



S-MULC-IO Load cell force transducer

Modular Universal Load Cell IO-Link

S-MULC-IO

● Characteristics

0620 - LOAD MEASURING - FORCE - OVERLOAD

 	- Input:	Load suspension device
	- Function load cell:	Tension / Compression / Tension and compression
	- Measuring range:	500 kg / 1000 kg / 1500 kg / 3000 kg
	- Output:	IO-Link interface
	- Voltage supply:	24 VDC
	- Accuracy:	See technical data
	- Protection class:	IP54
	- Vibration protection:	Electronics completely potted
	- Configuration:	per software (IO-Link)
	- Material load cell:	Stainless steel / Tool steel nickel-plated
- Accessories:	Rod ends	

● Technical Data

Input	
Load suspension device:	Tension load, compression load, tension and compression load
Ranges:	500 kg / 1000 kg / 1500 kg / 3000 kg
Output	
Interface:	IO-Link
Signal level:	0/24V (as per IO-Link specification)

Performance Parameters		
Measurement amplifier:	Accuracy:	max. 0,05% of range + sensor error
	Resolution:	16 Bit
	Filter adjustment:	0...5 s
	Switch-on delay:	<5 s
	Response time:	20 ms
	Configuration:	via software (IO-Link)

Load Cell Specifications	
Material:	Stainless steel / Tool steel nickel-plated
Hysteresis:	0,5% of range
Repeatability:	0,05% of range
Creepage:	0,05% of range / 10 min
Temperature drift on zero:	0,05% of range / 10 K
Temperature drift on span:	0,05% of range / 10 K
Safe overload:	150% of range
Ultimate load:	200% of range

● Applications

The load cell with integrated measuring amplifier IO-Link is for use in applications where dynamic forces have to be measured. Possible are tension, compression and tension / compression loads. The output signal has a signal level of 24 V (IO-Link specification). The load cells are available with rod ends.

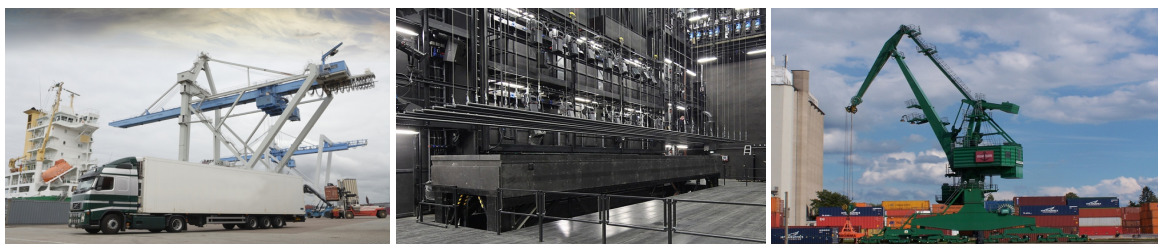


photo: www.pixelquelle.de

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● Technical Data (Continued)

Supply

Voltage:	24 VDC
Current:	
Standard:	<30 mA
Switching (SIO):	max. 100 mA
Total current:	max. 130 mA
Reverse voltage protection:	Available (no function, no damage)

Environmental Conditions

Operating temperature:	-20...+80°C
Storage temperature:	-20...+85°C
Humidity:	30...90% rH (40 °C, no condensation)

Mechanics

Protection class:	IP54
Weight:	
500/1000 kg:	approx. 343 g (no rod ends, no covers)
1500/3000 kg:	approx. 423 g (no rod ends, no covers)
Vibration resistance:	Inside potted
Electrical connection:	IO-Link: Male plug M12x1, 4-pole
Load cell:	
Type:	Tension and compression load cell
Dimensions:	See table page 3
Material:	Stainless steel / Tool steel nickel-plated
Mounting device:	Rod ends / Option: without (The operator uses the threaded holes of the load cell.)

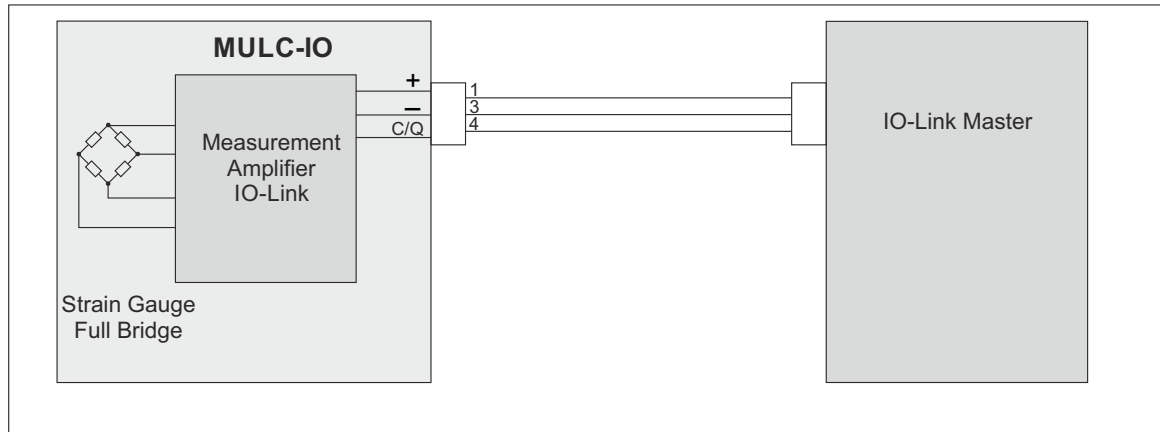
● IO-Link

The configuration has to take place over a connected IO-Link master. You will also need the related IO Device Description (IODD) file. You can find information about working with IO-Link and a list of all readable parameters in *Technical Overview IODD - MULC-IO*. The IODD-file can be downloaded directly via the IODD-Finder. The TO IODD MULC-IO and a link to the IODD-Finder can be found on our website www.octogon.org.

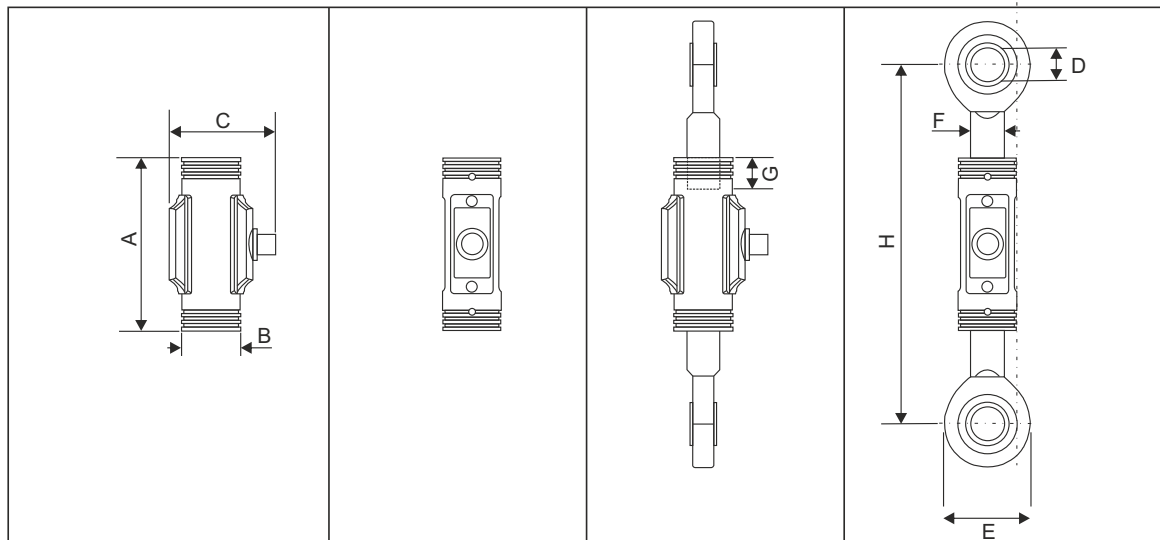
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Electrical Connection

IO-Link Connection with Plug M12x1 (4-pole)



Dimensions (in mm)



Range	A	B	C	D	E	F	G	H
1000 kg*	90	Ø35	64	Ø12	34	M16	18	168
1500 kg	90	Ø35	64	Ø17	34	M16	17	198
3000 kg	105	Ø35	64	Ø20	53	M20x1,5	23	218

*Dimensions 500 kg = dimensions 1000 kg

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● **Order Code**

		C	H	X	X	X	X	X	X	-	X	X	X	X	
Function load cell:	Tension load														
	Compression load														
	Tension- and compression load														
Output:	IO-Link (24 VDC)														0
Supply:	24 VDC														0
Vibration resistance:	Yes (inside potted)														1
Range load cell:	500 kg														0
	1000 kg														1
	1500 kg														2
	3000 kg														3
Material load cell:	stainless steel														0
	tool steel nickel-plated														1
Mounting device:	rod ends														0
	without (The operator uses the threaded holes of the load cell.)														1
Electrical connection:	M12x1, 4-pole														1
Configuration:	without														0
	factory setting														1
	customized (please specify)														2
Special model:	No														0
	Yes (please specify)														1