AST Gruppe
Angewandte System Technik

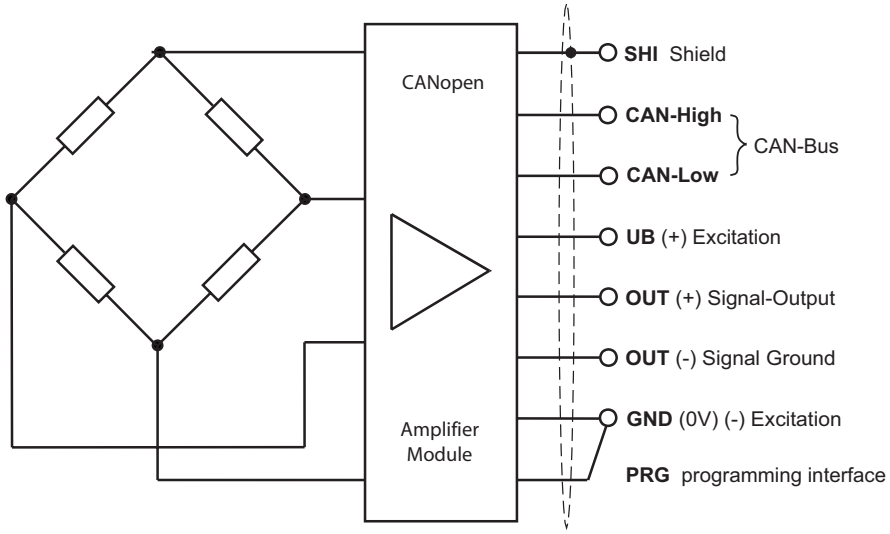
Force Transducer with integrated CANopen® - Interface

Applications

Many of our force transducers can be supplied with an integrated CANopen interface.

Please ask us for more information.

Principle Overview



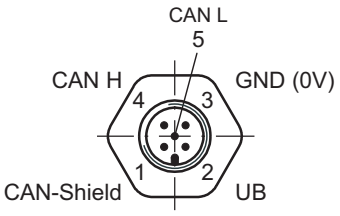
(0V and PRG to be connected by the customer)

Connections

	DIN	4-wire	8-wire
UB	brown	brown	white
GND (0V)	yellow	yellow	brown
CAN-High	green	green	green
CAN-Low	white	white	yellow
PRG/ Test	grey	-	pink
CAN-SHI	black	black	grey
OUT-	-	-	blue
OUT+	-	-	red

Flange plug M12x1on the sensor housing

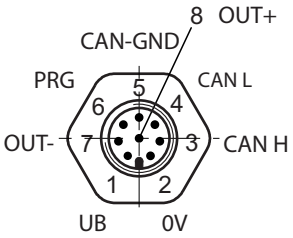
XKC 044.03



Force sensor with CANopen
5-pole

(view at plug front)

XKC 044.04



Force sensor with CANopen and
standard signal output (0/+4 ... +20mA or 0 ... +10V)
8-pole

Specifications

Profile		
Device profile		CiA 404: Sensors and controllers
Output digital CAN		
Transmission rate - adjustable	kBit/s	125/ 250/ 500
Number of PDO - configurable		4
Module address - adjustable		1 ... 127
Conversion rate	Hz	8000
Filter (averaging)	Values	1 ... 250
Resolution	bit	16
Accuracy class regarding strain-gauge sensor: 2mV/V input signal = 100% v. E.		
Reproducibility	% v. E.	0.2
Temperature coefficient amplification	% v. E. / 10K	0.1
Temperature coefficient zero point	% v. E. / 10K	0.1
Output standard signal analog		
Standard output signal		0/+4 ... +20mA or 0 ... +10V
Min. load at a voltage output	kΩ	10
Max. burden on current output	Ω	350
Datarate DAC	1/s	10000
Max. Slew_rate	V/ ms	7
Accuracy class standard signal analog regarding strain-gauge sensor: 2mV/V input signal = 100% v. E.		
linearity	% v. E.	0.2
Temperature coefficient amplification	% v. E./ 10K	0.15
Temperature coefficient zero point	% v. E./ 10K	0.15
Noise current output, typical	μA_{RMS}	12
Noise voltage output, typical	mV_{RMS}	5.5
Power supply		
Supply voltage	VDC	24 (5 ... 36)
Power consumption	mW	<300
Environmental condition		
Working temperature range	°C	-40 ... +85
Storage temperature range	°C	-40 ... +85
Interference immunity		DIN EN 61000-6-2
Interference emission		DIN EN 55011-B

Order Example

Type Code	Description
KAM-DI/10kN/0.1/CANopen	Example type KAM for force transducers with integrated CANopen CANopen-Output Accuracy class Rated load DI = with integrated electronics with Digitaloutput Model of the force tranducer