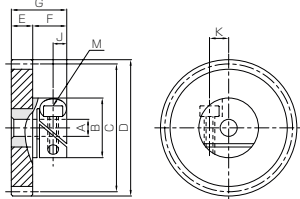




Specifications	
Precision grade	JIS grade N10 (JIS B1702-1:1998) * JIS grade 6 (JIS B1702:1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	Acetal with SUS303 core
Heat treatment	—
Tooth hardness	(110 ~ 120HRR)

\* The gear grade listed is the value before clamping. The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.



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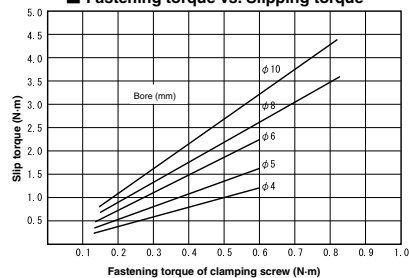
Catalog No.	Module	No. of teeth	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width	Total length	Cap screw dimensions			
				A <sub>H7</sub>	B						C	D	E	F
<b>DSL0.5-28</b>	m0.5	28	S1	5	14	14	15	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-30</b>		30	S1	5	14	15	16	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-32</b>		32	S1	5	14	16	17	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-36</b>		36	S1	5	14	18	19	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-40</b>		40	S1	5	14	20	21	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-45</b>		45	S1	5	14	22.5	23.5	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-48</b>		48	S1	5	14	24	25	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-50</b>		50	S1	5	14	25	26	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-56</b>		56	S1	5	14	28	29	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-60</b>		60	S1	5	14	30	31	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-64</b>		64	S1	5	14	32	33	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-70</b>		70	S1	5	14	35	36	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.5-72</b>	72	S1	5	14	36	37	5	8.5	13.5	M2.5	3.3	4.4		
<b>DSL0.5-75</b>	75	S1	5	14	37.5	38.5	5	8.5	13.5	M2.5	3.3	4.4		
<b>DSL0.5-80</b>	80	S1	5	14	40	41	5	8.5	13.5	M2.5	3.3	4.4		
<b>DSL0.5-90</b>	m0.8	90	S1	8	17	45	46	5	9.8	14.8	M3	4.3	5.9	
<b>DSL0.5-96</b>		96	S1	8	17	48	49	5	9.8	14.8	M3	4.3	5.9	
<b>DSL0.5-100</b>		100	S1	8	17	50	51	5	9.8	14.8	M3	4.3	5.9	
<b>DSL0.5-120</b>		120	S1	8	17	60	61	5	9.8	14.8	M3	4.3	5.9	
<b>DSL0.8-20</b>	m0.8	20	S1	5	14	16	17.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-24</b>		24	S1	5	14	19.2	20.8	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-25</b>		25	S1	5	14	20	21.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-28</b>		28	S1	5	14	22.4	24	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-30</b>		30	S1	5	14	24	25.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-32</b>		32	S1	5	14	25.6	27.2	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-36</b>		36	S1	5	14	28.8	30.4	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-40</b>		40	S1	5	14	32	33.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-45</b>		45	S1	5	14	36	37.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-48</b>		48	S1	5	14	38.4	40	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-50</b>		50	S1	5	14	40	41.6	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-56</b>		56	S1	5	14	44.8	46.4	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL0.8-60</b>	60	S1	8	17	48	49.6	5	9.8	14.8	M3	4.3	5.9		
<b>DSL0.8-72</b>	72	S1	8	17	57.6	59.2	5	9.8	14.8	M3	4.3	5.9		
<b>DSL0.8-80</b>	80	S1	8	17	64	65.6	5	9.8	14.8	M3	4.3	5.9		
<b>DSL0.8-90</b>	90	S1	8	17	72	73.6	5	9.8	14.8	M3	4.3	5.9		
<b>DSL0.8-100</b>	100	S1	8	17	80	81.6	5	9.8	14.8	M3	4.3	5.9		

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 31 for more details.
  - The backlash values shown in the table are the theoretical values for a pair of identical gears in mesh.
  - Holding strength between the teeth (acetal) and the core (SUS303) is 2.9N · m for all DSL products. Please consider holding strength when selecting products.
  - Fairloc Hub Gears are attached to the shaft by a friction coupling. Recommended shaft tolerances are g6, h6 and h7. Torque slippage should be considered when making a selection.
  - Do not tighten the clamping screw without inserting a shaft, or the bore will be permanently deformed and will not accept a shaft.

Fastening torque vs. Slipping torque

The slipping torque which is dependent on the fastening torque can sometimes be less than the gear strength. Please use caution in selecting. The chart on the right shows the relationship between the slipping torque and the fastening torque.

Fastening torque vs. Slipping torque



\* Data supplied by Designtronics Inc.

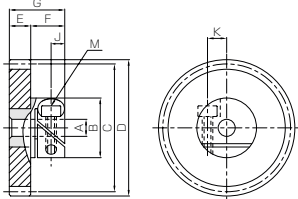
Allowable torque (N·m)	Allowable torque (kgf·m)	Ref. Slipping torque / Recommended fastening torque (N·m)	Backlash (mm)	Weight (kg)	Catalog No.
0.39	0.04	1.60 / 0.60	0~0.10	10.8	<b>DSL0.5-28</b>
0.43	0.044	1.60 / 0.60	0~0.10	11.0	<b>DSL0.5-30</b>
0.46	0.047	1.60 / 0.60	0~0.10	11.2	<b>DSL0.5-32</b>
0.54	0.055	1.60 / 0.60	0~0.10	11.5	<b>DSL0.5-36</b>
0.62	0.063	1.60 / 0.60	0~0.10	12.0	<b>DSL0.5-40</b>
0.71	0.073	1.60 / 0.60	0~0.10	12.5	<b>DSL0.5-45</b>
0.78	0.079	1.60 / 0.60	0~0.10	12.9	<b>DSL0.5-48</b>
0.82	0.083	1.60 / 0.60	0~0.10	13.2	<b>DSL0.5-50</b>
0.93	0.095	1.60 / 0.60	0~0.10	14.1	<b>DSL0.5-56</b>
1.01	0.10	1.60 / 0.60	0~0.10	14.7	<b>DSL0.5-60</b>
1.08	0.11	1.60 / 0.60	0~0.10	15.4	<b>DSL0.5-64</b>
1.20	0.12	1.60 / 0.60	0~0.10	16.5	<b>DSL0.5-70</b>
1.24	0.13	1.60 / 0.60	0~0.10	16.9	<b>DSL0.5-72</b>
1.29	0.13	1.60 / 0.60	0~0.10	17.5	<b>DSL0.5-75</b>
1.39	0.14	1.60 / 0.60	0~0.10	18.6	<b>DSL0.5-80</b>
1.58	0.16	3.45 / 0.80	0~0.10	23.9	<b>DSL0.5-90</b>
1.70	0.17	3.45 / 0.80	0~0.10	25.5	<b>DSL0.5-96</b>
1.78	0.18	3.45 / 0.80	0~0.10	26.6	<b>DSL0.5-100</b>
2.15	0.22	3.45 / 0.80	0~0.10	32.6	<b>DSL0.5-120</b>
0.58	0.059	1.60 / 0.60	0~0.10	11.2	<b>DSL0.8-20</b>
0.73	0.075	1.60 / 0.60	0~0.10	11.8	<b>DSL0.8-24</b>
0.78	0.079	1.60 / 0.60	0~0.10	12.0	<b>DSL0.8-25</b>
0.89	0.091	1.60 / 0.60	0~0.10	12.5	<b>DSL0.8-28</b>
0.97	0.099	1.60 / 0.60	0~0.10	12.9	<b>DSL0.8-30</b>
1.06	0.11	1.60 / 0.60	0~0.10	13.4	<b>DSL0.8-32</b>
1.23	0.13	1.60 / 0.60	0~0.10	14.3	<b>DSL0.8-36</b>
1.41	0.14	1.60 / 0.60	0~0.10	15.4	<b>DSL0.8-40</b>
1.62	0.17	1.60 / 0.60	0~0.10	16.9	<b>DSL0.8-45</b>
1.76	0.18	1.60 / 0.60	0~0.10	17.9	<b>DSL0.8-48</b>
1.85	0.19	1.60 / 0.60	0~0.10	18.6	<b>DSL0.8-50</b>
2.11	0.22	1.60 / 0.60	0~0.10	20.8	<b>DSL0.8-56</b>
2.28	0.23	3.45 / 0.80	0~0.10	25.5	<b>DSL0.8-60</b>
2.8	0.29	3.45 / 0.80	0~0.10	31.1	<b>DSL0.8-72</b>
3.15	0.32	3.45 / 0.80	0~0.10	35.4	<b>DSL0.8-80</b>
3.58	0.37	3.45 / 0.80	0~0.10	41.4	<b>DSL0.8-90</b>
4.03	0.41	3.45 / 0.80	0~0.10	48.1	<b>DSL0.8-100</b>

[Caution on Secondary Operations] ① Perform secondary operations carefully as to not distort the groove for clamping.



Specifications	
Precision grade	JIS grade H10 (JIS B1702-1:1998) * JIS grade 6 (JIS B1702:1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	Acetal with SUS303 core
Heat treatment	—
Tooth hardness	(110 ~ 120HRR)

\* The gear grade listed is the value before clamping. The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.



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Catalog No.	Module	No. of teeth	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width	Total length	Cap screw dimensions			
				A <sub>H7</sub>	B						C	D	E	F
<b>DSL1-15</b>	m1	15	S1	5	14	15	17	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-16</b>		16	S1	5	14	16	18	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-18</b>		18	S1	5	14	18	20	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-20</b>		20	S1	5	14	20	22	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-24</b>		24	S1	5	14	24	26	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-25</b>		25	S1	5	14	25	27	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-28</b>		28	S1	5	14	28	30	5	8.5	13.5	M2.5	3.3	4.4	
<b>DSL1-30</b>		30	S1	8	17	30	32	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-32</b>		32	S1	8	17	32	34	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-35</b>		35	S1	8	17	35	37	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-36</b>		36	S1	8	17	36	38	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-40</b>		40	S1	8	17	40	42	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-45</b>		45	S1	8	17	45	47	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-48</b>		48	S1	8	17	48	50	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-50</b>		50	S1	8	17	50	52	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-56</b>		56	S1	8	17	56	58	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-60</b>		60	S1	8	17	60	62	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-64</b>		64	S1	8	17	64	66	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-70</b>		70	S1	8	17	70	72	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-72</b>		72	S1	8	17	72	74	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-80</b>		80	S1	8	17	80	82	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-90</b>		90	S1	8	17	90	92	5	9.8	14.8	M3	4.3	5.9	
<b>DSL1-100</b>		100	S1	8	17	100	102	5	9.8	14.8	M3	4.3	5.9	

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 31 for more details.
  - The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.
  - Holding strength between the teeth (acetal) and the core (SUS303) is 2.9N · m for all DSL products. Please consider holding strength when selecting products.
  - Fairloc Hub Gears are attached to the shaft by a friction coupling. Recommended shaft tolerances are g6, h6 and h7. Torque slippage should be considered when making a selection.
  - Do not tighten the clamping screw without inserting a shaft, or the bore will be permanently deformed and will not accept a shaft.

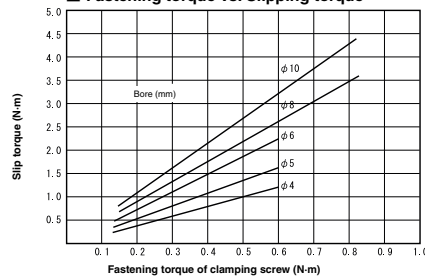
Allowable torque (N·m)	Allowable torque (kgf·m)	Ref. Slipping torque / Recommended fastening torque (N·m)	Backlash (mm)	Weight (kg)	Catalog No.
0.53	0.054	1.60 / 0.60	0~0.10	11.0	<b>DSL1-15</b>
0.59	0.06	1.60 / 0.60	0~0.10	11.2	<b>DSL1-16</b>
0.69	0.07	1.60 / 0.60	0~0.10	11.5	<b>DSL1-18</b>
0.80	0.081	1.60 / 0.60	0~0.10	12.0	<b>DSL1-20</b>
1.00	0.10	1.60 / 0.60	0~0.10	12.9	<b>DSL1-24</b>
1.06	0.11	1.60 / 0.60	0~0.10	13.2	<b>DSL1-25</b>
1.22	0.12	1.60 / 0.60	0~0.10	14.1	<b>DSL1-28</b>
1.33	0.14	3.45 / 0.80	0~0.10	17.7	<b>DSL1-30</b>
1.44	0.15	3.45 / 0.80	0~0.10	18.4	<b>DSL1-32</b>
1.62	0.17	3.45 / 0.80	0~0.10	19.5	<b>DSL1-35</b>
1.68	0.17	3.45 / 0.80	0~0.10	19.9	<b>DSL1-36</b>
1.92	0.20	3.45 / 0.80	0~0.10	21.6	<b>DSL1-40</b>
2.22	0.23	3.45 / 0.80	0~0.10	23.9	<b>DSL1-45</b>
2.41	0.25	3.45 / 0.80	0~0.10	25.5	<b>DSL1-48</b>
2.53	0.26	3.45 / 0.80	0~0.10	26.6	<b>DSL1-50</b>
2.88	0.29	3.45 / 0.80	0~0.10	30.1	<b>DSL1-56</b>
3.12	0.32	3.45 / 0.80	0~0.10	32.6	<b>DSL1-60</b>
3.35	0.34	3.45 / 0.80	0~0.10	35.4	<b>DSL1-64</b>
3.71	0.38	3.45 / 0.80	0~0.10	39.8	<b>DSL1-70</b>
3.83	0.39	3.45 / 0.80	0~0.10	41.4	<b>DSL1-72</b>
4.30	0.44	3.45 / 0.80	0~0.10	48.1	<b>DSL1-80</b>
4.89	0.50	3.45 / 0.80	0~0.10	57.6	<b>DSL1-90</b>
5.49	0.56	3.45 / 0.80	0~0.10	68.1	<b>DSL1-100</b>

- [Caution on Secondary Operations]
- Perform secondary operations carefully as to not distort the groove for clamping.

### Fastening torque vs. Slipping torque

The slipping torque which is dependent on the fastening torque can sometimes be less than the gear strength. Please use caution in selecting. The chart on the right shows the relationship between the slipping torque and the fastening torque.

### Fastening torque vs. Slipping torque



※ Data supplied by Designtronics Inc.