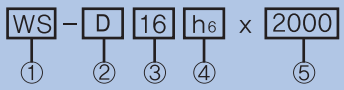
if) When both ends are fixed;
According to condition P = 100N
ℓ=1800(mm)
C = 3.44 x 10^{-13} (1/N · mm^2)
from the table, Therefore

$$\delta max = \frac{1}{4} P\ell^3 C = 0.05\ (mm)$$

5 Part Number of LM Shaft

1. Type number format I (Case hardened & ground shaft)



① Type of LM Shaft

Case Hardened and Ground Shaft	WS	Conventional shaft to be used with Ball Bushing. - Material : High Carbon Steel (KS SM55C, JIS S55C) for LM Shaft, KS STB-2(JIS SUJ-2)
	WAS	The exclusive usage for Ball Bushing in use for high anti-corrosive applications under the oxidizing atmosphere such as water, vapor, chemical, food process machinery, semiconductor and medical equipments. - Material : KS STS440C(JIS SUS440C)
	WCS	Hard Chromium plated shaft providing a cost reduction in comparison to the stainless steel shaft with the same function as anti-corrosion. - Material : High Carbon Steel KS SM55C(JIS S55C) for LM Shaft, KS STB-2(JIS SUJ-2)

② Machining type and number (In case of standard shaft or simple cutting shaft, This is not necessary to be indicated)

D	Manufacture refer to drawing

③Diameter (㎜), ④Diameter Tolerance (㎛), ⑤Length(㎜)

DIA (㎜)	Diameter tolerance (㎛)			Standard stroked length L (㎜)						
	g6	h5	h6	300	500	1000	1200	1500	2000	3000
3	−2 ~ −8	0 ~ −4	0 ~ −6							
4	−4 ~ −12	0 ~ −5	0 ~ −8							
5										
6										
8	−5 ~ −14	0 ~ −6	0 ~ −9							
10										
12	−6 ~ −17	0 ~ −8	0 ~ −11							
13										
16										
20	−7 ~ −20	0 ~ −9	0 ~ −13							
25										
30										
35	−9 ~ −25	0 ~ −11	0 ~ −16							
40										
50										
60	−10 ~ −29	0 ~ −13	0 ~ −19							
80										

Note 1) Max. Length : 6000mm
2) Max. Diameter : Ø300mm