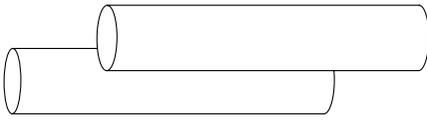


# GEAR MEASURING WIRES DIAMETRAL PITCH

"XX" Tolerance



Wires sold is pairs only.

Normal Diametral Pitch	Enlarged Pinions <u>1.92</u> DP	<del>Enlarged Pinions</del> <u>1.728</u> DP	<del>Enlarged Pinions</del> <u>1.68</u> DP	<del>Enlarged Pinions</del> <u>1.44</u> DP
<b>WIRE SIZES IN INCHES</b>				
1	1.92000"	1.72800"	1.68000"	1.44000"
1-1/2	1.28000"	1.15200"	1.12000"	.96000"
2	.96000"	.86400"	.84000"	.72000"
2-1/2	.76800"	.69120"	.67200"	.57600"
3	.64000"	.57600"	.56000"	.48000"
3-1/2	.54857"	.49371"	.48000"	.41143"
4	.48000"	.43200"	.42000"	.36000"
4-1/2	.42667"	.38400"	.37333"	.32000"
5	.38000"	.34560"	.33600"	.28800"
6	.32000"	.28800"	.28000"	.24000"
7	.27429"	.24686"	.24000"	.20571"
8	.24000"	.21600"	.21000"	.18000"
9	.21333"	.19200"	.18667"	.16000"
10	.19200"	.17280"	.16800"	.14400"
11	.17455"	.15709"	.15273"	.13091"
12	.16000"	.14400"	.14000"	.12000"
14	.13714"	.12343"	.12000"	.10286"
16	.12000"	.10800"	.10500"	.09000"
18	.10667"	.09600"	.09333"	.08000"
20	.09600"	.08640"	.08400"	.07200"
22	.08727"	.07855"	.07363"	.06545"
24	.08000"	.07200"	.07000"	.06000"
28	.06857"	.06171"	.06000"	.05143"
32	.06000"	.05400"	.05250"	.04500"
36	.05333"	.04800"	.04667"	.04000"
40	.04800"	.04320"	.04200"	.03600"
48	.04000"	.03600"	.03500"	.03000"
56	.03429"	.03086"	.03000"	.02571"
64	.03000"	.02700"	.02625"	.02250"
72	.02667"	.02400"	.02333"	.02000"
80	.02400"	.02160"	.02100"	.01800"
96	.02000"	.01800"	.01750"	.01500"
100	.01920"	.01728"	.01680"	.01440"
120	.01600"	.01440"	.01400"	.01200"

## GEAR MEASURING WIRE SETS

"XX" Tolerance

Series	Gear Measuring Wire Sets
<b>GWS-1728-18</b>	<b>Set includes 1 pair each of 18 sizes from 1.728/DP Series:</b> 3, 4, 5, 6, 8, 9, 10, 12, 14, 16, 18, 20, 24, 32, 36, 40, 48 & 64
<b>GWS-144-18</b>	<b>Set includes 1 pair each of 18 sizes from 1.44/DP Series:</b> 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 24, 32, 36, 40, 48 & 64
<b>GWS-168-15</b>	<b>Set includes 1 pair each of 15 sizes from 1.68/DP Alternate Series:</b> 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24, 28, 32, 48 & 56
<b>GWS-192-15</b>	<b>Set includes 1 pair each of 15 sizes from 1.92/DP Series:</b> 1, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 20, 24 & 32

Clear plastic containers for gear wires are also available in sizes 1/2", 3/4", 1" OD (all 2-1/2" length). Please inquire.

## GEAR MEASURING WIRES 30°, 37-1/2° & 45° INVOLUTE SPLINE

Spline Pitch	1.92 DP	1.728 DP	Spline Pitch	1.92 DP	1.728 DP
WIRE SIZES IN INCHES			WIRE SIZES IN INCHES		
3/6	.64000"	.57600"	12/24	.16000"	.14400"
4/8	.48000"	.43200"	16/32	.12000"	.10800"
5/10	.38000"	.34560"	20/40	.09600"	.08640"
6/12	.32000"	.28800"	24/48	.08000"	.07200"
8/16	.24000"	.21600"	32/64	.06000"	.05400"
10/20	.19200"	.17280"	40/80	.04800"	.04320"
12/24	.16000"	.14400"	48/96	.04000"	.03600"

**"XX" Tolerance**



*Wires sold in pairs only.*

## GEAR MEASURING WIRES 36 & 48 SERRATION

36 SERRATION			48 SERRATION		
Nominal Dia.	Internal	External	Nominal Dia.	Internal	External
WIRE SIZES IN INCHES			WIRE SIZES IN INCHES		
1/8	.00650"	.00796"	3/4	.03025"	.03558"
3/16	.00967"	.01194"	7/8	.03529"	.04150"
1/4	.01290"	.01592"	1	.04033"	.04743"
5/16	.01613"	.01990"	1-1/8	.04538"	.05336"
3/8	.01935"	.02388"	1-1/4	.05042"	.05929"
1/2	.02580"	.03184"	1-3/8	.05546"	.06522"
5/8	.03225"	.03980"	1-1/2	.06050"	.07115"
			1-3/4	.07058"	.08301"
			2	.08067"	.09487"
			2-1/4	.09075"	.10673"
			2-1/2	.10083"	.11858"
			2-3/4	.11092"	.13044"
			3	.12100"	.14230"

**"XX" Tolerance**



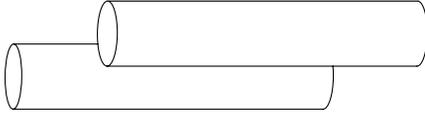
*Wires sold in pairs only.*

## GEAR WIRE TOLERANCE

Dia. Above	To and Include	ASH Standard				
		XXX	XX	X	Y	Z
.010"	.825"	.00001"	.00002"	.00004"	.00007"	.00010"
.825"	1.510"	.000015"	.00003"	.00006"	.00004"	.00012"
.1510"	2.510"	.00002"	.00004"	.00008"	.00012"	.00010"

## GEAR MEASURING WIRES

### METRIC MODULE "XX" Tolerance

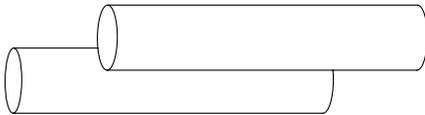


METRIC EQUIVALENTS			
mm	size	mm	size
1.00 mm	.03937"	3.25 mm	.12795"
1.20 mm	.04724"	3.50 mm	.13780"
1.25 mm	.04921"	3.75 mm	.14764"
1.30 mm	.05118"	4.00 mm	.15748"
1.50 mm	.05906"	4.25 mm	.16732"
1.75 mm	.06889"	4.50 mm	.17717"
2.00 mm	.07874"	5.00 mm	.19685"
2.25 mm	.08858"	5.25 mm	.20669"
2.50 mm	.09843"	6.00 mm	.23622"
2.75 mm	.10827"	7.00 mm	.27559"
3.00 mm	.11811"	8.00 mm	.31496"

Normal Module Pitch	Enlarged Pinions	External Gears	Alternate Series	Internal Gears
	<u>1.92</u> DP	<u>1.728</u> DP	<u>1.68</u> DP	<u>1.44</u> DP
<b>WIRE SIZES IN INCHES</b>				
0.5	.03780"	.03402"	.03307"	.02835"
0.6	.04535"	.04082"	.03969"	.03402"
0.7	.05291"	.04762"	.04630"	.03969"
.075	.05669"	.05102"	.04960"	.04252"
0.8	.06047"	.05443"	.05291"	.04535"
1.0	.07559"	.06803"	.06614"	.05669"
1.25	.09449"	.08504"	.08268"	.07087"
1.50	.11339"	.10205"	.09921"	.08504"
1.75	.13228"	.11906"	.11575"	.09921"
2.0	.15118"	.13606"	.13228"	.11339"
2.25	.17008"	.15307"	.14882"	.12756"
2.5	.18898"	.17008"	.16535"	.14173"
3.0	.22677"	.20409"	.19843"	.17008"
3.5	.26457"	.23811"	.23150"	.19843"
4.0	.30236"	.27213"	.26457"	.22677"
4.5	.34016"	.30614"	.29764"	.25512"
5	.37795"	.34016"	.33071"	.28346"
6	.45354"	.40819"	.39685"	.34016"
7	.52913"	.47622"	.46299"	.39685"
8	.60472"	.54425"	.52913"	.45354"
9	.68031"	.61228"	.59528"	.51024"
10	.75591"	.68031"	.66142"	.56693"
11	.83150"	.74835"	.72756"	.62362"
12	.90709"	.81638"	.79370"	.68031"
14	1.05827"	.95244"	.92598"	.79370"
16	1.20945"	1.08850"	1.05827"	.90709"
18	1.36063"	1.22457"	1.19055"	1.02047"
20	1.51181"	1.36063"	1.32283"	1.13386"

## GEAR MEASURING WIRES CIRCULAR PITCH

### CIRCULAR PITCH "XX" Tolerance



*Wires sold in pairs only.*

Normal Circular Pitch	Enlarged Pinions	External Gears	Alternate Series	Internal Gears
	<u>1.92</u> DP	<u>1.728</u> DP	<u>1.68</u> DP	<u>1.44</u> DP
<b>WIRE SIZES IN INCHES</b>				
1/8	.07639"	.06875"	.06684"	.05730"
1/4	.15279"	.13750"	.13369"	.11450"
3/8	.22918"	.20626"	.20053"	.17189"
1/2	.30558"	.27501"	.26738"	.22918"
5/8	.38197"	.34377"	.33422"	.28648"
3/4	.45837"	.41252"	.40107"	.34377"
7/8	.53476"	.48128"	.46791"	.40107"
1	.61116"	.55003"	.53476"	.45837"
1-1/4	.76394"	.68754"	.66845"	.57296"
1-1/2	.91673"	.82505"	.80214"	.68755"