

DI 301DP DMS-Profibus-Interface

Applications

- Force measurement
- Industrial weighing with measured value output

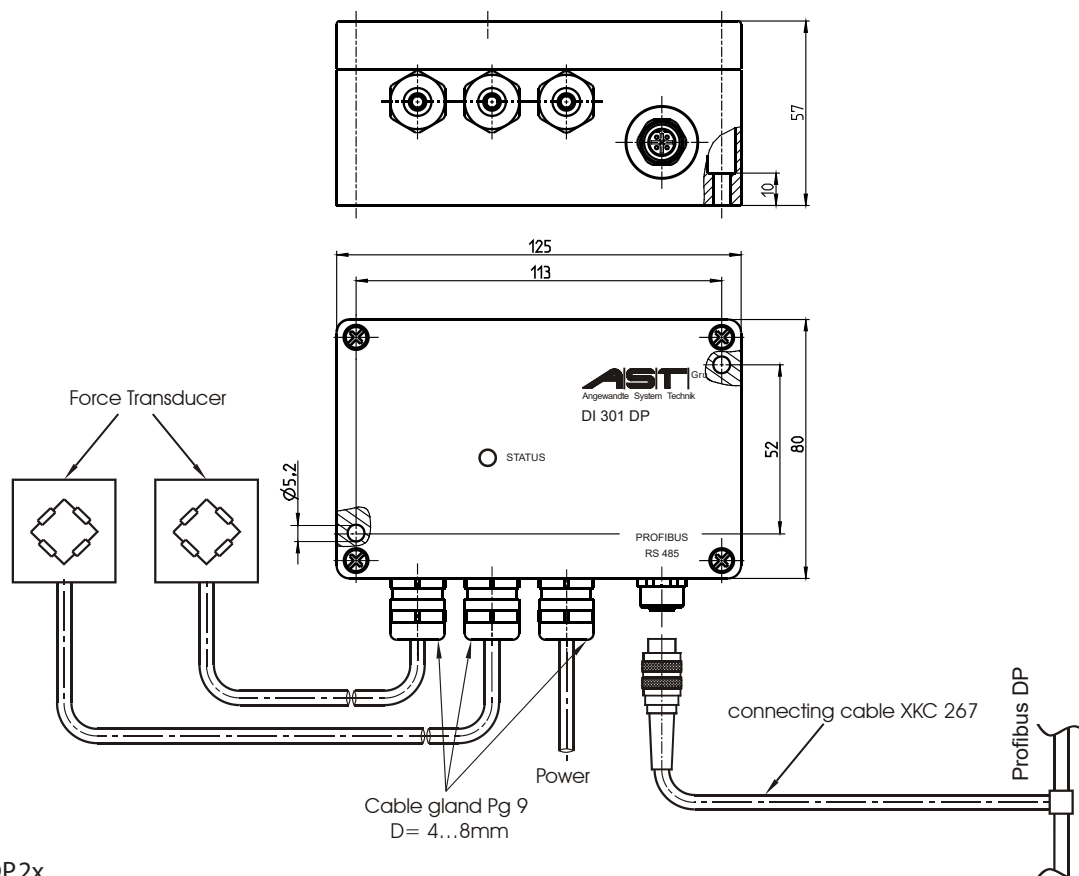
Features

- Field interface Profibus DP or RS485- BUS
- High accuracy by 24bit A/D-converter
- Measuring rate up to 400Hz
- Two measuring inputs, mV/V, mA, VDC
- One incremental encoder-output
- Industrial design, IP 65
- Power supply 9 ... 36VDC
- 6-wire system
- Integrated weighing functions

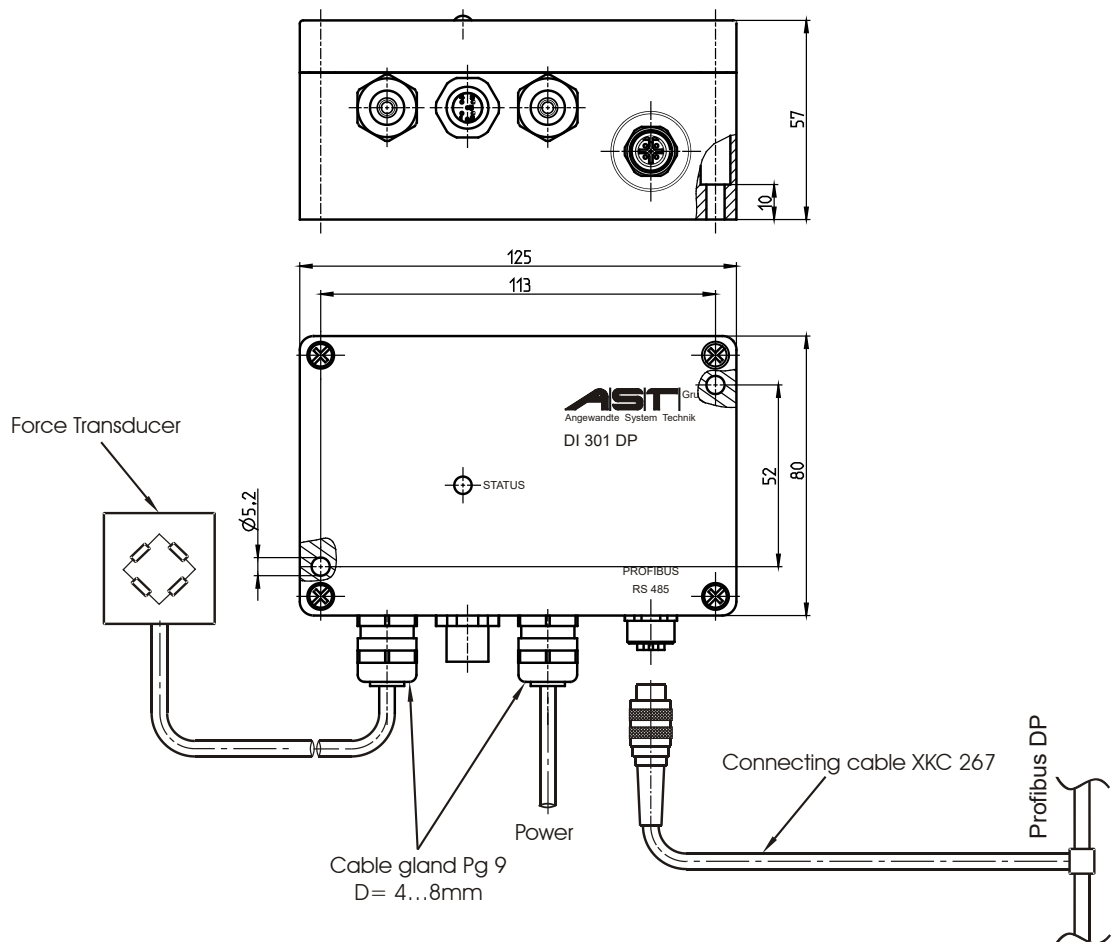
Option

Power supply 100 ... 240 VAC

Dimensions/ Connections

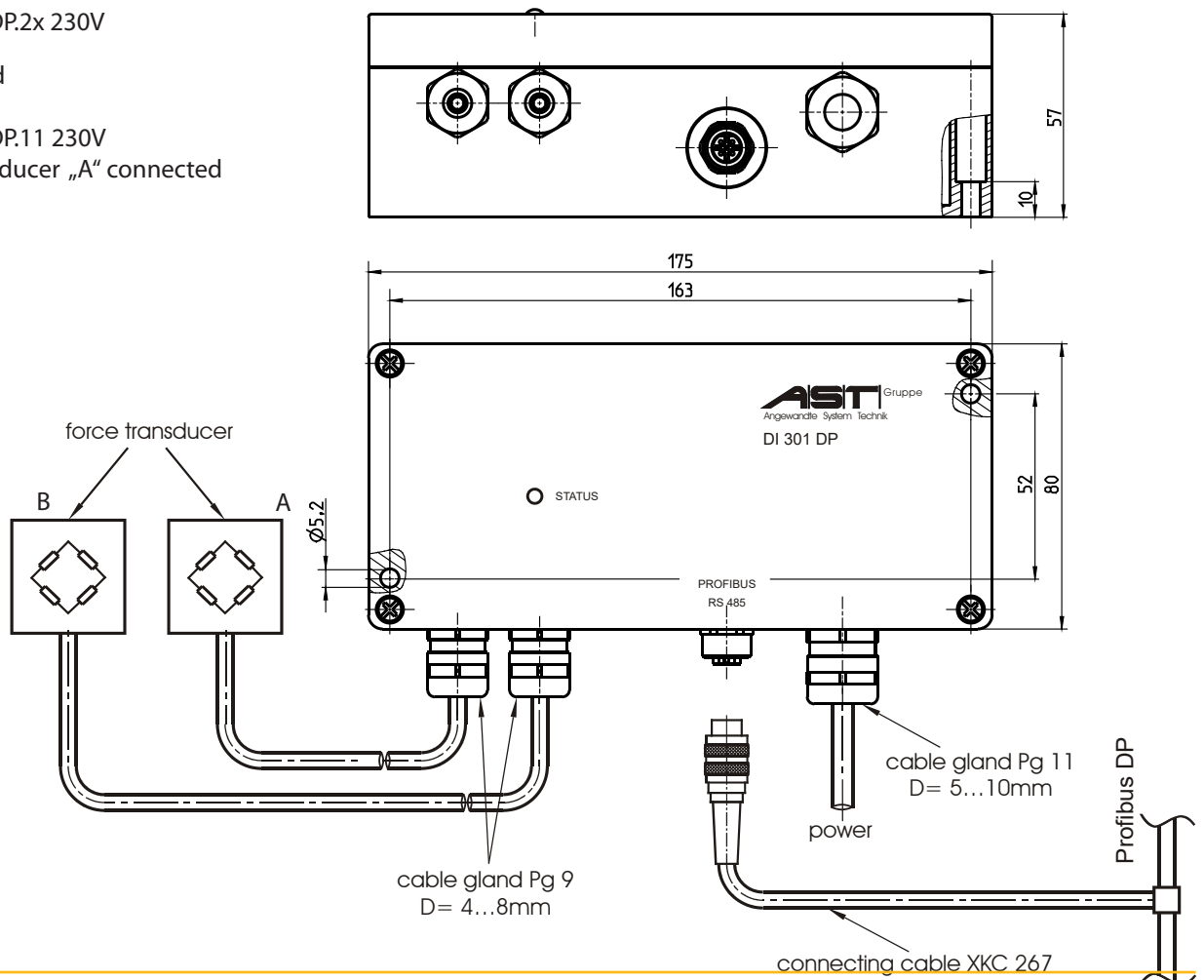


Version DI 301DP.2x

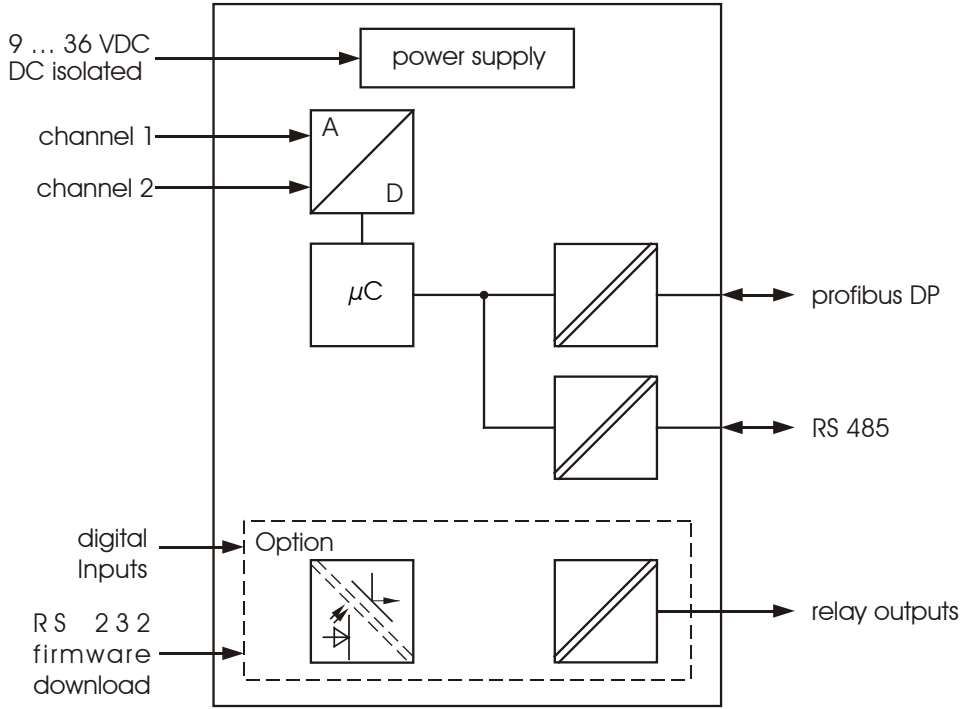


and

only force transducer „A“ connected



Wiring Diagram



Type Code	Analog input		Switching input	Incremental-input	Switching output
	Channel 1	Channel 2	4x	1x	2x
DI 301DP.11	 mV/V	-	yes	yes	yes
DI 301DP.21	 mV/V	 mV/V	yes	yes	yes
DI 301DP.22	 mV/V	 0 ... ±10V	yes	yes	yes
DI 301DP.23	 mV/V	 4 ... 20mA	yes	yes	yes
DI 301DP.24	 0 ... ±10V	 0 ... ±10V	yes	yes	yes
DI 301DP.25	 4 ... 20mA	 4 ... 20mA	yes	yes	yes

Option: Power supply 100 ... 240 VAC for all types

Specifications

Accuracy Class		0.01	
Type		DI301 DP.11	DI301 DP.21; DI301 DP.22; DI301 DP.23; DI301 DP.24; DI301 DP.25
Signal Input		one channel 6-wire system	two channel Channel 1 : 6-wire system Channel 2 : 4-wire system
Input strain-gauge bridge Connecting equipment			
Admissible bridge resistance	Ω	87 ... 2000	
Input signal range (+SI/-SI)	mV/V	-3 ... 3	
Supply voltage for the strain-gauge bridge	VDC	± 2.5	
Normsignal		0 (4) ... ±20mA or 0 ... ±10V	
4 optocoupler inputs	VDC	24	
1 incremental encoder input	VDC	24	
Error at 2mV/V			
Error for strain gauge bridge	%	0.01	
Relative linearity error	%	0.0015	
Noise limited resolution of measured value	Bit	14 up to 19 (depending on the measuring rate)	
Input sensitivity for 1 LBS	nV	5	
Zero drift	nV/K	20	
Signal Output			
- Profibus according to EC 61158 - Asynchronous protocol RS485 - 2-relays output - RS232 (only for version with one channel)		Profibus DP V0 up to 12Mbit/s, IEC 61158 bus compatible, max. 16 subscribers, 2400 to 19200 Baud 24VDC/ 1A max. 5m, for external display	
Measuring Charact. of A/D Converter			
External measured-value output rate	Hz	up to 400	up to 15 per channel
Internal conversion rate	Hz		max. 1600
Internal resolution	Bit		24
Power Supply			
Supply voltage range		9 ... 36 VDC (optional: 100 ... 240 VAC) -10% ... +10%	
Power consumption at 24V (without KA)	mA	approx. 60	
Environmental Conditions			
Rated temperature range	°C	-20 ... +60	
Storage temperature range	°C	-25 ... +85	
Construction			
Weight	kg	0.4	
Environmental protection acc. EN 60529		IP 65	
Internal terminal strips	mm	0.14 ... 1	
Internal parameterization interface		RS232	

Accessoires

	Type Code	Description
Software	XKS 265	Service program DI301 (PC software for testing and setup)
Documentation		Documentation on CD (manual, specification for user Profibus, GSD-file)

Options

	Type Code	Description
Cable	XKC 267	Connecting cable Profibus (5-pin cable connector B-coded and SUB-D plug 9-pin) 5m
	XKC 269	Connecting cable RS232 for setting the parameters of the DI301DP