–23.	R124/ R	425	0,27	101–578	7.0–36.6	0.39–2.04	48	D	S	S
X.F. Peng, G.P. Peterson, Convective heat transfer and flow friction for water flow in microchannel structures, Int. J. Heat Mass Transfer 39 (12) (1996) 2599–2608.	Água/ R	133–200	0.5–1.0	136–794	192.1–394.1	13.50–27.70	25–338	D	N	N
X.N. Jiang, Z.Y. Zhou, X.Y. Huang, C.Y. Liu, Laminar flow through microchannels used for microscale cooling systems, in: Proc. of the Electronic Packaging Technology Conference, EPTC, 1997, pp. 119–122.	Água/ C, Tr	8–68	0.38–0.44	0.032–26.1	3.6–48.9	0.22–3.05	69–276	D	N	S
C.P. Tso, S.P. Mahulikar, Multimode heat transfer in two-dimensional microchannel, Am. Soc. Mech. Engineers, EEP 26 (2) (1999) 1229–1233.	Água/ C	728	NA	16.6–37.5	ID	ID	76–89	D	S	N
R.J. Vidmar, R.J. Barker, Microchannel cooling for a high-energy particle transmission window, an RF transmission window, and VLSI heat dissipation, IEEE Trans. Plasma Sci. 26 (3) (1998) 1031–1043.	Água/ C	131	NA	2452–7194	28.4–89.2	1.77–5.58	580	D	S	S
T.M. Adams, M.F. Dowling, S.I. Abdel-Khalik, S.M. Jeter, Applicability of traditional turbulent single-phase forced convection correlations to noncircular microchannels, Int. J. Heat Mass Transfer 42 (23) (1999) 4411–4415.	Água/ Tr	131	DI	3899–21429	DI	DI	141	D	S	S
G.M. Mala, D.Q. Li, Flow characteristics of water in microtubes, Int. J. Heat Fluid Flow 20 (2) (1999) 142–148.	Água/ C	50–254	NA	132–2259	22.2–321.2	1.38–20.07	150–490	A	S	S
I. Papautsky, J. Brazzle, T. Ameel, A.B. Frazier, Laminar fluid behavior in microchannels using micropolar fluid theory, Sensors and Actuators A: Physical 73 (1–2) (1999) 101–108.	Água/ R	44–47	5.69–26.42	0.002–4	19.8–32.1	0.98–1.41	164–177	A	S	S
D. Pfund, D. Rector, A. Shekarriz, A. Popescu, J. Welty, Pressure drop measurements in a microchannel, AIChE J. 46 (8) (2000) 1496–1507.	Água/ R	253–990	19.19–78.13	55.3–3501	21.9–40.7	0.01–1.81	101–396	A	S	S
W. Qu, M. Mala, D. Li, Heat transfer for water in trapizoid silicon microchannels, Int. J. Heat Mass Transfer 43 (2000) 3925–3936.	Água/ Tr	51–169	1.54–14.44	6.2–1447	9.2–36.7	0.55–1.68	165–543	A	S	S
W. Qu, G.M. Mala, D. Li, Pressure-driven water flows in trapezoidal silicon microchannels, Int. J. Heat Mass Transfer 43 (3) (2000) 353–364.	Água/ Tr	62–169	2.16–11.53	94–1491	DI	DI	178–482	D	N	N
M.M. Rahman, Measurements of heat transfer in microchannel heat sinks, Int. Comm. Heat Mass Transfer 27 (4) (2000) 495–507.	Água/ R	299–491	3.00–6.00	275–3234	9119.2–34880.6	487–2028	94–154	D	N	N
B. Xu, K.T. Ooi, N.T. Wong, W.K. Choi, Experimental investigation of flow friction for liquid flow in microchannels, Int. Comm. Heat Mass Transfer 27 (8) (2000) 1165–1176.	Água/ R	30–344	0.58–24.53	5–4620	9.1–46.2	0.53–3.18	145–1070	A	S	S
P.M.-Y. Chung, M. Kawaji, A. Kawahara, Characteristics of single-phase flow in microchannels, in: Proc. of Fluids Engineering Division Summer Meeting, July 14–18, 2002, Montreal, Quebec, Canada, ASME Publications, 2002, pp. 1219–1227.	Água/ C	100	NA	1.9–3237	41.2–33.3	0.89–2.08	875	A	S	S
J. Judy, D. Maynes, B.W. Webb, Characterization of frictional pressure drop for liquid flows through microchannels, Int. J. Heat Mass Transfer 45 (17) (2002) 3477–3489.	Água, metanol, isopropil/ C, R	14–149	1	7.6–2251	12.9–20.3	0.83–1.27	1203–5657	A	S	S
P.S. Lee, J.C. Ho, H. Xue, Experimental study on laminar heat transfer in microchannel heat sink, in: The Eighth Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 30 May–1 June 2002, ITHERM 2002, IEEE Publications, 2002, pp. 379–386.	Água/ R	85	0,25	119–989	19.4–43.6	1.06–2.39	118	D	S	S
W. Qu, I. Mudawar, Experimental and numerical study of pressure drop and heat transfer in a single-phase micro-channel heat sink, Int. J. Heat Mass Transfer 45 (12) (2002) 2549–2565.	Água/ R	349	0,32	137–1670	12.1–33.4	0.70–1.94	128	D	S	S
A. Bucci, G.P. Celata, M. Cumo, E. Serra, G. Zummo, Water single-phase fluid flow and heat transfer in capillary tubes, in: Int. Conference on Microchannels and Minichannels, Paper # 1037, ASME, vol. 1, 2003, pp.319–326.	Água/ C	172–520	NA	2–5272	14.0–51.9	0.87–3.24	DI	D	S	S
J.-Y. Jung, H.-Y. Kwak, Fluid flow and heat transfer in microchannels with rectangular cross section, in: Int. Conference on Microchannels and Minichannels, Paper # 1032, vol. 1, 2003, pp. 291–297.	Água/ R	100–200	1.00–2.00	50–325	10.7–33.4	0.69–2.15	75–150	D	S	S
P.-S. Lee, S.V. Garimella, Experimental investigation of heat transfer in microchannels, in: Proceedings of the ASME Summer Heat Transfer Conference, 2003, pp. 391–397.	Água/ R	318–903	0.17–0.22	558–3636	DI	DI	28–80	D	S	S
H. Park, J.J. Pak, S.Y. Son, G. Lim, I. Song, Fabrication of a microchannel integrated with inner sensors and the analysis of its laminar flow characteristics, Sensors and Actuators A: Physical 103 (3) (2003) 317–329.	Água/ R	73	4,44	4.2–19.1	DI	DI	654	D	-	-
X. Tu, P. Hrnjak, Experimental investigation of single-phase flow pressure drop through rectangular microchannels, in: Int. Conference on Microchannels and Minichannels, Paper # 1028, ASME Publications, vol. 1, 2003, pp. 257–267.	R134a/ R	69–305	4.11–11.61	112–3500	17.6–50.5	0.89–2.35	131–288	D	S	S
H. Wu, P. Cheng, An experimental study of convective heat transfer in silicon microchannels with different surface conditions, Int. J. Heat Mass Transfer 46 (14) (2003) 2547–2556.	Água/ Tr, Ti	26–291	DI	11.1–3060	11.7–31.6	0.73–1.98	DI	A	S	S
H.Wu, P. Cheng, Friction factors in smooth trapezoidal silicon microchannels with different aspect ratios, Int. J. Heat Mass Transfer 46 (14) (2003) 2519–2525.	Água/ Tr,	169	1.54–26.20	16–1378	8.6–34.1	0.58–1.88	192–467	D	N	S
R. Baviere, F. Ayela, S. Le Person, M. Favre-Marinet, An experimental study of water flow in smooth and rough rectangular micro-channels, in: Int. Conference on Microchannels andMinichannels, ASME Publications, 2004.	Água/ R	14–593	83,33	0.1–7985	21.5–71.8	0.91–3.04	138–429	D	S	S
S.-S. Hsieh, C.-Y. Lin, C.-F. Huang, H.-H. Tsai, Liquid flow in a microchannel, J. Micromech. Microengrg. 14 (4) (2004) 436–445.	Água/ R	146	1,74	45–969	14.6–51.2	0.96–3.39	164	D	S	S
W. Owhaib, B. Palm, Experimental investigation of single-phase convective heat transfer in circular microchannels, Exp. Thermal Fluid Sci. 28 (2–3) (2004) 105–110.	R134a/ C	800–1700	NA	1262–16070	DI	DI	191–406	D	S	S

Literatura selecionada para escoamento de líquido fase única em passagem por microcanal

NA = Não Aplicávl, DI = Dados Insuficiente; *C = circular, R = retangular, Tr = trapézio, Ti = triângulo; **A = Adiabático, D = Diabático; ***S = Sim, N = Não