



PN LINE



Technical remarks [8_9](#)



PN 11 PN 13 PN 14 PN 15 PN 17 PN 18 PN 20 PN 23



PN 25 PN 26 PN 27 PN 28 PN 29 PN 37 PN 38 PN 39



PN 40 PN 43 PN 10

PN 11
PN 13
PN 14
PN 15
PN 17
PN 18
PN 20
PN 23

[10_12](#)

PN 25
PN 26
PN 27
PN 28
PN 29
PN 37
PN 38
PN 39

[12_14](#)

PN 40
PN 43
PN 10

[14_16](#)

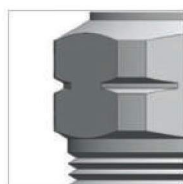


PN LINE

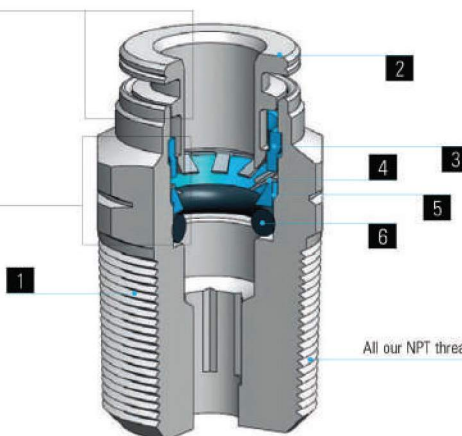
1 - 2	3	4	5	6
Body and Release Ring	Tightness Ring	Gripping collet	Protection Ring	Seals
Brass UNI EN 12164 CW614N - UNI EN 12165 CW617N Nickel Plated	Acetal Resin (POM)	Stainless steel AISI 301	Acetal Resin (POM)	NBR (FPM on request)



Identification mark
for inch sizes.



Identification mark
for NPTF threads.



All our NPT threads are PTFE pre-applied.

THE PN LINE

PN is C.MATIC highly performing, extremely compact push-in full metal fitting.

Our PN fittings are ready for use as all threads are PTFE pre-applied and no tools are requested to guarantee tight and pressure resistant assemblies.

The hose connection is made possible by the presence of a stainless steel gripper and by an O-ring inside of the fitting. To connect, simply push the tubing until it bottoms; the stainless steel teeth grip onto the tubing and holds it captive.

The great advantage of our special PTFE coating on threads makes sure that the fitting can be used several times without peeling off.

It is a full metal fitting and this makes of it the suitable fitting for the heaviest duty pneumatic applications.

DATA SHEET

Recommended tubings:

PA 6, PA 11, PA 12,
Polyethylene PE, Polyurethane PU (95
durometer or above)

Acceptable Tolerances on the tubings:
+/- .003

Working Temperature:
from -4 °F up to 160°F

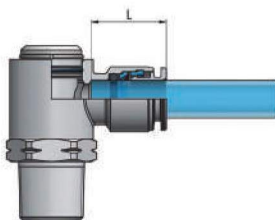
Working Pressure:
Pressure varies depending on the kind of
tubing used and in any case it never has
to exceed 261 psi.

Vacuum rating: to 28" Hg

Application fields:
Pneumatic circuits.



Tubing insertion depth



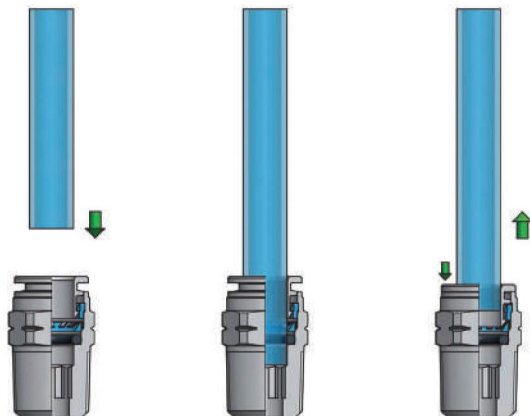
Tube OD	L
1/8	.386
5/32	.512
1/4	.622
5/16	.630
3/8	.720
1/2	.768

ASSEMBLY INSTRUCTIONS

1. Cut the tube square (by means of a tube cutter i.e. our PA 34) making sure that no burrs are left and that the tube is not oval.
2. Insert the tube into the fitting until it bottoms.

Tube release

While pressing on the release ring, pull out the tube from the fitting.



Our tapered male straight connector is provided with an inner hex allowing for easy assembly when no space is available.

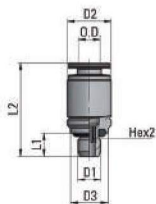


Once the tubing is connected to the fitting, make sure that the tubing is not subject to any tensile strength and that the min. recommended bending radius stated in the tubing section of this catalogue is complied with (see page 54). To prevent any accidental tube release, no components have to come in touch with the release ring and exercise any unwanted pressure on the same that. Indeed however lateral, any load on the release ring may cause the tube disconnection. To tighten threads, please check out our tightening torque chart illustrated at page 4.

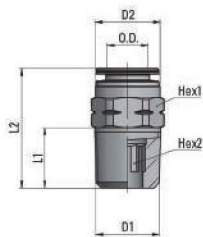


PN 11

Taper Straight, male



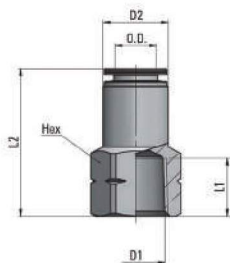
Part Number	Tube OD	D1 UNF	D2	D3	L1	L2	HEX2	oz Δ
PN11-1/8-10-32	1/8	10-32	.276	.315	.197	.857	3/32	.088
PN11-5/32-10-32	5/32	10-32	.374	.315	.197	.787	3/32	.159
PN11-1/4-10-32	1/4	10-32	.472	.315	.197	.925	3/32	.300



Part Number	Tube OD	D1 NPTF	D2	L1	L2	HEX1	HEX2	oz Δ
PN11-1/8-1/8	1/8	1/8	.276	.335	.728	7/16	3/32	.335
PN11-5/32-1/8	5/32	1/8	.374	.335	.728	7/16	1/8	.318
PN11-5/32-1/4	5/32	1/4	.374	.512	.945	9/16	1/8	.706
PN11-1/4-1/8	1/4	1/8	.472	.335	.866	1/2	5/32	.371
PN11-1/4-1/4	1/4	1/4	.472	.512	.965	9/16	5/32	.653
PN11-1/4-3/8	1/4	3/8	.472	.512	1.004	11/16	5/32	-
PN11-5/16-1/8	5/16	1/8	.551	.335	1.043	9/16	3/16	.529
PN11-5/16-1/4	5/16	1/4	.551	.512	1.004	9/16	1/4	.565
PN11-5/16-3/8	5/16	3/8	.551	.512	.984	11/16	1/4	.988
PN11-3/8-1/8	3/8	1/8	.630	.335	1.122	11/16	3/16	.794
PN11-3/8-1/4	3/8	1/4	.630	.512	1.260	11/16	1/4	.953
PN11-3/8-3/8	3/8	3/8	.630	.512	1.004	11/16	5/16	.900
PN11-3/8-1/2	3/8	1/2	.630	.669	1.201	7/8	5/16	1.976
PN11-1/2-1/4	1/2	1/4	.787	.512	1.358	13/16	5/16	1.253
PN11-1/2-3/8	1/2	3/8	.787	.512	1.161	13/16	13/32	.970
PN11-1/2-1/2	1/2	1/2	.787	.669	1.201	7/8	13/32	1.606

PN 13

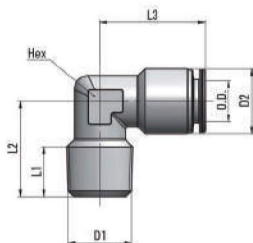
Female Straight



Part Number	Tube OD	D1 NPTF	D2	L1	L2	HEX	oz Δ
PN13-5/32-1/8	5/32	1/8	.374	.335	.984	1/2	.406
PN13-1/4-1/8	1/4	1/8	.472	.335	1.063	1/2	.494
PN13-1/4-1/4	1/4	1/4	.472	.492	1.240	11/16	.935
PN13-5/16-1/8	5/16	1/8	.551	.335	1.063	9/16	.706
PN13-5/16-1/4	5/16	1/4	.551	.492	1.240	11/16	1.006
PN13-3/8-1/4	3/8	1/4	.630	.492	1.339	11/16	1.147
PN13-3/8-3/8	3/8	3/8	.630	.492	1.339	13/16	1.323

PN 14

Taper Elbow Fitting, male

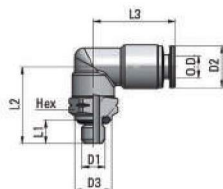


Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX (mm)	oz Δ
PN14-5/32-1/8	5/32	1/8	.374	.335	.630	.689	10	.318
PN14-1/4-1/8	1/4	1/8	.472	.335	.630	.807	10	.459
PN14-1/4-1/4	1/4	1/4	.472	.433	.787	.807	10	.600
PN14-5/16-1/8	5/16	1/8	.551	.335	.748	.886	12	.723
PN14-5/16-1/4	5/16	1/4	.551	.433	.807	.886	12	.794
PN14-3/8-1/4	3/8	1/4	.630	.472	.886	.984	14	1.041
PN14-3/8-3/8	3/8	3/8	.630	.433	.886	.984	14	1.182

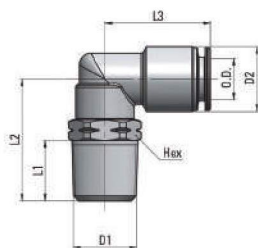


PN 15

Taper Swivelling Elbow Fitting, male



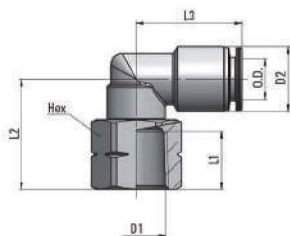
Part Number	Tube OD	D1 UNF	D2	D3	L1	L2	L3	HEX	oz
PN15-1/8-10-32	1/8	10-32	.276	.315	.197	.650	.539	3/8	.282
PN15-5/32-10-32	5/32	10-32	.374	.315	.197	.650	.689	3/8	.353



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
PN15-1/8-1/8	1/8	1/8	.276	.335	.728	.539	7/16	.371
PN15-5/32-1/8	5/32	1/8	.374	.335	.728	.689	7/16	.441
PN15-5/32-1/4	5/32	1/4	.374	.512	1.024	.748	9/16	.794
PN15-1/4-1/8	1/4	1/8	.472	.335	.827	.866	1/2	.688
PN15-1/4-1/4	1/4	1/4	.472	.512	1.024	.866	9/16	.865
PN15-1/4-3/8	1/4	3/8	.472	.512	1.043	.866	11/16	-
PN15-5/16-1/8	5/16	1/8	.551	.335	.827	.886	1/2	.812
PN15-5/16-1/4	5/16	1/4	.551	.512	.945	.886	9/16	.970
PN15-5/16-3/8	5/16	3/8	.551	.512	1.122	.886	11/16	1.411
PN15-3/8-1/8	3/8	1/8	.630	.335	.945	1.024	11/16	1.376
PN15-3/8-1/4	3/8	1/4	.630	.512	1.122	1.024	11/16	1.500
PN15-3/8-3/8	3/8	3/8	.630	.512	1.122	1.024	11/16	1.535
PN15-3/8-1/2	3/8	1/2	.630	.669	1.339	1.024	7/8	2.188
PN15-1/2-1/4	1/2	1/4	.787	.512	1.260	1.122	13/16	2.382
PN15-1/2-3/8	1/2	3/8	.787	.512	1.260	1.122	13/16	2.258
PN15-1/2-1/2	1/2	1/2	.787	.669	1.437	1.122	7/8	2.699

PN 17

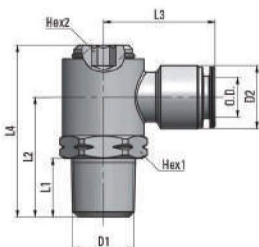
Swivelling Elbow fitting, female



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
PN17-5/32-1/8	5/32	1/8	.374	.335	.768	.748	9/16	.741
PN17-1/4-1/8	1/4	1/8	.472	.335	.768	.866	9/16	.794
PN17-1/4-1/4	1/4	1/4	.472	.492	.925	.866	11/16	1.129
PN17-5/16-1/8	5/16	1/8	.551	.335	.768	.886	9/16	.935
PN17-5/16-1/4	5/16	1/4	.551	.492	.925	.886	11/16	1.288
PN17-3/8-1/4	3/8	1/4	.630	.492	.925	1.024	11/16	1.570
PN17-3/8-3/8	3/8	3/8	.630	.492	.925	1.024	13/16	1.711

PN 18

Swivelling fitting with banjo ring

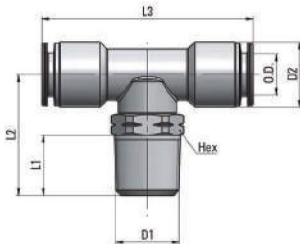


Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	L4	HEX1	HEX2	oz
PN18-5/32-1/8	5/32	1/8	.374	.335	.807	.807	1.220	9/16	1/8	1.006
PN18-1/4-1/8	1/4	1/8	.472	.335	.807	.886	1.220	9/16	1/8	1.059
PN18-1/4-1/4	1/4	1/4	.472	.512	1.043	.945	1.496	11/16	3/16	1.711
PN18-5/16-1/8	5/16	1/8	.551	.335	.807	.886	1.220	9/16	1/8	1.076
PN18-5/16-1/4	5/16	1/4	.551	.512	1.043	.965	1.496	11/16	3/16	1.747
PN18-5/16-3/8	5/16	3/8	.551	.512	1.142	1.043	1.654	13/16	1/4	-
PN18-3/8-1/4	3/8	1/4	.630	.512	1.043	1.043	1.496	11/16	3/16	1.835
PN18-3/8-3/8	3/8	3/8	.630	.512	1.142	1.142	1.654	13/16	1/4	2.964



PN 20

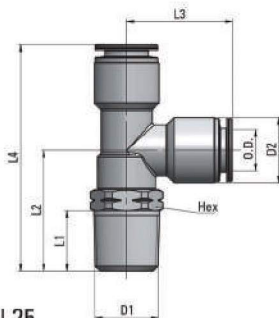
Swivelling Tee fitting, taper



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
PN20-1/8-1/8	1/8	1/8	.276	.335	.827	1.260	1/2	.670
PN20-5/32-1/8	5/32	1/8	.374	.335	.827	1.535	1/2	.776
PN20-5/32-1/4	5/32	1/4	.374	.512	1.024	1.535	9/16	.953
PN20-1/4-1/8	1/4	1/8	.472	.335	.827	1.732	1/2	.900
PN20-1/4-1/4	1/4	1/4	.472	.512	1.024	1.732	9/16	1.076
PN20-5/16-1/8	5/16	1/8	.551	.335	.827	1.772	1/2	1.112
PN20-5/16-1/4	5/16	1/4	.551	.512	1.024	1.772	9/16	1.306
PN20-3/8-1/4	3/8	1/4	.630	.512	1.122	2.047	11/16	1.905
PN20-3/8-3/8	3/8	3/8	.630	.512	1.122	2.047	11/16	1.941
PN20-1/2-3/8	1/2	3/8	.787	.512	1.260	2.244	13/16	2.752
PN20-1/2-1/2	1/2	1/2	.787	.669	1.437	2.244	7/8	3.299

PN 23

Lateral Swivelling Tee fitting, taper



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	L4	HEX	oz
PN23-1/8-1/8	1/8	1/8	.276	.335	.827	.630	1.457	1/2	.670
PN23-5/32-1/8	5/32	1/8	.374	.335	.827	.768	1.594	1/2	.812
PN23-5/32-1/4	5/32	1/4	.374	.512	1.024	.768	1.791	9/16	.953
PN23-1/4-1/8	1/4	1/8	.472	.335	.827	.866	1.693	1/2	.900
PN23-1/4-1/4	1/4	1/4	.472	.512	1.024	.866	1.890	9/16	1.076
PN23-5/16-1/8	5/16	1/8	.551	.335	.827	.886	1.713	1/2	1.112
PN23-5/16-1/4	5/16	1/4	.551	.512	1.024	.886	1.909	9/16	1.323
PN23-3/8-1/4	3/8	1/4	.630	.512	1.122	1.024	2.146	11/16	1.905
PN23-3/8-3/8	3/8	3/8	.630	.512	1.122	1.024	2.146	11/16	1.941
PN23-1/2-3/8	1/2	3/8	.787	.512	1.260	1.122	2.382	13/16	2.735
PN23-1/2-1/2	1/2	1/2	.787	.669	1.437	1.122	2.559	7/8	3.176

PN 25

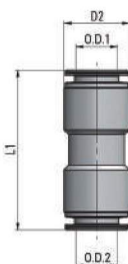
Reducer



Part Number	Tube OD	D1	D2	L1	oz
PN25- 1/8- 5/32	1/8	5/32	.276	1.051	.088
PN25- 5/32- 1/4	5/32	1/4	.374	1.240	.265
PN25- 1/4- 5/16	1/4	5/16	.472	1.358	.406
PN25- 1/4- 3/8	1/4	3/8	.472	1.378	.476
PN25- 1/4- 1/2	1/4	1/2	.512	1.378	.882
PN25- 5/16- 3/8	5/16	3/8	.551	1.437	.547
PN25- 3/8- 1/2	3/8	1/2	.630	1.575	.865

PN 26

Union

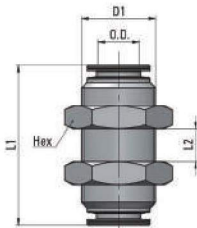


Part Number	Tube OD1	Tube OD2	D2	L1	oz
PN26-1/8-1/8	1/8	1/8	.276	.843	.106
PN26-5/32-5/32	5/32	5/32	.374	1.102	.265
PN26-1/4-1/4	1/4	1/4	.472	1.323	.476
PN26-5/16-5/16	5/16	5/16	.551	1.339	.635
PN26-3/8-3/8	3/8	3/8	.630	1.520	.882
PN26-1/2-1/2	1/2	1/2	.787	1.614	1.112



PN 27

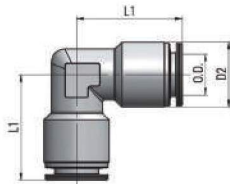
Bulkhead union



Part Number	Tube OD	D1	L1	L2	HEX (mm)	oz Δ
PN27-1/8-1/8	1/8	M10x1	.827	.177	14	.476
PN27-5/32-5/32	5/32	M12x1	1.102	.315	16	.812
PN27-1/4-1/4	1/4	M14x1	1.339	.571	18	1.147
PN27-5/16-5/16	5/16	M16x1	1.339	.571	20	1.376
PN27-3/8-3/8	3/8	M18x1	1.417	.689	22	1.888
PN27-1/2-1/2	1/2	M22x1.5	1.614	.728	26	1.941

PN 28

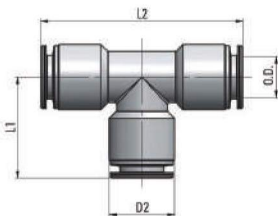
Union Elbow



Part Number	Tube OD	D2	L1	oz Δ
PN28-1/8-1/8	1/8	.276	.461	.159
PN28-5/32-5/32	5/32	.374	.689	.335
PN28-1/4-1/4	1/4	.472	.807	.547
PN28-5/16-5/16	5/16	.551	.886	.829
PN28-3/8-3/8	3/8	.630	.984	1.129
PN28-1/2-1/2	1/2	.787	1.063	1.817

PN 29

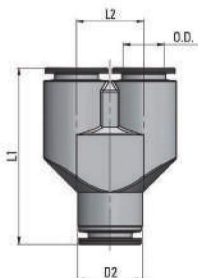
Union Tee



Part Number	Tube OD	D2	L1	L2	oz Δ
PN29-1/8-1/8	1/8	.276	.461	.921	.194
PN29-5/32-5/32	5/32	.374	.689	1.379	.441
PN29-1/4-1/4	1/4	.472	.787	1.575	.706
PN29-5/16-5/16	5/16	.551	.886	1.772	.988
PN29-3/8-3/8	3/8	.630	.965	1.929	1.500
PN29-1/2-1/2	1/2	.787	1.063	2.126	2.435

PN 37

Y Fitting

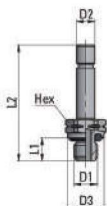


Part Number	Tube OD	D2	L1	L2	oz Δ
PN37-1/8-1/8	1/8	.354	1.083	.374	.670
PN37-5/32-5/32	5/32	.354	1.161	.374	.476
PN37-1/4-1/4	1/4	.472	1.421	.492	1.076
PN37-5/16-5/16	5/16	.551	1.476	.571	1.482

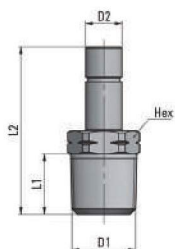


PN 38

Stem adaptor



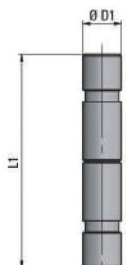
Part Number	D1 UNF	D2	D3	L1	L2	HEX	oz
PN38-5/32-10-32	10-32	5/32	.311	.197	.984	5/16	.088



Part Number	D1 NPTF	D2	L1	L2	HEX	oz
PN38-5/32-1/8	1/8	5/32	.335	1.142	7/16	.247
PN38-5/32-1/4	1/4	5/32	.512	1.339	9/16	.494
PN38-1/4-1/8	1/8	1/4	.335	1.220	7/16	.300
PN38-1/4-1/4	1/4	1/4	.512	1.417	9/16	.529
PN38-5/16-1/8	1/8	5/16	.335	1.220	7/16	.318
PN38-5/16-1/4	1/4	5/16	.512	1.417	9/16	.547
PN38-3/8-1/4	1/4	3/8	.512	1.496	9/16	.582
PN38-3/8-3/8	3/8	3/8	.512	1.516	11/16	.812
PN38-1/2-3/8	3/8	1/2	.512	1.634	11/16	.900
PN38-1/2-1/2	1/2	1/2	.669	1.831	7/8	1.517

PN 39

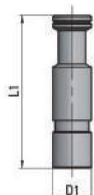
Extention Piece



Part Number	D1	L1	oz
PN39-5/32-5/32	5/32	1.181	.099
PN39-1/4-1/4	1/4	1.378	.176
PN39-5/16-5/16	5/16	1.378	.194
PN39-3/8-3/8	3/8	1.575	.300
PN39-1/2-1/2	1/2	1.732	.494

PN 40

Plug

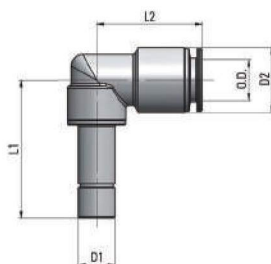


Part Number	D1	L1	oz
PN40-1/8-1/8	1/8	.787	.046
PN40-5/32-5/32	5/32	.984	.088
PN40-1/4-1/4	1/4	.984	.159
PN40-5/16-5/16	5/16	1.181	.441
PN40-3/8-3/8	3/8	1.378	.723
PN40-1/2-1/2	1/2	1.575	1.482



PN 43

Plug-in Elbow

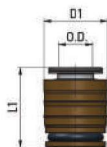


Part Number	Tube OD	D1	D2	L1	L2	oz 
PN43-5/32-00	5/32	5/32	.374	1.004	.748	.494
PN43-1/4-00	1/4	1/4	.427	1.161	.866	.600
PN43-5/16-00	5/16	5/16	.551	1.161	.886	.723
PN43-3/8-00	3/8	3/8	.630	1.319	1.024	1.059



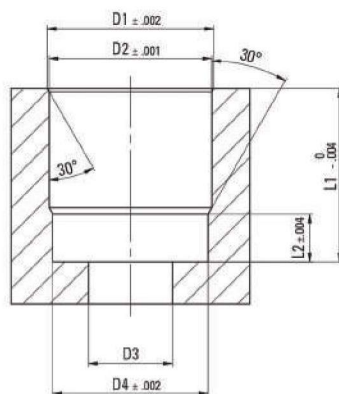
PN 10

Press-in Cartridge



Part Number	Tube OD	D1	L1	Δ
PN10-5/32-00	5/32	.366	.571	.127
PN10-1/4-00	1/4	.472	.650	.201
PN10-5/16-00	5/16	.539	.669	.279
PN10-3/8-00	3/8	.602	.748	.363

Cartridges seat drilling plan



Tube OD	D1	D2	D3	D4	L1	L2
5/32	.374	.362	.118	.339	.472	.126
1/4	.480	.469	.217	.445	.551	.157
5/16	.547	.535	.276	.512	.571	.157
3/8	.610	.598	.335	.575	.630	.157