

Robot-limited force (RLF)

- Safety goal

Table.1 Safety goal for the Robot-limited force

Safety Function	Robot-limited force (RLF)
Safe State	STO state: Turn off the torque applied to the motor. SOS state: Robot stop state monitoring.
Mean time to dangerous failure (MTTFd)	10 years < MTTFd < 30 years
Diagnostic Coverage Average (DCave)	DCave > 90%
Common Cause Failure (CCF)	Score : 65 or better
Safety function Response time (SRT)	930ms(Max)

- Function description

The robot's external force (each axis, TCP) calculated from the torque sensor input is monitored and robot turns the safe state when the external force exceeds the specified limit (Fmin to Fmax).

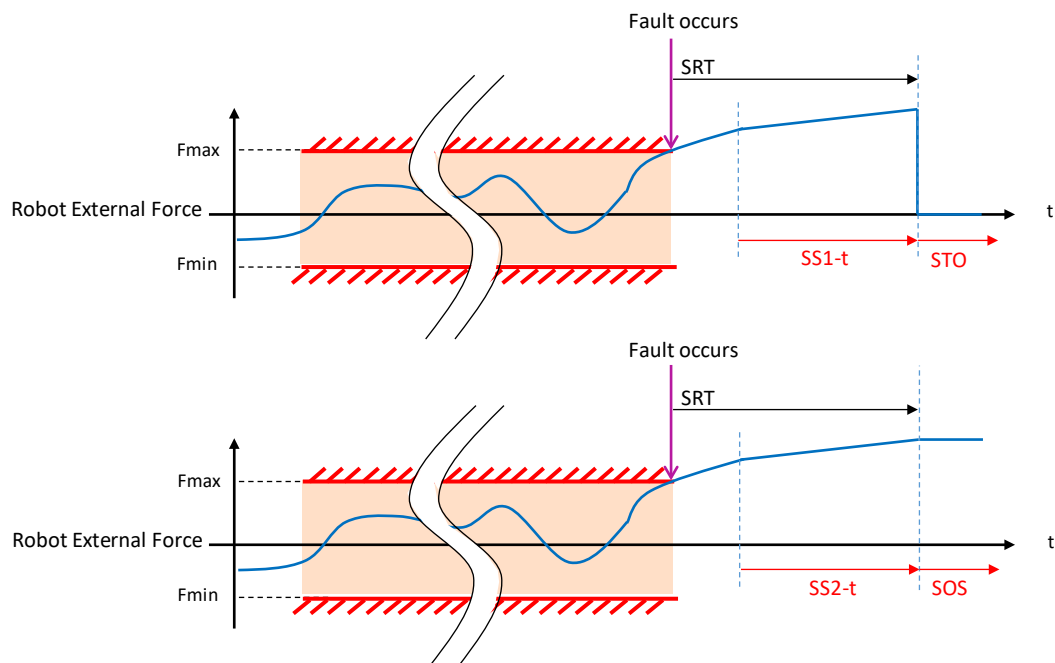


Fig.1 Safety function response time of Robot-limited force