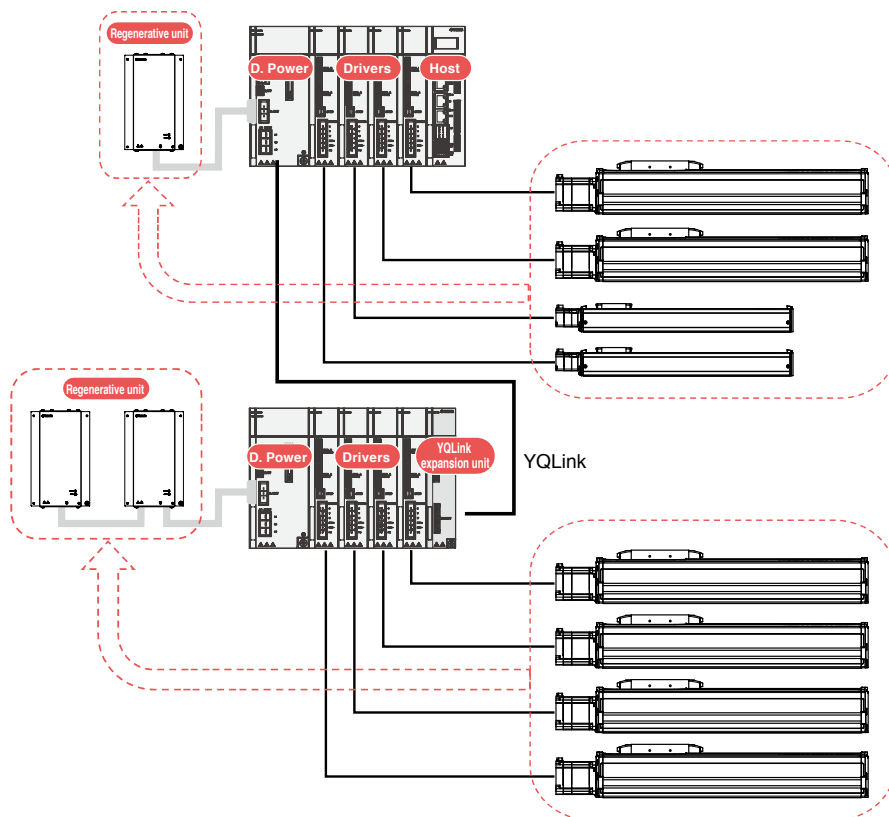


Procedure to determine the regenerative unit quantity (Single-axis robot GX series)

The number of regenerative units to be connected to the **D. Power** is determined depending on the configuration of the single-axis robot GX series operated by each **Drivers** connected to this **D. Power**.



When the following conditions are satisfied, one regenerative unit needed.

1. The total motor capacity of vertically installed single-axis robots is 400 W or more.
2. The vertically installed single-axis robots include the following.
 - GX07: Lead is 5 mm and stroke is 1000 mm or more.
 - GX10: Lead is 5 mm and stroke is 500 mm or more.
 - GX10: Lead is 10 mm and stroke is 500 mm or more.
 - GX10: Lead is 20 mm and stroke is 1200 mm or more.
3. The horizontally installed single-axis robots include the following.
 - GX16: Lead is 20 mm and stroke is 500 to 800 mm.
 - GX20: Lead is 20 mm and stroke is 550 to 800 mm.
4. The horizontally installed single-axis robots satisfy the following conditions.
 - The total number of GX12, GX16, and GX20 robots is 3 or more.
 - The total number of GX16 and GX20 robots is 2 or more.

When the single-axis robot with an operating duty (*) of 50% or more is used for 1 axis or more, two regenerative units are needed.

1. The total number of vertically installed GX10, GX12, GX16, and GX20 robots is 8 axes or more.
2. The total number of vertically installed GX12, GX16, and GX20 robots is 7 axes or more.
3. The total number of vertically installed GX16 and GX20 robots is 4 axes or more.
4. The vertically installed GX20 robots are connected to 4 axes or more.
5. The total number of horizontally installed GX10, GX12, GX16, and GX20 robots is 6 axes or more.

* The operating duty is calculated by the following formula.

$$\text{Operating duty} = \text{Total robot movement time} \div 1 \text{ cycle time} \times 100[\%]$$

For the robot that reciprocates in one cycle, the total forward and backward movement time becomes the "total robot movement time".

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
GX

Motor-less single axis actuator
Robonity

Compact single-axis robots
TRANSERO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & Place robots
YP-X

CLEAN CONTROLLER

INFORMATION

Robot positioner

Pulse string driver

Robot controller

RCXIVY2+ Electric gripper

Option