Zero Return : Forward mode reverse direction – Stepping motor
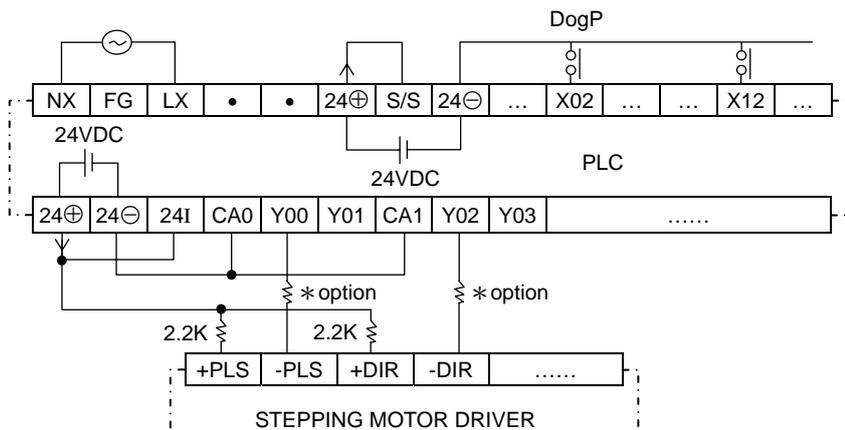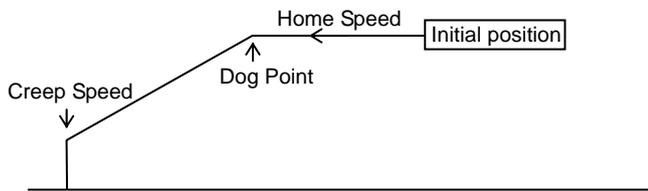
♦Wiring

DogP

| NX | FG | LX | • | • | 24⊕ | S/S | 24⊖ | … | X02 | … | … | X12 | … |

24VDC

24VDC   PLC

| 24⊕ | 24⊖ | 24I | CA0 | Y00 | Y01 | CA1 | Y02 | Y03 | …… |

＊option   ＊option

2.2K   2.2K

| +PLS | -PLS | +DIR | -DIR | …… |

STEPPING MOTOR DRIVER

♦Action

<First direction reverse>

Home Speed ← Initial position

Dog Point

Creep Speed

♦Sample Program

```
M8002
 ─┤├──────────────────────────────────────[MOV    K100      D8168  ] Y0 bias speed
         ─────────────────────────────────[MOV    K2000     D8164  ] Y0 acc/deceleration time
         ──────────────────────[DMOV   K10000           D8156     ] Y0 maximum speed
M8002
 ─┤├──────────────────────────[DMOV   K5000            D116      ] ZRN Home speed
         ─────────────────────[DMOV   K500             D118      ] ZRN Creep speed
         ──────────────────────────────[MOVP   K0      D8169  ] K=0, for stepping motor
X012
 ─┤↑├─────────────────────────────────────[SET    M112   ]
         ─────────────────────────────────[RST    M8152  ] clear ZRN finish flag
         ─────────────────────────────────[RST    M8158  ] 1st DIR by flag M8156
         ─────────────────────────────────[SET    M8156  ] 1st DIR reverse
         ─────────────────────────────────[SET    M8154  ] Forward mode
X012
 ─┤↓├─────────────────────────────────────[RST    M112   ]
M112    [S1.]=Home, [S2.]=Creep, [S3.]=DogP
 ─┤├───────────────[DZRN    D116        D118        X002        Y000        ]
     M8029   M8152
      ─┤├──────┤├──────────────────────────────────[RST    M112   ]
              ────────────────────────────────────[RST    M8029  ]
When FNC(156) ZRN execute, D8168=Creep speed
                                                                         [ END   ]
```