



jaga

TECHNICAL INFORMATION
Low-H₂O fin tube elements

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	Page
Correction factors: why the reference standard EN442 ?	3
Overview & content fin tube elements	4
Pressure drop	5
Average correction factors	10
Weight	11
Standard specifications	12

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Note: dimensions in “()” are shown in centimeters.

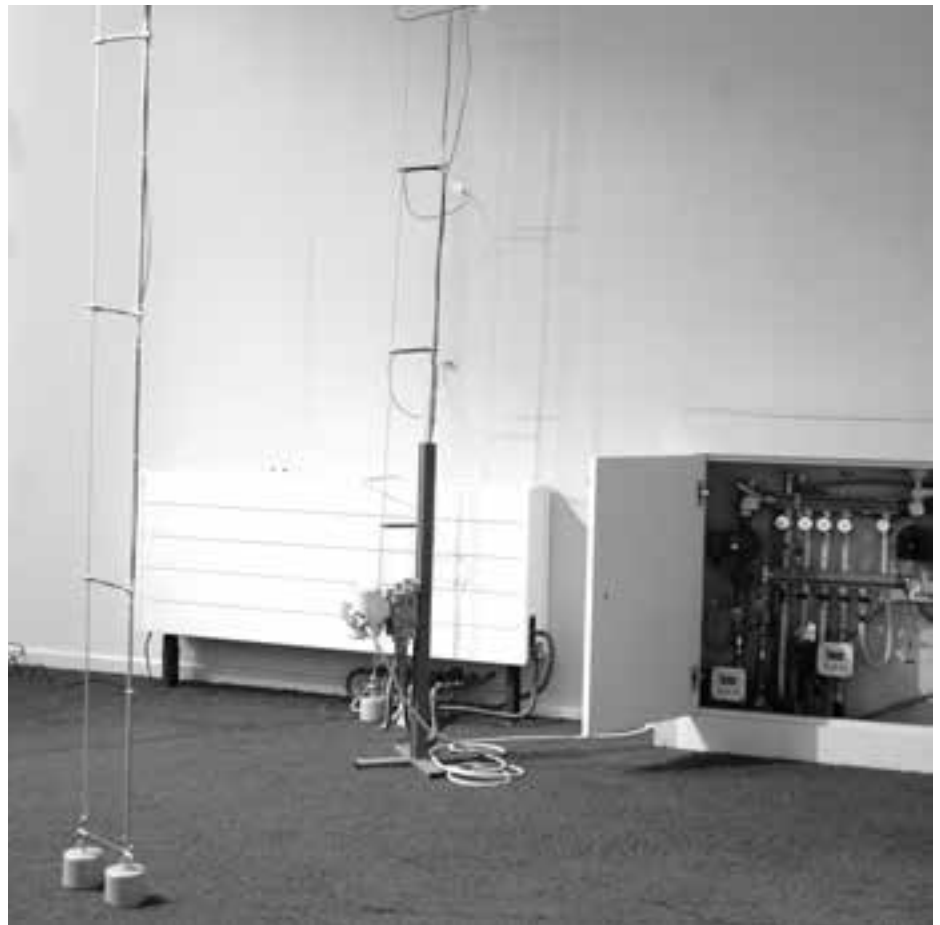
CORRECTION FACTORS



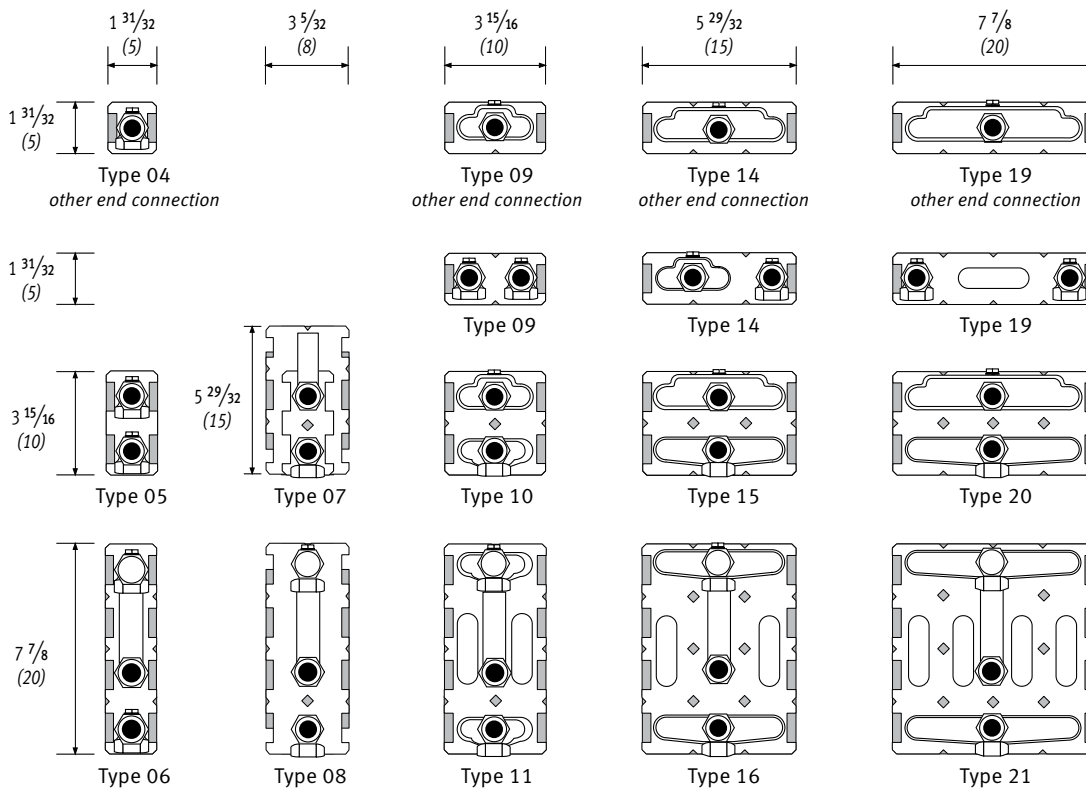
Why the reference standard EN442?

This European standard is introduced in Europe to certify the output of all heat emitters for central heating systems. This standard Defines procedures for determining the standard thermal output of the heating appliances (radiators and convectors) fed with water or steam at temperatures below 248°F (120°C), supplied by a remote heat source. This also specifies the laboratory arrangements and testing methods to be adopted, the admissible tolerances the criteria for selecting the samples to be tested and for verifying the conformity of the current production with the samples.

Guidelines for testing procedures and conditions are taken into this standard. All outputs are measured and certified for standard water and room temperatures. Standard inlet, return and room temperatures are: 167/149/68, 194/158/68 and 131/113/68°F (75/65/20, 90/70/20 and 55/45/20°C). All alternative temperatures can be calculated according to realistic formulas and graphs. Also there will be tests performed on different products in the same product-range, this includes different flow rates and different cabinet heights. Due to the very strict structure of the test room, an exact reproducibility is obtained. There will be no extra addition to the measured results. All European manufacturers are obliged to participate in this testing procedure. A periodic recheck will be performed on a random selection of appliances. This standard ensures all users that the published heat outputs are officially tested and confirmed by an independent official laboratory.



OVERVIEW FIN TUBE ELEMENTS



WATER CONTENT

Type	G/foot	L/meter
04	0.0129	0.16
05	0.0258	0.32
06	0.0515	0.64
07	0.0411	0.51
08	0.0507	0.63
09	0.0250	0.31
10	0.0523	0.65
11	0.1071	1.33
14	0.0378	0.47
15	0.0789	0.98
16	0.1594	1.98
19	0.0507	0.63
20	0.1063	1.32
21	0.2142	2.66

T05 T06 T07 T08 T11 T16 T21 are not available with opposite end connections.

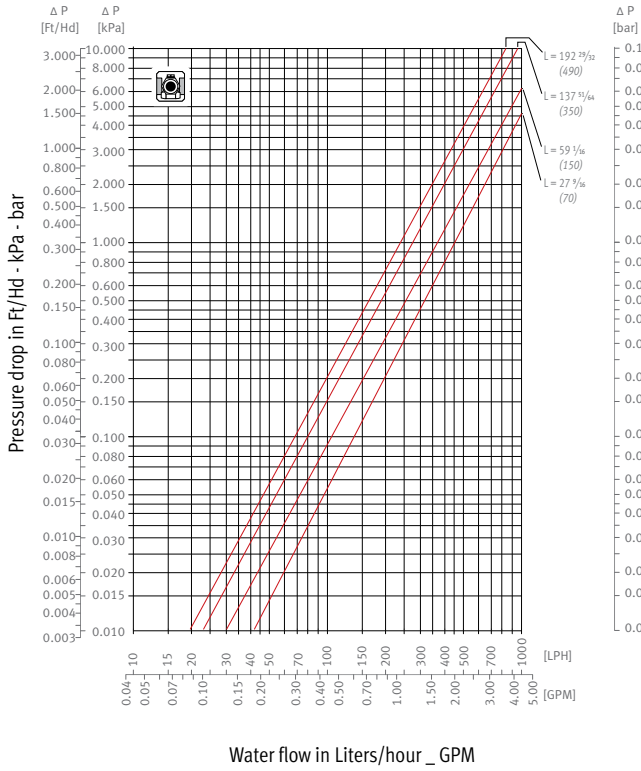
Fin tube element per appliance. Overview codes:

Element	Knockonwood	Strada	Linea Plus	Tempo	Basic	Maxi	Play	Mini	Build-in	Mini Canal Dimensions duct H x D
04 other end	-	-	-	-	-	-	-	-	-	type 04 3.5" (9) x 5.5" (14) or 4.5" (11) x 5.5" (14)
05	-	-	-	-	-	-	-	type 05	-	type 05 5.5" (14) x 5.5" (14)
06	-	-	-	-	-	-	-	type 06	-	-
07	-	type 6 - H 6***	-	-	-	-	-	-	-	-
08	type 6 - H 8***	type 6 - H 8***	-	-	-	-	-	-	-	-
09	-	-	-	-	-	-	-	-	-	type 09 3.5" (9) x 7" (18) or 4.5" (11) x 7" (18)
09 other end	-	-	-	-	-	-	-	type 09	-	-
10	type 10	type 10	type 10	type 10	type 10	type 10	type 10	type 10	type 10	type 10 5.5" (14) x 10" (26) or 7.5" (19) x 10" (26)
11	type 11	type 11	type 11	type 11	type 11	type 11	type 11	type 11	type 11	-
14	-	-	-	-	-	-	-	-	-	type 14 3.5" (9) x 13.5" (34) or 4.5" (11) x 13.5" (34)
14 other end	-	-	-	-	-	-	-	type 14	-	-
15	type 15	type 15	type 15	type 15	type 15	type 15	type 15	type 15	type 15	type 15 5.5" (14) x 13.5" (34) or 7.5" (19) x 13.5" (34)
16	type 16	type 16	type 16	type 16	type 16	type 16	type 16	type 16	type 16	-
19	-	-	-	-	-	-	-	-	-	type 19 3.5" (9) x 16.5" (42) or 4.5" (11) x 16.5" (42)
19 other end	-	-	-	-	-	-	-	type 19	-	-
20	-	type 20	type 20	type 20	type 20	type 20	type 20	type 20	type 20	type 20 5.5" (14) x 16.5" (42) or 7.5" (19) x 16.5" (42)
21	-	type 21	type 21	type 21	type 21	type 21	type 21	type 21	type 21	-

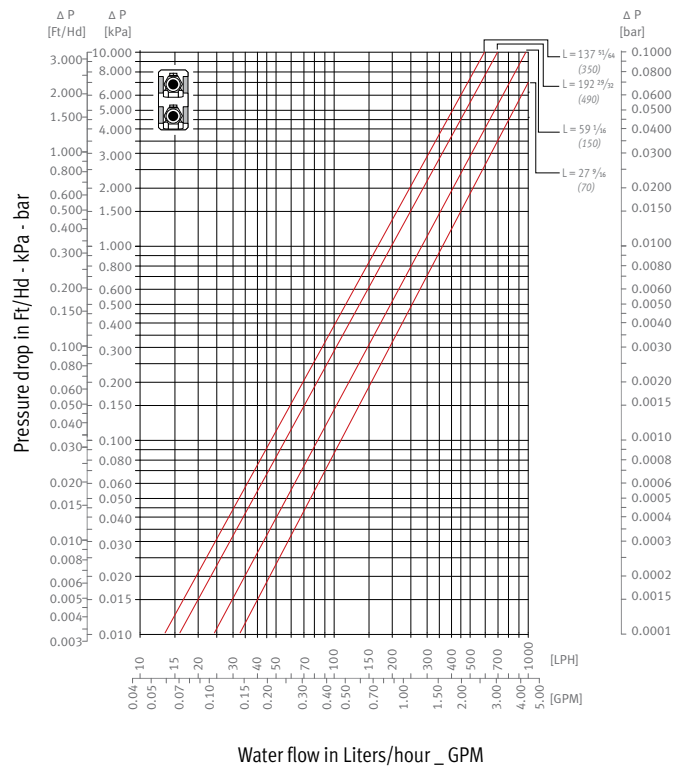
* Strada type 06 height 8" (20) ** Knockonwood and Strada type 06, all other heights

PRESSURE DROP

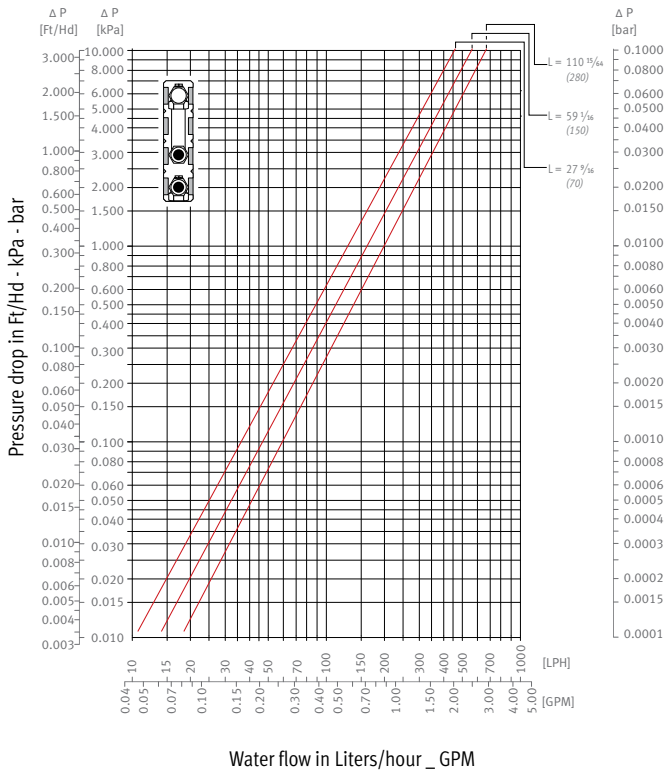
TYPE 04 OTHER END CONNECTION



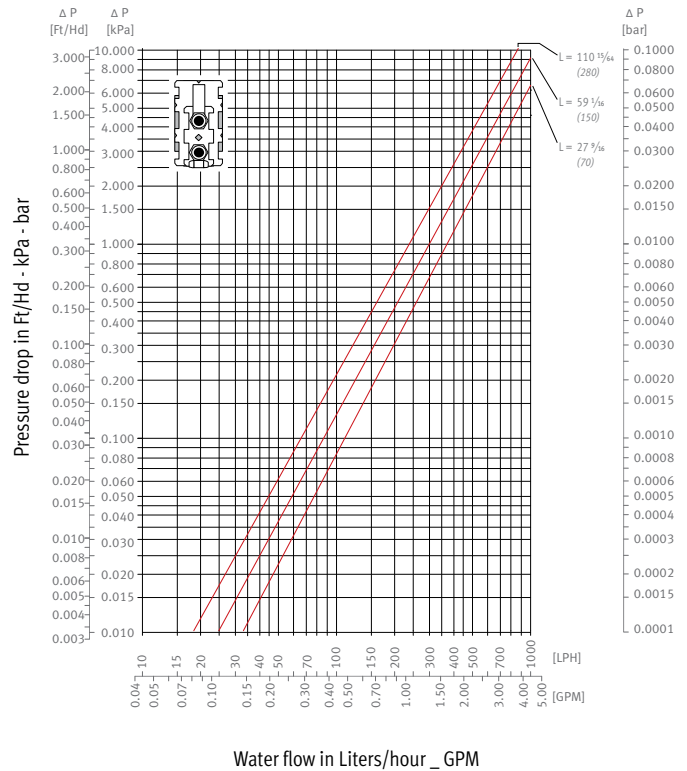
TYPE 05



TYPE 06

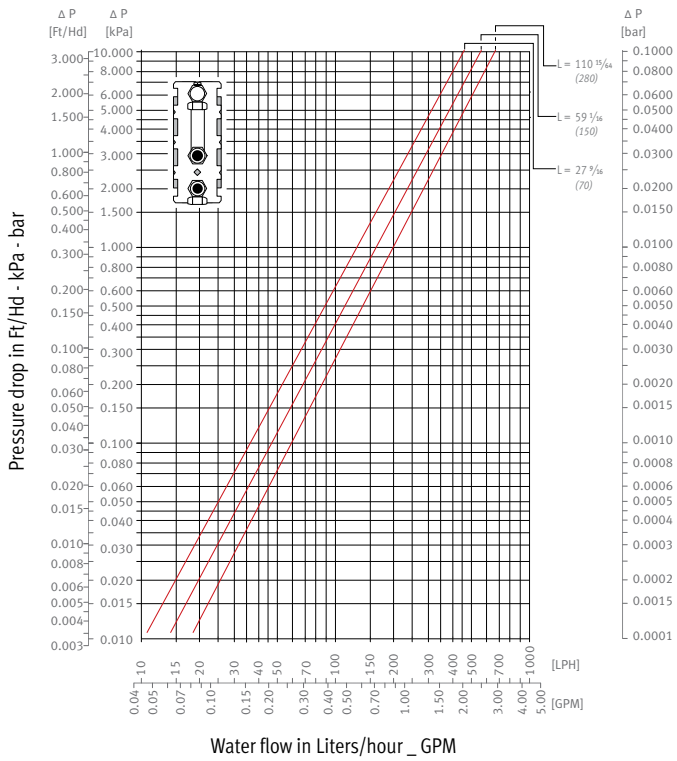


TYPE 07

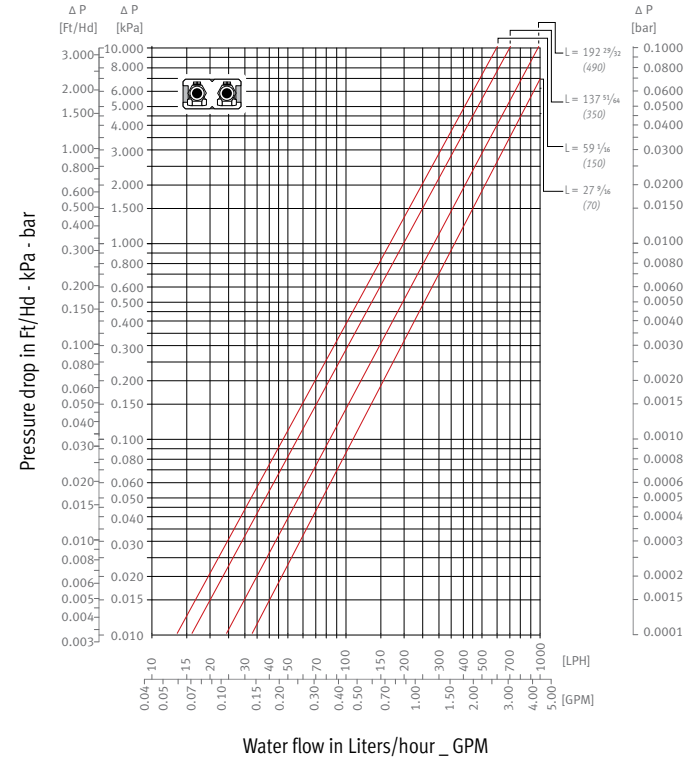


PRESSURE DROP

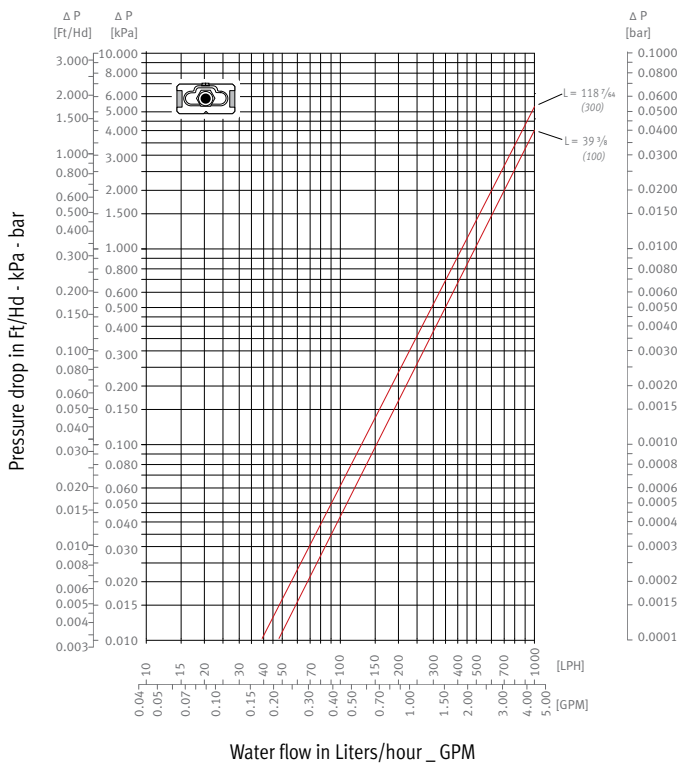
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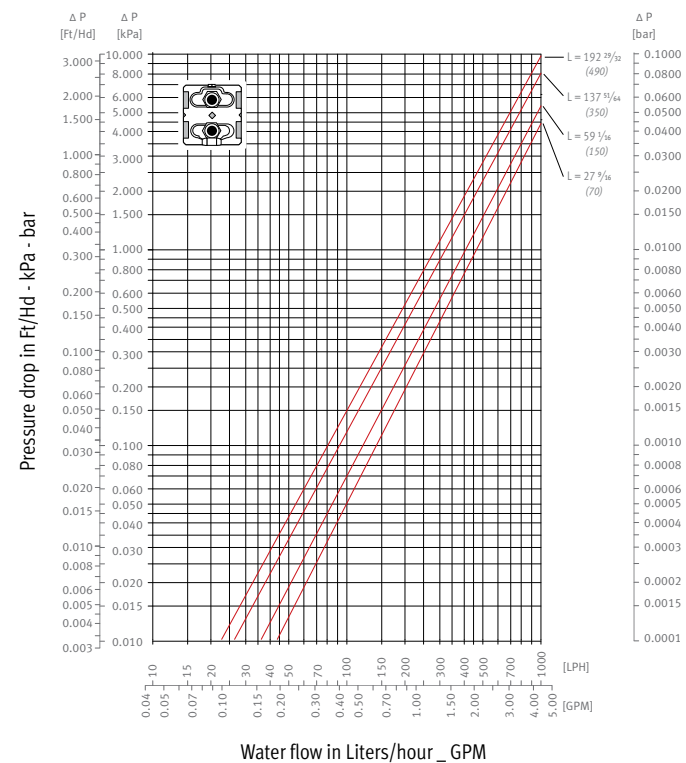
TYPE 09



TYPE 09 OTHER END CONNECTION

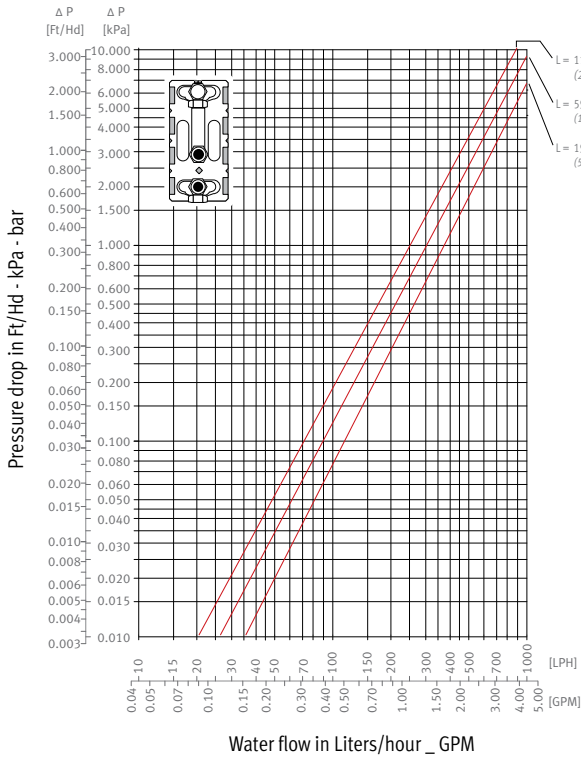


TYPE 10

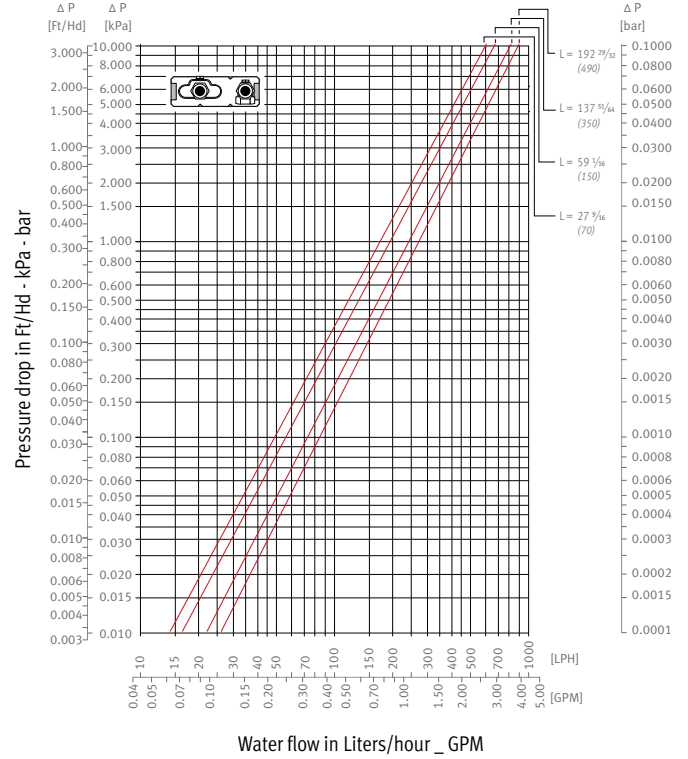


PRESSURE DROP

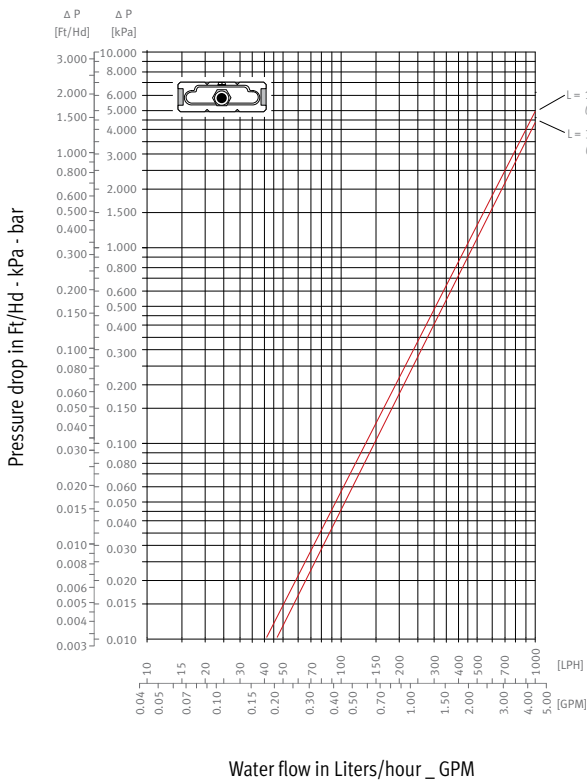
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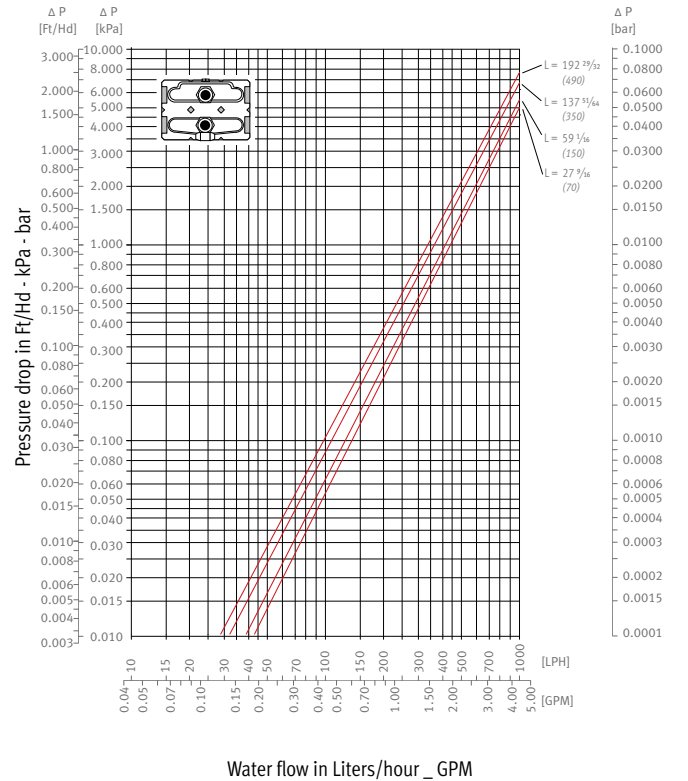
TYPE 14



TYPE 14 OTHER END CONNECTION

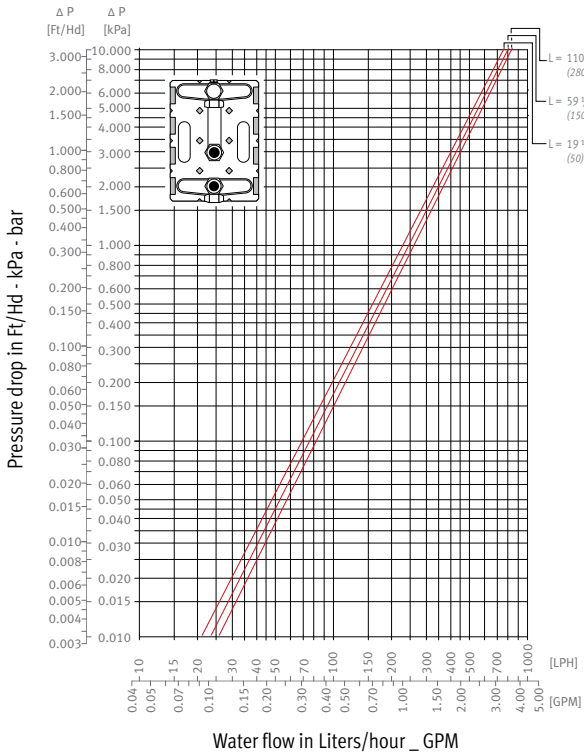


TYPE 15

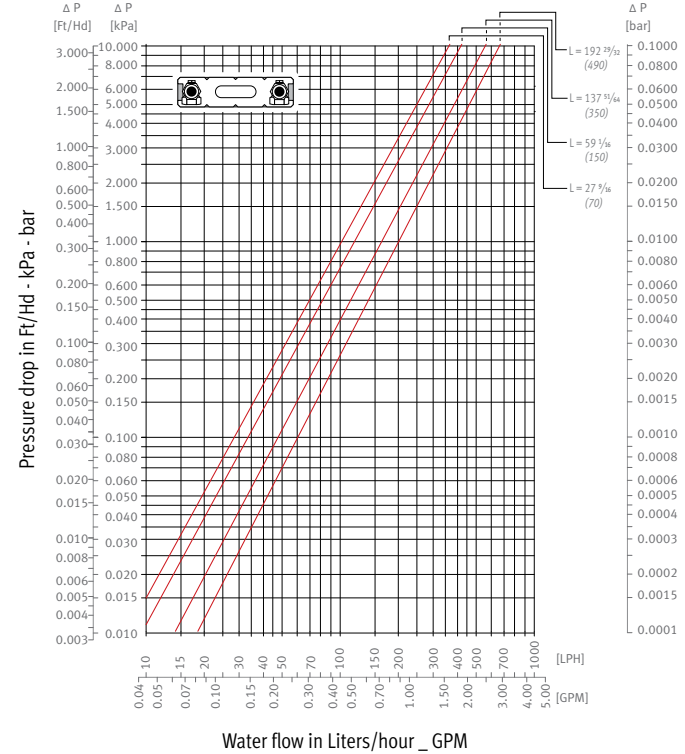


PRESSURE DROP

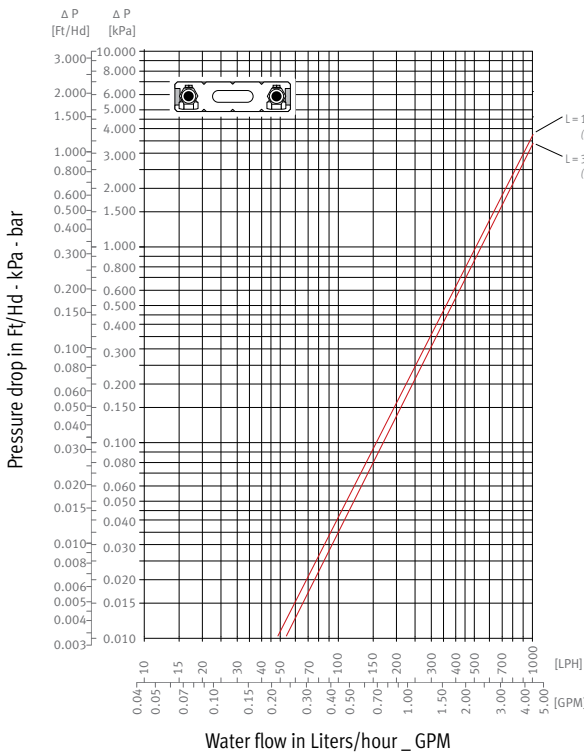
TYPE 16



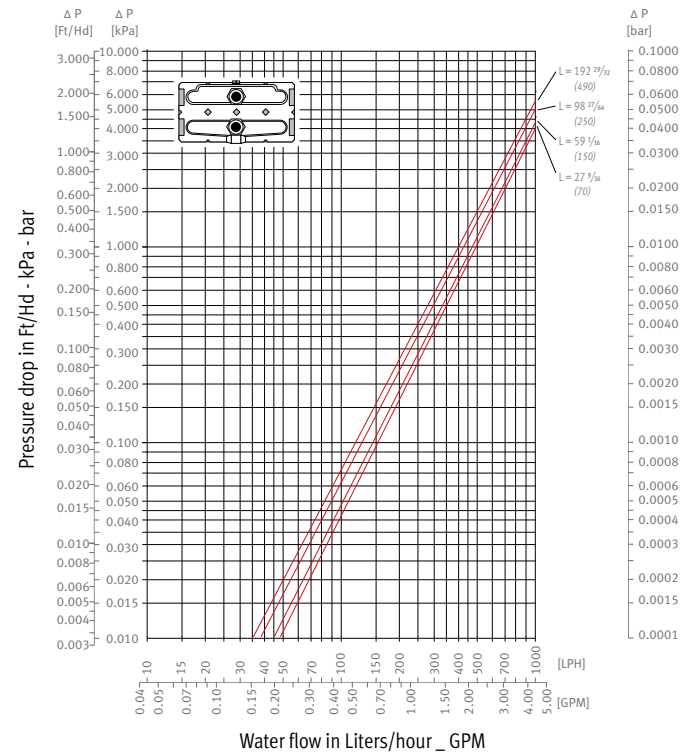
TYPE 19



TYPE 19 OTHER END CONNECTION

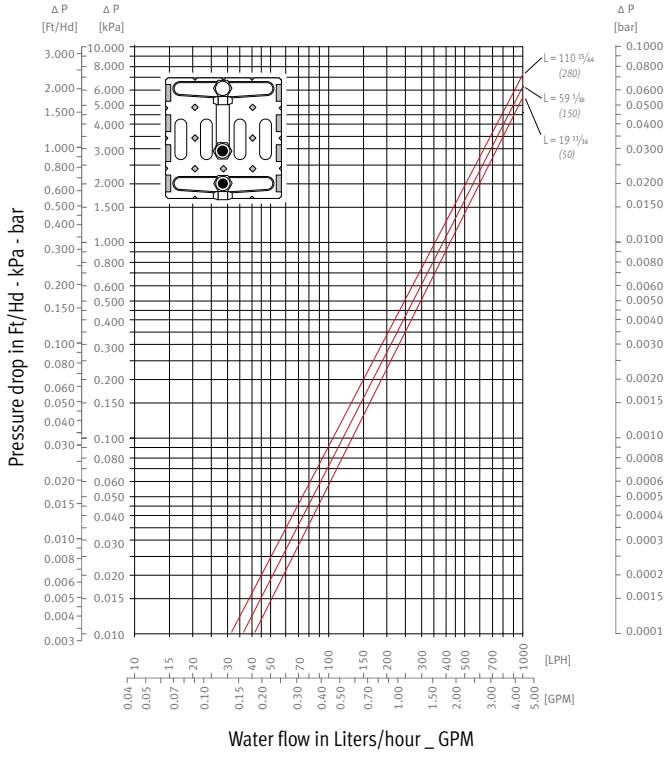


TYPE 20



PRESSURE DROP

TYPE 21



AVERAGE CORRECTION FACTORS MEAN TEMPERATURES BY 1 GPM - REFERENCE: 160°F (71°C)

KNOCKWOOD

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
06	0.237	0.455	0.712	0.852	1.317	1.485	1.659	1.838	2.024
10	0.245	0.463	0.717	0.855	1.308	1.471	1.640	1.813	1.992
11	0.227	0.444	0.704	0.848	1.329	1.504	1.686	1.875	2.071
15	0.250	0.468	0.720	0.857	1.304	1.464	1.630	1.800	1.975
16	0.228	0.445	0.705	0.848	1.327	1.501	1.682	1.870	2.064

STRADA

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
06	0.248	0.466	0.719	0.856	1.306	1.467	1.634	1.806	1.982
10	0.252	0.470	0.721	0.858	1.302	1.461	1.625	1.794	1.968
11	0.234	0.451	0.709	0.851	1.321	1.491	1.668	1.851	2.040
15	0.255	0.473	0.724	0.859	1.299	1.456	1.618	1.784	1.955
16	0.232	0.449	0.707	0.850	1.323	1.495	1.673	1.858	2.049
20	0.255	0.473	0.724	0.859	1.299	1.456	1.618	1.784	1.955
21	0.227	0.443	0.704	0.848	1.329	1.504	1.686	1.875	2.071

LINEA PLUS

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.248	0.466	0.719	0.856	1.306	1.468	1.635	1.806	1.983
11	0.234	0.452	0.709	0.851	1.320	1.491	1.667	1.849	2.038
15	0.256	0.474	0.724	0.859	1.298	1.455	1.616	1.782	1.953
16	0.232	0.450	0.708	0.850	1.322	1.494	1.671	1.856	2.046
20	0.255	0.474	0.724	0.859	1.299	1.456	1.618	1.784	1.954
21	0.227	0.444	0.704	0.847	1.328	1.504	1.686	1.875	2.071

TEMPO

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.253	0.471	0.722	0.857	1.301	1.459	1.622	1.789	1.961
11	0.238	0.455	0.712	0.852	1.316	1.484	1.658	1.837	2.023
15	0.257	0.475	0.725	0.859	1.297	1.453	1.613	1.779	1.948
16	0.231	0.448	0.706	0.849	1.324	1.497	1.676	1.862	2.054
20	0.257	0.475	0.725	0.859	1.297	1.453	1.613	1.778	1.947
21	0.224	0.441	0.735	0.847	1.331	1.508	1.693	1.872	2.082

MAXI WT

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.253	0.471	0.722	0.858	1.301	1.459	1.622	1.789	1.961
11	0.257	0.475	0.725	0.852	1.297	1.453	1.613	1.779	1.948
15	0.257	0.475	0.725	0.859	1.297	1.453	1.613	1.778	1.947
16	0.238	0.455	0.712	0.849	1.316	1.484	1.658	1.837	2.023
20	0.231	0.448	0.706	0.859	1.324	1.497	1.676	1.862	2.054
21	0.224	0.441	0.735	0.847	1.331	1.508	1.693	1.872	2.082

BASIC

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.254	0.472	0.723	0.855	1.300	1.458	1.621	1.788	1.960
11	0.241	0.459	0.714	0.857	1.313	1.479	1.651	1.828	2.011
15	0.261	0.479	0.727	0.853	1.294	1.447	1.605	1.768	1.934
16	0.237	0.454	0.711	0.860	1.318	1.486	1.661	1.842	2.028
20	0.271	0.489	0.734	0.851	1.284	1.432	1.584	1.739	1.898
21	0.233	0.451	0.741	0.864	1.321	1.492	1.669	1.841	2.042

PLAY

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.248	0.466	0.719	0.856	1.306	1.467	1.633	1.805	1.981
11	0.235	0.453	0.71	0.851	1.319	1.488	1.664	1.845	2.033
15	0.251	0.469	0.721	0.857	1.303	1.462	1.626	1.795	1.969
16	0.233	0.45	0.708	0.850	1.322	1.493	1.671	1.854	2.044
20	0.254	0.472	0.723	0.858	1.300	1.457	1.620	1.786	1.957
21	0.230	0.448	0.706	0.849	1.325	1.497	1.677	1.863	2.055

MINI

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
05	0.247	0.465	0.718	0.854	1.307	1.469	1.636	1.809	1.986
06	0.244	0.462	0.716	0.854	1.310	1.474	1.643	1.817	1.997
09	0.243	0.461	0.715	0.854	1.311	1.476	1.646	1.821	2.002
10	0.244	0.462	0.716	0.855	1.309	1.473	1.642	1.816	1.995
11	0.237	0.455	0.711	0.854	1.317	1.485	1.659	1.839	2.025
14	0.243	0.461	0.715	0.854	1.311	1.475	1.645	1.820	2.000
15	0.244	0.462	0.716	0.854	1.310	1.474	1.644	1.819	1.998
16	0.235	0.453	0.710	0.855	1.319	1.488	1.664	1.845	2.033
19	0.245	0.463	0.716	0.852	1.309	1.473	1.641	1.815	1.994
20	0.242	0.460	0.715	0.851	1.311	1.476	1.646	1.822	2.003
21	0.234	0.452	0.709	0.850	1.320	1.490	1.666	1.848	2.036


BUILD-IN

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
10	0.253	0.471	0.722	0.857	1.301	1.459	1.622	1.789	1.961
11	0.238	0.455	0.712	0.852	1.316	1.484	1.658	1.837	2.023
15	0.257	0.475	0.725	0.859	1.297	1.453	1.613	1.779	1.948
16	0.231	0.448	0.706	0.849	1.324	1.497	1.676	1.862	2.054
20	0.257	0.475	0.725	0.859	1.297	1.453	1.613	1.778	1.947
21	0.224	0.441	0.735	0.847	1.331	1.508	1.693	1.872	2.082

MINI CANAL

Type	°F 100 °C (37.75)	120 (48.90)	140 (60.00)	150 (65.55)	180 (82.20)	190 (87.75)	200 (93.35)	210 (98.90)	220 (104.45)
04	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
05	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
09	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
10	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
14	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
15	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
19	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948
20	0.257	0.475	0.725	0.859	1.297	1.453	1.614	1.779	1.948

WEIGHT IN LBS/FOOT (KG/METER)]

 **Weight without packaging or options.**

KNOCKONWOOD

Height	Type	06	10	11	15	16
12" (030)		5.60 (8.30)	5.25 (7.80)	6.65 (9.90)	6.00 (8.90)	8.20 (12.20)
19.5" (050)		8.25 (12.30)	8.05 (12.00)	9.15 (13.60)	9.45 (14.10)	13.25 (19.70)
31.5" (080)		11.70 (17.40)	11.35 (16.90)	12.50 (18.60)	12.50 (18.60)	14.20 (21.10)

STRADA

Height	Type	06	10	11	15	16	20	21
8" (020)		4.50 (6.70)	5.05 (7.50)	---	6.30 (9.40)	---	7.65 (11.40)	---
14" (035)		6.05 (9.00)	6.60 (9.80)	7.55 (11.20)	8.00 (11.90)	9.55 (14.20)	9.40 (14.00)	11.20 (16.70)
19.5" (050)		7.45 (11.10)	8.05 (12.00)	9.05 (13.50)	9.70 (14.40)	11.20 (16.70)	11.20 (16.70)	13.10 (19.50)
25.5" (065)		8.95 (13.30)	9.60 (14.30)	10.60 (15.80)	11.35 (16.90)	12.90 (19.20)	13.05 (19.40)	14.85 (22.10)
37.5" (095)		11.75 (17.50)	12.70 (18.90)	13.70 (20.40)	14.65 (21.80)	16.20 (24.10)	16.65 (24.80)	18.50 (27.50)

LINEA PLUS

Height	Type	10	11	15	16	20	21
8" (020)		4.10 (6.10)	---	5.10 (7.60)	---	6.10 (9.10)	---
14" (035)		5.65 (8.40)	6.65 (9.90)	6.80 (10.10)	8.40 (12.50)	8.00 (11.90)	9.80 (14.60)
19.5" (050)		7.20 (10.75)	8.25 (12.25)	8.60 (12.80)	10.15 (15.10)	9.90 (14.70)	11.70 (17.40)
25.5" (065)		8.80 (13.10)	9.80 (14.60)	10.30 (15.35)	11.85 (17.65)	11.75 (17.50)	13.55 (20.20)
37.5" (095)		12.00 (17.85)	13.00 (19.35)	13.80 (20.55)	15.35 (22.85)	15.60 (23.20)	17.40 (25.90)

TEMPO

Height	Type	10	11	15	16	20	21
8" (020)		3.70 (5.50)	---	4.95 (7.40)	---	6.15 (9.15)	---
12" (030)		4.55 (6.80)	5.60 (8.30)	5.90 (8.75)	7.55 (11.25)	7.20 (10.70)	9.15 (13.60)
15.5" (040)		5.35 (7.95)	6.40 (9.55)	6.80 (10.10)	8.45 (12.60)	8.20 (12.20)	10.15 (15.10)
19.5" (050)		4.65 (6.90)	7.20 (10.75)	7.70 (11.45)	9.35 (13.95)	9.25 (13.75)	11.20 (16.65)
23.5" (060)		7.00 (10.45)	8.05 (11.95)	8.60 (12.80)	10.30 (15.30)	10.20 (15.15)	12.20 (18.15)
27.5" (070)		7.80 (11.60)	8.85 (13.20)	9.50 (14.15)	11.25 (16.75)	11.20 (16.70)	13.25 (19.70)
35.5" (090)		9.60 (14.30)	10.60 (15.80)	11.60 (17.25)	13.25 (19.75)	12.95 (19.30)	15.00 (22.30)

TEMPO_FREESTANDING CABINET

Height	Type	10	11	15	16	20	21
8" (020)		5.65 (8.40)	---	6.90 (10.30)	---	8.05 (12.00)	---
12" (030)		6.95 (10.35)	8.10 (12.05)	8.35 (12.40)	10.30 (15.30)	9.60 (14.30)	11.70 (17.40)
15.5" (040)		8.35 (12.40)	9.45 (14.10)	9.80 (14.55)	11.75 (17.45)	11.10 (16.55)	13.20 (19.65)
19.5" (050)		9.65 (14.35)	10.80 (16.05)	11.20 (16.65)	13.15 (19.55)	12.65 (18.85)	14.75 (21.95)

MAXI WT

Height	Type	10	11	15	16	20	21
17.5" (044)		13.15 (19.55)	14.20 (21.10)	14.70 (21.90)	16.40 (24.40)	16.30 (24.25)	18.30 (27.20)
23" (059)		16.75 (24.95)	17.85 (26.55)	18.65 (27.75)	20.35 (30.30)	20.50 (30.50)	22.50 (33.50)
29" (074)		20.50 (30.50)	21.55 (32.10)	22.50 (33.45)	24.20 (36.00)	24.45 (36.40)	26.50 (39.40)

BASIC

Height	Type	10	11	15	16	20	21
8.5" (020)		4.60 (6.85)	5.65 (8.40)	5.95 (8.85)	7.65 (11.35)	6.70 (10.00)	8.75 (13.00)
12.5" (032)		5.80 (8.65)	6.90 (10.25)	7.25 (10.80)	8.95 (13.30)	8.15 (12.10)	10.10 (15.05)
16.5" (042)		7.05 (10.50)	8.10 (12.05)	8.55 (12.75)	10.30 (15.30)	9.55 (14.20)	11.50 (17.15)
20.5" (052)		8.25 (12.30)	9.30 (13.85)	9.90 (14.75)	11.60 (17.25)	10.95 (16.30)	12.95 (19.25)
24.5" (062)		9.45 (14.10)	10.55 (15.70)	11.20 (16.70)	12.90 (19.20)	12.35 (18.40)	14.35 (21.35)
28.5" (072)		10.70 (15.95)	11.75 (17.50)	12.55 (18.65)	14.25 (21.20)	13.80 (20.50)	15.75 (23.45)
36" (092)		13.15 (19.60)	14.20 (21.15)	15.20 (22.60)	16.85 (25.10)	16.60 (24.70)	18.60 (27.65)

PLAY

Height	Type	10	11	15	16	20	21
14" (035)		9.51 (14.15)	10.45 (15.55)	11.35 (16.89)	13.02 (19.38)	13.21 (19.66)	15.19 (22.6)
19.5" (050)		11.04 (16.43)	11.98 (17.83)	13.06 (19.43)	14.73 (21.92)	15.09 (22.45)	17.06 (25.39)
25.5" (065)		10.29 (15.32)	11.24 (16.72)	12.62 (18.78)	14.29 (21.27)	14.95 (22.25)	16.93 (25.19)

MINI

Height	Type	05	06	09	10	11	14	15	16	19	20	21
3" (008)		---	---	3.45 (5.25)	---	---	4.10 (6.15)	---	---	4.70 (6.95)	---	---
23" (013)		3.80 (5.65)	---	---	4.75 (7.05)	---	---	5.65 (8.45)	---	---	6.51 (9.70)	---
29" (023)		---	5.75 (10.80)	---	---	6.85 (13.65)	---	---	8.60 (16.80)	---	---	10.85 (19.50)

MINI CANAL excluding grille

Height	D	5.5" (14)	7" (18)	10" (26)	13.5" (34)	16.5" (42)
3.5" (009)		3.10 (4.60)	3.35 (5.00)	3.90 (5.80)	4.75 (7.05)	5.55 (8.30)
4.5" (011)		3.35 (5.00)	3.65 (5.40)	4.20 (6.25)	5.05 (7.50)	5.90 (8.80)
5.5" (014)		3.85 (5.70)	---	5.20 (7.75)	6.40 (9.50)	7.60 (11.30)
7.5" (019)		---	---	6.20 (9.25)	7.45 (11.05)	8.65 (12.90)

MINI CANAL_GRILLE

Model	Width grille Width duct	5" 3/64 (12.8)	6" 39/64 (16.8)	9" 49/64 (24.8)	12" 29/32 (32.8)	16" 1/16 (40.8)
		5.5" (14)	7" (18)	10" (26)	13.5" (34)	16.5" (42)
Roll-up Designo merbau natural/merbau varnished		1.45 (2.18)	2.00 (3.00)	2.35 (3.50)	2.50 (4.00)	3.15 (4.65)
Roll-up Designo beech natural/beechn varnished		1.00 (1.50)	1.30 (1.90)	1.70 (2.50)	2.10 (3.10)	2.40 (3.60)
Roll-up Designo oak natural/oak varnished		1.05 (1.60)	1.35 (2.05)	1.80 (2.70)	2.25 (3.35)	2.60 (3.90)
Pebbles - rigid aluminum natural/powder coated		---	---	2.30 (3.45)	2.85 (4.25)	3.95 (5.90)
Accordion roll-up aluminum narural		1.65 (2.45)	2.15 (3.20)	3.15 [4.70] (4.70)	4.20 (6.20)	5.20 (7.75)
Rigid Designo aluminum natural/black/brown/brass/powder coated		1.10 (1.60)	1.40 (2.10)	2.15 (3.20)	2.75 (4.10)	3.35 (5.00)

BUILD-IN

Height	Type	10	11	15	16	20	21
8" (020)		2.60 (3.90)	---	3.45 (5.10)	---	4.15 (6.20)	---
12" (030)		3.30 (4.90)	4.35 (6.50)	4.10 (6.10)	5.85 (8.70)	4.90 (7.30)	6.90 (10.30)
15.5" (040)		3.95 (5.90)	5.05 (7.50)	4.85 (7.20)	6.50 (9.70)	5.70 (8.50)	7.65 (11.40)
19.5" (050)		4.65 (6.90)	5.70 (8.50)	5.50 (8.20)	7.25 (10.80)	6.45 (9.60)	8.45 (12.60)
23.5" (060)		5.30 (7.90)	6.30 (9.40)	6.25 (9.30)	7.95 (11.80)	7.20 (10.70)	9.20 (13.70)
27.5" (070)		6.00 (8.90)	7.00 (10.40)	7.00 (10.40)	8.65 (12.90)	8.00 (11.90)	10.00 (14.90)
35.5" (090)		7.45 (11.10)	8.55 (12.70)	8.65 (12.90)	10.35 (15.40)	9.55 (14.20)	11.55 (17.20)

STANDARD SPECIFICATIONS

KNOCKONWOOD

Material

- The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes made of pure red copper with pure aluminum fins and two brass collectors for left or right G $\frac{1}{2}$ " same end connection. Extended air vent $\frac{1}{8}$ " NPT and drain cock $\frac{1}{2}$ " NPT. Pressure test: 670 ft/hd (20 bar) Working pressure: 335 ft/hd (10 bar)
- Brackets: galvanized steel plate thickness 0.039" (0.1), dark grey powder coated with a maximum intermediate distance of 41 $\frac{11}{32}$ " (105).
- Cabinet pre-fitted and supplied in one single piece.
- front panel with grille made from a single curved, finished wood laminate panel at least $\frac{5}{8}$ " (1.6) thick.
- Sides and chassis made from electrolytic galvanized steel plate 0.049" (0.125) thick.
- Strong and functional packaging, can be used as a protective cover during construction works.

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%. Sides and chassis powder coated in the color sandblast grey metallic. in a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392°F (200°C). UV-resistant due to ASTM G53.
- Front panel with grille finished in veneer. inside koto veneer, outside in: oak / bleached oak / mahogany / wenge-colored oak / beech / bleached beech / maple / walnut / zebrano veneer.

The surface temperature remains safe at all times, even at a waterflow of 109.4°F (43°C). Knockonwood complies to the DHSS DN4 1992 regulation and subsequent revisions.

Manufacturer: Jaga Inc
Type: Knockonwood

Outputs meet standard EN442.

STRADA

Material

- The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes made of pure red copper, with pure aluminum fins and two brass collectors for left or right G $\frac{1}{2}$ " same end connection. Extended air vent $\frac{1}{8}$ " NPT and drain cock $\frac{1}{2}$ " NPT. Pressure test: 670 ft/hd (20 bar) Working pressure: 335 ft/hd (10 bar)
- Brackets: galvanized steel thickness 0.039" (0.1), dark grey powder coated with a maximum intermediate distance of 41 $\frac{11}{32}$ " (105).
- Front panel: 0.049" (0.125) thick.
- Side panels: galvanized steel of 0.049" (0.125) thick.
- Wall slat: electrolytic. galvanized steel plate of 0.049" (0.125) thick
- Aluminum top grille coated in the same color as the cabinet.
- Strong and functional packaging, can be used as a protection cover during construction works.

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%.
- The cabinet shall be powder coated in the color white (RAL 9016) / other (see color chart)
The coating shall be a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392°F (200°C). UV-resistant due to ASTM G53.

The surface temperature remains safe at all times, even with a waterflow of 109.4°F (43°C). Strada complies to the DHSS DN 4 1992 regulation and subsequent revisions.

Manufacturer: Jaga Inc.
Type: Strada.

Outputs meet standard EN442.

Options

- Towel rail in chromium-plated aluminum.
- continuous enclosure for wall to wall installations.

TEMPO

Material

- The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes made of pure red copper, with pure aluminum fins and two brass collectors for left or right G $\frac{1}{2}$ " same end connection. Air vent $\frac{1}{8}$ " NPT and drain cock $\frac{1}{2}$ " NPT. Pressure test: 670 ft/hd (20 bar) Working pressure: 335 ft/hd (10 bar)
- Brackets are included and made of galvanized steel of 0.039" (0.1); supplied to be installed with a maximum intermediate distance of 41 $\frac{11}{32}$ " (105).
- The front panels: galvanized steel of 0.034" (0.086) , double profiled in length. Supplied with small positioning holes and slots to assemble front panels to side panel with easy click system.
- Side panels: sendzimir, profiled galvanized steel plate of 0.039" (0.1) .
- The top grille: galvanized steel of 0.031" (0.08) thick, profiled backwards angled steel plate with angled topside. At corners the grille shall be supplied with high standard synthetic angled corner pieces in same finish as the cabinet.

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%.
- The cabinet shall be in a structured polyester finish in RAL 9010. UV-resistant due to ASTM G53.

The surface temperature remains safe at all times, even with a waterflow of 109.4°F (43°C). Tempo complies to the DHSS DN 4 1992 regulation and subsequent revisions.

Manufacturer: Jaga Inc
Type: Tempo

Outputs meet standard EN442.

Options

- continuous enclosure for wall to wall installations.

MINI

Material

- The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes of pure red copper, with pure aluminum fins and two brass collectors for left or right G $\frac{1}{2}$ " same end (H = 5 $\frac{1}{8}$ - 9 $\frac{1}{16}$ ") (13 - 23 - 28) or G $\frac{1}{2}$ " other end (H=3 $\frac{5}{32}$ ") (8) connection. Air vent $\frac{1}{8}$ " NPT and drain cock $\frac{1}{2}$ " NPT Pressure test: 670 ft/hd (20 bar) Working pressure: 335 ft/hd (10 bar)
- The cabinet: in one piece. electrolytic painting. galvanized double profiled steel plate 0.049" (0.125) thick.
- The top grille: electrolytic. galvanized steel plate of 0.031" (0.08) thick, profiled backwards angled steel plate with angled topside.
- The fixed feet are delivered in same color as the cabinet; height 3 $\frac{15}{16}$ " (10).

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%.
- The cabinet shall be powder coated in the color white (RAL 9010) other (see color chart).
The coating shall be a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392°F (200°C). UV-resistant due to ASTM G53.

The surface temperature remains safe at all times, even with a waterflow of 109.4°F (43°C). Mini complies to the DHSS DN 4 1992 regulation and subsequent revisions.

Manufacturer: Jaga Inc
Type: Mini

Outputs meet standard EN442.

Options

- continuous enclosure for wall to wall installations.

STANDARD SPECIFICATIONS

BUILD-IN

Material

- The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes made of pure red copper, with pure aluminum fins and two brass collectors for left or right G $\frac{1}{2}$ " same end connection. Air vent $\frac{1}{8}$ " NPT and drain cock $\frac{1}{2}$ " NPT. Pressure test: 670 ft/hd (20 bar) Working pressure: 335 ft/hd (10 bar)
- Brackets are included and made of galvanized steel of 0.039" (0.1); supplied to be installed with a maximum intermediate distance of 41 $\frac{11}{32}$ " (105).

Separation wall

Double profiled, electrolytic galvanized steel plate of 0.028" (0.07) thick ; powder coated grey (RAL 7011). To be attached to the lips of the brackets. The separation wall is suitable as definite cabinet. The front panel is intended for recessed installation behind drywall or a custom panel

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%.

The surface temperature remains safe at all times, even with a waterflow of 109.4°F (43°C). Build-in complies to the DHSS DN 4 1992 regulation and subsequent revisions.

Manufacturer: Jaga Inc
Type: Build-in

Outputs meet standard EN442.

Installation must be carried out according to the installation manual. Specific attention is required for optimal space for supply and return air.

HOW TO INSTALL

Knockonwood_Strada_Linea Plus_ Tempo_Basic_Maxi WT_Play_Mini_ Build-in

The building services engineer chooses the heating elements considering the following conditions:

- A heat output calculation according to the standard.
- Tables of heat outputs and dimensions for Knockonwood / Strada / Tempo / Mini / Build-in elements, according to EN 442.
- The normal fitting position for the heating elements shall be under the window.
- The cabinet can be extended, to allow sufficient space for installation of control and balancing valves. The length of the enclosure is adjustable with increments of 10cm, 4". Extra brackets are to be ordered separately to hold the enclosure in place.
- The minimum space requirement under the heating elements shall be for Knockonwood / Strada / Tempo / Build-in:
 - 3 $\frac{15}{16}$ " (10) for types 06, 10 and 11
 - 4 $\frac{23}{32}$ " (12) for types 15 and 16
 - 5 $\frac{29}{32}$ " (15) for types 20 and 21shall be for Mini:
 - 1 $\frac{31}{32}$ " (5) for types 05 and 09
 - 3 $\frac{15}{16}$ " (7) for types 10 and 14
 - 4 $\frac{23}{32}$ " (9) for types 15 and 19
 - 5 $\frac{29}{32}$ " (11) for types 20 and 21
- As minimum space between the top of the cabinet and the extended window sills, the above mentioned dimensions have to be applied.
- The fin tube elements will be connected to a one pipe system / two pipe system, with a same side end connection. Mini height 3 $\frac{5}{32}$ " (8) will be connected with an other end connection. Optional T10, T15 and T20 heat exchangers can be ordered with opposite end connections.
- The fin tube element shall be equipped with two brass collectors for left or right $\frac{1}{2}$ " NPT same end connection. Supply always has to be fitted to the top connection of the fin tube element.

STANDARD SPECIFICATIONS

MINI CANAL

Mini-duct

Pre-mounted duct, in galvanized steel of 0.039" (0.1) thick. provided with anthracite grey epoxy-polyester RAL 7024, gloss degree 70%. The well has 6 pre-perforated holes to lead through the tubes. These holes. 2 in the front and 2 in each side are covered with black plugs. Mini Canal with same end connection shall be provided with 3 pre-perforated holes in the front. The mini duct shall be also provided with brackets and anchoring strips in order to fix the duct in the concrete. The frame shall be pre-mounted on the Mini Canal.

K-value = 45.4 BTU/ft²F

R-value = 0.022 ft²/BTU

Aluminum frames

Reinforced L-profile, height 1 15/64" (3.15) x 15/16" (2.4) width. Versions: anodized aluminum in natural color / dark brown / black / brass color / powder coated in a scratch resistant epoxy-polyester powder. sprayed electrostatically and baked at a temperature of 392°F (200°C). UV-resistant due to ASTM G53.

The frame shall be pre-mounted on the Mini floor duct.

With removable pieces to avoid deformation of the frame during installation or floor construction.

Designo rigid aluminum grilles

Profiled slats placed lengthways (13/64" x 5/8") (0.5 x 1.6) with 21/64" (0.85 or 0,25" (6mm)) space between, mechanically connected with two crossways supporting slats (13/64" x 1 1/16") (0.5 x 2.7) with maximum 12 1/64" (30.5) space between.

Free air flow 62.5%.

Versions: anodized aluminum in natural color / dark brown / black / brass color / powder coated in a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392°F (200°C). UV-resistant due to ASTM G53.

Pebbles rigid aluminum grilles

Constructed of foundry aluminum. The Pebbles grille shall be divided in "tiles" of 25/64" (1) thickness and 19 11/16" (50) length, ending with an element of min. 7 7/8" (20) length.

Free air flow 66%.

Versions in sandblasted foundry aluminum:

- powder coated in aluminium or sandblast grey. The coating shall be a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392 . UV-resistant due to ASTM G53.

Fin tube element

The Low-H₂O fin tube element shall be composed of round, seamless circulation tubes of pure red copper, with pure aluminum fins and two brass collectors for left or right 1/2" NPT same end connection.

Other end connection 1/2" NPT: only for fin tube element type 04.

Air vent(s) 1/8" NPT and drain cock(s) 1/2" NPT.

Pressure test: 670 ft/hd (20 bar)

Working pressure: 335 ft/hd (10 bar)

Color

- The fin tube element shall be electrostatically powder coated with anthracite grey epoxy-polyester RAL 7024. gloss degree 70%.
- Powder coated frame and rigid grille in the color... (see color chart).

The coating shall be a scratch resistant epoxy-polyester powder, sprayed electrostatically and baked at a temperature of 392 . UV-resistant due to ASTM G53.

Manufacturer: Jaga Inc.

Type: Mini Canal

Outputs meet standard EN442.

HOW TO INSTALL

Mini Canal

The building services engineer chooses the heating elements considering the following conditions:

- a heat output calculation according to the standard.
 - the required heat outputs will be determined by the tables and the fitting instruction of the building services engineer.
 - the fin tube element should be connected to a two pipe system with a same end connection, other end connection (just for type 04).
 - the fin tube element shall be equipped with two brass collectors for left or right 1/2" NPT same end connection. Air vent 1/8" NPT and drain cock 1/2" NPT. In case of same end connection the supply always has to be fitted to the top connection.
 - in order to totally block off the cold draughts from the window it shall be preferable that the fin tube element covers the full length of the window. Concerning the distance in between the window and the Mini Canal allow extra space for curtains. which under no circumstances should hang over the Mini Canal.
- The fin tube element must always be kept accessible for maintenance purposes.

STANDARD SPECIFICATIONS



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