

METAL SEPARATOR

P-TRON 07 GM V2

DETECTION OF ALL TYPES OF METALS

- FERROUS
- STAINLESS STEEL
- ALUMINUM
- COPPER
- BRASS
-

RELIABLE DETECTION OF FREE OR ENCAPSULATED CONTAMINANTS.

Version 08/19



METAL SEPARATOR FOR THE INSTALLATION INTO HORIZONTAL OR VERTICAL SUCTION AND PRESSURE LINES WITH AUTOMATICALLY EJECTION OF METAL CONTAMINATION IN GRANULATES (POWDER OPTIONALLY).

INDUSTRIES

- CHEMICAL INDUSTRY
- FOOD INDUSTRY

APPLICATION

- MACHINERY PROTECTION E. G. MILLS, EXTRUDER, MIXER/KNEADER, AND MORE
- PRODUCT FILLING / -TRANSFILLING

www.mesutronic.de

MESUTRONIC

Metal Detection made in Germany

CONVINCING ARGUMENTS

- FAST REACTING REJECT SYSTEM WITH POWERFUL AND PERMANENTLY MAINTENANCE-FREE PNEUMATIC ACTUATOR.
- TROUBLE-FREE INTEGRATION OF THE COIL DIRECTLY INTO THE TUBING WITHOUT ADDITIONAL FIXTURES.
- STANDARD SYSTEMS FOR THE MOST POPULAR TUBING DIAMETERS (38 MM TO 200 MM).
- IMMUNE AGAINST INTERFERENCE WITH THE NEW „POWERLINE“. THIS TYPE OF COIL DOES NOT REQUIRE A SENSOR TUBE OPENING AND IS THEREFORE EFFECTIVLY SHIELDED AGAINST INTERFERENCE.
- REPLACEABLE ANTI-STATIC SENSING TUBE IS COMPLETELY INTEGRATED INTO THE DETECTOR HOUSING.
- PRODUCT EFFECT COMPENSATION – GUARANTEES CONTINUOUS SENSITIVITY AND TROUBLE-FREE OPERATION EVEN WITH "DIFFICULT" PRODUCTS. "PRODUCT EFFECT" CANNOT CREATE FALSE EJECTS.
- SELF MONITORING – IN ADDITION TO THE DETECTION UNIT (COIL AND ELECTRONICS) THE OPERATING PRESSURE AND EJECT FUNCTIONS ARE PERMANENTLY MONITORED AS WELL. MALFUNCTIONS ARE INDICATED!
- DETAILED INFORMATION REGARDING THE ELECTRONICS AND 07 CAN BE FOUND IN THE REAR OF THIS SPECIFICATION SHEET.

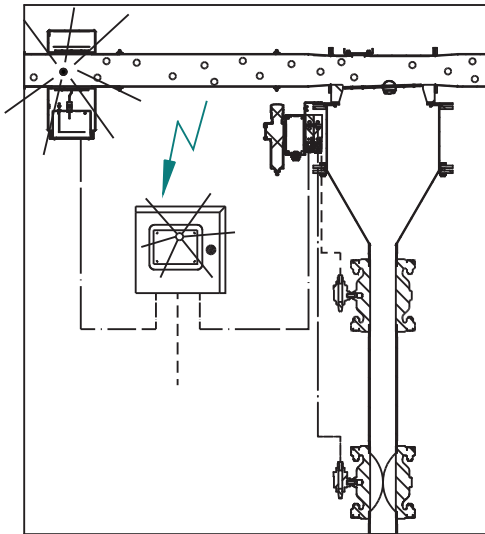
SENSITIVITY

	Size 1					Size 2				Size 3			Size 4	
APERTURE (mm)	38	45	50	55	60	65	70	75	80	>80	100	120	150	200
SENSITIVITY	Sphere Ø mm					Sphere Ø mm				Sphere Ø mm			Sphere Ø mm	
FERROUS	0,4					0,5				0,6			0,8	
NON-FERROUS	0,5					0,7				0,7			1,0	
STAINLESS STEEL	0,8					0,9				1,0			1,2	

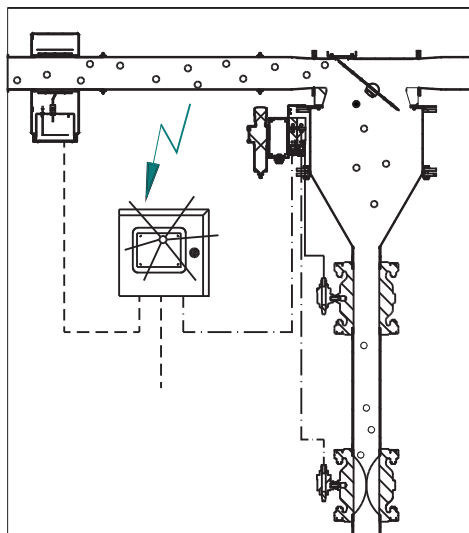
THE SENSITIVITY IS PROPORTIONAL TO THE DIAMETER OF THE APERTURE. THE SMALLER THE APERTURE, THE HIGHER THE SENSITIVITY. THE ABOVE STATED VALUES WERE OBTAINED IN THE CENTRE OF THE APERTURE UNDER SIMULATED PRODUCTION CONDITIONS AND ARE VALID FOR MOST DRY POWDERS AND GRANULATES.

MAXIMUM OBTAINABLE SENSITIVITY VALUES CAN BE ESTABLISHED BY TESTING YOUR PRODUCT SAMPLE IN OUR LABORATORY.

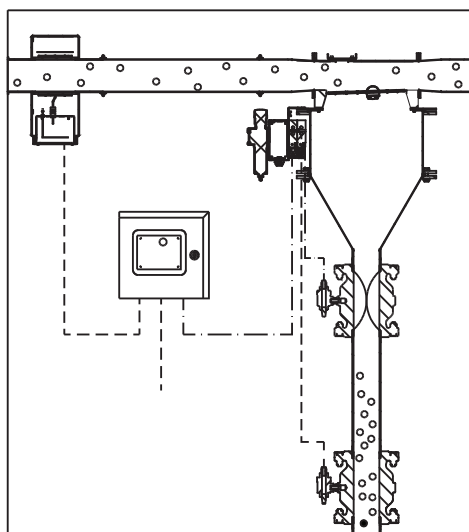
WORKING PRINCIPLE



WITH TRANSMITTER AND RECEIVER COILS AN ELECTRO-MAGNETIC FIELD IS EVALUATED IN THE DETECTOR. IF A METAL PARTICLE ENTERS THE FIELD THE MEASURED SIGNAL IS DEFLECTED IN ONE DIRECTION. WHEN THE METAL PARTICLE LEAVES THE FIELD THE SIGNAL IS DEFLECTED IN THE OPPOSITE DIRECTION. IF THE DETECTION THRESHOLDS ARE EXCEEDED IN BOTH DIRECTIONS A METAL SIGNAL IS CREATED.



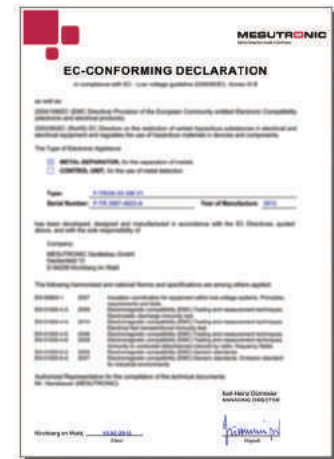
IN CASE OF A METAL SIGNAL THE PNEUMATIC CYLINDER OPENS THE EJECT FLAP. THE METAL PARTICLE IS REDIRECTED INTO THE EJECT BIN TOGETHER WITH A SMALL AMOUNT OF CONVEYED MATERIAL. BECAUSE THE EJECT MATERIAL BIN IS SEALED DURING THE CONVEYING PHASE THE AIR STREAM DOES NOT BREAK DOWN. AFTER THE EJECT DURATION PERIOD THE FLAP IS CLOSED AGAIN AUTOMATICALLY.



A DUAL AIRLOCK DROPS THE EJECTED MATERIAL INTO A EJECT BIN.
THE DUAL AIRLOCK ASSURES AN EVEN PRESSURE IN THE TUBING:

STANDARD SCOPE OF DELIVERY

- THE DETECTION UNIT IS COMPRISED OF THE DETECTION COIL AND THE ELECTRONICS IN A HOUSING
- COMPACT UNIT WITH ROUND PORTS, INCLUDING:
 - FLAP POSITION MONITOR
 - AIR PRESSURE MONITOR
 - "TEST" BUTTON
- EJECT SYSTEM WITH INCORPORATED EJECT MATERIAL BIN AND DUAL AIRLOCK
- INSTALLATION ACCESSORIES AND CONNECTING CABLES
- USER MANUAL INCL. INSTALLATION INSTRUCTIONS, WIRING DIAGRAM AND SPARE PARTS LIST (LANGUAGE AS PER AGREEMENT).
- EC CONFORMITY DECLARATION



OPTIONS

- OPTICAL AND ACOUSTICAL SIGNAL UNITS
 - BEACON
 - BUZZER
 - BEACON WITH SIREN
- SOFTWARE SOLUTIONS
 - mesuSET (DETECTOR OPERATION VIA LAPTOP)
 - mesuNET (DETECTOR NETWORKING AND REMOTE MONITORING)
- TURBINE VIBRATOR FOR NON- FREE FLOWING MATERIAL

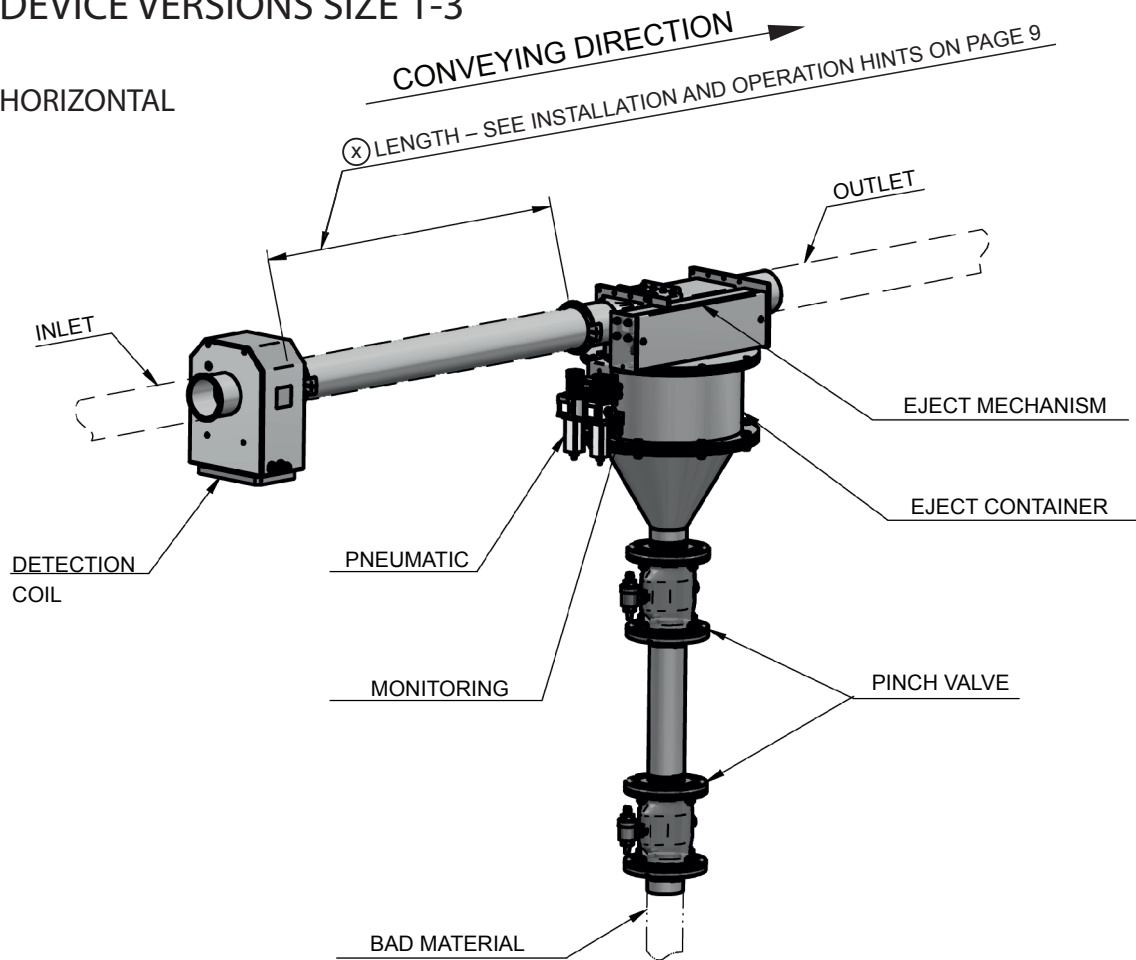
SPECIAL VERSIONS

- HIGHER TYPE OF PROTECTION (E. G. EXPLOSION PROOF)
- SPECIAL POWER SUPPLY
- EJECT GATE FOR POWDER (P)
- POLISHED TRANSITIONS AND EJECT GATE
- EJECT GATE IN STAINLESS STEEL (1.4404 / 316L OR 1.4571 / 316Ti)
- TUBING CONNECTORS AS PER CUSTOMER'S REQUIREMENTS (FLANGE, CLAMP,...)
- DIAGONAL VERSION
- PINCH VALVE MEMBRANE FOR FOODS OR ABRASIVE MATERIALS
- EJECT BIN WITH LARGER VOLUME
- HIGHER TRANSPORT PRESSURE WITH UP TO 1.5 BAR OVER PRESSURE



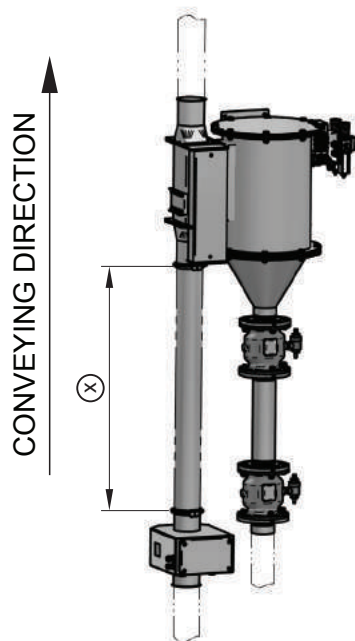
DEVICE VERSIONS SIZE 1-3

HORIZONTAL



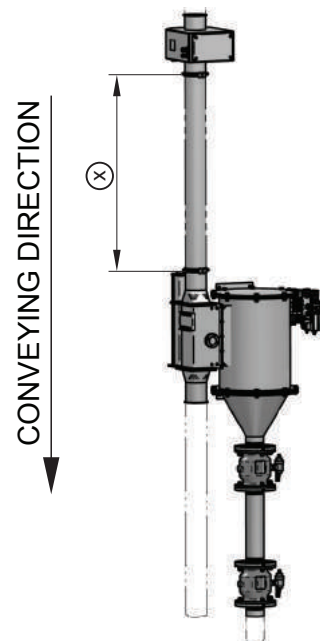
VERTICAL UP

(CONVEYING DIRECTION FROM BOTTOM TO TOP)



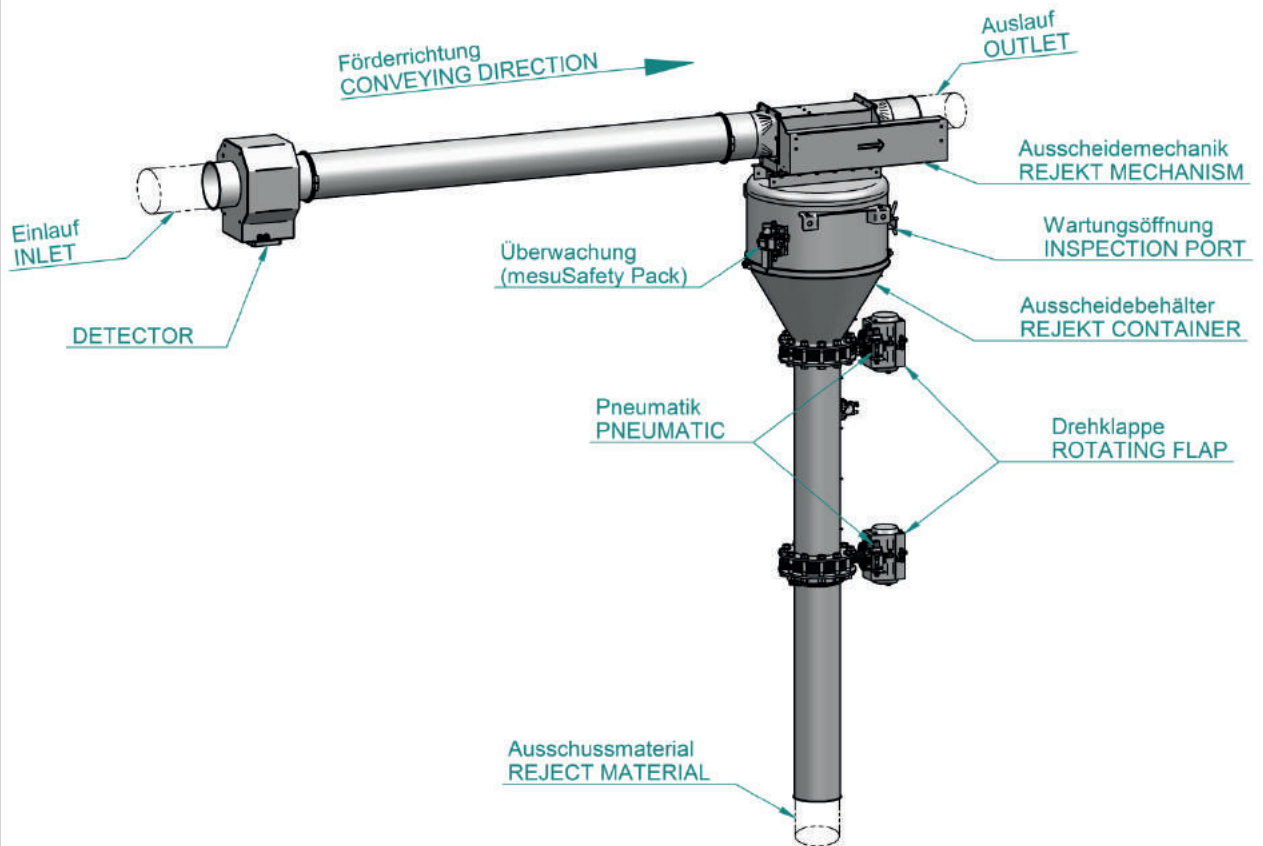
VERTICAL DOWN

(CONVEYING DIRECTION FROM TOP TO BOTTOM)



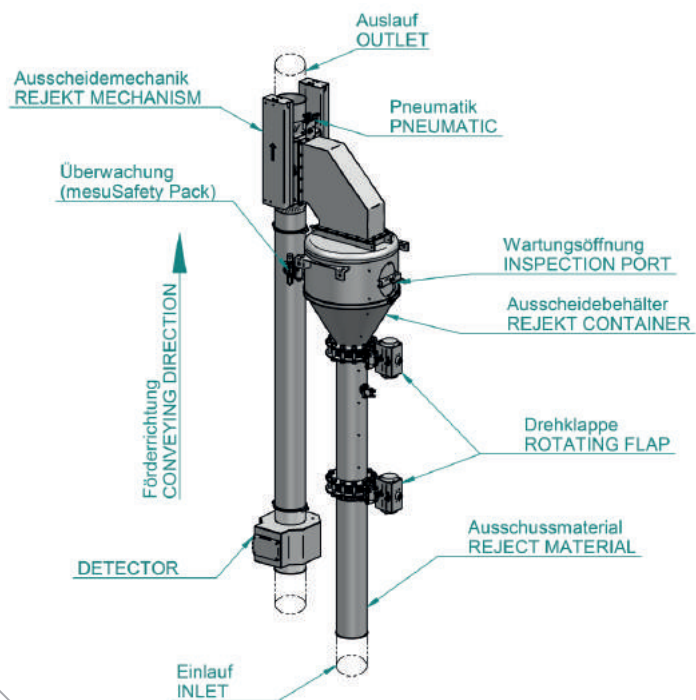
DEVICE VERSIONS SIZE 4

HORIZONTAL



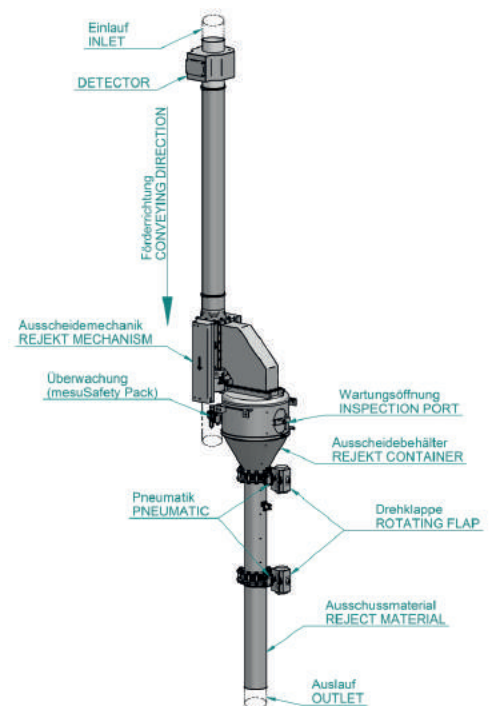
VERTICAL UP

(CONVEYING DIRECTION FROM BOTTOM TO TOP)



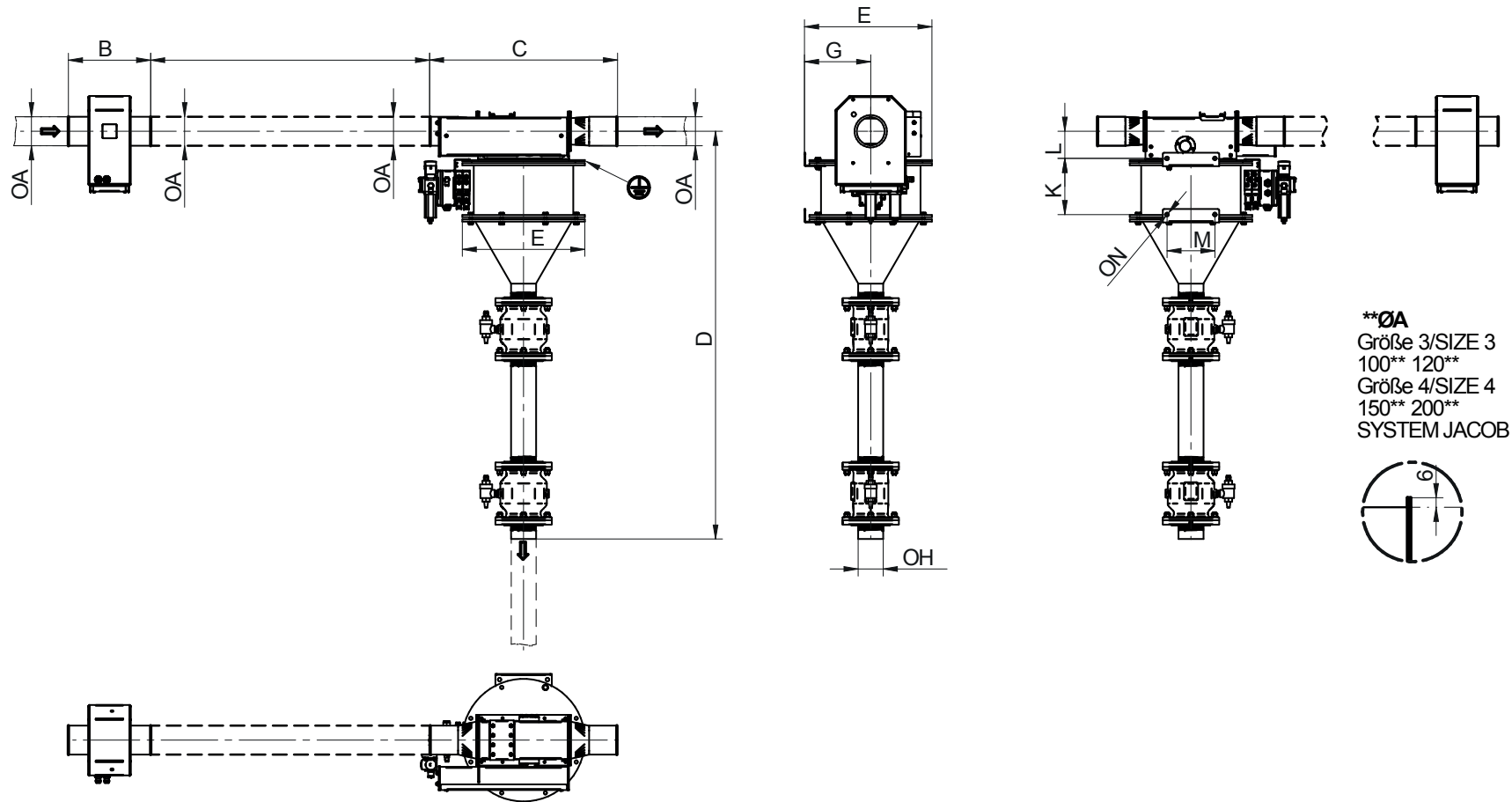
VERTICAL DOWN

(CONVEYING DIRECTION FROM TOP TO BOTTOM)



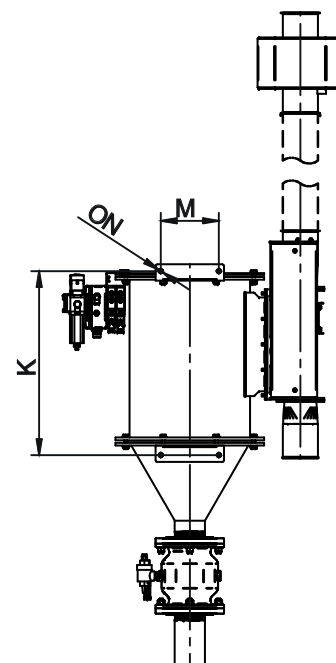
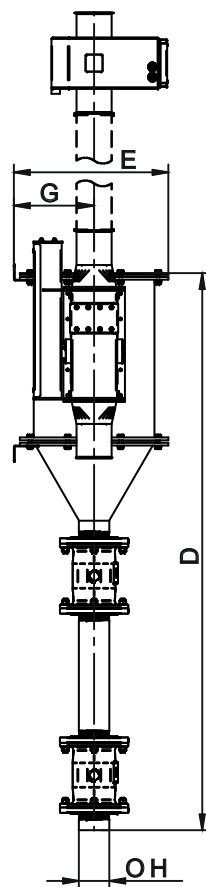
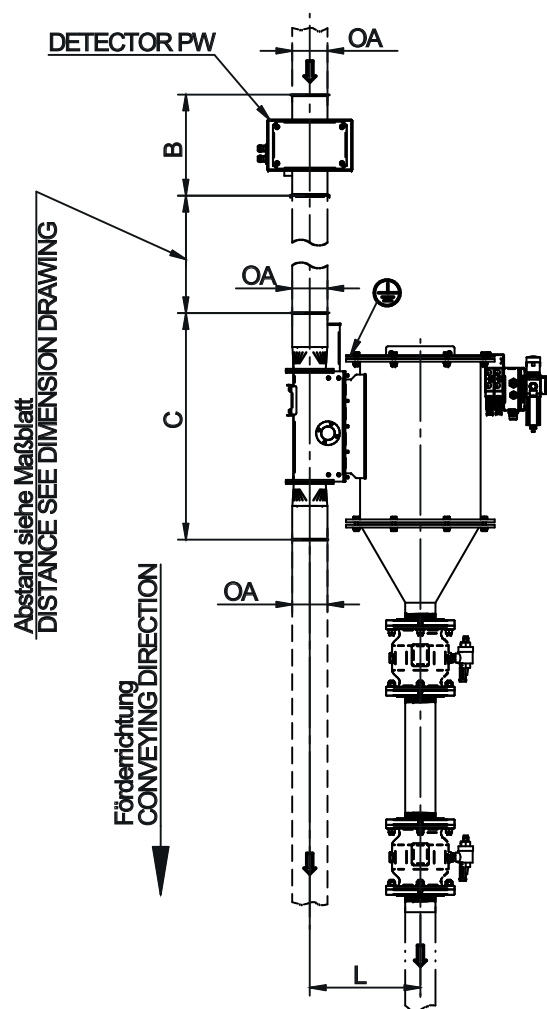
	Ø A	B	C	D	E	G	H	K	L	M	Ø N
Größe 1 / SIZE 1	38, 45, 50, 55, 60	398	340	1286	350	175	60	187	90	160	11,5
Größe 2 / SIZE 2	65, 70, 75, 80	480	430	1410	350	175	89	187	98	160	11,5
Größe 3 / SIZE 3	85/100**/120**	660/296/310	669	1447	453	235	89	200	96	170	13
Größe 4 / SIZE 4	150**/200**	380/450	1055/915	3040	690	345	200**	250	340	350	13

Förderrichtung
CONVEYING DIRECTION



**ØA
Größe 3/SIZE 3
100** 120**
Größe 4/SIZE 4
150** 200**
SYSTEM JACOB

	Ø A	B	C	D	E	G	Ø H	K	L	M	Ø N
Größe 1 / SIZE 1	38, 45, 50, 55, 60	398	340	1500	350	175	60	473	246	160	11,5
Größe 2 / SIZE 2	65, 70, 75, 80	480	430	1620	350	175	89	473	250	160	11,5
Größe 3 / SIZE 3	85/100**/120**	660/296/310	669	1630	453	235	89	538	324	170	13
Größe 4 / SIZE 4	150**/200**	380/450	1055/915	2873	690	345	200**	250	520	350	13

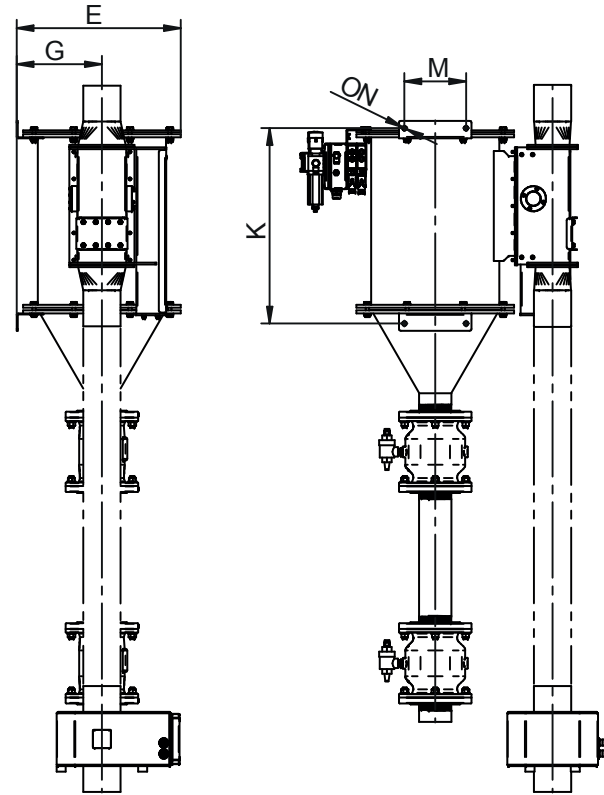
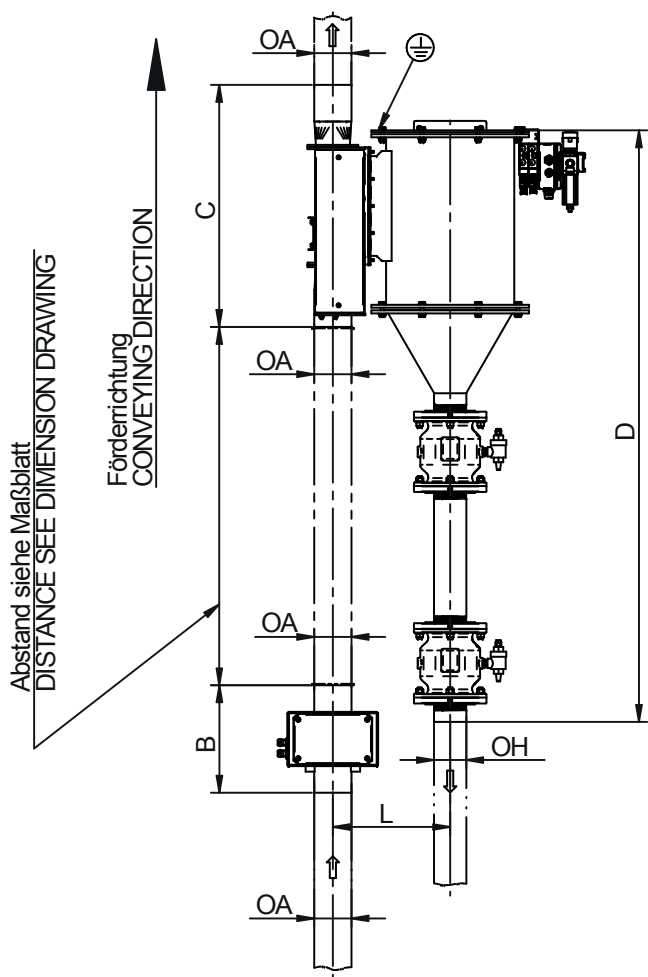


****ØA**
Größe 3/SIZE 3
100** 120**
Größe 4/SIZE 4
150** 200**
SYSTEM JACOB



ALL DIMENSIONS IN MM

	Ø A	B	C	D	E	G	Ø H	K	L	M	Ø N
Größe 1 / SIZE 1	38, 45, 50, 55, 60	398	340	1500	350	175	60	473	246	160	11,5
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****ØA**
Größe 3/SIZE 3
100** 120**
Größe 4/SIZE 4
150** 200**
SYSTEM JACOB



MATERIALS EMPLOYED

	STANDARD / POWDER (P)
EJECT GATE:	STAINLESS STEEL (1.4301 / SS 304)
FLAP SEAL:	EPDM-FDA
DETECTOR COIL:	HOUSING AND CONNECTIONS IN STAINLESS STEEL (1.4301 / SS 304)
SENSOR AREA:	PE-el (POLYETHYLENE, ELECTRICALLY CONDUCTIVE) FDA
ELECTRONIC HOUSING:	STAINLESS STEEL (1.4301 / SS 304)
PINCH VALVE (SIZE 1-3):	UP TO Ø60 / HOUSING = POM (POLYACETAL) UP TO Ø120 / HOUSING = ALUMINUM SEAL = NATURAL RUBBER
ROTATING FLAP (SIZE 4):	UP TO Ø200 / HOUSING = GRAY CAST IRON; PLATE = STAINLESS STEEL SEAL = EPDM
BEARING / CYLINDER SUPPORT:	STAINLESS STEEL (1.4301 / SS 304)

AS AN OPTION WE USE OTHER MATERIALS SUCH AS STAINLESS STEEL (1.4571 / 316Ti) OR PINCH VALVES WITH A EPDM (ETHYLENE PROPYLENE DIENE MONOMER) DIAPHRAGM. PLEASE CONSULT OUR TECHNICIANS.

INSTALLATION AND OPERATION INSTRUCTIONS

- THE DISTANCE BETWEEN THE COIL AND THE REJECT SYSTEM IS DETERMINED ACCORDING TO THIS RULE OF THUMB:
CONVEYING SPEED (M/SEC.) x EJECT DURATION (UNIT SIZE 1 und 2 = 0,05 SEC. OR UNIT SIZE 3 = 0,07 SEC.)

$$\text{DISTANCE} = \text{CONVEYING SPEED (M/SEC.)} \quad \times \quad \text{EJECT DURATION (SEC.)}$$

EXAMPLE: CONVEYING SPEED = 15 M/SEC.
REJECT DURATION = 0,05 SEC.

$$\text{DISTANCE} = \quad 15 \text{ M/SEC.} \quad \times \quad 0,05 \text{ SEC.} \quad = 0,75 \text{ M}$$

- THE DETECTOR COIL HAS TO BE FIRM AND TORSION FREE INSTALLED INTO THE SYSTEM BY THE OWNER. POTENTIAL DIFFERENCES HAVE TO BE COMPENSATED. THE EJECT SYSTEM IS TO BE FIXED ON THE 4 INSTALLATION POINTS. THE ASSEMBLY HAS TO BE ABLE TO SUPPORT THE WEIGHT OF THE UNIT.
- THE ELECTRONICS HOUSING IS TO BE INSTALLED IN THE PROPER POSITION. THE ELECTRICAL CABLES NEED TO BE SECURED. INSTALL THE AIR PRESSURE CONNECTIONS ON THE MAINTENANCE UNIT. SYSTEM AIR CONNECTION MIN. 6 BAR.
- IF POSSIBLE, DO NOT INSTALL THE METAL SEPARATOR NEAR STRONG ELECTROMAGNETIC INTERFERENCE FIELDS. POTENTIAL INTERFERENCE MAY BE CAUSED BY LARGE ELECTRIC MOTORS, HIGH VOLTAGE LINES, INSUFFICIENT SHIELDED FREQUENCY CONVERTERS AND SUCH.
- KEEP THE METAL SEPARATOR UNDER POWER. THE INITIALIZATION PERIOD AFTER POWER UP IS 15 SECONDS.

CONTROL UNIT AMD 07

ADVANTAGES THAT WILL CONVINCE YOU!

UNLIMITED FLEXIBILITY DUE TO NETWORK-ENABLED SYSTEM COMPONENTS. THE METAL SENSOR, THE DISPLAY AND THE CONTROL UNIT COMMUNICATE VIA ETHERNET AND CAN BE COMBINED AS REQUIRED. SOME COMPONENTS MAY NOT BE REQUIRED, IF THE METAL DETECTOR IS INTEGRATED IN OTHER MACHINERY DISTANCES ARE IRRELEVANT. HIGHEST SENSITIVITY AND AVAILABILITY ARE GUARANTEED.

AUTO-SETUP-ROUTINE WITH INTERFERENCE SIGNAL SUPPRESSION AND AUTOMATIC SENSITIVITY CALIBRATION.

AUTOMATIC PRODUCT-EFFECT CANCELLATION WITH REAL TIME PRODUCT PARAMETER MEASUREMENT CAPABILITIES.

DYNAMIC AUTO-TRACKING (PRODUCT CHARACTERISTIC CHANGE TRACKING) GUARANTEES MAXIMUM SENSITIVITY IN OPERATION.

MULTI-FILTER SYSTEM USING DIGITAL FILTERS FOR MAXIMUM STABILITY IN HARSH ENVIRONMENTS.

AUTO-BALANCE AUTOMATICALLY DETECTS AND COMPENSATES FOR ANY CHANGES IN THE SIGNAL DURING NORMAL OPERATION. (E.G. TEMPERATURE VARIATIONS)

NARROW DETECTION ZONE PROVIDES AN ACCURATE LOCATION OF THE METALLIC PARTICLE IN THE DETECTION FIELD ALLOWING PRECISE SEPARATION.

TOUCH SCREEN CONTROL PANEL – MAXIMUM INFORMATION, EASY AND FAST OPERATION! THE 5,7" BACKLIT VGA COLOR-TOUCH-DISPLAY IS LARGE ENOUGH TO DISPLAY SUCH INFORMATION AS PARAMETER DATA AND PROTOCOL CONTENTS IN A LEGIBLE MANNER. INPUT FIELDS AND OTHER OPERATING TOOLS HAVE GENEROUS DIMENSIONS AND ARE ERGONOMICALLY ARRANGED. EASY TO OPERATE WITH CLEAR MENUS AND SELECTABLE OPERATING LANGUAGE THE OSCILLOSCOPE FUNCTION MAKES THE SIGNAL WAVES VISIBLE BY PROJECTING THEM ONTO THE DISPLAY!

3 LEVELS OF USER ACCESS (INDIVIDUAL PIN CODES UP TO 4 LEVELS) GUARANTEE PROTECTION AGAINST UNAUTHORIZED ACCESS DUE TO INTELLIGENT USER MANAGEMENT. INDIVIDUAL ACCESS FOR AUTHORIZED PERSONNEL WITH PERSONALIZED ACCESS CODE (USER ID) IN ADDITION 2 FREE CONFIGURABLE FUNCTION KEYS.

METAL COUNTER CAN BE DISPLAYED ON THE LCD SCREEN OR INTERFACED WITH A PRINTER OVER A SERIAL INTERFACE.

QUALITY SMD's (SURFACE MOUNTED DEVICES) ARE USED IN THE PRODUCTION OF THE CONTROLS. THEY NOT ONLY OFFER A COMPACT DESIGN, BUT ALSO PROVIDE HIGHER QUALITY AND MORE ROBUST PERFORMANCE UNDER HARSH CONDITIONS. ALL MESUTRONIC PRODUCTS CONFORM TO THE CE STANDARDS AND ARE DEVELOPED ACCORDING TO TECHNICAL STANDARDS AND NORMS SUCH AS EN, DIN AND UVV.



SELF MONITORING SYSTEM ENSURES ALL IMPORTANT COMPONENTS ARE FUNCTIONING PROPERLY. IN CASE OF A FAULT, RELAY OUTPUTS ARE AVAILABLE. FAULTS ARE DISPLAYED AS TEXT IN REAL TIME.

PRODUCT STORAGE MEMORY BACKUP FOR UP TO 500 INDIVIDUAL PRODUCTS. EACH PRODUCT HAS A COMPLETE SET OF SETUP PARAMETERS ASSIGNED, SUCH AS SENSITIVITY, EJECT TIME ETC. THE DISPLAY OF TIME RELEVANT DATA IS IN REAL-TIME. INDIVIDUAL PRODUCT NAMES CAN BE STORED AS WELL.

DETECTOR TEST FUNCTION (VALIDATION) YOU MAY CHOOSE BETWEEN THE MANUAL OR AUTOMATIC MODE. IN THE AUTOMATIC MODE THE DETECTOR WILL ADVISE AUTOMATICALLY, WHEN THE DETECTOR TEST IS TO BE PERFORMED. THE CYCLE TIME CAN BE ADJUSTED FROM 1 MINUTE TO 11 HOURS IN REAL TIME. THE TEST RESULTS ARE DOCUMENTED IN THE EVENT LOG INCLUDING DATE AND TIME STAMP.

USB DATA MEDIA AS MOBILE DATA CARRIER. A USB CONNECTION IS STANDARD EQUIPMENT TO STORE DATA ON A COMMERCIALY AVAILABLE DATA STORAGE MEDIA. MODERN DATA STORAGE DEVICES HAVE SUFFICIENT CAPACITY TO STORE ALL ADJUSTMENT AND PRODUCT PARAMETER DATA AS WELL AS THE RESULTS. IN ADDITION SOFTWARE UPDATES AND ADDITIONAL LANGUAGE FILES CAN BE UPLOADED EASILY AND COMFORTABLY.

MULTI-MODE-FUNCTION (OPTIONAL) IMPROVES SENSITIVITY IF PRODUCTS IN STANDARD PACKAGING AND METALIZED FOIL PACKING ARE EXAMINED WITH THE SAME METAL DETECTOR. THE DETECTOR SELECTS THE OPTIMAL FREQUENCY AUTOMATICALLY DURING THE PRODUCT PARAMETER MEASUREMENT. ALL PRODUCT SPECIFIC VALUES CAN BE STORED AND CAN BE RETRIEVED IMMEDIATELY AFTER A PRODUCT CHANGE

DATA PORTS FOR DIFFERENT TASKS. THE METAL DETECTOR IS EQUIPPED WITH 2 DATA PORTS, WHEREAS ONE OF THE DATA POINTS (ETHERNET) IS RESERVED FOR SERVICE SUCH AS SECURING DATA, LOCAL SOFTWARE UPDATES AND SUCH. THE OTHER DATA POINT (RS232) IS FREELY AVAILABLE. BI-DIRECTIONAL DATA COMMUNICATION WITH CLIENTS SPS OR PC SYSTEMS IS POSSIBLE. (SOFTWARE PACKAGES ARE OPTIONAL).

METAL DETECTOR NETWORK AND REMOTE SERVICE EVERYTHING IS POSSIBLE! SEVERAL OPTIONAL SOFTWARE-PACKAGES ARE AVAILABLE. WITH THE AID OF MODERN NETWORK SOLUTIONS SUCH AS ETHERNET OR Wi-Fi YOU CAN ESTABLISH A SECURE AND EFFICIENT DATA MANAGEMENT SYSTEM WITH AN UNLIMITED NUMBER OF DETECTORS. THE UNITS CAN BE REMOTE CONTROLLED VIA A CENTRAL PC. WE CAN ALWAYS BE PRESENT LOCALLY WITH **mesuREMOTE**, THE MESUTRONIC REMOTE SERVICE MODULE.

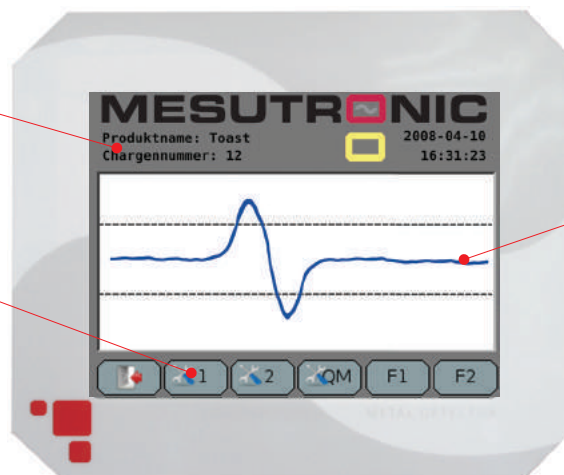
CONTROLS

EXAMPLE OF AN INPUT DISPLAY (DEPENDING UPON THE SELECTED MENU THE DISPLAY SHOWS DIFFERENT FUNCTIONS !)

DISPLAY (PRODUCT NAME, BATCH NUMBER, ETC.)

SENSITIVE KEY CONTROL
(HERE TO SELECT FOR THE USER LEVELS)

SIGNAL WAVE
DISPLAY



5,7" COLOR-TOUCH DISPLAY (320 X 240 PIXEL)

ADAPTER PLATE (PROJECT SPECIFIC
ASSIGNABLE WITH ADDITIONAL
CABLE CONNECTIONS,
BUSHINGS AND SUCH)

USB (A)
CONNECTION

SCREWED CONNECTION
MONITORING

POWER CONNECTION

SCREWED CONNECTION
FOR THE DETECTION COIL
(USED BY THE MANUFACTURER)

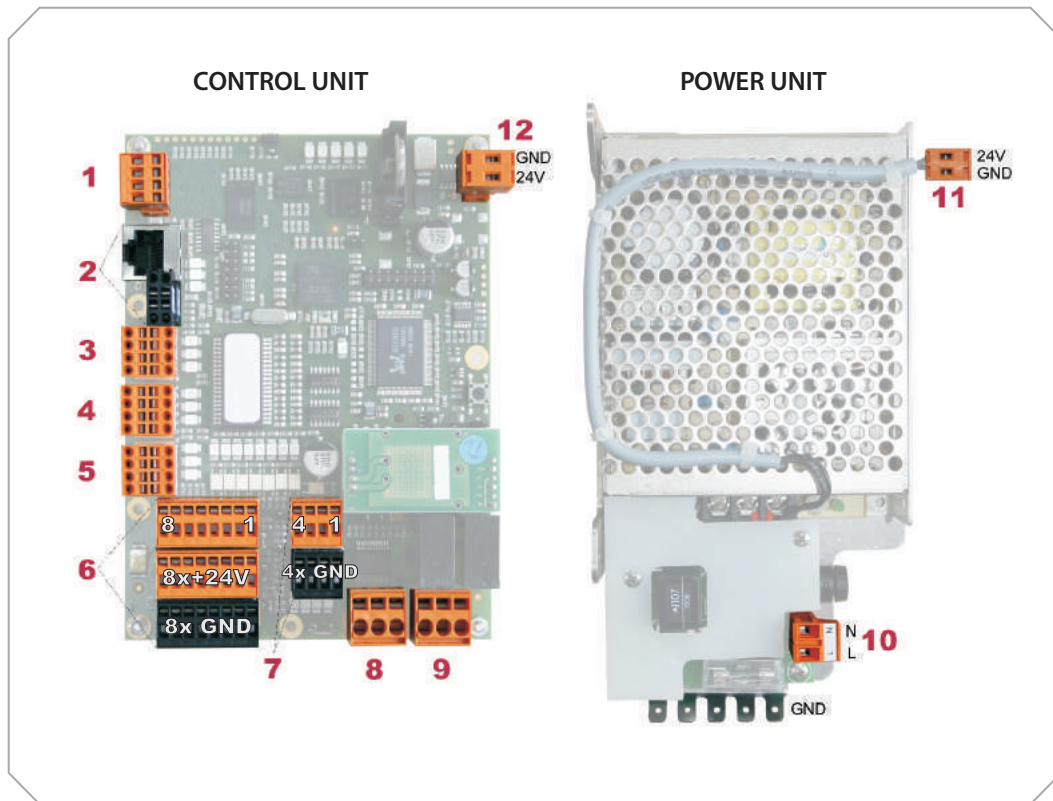
CABLE CONNECTION AS NEEDED
1 x M 20 x 1,5 und 2 x M 16 x 1,5
1 x M 25 x 1,5

TECHNICAL DATA

POWER SUPPLY:	100 - 240 V AC, 50/60 HZ
CURRENT CONSUMPTION:	MAX. 50 W
FUSED:	1,25 A (SLOW BLOW), 5 x 20 MM ACCORDING TO DIN
TYPE OF PROTECTION:	IP 66
WORKING TEMPERATURE RANGE:	- 5° C TO + 50° C
STORAGE TEMPERATURE RANGE:	- 10° C TO + 60° C
RELATIVE HUMIDITY:	0 TO 95 % (WITHOUT CONDENSATION)
EJECT DURATION:	0,1 TO 10 SEC., ADJUSTABLE
AIR SUPPLY:	6 - 10 BAR (AIR PLUG 7,2)
AIR CONSUMPTION:	< 0,2 NORM-LITRES PER EJECT
BULK MATERIAL SIZE (STANDARD VERSION)	Ø 0,5 MM – 8 MM
BULK MATERIAL SIZE (OPTION POWDER)	Ø 0,0 MM – 2 MM
DELIVERY PRESSURE:	MAX. +/- 0,5 BAR (TO 1,5 BAR OVER PRESSURE OPTIONAL)
CONVEYING SPEED:	TO 30 M/SEC. (HIGHER SPEEDS ON REQUEST)
VERSION:	STAINLESS STEEL (1.4301) SANDBLASTED
CONNECTING CABLE:	2 M (ELECTRONIC / EJECT UNIT/ DETECTION COIL)
POWER CABLE:	APP. 1,8 M CABLE WITH PLUG (TWO POLE AND EARTHING PIN) (US-VERSION WITH US-STANDARD PLUG)

OTHER VERSIONS AVAILABLE

POSITIONS



- 1** SERIAL PORT RS 232 (OPTIONAL)
- 2** ETHERNET INTERFACE (USED BY THE MANUFACTURER)
- 3** ETHERNET INTERFACE FOR NETWORK (SUCH AS mesuNET)
- 4** ETHERNET CONNECTION FOR THE SENSOR-UNIT (USED BY THE MANUFACTURER)
- 5** ETHERNET CONNECTION FOR THE DISPLAY-UNIT (USED BY THE MANUFACTURER)
- 6** EIGHT (8) FREE PROGRAMMABLE INPUTS (24V DC)

IN 1 - INITIATOR „NORMAL POSITION“ (EJECT GATE)
 IN 2 - FREE
 IN 3 - PRESSURE MONITOR (PRESSURE SWITCH)
 IN 4 - FREE
 IN 5 - INITIATOR „EJECT POSITION“ (EJECT GATE)
 IN 6 - FREE
 IN 7 - FREE
 IN 8 - FREE

ADDITIONAL CONNECTIONS SUCH AS LIGHT TRIGGERS, FILL SENSORS AND SUCH

18	17	16	15	14	13	12	11
24V	24V	24V	24V	24V	24V	24V	24V
GND	GND	GND	GND	GND	GND	GND	GND

POSITIONS

7 FOUR (4) FREELY PROGRAMMABLE OUTPUTS (24 V DC)

OUTPUT (STANDARD LAYOUT)

OUT1 - CONTROL FOR EJECT RELAY

OUT2 - CONTROL FOR PINCH VALVE

OUT3 - FREE

OUT4 - FREE

ADDITIONAL CONNECTIONS: MAGNET SOLENOID (REJECT MECHANISM),
FAULT INDICATOR, ALARM AND SUCH.



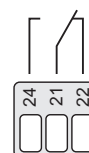
MAX. LOAD FOR ALL INPUTS AND OUTPUTS $I_{TOTAL} \leq 300 \text{ MA CUMULATIVE!}$

8 RELAY 2 (CONNECT AT FAULT)

FLOATING CHANGE OVER CONTACT

ACTUATED BY SELF MONITORING SYSTEM (NORMAL OPERATION)

MAX. CONTACT LOAD: 250 V/3 A



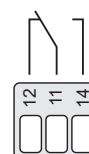
9 RELAY 1 (CONNECT WHEN METAL)

FLOATING CHANGE OVER CONTACT ACTUATED WHEN METAL IS DETECTED

MAX. CONTACT LOAD: 250 V/3 A

PULSE DURATION (AUTO-RESET): 0,1 SEC. TO 30 SEC. (ADJUSTABLE)

PULSE DURATION (RESET BY HAND): PERMANENT SIGNAL UNTIL RESET-BUTTON IS
PRESSED



IF REQUIRED; THE RELAYS MAY BE PROGRAMMED DIFFERENT.

10 POWER CONNECTION

11 24V DC TENSION / OUTPUT (USED BY THE MANUFACTURER)

12 24V DC TENSION / INPUT (USED BY THE MANUFACTURER)

THE MESUTRONIC GERÄTEBAU GMBH IS A GLOBALLY ACTIVE COMPANY IN THE FIELD OF INDUSTRIAL METAL DETECTION TECHNOLOGY WITH HEADQUARTERS IN GERMANY.

A TEAM OF SPECIALISTS FOCUSES FOR DECADES SUCCESSFULLY ON THE DEVELOPMENT, MANUFACTURING AND DISTRIBUTION OF ELECTRONIC METAL DETECTORS AND SEPARATORS FOR ALL INDUSTRIES. DAILY WE TAKE UP THE CHALLENGE TO SOLVE INDIVIDUAL PROBLEMS RELIABLE AND TAILORED TO THE CUSTOMER. WHERE OTHERS SAID "NO" LONG AGO OUR TASK JUST STARTS. TRUE TO THE MOTTO: "NOTHING IS IMPOSSIBLE."

THOUSANDS OF DETECTOR COILS, VARIOUS TRANSMITTERS AND A VARIETY OF EJECTORS AND MECHANICAL COMPONENTS CAN BE COMBINED DEPENDING ON THE TASK AND SERVE AS A BASIS FOR PRACTICAL AND FLEXIBLE SOLUTIONS. THROUGH YEARS OF CLOSE COLLABORATION WITH OUR CUSTOMERS FROM VARIOUS INDUSTRIES, WE HAVE SHAPED OUR EQUIPMENT PROGRAM CONTINUAL WITH THE RESULT THAT ALL MESUTRONIC PRODUCTS ARE NOW LEADING THE WAY IN PERFORMANCE, QUALITY, RELIABILITY AND HANDLING.

IN ADDITION, OUR WORLDWIDE SALES AND SERVICE NETWORK ENSURES THAT ON ALL CONTINENTS OF THE WORLD A PROFESSIONAL COMPETENT CONTACT PERSON IS AVAILABLE FOR YOU.

MESUTRONIC

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