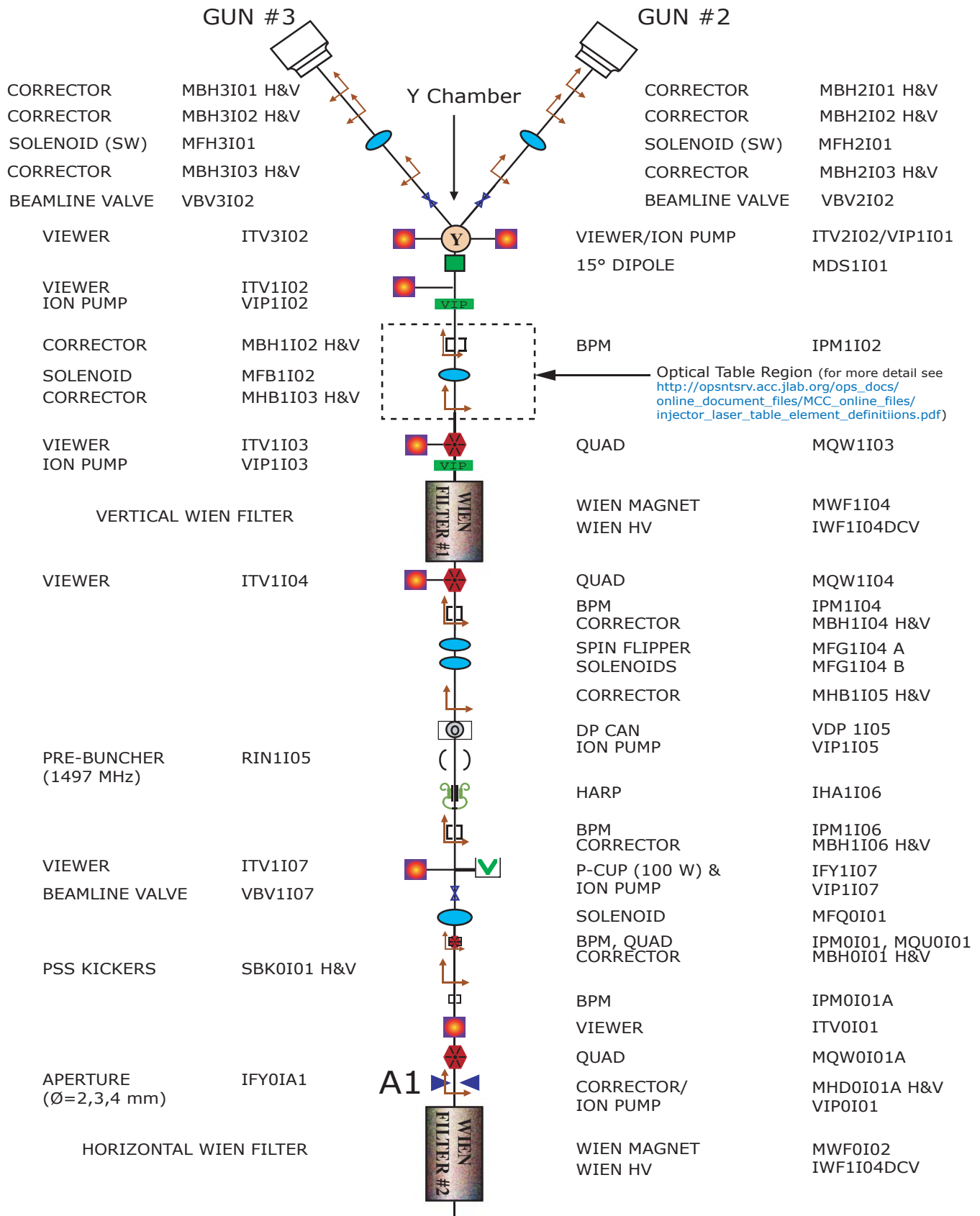


INJECTOR QUICK REFERENCE DRAWING



CORRECTOR MBH0I02 H&V
 VIEWER ITV0I02
 APERTURE IFY0IA2
 (Ø=4,6,8 mm)

BPM/QUAD IPM0I02, MQU0I02
 HARP (disconnected) IHA0I02

ION PUMP VIP0I02
 CORRECTOR/BPM MBH0I02A H&V, IPM0I02A
 QUAD MQU0I02A
 BEAMLINE VALVE VB0I02
 SOLENOID MFA0I03
 CHOPPER #1 (499 MHz)
 ION PUMP VIP0I03
 EARTH CORRECTING COIL MED0I03
 CORRECTOR MBH0I03 H&V
 SOLENOID (same supply as MFD0I04A) MFD0I04

Quick Access CARM #1 of 3
 VIEWER ITV0I04
 ION PUMP VIP0I04
 SOLENOID MFD0I04A
 CORRECTOR MBH0I04 H&V
 CHOPPER #2 (499 MHz)
 ION PUMP VIP0I04A

EARTH CORRECTING COIL MEE0I05
 SOLENOID MFA0I05
 CORRECTOR/BPM MBH0I05 H&V / IPM0I05
 VIEWER/ION PUMP ITV0I05/VIP0I05

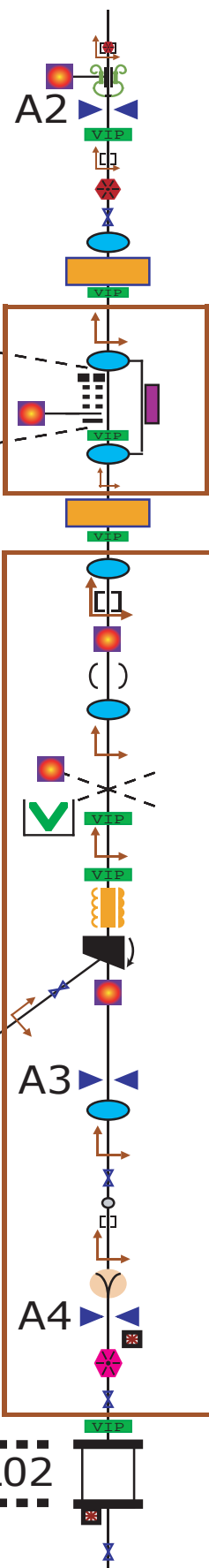
SOLENOID MFA0I06
 CORRECTOR MBH0I06 H&V
 VIEWER ITV0I06
 FARADAY CUP #1 (100W) IFY0I06
 ION PUMP VIP0I06
 CORRECTOR MAD0I06A H&V
 CAPTURE ION PUMPS VIP0I06A,B,C,D,E

DIPOLE MBO0I06
 VIEW SCREEN ITV0I06A

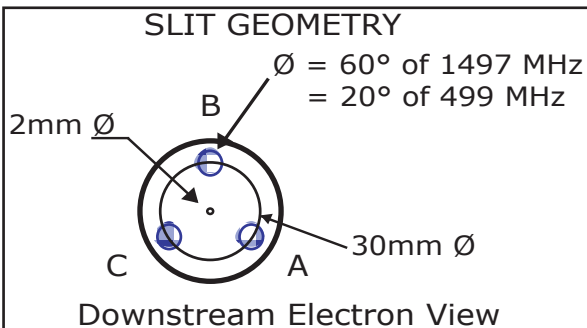
APERTURE (Ø=6mm) IFY0IA3
 SOLENOID MFL0I07
 CORRECTOR MAD0I07 H&V
 BEAMLINE VALVE VB0I07
 DIFFERENTIAL PUMP VDP0I07
 BPM IPM0I07
 CORRECTOR MBH0I07A H&V

YAO CAVITY ICV0I07
 APERTURE (Ø=6.5mm) IFY0IA4
 SKEW QUAD MQS0I07
 BEAMLINE VALVE VB0L00A
 ION PUMP VIP0L00

BEAMLINE VALVE VB0L00B



MASTER SLIT
 SLIT A
 SLIT B
 SLIT C
 VIEWER
 CENTER PLUG



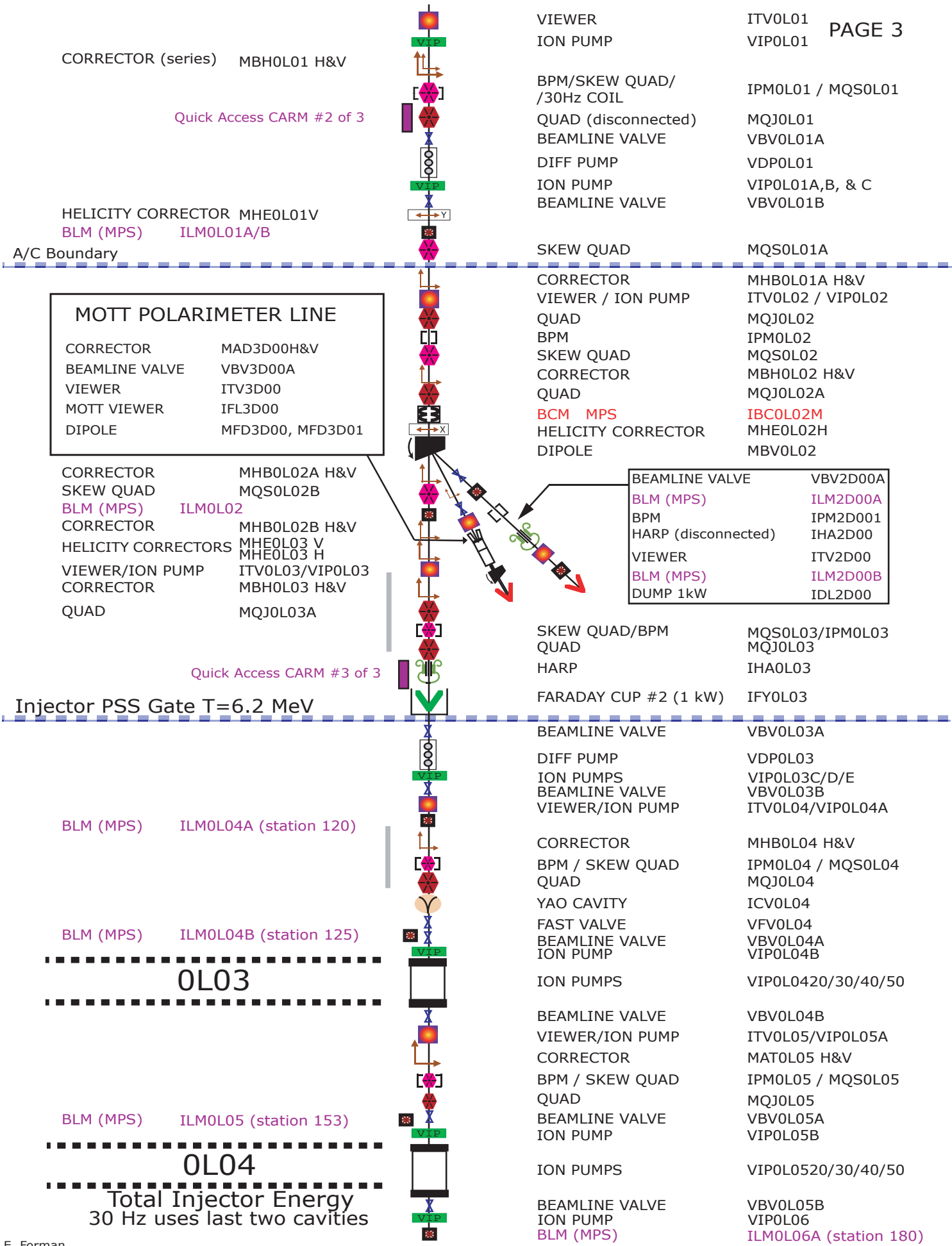
T= 130 keV .60c
 CAPTURE

130 keV/500 keV
 SPECTROMETER LINE

BEAMLINE VALVE	VBV1D00
CORRECTOR	MAD1D00 H&V
HARP	IHA1D00
VIEWER	ITV1D00
500 keV (1kW) Dump	IDL1D00

BLM (MPS) ILM0I07

T= 500keV .86c
 1/4 CRYOMODULE 0L02
 BLM (MPS) ILM0L01A



CORRECTOR (series) MBH0L01 H&V

Quick Access CARM #2 of 3

HELICITY CORRECTOR MHE0L01V
BLM (MPS) ILM0L01A/B

A/C Boundary

MOTT POLARIMETER LINE

CORRECTOR	MAD3D00H&V
BEAMLINE VALVE	VBV3D00A
VIEWER	ITV3D00
MOTT VIEWER	IFL3D00
DIPOLE	MFD3D00, MFD3D01

CORRECTOR	MHB0L02A H&V
SKEW QUAD	MQS0L02B
BLM (MPS)	ILM0L02
CORRECTOR	MHB0L02B H&V
HELICITY CORRECTORS	MHE0L03 V MHE0L03 H
VIEWER/ION PUMP	ITV0L03/VIP0L03
CORRECTOR	MBH0L03 H&V
QUAD	MQJ0L03A

Quick Access CARM #3 of 3

Injector PSS Gate T=6.2 MeV

BLM (MPS) ILM0L04A (station 120)

BLM (MPS) ILM0L04B (station 125)

OL03

BLM (MPS) ILM0L05 (station 153)

OL04

Total Injector Energy
30 Hz uses last two cavities

VIEWER
ION PUMP

ITV0L01
VIP0L01

BPM/SKEW QUAD/
/30Hz COIL
QUAD (disconnected)
BEAMLINE VALVE
DIFF PUMP
ION PUMP
BEAMLINE VALVE

IPM0L01 / MQS0L01
MQJ0L01
VBV0L01A
VDP0L01
VIP0L01A,B, & C
VBV0L01B

SKEW QUAD

MQS0L01A

CORRECTOR
VIEWER / ION PUMP
QUAD
BPM
SKEW QUAD
CORRECTOR
QUAD
BCM MPS
HELICITY CORRECTOR
DIPOLE

MHB0L01A H&V
ITV0L02 / VIP0L02
MQJ0L02
IPM0L02
MQS0L02
MBH0L02 H&V
MQJ0L02A
IBC0L02M
MHE0L02H
MBV0L02

BEAMLINE VALVE	VBV2D00A
BLM (MPS)	ILM2D00A
BPM	IPM2D001
HARP (disconnected)	IHA2D00
VIEWER	ITV2D00
BLM (MPS)	ILM2D00B
DUMP 1kW	IDL2D00

SKEW QUAD/BPM
QUAD
HARP

MQS0L03/IPM0L03
MQJ0L03
IHA0L03

FARADAY CUP #2 (1 kW)

IFY0L03

BEAMLINE VALVE
DIFF PUMP
ION PUMPS
BEAMLINE VALVE
VIEWER/ION PUMP

VBV0L03A
VDP0L03
VIP0L03C/D/E
VBV0L03B
ITV0L04/VIP0L04A

CORRECTOR
BPM / SKEW QUAD
QUAD
YAO CAVITY
FAST VALVE
BEAMLINE VALVE
ION PUMP

MHB0L04 H&V
IPM0L04 / MQS0L04
MQJ0L04
ICV0L04
VFV0L04
VBV0L04A
VIP0L04B

ION PUMPS

VIP0L0420/30/40/50

BEAMLINE VALVE
VIEWER/ION PUMP
CORRECTOR
BPM / SKEW QUAD
QUAD
BEAMLINE VALVE
ION PUMP

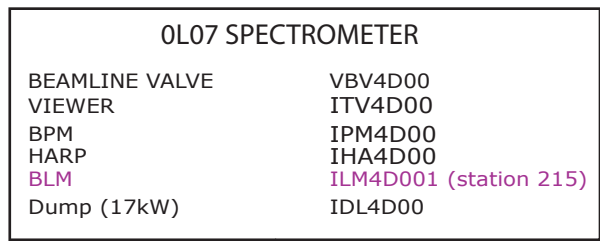
VBV0L04B
ITV0L05/VIP0L05A
MAT0L05 H&V
IPM0L05 / MQS0L05
MQJ0L05
VBV0L05A
VIP0L05B

ION PUMPS

VIP0L0520/30/40/50

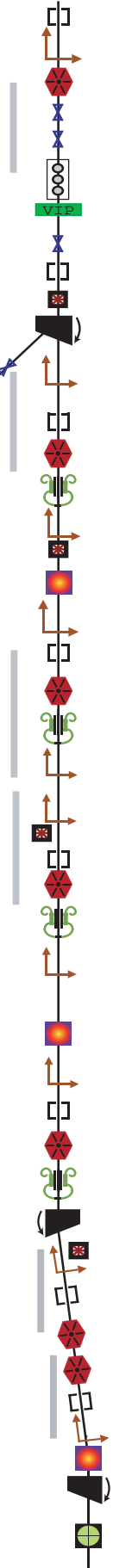
BEAMLINE VALVE
ION PUMP
BLM (MPS)

VBV0L05B
VIP0L06
ILM0L06A (station 180)



BLM (MPS) ILM0L09 (station 240)

BLM (MPS) ILM0R01 (station 275)



- | | |
|----------------|------------------------|
| BPM | IPM0L06 |
| CORRECTORS | MDB0L06H |
| QUAD | MDJ0L06V |
| FAST VALVE | MQD0L06 |
| BEAMLINE VALVE | VFV0L06 |
| | VBV0L06A |
| DIFF PUMP | VDP0L06 |
| ION PUMPS | VIP0L06A/B/C |
| BEAMLINE VALVE | VBV0L06B |
| BPM | IPM0L06A |
| BLM (MPS) | ILM0L06B (station 190) |
| DIPOLE | MBF0L06 "SPECTROMETER" |
| CORRECTORS | MDB0L07H |
| | MDJ0L07V |
| BPM | IPM0L07 |
| QUAD | MQB0L07 |
| HARP | IHA0L07 |
| CORRECTOR | MAT0L07V |
| BLM (MPS) | ILM0L07 (station 210) |
| VIEWER | ITV0L08 |
| CORRECTORS | MDB0L08H |
| | MDJ0L08V |
| BPM | IPM0L08 |
| QUAD | MQB0L08 |
| HARP | IHA0L08 |
| CORRECTOR | MAT0L08 H&V |
| CORRECTORS | MDB0L09H |
| | MDJ0L09V |
| BPM | IPM0L09 |
| QUAD | MQB0L09 |
| HARP | IHA0L09B |
| CORRECTOR | MAT0L09H |
| VIEWER | ITV0L10 |
| CORRECTORS | MDB0L10H |
| | MDJ0L10V |
| BPM | IPM0L10 |
| QUAD | MQB0L10 |
| HARP | IHA0L10 |
| CHICANE DIPOLE | MBL0R01 |
| CORRECTOR | MAT0R01 H&V |
| BPM | IPM0R01 |
| QUAD | MQD0R01 |
| QUAD | MQD0R02 |
| BPM | IPM0R02 |
| CORRECTOR | MAT0R02 H&V |
| VIEWER | ITV0R02 |
| CHICANE DIPOLE | MBL0R02 |
| SLM | ISR0R02 |

