



Fraunhofer

TESTED[®] DEVICE

Yeonhab Precision Co., Ltd.
YHHF-FLAT CABLE-4C-3
Report No. YE 1410-726

Qualification Certificate

This is to certify that the product mentioned above, provided by

Yeonhab Precision Co., Ltd.
Cheonan, Republic of Korea

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number YE 1410-726.

The YHHF-FLAT CABLE-4C-3 is suitable for use in cleanrooms fulfilling the specifications of Air Cleanliness Class 1 according to ISO 14644-1.

Parameter	Air Cleanliness Class
$v_1 = 0.5 \text{ m/s}; a_1 = 1.0 \text{ m/s}^2$	1
$v_2 = 1.0 \text{ m/s}; a_2 = 2.0 \text{ m/s}^2$	1
$v_3 = 2.0 \text{ m/s}; a_3 = 4.0 \text{ m/s}^2$	1
Overall result	1

- Energy chain:..... igus E61.29.50.075.0
- Chain bending radius: $r = 75 \text{ mm}$
- Stroke length:..... $s = 820 \text{ mm}$
- Cable length:..... $l = 840 \text{ mm}$

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

Stuttgart, October 13, 2014

i.A. 
Frank Bürger, Project manager Fraunhofer IPA

DUPLICATE

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.

Further information:
www.tested-device.com