C40 IMB Upgrade

10/30/2012

1. X-axis guider 1
    a. TMG 5609L-0502 400 steps/rev NEMA 23 stepper 1 each
    b. US Digital E2 relative Encoder 1 each
    c. Panasonic SUNX Proximity Sensor GX-N12F 2 each

    Y-axis guider 1

    a. TMG 5609L-0502 400 steps/rev NEMA 23 stepper 1 each
    b. US Digital E2 relative Encoder 1 each
    c. Panasonic SUNX Proximity Sensor GX-N12F 2 each

    Focus 1

        a. Haydon/Kerk Hybrid Linear Actuator Size NEMA 23 Part #: 57J47-05-003ENG 1 each
        b. Panasonic SUNX Proximity Sensor GX-N12F 2 each
        c. Air Cylinder, MRS-021.5-DXP Bimba 1 each
        d. Air Cylinder, MRS-022.5-DXP Bimba 1 each
        e. Air Cylinder, 0071 Bimba 1 each
        f. Position Sensors: Bimba MSKX 5 each

2. X-axis guider 2
    a. TMG 5609L-0502 400 steps/rev NEMA 23 stepper 1 each
    b. US Digital E2 relative Encoder 1 each
    c. Panasonic SUNX Proximity Sensor GX-N12F 2 each

    Y-axis guider 2

    a. TMG 5609L-0502 400 steps/rev NEMA 23 stepper 1 each
    b. US Digital E2 relative Encoder 1 each
    c. Panasonic SUNX Proximity Sensor GX-N12F 2 each

    Focus 2

        a. Haydon/Kerk Hybrid Linear Actuator Size NEMA 23 Part #: 57J47-05-003ENG 1 each
        b. Panasonic SUNX Proximity Sensor GX-N12F 2 each
        c. Air Cylinder, MRS-021.5-DXP Bimba 1 each
        d. Air Cylinder, MRS-022.5-DXP Bimba 1 each
        e. Air Cylinder, 0071 Bimba 1 each
        f. Position Sensors: Bimba MSKX 5 each

3. Filter Wheel 1

    6 position

Detent A microswitch Honeywell 311SM4-T 1 each

Detent B microswitch Honeywell 311SM4-T 1 each

TMG 5609L-0502 0.9 Degree, 400 Steps/Rev Hybrid Stepper, NEMA 23 1 each

Encoder: BEI-HS35F absolute hollow core 4096 or 8192 counts/rev 1 each

4. Filter Wheel 2

   6 position

   Detent A microswitch Honeywell 311SM4-T 1 each

   Detent B microswitch Honeywell 311SM4-T 1 each

   TMG 5609L-0502 0.9 Degree, 400 Steps/Rev Hybrid Stepper, NEMA 23 1 each

   Encoder: BEI-HS35F absolute hollow core 4096 or 8192 counts/rev. 1 each

5. Calibration Lamp control
6. S-H lenslet control?
7. Galil DMC-4080(ISCNTL)-C012(P422)-I200(SSI,STEP)-I200(SSI,STEP)-D4040-D4040 1 each