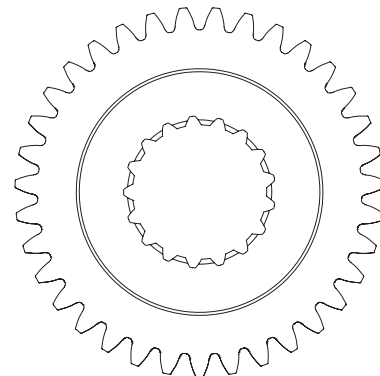
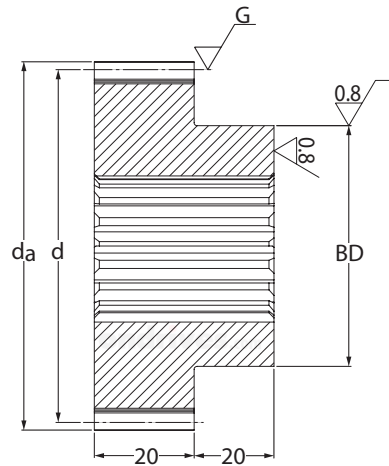


**UPSGS**  
**2.0m<sub>n</sub>**

# PRECISION GROUND GEARS

## 2.0 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967



DIN 3967 Tooth Thickness tol.

Slide-Fit when used with W external 8f

Part Number		No. of Teeth <i>z</i>	Ref. Dia. <i>d</i>	Tip Dia. <i>d<sub>a</sub></i>	DIN 5480 Splined Bore	Hub Dia. <i>BD</i>
Case Hardened 805M20	Stainless Steel 17-4PH					
UPSGS2.0-22H	UPSGS2.0-22PH	22	44	48	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-23H	UPSGS2.0-23PH	23	46	50	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-24H	UPSGS2.0-24PH	24	48	52	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-25H	UPSGS2.0-25PH	25	50	54	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-26H	UPSGS2.0-26PH	26	52	56	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-28H	UPSGS2.0-28PH	28	56	60	N20 x 1.25 x 30 x 14 x 9H	35
UPSGS2.0-29H	UPSGS2.0-29PH	29	58	62	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.0-30H	UPSGS2.0-30PH	30	60	64	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.0-32H	UPSGS2.0-32PH	32	64	68	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.0-35H	UPSGS2.0-35PH	35	70	74	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.0-38H	UPSGS2.0-38PH	38	76	80	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.0-40H	UPSGS2.0-40PH	40	80	84	N30 x 1.25 x 30 x 22 x 9H	55
UPSGS2.0-42H	UPSGS2.0-42PH	42	84	88	N30 x 1.25 x 30 x 22 x 9H	55
UPSGS2.0-45H	UPSGS2.0-45PH	45	90	94	N30 x 1.25 x 30 x 22 x 9H	55
UPSGS2.0-48H	UPSGS2.0-48PH	48	96	100	N30 x 1.25 x 30 x 22 x 9H	55
UPSGS2.0-50H	UPSGS2.0-50PH	50	100	104	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-52H	UPSGS2.0-52PH	52	104	108	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-55H	UPSGS2.0-55PH	55	110	114	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-58H	UPSGS2.0-58PH	58	116	120	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-60H	UPSGS2.0-60PH	60	120	124	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-62H	UPSGS2.0-62PH	62	124	128	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-65H	UPSGS2.0-65PH	65	130	134	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-68H	UPSGS2.0-68PH	68	136	140	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-70H	UPSGS2.0-70PH	70	140	144	N40 x 2.00 x 30 x 18 x 9H	65
UPSGS2.0-72H	UPSGS2.0-72PH	72	144	148	N40 x 2.00 x 30 x 18 x 9H	65

Other spline bore sizes available on request.

**UPSGS**  
**2.0m<sub>n</sub>**

# PRECISION GROUND GEARS

## 2.0 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967

Standard Part **UPSGS** **2.0** **50** **H**

Modified Part **UPSGS** **2.0** **50** **PH** **T**

UPSG - Precision Splined Ground Spur Gear  
Quality Grade 4f24 DIN 3961/3967  
Other Quality Grades available  
See Technical

m<sub>n</sub> Module - Cut with DIN 867 1.25/0.20/1.0  
Ref. Tooth Profile Topping WD = 2.25 x m<sub>n</sub>  
Ground flanks and root (spline not ground)

Number of Teeth **z**

**T** = 1 x Tapped hole    **2T** = 2 x Tapped holes  
**P** = 1 x Pin Hole      **PT** = 1 x Pin Hole through  
All threads metric as standard  
See Technical

**Material H**  
805M20 Case Hardened 58-62HRc  
**Material PH**  
17-4PH Condition H1025, 38-40HRc

DIN 5480 Splined Bores. Other splined bore sizes available on request.

Other numbers of teeth and tooth tolerances available on request.

Lead crowning (barrelling), profile crowning and other modifications available on request.

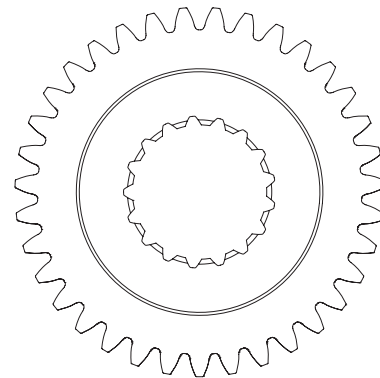
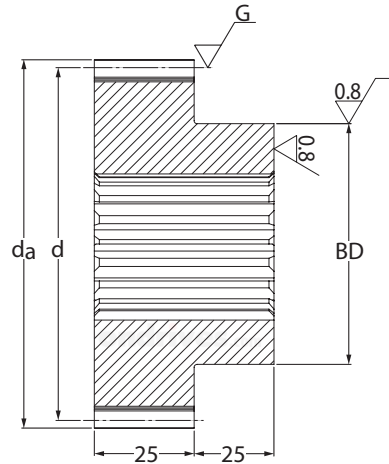
Part Number Case Hardened 805M20	Backlash (mm) j <sub>t,e</sub> (max) j <sub>t,i</sub> (min)	Inertia kgm <sup>2</sup>	Mass kg	Torque T <sub>2</sub> Nm n <sub>2</sub> 100 Rpm	Part Number Stainless Steel 17-4PH	Backlash (mm) j <sub>t,e</sub> (max) j <sub>t,i</sub> (min)	Inertia kgm <sup>2</sup>	Mass kg	Torque T <sub>2</sub> Nm n <sub>2</sub> 100 Rpm
UPSGS2.0-22H	0.077 - 0.019	7.69 x 10 <sup>-5</sup>	0.288	70.62	UPSGS2.0-22PH	0.077 - 0.019	7.86 x 10 <sup>-5</sup>	0.233	56.50
UPSGS2.0-23H	0.077 - 0.019	8.81 x 10 <sup>-5</sup>	0.310	78.88	UPSGS2.0-23PH	0.077 - 0.019	9.30 x 10 <sup>-5</sup>	0.257	63.10
UPSGS2.0-24H	0.077 - 0.019	1.01 x 10 <sup>-4</sup>	0.333	87.58	UPSGS2.0-24PH	0.077 - 0.019	1.09 x 10 <sup>-4</sup>	0.282	70.06
UPSGS2.0-25H	0.077 - 0.019	1.15 x 10 <sup>-4</sup>	0.357	96.77	UPSGS2.0-25PH	0.077 - 0.019	1.27 x 10 <sup>-4</sup>	0.307	77.42
UPSGS2.0-26H	0.099 - 0.027	1.32 x 10 <sup>-4</sup>	0.382	104.64	UPSGS2.0-26PH	0.099 - 0.027	1.48 x 10 <sup>-4</sup>	0.334	83.71
UPSGS2.0-28H	0.099 - 0.027	1.70 x 10 <sup>-4</sup>	0.435	125.25	UPSGS2.0-28PH	0.099 - 0.027	1.96 x 10 <sup>-4</sup>	0.391	100.20
UPSGS2.0-29H	0.099 - 0.027	2.26 x 10 <sup>-4</sup>	0.506	136.28	UPSGS2.0-29PH	0.099 - 0.027	2.20 x 10 <sup>-4</sup>	0.393	109.02
UPSGS2.0-30H	0.099 - 0.027	2.51 x 10 <sup>-4</sup>	0.535	147.80	UPSGS2.0-30PH	0.099 - 0.027	2.50 x 10 <sup>-4</sup>	0.424	118.24
UPSGS2.0-32H	0.099 - 0.027	3.09 x 10 <sup>-4</sup>	0.595	172.33	UPSGS2.0-32PH	0.099 - 0.027	3.21 x 10 <sup>-4</sup>	0.489	137.86
UPSGS2.0-35H	0.099 - 0.027	4.20 x 10 <sup>-4</sup>	0.694	211.85	UPSGS2.0-35PH	0.099 - 0.027	4.52 x 10 <sup>-4</sup>	0.593	169.48
UPSGS2.0-38H	0.099 - 0.027	5.63 x 10 <sup>-4</sup>	0.801	254.05	UPSGS2.0-38PH	0.099 - 0.027	6.20 x 10 <sup>-4</sup>	0.706	203.24
UPSGS2.0-40H	0.099 - 0.027	7.44 x 10 <sup>-4</sup>	0.933	283.90	UPSGS2.0-40PH	0.099 - 0.027	7.48 x 10 <sup>-4</sup>	0.752	227.12
UPSGS2.0-42H	0.101 - 0.025	8.78 x 10 <sup>-4</sup>	1.013	315.50	UPSGS2.0-42PH	0.101 - 0.025	9.04 x 10 <sup>-4</sup>	0.836	252.40
UPSGS2.0-45H	0.101 - 0.025	1.12 x 10 <sup>-3</sup>	1.141	356.05	UPSGS2.0-45PH	0.101 - 0.025	1.18 x 10 <sup>-3</sup>	0.970	284.84
UPSGS2.0-48H	0.101 - 0.025	1.42 x 10 <sup>-3</sup>	1.278	380.92	UPSGS2.0-48PH	0.101 - 0.025	1.52 x 10 <sup>-3</sup>	1.112	304.74
UPSGS2.0-50H	0.101 - 0.025	1.73 x 10 <sup>-3</sup>	1.350	397.33	UPSGS2.0-50PH	0.101 - 0.025	1.75 x 10 <sup>-3</sup>	1.126	317.86
UPSGS2.0-52H	0.101 - 0.025	1.99 x 10 <sup>-3</sup>	1.450	413.58	UPSGS2.0-52PH	0.101 - 0.025	2.04 x 10 <sup>-3</sup>	1.230	330.86
UPSGS2.0-55H	0.101 - 0.025	2.43 x 10 <sup>-3</sup>	1.607	437.68	UPSGS2.0-55PH	0.101 - 0.025	2.54 x 10 <sup>-3</sup>	1.393	350.14
UPSGS2.0-58H	0.101 - 0.025	2.96 x 10 <sup>-3</sup>	1.774	461.45	UPSGS2.0-58PH	0.101 - 0.025	3.13 x 10 <sup>-3</sup>	1.564	369.16
UPSGS2.0-60H	0.101 - 0.025	3.37 x 10 <sup>-3</sup>	1.890	477.10	UPSGS2.0-60PH	0.101 - 0.025	3.57 x 10 <sup>-3</sup>	1.684	381.68
UPSGS2.0-62H	0.103 - 0.023	3.81 x 10 <sup>-3</sup>	2.010	492.60	UPSGS2.0-62PH	0.103 - 0.023	4.06 x 10 <sup>-3</sup>	1.807	394.08
UPSGS2.0-65H	0.127 - 0.037	4.56 x 10 <sup>-3</sup>	2.197	515.27	UPSGS2.0-65PH	0.127 - 0.037	4.89 x 10 <sup>-3</sup>	1.999	412.22
UPSGS2.0-68H	0.127 - 0.037	5.43 x 10 <sup>-3</sup>	2.393	537.85	UPSGS2.0-68PH	0.127 - 0.037	5.83 x 10 <sup>-3</sup>	2.200	430.28
UPSGS2.0-70H	0.127 - 0.037	6.07 x 10 <sup>-3</sup>	2.528	552.75	UPSGS2.0-70PH	0.127 - 0.037	6.53 x 10 <sup>-3</sup>	2.339	442.20
UPSGS2.0-72H	0.127 - 0.037	6.77 x 10 <sup>-3</sup>	2.668	567.45	UPSGS2.0-72PH	0.127 - 0.037	7.29 x 10 <sup>-3</sup>	2.481	453.96

**UPSGS**  
**2.5m<sub>n</sub>**

# PRECISION GROUND GEARS

## 2.5 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967



DIN 3967 Tooth Thickness tol.

Slide-Fit when used with W external 8f

Part Number		No. of Teeth <i>z</i>	Ref. Dia. <i>d</i>	Tip Dia. <i>d<sub>a</sub></i>	DIN 5480 Splined Bore	Hub Dia. <i>BD</i>
Case Hardened 805M20	Stainless Steel 17-4PH					
UPSGS2.5-24H	UPSGS2.5-24PH	24	60.0	65.0	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.5-25H	UPSGS2.5-25PH	25	62.5	67.5	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.5-26H	UPSGS2.5-26PH	26	65.0	70.0	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.5-27H	UPSGS2.5-27PH	27	67.5	72.5	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.5-28H	UPSGS2.5-28PH	28	70.0	75.0	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS2.5-29H	UPSGS2.5-29PH	29	72.5	77.5	N35 x 2.00 x 30 x 16 x 9H	55
UPSGS2.5-30H	UPSGS2.5-30PH	30	75.0	80.0	N35 x 2.00 x 30 x 16 x 9H	55
UPSGS2.5-32H	UPSGS2.5-32PH	32	80.0	85.0	N35 x 2.00 x 30 x 16 x 9H	55
UPSGS2.5-35H	UPSGS2.5-35PH	35	87.5	92.5	N35 x 2.00 x 30 x 16 x 9H	55
UPSGS2.5-38H	UPSGS2.5-38PH	38	95.0	100.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-40H	UPSGS2.5-40PH	40	100.0	105.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-42H	UPSGS2.5-42PH	42	105.0	110.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-45H	UPSGS2.5-45PH	45	112.5	117.5	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-48H	UPSGS2.5-48PH	48	120.0	125.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-50H	UPSGS2.5-50PH	50	125.0	130.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-52H	UPSGS2.5-52PH	52	130.0	135.0	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-55H	UPSGS2.5-55PH	55	137.5	142.5	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS2.5-58H	UPSGS2.5-58PH	58	145.0	150.0	N40 x 2.00 x 30 x 18 x 9H	70

Other spline bore sizes available on request.

**UPSGS**  
**2.5m<sub>n</sub>**

# PRECISION GROUND GEARS

## 2.5 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967

Standard Part **UPSGS** **2.5** **50** **H**

Modified Part **UPSGS** **2.5** **50** **PH** **T**

UPSG - Precision Splined Ground Spur Gear  
Quality Grade 4f24 DIN 3961/3967  
Other Quality Grades available  
See Technical

m<sub>n</sub> Module - Cut with DIN 867 1.25/0.20/1.0  
Ref. Tooth Profile Topping WD = 2.25 x m<sub>n</sub>  
Ground flanks and root (spline not ground)

Number of Teeth **z**

**T** = 1 x Tapped hole    **2T** = 2 x Tapped holes  
**P** = 1 x Pin Hole      **PT** = 1 x Pin Hole through  
All threads metric as standard  
See Technical

**Material H**  
805M20 Case Hardened 58-62HRc  
**Material PH**  
17-4PH Condition H1025, 38-40HRc

DIN 5480 Splined Bores. Other splined bore sizes available on request.

Other numbers of teeth and tooth tolerances available on request.

Lead crowning (barrelling), profile crowning and other modifications available on request.

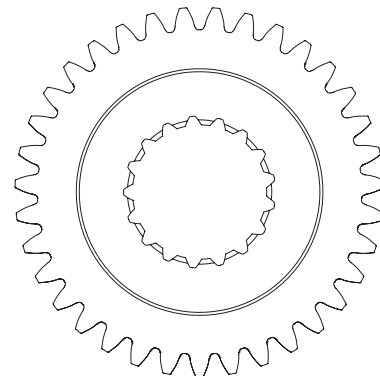
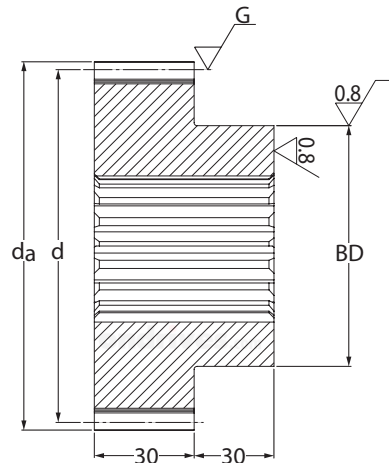
Part Number Case Hardened 805M20	Backlash (mm) <i>j<sub>t,e</sub>(max) j<sub>t,i</sub>(min)</i>	Inertia <i>kgm<sup>2</sup></i>	Mass <i>kg</i>	Torque <i>T<sub>2</sub> Nm</i> <i>n<sub>2</sub>100 Rpm</i>	Part Number Stainless Steel 17-4PH	Backlash (mm) <i>j<sub>t,e</sub>(max) j<sub>t,i</sub>(min)</i>	Inertia <i>kgm<sup>2</sup></i>	Mass <i>kg</i>	Torque <i>T<sub>2</sub> Nm</i> <i>n<sub>2</sub>100 Rpm</i>
UPSGS2.5-24H	0.099 - 0.027	3.16 x 10 <sup>-4</sup>	0.668	175.80	UPSGS2.5-24PH	0.099 - 0.027	3.33 x 10 <sup>-4</sup>	0.550	140.64
UPSGS2.5-25H	0.099 - 0.027	3.60 x 10 <sup>-4</sup>	0.714	194.20	UPSGS2.5-25PH	0.099 - 0.027	3.89 x 10 <sup>-4</sup>	0.601	155.36
UPSGS2.5-26H	0.099 - 0.027	4.10 x 10 <sup>-4</sup>	0.763	213.55	UPSGS2.5-26PH	0.099 - 0.027	4.51 x 10 <sup>-4</sup>	0.653	170.84
UPSGS2.5-27H	0.099 - 0.027	4.66 x 10 <sup>-4</sup>	0.814	233.80	UPSGS2.5-27PH	0.099 - 0.027	5.20 x 10 <sup>-4</sup>	0.707	187.04
UPSGS2.5-28H	0.099 - 0.027	5.28 x 10 <sup>-4</sup>	0.866	255.10	UPSGS2.5-28PH	0.099 - 0.027	5.97 x 10 <sup>-4</sup>	0.764	204.08
UPSGS2.5-29H	0.099 - 0.027	6.94 x 10 <sup>-4</sup>	1.075	277.30	UPSGS2.5-29PH	0.099 - 0.027	6.81 x 10 <sup>-4</sup>	0.822	221.84
UPSGS2.5-30H	0.099 - 0.027	7.71 x 10 <sup>-4</sup>	1.131	300.35	UPSGS2.5-30PH	0.099 - 0.027	7.75 x 10 <sup>-4</sup>	0.882	240.28
UPSGS2.5-32H	0.099 - 0.027	9.49 x 10 <sup>-4</sup>	1.250	347.00	UPSGS2.5-32PH	0.099 - 0.027	9.89 x 10 <sup>-4</sup>	1.008	277.60
UPSGS2.5-35H	0.101 - 0.025	1.29 x 10 <sup>-3</sup>	1.442	422.00	UPSGS2.5-35PH	0.101 - 0.025	1.39 x 10 <sup>-3</sup>	1.212	337.60
UPSGS2.5-38H	0.101 - 0.025	1.92 x 10 <sup>-3</sup>	1.640	504.50	UPSGS2.5-38PH	0.101 - 0.025	1.86 x 10 <sup>-3</sup>	1.283	403.60
UPSGS2.5-40H	0.101 - 0.025	2.28 x 10 <sup>-3</sup>	1.789	563.70	UPSGS2.5-40PH	0.101 - 0.025	2.27 x 10 <sup>-3</sup>	1.440	450.96
UPSGS2.5-42H	0.101 - 0.025	2.69 x 10 <sup>-3</sup>	1.946	626.30	UPSGS2.5-42PH	0.101 - 0.025	2.75 x 10 <sup>-3</sup>	1.604	501.04
UPSGS2.5-45H	0.101 - 0.025	3.43 x 10 <sup>-3</sup>	2.196	692.40	UPSGS2.5-45PH	0.101 - 0.025	3.59 x 10 <sup>-3</sup>	1.865	553.92
UPSGS2.5-48H	0.101 - 0.025	4.33 x 10 <sup>-3</sup>	2.463	740.35	UPSGS2.5-48PH	0.101 - 0.025	4.61 x 10 <sup>-3</sup>	2.142	592.28
UPSGS2.5-50H	0.103 - 0.023	5.03 x 10 <sup>-3</sup>	2.651	771.90	UPSGS2.5-50PH	0.103 - 0.023	5.40 x 10 <sup>-3</sup>	2.337	617.52
UPSGS2.5-52H	0.127 - 0.037	5.82 x 10 <sup>-3</sup>	2.847	803.20	UPSGS2.5-52PH	0.127 - 0.037	6.29 x 10 <sup>-3</sup>	2.540	642.56
UPSGS2.5-55H	0.127 - 0.037	7.19 x 10 <sup>-3</sup>	3.155	849.46	UPSGS2.5-55PH	0.127 - 0.037	7.82 x 10 <sup>-3</sup>	2.858	679.57
UPSGS2.5-58H	0.127 - 0.037	8.90 x 10 <sup>-3</sup>	3.850	894.95	UPSGS2.5-58PH	0.127 - 0.037	9.66 x 10 <sup>-3</sup>	3.376	715.96

**UPSGS**  
**3.0m<sub>n</sub>**

# PRECISION GROUND GEARS

## 3.0 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967



DIN 3967 Tooth Thickness tol.

Slide-Fit when used with W external 8f

Part Number		No. of Teeth <i>z</i>	Ref. Dia. <i>d</i>	Tip Dia. <i>d<sub>a</sub></i>	DIN 5480 Splined Bore	Hub Dia. <i>BD</i>
Case Hardened 805M20	Stainless Steel 17-4PH					
UPSGS3.0-20H	UPSGS3.0-20PH	20	60	66	N25 x 1.25 x 30 x 18 x 9H	45
UPSGS3.0-22H	UPSGS3.0-22PH	22	66	72	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-23H	UPSGS3.0-23PH	23	69	75	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-24H	UPSGS3.0-24PH	24	72	78	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-25H	UPSGS3.0-25PH	25	75	81	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-26H	UPSGS3.0-26PH	26	78	84	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-27H	UPSGS3.0-27PH	27	81	87	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-28H	UPSGS3.0-28PH	28	84	90	N32 x 2.00 x 30 x 14 x 9H	55
UPSGS3.0-29H	UPSGS3.0-29PH	29	87	93	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-30H	UPSGS3.0-30PH	30	90	96	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-32H	UPSGS3.0-32PH	32	96	102	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-35H	UPSGS3.0-35PH	35	105	111	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-38H	UPSGS3.0-38PH	38	114	120	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-40H	UPSGS3.0-40PH	40	120	126	N40 x 2.00 x 30 x 18 x 9H	70
UPSGS3.0-42H	UPSGS3.0-42PH	42	126	132	N40 x 2.00 x 30 x 18 x 9H	80
UPSGS3.0-45H	UPSGS3.0-45PH	45	135	141	N40 x 2.00 x 30 x 18 x 9H	80
UPSGS3.0-48H	UPSGS3.0-48PH	48	144	150	N40 x 2.00 x 30 x 18 x 9H	80

Other spline bore sizes available on request.

**UPSGS**  
**3.0m<sub>n</sub>**

# PRECISION GROUND GEARS

## 3.0 Module Splined Ground Spur Gear α 20° PA

Quality Grade 4f24 DIN 3961/3967

Standard Part **UPSGS** **3.0** **40** **H**

Modified Part **UPSGS** **3.0** **40** **PH** **T**

UPSG - Precision Splined Ground Spur Gear  
Quality Grade 4f24 DIN 3961/3967  
Other Quality Grades available  
See Technical

m<sub>n</sub> Module - Cut with DIN 867 1.25/0.20/1.0  
Ref. Tooth Profile Topping WD = 2.25 x m<sub>n</sub>  
Ground flanks and root (spline not ground)

Number of Teeth **z**

**T** = 1 x Tapped hole    **2T** = 2 x Tapped holes  
**P** = 1 x Pin Hole      **PT** = 1 x Pin Hole through  
All threads metric as standard  
See Technical

**Material H**  
805M20 Case Hardened 58-62HRc  
**Material PH**  
17-4PH Condition H1025, 38-40HRc

DIN 5480 Splined Bores. Other splined bore sizes available on request.

Other numbers of teeth and tooth tolerances available on request.

Lead crowning (barrelling), profile crowning and other modifications available on request.

Part Number Case Hardened 805M20	Backlash (mm) <i>j<sub>t,e</sub>(max) j<sub>t,i</sub>(min)</i>	Inertia <i>kgm<sup>2</sup></i>	Mass <i>kg</i>	Torque <i>T<sub>2</sub> Nm</i> <i>n<sub>2</sub>100 Rpm</i>	Part Number Stainless Steel 17-4PH	Backlash (mm) <i>j<sub>t,e</sub>(max) j<sub>t,i</sub>(min)</i>	Inertia <i>kgm<sup>2</sup></i>	Mass <i>kg</i>	Torque <i>T<sub>2</sub> Nm</i> <i>n<sub>2</sub>100 Rpm</i>
UPSGS3.0-20H	0.099 - 0.027	3.84 x 10 <sup>-4</sup>	0.801	203.12	UPSGS3.0-20PH	0.099 - 0.027	4.26 x 10 <sup>-4</sup>	0.684	162.50
UPSGS3.0-22H	0.099 - 0.027	6.09 x 10 <sup>-4</sup>	0.977	257.19	UPSGS3.0-22PH	0.099 - 0.027	5.92 x 10 <sup>-4</sup>	0.763	205.75
UPSGS3.0-23H	0.099 - 0.027	6.94 x 10 <sup>-4</sup>	1.051	286.65	UPSGS3.0-23PH	0.099 - 0.027	7.01 x 10 <sup>-4</sup>	0.843	229.32
UPSGS3.0-24H	0.099 - 0.027	7.91 x 10 <sup>-4</sup>	1.128	317.80	UPSGS3.0-24PH	0.099 - 0.027	8.24 x 10 <sup>-4</sup>	0.928	254.24
UPSGS3.0-25H	0.099 - 0.027	9.01 x 10 <sup>-4</sup>	1.209	350.60	UPSGS3.0-25PH	0.099 - 0.027	9.62 x 10 <sup>-4</sup>	1.015	280.48
UPSGS3.0-26H	0.099 - 0.027	1.02 x 10 <sup>-3</sup>	1.293	385.05	UPSGS3.0-26PH	0.099 - 0.027	1.12 x 10 <sup>-3</sup>	1.106	308.04
UPSGS3.0-27H	0.101 - 0.025	1.16 x 10 <sup>-3</sup>	1.380	418.70	UPSGS3.0-27PH	0.101 - 0.025	1.29 x 10 <sup>-3</sup>	1.200	334.96
UPSGS3.0-28H	0.101 - 0.025	1.32 x 10 <sup>-3</sup>	1.471	453.75	UPSGS3.0-28PH	0.101 - 0.025	1.48 x 10 <sup>-3</sup>	1.297	363.00
UPSGS3.0-29H	0.101 - 0.025	1.76 x 10 <sup>-3</sup>	1.699	490.20	UPSGS3.0-29PH	0.101 - 0.025	1.66 x 10 <sup>-3</sup>	1.292	392.16
UPSGS3.0-30H	0.101 - 0.025	1.95 x 10 <sup>-3</sup>	1.796	528.22	UPSGS3.0-30PH	0.101 - 0.025	1.89 x 10 <sup>-3</sup>	1.396	422.58
UPSGS3.0-32H	0.101 - 0.025	2.40 x 10 <sup>-3</sup>	2.001	608.50	UPSGS3.0-32PH	0.101 - 0.025	2.42 x 10 <sup>-3</sup>	1.614	486.80
UPSGS3.0-35H	0.101 - 0.025	3.24 x 10 <sup>-3</sup>	2.333	739.80	UPSGS3.0-35PH	0.101 - 0.025	3.42 x 10 <sup>-3</sup>	1.965	591.84
UPSGS3.0-38H	0.101 - 0.025	4.32 x 10 <sup>-3</sup>	2.695	884.40	UPSGS3.0-38PH	0.101 - 0.025	4.69 x 10 <sup>-3</sup>	2.346	707.52
UPSGS3.0-40H	0.101 - 0.025	5.20 x 10 <sup>-3</sup>	2.953	988.00	UPSGS3.0-40PH	0.101 - 0.025	5.72 x 10 <sup>-3</sup>	2.617	790.40
UPSGS3.0-42H	0.127 - 0.037	6.62 x 10 <sup>-3</sup>	3.502	1,097.50	UPSGS3.0-42PH	0.127 - 0.037	6.90 x 10 <sup>-3</sup>	2.901	878.00
UPSGS3.0-45H	0.127 - 0.037	8.45 x 10 <sup>-3</sup>	3.934	1,192.45	UPSGS3.0-45PH	0.127 - 0.037	9.00 x 10 <sup>-3</sup>	3.351	953.96
UPSGS3.0-48H	0.127 - 0.037	1.07 x 10 <sup>-2</sup>	4.396	1,274.50	UPSGS3.0-48PH	0.127 - 0.037	1.15 x 10 <sup>-2</sup>	3.831	1,019.60