

Three Axes Force Sensor K3D120

Measurement ranges: $\pm 50\text{N}$, $\pm 200\text{N}$, $\pm 1000\text{N}$

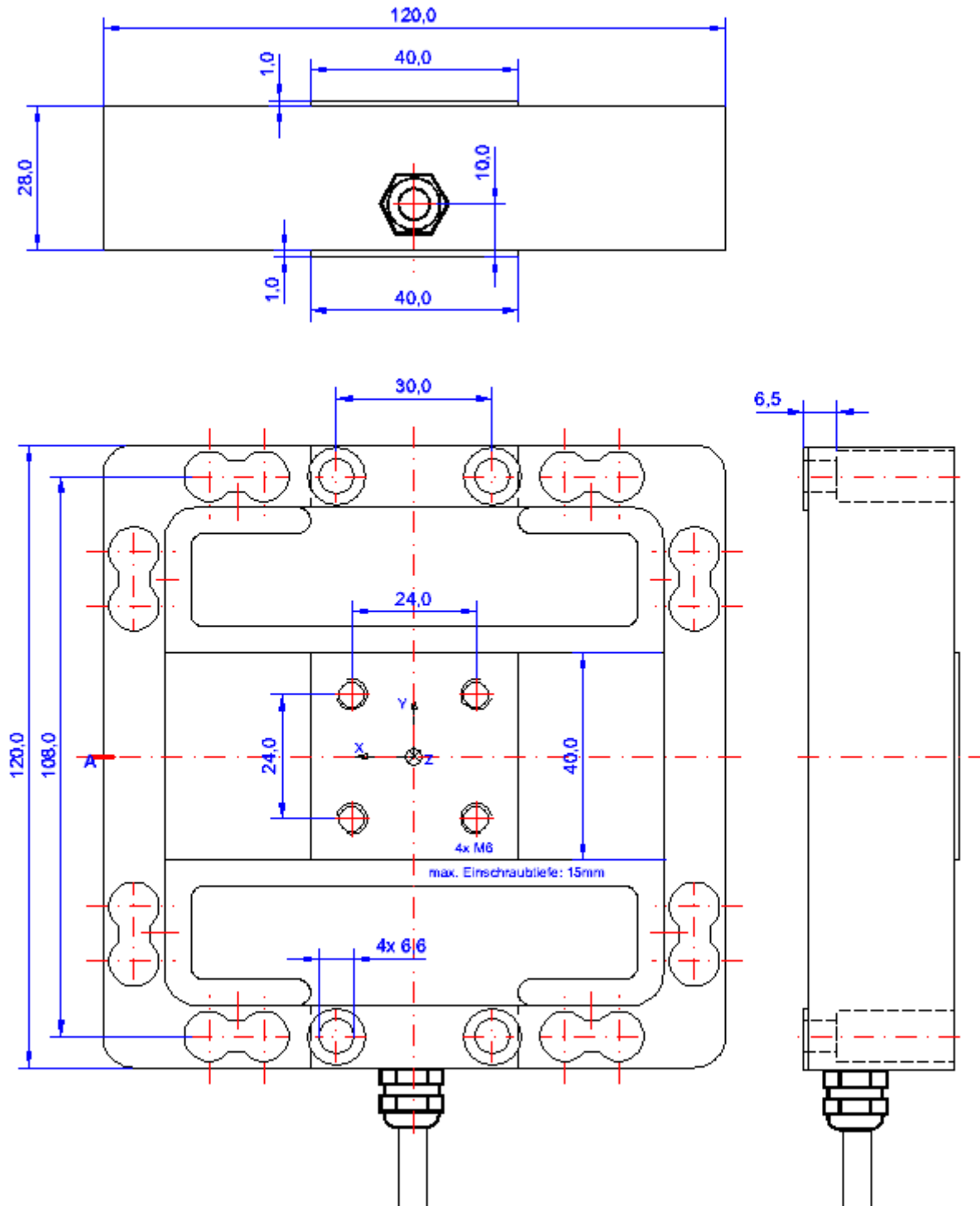


The 3-axes sensor K3D120 is suitable for force measurement in three perpendicular axes.

It can be provided for $\pm 50\text{N}$ in all three axes or for $\pm 200\text{N}$ or $\pm 1000\text{N}$ in all three axes and can be manufactured in other measurement ranges optionally.

It stands out by its compact construction with a base of 120mm x 120mm and a low total height of only 30mm.

Dimensions



Pin Configuration

Axes		Description	Colour of wire
X-axis	+ Us	sensor supply	brown
	- Us	sensor supply	white
	+ Ud	bridge output	green
	-Ud	bridge output	yellow
Y-axis	+ Us	sensor supply	pink
	- Us	sensor supply	gray
	+ Ud	bridge output	blue
	- Ud	bridge output	red
Z-axis	+ Us	sensor supply	purple
	- Us	sensor supply	black
	+ Ud	bridge output	gray pink
	- Ud	bridge output	red blue

Connection cable

3m twin-twisted connection cable with overall shield, 6x2x0.25;

Technical Data

	Output signal	
Calibration output X	1 mV/V \pm 0.5%	
Calibration output Y	1 mV/V \pm 0.5%	
Calibration output Z	1 mV/V \pm 0.5%	
Zero signal	< 5 % v.E.	
Tolerable excentricity of force transmission	\pm 100mm	
Crosstalk from z to x/y at 50N	< 1% v.E.	
Crosstalk from x to y at 50N	< 1% v.E.	
Crosstalk from y to x at 50N	< 1% v.E.	
Crosstalk from x/y to z at 50N with 0mm excentricity	< 1% v.E.	
Crosstalk from x/y to z at 50N with 300 mm excentricity	< 1% v.E.	
Maximum force x/y/z	> 300 % v.E.	
Temperature drift	<0.3% / °C v.E.	

Note: The output signal can differ from the rated output 1 mV/V and is given in that case in the calibration printout.