

Web tension load cell series



Features

Capacity 100N-30000N

High accuracy

Size available for every applications

Nickel plated alloy steel

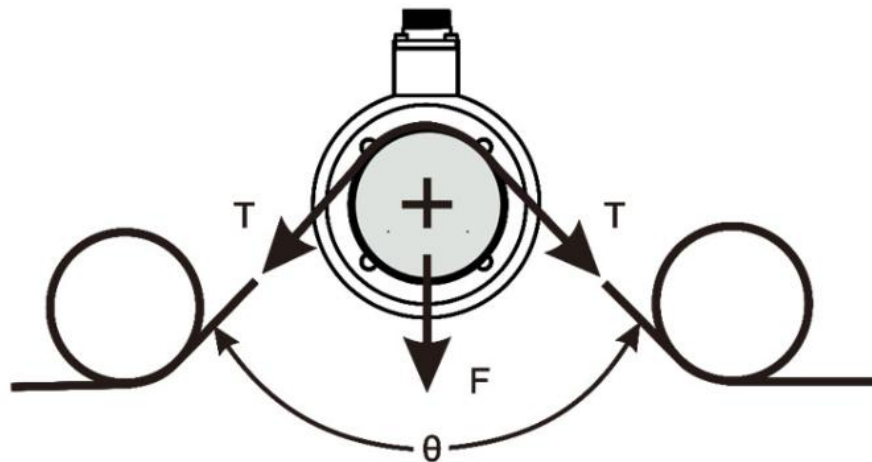
Optional features

Stainless steel construction

DESCRIPTION

The ZMZL series tension sensors offer the highest accuracy, reliability, and durability in the industry. Utilizing a combination of stainless steel construction, a built in mechanical hard stop, and individual sensor performance verification, the ZMZL series tension sensors are perfect for all high performance running web applications.

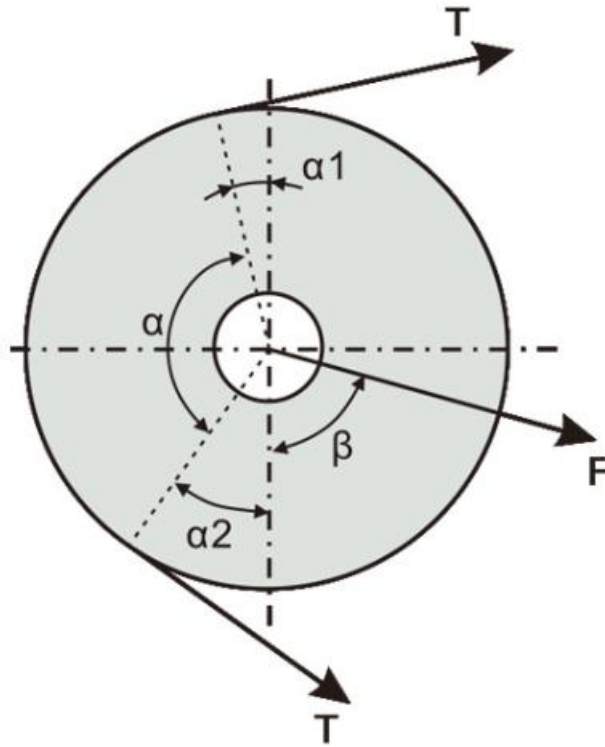
INSTALLATION



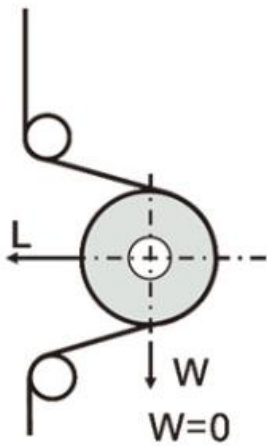
$$0 \leq \theta \leq 150^\circ$$

T=Material tension F=force on web tension load cell

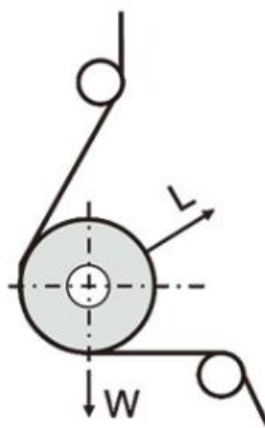
HOW TO CHOOSE CAPACITY



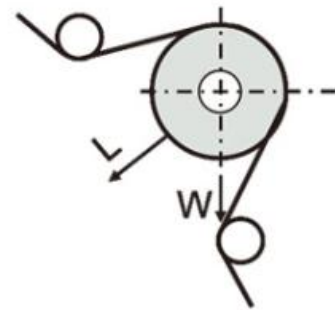
$$F = 2 \times T \times \sin \frac{\alpha}{2} \text{ where } \beta = \alpha + \frac{\alpha}{2}$$



$F = L$

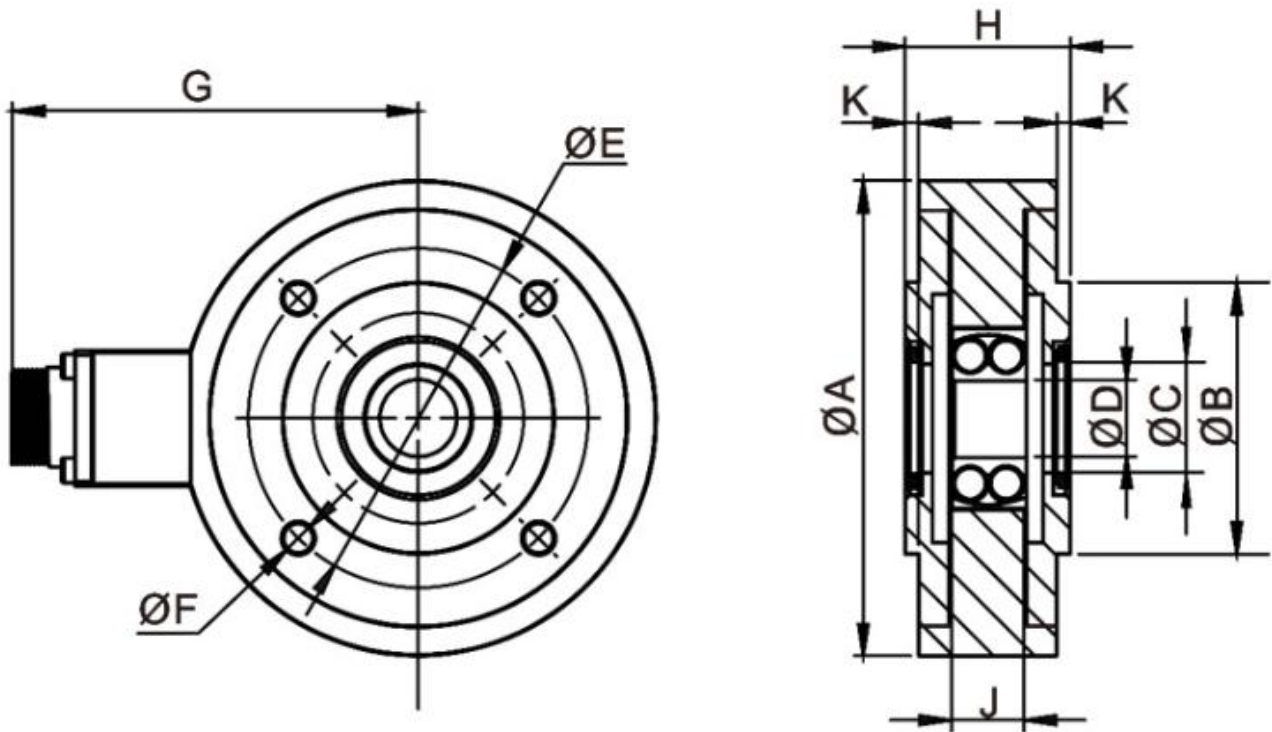


$F = L - W$



$F = L + W$

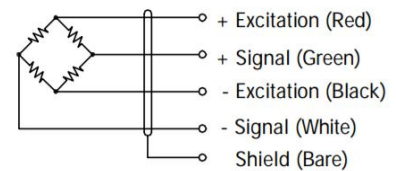
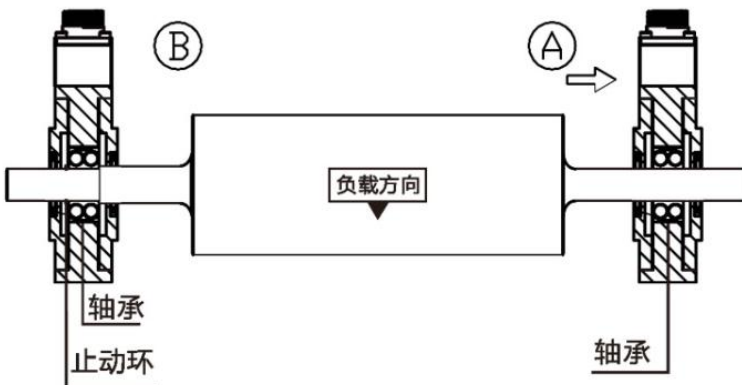
Dimensions in mm



技术数据

单位: mm

型号	额定荷重(kg)	外形尺寸									
		A	B	C	D	E	F	G	H	J	K
TTS-10-17	10	105	60	22	17	75	6.5	90	36.5	16	3
TTS-15-17	15	105	60	22	17	75	6.5	90	36.5	16	3
TTS-25-17	25	105	60	22	17	75	6.5	90	36.5	16	3
TTS-50-17	50	105	60	22	17	75	6.5	90	36.5	16	3
TTS-75-25	75	125	70	31	25	95	6.5	100	47.5	18	4
TTS-100-25	100	125	70	31	25	95	6.5	100	47.5	18	4
TTS-150-35	150	175	100	44	35	135	8.5	125	65	23	4
TTS-300-35	300	175	100	44	35	135	8.5	125	65	23	4
TTS-500-65	500	265	160	80	65	220	10.5	170	80	33	4
TTS-1000-65	1000	265	160	80	65	220	10.5	170	80	33	4
TTS-2000-65	2000	265	160	80	65	220	10.5	170	80	33	4
TTS-3000-65	3000	265	160	80	65	220	10.5	170	80	33	4



SPECIFICATIONS

PARAMETER	VALUE	UNIT
Standard capacities (E _{max})	100-30000	N
Rated output-R.O.	1.0	mV/V
Zero balance	1	±% of rated output
Non linearity	0.3	±% of rated output
Hysteresis	0.2	±% of rated output
Non-repeatability	0.1	±% of rated output
Creep error (30 minutes)	0.03	±% of rated output
Zero return (30 minutes)	0.03	±% of rated output
Temperature effect on min. dead load output	0.0026	±% of rated output/°C
Temperature effect on sensitivity	0.0015	±% of rated output/°C
Compensated temperature range	-10 to +40	°C
Operating temperature range	-20 to +60	°C
Safe overload	150	% of R.C
Ultimate overload	200	% of R.C
Excitation, recommended	10	Vdc
Excitation, maximum	15	Vdc
Input resistance	380±10	Ohms
Output resistance	350±3	Ohms
Insulation resistance	5000	Mega-Ohms
Material	Alloy steel	
Protection class	IP66	

All specifications listed subject to change without notice.