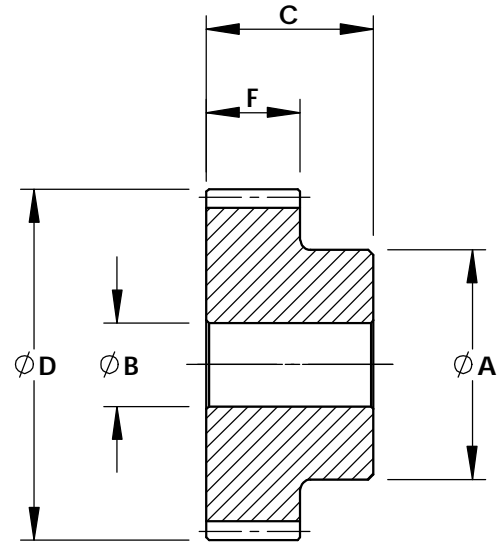
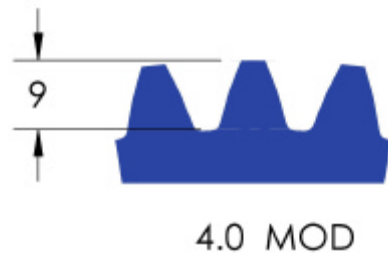




## **engineering cataloge 2008**

**STOCK SPUR GEARS**  
**16DP – 6DP**  
**1.5MOD – 4.0MOD**

## STOCK SPUR GEARS PITCH - 4.0 MOD



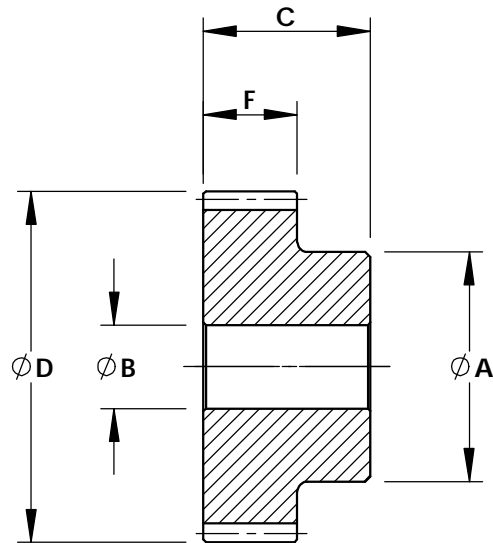
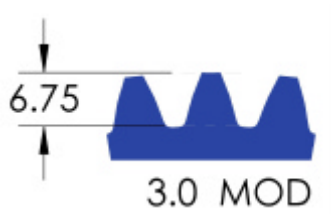
Face Width – 'F' = 40mm.  
Material - S1045 Steel  
Tooth Pressure Angle - 20°  
Gear Accuracy Conforms To AGMA Class 8

Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12M4.0S	12	52.00	35.0	20.00	60.0	60.00
14M4.0S	14	60.00	40.0	20.00	60.0	68.00
15M4.0S	15	64.00	45.0	20.00	60.0	72.00
16M4.0S	16	68.00	50.0	20.00	60.0	76.00
18M4.0S	18	72.00	55.0	20.00	60.0	80.00
19M4.0S	19	76.00	60.0	20.00	60.0	84.00
20M4.0S	20	80.00	65.0	20.00	60.0	88.00
24M4.0S	24	96.00	80.0	20.00	60.0	104.00
30M4.0S	30	120.00	100.0	20.00	60.0	128.00
36M4.0S	36	144.00	100.0	22.00	56.0	152.00
40M4.0S	40	160.00	100.0	25.00	56.0	168.00
44M4.0S	44	176.00	100.0	25.00	56.0	184.00
45M4.0S	45	180.00	100.0	25.00	56.0	188.00
48M4.0S	48	192.00	100.0	25.00	56.0	200.00
54M4.0S	54	216.00	100.0	30.00	56.0	224.00
60M4.0S	60	240.00	110.0	30.00	56.0	248.00

Dimensions in mm.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 3.0 MOD



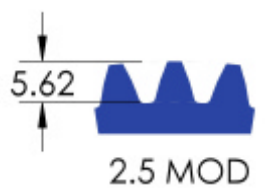
Face Width – 'F' = 30mm.  
Material - S1045 Steel  
Tooth Pressure Angle - 20°  
Gear Accuracy Conforms To AGMA Class 8

Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12M3.0S	12	39.00	28.0	15.00	45.0	45.00
14M3.0S	14	45.00	36.0	15.00	45.0	51.00
15M3.0S	15	48.00	38.0	15.00	45.0	54.00
16M3.0S	16	51.00	39.0	15.00	45.0	57.00
18M3.0S	18	54.00	40.0	15.00	45.0	60.00
20M3.0S	20	60.00	50.0	15.00	45.0	66.00
24M3.0S	24	72.00	58.0	15.00	45.0	78.00
28M3.0S	28	84.00	70.0	20.00	45.0	90.00
30M3.0S	30	90.00	75.0	20.00	45.0	96.00
32M3.0S	32	96.00	75.0	20.00	45.0	102.00
36M3.0S	36	108.00	80.0	20.00	45.0	114.00
40M3.0S	40	120.00	80.0	25.00	45.0	126.00
44M3.0S	44	132.00	80.0	25.00	45.0	138.00
45M3.0S	45	135.00	80.0	25.00	45.0	141.00
48M3.0S	48	144.00	80.0	25.00	45.0	150.00
54M3.0S	54	162.00	80.0	25.00	45.0	168.00
56M3.0S	56	168.00	80.0	25.00	45.0	174.00
60M3.0S	60	180.00	80.0	25.00	45.0	186.00
64M3.0S	64	192.00	80.0	25.00	45.0	198.00
72M3.0S	72	216.00	90.0	25.00	45.0	222.00

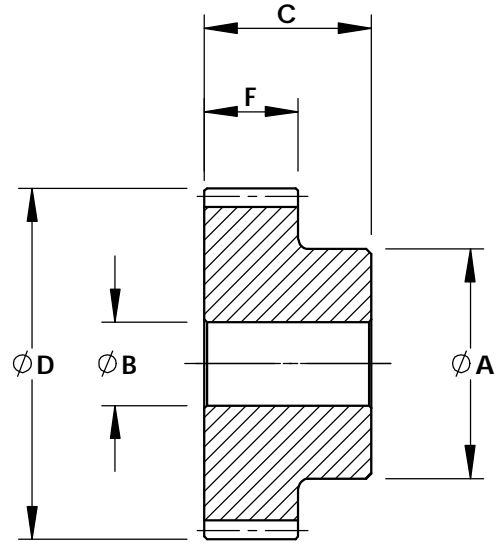
Dimensions in mm.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 2.5 MOD



Face Width – 'F' = 25mm.  
Material - S1045 Steel  
Tooth Pressure Angle - 20°  
Gear Accuracy Conforms To AGMA Class 8

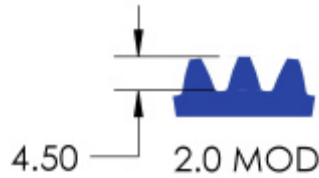


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12M2.5S	12	32.50	25.0	12.00	37.0	37.50
14M2.5S	14	37.50	30.0	12.00	37.0	42.50
15M2.5S	15	40.00	32.0	15.00	37.0	45.00
16M2.5S	16	42.50	35.0	15.00	37.0	47.50
18M2.5S	18	45.00	38.0	15.00	37.0	50.00
20M2.5S	20	50.00	40.0	15.00	37.0	55.00
24M2.5S	24	60.00	48.0	15.00	37.0	65.00
25M2.5S	25	62.50	50.0	15.00	37.0	67.50
28M2.5S	28	70.00	60.0	15.00	37.0	75.00
30M2.5S	30	75.00	65.0	15.00	37.0	80.00
35M2.5S	35	87.50	70.0	15.00	37.0	92.50
36M2.5S	36	90.00	70.0	15.00	37.0	95.00
40M2.5S	40	100.00	70.0	20.00	37.0	105.00
45M2.5S	45	112.50	70.0	20.00	37.0	117.50
48M2.5S	48	120.00	70.0	20.00	37.0	125.00
50M2.5S	50	125.00	70.0	20.00	37.0	130.00
54M2.5S	54	135.00	70.0	20.00	37.0	140.00
55M2.5S	55	137.50	70.0	20.00	37.0	142.50
60M2.5S	60	150.00	70.0	25.00	37.0	155.00
70M2.5S	70	175.00	80.0	25.00	37.0	180.00

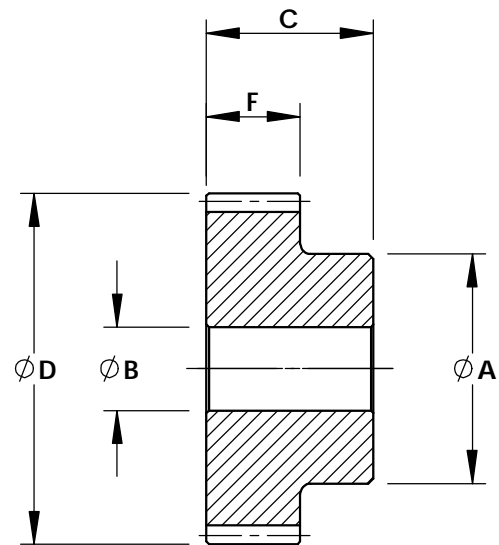
Dimensions in mm.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 2.0 MOD



Face Width – 'F' = 20mm.  
Material - S1045 Steel  
Tooth Pressure Angle - 20°  
Gear Accuracy Conforms To AGMA Class 8

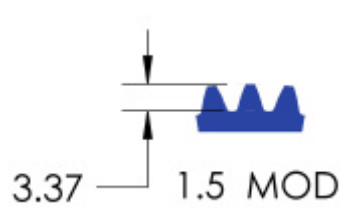


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12M2.0S	12	26.00	20.0	10.00	30.0	30.00
13M2.0S	13	28.00	20.0	10.00	30.0	32.00
14M2.0S	14	30.00	24.0	10.00	30.0	34.00
15M2.0S	15	32.00	26.0	12.00	30.0	36.00
16M2.0S	16	34.00	28.0	12.00	30.0	38.00
18M2.0S	18	36.00	30.0	12.00	30.0	40.00
20M2.0S	20	40.00	32.0	12.00	30.0	44.00
21M2.0S	21	42.00	34.0	12.00	30.0	46.00
24M2.0S	24	48.00	38.0	12.00	30.0	52.00
28M2.0S	28	56.00	45.0	12.00	30.0	60.00
30M2.0S	30	60.00	50.0	12.00	30.0	64.00
36M2.0S	36	72.00	55.0	12.00	30.0	76.00
40M2.0S	40	80.00	55.0	15.00	30.0	84.00
42M2.0S	42	84.00	55.0	15.00	30.0	88.00
45M2.0S	45	90.00	55.0	15.00	30.0	94.00
48M2.0S	48	96.00	55.0	15.00	30.0	100.00
54M2.0S	54	108.00	55.0	15.00	30.0	112.00
60M2.0S	60	120.00	60.0	15.00	30.0	124.00
72M2.0S	72	144.00	60.0	15.00	30.0	148.00

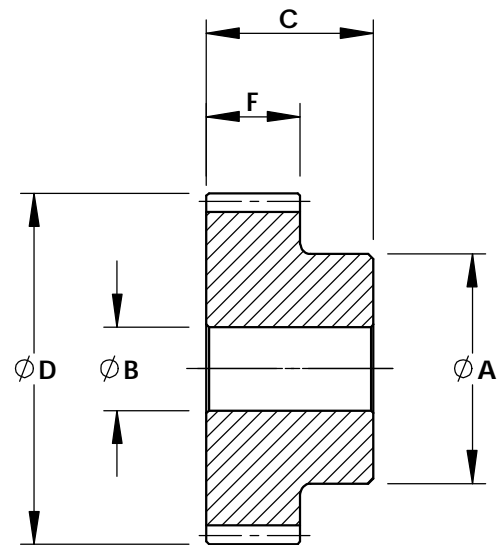
Dimensions in mm.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 1.5 MOD



Face Width – 'F' = 15mm.  
Material - S1045 Steel  
Tooth Pressure Angle - 20°  
Gear Accuracy Conforms To AGMA Class 8

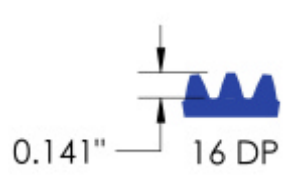


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12M1.5S	12	19.50	14.0	8.00	25.0	22.50
14M1.5S	14	22.50	16.0	8.00	25.0	25.50
15M1.5S	15	24.00	20.0	8.00	25.0	27.00
16M1.5S	16	25.50	21.0	8.00	25.0	28.50
20M1.5S	20	30.00	24.0	8.00	25.0	33.00
24M1.5S	24	36.00	28.0	8.00	25.0	39.00
28M1.5S	28	42.00	36.0	10.00	25.0	45.00
30M1.5S	30	45.00	38.0	10.00	25.0	48.00
32M1.5S	32	48.00	40.0	10.00	25.0	51.00
36M1.5S	36	54.00	45.0	10.00	25.0	57.00
40M1.5S	40	60.00	45.0	12.00	25.0	63.00
45M1.5S	45	67.50	45.0	12.00	25.0	70.50
48M1.5S	48	72.00	45.0	12.00	25.0	75.00
54M1.5S	54	81.00	50.0	15.00	25.0	84.00
56M1.5S	56	84.00	50.0	15.00	25.0	87.00
60M1.5S	60	90.00	50.0	15.00	25.0	93.00
64M1.5S	64	96.00	55.0	15.00	25.0	99.00
72M1.5S	72	108.00	55.0	15.00	25.0	111.00

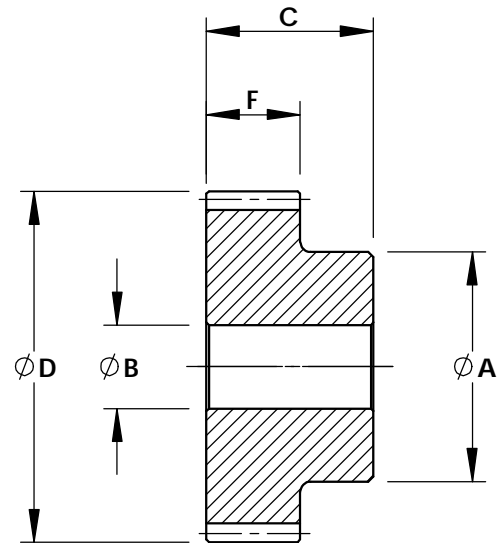
Dimensions in mm.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 16 DP



Face Width – 'F' = 1/2"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°

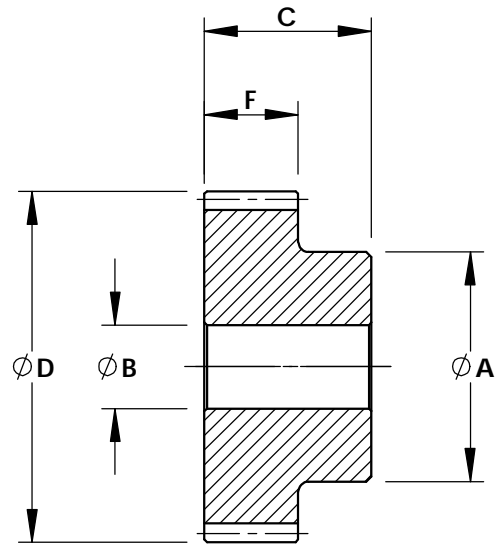
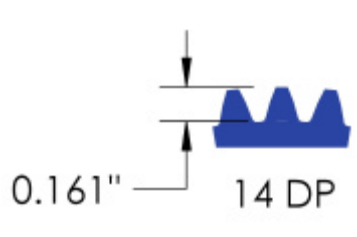


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D16S	12	0.812"	0.65"	0.3125"	15/16"	0.937"
14D16S	14	0.937"	0.75"	0.3125"	15/16"	1.062"
15D16S	15	1.000"	0.83"	0.3125"	15/16"	1.125"
16D16S	16	1.062"	0.88"	0.375"	15/16"	1.187"
20D16S	20	1.250"	1.06"	0.375"	15/16"	1.375"
24D16S	24	1.500"	1.1/4"	0.500"	15/16"	1.625"
28D16S	28	1.750"	1.1/2"	0.500"	15/16"	1.875"
32D16S	32	2.000"	1.3/4"	0.500"	15/16"	2.125"
36D16S	36	2.250"	1.3/4"	0.500"	15/16"	2.375"
40D16S	40	2.500"	1.3/4"	0.500"	1"	2.625"
48D16S	48	3.000"	2"	0.500"	1"	3.125"
56D16S	56	3.500"	2.1/4"	0.500"	1"	3.625"
64D16S	64	4.000"	2.1/2"	0.500"	1"	4.125"
72D16S	72	4.500"	2.1/2"	0.500"	1"	4.625"

Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 14 DP



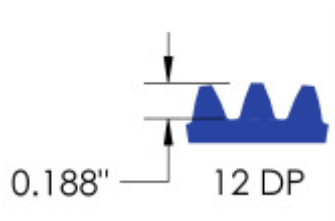
Face Width – 'F' = 5/8"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°

Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D14S	12	0.929"	0.70"	0.375"	1.1/8"	1.071"
13D14S	13	1.000"	0.81"	0.375"	1.1/8"	1.143"
14D14S	14	1.071"	0.85"	0.375"	1.1/8"	1.214"
15D14S	15	1.143"	0.92"	0.375"	1.1/8"	1.286"
16D14S	16	1.214"	1.00"	0.375"	1.1/8"	1.357"
20D14S	20	1.429"	1.20"	0.500"	1.1/8"	1.571"
21D14S	21	1.500"	1.30"	0.500"	1.1/8"	1.643"
24D14S	24	1.714"	1.50"	0.500"	1.1/8"	1.857"
28D14S	28	2.000"	1.3/4"	0.500"	1.1/8"	2.143"
30D14S	30	2.143"	1.3/4"	0.625"	1.1/8"	2.286"
35D14S	35	2.500"	2"	0.625"	1.1/8"	2.643"
42D14S	42	3.000"	2"	0.625"	1.1/8"	3.143"
49D14S	49	3.500"	2.1/2"	0.625"	1.1/8"	3.643"
56D14S	56	4.000"	2.1/2"	0.625"	1.1/8"	4.143"
63D14S	63	4.500"	3"	0.625"	1.1/4"	4.643"
70D14S	70	5.000"	3"	0.625"	1.1/4"	5.143"

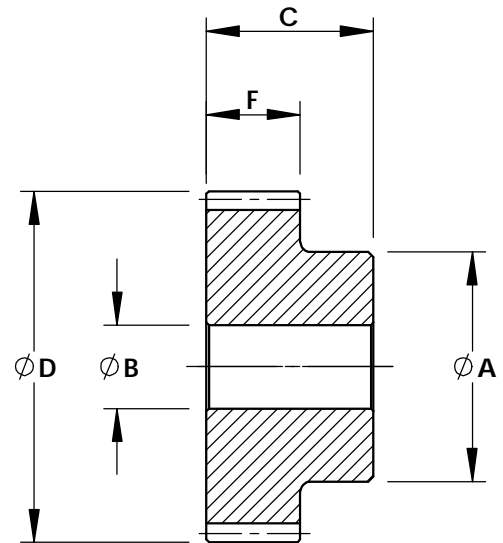
Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 12 DP



Face Width – 'F' = 7/8"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°

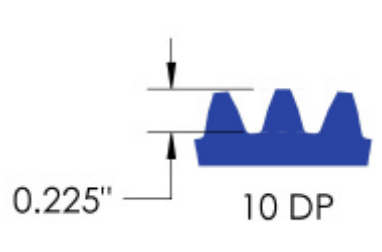


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D12S	12	1.083"	0.85"	0.500"	1.1/2"	1.250"
13D12S	13	1.167"	0.93"	0.500"	1.1/2"	1.333"
14D12S	14	1.250"	1.00"	0.500"	1.1/2"	1.417"
15D12S	15	1.333"	1.10"	0.500"	1.1/2"	1.500"
16D12S	16	1.417"	1.3/16"	0.500"	1.1/2"	1.583"
18D12S	18	1.500"	1.1/4"	0.625"	1.1/2"	1.667"
20D12S	20	1.667"	1.7/16"	0.625"	1.1/2"	1.833"
21D12S	21	1.750"	1.1/2"	0.625"	1.1/2"	1.917"
24D12S	24	2.000"	1.3/4"	0.625"	1.1/2"	2.167"
27D12S	27	2.250"	2"	0.750"	1.1/2"	2.417"
30D12S	30	2.500"	2.1/4"	0.750"	1.1/2"	2.667"
36D12S	36	3.000"	2.1/4"	0.750"	1.1/2"	3.167"
40D12S	40	3.333"	2.1/2"	0.750"	1.1/2"	3.500"
42D12S	42	3.500"	2.1/2"	0.750"	1.1/2"	3.667"
45D12S	45	3.750"	3"	0.875"	1.5/8"	3.917"
48D12S	48	4.000"	3"	0.875"	1.5/8"	4.167"
54D12S	54	4.500"	3.1/2"	0.875"	1.5/8"	4.667"
60D12S	60	5.000"	3.3/4"	0.875"	1.5/8"	5.167"
72D12S	72	6.000"	4.1/2"	0.875"	1.5/8"	6.167"

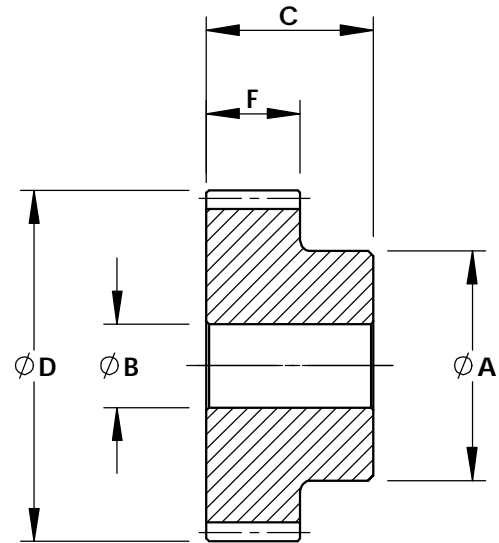
Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 10 DP



Face Width – 'F' = 1.1/8"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°

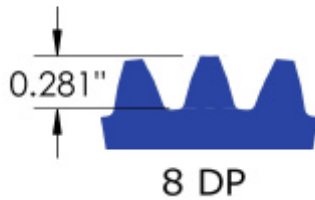


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D10S	12	1.300"	1.00"	0.625"	1.3/4"	1.500"
14D10S	14	1.500"	1.20"	0.625"	1.3/4"	1.700"
15D10S	15	1.600"	1.30"	0.625"	1.3/4"	1.800"
16D10S	16	1.700"	1.40"	0.625"	1.3/4"	1.900"
18D10S	18	1.800"	1.1/2"	0.750"	1.3/4"	2.000"
20D10S	20	2.000"	1.70"	0.750"	1.3/4"	2.200"
24D10S	24	2.400"	2.1/8"	0.750"	1.3/4"	2.600"
25D10S	25	2.500"	2.1/8"	0.875"	1.3/4"	2.700"
30D10S	30	3.000"	2.1/2"	0.875"	1.7/8"	3.200"
35D10S	35	3.500"	2.5/8"	0.875"	1.7/8"	3.700"
36D10S	36	3.600"	2.5/8"	0.875"	1.7/8"	3.800"
40D10S	40	4.000"	2.3/4"	1.000"	2"	4.200"
45D10S	45	4.500"	3.1/2"	1.000"	2"	4.700"
50D10S	50	5.000"	4"	1.000"	2"	5.200"
55D10S	55	5.500"	4.1/4"	1.000"	2"	5.700"
60D10S	60	6.000"	4.1/2"	1.000"	2"	6.200"
70D10S	70	7.000"	5"	1.000"	2"	7.200"

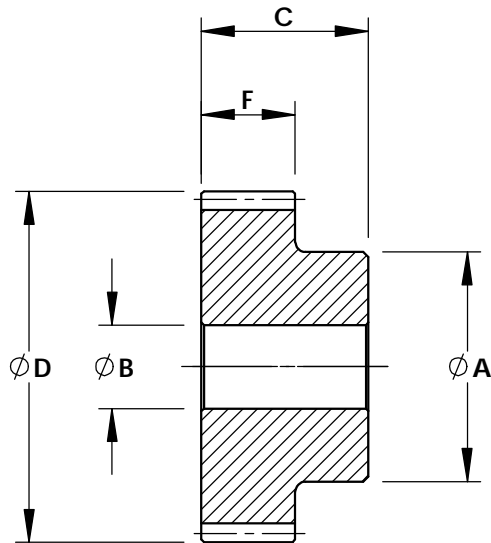
Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 8 DP



Face Width - 'F' = 1.1/2"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°

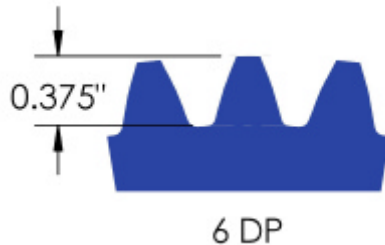


Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D8S	12	1.625"	1.1/4"	0.750"	2.1/4"	1.875"
14D8S	14	1.875"	1.1/2"	0.750"	2.1/4"	2.125"
15D8S	15	2.000"	1.5/8"	0.750"	2.1/4"	2.250"
16D8S	16	2.125"	1.3/4"	0.750"	2.1/4"	2.375"
18D8S	18	2.250"	1.7/8"	0.875"	2.1/4"	2.500"
20D8S	20	2.500"	2.1/8"	0.875"	2.3/8"	2.750"
24D8S	24	3.000"	2.5/8"	0.875"	2.3/8"	3.250"
28D8S	28	3.500"	3"	0.875"	2.3/8"	3.750"
30D8S	30	3.750"	3"	1.000"	2.3/8"	4.000"
32D8S	32	4.000"	3"	1.000"	2.3/8"	4.250"
36D8S	36	4.500"	3.1/4"	1.000"	2.3/8"	4.750"
40D8S	40	5.000"	4"	1.000"	2.1/2"	5.250"
44D8S	44	5.500"	4.1/4"	1.125"	2.1/2"	5.750"
48D8S	48	6.000"	4.1/2"	1.125"	2.1/2"	6.250"
56D8S	56	7.000"	5"	1.125"	2.1/2"	7.250"
60D8S	60	7.500"	5.1/2"	1.125"	2.1/2"	7.750"
64D8S	64	8.000"	6"	1.125"	2.1/2"	8.250"
72D8S	72	9.000"	6.1/2"	1.125"	2.1/2"	9.250"

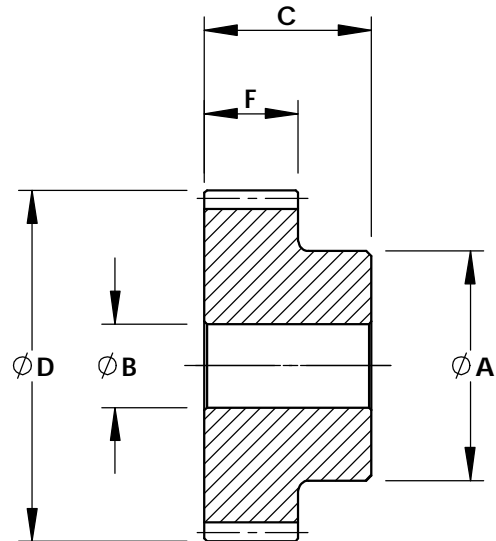
Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## STOCK SPUR GEARS PITCH - 6 DP



Face Width – 'F' = 2"  
Material - S1045 Steel  
Tooth Pressure Angle - 20°



Catalogue No.	No. Teeth	Pitch Dia.	A	B	C	D
12D6S	12	2.167"	1.3/4"	0.875"	2.7/8"	2.500"
14D6S	14	2.500"	2"	0.875"	2.7/8"	2.833"
15D6S	15	2.667"	2.1/4"	1.000"	2.7/8"	3.000"
16D6S	16	2.833"	2.3/8"	1.000"	2.7/8"	3.167"
18D6S	18	3.000"	2.1/2"	1.000"	2.7/8"	3.333"
19D6S	19	3.166"	2.5/8"	1.000"	2.7/8"	3.500"
20D6S	20	3.333"	2.3/4"	1.000"	2.7/8"	3.667"
24D6S	24	4.000"	3.1/4"	1.125"	2.7/8"	4.333"
30D6S	30	5.000"	3.3/4"	1.125"	2.7/8"	5.333"
36D6S	36	6.000"	4.3/4"	1.250"	3.1/4"	6.333"
40D6S	40	6.667"	5.1/4"	1.250"	3.1/4"	7.000"
44D6S	44	7.333"	5.1/2"	1.250"	3.1/4"	7.667"
45D6S	45	7.500"	6"	1.250"	3.1/4"	7.833"
48D6S	48	8.000"	6"	1.250"	3.1/2"	8.333"
54D6S	54	9.000"	6.3/4"	1.250"	3.1/2"	9.333"
60D6S	60	10.000"	7.1/2"	1.250"	3.1/2"	10.333"

Dimensions in Inches.

Note:- To give added strength and improved tooth action all pinions having 16 teeth or less have had their effective meshing pitch diameter increased by one addendum. Centre distance for any two gears is the sum of their pitch diameters as shown in the table, divided by two.

## Notes :

Full Size Teeth Of 20° Pressure Angle in Inch and Metric Sizes

