



Spline Nut

THK General Catalog

B Product Specifications

Dimensional Drawing, Dimensional Table

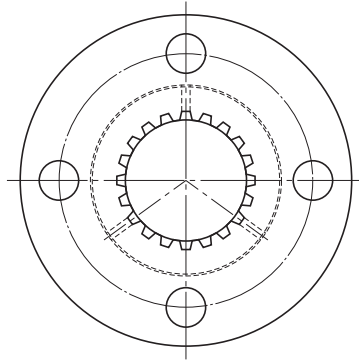
Model DPM	B-412
Model DP	B-414

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* Please see the separate "A Technical Descriptions of the Products".

Model DPM



Spline Nut Model No.	Outer dimensions			Spline nut dimensions						
	Outer diameter		Length L	Flange diameter D ₁	H	B	PCD	r	F	d
	D	Tolerance h9								
DPM 1220	22	0	20	44	6	5.4	31	1.5	7	1.5
DPM 1230			30							
DPM 1520	22	-0.052	20	44	6	5.4	31	1.5	7	1.5
DPM 1530			30							
DPM 1723	28	0	23	51	7	6.6	38	1.5	8	1.5
DPM 1735			35							
DPM 2028	32	0	28	56	7	6.6	42	1.5	10.5	1.5
DPM 2040			40							
DPM 2536	36	-0.062	36	61	8	6.6	47	2	14	2
DPM 2550			50							
DPM 3040	44	0	40	76	10	9	58	2	15	2
DPM 3056			56							
DPM 3544	52	0	44	84	10	9	66	2.5	17	2.5
DPM 3560			60							
DPM 4050	58	0	50	98	12	11	76	2.5	19	3
DPM 4068			68							
DPM 4555	64	-0.074	55	104	12	11	80	2.5	21.5	3
DPM 4575			75							
DPM 5060	68	0	60	109	12	11	85	2.5	24	3.5
DPM 5080			80							

Note) The dynamic permissible torque (T) indicates the torque at which the contact surface pressure on the spline teeth is 9.8 N/mm².
Clearance in the rotational direction: $\alpha \leq 20'$ MAX

Model number coding

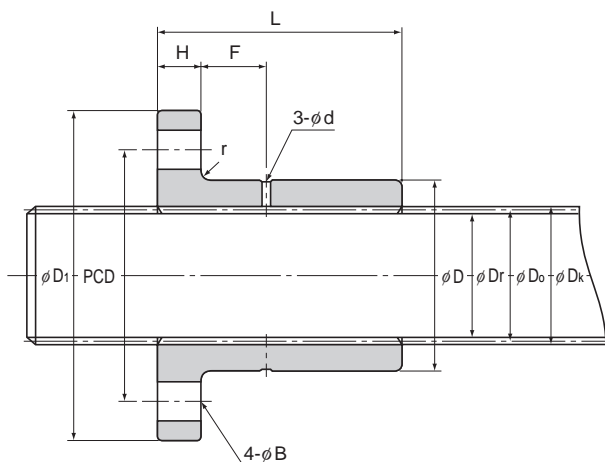
Combination of spline nut and spline shaft

2 DPM2040 +360L

Overall spline shaft length (in mm)

Model No. of spline nut

Number of spline nuts used on the same shaft



Unit: mm

	Spline shaft Model No.	Spline details				Standard shaft length	Maximum shaft length	Dynamic permissible torque T_{Note} N-m	Mass	
		Pitch diameter D_o	Major diameter D_s	Minor diameter D_r	Number of teeth Z				Spline Nut g	Spline Shaft kg/m
	SS 12	12	12.8	10.9	16	1500	1500	17.6 26.5	80 90	0.9
	SS 15	15	16.1	13.5	16	1500	2000	30.4 46.1	70 80	1.4
	SS 17	17	18.2	15.4	16	1500	2000	43.1 65.7	120 150	1.7
	SS 20	20	21.5	18.3	16	1500	3200	70.6 100	160 200	2.5
	SS 25	25	26.9	22.6	16	1500	3200	152 211	220 270	3.8
	SS 30	30	31.8	28.2	20	1500	3200	212 297	400 480	5.5
	SS 35	35	37.1	32.8	20	1500	3200	325 443	560 670	7.5
	SS 40	40	42.4	37.5	20	1500	3200	480 673	830 970	9.8
	SS 45	45	47.7	42.1	20	1500	3200	680 927	980 1110	12.4
	SS 50	50	53	46.8	20	1500	3200	910 1220	1080 1290	15.4

Model number coding

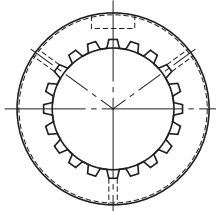
Spline shaft

SS20 +1500L

Overall spline shaft length (in mm)

Model number of spline shaft

Model DP



Spline Nut Model No.	Outer dimensions			Spline nut dimensions					
	Outer diameter		L 0 -0.3	Keyway dimensions				d	r
	D	Tolerance h9		b	Tolerance N9	t	ℓ		
DP 12	22	0 -0.052	22	4	0 -0.030	2	16	1.5	1
DP 15	22		22	4		2	16	1.5	1
DP 17	28		26	5		2.5	18	1.5	1
DP 20	32	0 -0.062	31	7	0 -0.036	2.5	22	1.5	1
DP 25	36		40	7		2.5	26	2	1
DP 30	44		45	10		4	32	2	1.5
DP 35	52	0 -0.074	49	12	0 -0.043	4.5	40	2.5	1.5
DP 40	58		57	15		5	42	3	1.5
DP 45	64		62	15		5	48	3	1.5
DP 50	68		67	15		5	52	3.5	1.5

Note) The dynamic permissible torque (T) indicates the torque at which the contact surface pressure on the spline teeth is 9.8 N/mm².

Clearance in the rotational direction: $\alpha \leq 20'$ MAX

Model number coding

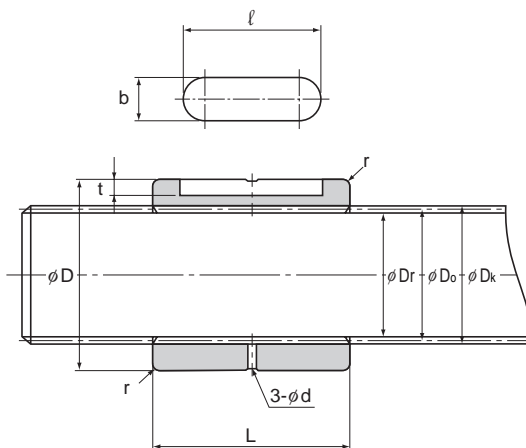
Combination of spline nut and spline shaft

2 DP20 +360L

Overall spline shaft length (in mm)

Model No. of spline nut

Number of spline nuts used on the same shaft



Unit: mm

	Spline shaft	Spline details				Standard shaft length	Maximum shaft length	Dynamic permissible torque T_{Note} N-m	Mass	
		Pitch diameter D_o	Major diameter D_s	Minor diameter D_r	Number of teeth Z				Spline Nut g	Spline Shaft kg/m
	Model No.									
	SS 12	12	12.8	10.9	16	1500	1500	19.6	40	0.9
	SS 15	15	16.1	13.5	16	1500	2000	33.3	30	1.4
	SS 17	17	18.2	15.4	16	1500	2000	48	65	1.7
	SS 20	20	21.5	18.3	16	1500	3200	77.5	100	2.5
	SS 25	25	26.9	22.6	16	1500	3200	169	135	3.8
	SS 30	30	31.8	28.2	20	1500	3200	238	230	5.5
	SS 35	35	37.1	32.8	20	1500	3200	362	360	7.5
	SS 40	40	42.4	37.5	20	1500	3200	547	510	9.8
	SS 45	45	47.7	42.1	20	1500	3200	767	640	12.4
	SS 50	50	53	46.8	20	1500	3200	1020	710	15.4

Model number coding

Spline shaft

SS20 +1500L

Overall spline shaft length (in mm)

Model number of spline shaft

