

PEMEX-E



- ▶ Robust and safe pressure meter for general mining applications
- ▶ The various versions of the device are used to measure relative and absolute pressures in liquid and gaseous media.
- ▶ Versions available:
 - Evaluation unit and transducer combined in a single housing (PEMEX-E*G*)
 - Evaluation unit with remote transducer DMU (PEMEX-E*A*)
 - Evaluation unit with extended transducer (PEMEX-E*V*)
 - Evaluation unit with hydrostatic transducer (well probe, PEMEX-E*B*)
- ▶ Housing: Stainless steel
- ▶ Pressure measuring ranges: 0 .. 40 mbar to 0 .. 600 bar
- ▶ Process connection, sensor:
 - Pipe thread G1¼, flush-mounted ceramic sensor,
 - Pipe thread G½, internal ceramic sensor,
 - Pipe thread G½, flush-mounted thinfilm sensor,
 - Pipe thread G½, internal thinfilm sensor or
 - Socket nipple DN10 (acc. to DIN 20043), thinfilm sensor
- ▶ Electrical connection:
 - Terminals and cable glands,
 - Machaczek connector type ME2A10,
 - PROMOS connector type BN4160,
 - Hydrostar connector type SKK24,
 - Becker module and terminals or
 - Souriau connector series 845
- ▶ Power supply:
 - 8.0 VDC .. 12.5 VDC (PEMEX-E**L*) or 10.0 VDC .. 18.5 VDC (PEMEX-E**H*)
- ▶ Output signal:
 - max. two frequency outputs 5 .. 15 Hz or limit, potential-free
 - PEMEX-EP*: one frequency or limit output, not potential-free
- ▶ Marking according to 94/9/EC:
 - I M1 EEx ia I (DMT 03 ATEX E 063)



Ordering information **PEMEX-E**

10	Electrical connection									
	K	Terminals								
	M	Machaczek connector type ME2A10								
	P	PROMOS connector type BN 4160								
	H	Hydrostar connector type SKK 24								
	B	With Becker module and terminals								
	S	Souriau connector series 845								
20	Version									
	G	Standard								
	V	Extension *4								
	A1	Remote version with Harting connector *1,5								
	A2	Remote version with Machaczek connector *1								
	A3	Remote version with Hydrostar connector *1								
	A4	Remote version with PROMOS connector *1								
	A5	Remote version with cable gland								
	B	Hydrostatic transducer								
30	Power supply									
	L	8.0 VDC ≤ Ui ≤ 12.5 VDC								
	H	10.0 VDC ≤ Ui ≤ 18.5 VDC								
40	Type of diaphragm									
	C	Ceramic								
	D	Thinfilm								
50	Type of transducer									
	F	Flush-mounted								
	I	Internal								
	S	Socket nipple								
60	Measuring range									
	—	See table of available ranges								
70	Length of connection cable *2									
	—	Length [m]								
80	Special version *3									
	S	Special version, to be specified								

Complete order code:

PEMEX - E						*2	*3
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^{*1} The connection cable (max. 90 m) is not part of the package and has to be ordered separately!

² Only specify if ordering remote version with cable gland (**A5**, max. 90 m) or hydrostatic version (**B**, max. 500 m)!

^{*3} Only necessary with deviations from order code pos. 10 to 70!

^{*4} Length according to customer

^{*5} With straight or angled coupling

Ordering examples:

1. PEMEX-EKGHDI400b

- Standard version with terminals and cable gland
- Power supply 10.0 .. 18.5 VDC
- Thinfilm transducer with internal diaphragm
- Measuring range 0 .. 400 bar

2. PEMEX-EPA2LCF600m

- Remote version with Machaczek connector
- Electrical connection with PROMOS connection
- Power supply 8.0 .. 12.5 VDC
- Ceramic transducer with flush-mounted diaphragm
- Measuring range 0 .. 600 mbar

Available measuring ranges:

with thinfilm transducer			with ceramic transducer		
measuring range	overrange limit	code	measuring range	overrange limit	code
0 .. 400 mbar	1.6 bar	400m	0 .. 40 mbar	-0.3 / 4 bar	040m
0 .. 600 mbar	2.4 bar	600m	0 .. 60 mbar	-0.3 / 4 bar	060m
0 .. 1 bar	4 bar	001b	0 .. 100 mbar	-0.3 / 4 bar	100m
-1 .. +1 bar	8 bar	-1+1b	0 .. 160 mbar	-0.6 / 5 bar	160m
-1 .. +5 bar	24 bar	-1+5b	0 .. 250 mbar	6 bar	250m
0 .. 1.6 bar	6.4 bar	01b6	0 .. 400 mbar	6 bar	400m
0 .. 2.5 bar	10 bar	02b5	0 .. 600 mbar	10 bar	600m
0 .. 4 bar	16 bar	004b	0 .. 1 bar	10 bar	001b
0 .. 6 bar	24 bar	006b	-1 .. +1 bar	10 bar	-1+1b
0 .. 10 bar	40 bar	010b	-1 .. +5 bar	25 bar	-1+5b
0 .. 16 bar	64 bar	016b	0 .. 1.6 bar	18 bar	01b6
0 .. 25 bar	100 bar	025b	0 .. 2.5 bar	18 bar	02b5
0 .. 40 bar	160 bar	040b	0 .. 4 bar	25 bar	004b
0 .. 60 bar	240 bar	060b	0 .. 6 bar	40 bar	006b
0 .. 100 bar	400 bar	100b	0 .. 10 bar	40 bar	010b
0 .. 160 bar	600 bar	160b	0 .. 16 bar	40 bar	016b
0 .. 250 bar	600 bar	250b	0 .. 25 bar	40 bar	025b
0 .. 400 bar	600 bar	400b	0 .. 40 bar	60 bar	040b
0 .. 600 bar	800 bar	600b	0 .. 60 bar	105 bar	060b

Standard measuring ranges of the hydrostatic transducer: 040m .. 001b

Other measuring ranges or higher overrange limits are optionally available!

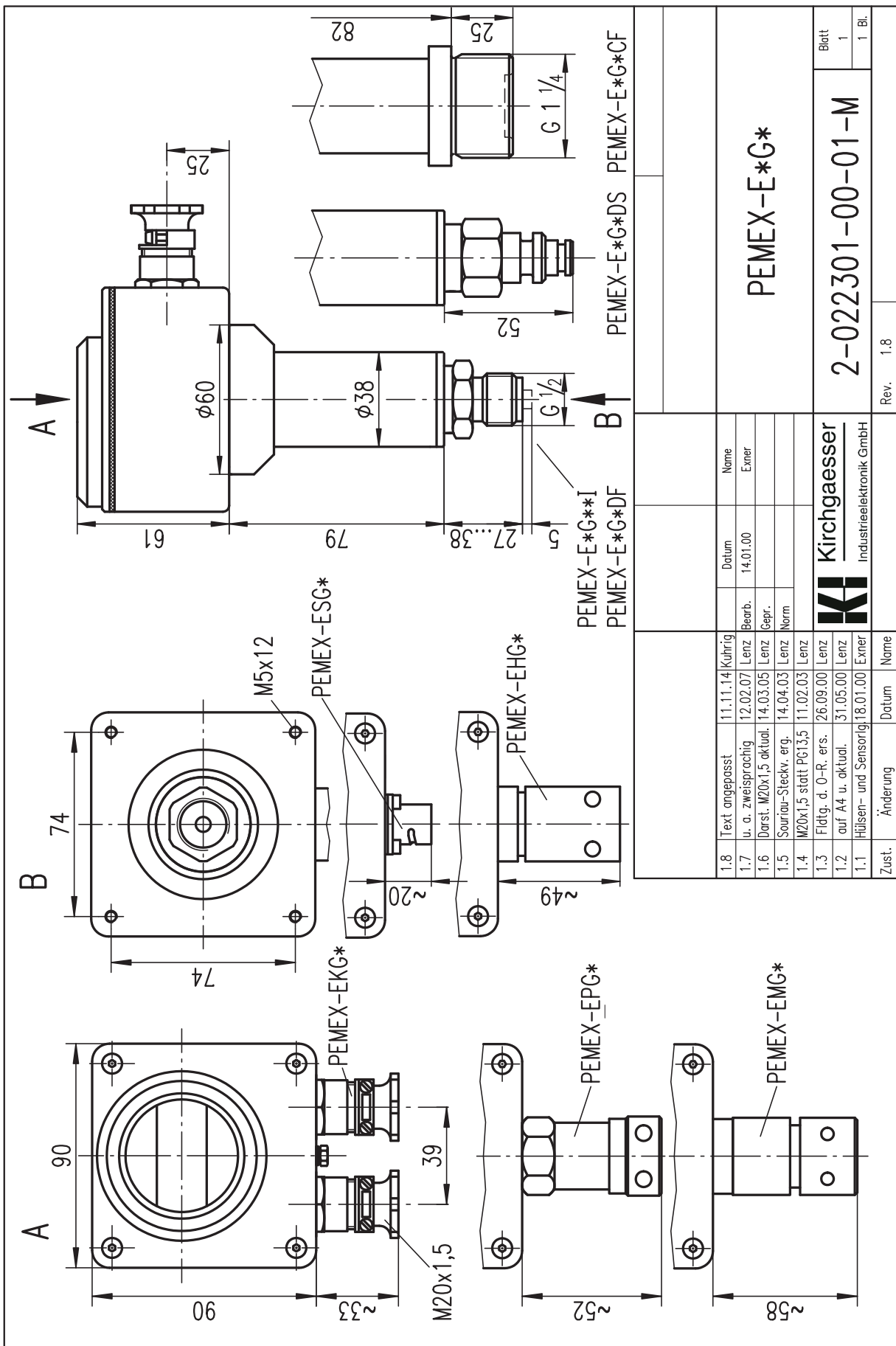
Technical data (general):

- Measuring principle:
Ceramic or thinfilm sensor
- Measuring uncertainty:
Max. $\pm 1\%$ of end value (Typ. $\pm 0.5\%$ of end value)
- Material:
Stainless steel
- Weight:
Depending on version (standard version approx. 1.8 kg)
- Protection according to EN 60529:
 - IP 65
 - Hydrostatic transducer IP 68
- Type of protection according to EN 50014:
EEx ia I (complies with Ex ia I according to EN 60079-0)
- Cable gland:
 - M20x1.5
 - Clamping range 8.0 - 11.5 mm
 - Tightening torque 2 Nm
- Process connection:
 - G $\frac{1}{2}$,
 - G $\frac{1}{4}$,
 - Socket nipple DN10 (according to DIN 20043) or
 - Pipe or vessel flange
- Ambient and medium temperature:
 $0^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

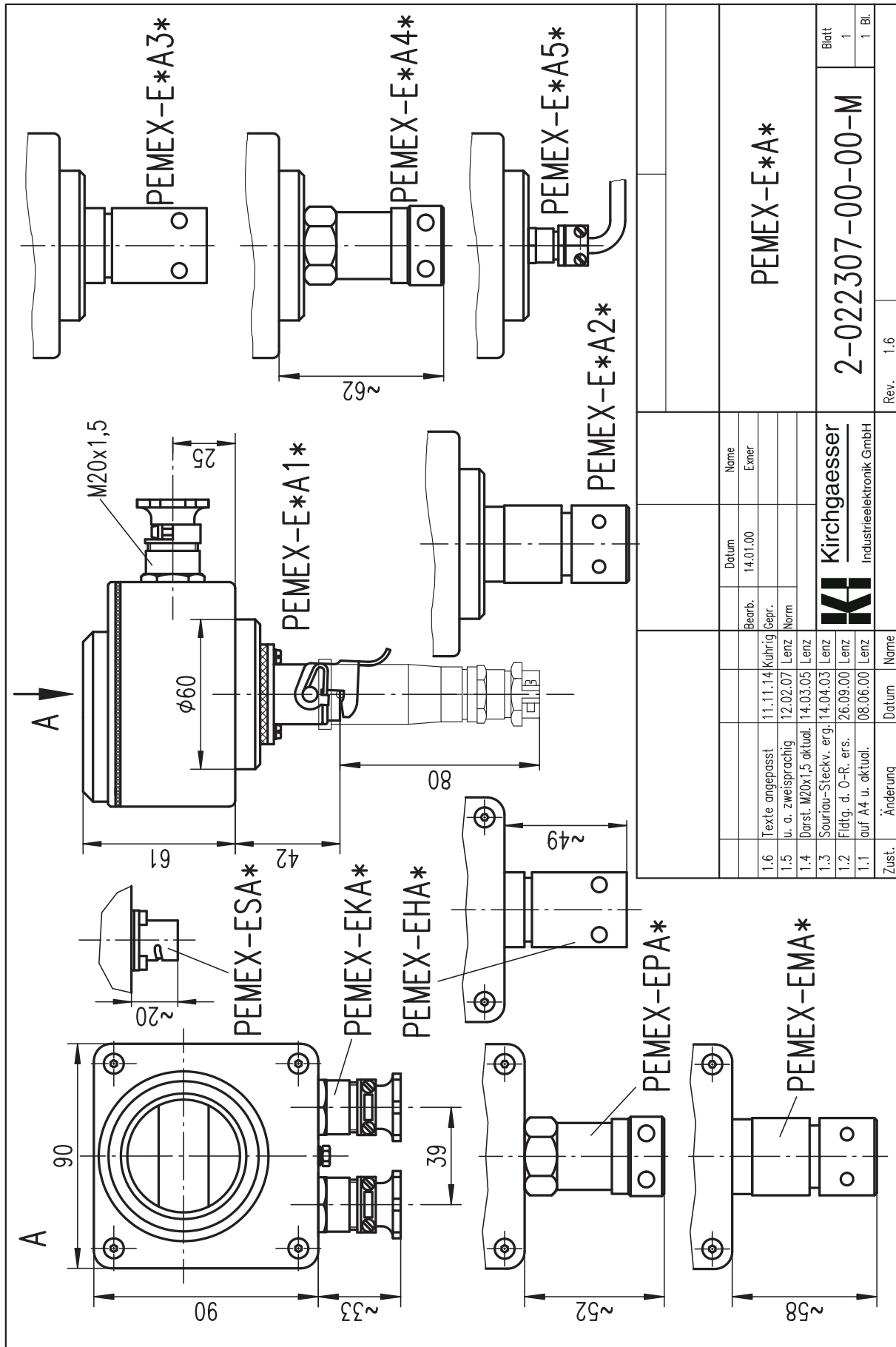
Technical data (electrical):

- Power supply:
 - PEMEX-E**L*: $8.0 \text{ VDC} \leq U_i \leq 12.5 \text{ VDC}$
 - PEMEX-E**H*: $10.0 \text{ VDC} \leq U_i \leq 18.5 \text{ VDC}$
- Current consumption:
30 mA
- Frequency output (except PEMEX-EP*):
 - Supply voltage: max. 30 VDC
 - Power consumption: max. 50 mW
- Frequency output (PEMEX-EP*):
 - Supply voltage: max. 13.5 VDC
- Internal inductances:
Negligible
- Internal capacitances:
Negligible

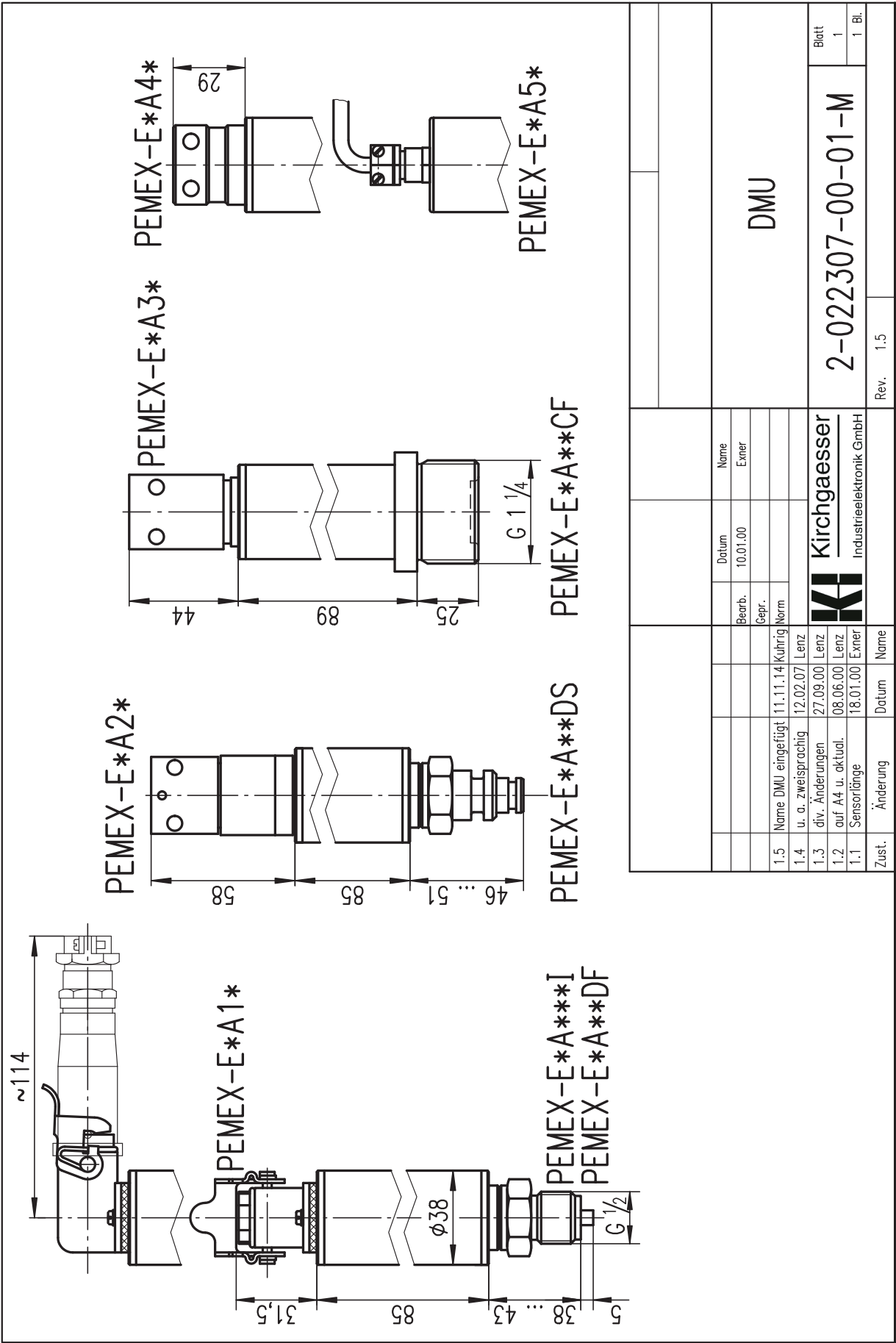
Dimension sheets:



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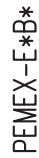


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