

## Powerflex 750 Safety Options

Catalog Numbers				
	20-750-S	20-750-S1	20-750-S3	20-750-S4
<b>Safety Features</b>	Safe Torque Off - Hardwired	Safe Speed Monitoring - Hardwared	Safe Torque Off - Hardwired and Networked	Advanced Safety - Networked STO, SS1,SS2,SBC,SLS,SDI,SLP,SOS (4) Safety Inputs, (2) Safety Outputs
<b>Safety Rating</b>	<b>SIL 3(Ple)</b>	<b>SIL 3(Ple)</b>	<b>SIL 3(Ple)</b>	<b>SIL 3(Ple)</b>
<b>Drive Compatibility</b>	PF753 All Frames PF755 All Frames	PF753 All Frames PF755 All Frames	PF755 Fr(1-7) V13(or later) non motion PF755 Motion - V14(or later) PF755 Fr(8-10) V14.002 due to firmware anamoly PF755T V1( or later) NOT Compatible with PF753	PF755 V14.002(or later) PF 755T V4.001(or later) NOT Compatible with PF753
<b>AOP Compatibility</b>		PF753 Fr(1-7) - v3.01 PF755 Fr(1-7) - v2.01 PF755 Fr(8-10) - V3.02	PF755 AOP 4.09(or later) PF755T AOP 1(or later)	PF 755 AOP 5.03(or later) PF 755T 5.04(or later)
<b>Studio 5000 Compatibility</b>		V16(or later)	V30.012(or later) non motion V31(or later) motion	V31(or later)
<b>Controllers</b>	All	All	V30 for 5370,5570(non motion) V31 for 5380,5580	5380 or 5580
<b>Other Notes</b>	Ports: 4,5,6	Ports: 4,5,6 Fdk - 20-750-DENC or 20-750-UFB Has to be used with feedback	Comms across backplate 20-750-ENETR - only available in TAP mode Ports: IO Mode(4,5,6), CIP Motion(6)	Comms across backplate 20-750-ENETR - only available in TAP mode Ports: IO Mode(4,5,6), CIP Motion(6) Fdk - 20-750-DENC or 20-750-UFB IF using incremental fdk as primary - have to use 20-750-DENC Can be used with no feedback, STO Only

## Kinetix 5x00 Safety Options

	Drive				
	Kinetix 5500 ERS	Kinetix 5500 ERS2	Kinetix 5700 ERS3(Series A)	Kinetix 5700 ERS3(Series B)	Kinetix 5700 ERS4
Safety Features	Safe Torque Off - Hardwired	Safe Torque Off - Networked	Safe Torque Off - Hardwired and Networked	Safe Torque Off - Hardwired and Networked Networked Timed SS1	Advanced Safety - Networked STO, SS1,SS2,SBC,SLS,SDI,SLP,SOS
Safety Rating	SIL 2(PLd)	SIL 3(Ple)	SIL 3(Ple)	SIL 3(Ple)	SIL 3(Ple)
Motor Compatibility	VP-Series, MP-Series <sup>(1)(2)</sup>	VP-Series, MP-Series <sup>(1)(2)</sup>	VP-Series, MP-Series <sup>(1)(2)</sup>	VP-Series, MP-Series <sup>(1)(2)</sup>	VP-Series, MP-Series <sup>(1)(2)(3)(6)</sup>
Studio 5000 Compatibility	V21(or later) <sup>(4)</sup>	V24(or later) <sup>(4)</sup>	V26(or later) <sup>(4)</sup>	V31(or later) <sup>(4)</sup>	V31(or later) <sup>(4)</sup>
Controllers	5370,5570,5380,5580	5370,5570,5380,5580 <sup>(5)</sup>	5370,5570,5380,5580 <sup>(5)</sup>	5380,5580 <sup>(5)</sup>	5380,5580 <sup>(5)</sup>
Other Notes					

### Notes

- (1) Requires 2198-H2DCK Converter Kit for Kinetix 5500/5700 to use MP series feedback. The Kinetix 5700 can also accept MP series feedback through the Universal Feedback Port(2198-K57CK-D15M)
- (2) Other motor/feedback types are available
- (3) See Safety Instructions page for required safety feedback requirements
- (4) See "Logix Controllers Drives AOP Compatibility" document on drive major firmware/Studio 5000 compability
- (5) To achieve the desired Performance Level, the controller requires the equivalent PL. For example, to achieve a PLe with a 5580 controller, a safety partner is required.
- (6) Kinetix 5700 can also accept MP series feedback through the Universal Feedback Port(2198-K57CK-D15M)

## Advanced Safety Instructions

Safety Functions	Drive Compatibility	Feedback Type		
		No Encoder Feedback - STO Only	Primary Feedback Only (Safety Encoder) <sup>(1)</sup>	Primary and Secondary Feedback (Safety Primary, Standard Secondary) <sup>(2)</sup>
Safe Stop 1 - Timed	Kinetix 5700 ERS3(Series B), ERS4, PF750S4	SIL 3(Ple)	SIL 3(Ple)	SIL 3(Ple)
Safe Stop 1 - Monitored	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 3(Ple)
Safe Stop 2 - Velocity Check	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 3(Ple)
Safe Stop 2 - Position Check	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 2(PLd)
Safe Operating Stop - Velocity Check	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 3(Ple)
Safe Operating Stop - Position Check	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 2(PLd)
Safe Limited Speed	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 3(Ple)
Safe Limited Direction	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 2(PLd)
Safe Limited Position	Kinetix 5700 ERS4, PF750S4	N/A	SIL 2(PLd)	SIL 2(PLd)
Safe Brake Control	Kinetix 5700 ERS4, PF750S4	N/A	N/A	N/A

(1) The primary encoder feedback requires a safety rating of SIL2, PLd rating. Examples would be the VP-Series (-W or -Q) encoders.

(2) The secondary encoder feedback can use a standard encoder such as the 842 Sin/Cos encoder.