



## Super Precision Bearings for Micro Jet Engines

Super precision bearings for micro jet engines designed and manufactured by HQW Precision are ideal for applications involving high temperatures and extremely high rotational speeds. These single-row angular-contact ball bearings are configured with a full-ball, cage-less design, ceramic balls and SV30 stainless steel rings for optimal performance in micro jet engines.

### Materials

Bearings for micro jet engines are manufactured from highly corrosion resistant SV30 stainless steel (HQW designation 30X). This material features an exceptionally fine microstructure. A special heat-treatment process developed in-house provides high hardness and correspondingly long service life. In combination with silicon nitride ( $\text{Si}_3\text{N}_4$ ) ceramic balls, the bearings are exceptionally smooth with very low vibration.

### Lubrication

All micro jet engine bearings are assembled in a cleanroom and undergo a complete dry wash in the final production step. This ensures that the bearings are delivered absolutely clean and dry, preventing any foreign substances from getting into the application.

During operation, the bearings must be lubricated accordingly. The advanced stainless-steel/ceramic-ball material allows the bearing to continue to perform under lubrication starved conditions.



### Available Size Range

Bearing Type	HQW Type	Dimension
796	C30X19M6	6x15x5
726	C30X2M6	6x19x6
788 W6	C30X18M8	8x16x6
798	C30X19M8	8x19x6
708	C30X38	8x22x7
7800	C30X1800	10x19x5
7900	C30X1900	10x22x6
7000	C30X100	10x26x8
7200	C30X200	10x30x9
7801	C30X1801	12x21x5
7001	C30X101	12x28x8
7802	C30X1802	15x24x5
7902	C30X1902	15x28x7
7002	C30X102	15x32x9
7202	C30X202	15x35x11
7803	C30X1803	17x26x5
7903	C30X1903	17x30x7
7003	C30X103	17x35x10
7904	C30X1904	20x37x9
7004	C30X104	20x42x12

Other sizes on request.  
Further information can be obtained from the HQW Application Engineering Dept.

[www.hqw.gmbh](http://www.hqw.gmbh)

HQW Precision GmbH | Wachtelberg 23, 97273 Kürnach, Germany  
Tel: +49 (0) 9367 98408-0 | Email: [info@hqw.gmbh](mailto:info@hqw.gmbh)

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