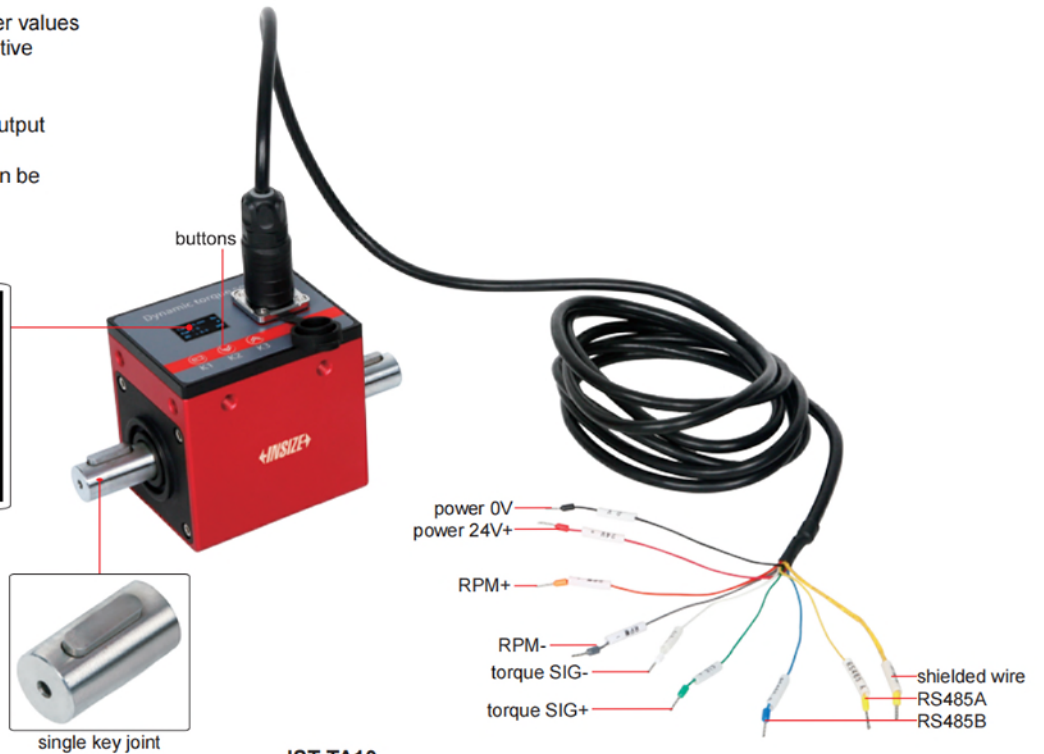
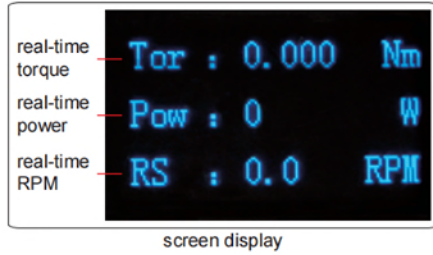


# DYNAMIC TORQUE SENSORS

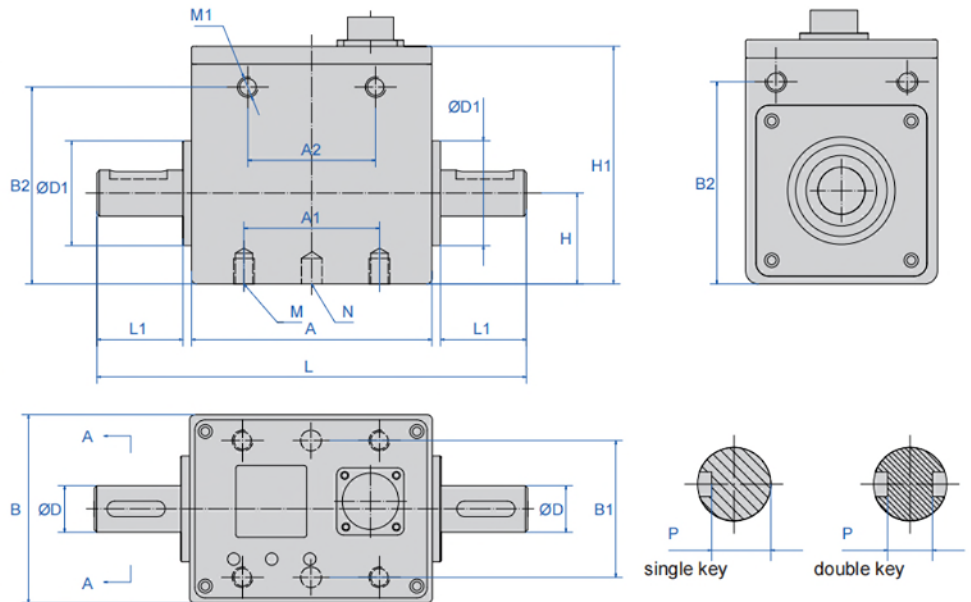
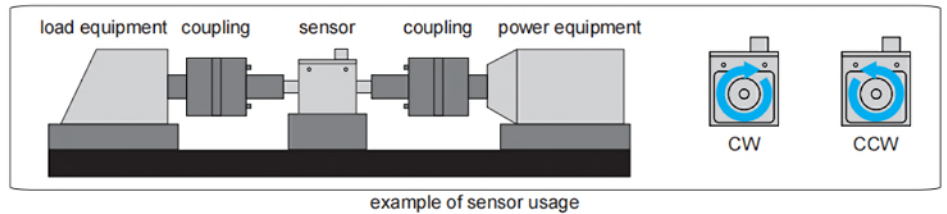
ATTENTION: CUSTOMIZATION IS REQUIRED FOR RPM EXCEEDING THE RATED RPM

- Real-time display of torque, RPM and power values
- Support RS485 communication, support active uploading protocols
- Communication rate up to 1000 Hz
- Torque signal is  $\pm 5V$  transformed voltage output
- OLED display, resolution 128\*64
- Simple calibration, zeroing, filtering, etc. can be performed



## SPECIFICATION

RPM signal	120/60/10 pulses/rev.
Zero output	$\pm 0.1\%$ F.S.
Accuracy	0.1%F.S.
Hysteresis	0.5%F.S.
Repeatability	0.1%F.S.
Creep (30 minutes)	0.05%F.S.
Temperature sensitivity drift	0.05%F.S./10°C
Zero temperature drift	0.05%F.S./10°C
Response time	0.6ms (50% response)
Response frequency	1kHz
Max. torsion angle	$2.6 \times 10 \text{ rad}$ (0.149°)
Inertial torque	0.38kg.cm
Intrinsic frequency of rotor vibration	19.4kHz
Torque constant	$3.85 \times 10 \text{ N.m/rad}$
Material	Stainless steel
Annual stability	0.3%/year
load resistance	$> 2 \text{ k}\Omega$
Power supply	DC24V 0.2A
Working environment	-10~50°C $\leq 85\%$ RH
Safety overload	150%
Extreme overload	200%
Cable specification	$\text{Ø}5\text{mm} \times 3\text{m}$
Extreme cable pulling force	10kg



dimension drawing

(mm)

Code	Maximum range	Rated RPM	D	B	L	L1	H	H1	A1	A2	B1	B2	D1	M	M1	N	Key size (L × W)	P
IST-TA1S	1N.m	8000rpm	10	51	108	18	25.5	68	58	/	43	/	12	4-M3 depth 6	/	/	single key 15×3	8.2
IST-TA2S	2N.m																	
IST-TA3S	3N.m																	
IST-TA5S	5N.m																	
IST-TA1L	1N.m	8000rpm	10	73	148	23.6	35.5	93	53	50	53	77	41	4-M8 depth 10	8-M8 depth 6	2-Ø8 depth 10	single key 10×3	8.2
IST-TA2L	2N.m																	
IST-TA3L	3N.m																	
IST-TA5L	5N.m																	
IST-TA10	10N.m	8000rpm	18	73	168	33.6	35.5	93	53	50	53	77	41	4-M8 depth 10	8-M8 depth 6	2-Ø8 depth 10	single key 22×6	14.5
IST-TA20	20N.m																	
IST-TA30	30N.m																	
IST-TA50	50N.m																	
IST-TA100	100N.m	7000rpm	28	73	208	53.5	35.5	93	53	50	53	77	51	4-M8 depth 10	8-M8 depth 6	2-Ø8 depth 10	single key 28×8	24
IST-TA200	200N.m																	
IST-TA300	300N.m																	
IST-TA500	500N.m	6000rpm	38	90	238	65.5	44	107.5	60	60	60	91	61	4-M8 depth 12	8-M8 depth 12	2-Ø8 depth 10	double key 45×10	28
IST-TA800	800N.m																	
IST-TA1000	1000N.m	4000rpm	60	120	258	75.5	60	138.5	60	70	75	122.5	93	4-M10 depth 15	8-M10 depth 15	2-Ø10 depth 15	double key 60×18	46
IST-TA2000	2000N.m																	
IST-TA3000	3000N.m																	
IST-TA5000	5000N.m																	
IST-TA10000	10000N.m	3000rpm	98	160	356	100.5	80	191.6	80	80	120	157	129	4-M12 depth 25	4-M12 depth 25	/	double key 90×28	78
IST-TA20000	20000N.m																	