

# GO Stage HV

## High Vacuum

## Precision Motion

### Nanometer Resolution Motion in High Vacuum

The PRECIBEO GO Stage HV is built for high vacuum environments down to  $10^{-6}$  mbar. Each stage is fitted with a vacuum side cable (PTFE coated wires in a braided metal sleeve) ended with a female D9SUB connector. Each stage also comes with an air side female D9SUB to ix-Industrial cable.

Connect the vacuum side and air side cables to your D9SUB feedthrough, the air side ix-connector to the GO Controller, and you are ready to GO!



### Technical Specification

MODEL (GO STAGE)	LLS4545 HV	LLS6545 HV	LLS8545 HV
<b>POSITIONING</b>			
TRAVEL (X)	20 mm	35 mm	50 mm
POSITION SENSOR	Optical Encoder		
SENSOR RESOLUTION	2 nm		
MIN INCREMENTAL MOTION	2 nm		
BIDIRECTIONAL REPEATABILITY	+/- 100 nm (typ. @ full travel)		
STRAIGHTNESS & FLATNESS	+/- 2 $\mu$ m (typ.)		
PITCH	+/- 150 $\mu$ rad (typ.)		
YAW	+/- 150 $\mu$ rad (typ.)		
<b>MOTION</b>			
MAX OPERATING FORCE (PUSH / PULL)	5 N (min.)		
HOLDING FORCE (WHEN POWER IS OFF)	6 N (min.)		
MAX SPEED (AT NO LOAD)	8 mm/s		
MAX SPEED (AT MAX OPERATING FORCE)	5 mm/s (min.)		
<b>DRIVE TYPE</b>			
MOTOR TYPE	Piezo Drive		
<b>MECHANICAL</b>			
MAX LOAD (IN X,Y OR Z DIRECTION)	0,5 kg		
GUIDE TYPE	Crossed Roller		
SIZE	45x45x14 mm	65x45x14 mm	85x45x14 mm
WEIGHT (W/O CABLE & CONNECTOR)	75 g (+-10%)	105 g (+-10%)	135 g (+-10%)
<b>MISCELLANEOUS</b>			
VACUUM SIDE CABLE	0,5 m cable (+-5%) with f. D9SUB connector		
AIR SIDE CABLE	2 m cable (+-5%) with f. D9SUB & ix Industrial™ connectors		
MATERIAL	Aluminum		

### Order Information

Please contact us by phone ( +46 18 700 13 40 ) or email ([sales@precibeo.com](mailto:sales@precibeo.com)) for any enquiries.

PRODUCT	DESCRIPTION
<b>GO-LLS4545HV</b>	One GO Stage HV LLS4545 with Cable and f. D9SUB Connector including: <ul style="list-style-type: none"> <li>Air side cable with f. D9SUB &amp; ix Industrial™ connectors.</li> <li>4 M2 screws for mounting the stage to a substrate.</li> </ul>
<b>VM-LLS4545HV</b>	One L-Bracket for vertical mounting of the stages, e.g. YZ-configuration, including: <ul style="list-style-type: none"> <li>8 M2 screws for mounting two stages to the L-Bracket.</li> </ul>

Disclaimer: Specifications of the product do not constitute a warranty of the properties. They are intended for information purposes only and are subject to change.