PRODUCT. 01

F/T Sensor

RFT series is a capacitive type 6-axes force/torque sensor with the lower price/performance ratio for the use with collaborate robots and industrial robots. The sensor has an innovative structure design and a robust calibration algorithm to achieve both of cost competitiveness and reliable performance. It provides users with various interface options for communication with their robots or devices. It was primarily designed to resist against an external impact or an excessive load. It is also temperature compensated for the use in various environments.

RFT80-6A02
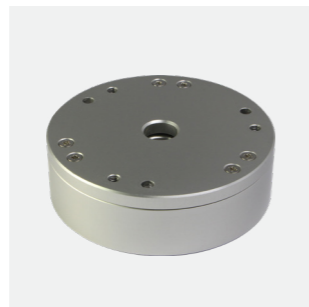Medium-sized model with high resolution

Rated Capacity
400N(force) | 20Nm(torque)
Resolution
0.08N(force) | 0.004Nm(torque)
Overload Capacity
300%FS
Temperature Compensation
Embedded EtherCAT board
Dimension & Weight
80(D)x30(H)mm | 294g

RFT64-6A01
Small-sized model with high resolution

Rated Capacity
200N(force) | 10Nm(torque)
Resolution
0.08N(force) | 0.004Nm(torque)
Overload Capacity
300%FS
Temperature Compensation
Embedded EtherCAT board
Dimension & Weight
64(D)x30(H)mm | 175g

RFT60-HA01
Small-sized model with high resolution

Rated Capacity
200N(force) | 4.5Nm(torque)
Resolution
0.15N(force) | 0.005Nm(torque)
Overload Capacity
150%FS
Dimension & Weight
60(D)x18.5(H)mm | 70g

RFT40-SA01
Mini-sized model with high resolution

Rated Capacity
100N(force) | 2.5Nm(torque)
Resolution
0.2N(force) | 0.008Nm(torque)
Overload Capacity
150%FS
Dimension & Weight
40(D)x18.5(H)mm | 60g

RFT80-6A01
Medium-sized model with high resolution

Rated Capacity
400N(force) | 20Nm(torque)
Resolution
0.1N(force) | 0.005Nm(torque)
Overload Capacity
200%FS
Dimension & Weight
80(D)x22(H)mm | 226g

RFT64-SB01
Small-sized model with a dust seal

Rated Capacity
200N(force) | 4.5Nm(torque)
Resolution
0.15N(force) | 0.005Nm(torque)
Overload Capacity
150%FS
Dimension & Weight
64(D)x20(H)mm | 140g

RFT44-SB01
Mini-sized model with a dust seal

Rated Capacity
100N(force) | 2.5Nm(torque)
Resolution
0.2N(force) | 0.008Nm(torque)
Overload Capacity
150%FS
Dust Resistant Seal
Dimension & Weight
44(D)x20(H)mm | 120g

RFT SERIES

Specification Table

Item		Unit	RFT40-SA01	RFT44-SB01	RFT60-HA01	RFT64-SB01	RFT64-6A01	RFT80-6A01	RFT80-6A02	RFTEC-02
Dimension	Diameter	mm	40	44	60	64	64	80	80	120 x 75
	Height	mm	18.5	20	18.5	20	30	22	30	20
Data Rate	(maximum)	Hz	200	200	1,000	1,000	1,000	1,000	1,000	1,000
Load Capacity	Fx, Fy	N	100	100	150	150	200	400	400	"Robot cable (3 meters) RFTC-6AE-R3"
	Fz	N	150	150	200	200	200	400	400	
	Tx, Ty, Tz	Nm	2.5	2.5	4	4	10	20	20	
Resolution	Fx, Fy	mN	200	200	100	150	80	100	80	-
	Fz	mN	200	200	150	200	80	100	80	-
	Tx, Ty, Tz	mNm	8	8	5	5	4	5	4	-
Overload Capacity	Fx, Fy	%	150	150	150	150	300	150	300	-
	Fz+ (Fz-)	%	150 (300)	150 (300)	150 (300)	150 (300)	300 (300)	200 (400)	300 (300)	-
	Tx, Ty, Tz	%	150	150	150	150	300	200	300	-
Hysteresis	Fx, Fy	%FS	2	2.5	2.5	3	1	2.5	1	-
	Fz	%FS	0.5	1	1	2	1.5	1	1.5	-
	Tx, Ty, Tz	%FS	1	3	1	2	2	1	2	-
Cross Talk	Fx, Fy	%FS	3	3	3	3	3	3	3	-
	Fz	%FS	3	3	3	3	3	3	3	-
	Tx, Ty, Tz	%FS	3	3	3	3	3	3	3	-
Weight(w/o cable)		g	60	70	120	140	175	226	294	66
Power Requirement		W, VDC	0.5W @5VDC (1.5W@5VDC for EtherCAT models)							2.5W @24VDC
Output Interface		optional	CAN	RS232	RS422	USB	EtherCAT						EtherCAT
Product Image										
Feature	Hollow Core ○ / Dust Seal ●		-	●	○	●	-	○	-	-
	Temerature Compensation		-	-	-	-	●	-	●	-
	Embedded EtherCAT Option		-	-	-	-	●	-	●	-