

## FORCE TRANSDUCER FOR TENSION/COMPRESSION F2301

Thin-film Technology

F23011420005

Force sensor 0-20kN, tension, 0-10VDC

- Force range from 1-500 kN
- Stainless steel IP67
- Accuracy <0.2%
- Amplified output signal 4-20 mA or 0-10V DC
- ATEX / SIL3 options



### PRODUCT DESCRIPTION

Wika's F2301 is a force transducer in compact design for tension or compression measurement or combination of both. Integrated analog output signal 4-20 mA or 0-10 V with thin-film measuring cell that provides good long-term stability and good repeatability and has protection against shock and vibration. Standard M12 electrical connection for easy assembly. For use in e.g. machines, vehicles, tractors, loaders, lifting devices, cranes and lifts. The force transducer is made of stainless steel, which makes it suitable for mounting in tough and aggressive environments. Available in SIL3 version where high personal safety is a requirement.

Special designs

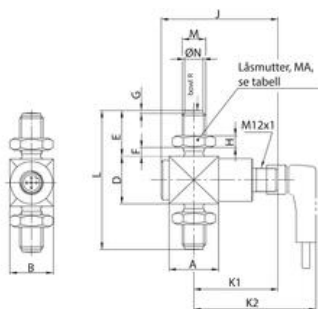
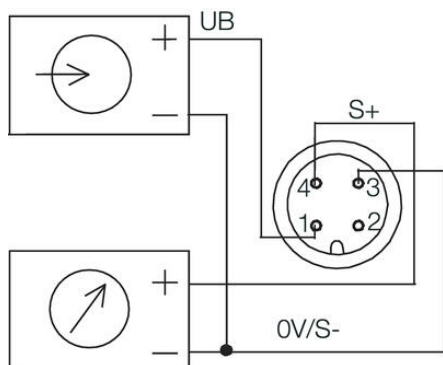
- Other output signals such as 0.5-4.5 V ratiometric, 0-5 V DC etc
- SIL3 approved
- Alternative connections and power ranges
- EX-rated design

### TECHNICAL DATA

Connection	M12x1
Function	Features
IP class	IP67
Material	Stainless steel 17-7 PH
Power range max	20 kN
Power range min	0
Response time	1 ms
Signal type	0-10 V
Storage temperature max	85 °C
Storage temperature min	-40 °C
Supply voltage dc max	30 V DC
Supply voltage dc min	14 V DC
Temperature operational max	80 °C

Temperature operational min

-40 °C



kN	A/ØC	B	D	E	F	G	H	J	K1	K2	L	M	ØN-6,1	Radius R	MA (Nm)
1	25.2	22	24	23	4.3	1.5	6	59	43	62	70	M12	9.5	60	60
2	25.2	22	24	23	4.3	1.5	6	59	43	62	70	M12	9.5	60	60
3	25.2	22	24	23	4.3	1.5	6	59	43	62	70	M12	9.5	60	60
5	25.2	22	24	23	4.3	1.5	6	59	43	62	70	M12	9.5	60	60
10	25.2	22	31	23	4.3	1.5	6	59	43	62	77	M12	9.5	60	60
20	25.2	26	33	34	3.8	2	10	59	43	62	101	MD6x1.5	17	100	300
30	27.5	27.5	40	34	3.8	2	10	61.5	44	63	108	MD6x1.5	17	120	300