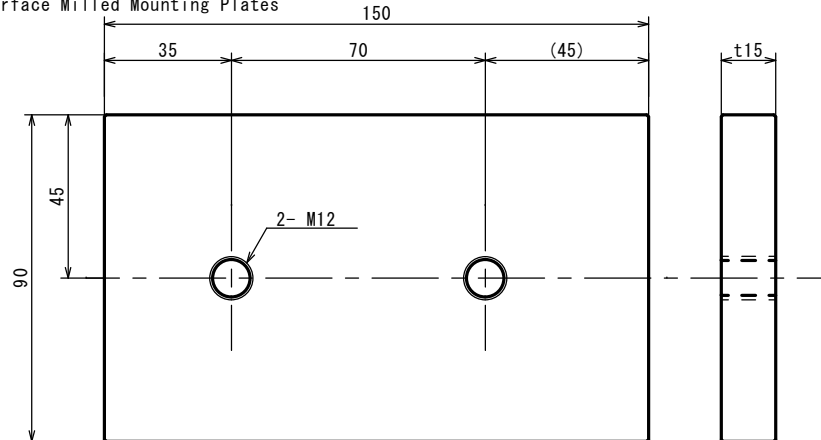


100	M12 Hex Nut	Steel	2		Stock item
6	Metal Washer	1045 Carbon Steel	2		Order item
5	Metal Collar	1045 Carbon Steel	2		Order item
4	Cantilever Shaft	1045 Carbon Steel	2		Order item
3	Gear Gears - Bearing Built-in Type 40 Teeth	10 Nylon Steel	1		Stock item
2	Gear Gears - Bearing Built-in Type 30 Teeth	10 Nylon Steel	1		Stock item
1	BASE Plate	1045 Carbon Steel	1		Order item
Parts Number	Item Name	Material	Number	Process	Remarks
Scale	Designer	Date			
1/1	Yosuke Satake	19/05/2017			
Illustration		Figure name			
		Robot Assembly Gear Unit (Draft-1)			
		Mechatronics Hardware Development Design Satake Giken			

Triangular projection

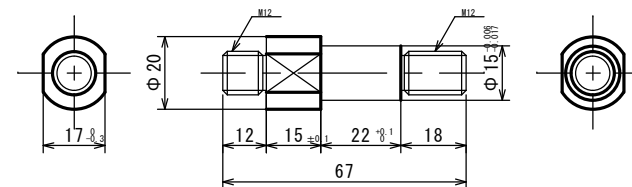
(1) Base Plate HFMQA-SCM-A150-B90-T15-X35-Y45-M12-L70-MA12

MISUMI, Order item, 1045 Carbon Steel, Surface Finish Electroless Nickel Plating
6-Surface Milled Mounting Plates



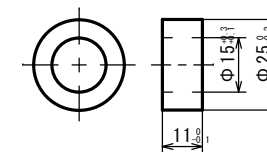
(4) Cantilever Shaft FXNAC15-15-F22-N12-MA12

MISUMI, Order item, 1045 Carbon Steel, Surface Finish Black Oxide



(5) Metal Collar NCLM15-25-11

MISUMI, Order item, 1045 Carbon Steel
Surface Finish Electroless Nickel Plating



(2) Spur Gears - Bearing Built-in GEABDM2.0-30-20

MISUMI, Stock item

Built-in bearing 6202ZZ

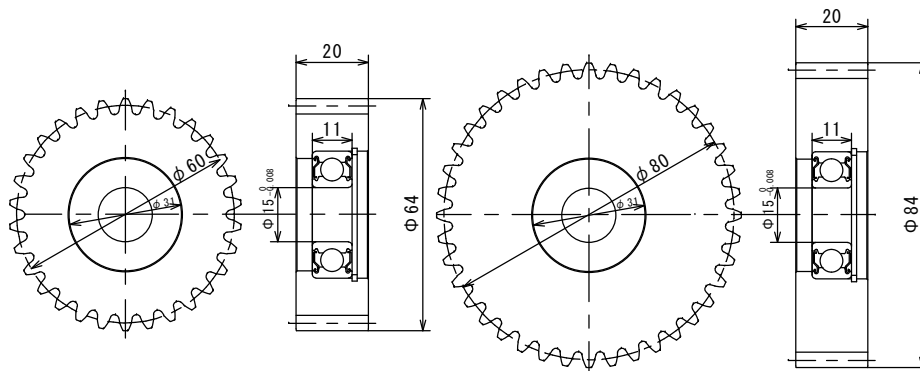
MC Nylon Not Provided, Module 2, 30 Teeth

(3) Spur Gears - Bearing Built-in Type GEABDM2.0-40-20

MISUMI, Stock item

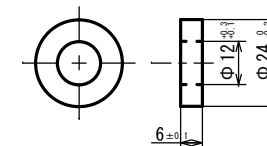
Built-in bearing 6202ZZ

MC Nylon Not Provided, Module 2, 40 Teeth



(6) Metal Washer FWSSM-D24-V12-T6

MISUMI, Order item, 1045 Carbon Steel
Surface Finish Electroless Nickel Plating



With Plating Version

Parts Number	Item Name	Material	Number	Process	Remarks
Scale	Designer				Date
1/1	Yosuke Satake				19/05/2017
Illustration	Figure name				
	Robot Assembly Gear Unit (Draft-1)				
	Mechatronics Hardware Development Design				Satake Giken

Triangular projection