

Safe Control Solutions

Advantages of SICK safety controllers

- ✓ Modular and scalable: SICK's safe control solutions can be used to solve all types of applications, from simple to complex
- ✓ Everything from a single source for a complete portfolio for safety solutions
- ✓ Intuitive programming of the safety configuration via software (SD/FSD) or rotary switch + Flexi Loop
- ✓ Compatibility with common fieldbus protocols
- ✓ Protective coating for more challenging ambient conditions



Flexi Classic

- › Configuration via rotary switch without software
- › Easy integration into existing systems (unbox and go)



Flexi Soft

- › Safe networking of modular machines (EFI-pro, Flexi Line, Flex Link)
- › Safe Motion monitoring
- › Highly expandable for complex projects



Flexi Compact

- › Lowest cost per I/O point
- › Fast response time and processing speed
- › Efficient design for installation



Flexi Mobile

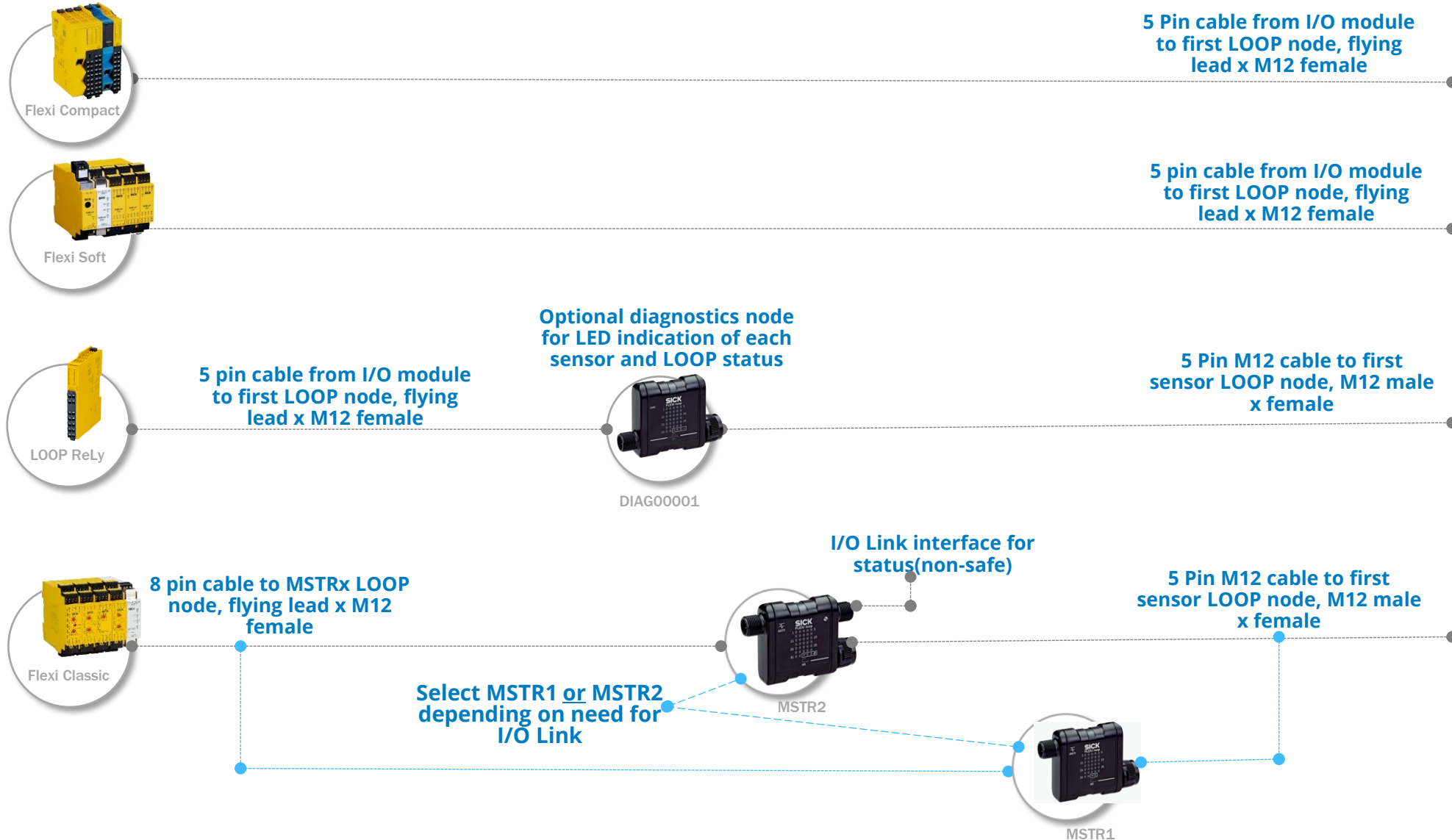
- › Robust IP69-K housing
- › Special function blocks (up to 512) simplify configuration of AGVs
- › Future-proof

Cascaded I/O Sensor Solutions

Flexi LOOP Selection guide

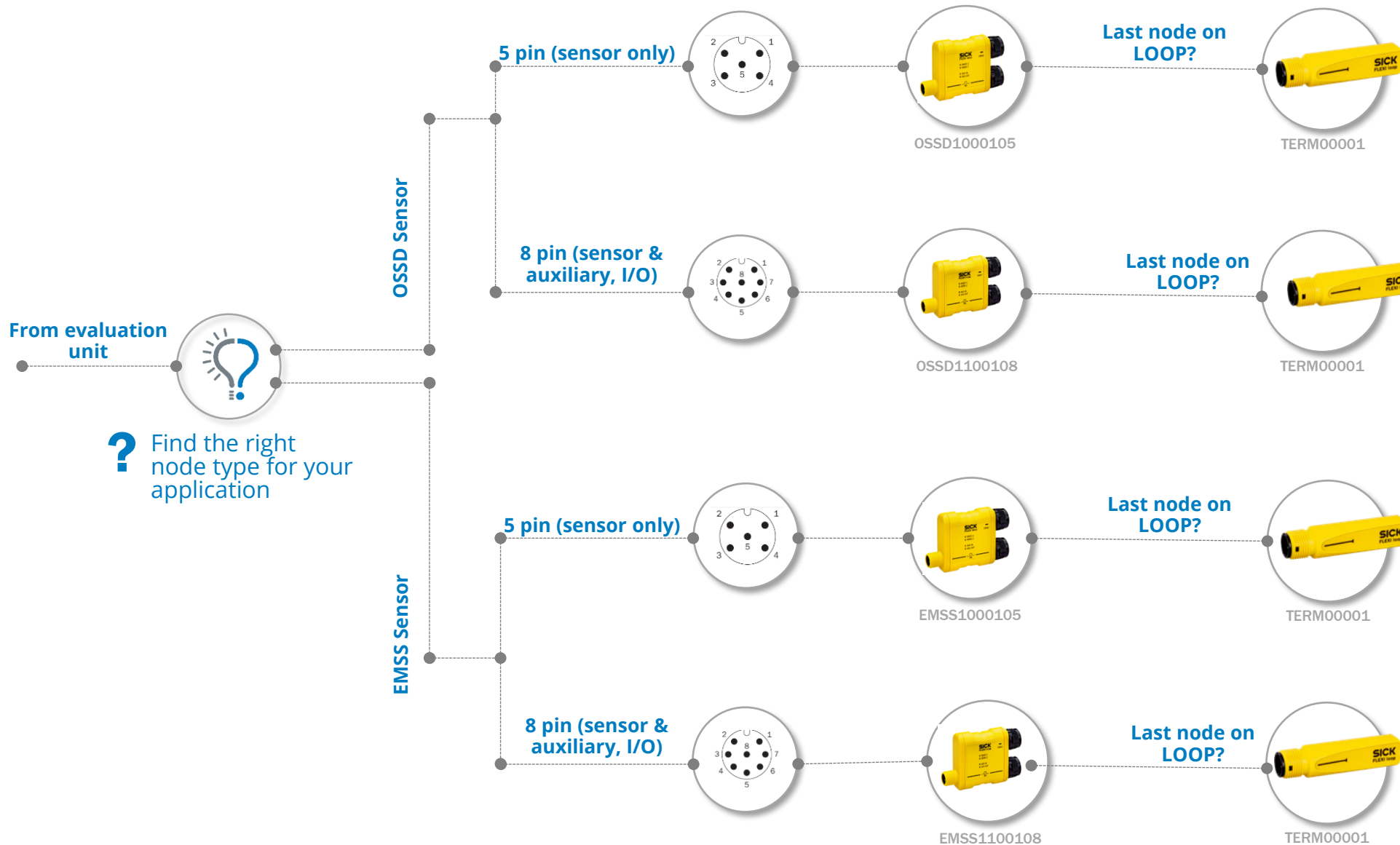
Flexi LOOP Evaluation
Unit

To Flexi LOOP nodes



Safe Series Solutions

Flexi LOOP Selection guide



Each sensor is connected to an appropriate type node

A total of 32 nodes of any type can be included on one Flexi Loop.

Distance between nodes can be up to 30 m.

The last node of the Loop must have a terminator (TERM00001)

Flexi LOOP can be evaluated by Flexi Soft, Flexi Compact, Flexi Classic, or a LOOP ReLy

If more than 32 sensors need to be cascaded, multiple LOOPS can be configured on Flexi Soft and Flexi Compact

Depending on the number of nodes, total current draw, and cable length a power injector node (PWR100001) may be required. Use Flexi Soft Designer or Safety Designer to determine requirements.

Not shown, Y Adaptor nodes are available to split the safety and auxiliary signals

Flexi Loop

Nodes

OSSD Sensor

1x dual channel,
output signal
switching safety device

OSSD1000105
5 pin sensors



OSSD1100108
8 pin sensors
Sensor status
+ auxiliary I/O



Electromechanical

1x electro-mechanical
safety switch for dual,
equivalent channels

EMSS1000105
5 pin sensors



EMSS1100108
8 pin sensors
Sensor status
+ auxiliary I/O



Flexi Classic

Nodes to connect to
Flexi Classic controller

MSTR00002
With I/O Link interface



MSTR00001
No I/O Link interface



Diagnostic

DIAG100001
LED diagnostics for
Each node status



LOOP Terminator

TERM00001
Terminates the network.
There must be a
terminator on the
last node



Power Injector

PWR100001
Power Injector to connect
additional 24V PS
- Galvanically isolating
- Overcurrent trip



Y Adaptors

YCON00001, YCON00002
Separates safe from
auxiliary I/O

