

Temperature Transmitter **FRC**



Features

- Universal Input
- High Accuracy
- Sensor Burnout
- Self Diagnosis
- Hart Communication
- Intrinsic Safety & Explosion Proof
- Wide Variety of Thermocouple Type
- Isolated Input & Output

Typical Applications

- Petrochemical / Refinery
- Pharmaceutical / Chemical
- Local Process Monitoring

General Specifications

Environmental Protection	NEMA 4X, IP65
Wiring Conduit	1/2 NPT, M20 x 1.5, PG13.5
Damping	0 to 30 sec.
Burnout	Upscale, Downscale or no burnout selectable
Cold junction compensation (thermocouple)	Available
Isolation	Input - output
Approvals for hazardous locations	FM flameproof & intrinsic safety / ATEX flameproof & intrinsic safety
Output	User-selectable
Linearization	Standard

Specifications

Items		Specification
LCD display	Display size	36 x 20 mm (1.41" x 0.79")
	Display range	-99999 to 99999
	Read rate	150msec
Hart communication	Transmission speed	1,200bps
	Character format	1 start bit, 8 data bits, 1 odd parity bit, 1 stop bit
	Distance	1.5 Km
	Mode	Master – slave mode and burst mode
Performance *Note 1	Accuracy	+/- 0.1%
	Cold junction compensation	Less than +/- 0.5°C
	Temperature coefficient	+/- 0.015% / °C
	Response time	Less than 1 sec. With damping time set to 0 and when not communicate via HART.
	Supply voltage effect	+/- 0.003% of span/V
Standard & Approvals *Note 1	CE conformity	ATEX Directive(94/9/EC) & EMC Directive(89/336/EEC)
	Safety approvals	FM flameproof & intrinsic safety / ATEX flameproof & intrinsic safety
Installation	Supply voltage	12 to 42V DC
	Operating temperature	-40 to 85°C Electronics, -30 to 80°C Display
	Humidity	0 to 95%RH
Input *Note 1		DCmV & V, Themocouple, RTD
Output *Note 1		4 to 20mA

*Note 1 See DATE SHEET No.EDS8-10.

CODE SYMBOLS

Digit	Description	Note	1	2	3	4	5	6	7	8
			F	R	C					1
4	Case None (module only) Yes					0	1			
5	Approvals for hazardous locations None FM flameproof (*1) ATEX flameproof (*2) FM intrinsic safety (*3) ATEX intrinsic safety	Note 1 Note 2 Note 3					A	B	C	D
6	Display None LCD					0	1			
7	Wiring conduit None 1/2NPT M20 x 1.5 PG13.5								0	1
									2	3

Note: (*1) Available for 7th digit code "1"

Note: (*2) Available for 7th digit code "1", "2"

Note: (*3) Available for 7th digit code "0", "1", "2"

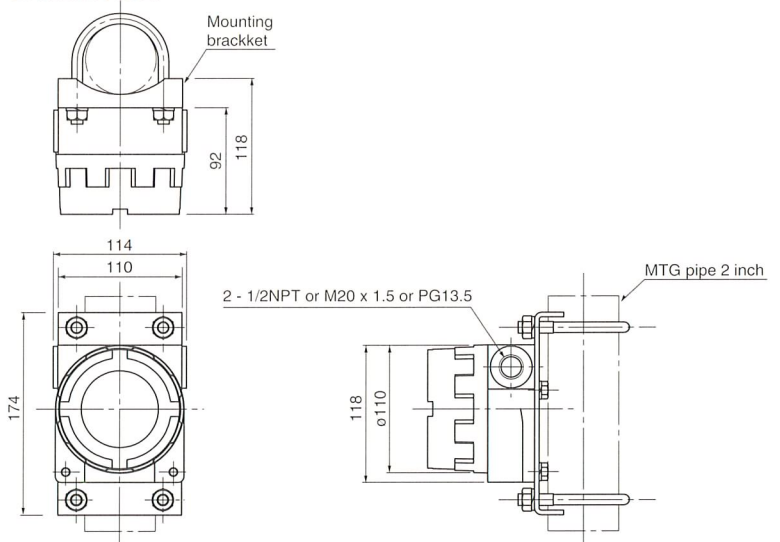


ISO 14001
JQA-EM2492

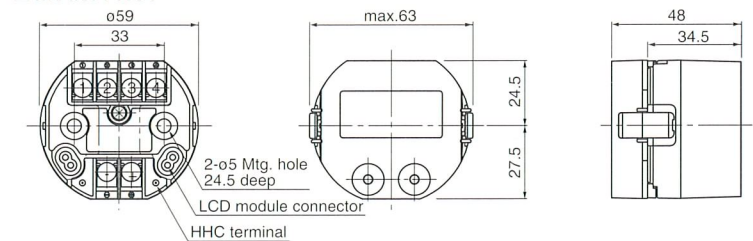
ISO 9001
JQA-2275

OUTLINE DIAGRAM (Unit:mm)

Model FRC1



Model FRC0



without LCD module
(Terminal location)

with LCD module

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