

embodied carbon declaration

EC0001-C: 03/23

embodied carbon declaration for pegler endex

Measuring our carbon emissions is the first step on the path to reducing them. As manufacturers of integrated piping systems, disclosing the embodied carbon of our products is key for achieving credible full life cycle assessments of the systems and buildings we help build.

The embodied carbon of a product includes all emissions released during making, installing and end-of life disposal. This excludes any emissions produced during its use and any benefits of potential reuse, recovery or recycling of materials at the end of its life. In the case of Aalberts IPS products, most emissions originate from the raw materials used to make them. This report does not include embodied carbon of packaging.

The table below shows the embodied carbon of our products calculated using **CIBSE TM65***. The total embodied carbon is reported in **kgCO2e**: kg of carbon dioxide equivalents. This shows the impact of all greenhouse gas emissions as if they were CO2 to allow for unified reporting.

While we conduct further investigation into our supply chains, we are choosing to calculate embodied carbon by using industry average values for the percentage of recycled content in our raw materials.



Pegler Endex

Endex is a range of end feed capillary fittings, manufactured from copper, gunmetal and dezincification resistant (DZR) alloy, designed for jointing copper tubes to BS EN 1057 in sizes from 6-159mm.

The fittings are guaranteed for 25 years against manufacturing defects and are WRAS approved.

They are available degreased and individually bagged for use on medical gas lines.

Revision	Notes	Date
1.0	/	15/08/22
1.1	Removed obsolete items (88441, 88510, 84935, 88582, 88583, 88726, 88844, 88300, 88240), added missing items (88200, 89616, 88653, 88128, 88324, 88334, 88335, 88452, 88775, 88788, 88797, 88860), split table into sub-categories and added descriptions	30/08/22
1.2	Removed pegler logo from top right	15/03/23

general range

The Endex general range is designed for end-feeding with soft solder or hard solder (brazing alloy). Available in sizes 6-54mm, it is ideal for use in hot and cold water services, central heating, fuel services and general engineering applications.

The fittings are guaranteed for 25 years against manufacturing defects and are WRAS approved.

Manufactured to BS EN 1254 Part 1, Endex fittings are designed for the service temperatures and maximum hydraulic working pressures when correctly assembled with copper tube to BS EN 1057.

code	name	type	size	total embodied carbon (kgCO ₂ e)*
88010	Endex straight coupling FF	N1	6	0.023
88011	Endex straight coupling FF	N1	8	0.014
88012	Endex straight coupling FF	N1	10	0.023
88013	Endex straight coupling FF	N1	12	0.027
88015	Endex straight coupling FF	N1	15	0.037
88016	Endex straight coupling FF	N1	16	0.041
85890	Endex straight coupling FF	N1	18	0.060
88019	Endex straight coupling FF	N1	22	0.092
88022	Endex straight coupling FF	N1	28	0.147
88023	Endex straight coupling FF	N1	35	0.270
88026	Endex straight coupling FF	N1	42	0.412
88027	Endex straight coupling FF	N1	54	0.632
89903	Endex straight coupling FF	N1	76	1.695
88400	Endex straight union coupling FF	N11	15	0.720
88401	Endex straight union coupling FF	N11	22	1.048
88402	Endex straight union coupling FF	N11	28	1.437
88403	Endex straight union coupling FF	N11	35	1.904
88404	Endex straight union coupling FF	N11	42	3.289
88405	Endex straight union coupling FF	N11	54	6.044
88440	Endex elbow FF	N12	8	0.027
88442	Endex elbow FF	N12	10	0.032
88443	Endex elbow FF	N12	12	0.037
88445	Endex elbow FF	N12	15	0.069
80701	Endex elbow FF	N12	18	0.101
88450	Endex elbow FF	N12	22	0.156
88451	Endex elbow FF	N12	28	0.252
88452	Endex elbow FF	N12	35	0.458
88454	Endex elbow FF	N12	42	0.733
88455	Endex elbow FF	N12	54	1.191
88483	Endex reducing elbow FF	N12R	22x15	0.169
85321D	Endex Slip elbow F	N12S	10x10	0.037
85322D	Endex Slip elbow F	N12S	12x12	0.041
88465	Endex Slip elbow F	N12S	15x15	0.073
80221	Endex Slip elbow F	N12S	18x18	0.110
88470	Endex Slip elbow F	N12S	22x22	0.169
88471	Endex Slip elbow F	N12S	28x28	0.284

88472	Endex Slip elbow F	N12S	35x35	0.458
88474	Endex Slip elbow F	N12S	42x42	0.733
88475	Endex Slip elbow F	N12S	54x54	1.237
88497	Endex elbow threaded connector FM	N13	15xR $\frac{1}{2}$	0.243
88505	Endex elbow threaded connector FM	N13	22xR $\frac{3}{4}$	0.497
84547	Endex elbow threaded connector FM	N13	22xR1	0.745
88509	Endex elbow threaded connector FM	N13	28xR1	0.750
88525	Endex elbow threaded connector FF	N14	15xRp $\frac{1}{2}$	0.320
88534	Endex elbow threaded connector FF	N14	22xRp $\frac{1}{2}$	0.425
88535	Endex elbow threaded connector FF	N14	22xRp $\frac{3}{4}$	0.546
88540	Endex elbow threaded connector FF	N14	28xRp1	0.921
88542	Endex elbow threaded connector FF	N14	35xRp1 $\frac{1}{4}$	1.826
88555	Endex wall plate elbow threaded FF	N15	15xRp $\frac{1}{2}$	0.475
84918	Endex wall plate elbow threaded FF	N15	15xRp $\frac{1}{2}$	0.386
88559	Endex wall plate elbow threaded FF	N15	22xRp $\frac{3}{4}$	0.811
80674	Endex slow bend FF	N18	10	0.037
80675	Endex slow bend FF	N18	12	0.046
88584	Endex slow bend FF	N18	15	0.087
89224	Endex slow bend FF	N18	16	0.110
88585	Endex slow bend FF	N18	18	0.137
88588	Endex slow bend FF	N18	22	0.224
88590	Endex slow bend FF	N18	28	0.348
88591	Endex slow bend FF	N18	35	0.664
88593	Endex slow bend FF	N18	42	1.209
88594	Endex slow bend FF	N18	54	1.539
89913	Endex slow bend FF	N18	76	3.847
89916	Endex slow bend FF	N18	108	7.511
80662	Endex slow street bend F	N18S	10x10	0.037
80663	Endex slow street bend F	N18S	12x12	0.046
88602	Endex slow street bend F	N18S	15x15	0.087
88603	Endex slow street bend F	N18S	16x16	0.092
88100	Endex slow street bend F	N18S	18x18	0.137
88604	Endex slow street bend F	N18S	22x22	0.224
88605	Endex slow street bend F	N18S	28x28	0.325
85030	Endex slow street bend F	N18S	35x34	0.710
85032	Endex slow street bend F	N18S	42x42	1.076
85033	Endex slow street bend F	N18S	54x54	1.525
85034	Endex slow street bend F	N18S	64x64	2.290
89926	Endex slow street bend F	N18S	76x76	3.646
88047	Endex transition coupling (metric x imperial) FF	N11M	15x $\frac{1}{2}$	0.037
88048	Endex transition coupling (metric x imperial) FF	N11M	22x $\frac{3}{4}$	0.096
88049	Endex transition coupling (metric x imperial) FF	N11M	28x1	0.160
88053	Endex reducing coupling FF	N1R	10x8	0.027
88055	Endex reducing coupling FF	N1R	12x10	0.041
88059	Endex reducing coupling FF	N1R	15x10	0.050
88060	Endex reducing coupling FF	N1R	15x12	0.050

88062	Endex reducing coupling FF	N1R	16x12	0.050
88064	Endex reducing coupling FF	N1R	18x10	0.069
85670D	Endex reducing coupling FF	N1R	18x15	0.060
88076	Endex reducing coupling FF	N1R	22x15	0.096
88077	Endex reducing coupling FF	N1R	22x16	0.110
80601D	Endex reducing coupling FF	N1R	22x18	0.101
88089	Endex reducing coupling FF	N1R	28x15	0.169
85686D	Endex reducing coupling FF	N1R	28x18	0.179
88094	Endex reducing coupling FF	N1R	28x22	0.160
85692D	Endex reducing coupling FF	N1R	35x18	0.330
89895	Endex reducing coupling FF	N1R	35x22	0.302
88099	Endex reducing coupling FF	N1R	35x28	0.289
88101	Endex reducing coupling FF	N1R	42x22	0.527
89898	Endex reducing coupling FF	N1R	42x28	0.490
88103	Endex reducing coupling FF	N1R	42x35	0.453
80603	Endex reducing coupling FF	N1R	54x28	0.792
85700	Endex reducing coupling FF	N1R	54x35	0.788
88108	Endex reducing coupling FF	N1R	54x42	0.756
88037	Endex slip coupling F	N1S	15x15	0.037
88039	Endex slip coupling F	N1S	22x22	0.087
88042	Endex slip coupling F	N1S	28x28	0.142
88031	Endex slip coupling F	N1S	35x35	0.256
88032	Endex slip coupling F	N1S	42x42	0.403
88033	Endex slip coupling F	N1S	54x54	0.618
88128	Endex straight connector FF	N2	15xRp $\frac{1}{4}$	0.127
88129	Endex straight connector FF	N2	15xRp $\frac{3}{8}$	0.105
88130	Endex straight connector FF	N2	15xRp $\frac{1}{2}$	0.166
84739D	Endex straight connector FF	N2	15xRp $\frac{3}{4}$	0.259
84741D	Endex straight connector FF	N2	18xRp $\frac{1}{2}$	0.232
84743D	Endex straight connector FF	N2	22xRp $\frac{1}{2}$	0.210
88137	Endex straight connector FF	N2	22xRp $\frac{3}{4}$	0.270
88138	Endex straight connector FF	N2	22xRp1	0.557
88142	Endex straight connector FF	N2	28xRp1	0.425
84749	Endex straight connector FF	N2	28xRp1 $\frac{1}{4}$	0.662
88143	Endex straight connector FF	N2	35xRp1 $\frac{1}{4}$	0.684
88144	Endex straight connector FF	N2	42xRp1 $\frac{1}{2}$	0.949
88145	Endex straight connector FF	N2	54xRp2	2.113
85163D	Endex elbow 45° FF	N21	12	0.037
88640	Endex elbow 45° FF	N21	15	0.060
85167D	Endex elbow 45° FF	N21	18	0.092
88645	Endex elbow 45° FF	N21	22	0.151
88647	Endex elbow 45° FF	N21	28	0.275
88648	Endex elbow 45° FF	N21	35	0.440
88650	Endex elbow 45° FF	N21	42	0.646
88651	Endex elbow 45° FF	N21	54	0.980
88653	Endex elbow 45° FF	N21	66.7	2.427
89928	Endex elbow 45° FF	N21	76	2.244

88661	Endex slip elbow 45° F	N21S	15x15	0.064
85133D	Endex slip elbow 45° F	N21S	18x18	0.092
88665	Endex slip elbow 45° F	N21S	22x22	0.137
88667	Endex slip elbow 45° F	N21S	28x28	0.252
88671	Endex slip elbow 45° F	N21S	35x35	0.472
88673	Endex slip elbow 45° F	N21S	42x42	0.623
88674	Endex slip elbow 45° F	N21S	54x54	1.053
88682	Endex partial crossover FM	N22	15	0.169
85242D	Endex partial crossover FM	N22	18	0.266
88685	Endex partial crossover FM	N22	22	0.389
88692	Endex full crossover FF	N23	15	0.229
85221D	Endex full crossover FF	N23	18	0.343
88695	Endex full crossover FF	N23	22	0.513
88700	Endex equal tee FFF	N24	6	0.023
88701	Endex equal tee FFF	N24	8	0.037
88702	Endex equal tee FFF	N24	10	0.064
88703	Endex equal tee FFF	N24	12	0.069
88705	Endex equal tee FFF	N24	15	0.096
85354D	Endex equal tee FFF	N24	16	0.101
80250	Endex equal tee FFF	N24	18	0.147
88709	Endex equal tee FFF	N24	22	0.270
88711	Endex equal tee FFF	N24	28	0.490
88713	Endex equal tee FFF	N24	35	0.756
88716	Endex equal tee FFF	N24	42	1.122
88717	Endex equal tee FFF	N24	54	2.001
88734	Endex tee reduced branch FFF	N25	15x15x10	0.096
85415D	Endex tee reduced branch FFF	N25	18x18x12	0.128
80251	Endex tee reduced branch FFF	N25	18x18x15	0.137
88752	Endex tee reduced branch FFF	N25	22x22x10	0.206
85426D	Endex tee reduced branch FFF	N25	22x22x12	0.174
88755	Endex tee reduced branch FFF	N25	22x22x15	0.206
80368	Endex tee reduced branch FFF	N25	22x22x18	0.229
88764	Endex tee reduced branch FFF	N25	28x28x15	0.289
85438D	Endex tee reduced branch FFF	N25	28x28x18	0.307
88770	Endex tee reduced branch FFF	N25	28x28x22	0.353
88775	Endex tee reduced branch FFF	N25	35x35x15	0.550
85443D	Endex tee reduced branch FFF	N25	35x35x18	0.545
88778	Endex tee reduced branch FFF	N25	35x35x22	0.572
88779	Endex tee reduced branch FFF	N25	35x35x28	0.632
88788	Endex tee reduced branch FFF	N25	42x42x15	0.824
85448D	Endex tee reduced branch FFF	N25	42x42x18	0.806
88793	Endex tee reduced branch FFF	N25	42x42x22	0.843
88794	Endex tee reduced branch FFF	N25	42x42x28	1.021
88795	Endex tee reduced branch FFF	N25	42x42x35	1.076
88797	Endex tee reduced branch FFF	N25	54x54x15	1.237
88799	Endex tee reduced branch FFF	N25	54x54x22	1.351
88800	Endex tee reduced branch FFF	N25	54x54x28	1.401

88801	Endex tee reduced branch FFF	N25	54x54x35	1.566
88802	Endex tee reduced branch FFF	N25	54x54x42	1.772
85525D	Endex tee one end reduced FFF	N26	18x15x18	0.183
85525D	Endex tee one end reduced FFF	N26	18x15x18	0.183
88850	Endex tee one end reduced FFF	N26	28x15x28	0.417
88850	Endex tee one end reduced FFF	N26	28x15x28	0.417
88853	Endex tee one end reduced FFF	N26	28x22x28	0.444
88853	Endex tee one end reduced FFF	N26	28x22x28	0.444
88856	Endex tee one end reduced FFF	N26	35x15x35	0.747
88856	Endex tee one end reduced FFF	N26	35x15x35	0.747
88854	Endex tee one end reduced FFF	N26	35x22x35	0.792
88854	Endex tee one end reduced FFF	N26	35x22x35	0.792
88855	Endex tee one end reduced FFF	N26	35x28x35	0.797
88855	Endex tee one end reduced FFF	N26	35x28x35	0.797
88857	Endex tee one end reduced FFF	N26	42x28x42	1.186
88857	Endex tee one end reduced FFF	N26	42x28x42	1.186
88858	Endex tee one end reduced FFF	N26	42x35x42	1.200
88858	Endex tee one end reduced FFF	N26	42x35x42	1.200
88860	Endex tee one end reduced FFF	N26	54x35x54	2.885
88859	Endex tee one end reduced FFF	N26	54x42x54	1.983
89953	Endex tee one end and branch reduced FFF	N27	15x12x12	0.082
85511D	Endex tee one end and branch reduced FFF	N27	18x12x12	0.105
85417D	Endex tee one end and branch reduced FFF	N27	18x15x15	0.114
88910	Endex tee one end and branch reduced FFF	N27	22x15x15	0.224
88845	Endex tee one end reduced FFF	N27	22x15x22	0.279
88845	Endex tee one end reduced FFF	N27	22x15x22	0.279
85541D	Endex tee one end and branch reduced FFF	N27	22x18x15	0.234
85547D	Endex tee one end and branch reduced FFF	N27	22x18x18	0.229
85553D	Endex tee one end reduced FFF	N27	22x18x22	0.256
85553D	Endex tee one end reduced FFF	N27	22x18x22	0.256
88925	Endex tee one end and branch reduced FFF	N27	28x15x15	0.334
88926	Endex tee one end and branch reduced FFF	N27	28x15x22	0.371
88935	Endex tee one end and branch reduced FFF	N27	28x22x15	0.321
88940	Endex tee one end and branch reduced FFF	N27	28x22x22	0.380
88942	Endex tee one end and branch reduced FFF	N27	35x22x22	0.627
88943	Endex tee one end and branch reduced FFF	N27	35x22x28	0.687
88947	Endex tee one end and branch reduced FFF	N27	35x28x22	0.614
88948	Endex tee one end and branch reduced FFF	N27	35x28x28	0.664
88950	Endex tee one end and branch reduced FFF	N27	42x28x28	1.049
88952	Endex tee one end and branch reduced FFF	N27	42x35x28	1.044
88957	Endex tee one end and branch reduced FFF	N27	42x35x35	1.177
88958	Endex tee one end and branch reduced FFF	N27	54x42x42	1.956
88971	Endex tee both ends reduced FFF	N28	10x10x12	0.092
85406D	Endex tee both ends reduced FFF	N28	15x15x18	0.156
88978	Endex tee both ends reduced FFF	N28	15x15x22	0.289
85419D	Endex tee both ends reduced FFF	N28	18x18x22	0.339
88990	Endex tee both ends reduced FFF	N28	22x22x28	0.531

88993	Endex tee both ends reduced FFF	N28	28x28x35	0.953
88995	Endex tee both ends reduced FFF	N28	35x35x42	1.608
89005	Endex tee threaded end FFF	N29R	15xG $\frac{1}{2}$ x15	0.381
89020	Endex tee threaded end FFF	N29R	22xG $\frac{1}{2}$ x22	0.568
89021	Endex tee threaded end FFF	N29R	28xG $\frac{1}{2}$ x28	0.888
88174	Endex straight connector FM	N3	15xR $\frac{3}{8}$	0.116
88177	Endex straight connector FM	N3	15xR $\frac{1}{2}$	0.259
88175	Endex straight connector FM	N3	15xR $\frac{1}{2}$	0.155
88176	Endex straight connector FM	N3	15xR $\frac{3}{4}$	0.232
84686D	Endex straight connector FM	N3	18xR $\frac{1}{2}$	0.171
84687D	Endex straight connector FM	N3	18xR $\frac{3}{4}$	0.210
88184	Endex straight connector FM	N3	22xR $\frac{1}{2}$	0.204
88185	Endex straight connector FM	N3	22xR $\frac{3}{4}$	0.243
88186	Endex straight connector FM	N3	22xR1	0.386
88188	Endex straight connector FM	N3	28xR $\frac{3}{4}$	0.326
88189	Endex straight connector FM	N3	28xR1	0.414
88192	Endex straight connector FM	N3	35xR1 $\frac{1}{2}$	0.662
88195	Endex straight connector FM	N3	42xR1 $\frac{1}{2}$	0.855
88198	Endex straight connector FM	N3	54xR2	1.462
89033	Endex tee threaded branch FFF	N30	15x15xRp $\frac{1}{2}$	0.370
89034	Endex tee threaded branch FFF	N30	22x22xRp $\frac{3}{8}$	0.701
89035	Endex tee threaded branch FFF	N30	28x28xRp1	1.219
89040	Endex tee threaded branch FFF	N30R	22x22xRp $\frac{1}{2}$	0.552
89041	Endex tee threaded branch FFF	N30R	28x28xRp $\frac{1}{2}$	0.789
84640	Endex tee threaded branch FFF	N30R	35x35xRp $\frac{1}{2}$	1.253
89050	Endex cross FFFF	N50	15	0.133
89052	Endex cross FFFF	N50	22	0.275
88241	Endex reducer FF	N6	10x6	0.018
88247	Endex reducer MF	N6	10x8	0.018
88245	Endex reducer MF	N6	12x10	0.027
88244	Endex reducer MF	N6	12x8	0.027
88249	Endex reducer MF	N6	15x10	0.037
88250	Endex reducer MF	N6	15x12	0.032
88248	Endex reducer MF	N6	15x8	0.037
88258	Endex reducer MF	N6	16x10	0.041
88259	Endex reducer MF	N6	16x12	0.037
85736D	Endex reducer MF	N6	18x10	0.055
85737D	Endex reducer MF	N6	18x12	0.050
85739D	Endex reducer MF	N6	18x15	0.050
88264	Endex reducer MF	N6	22x10	0.096
88265	Endex reducer MF	N6	22x12	0.078
88267	Endex reducer MF	N6	22x15	0.082
88261	Endex reducer MF	N6	22x16	0.078
85750	Endex reducer MF	N6	22x18	0.087
85753D	Endex reducer MF	N6	28x12	0.160
88280	Endex reducer MF	N6	28x15	0.156
89852	Endex reducer MF	N6	28x16	0.151

85757D	Endex reducer MF	N6	28x18	0.147
88284	Endex reducer MF	N6	28x22	0.128
88287	Endex reducer MF	N6	35x15	0.311
88289	Endex reducer MF	N6	35x22	0.252
88290	Endex reducer MF	N6	35x28	0.243
88293	Endex reducer MF	N6	42x15	0.435
88296	Endex reducer MF	N6	42x22	0.431
88297	Endex reducer MF	N6	42x28	0.389
88298	Endex reducer MF	N6	42x35	0.371
88301	Endex reducer MF	N6	54x22	0.563
88302	Endex reducer MF	N6	54x28	0.669
88303	Endex reducer MF	N6	54x35	0.660
88304	Endex reducer MF	N6	54x42	0.627
85780	Endex reducer MF	N6	64x42	0.998
85781	Endex reducer MF	N6	64x54	0.962
85787	Endex reducer MF	N6	76x64	1.282
88240	Endex reducer MF	N6	8x6	0.014
89076	Endex stop end F	N61	8	0.009
89077	Endex stop end F	N61	10	0.014
86045	Endex stop end F	N61	12	0.018
89080	Endex stop end F	N61	15	0.027
86049	Endex stop end F	N61	18	0.037
89084	Endex stop end F	N61	22	0.064
89085	Endex stop end F	N61	28	0.110
89087	Endex stop end F	N61	35	0.202
89088	Endex stop end F	N61	42	0.275
89089	Endex stop end F	N61	54	0.490
89091	Endex stop end with air vent F	N61AV	15	0.171
89103	Endex straight tap connector FF	N62	15xRp $\frac{1}{2}$	0.158
89104	Endex straight tap connector FF	N62	15xRp $\frac{3}{4}$	0.281
89106	Endex straight tap connector FF	N62	22xRp $\frac{3}{4}$	0.322
89110	Endex bent tap connector FF	N63	15xRp $\frac{1}{2}$	0.204
89111	Endex bent tap connector FF	N63	22xRp $\frac{3}{4}$	0.478
89120	Endex bent union adaptor FF	N64	15xRp $\frac{3}{4}$	0.391
89145	Endex bent union connector FM	N65	15xR $\frac{1}{2}$	0.895
89152	Endex bent union connector FM	N65	22xR $\frac{3}{4}$	1.328
89155	Endex bent union connector FM	N65	28xR1	2.395
89190	Endex straight union adapter FF	N68	15xRp $\frac{3}{4}$	0.245
89197	Endex straight union adapter FF	N68	22xRp1	0.379
89205	Endex straight union adapter FF	N68	28xRp1 $\frac{1}{4}$	0.874
89535	Endex flat faced union adapter FF	N68FF	22xRp $\frac{3}{4}$	0.231
89520	Endex straight gas meter union FF	N68M	22xRp $\frac{3}{4}$	0.474
89235	Endex straight union connector FM	N69	15xR $\frac{1}{2}$	0.753
89242	Endex straight union connector FM	N69	22xR $\frac{3}{4}$	0.992
89245	Endex straight union connector FM	N69	28xR1	1.915
89248	Endex straight union connector FM	N69	35xR1 $\frac{1}{2}$	2.569
89250	Endex straight union connector FM	N69	42xR1 $\frac{1}{2}$	4.353

89251	Endex straight union connector FM	N69	54xR2	7.964
88320	Endex adapter FF	N7	15xRp½	0.177
88321	Endex adapter FF	N7	22xRp¾	0.287
88322	Endex adapter FF	N7	28xRp1	0.469
88323	Endex adapter FF	N7	35xRp1¼	0.784
88324	Endex adapter FF	N7	43xRp1½	1.048
88325	Endex adapter FF	N7	54xRp2	1.655
88330	Endex adapter FM	N8	15xR½	0.177
88331	Endex adapter FM	N8	22xR¾	0.309
88332	Endex adapter FM	N8	28xR1	0.508
88333	Endex adapter FM	N8	35xR1 ½	0.767
88334	Endex adapter FM	N8	42xR1½	0.993
88335	Endex adapter FM	N8	54xR2	2.483
88390	Endex adaptor to imperial FF	N9	15x½	0.050
88391	Endex adaptor to imperial FF	N9	22x¾	0.124

endbraz

Large size fittings for use with brazing alloys, the Endbraz range of fittings is available in sizes 67-159mm. It includes flanges and is ideal for use in hot and cold water services, heating systems, gas service pipework and many engineering applications.

The fittings are guaranteed for 25 years against manufacturing defects and are WRAS approved.

Endbraz fittings are designed for service temperatures and maximum hydraulic working pressures when correctly assembled with copper tube to BS EN 1057.

code	name	type	size	total embodied carbon (kgCO2e)*
88030	Endex straight coupling FF	N1	67	0.994
89600	Endex straight coupling FF	N1	76	1.035
89601	Endex straight coupling FF	N1	108	2.139
89697	Endex straight coupling FF	N1	133	4.960
89698	Endex straight coupling FF	N1	159	4.626
89618	Endex transition coupling (metric x imperial) FF	N1IM	108x4	1.704
89617	Endex transition coupling (metric x imperial) FF	N1IM	76x3	0.879
88200	Endex straight connector FM	N3	66.7xR2½	3.421
89615	Endex straight connector FM	N3	76xR3	5.259
89616	Endex straight connector FM	N3	108xR4	7.008
88310	Endex reducer MF	N6	67x28	1.026
88311	Endex reducer MF	N6	67x35	0.989
88312	Endex reducer MF	N6	67x42	1.040
88313	Endex reducer MF	N6	67x54	1.177
89624	Endex reducer MF	N6	76x35	1.035
89625	Endex reducer MF	N6	76x42	0.957
89626	Endex reducer MF	N6	76x54	0.861
89907	Endex reducer MF	N6	76x54	1.466
89627	Endex reducer MF	N6	76x67	0.737
89630	Endex reducer MF	N6	108x42	2.441

89631	Endex reducer MF	N6	108x54	2.230
89632	Endex reducer MF	N6	108x67	1.951
89633	Endex reducer MF	N6	108x76	1.887
89699	Endex reducer MF	N6	133x42	3.114
89700	Endex reducer MF	N6	133x54	3.426
89701	Endex reducer MF	N6	133x67	3.572
89702	Endex reducer MF	N6	133x76	3.206
89707	Endex reducer MF	N6	159x108	4.351
89708	Endex reducer MF	N6	159x133	7.099
89704	Endex reducer MF	N6	159x54	4.122
89705	Endex reducer MF	N6	159x67	4.520
89706	Endex reducer MF	N6	159x76	7.603
89703	Endex reducer MF	N6	133x108	3.435
88456	Endex elbow FF	N12	67	1.887
89619	Endex elbow FF	N12	76	1.727
89639	Endex slow bend FF	N18	67	2.794
89640	Endex slow bend FF	N18	76	2.812
89641	Endex slow bend FF	N18	108	6.146
89709	Endex slow bend FF	N18	133	18.833
89710	Endex slow bend FF	N18	159	28.167
89645	Endex elbow 45° FF	N21	76	1.690
89646	Endex elbow 45° FF	N21	108	3.325
89711	Endex elbow 45° FF	N21	133	12.508
89712	Endex elbow 45° FF	N21	159	13.012
88719	Endex equal tee FFF	N24	67	3.110
89648	Endex equal tee FFF	N24	76	4.626
89649	Endex equal tee FFF	N24	108	10.717
89713	Endex equal tee FFF	N24	133	15.018
89714	Endex equal tee FFF	N24	159	23.816
89059	Endex tee reduced branch FFF	N25	108x108x35	8.198
89660	Endex tee reduced branch FFF	N25	108x108x54	7.420
89002	Endex tee reduced branch FFF	N25	108x108x76	8.198
89716	Endex tee reduced branch FFF	N25	133x133x108	16.786
89715	Endex tee reduced branch FFF	N25	133x133x154	5.954
89718	Endex tee reduced branch FFF	N25	159x159x133	21.297
89717	Endex tee reduced branch FFF	N25	159x159x54	7.983
88807	Endex tee reduced branch FFF	N25	67x67x28	2.308
89055	Endex tee reduced branch FFF	N25	67x67x35	2.308
89056	Endex tee reduced branch FFF	N25	67x67x42	2.748
89057	Endex tee reduced branch FFF	N25	67x67x54	3.343
89058	Endex tee reduced branch FFF	N25	76x76x28	2.427
89000	Endex tee reduced branch FFF	N25	76x76x35	3.714
89654	Endex tee reduced branch FFF	N25	76x76x42	3.934
89001	Endex tee reduced branch FFF	N25	76x76x54	3.916
89090	Endex stop end F	N61	67	0.747
89694	Endex stop end F	N61	76	0.692
89695	Endex stop end F	N61	108	1.635

89253	Endex straight union connector FM	N69P	67xR2 ½	9.857
88028	Endex Bi-metal Flange (4 holes)	N1FMGI	42	9.879
88029	Endex Bi-metal Flange (4 holes)	N1FMGI	54	11.509
88114	Endex Bi-metal Flange (4 holes)	N1FMGI	66.7	13.523
89603	Endex Bi-metal Flange (8 holes)	N1FMGI	76.1	17.024
89604	Endex Bi-metal Flange (8 holes)	N1FMGI	108	19.422
89602	Endex Bi-metal Flange (8 holes)	N1FMGI	133	26.106
89719	Endex Bi-metal Flange (8 holes)	N1FMGI	159	29.885

degreased

Endex degreased is available for some general and Endbrazed products. Exclusively designed for Medical Gas Pipelines. Endex degreased copper fittings recognise and embrace the specialist requirements of the Medical Gas Pipeline industry to include all the aspects of design, cleanliness, packaging and usability.

Table notes: (d&w) = degreased and wrapped

code	name	type	size	total embodied carbon (kgCO ₂ e)*
88445DW	Endex elbow (d&w) FF	N12DW	15	0.092
88450DW	Endex elbow (d&w) FF	N12DW	22	0.160
88451DW	Endex elbow (d&w) FF	N12DW	28	0.293
88452DW	Endex elbow (d&w) FF	N12DW	35	0.481
88454DW	Endex elbow (d&w) FF	N12DW	42	0.724
88455DW	Endex elbow (d&w) FF	N12DW	54	1.292
88015DW	Endex straight coupling (d&w) FF	N1DW	15	0.046
88019DW	Endex straight coupling (d&w) FF	N1DW	22	0.092
88022DW	Endex straight coupling (d&w) FF	N1DW	28	0.183
88023DW	Endex straight coupling (d&w) FF	N1DW	35	0.298
88026DW	Endex straight coupling (d&w) FF	N1DW	42	0.421
88027DW	Endex straight coupling (d&w) FF	N1DW	54	0.641
88076DW	Endex reducing coupling (d&w) FF	N1RDW	22x15	0.105
88705DW	Endex equal tee (d&w) FFF	N24DW	15	0.092
88709DW	Endex equal tee (d&w) FFF	N24DW	22	0.275
88711DW	Endex equal tee (d&w) FFF	N24DW	28	0.421
88713DW	Endex equal tee (d&w) FFF	N24DW	35	0.847
88716DW	Endex equal tee (d&w) FFF	N24DW	42	1.145
88717DW	Endex equal tee (d&w) FFF	N24DW	54	2.001
88755DW	Endex tee reduced branch (d&w) FFF	N25DW	22x22x15	0.211
88764DW	Endex tee reduced branch (d&w) FFF	N25DW	28x28x15	0.330
88770DW	Endex tee reduced branch (d&w) FFF	N25DW	28x28x22	0.366
88778DW	Endex tee reduced branch (d&w) FFF	N25DW	35x35x22	0.742
88797DW	Endex tee reduced branch (d&w) FFF	N25DW	54x54x15	1.667
88130DW	Endex straight connector (d&w) FF	N2DW	15xRp½	0.143
88185DW	Endex straight connector (d&w) FM	N3DW	22xR¾	0.270
88189DW	Endex straight connector (d&w) FM	N3DW	28xR1	0.425
89080DW	Endex stop end (d&w) F	N61DW	15	0.037
89084DW	Endex stop end (d&w) F	N61DW	22	0.082

89085DW	Endex stop end (d&w) F	N61DW	28	0.119
89235DW	Endex straight union connector (d&w) FM	N69DW	15xR½	0.753
89245DW	Endex straight union connector (d&w) FM	N69DW	28xR1	1.915
88250DW	Endex reducer (d&w) FF	N6DW	15x12	0.046
88248DW	Endex reducer (d&w) FF	N6DW	15x8	0.055
88267DW	Endex reducer (d&w) FF	N6DW	22x15	0.087
88284DW	Endex reducer (d&w) FF	N6DW	28x22	0.156
88290DW	Endex reducer (d&w) FF	N6DW	35x28	0.247
88296DW	Endex reducer (d&w) FF	N6DW	42x22	0.431
88297DW	Endex reducer (d&w) FF	N6DW	42x28	0.431
88303DW	Endex reducer (d&w) FF	N6DW	54x35	0.673
88304DW	Endex reducer (d&w) FF	N6DW	54x42	0.618

waste

Endex waste fittings are designed for connecting to basins, baths, sinks and other sanitary appliances in domestic and commercial properties. Available in sizes 35-54mm, the range includes bends, tees and crosses; and fittings with rodding eyes to enable inspection and maintenance of the pipework.

Table notes: (w) = waste

code	name	type	size	total embodied carbon (kgCO ₂ e)*
89750	Endex elbow 45° (w) FF	N21W	35	0.435
89751	Endex elbow 45° (w) FF	N21W	42	0.637
89752	Endex elbow 45° (w) FF	N21W	54	0.985
89763	Endex bend (w) FF	N323	35	0.568
89764	Endex bend (w) FF	N323	42	0.820
89765	Endex bend (w) FF	N323	54	1.319
89770	Endex pitcher tee (w) FFF	N359	35	1.208
89771	Endex pitcher tee (w) FFF	N359	42	1.666
89772	Endex pitcher tee (w) FFF	N359	54	2.649
89773	Endex pitcher tee reduced branch (w) FFF	N359R	42x42x35	1.567
89774	Endex pitcher tee reduced branch (w) FFF	N359R	54x54x35	2.257
89775	Endex pitcher tee reduced branch (w) FFF	N359R	54x54x42	2.660
89776	Endex pitcher tee with cleaning eye (w) FFF	N363	35x35xRp1¼	1.356
89777	Endex pitcher tee with cleaning eye (w) FFF	N363	42x42xRp1½	1.807
89778	Endex pitcher tee with cleaning eye (w) FFF	N363	54x54xRp2	3.886
89780	Endex pitcher tee reduced branch with cleaning eye (w) FFF	N363R	54x35xRp2	2.971
89781	Endex pitcher tee reduced branch with cleaning eye (w) FFF	N363R	54x42xRp2	3.164
89741	Endex straight coupling FF	N1W	35	0.279
89742	Endex straight coupling FF	N1W	42	0.220
89743	Endex straight coupling FF	N1W	54	0.366
89745	Endex reducer FF	N6W	42x35	0.206
89746	Endex reducer MF	N6W	54x35	0.376
89747	Endex reducer MF	N6W	54x42	0.371
89783	Endex sweep cross with cleaning eye FFFF	N376	54	5.512
89784	Endex cleaning eye adaptor M	N377	35xR1	0.577

89785	Endex cleaning eye adaptor M	N377	42xR1½	0.751
89786	Endex cleaning eye adaptor M	N377	54xR1½	1.337
89788	Endex cleaning eye adaptor F	N378	42xRp1¼	0.787
89789	Endex cleaning eye adaptor F	N378	54xRp1½	1.494

accessories

Endex fittings are complemented by a range of accessories which includes solders, fluxes, brazing rods and tap connector washers.

code	name	type	size	total embodied carbon (kgCO2e)*
73050	Endex Fibre Washers	FW1	½	0.001
73051	Endex Fibre Washers	FW1	¾	0.002
71159	Endex lead free solder reel	N161	500g	12.938
71176	Endex brazing rod	N164	3x600	0.245
71175	Endex silver brazing rod	N166	3x600	0.370

* Embodied carbon calculated following 'Basic' calculation method described in CIBSE (2021) Embodied carbon in building services: a calculation methodology CIBSE TM65: 2021 (Hampshire: Hobbs the Printers Ltd) using CIBSE (2022) Embodied Carbon Calculator TM65 Digital Tool beta version 1.1 January 2022 (London: Chartered Institution of Building Services Engineers)