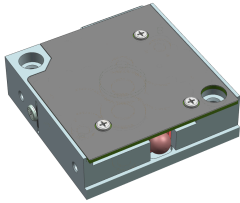


XUMU-3 Series

Fast and compact motion unit



The XUMU motion units are world class in terms of weight, size and precision. The XUMU motion unit is driven by the Crossfixx™ ultrasonic piezo motor, allowing an extremely compact design and variable speeds up to 1000 mm/s! The XUMU-3 has an integrated controller and comes with a mountable ceramic strip for easier integration in any application.

Key features

	open-loop
drive principle	patented Crossfixx™ ultrasonic piezo technology
lifetime	> 1000 km / typ. 20 million cycles
operating voltage	12 V
controller	integrated controller*

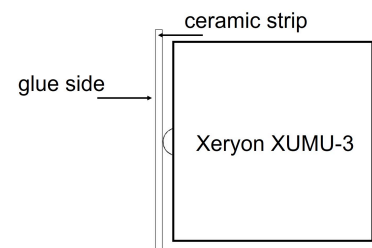
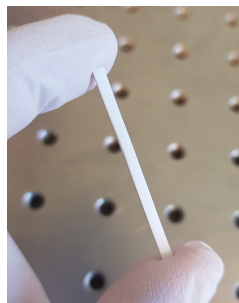
*also available with any external Xeryon controller

Environmental compatibility

temperature range	-30°C to +70°C
humidity range	20% to 90% RH (non-condensing)
heat dissipation (motor only)	< 1 W

Mountable ceramic strip lengths

The XUMU-3 comes with a ceramic strip of 10 mm to 300 mm that can be glued against the body that will be moved. This provides a much more flexible way of integrating the Xeryon Ultrasonic motors in any application.



Motion performance

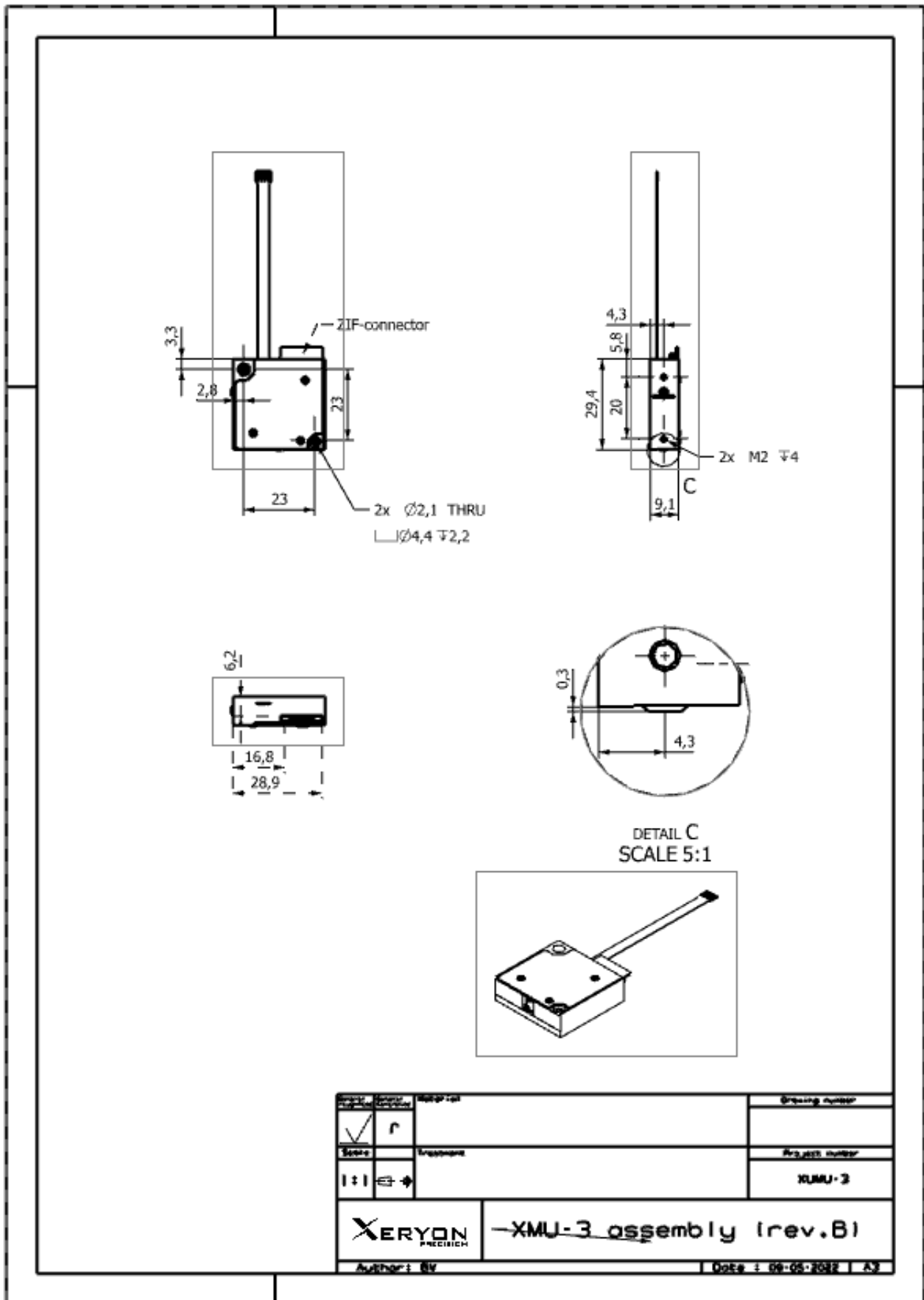
				unit	tolerance
LIMITS					
X U M U - 3	p o s i t i o n i n g	min. step size	50 – 100 µm (pulsed operation)	nm	typ.
	s p e e d	max. speed	1000	mm/s	typ.
		min speed	10	µm/s	typ.

Mechanical properties

	XUMU-3	unit	tolerance
dimensions	32.8 x 30.0 x 9.1	mm	± 0.1
mass	28	g	± 5%
holding force	3	N	min.
driving force	3	N	min.
motion unit materials	anodised aluminium (housing)		
cable type	FPC, 14 core, 0.5 mm pitch with opposite side contacts		

Market comparison

	Xeryon XUMU-3	Other brands
maximum velocity	1000 mm/s	± 180 mm/s
holding force	3N	1N to 1.5N
driving force	3N	1N to 1.5N
lifetime	> 1000 km	± 200 km



<input checked="" type="checkbox"/>	<p>Scale</p> <p>1:1</p>	<p>Author</p> <p>BY</p>	<p>Drawing number</p> <p>XMU-3</p>
<p>XERYON PRECISION</p>		<p>XMU-3 assembly (rev.B)</p>	
<p>Author: BY</p>		<p>Date: 09-05-2022 A2</p>	