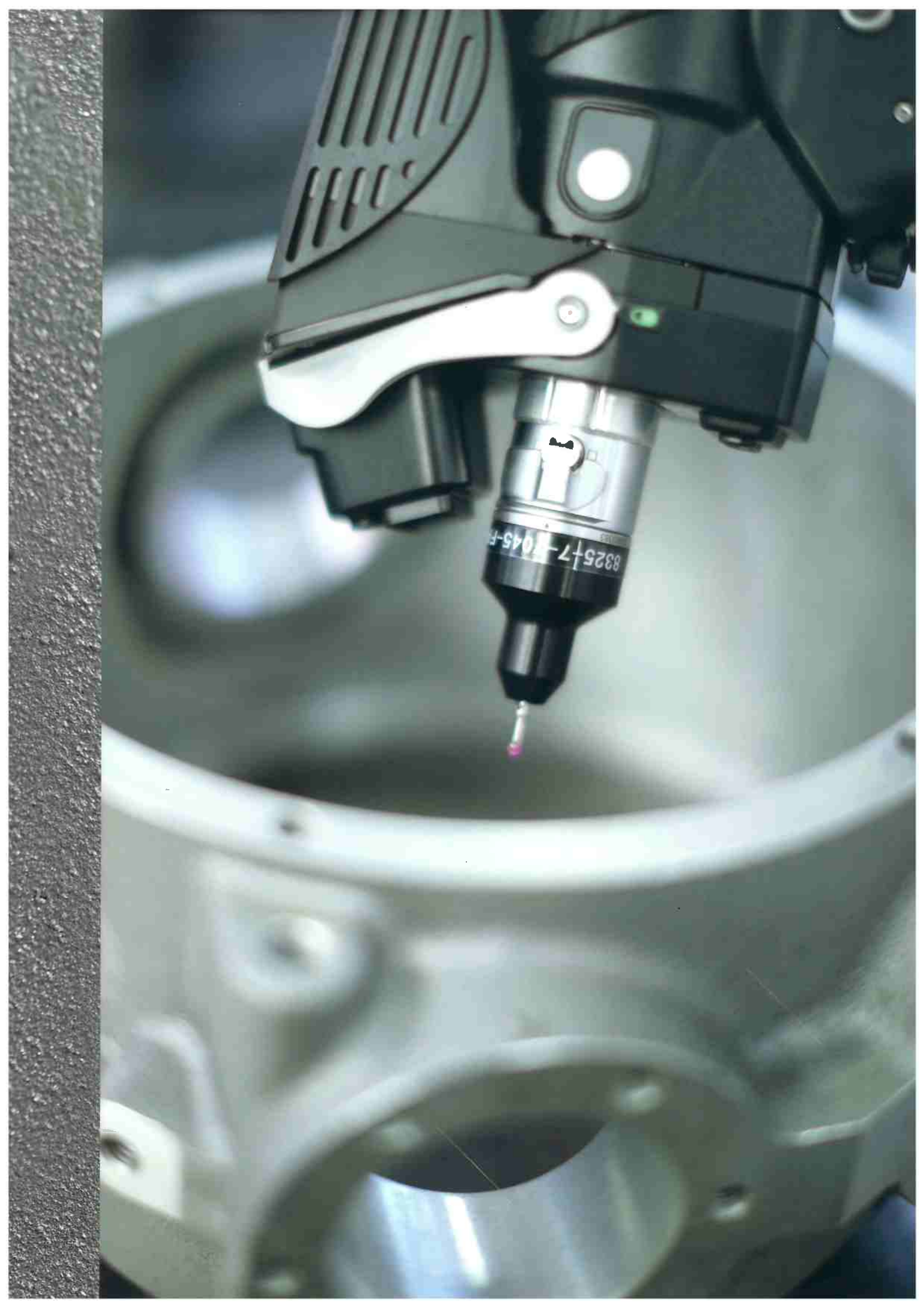


LT TOREX



TOREX[®]



8325+7-7045-F

Companies are made of people,
we must never forget it

- Vainer Marchesini -



COMPANY

If you can dream it,
you can do it.



TOREX

TOREX was founded within WAMGROUP in 1987 in Bastiglia, Modena, as a company designing and producing components for the transport and feeding of powdered materials.

The company's development went hand in hand with the growing needs of the reference market; products such as telescopic loading bellows, rotary valves and diverters, as well as components for silo safety and monitoring, represent the global benchmark in value for money.

1987 BASTIGLIA

ROTEX srl is founded in Bastiglia, Modena
Plant area: covered 1200 m²; total 3000 m²





1998

MEDOLLA

Transfer of ROTEX srl to the Medolla plant.
Plant area: covered 2300 m²;
total 5711 m²



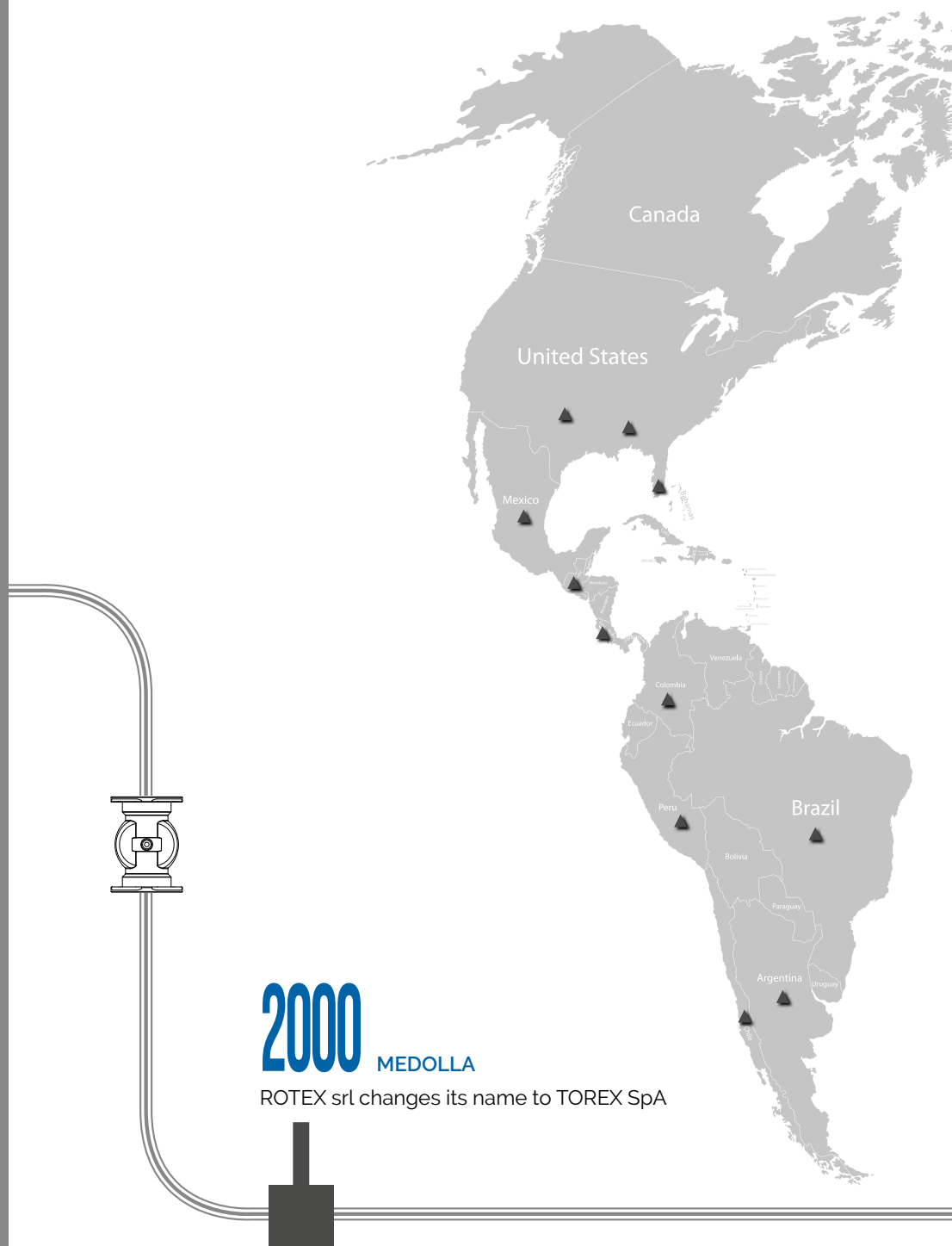
TOREX

Maximising our human resources, making major investments in research and development, adopting rigorous quality standards and the best technologies, and synergy with WAMGROUP companies, all enable us to guarantee our customers worldwide the best integrated solution for their needs.

We are present on 5 continents with branches for technical and commercial assistance, but we keep our roots firmly in our local area, which we never abandoned even in the darkest days of the 2012 earthquake. Today, we employ 55 employees at our headquarters in San Prospero (MO).

In the short term, thanks to growth in recent years, all our activities are expected to be transferred to the new plant under construction a stone's throw from the current headquarters.

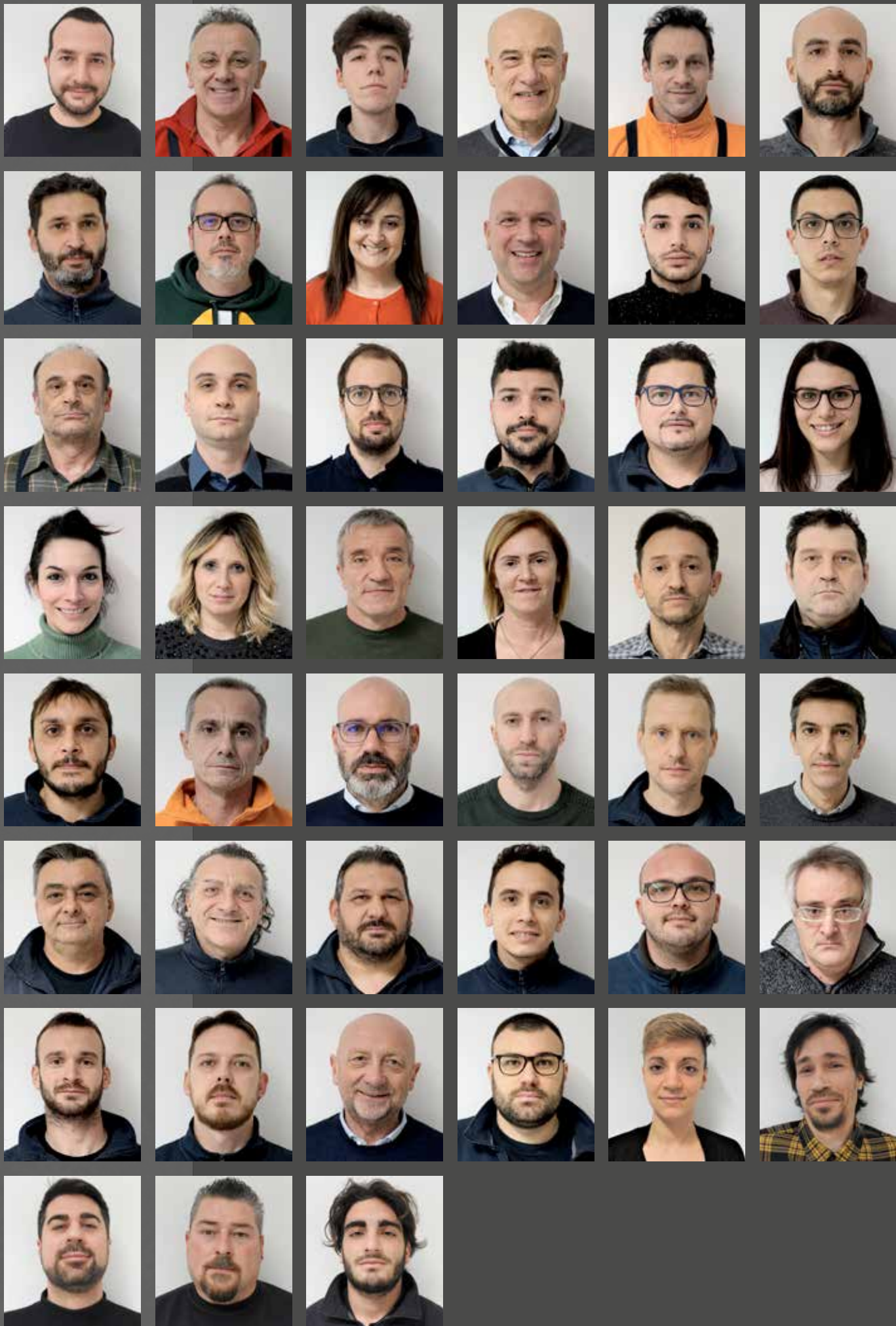
DISTRIBUTION BRANCHES





PEOPLE

Talent can win a game.
Intelligence and teamwork
are what win the championship.



TEAM

We are Torex, Torex is us.

Since its foundation, people have been placed at the centre of the company project: each team member's unique skills and characteristics have contributed to building the Torex of today.

Constant training, involvement in internal and group activities, and transparent communication are what Torex offers all its collaborators. For years, a group-wide code of ethics has been adopted which establishes the constant commitment to maintaining certain operating standards for all subsidiaries.

The objectives for the Torex of tomorrow are clear: we aim for continuous improvement, we want to innovate our products, raise the level of our services and guarantee the highest quality to our customers in order to become the point of reference in the sector.





ENVIRONMENT





WE ARE
TOREX

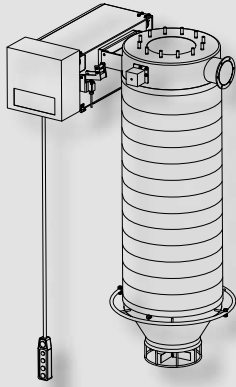
PRODUCTS

Those who say it's impossible
shouldn't disturb
those who are doing it.

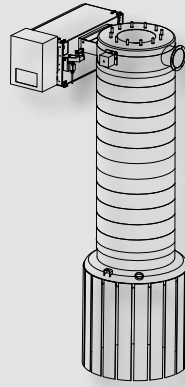


LOADING BELLOWS

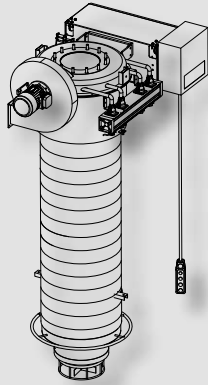




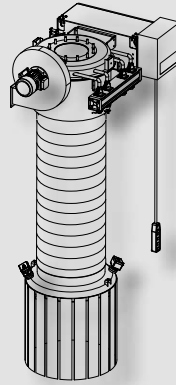
Z6 LOADING BELLOWS



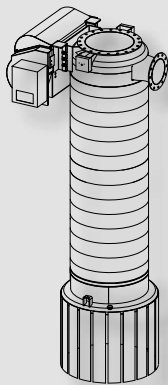
ZH LOADING BELLOWS



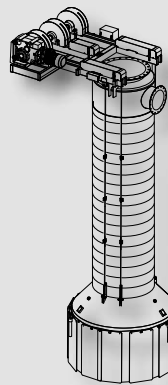
BELLOJET ZA LOADING BELLOWS



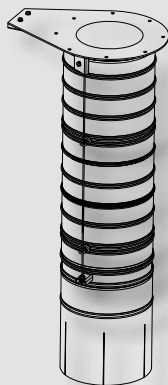
BELLOJET ZC LOADING BELLOWS



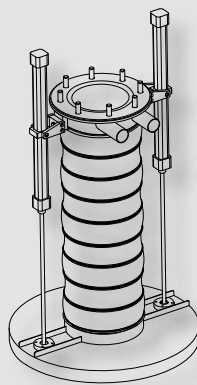
ZX LARGE CAPACITY LOADING BELLOWS



ZQ LARGE CAPACITY LOADING BELLOWS



ZN LOADING BELLOWS



MINIFILL LOADING BELLOWS

SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



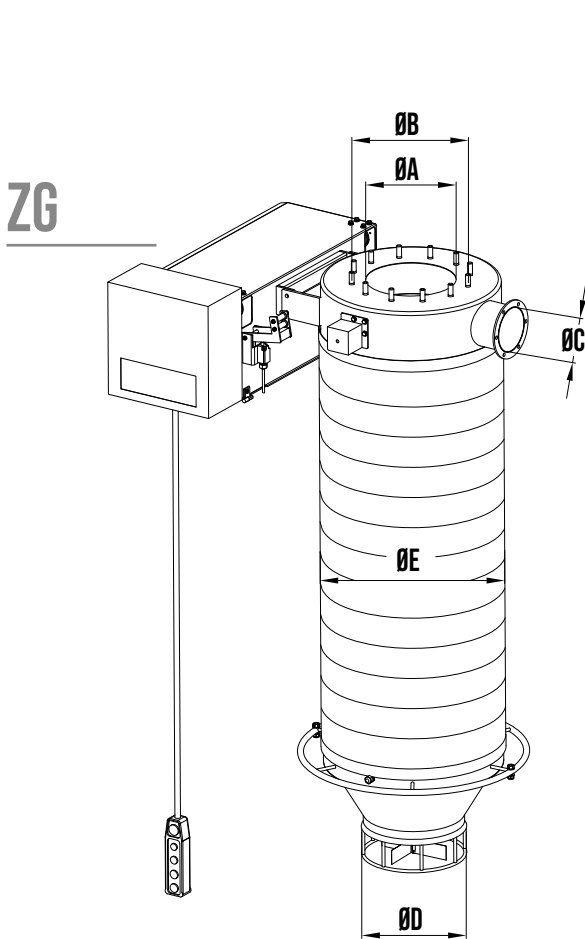
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

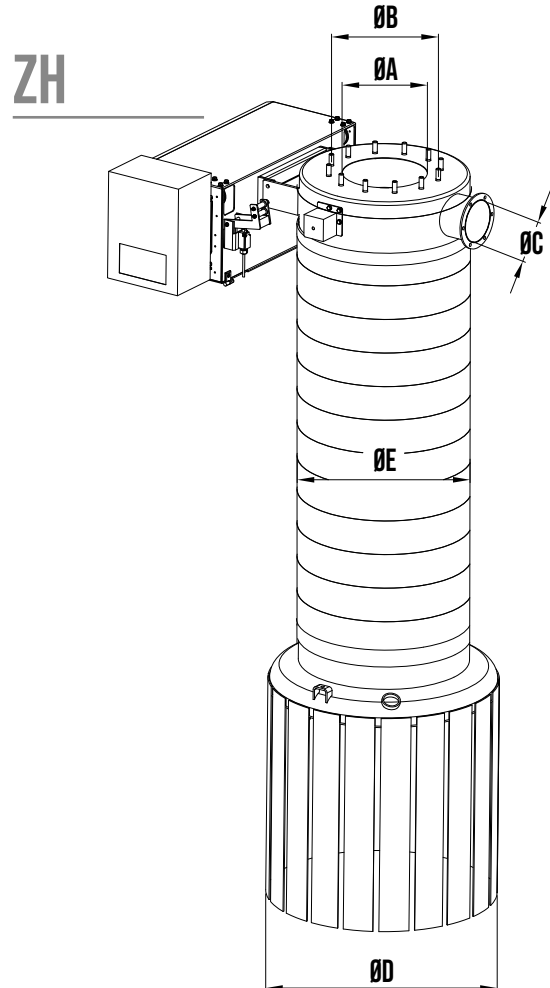
ZG - ZH TELESCOPIC LOADING BELLOWS

The telescopic loading bellows designed and built by Torex Spa meet the need of numerous industrial sectors to unload fine or bulk solid materials onto tankers, tipper trucks or other means of transport, while eliminating or minimising dust. This equipment, with a particular construction strength, is used in bulk loading systems in all sectors which require it: thanks to the perfectly sealed exit cone covered in Sintal or the containment skirt, the materials are unloaded without generating dust.



ZG TELESCOPIC LOADING BELLOWS FOR TANKER
(dimensions in mm)

Type	A	B	C	D	E
ZG	300	400	150	350	610



ZH TELESCOPIC LOADING BELLOWS FOR OPEN TRUCK
(dimensions in mm)

Type	A	B	C	D	E
ZH	300	400	150	810	610

TECHNICAL DATA

- Inlet diameter 300 – 400 mm;
- Maximum capacity: 250 m³/h – 440 m³/h.
- Maximum extension: up to 6 m;
- Working temperature: from -40°C to + 150°C.
- 2 external steel cables extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear.
- Construction material: iron, hardox 400, 304 stainless steel, 316 stainless steel.



Electric panel



Standard push-button panel



Wireless push-button panel



Spreader



Anti-waste device



Electric vibrator



Hypalon-neoprene bellows



Polyester bellows



Kevlar bellows



Removable terminal



EAC Ex

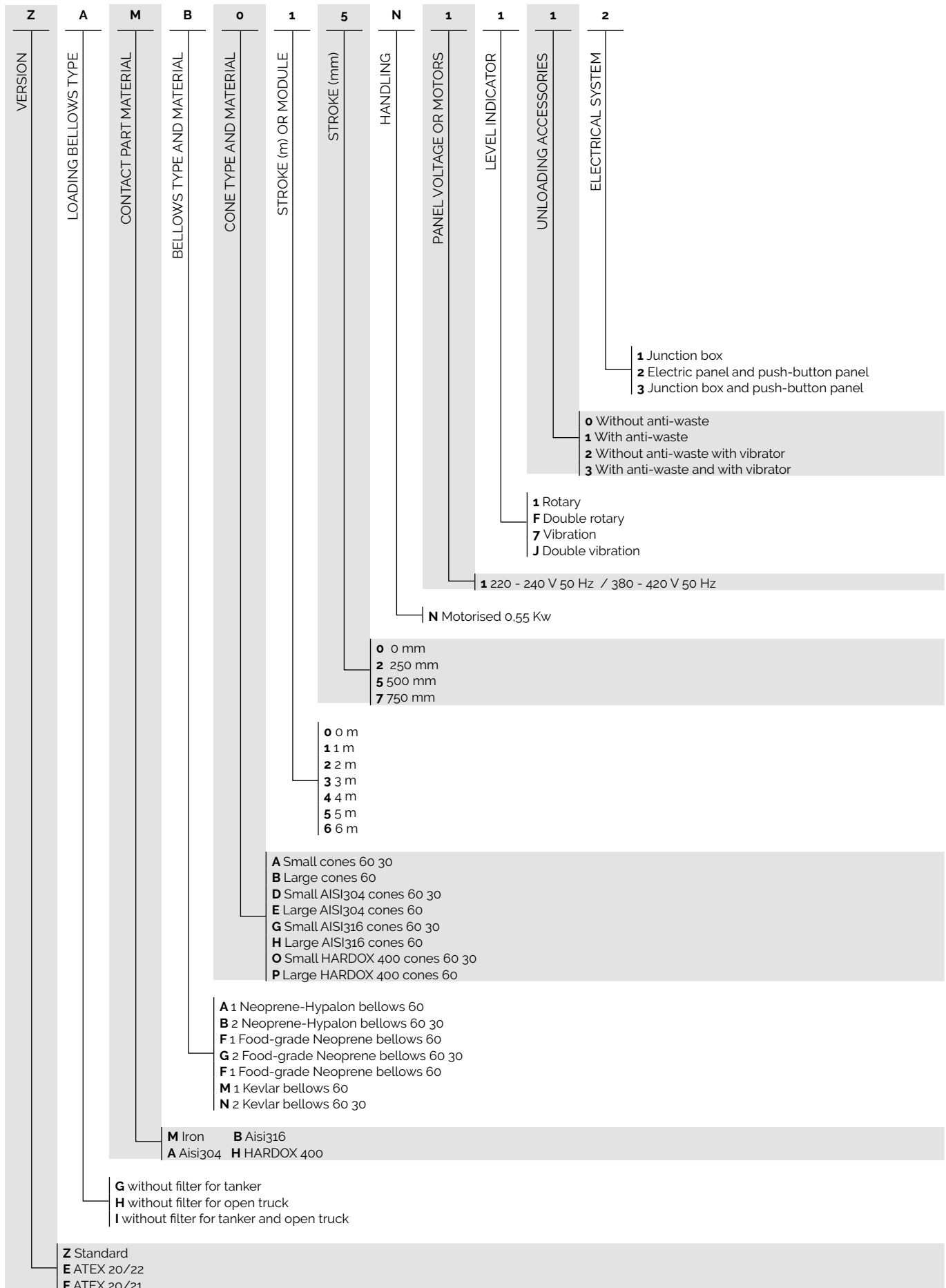
EAC



CE

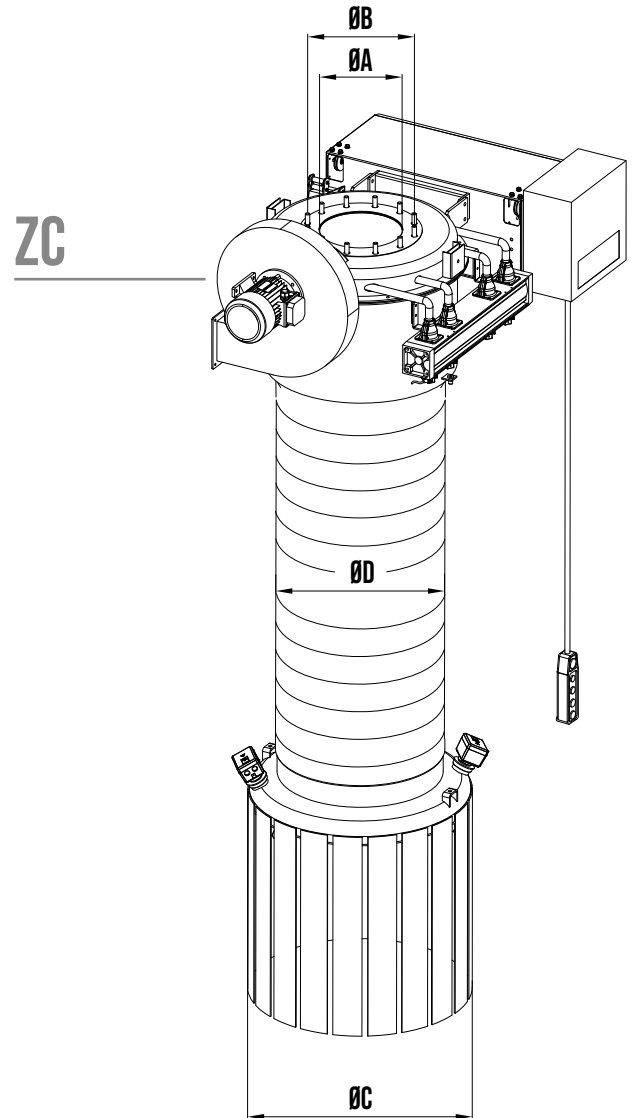
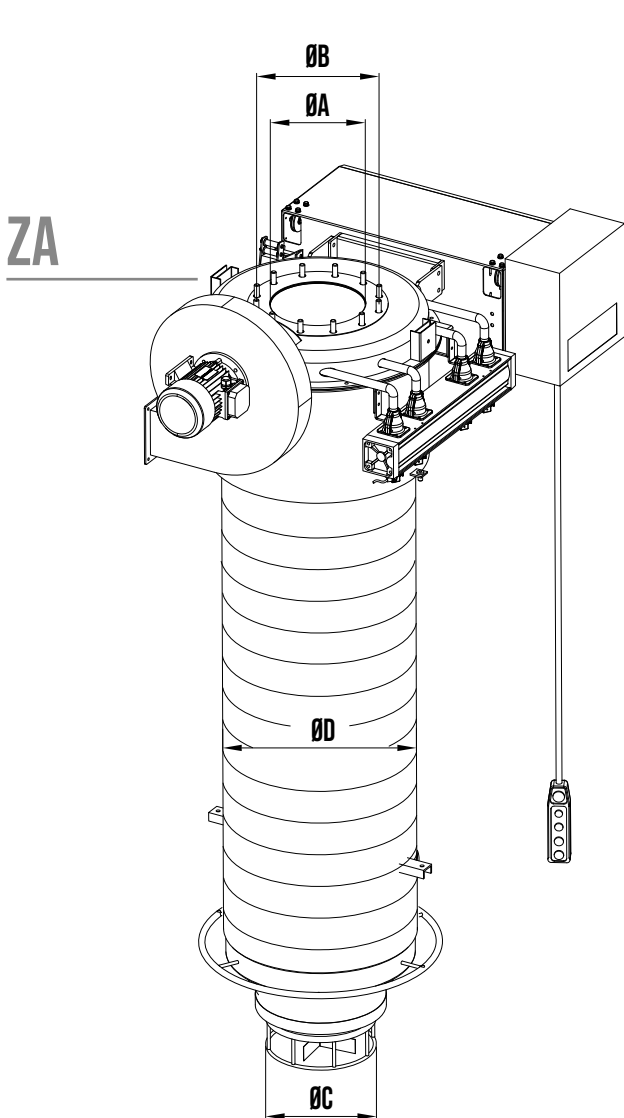
ZG - ZH TELESCOPIC LOADING BELLOWS

CONFIGURATION



BELLOJET ZA - ZC TELESCOPIC LOADING BELLOWS

Unloading system for tankers or tipper trucks, with the same characteristics as the ZH - ZG model plus the addition of a filter inside the head, complete with counter-current cleaning system and fan. The built-in high-efficiency filter enables you to load materials without generating dust.



ZA BELLOJET TELESCOPIC LOADING BELLOWS FOR TANKER (dimensions in mm)

Type	A	B	C	D
ZA	300	400	350	610

ZC BELLOJET TELESCOPIC LOADING BELLOWS FOR OPEN TRUCK (dimensions in mm)

Type	A	B	C	D
ZC	300	400	810	610

TECHNICAL DATA

- Inlet diameter 300 – mm;
- Maximum capacity: 250 m³/h;
- Maximum extension: up to 5,5 m;
- Working temperature: from -40°C to + 150°C;
- 2 external steel cables extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear;
- Construction material: iron, hardox 400, 304 stainless steel, 316 stainless steel;
- Built-in 10 m²/h filter with 2.2 kW fan.

ACCESSORIES



Electric panel



Standard push-button panel



Wireless push-button panel



Spreader



Anti-waste device



Electric vibrator



Hypalon-neoprene bellows



Polyester bellows



Kevlar bellows



Removable terminal



Cartridges PH polyester



Cartridges PX antistatic



Cartridges PV hydro-oil repellent



Cartridges PT membrane fabric



Cartridges PZ antistatic membrane fabric



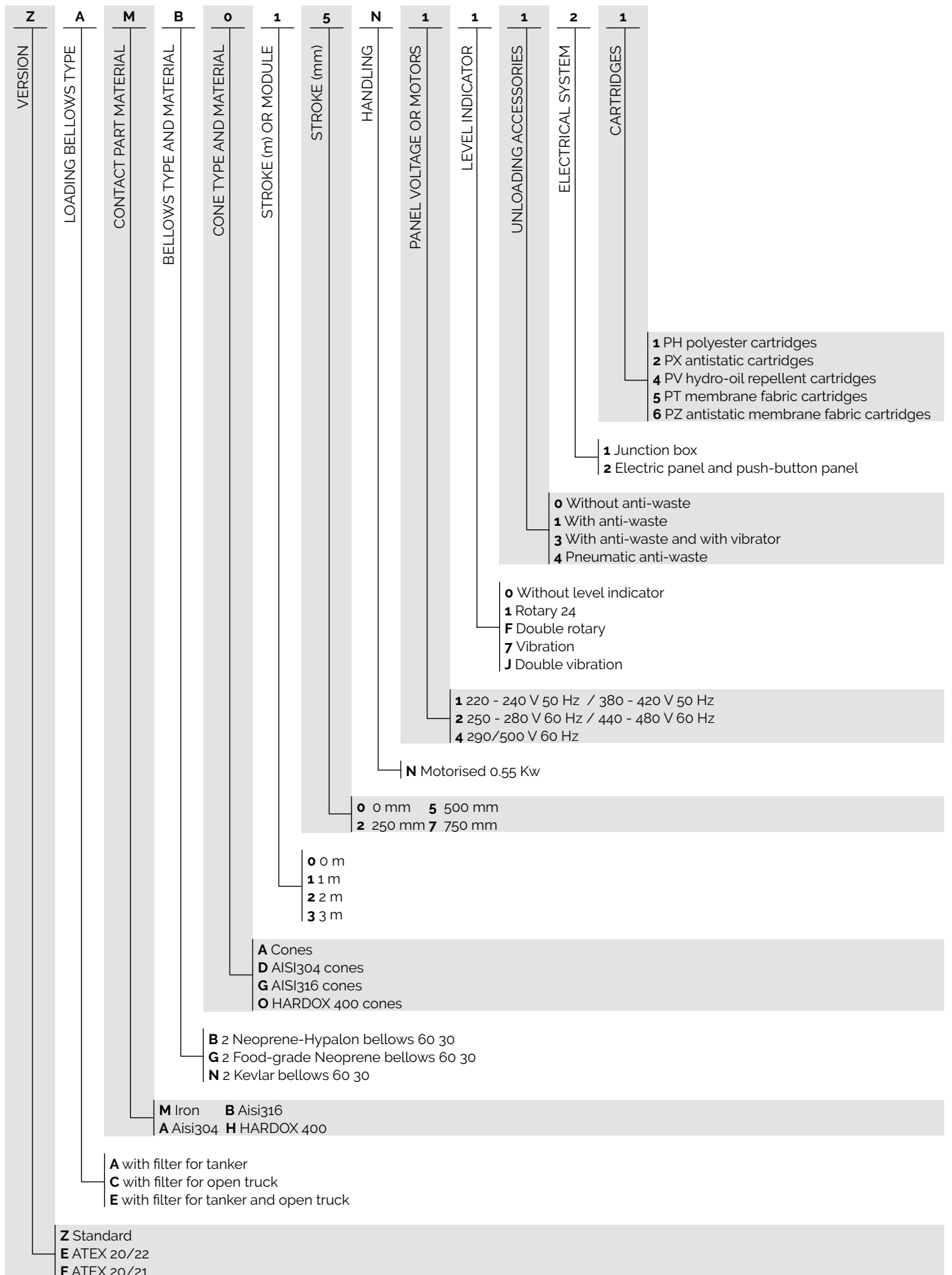
ERL Ex



CE EAC

BELLOJET ZA - ZC TELESCOPIC LOADING BELLOWS

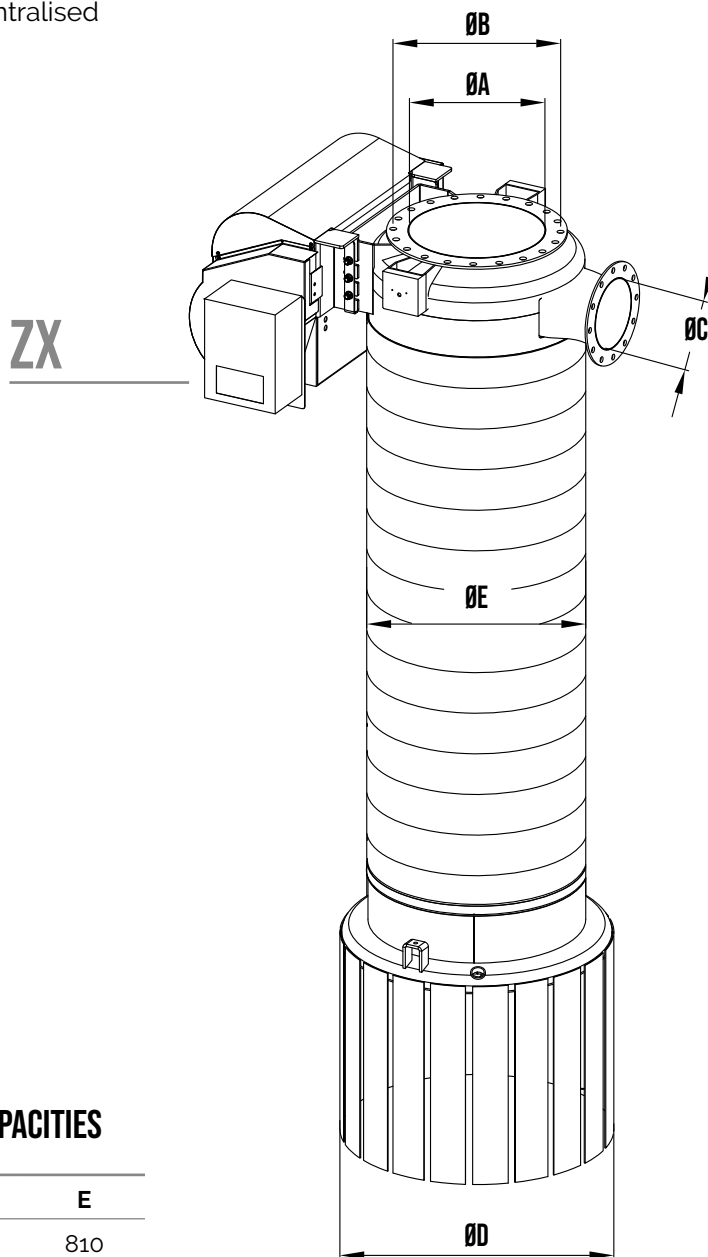
CONFIGURATION



ZX TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES

The **ZX** telescopic loading bellows are suitable for loading flatbed trucks, wagons and holds, reaching a capacity of 550 m³/h, and is built for continuous use.

The terminal is equipped with a skirt that contains the emission of dust during unloading, while the head is equipped with a flange for connection to a centralised filter.



ZX TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES (dimensions in mm)

Type	A	B	C	D	E
ZX	510	620	267	1000	810

TECHNICAL DATA

- Inlet diameter 500 mm;
- Maximum capacity: 550 m³/h;
- Maximum extension: up to 20 m;
- Working temperature: from -40°C to + 150°C;
- 2 external steel cables extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear;
- Construction material: iron, hardox 400, 304 stainless steel, 316 stainless steel.

ACCESSORIES



Electric panel



Standard push-button panel



Wireless push-button panel



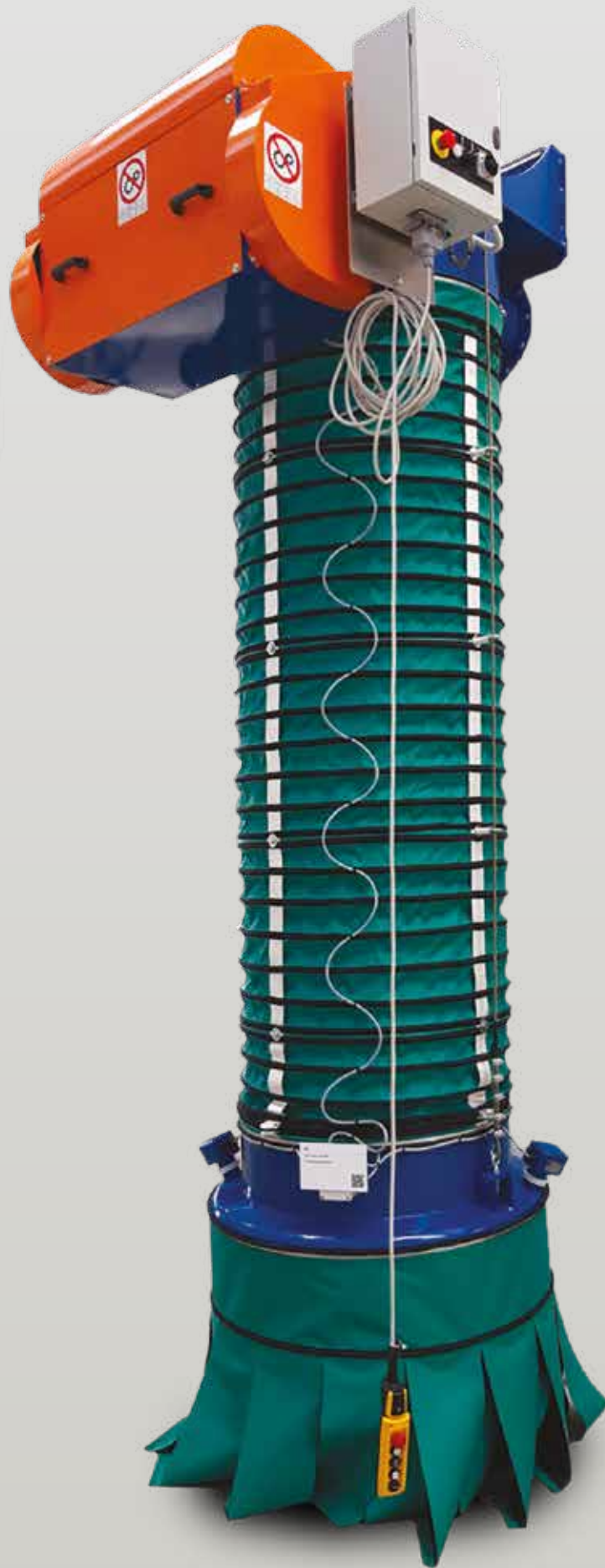
Hypalon-neoprene bellows



Polyester bellows



Kevlar bellows



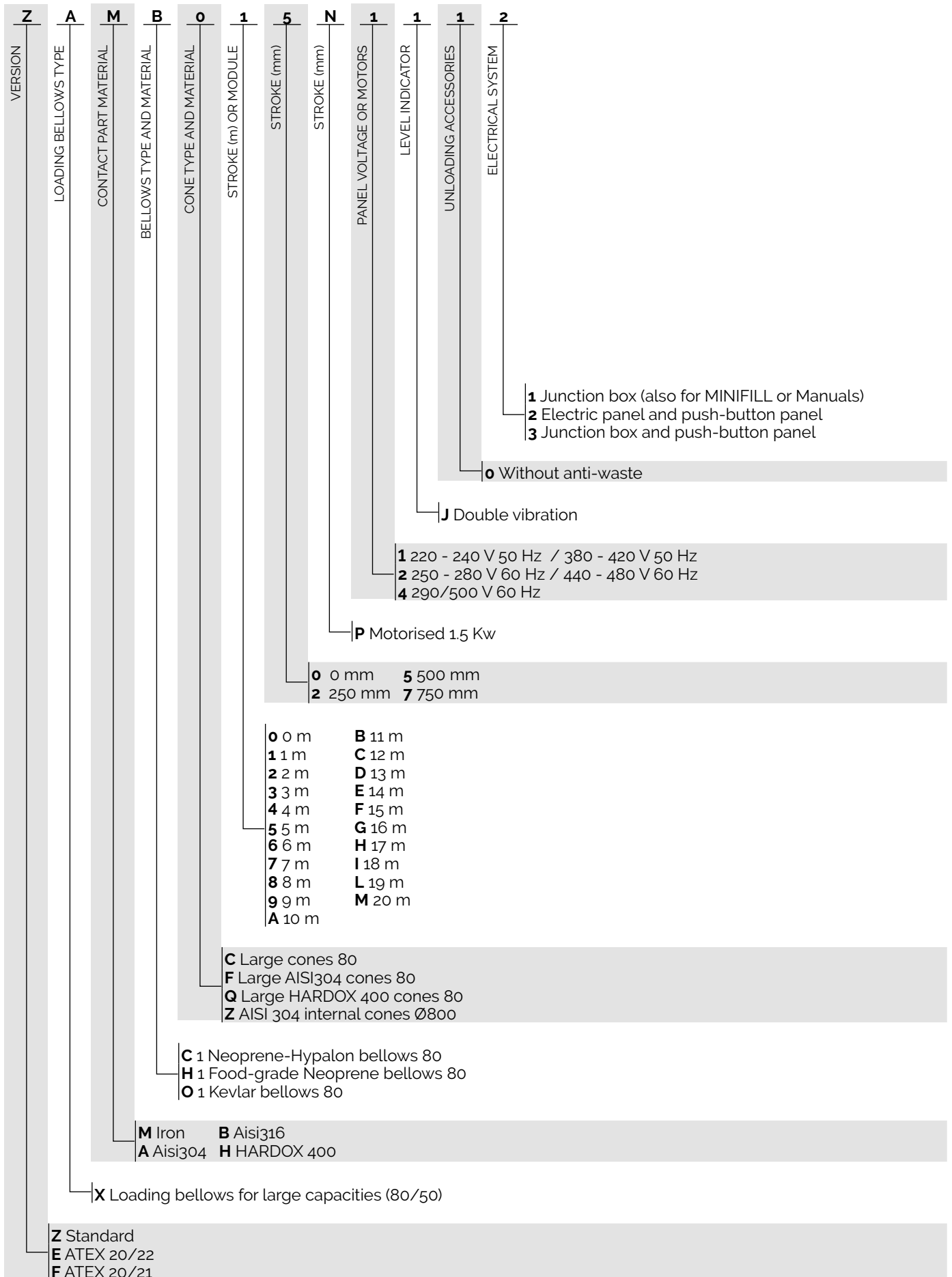
ERL Ex



CE ERL

ZX TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES

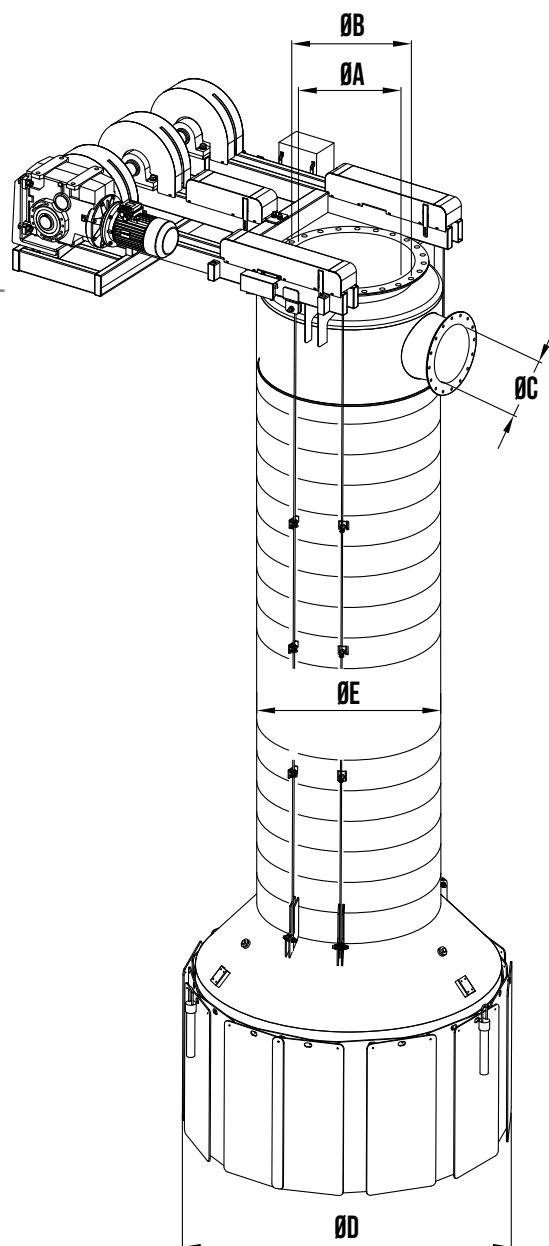
CONFIGURATION



ZQ TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES

Developed to load ships, barges or outdoor storage, capacity of 1,800 m³/h. Equipped with a skirt in the terminal that prevents the emission of dust during unloading and a suction flange on the head for connection to a centralised filter.

ZQ



ZQ TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES (dimensions in mm)

Type	A	B	C	D	E
ZQ	800	950	400	2100	1200

TECHNICAL DATA

- Inlet diameter 800 mm;
- Maximum capacity: 1,800 m³/h;
- Maximum extension: up to 30 m;
- Working temperature: from -20°C to +150°C;
- Electric lifting motor 5.5 Kw;
- 3 external cables extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear;
- Construction material: iron, hardox 400, 304 stainless steel, 316 stainless steel;
- 3 TILT-type level indicators placed outside the material flow.

ACCESSORIES



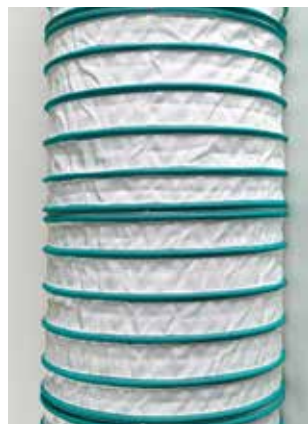
Electric panel



Wireless push-button panel



Hypalon-neoprene bellows



Polyester bellows



Kevlar bellows



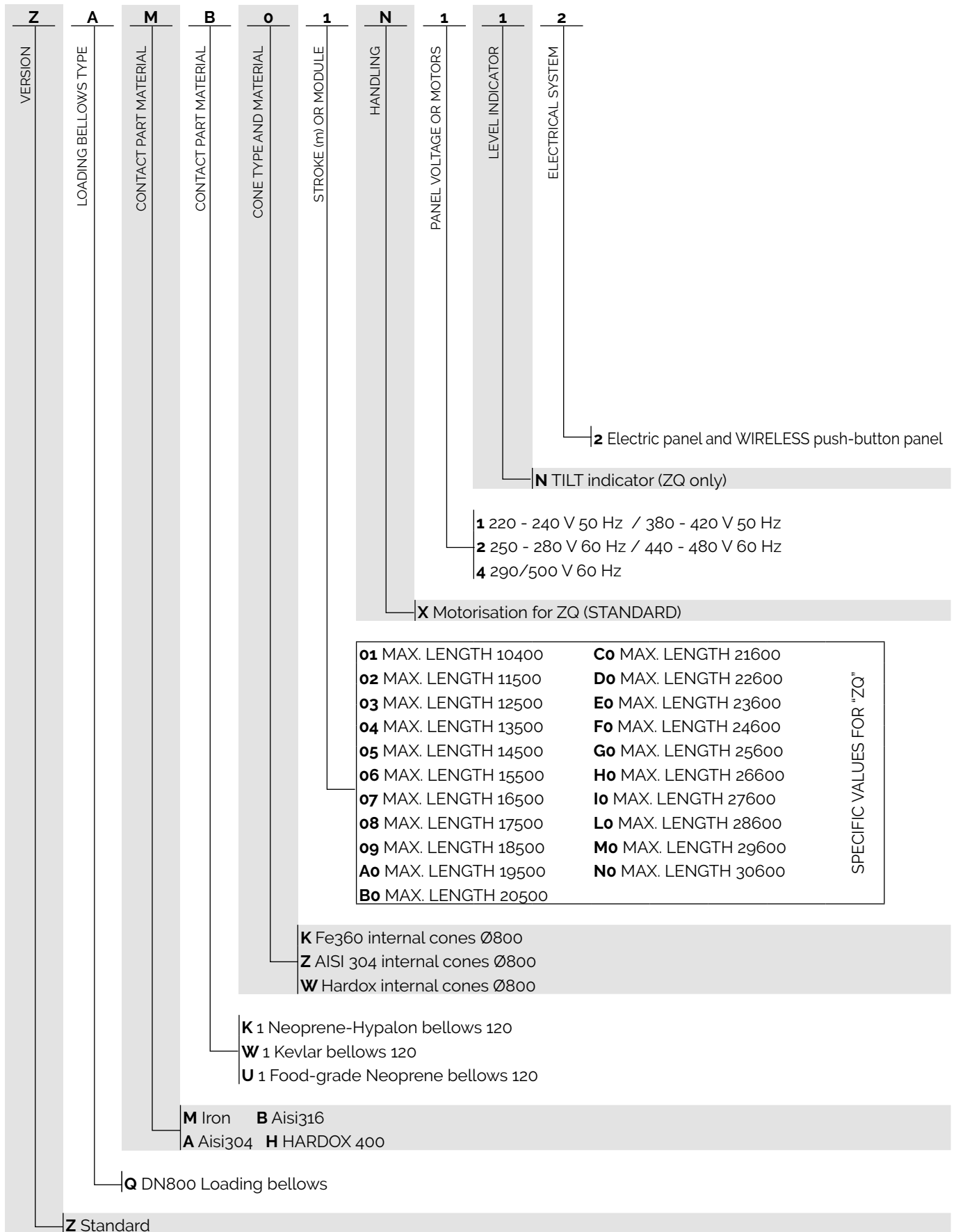
ERL Ex



CE ERL

ZQ TELESCOPIC LOADING BELLOWS FOR LARGE CAPACITIES

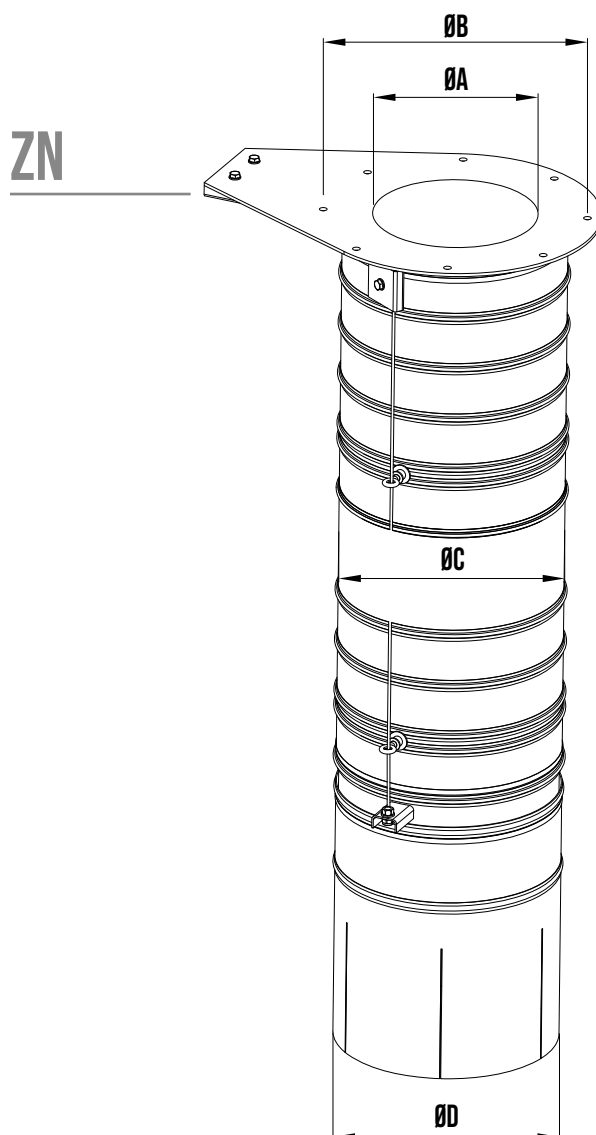
CONFIGURATION



ZN TELESCOPIC LOADING BELLOWS

The **ZN** telescopic loading bellows are the ideal combination of convenience, simplicity and quality for loading tankers.

Movement with manual winch, attached or with transmission, skirt on the conical terminal to prevent the emission of dust into the atmosphere.



ZN TELESCOPIC LOADING BELLOWS

(dimensions in mm)

Type	A	B	C	D
ZN	300	480	410	410

TECHNICAL DATA

- Inlet diameter 300 mm;
- Maximum capacity: 200 m³/h;
- Maximum extension: up to 4 m;
- Working temperature: from -40°C to + 150°C;
- 2 external steel cables extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear;
- Construction material: Iron, 304 stainless steel.

ACCESSORIES

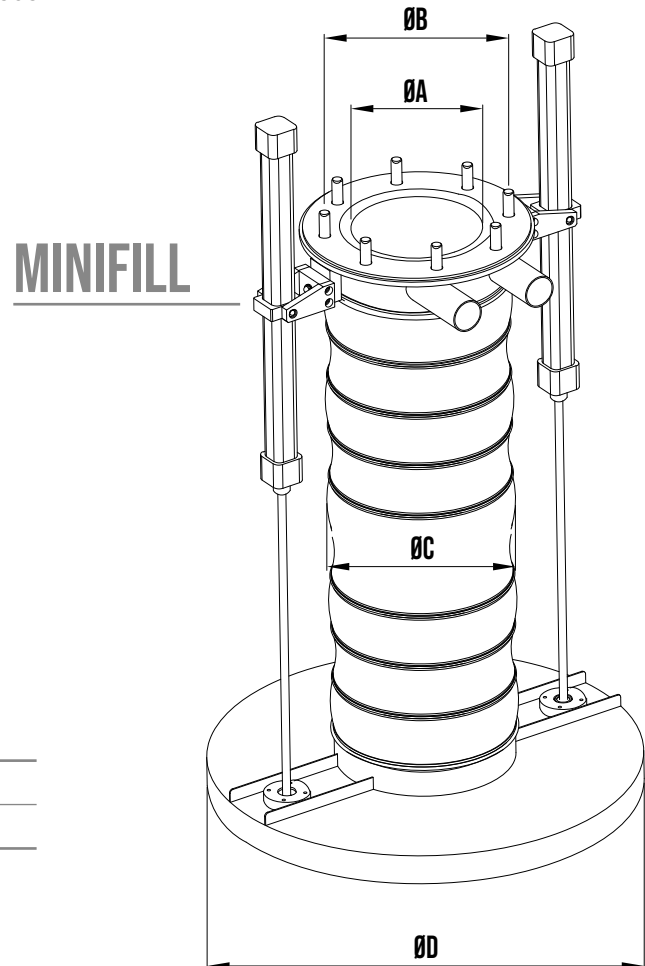


Manual winch

MINIFILL TELESCOPIC LOADING BELLOWS

Built for filling small containers without spreading dust. The compact dimensions of the **MINIFILL** telescopic loading bellows make it the ideal solution in limited space conditions.

The double bellows solution with suction inlet increases the dedusting efficiency.



MINIFILL TELESCOPIC LOADING BELLOWS

(dimensions in mm)

Type	A	B	C	D
MINIFILL	200	280	410	650

TECHNICAL DATA

- Inlet diameter 200 mm;
- Maximum capacity: 120 m³/h;
- Maximum extension: up to 2 m;
- Working temperature: from -15°C to + 120°C;
- 2 Pneumatic cylinders extend and retract the external loading bellows without coming into contact with the product, avoiding obstructions and wear;
- 2 Suction nozzles diam. 50 mm;
- Double bellows.



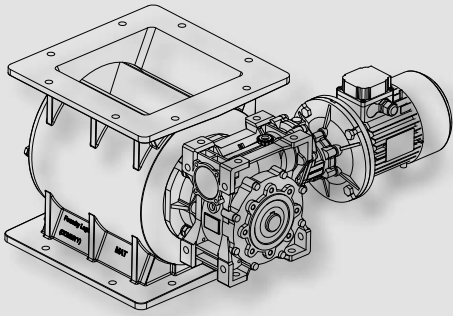
CE EAC



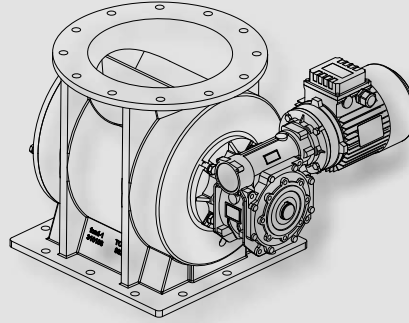
ROTARY VALVES



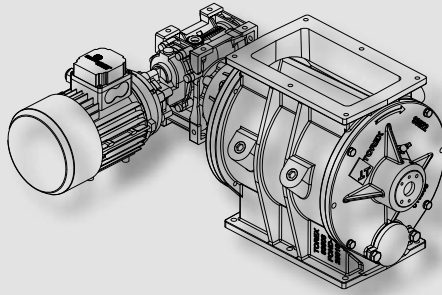
RV DROP-THROUGH ROTARY VALVES



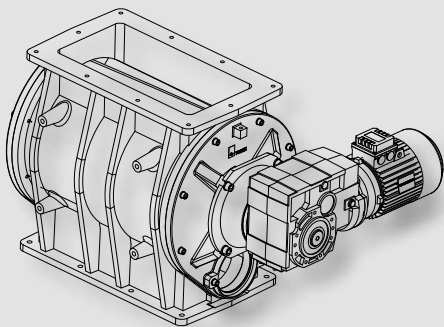
RVR DROP-THROUGH ROTARY VALVES



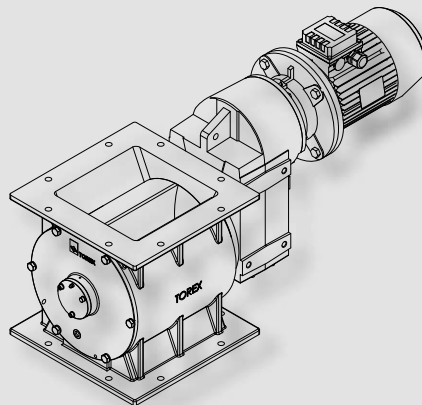
RVC DROP-THROUGH ROTARY VALVES



RVS BLOW-THROUGH ROTARY VALVE



RWN ROTARY VALVE FOR PELLETS AND WOOD CHIPS



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



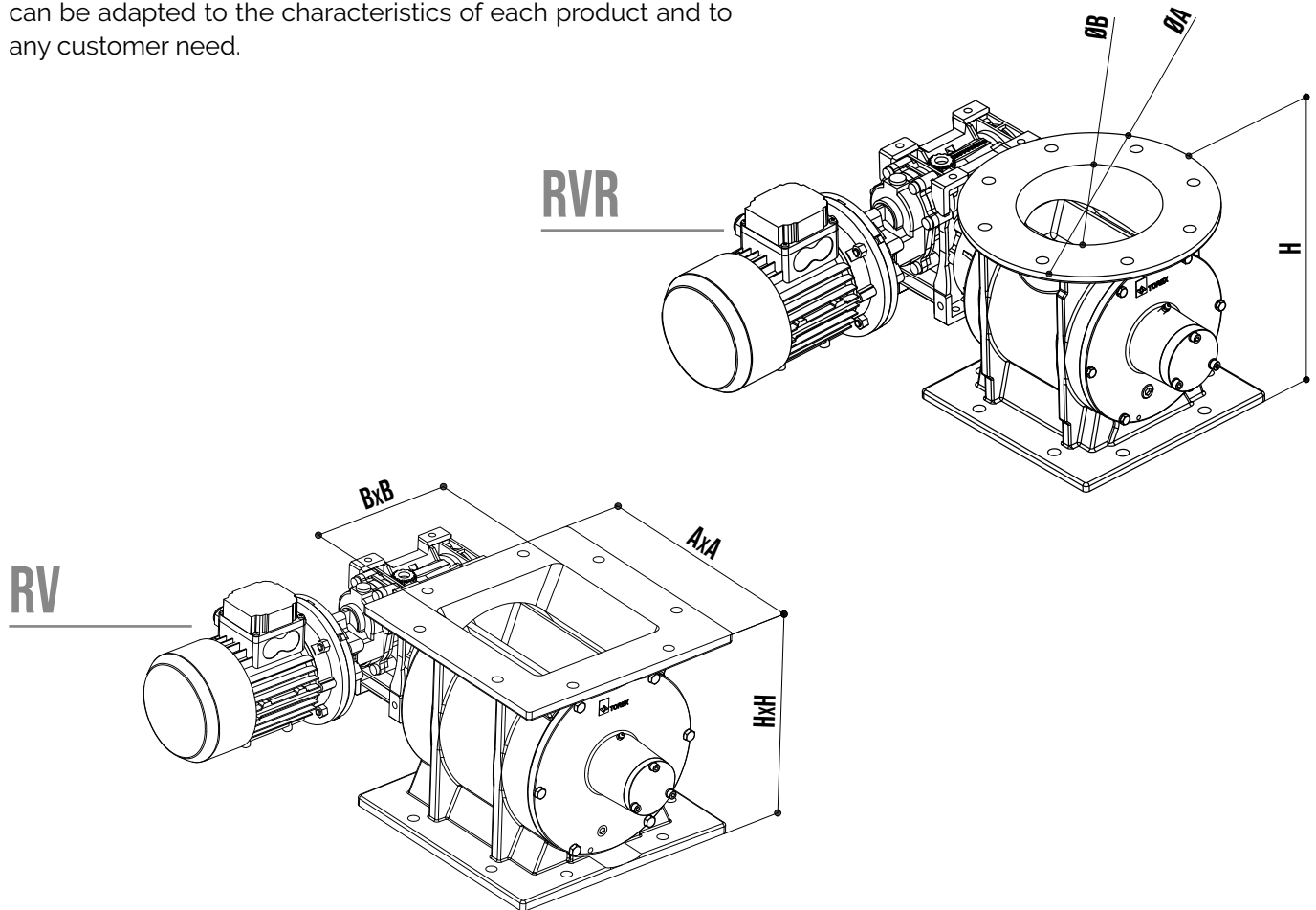
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

RV-RVR DROP-THROUGH ROTARY VALVES

The drop-through rotary valves mod. **RV-RVR** have been designed according to a criterion of maximum universal application. They are suitable for controlled feeding or unloading of powder or granular products from silos, hoppers, pneumatic transport systems, filters and cyclones. Thanks to the different construction materials and the appropriate accessories, they can be adapted to the characteristics of each product and to any customer need.



RV MODEL (dimensions in mm)

Type	A	B	H
RV 02	265	150	220
RV 05	320	200	280
RV 10	375	250	360
RV 20	440	300	445

RVR MODEL (dimensions in mm)

Type	A	B	H
RVR 02	285	160	250
RVR 05	340	200	330
RVR 10	406	265	360
RVR 20	445	300	455

TECHNICAL DATA

- Round inlet diameter: 150 mm (6") - 200 mm (8") - 250 mm (10") - 300 mm (12");
- Square inlet diameter: 150x150 mm - 200x200 mm - 250x250 mm - 300x300 mm (6"x6" - 8"x8" - 10"x10" - 12"x12");
- Capacity: 2-5-10-20 litres/rev (0.07 - 0.17 - 0.35 - 0.7 cu ft/rev);
- Working temperature: from -40°C up to 180°C;
- Working pressure: from -0.2 bar up to +0.3 bar;
- Construction material: cast iron, 304 stainless steel, AISI 316 stainless steel only for RV.

RV-RVR...X

Atex rotary valves

ATEX20/22 certified

UE certificate, type TÜV IT 16 ATEX 063 X

CE₀₉₄₈ Ex II 1/3

Ex h III C T135°C Da/Dc

ATEX rotary valves are designed and tested for use in potentially explosive areas classified as ZONA 22 and with a process atmosphere (inside the valve) classified as ZONA 20 in accordance with Directives 2014/34/EU and 1999/92/EC.

RV-RVR...E

Fire stop rotary valves

ATEX20/22 and EN 15089 certified

(Explosion protection systems)

UE certificate, type FTZÚ 13 ATEX 0148 X

CE₀₉₄₈ Ex II 1/3

Ex h III C T135°C Da/Dc

CE₀₉₄₈ Ex D St2

Rotary valves certified as explosion protection system for pressure up to 1.2 bar.

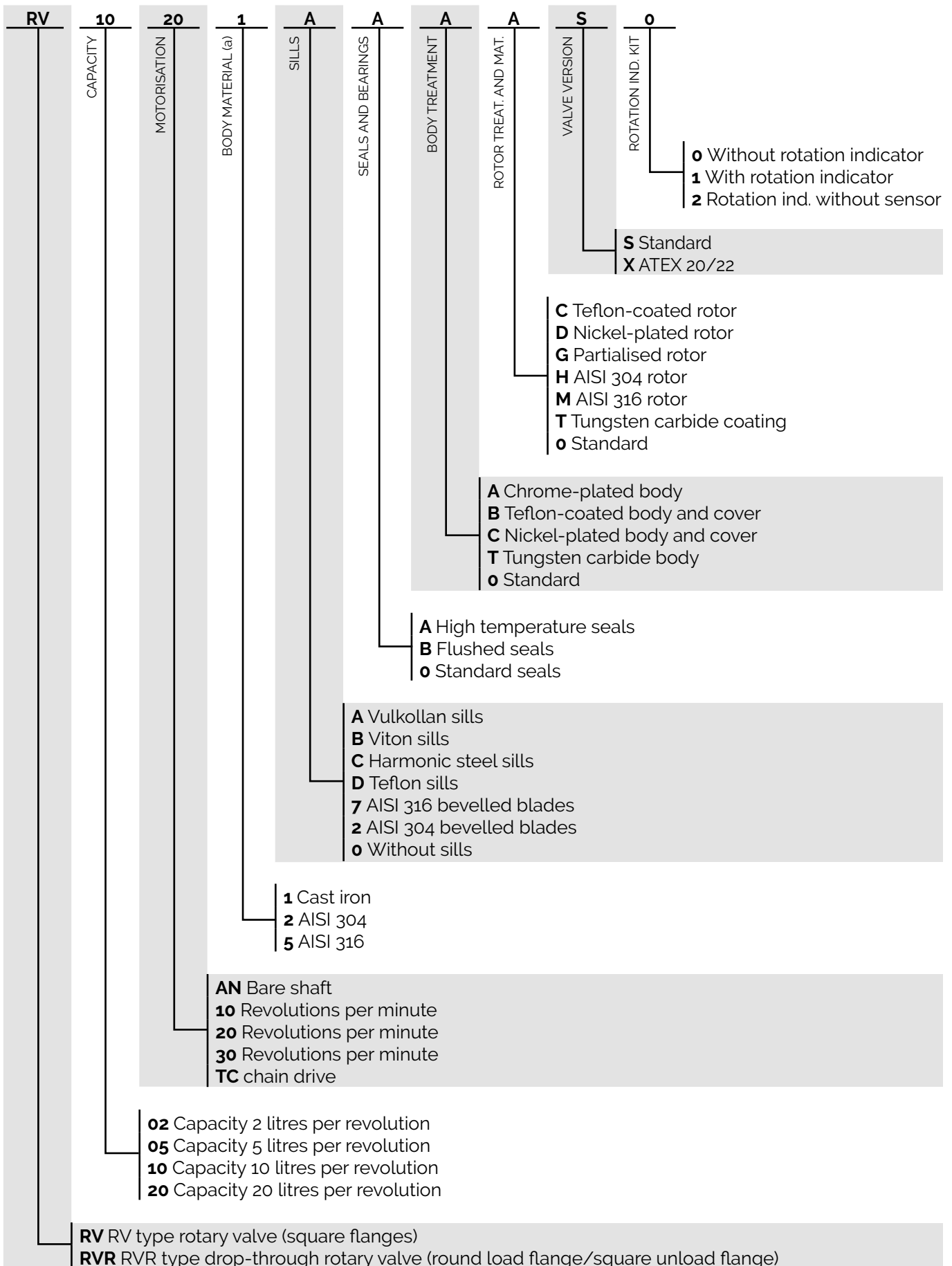




ERC Ex  ERC  CE

RV-RVR DROP-THROUGH ROTARY VALVES

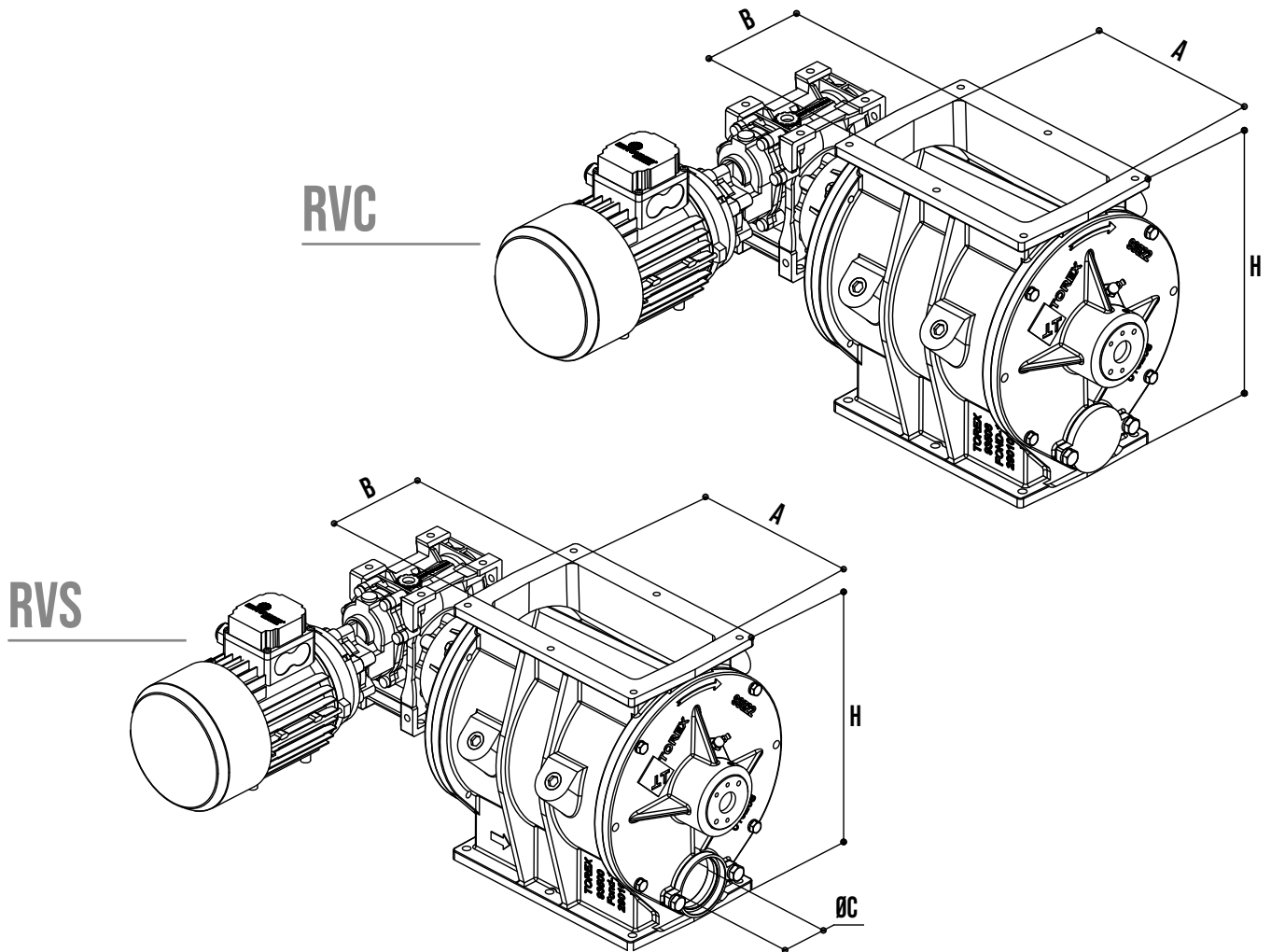
CONFIGURATION



ROTARY VALVES

RVC DROP-THROUGH ROTARY VALVE RVS BLOW-THROUGH ROTARY VALVE

High filling coefficient, minimum leakage. Ideal for unloading and feeding powder and granules in every industrial sector.



RVC MODEL (dimensions in mm)

Type	A	B	H
RVC 05	170	122	335
RVC 10	238	135	339
RVC 15	276	148	399
RVC 20	337	196	447
RVC 35	470	240	530
RVC 80	569	284	677

RVS MODEL (dimensions in mm)

Type	A	B	C	H
RVS 05	170	122	54	335
RVS 10	238	135	64	339
RVS 15	276	148	74	399
RVS 20	337	196	96	447
RVS 35	470	240	118	530
RVS 80	569	284	150	677

TECHNICAL DATA

- Capacity 5 – 10 – 15 – 20 – 38 – 78 litres/rev;
- Working temperature: from -40°C to +220°C;
- Working pressure: from -0.2 bar to +0.8 bar;
- Open rotor with inclined and chamfered blades or with standard blades;
- Construction material: cast iron, chrome-plated cast iron, nickel-plated cast iron, teflon-plated cast iron and 304 stainless steel.

RVS-RVC...X

Atex rotary valves

ATEX20/22 certified

EU certificate, type TÜV IT 16 ATEX 063 X

CE₀₉₄₈ Ex II 1/3

Ex h III C T135°C Da/Dc

ATEX rotary valves are designed and tested for use in potentially explosive areas classified as ZONA 22 and with a process atmosphere (inside the valve) classified as ZONA 20 in accordance with Directives 2014/34/EU and 1999/92/EC.

RVC...E

Fire stop rotary valves

ATEX20/22 and En 15089 certified

(Explosion protection systems)

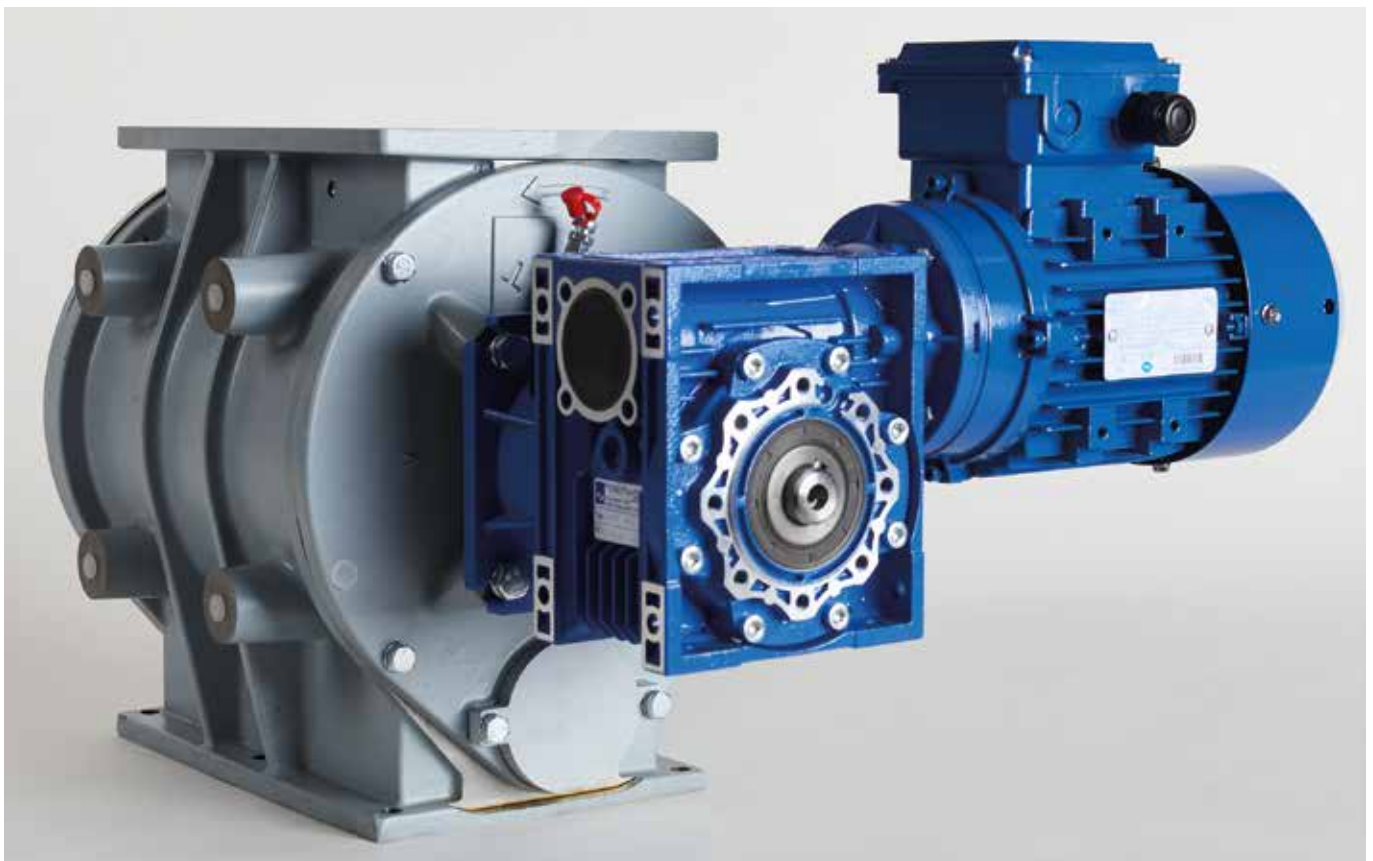
EU certificate, type FTZÚ 1A ATEX 0053X

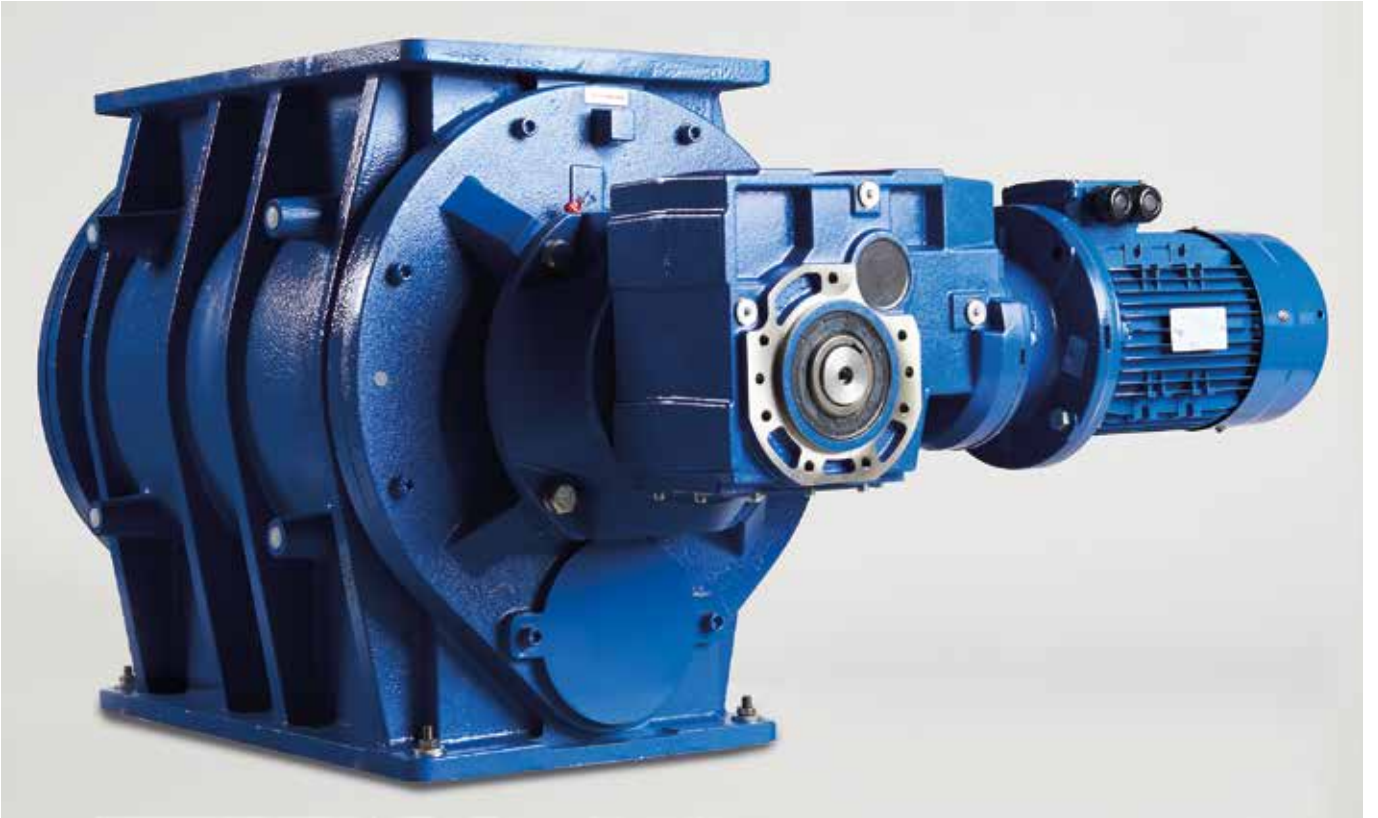
CE₀₉₄₈ Ex II 1/3

Ex III C T135°C Da/Dc

CE₀₉₄₈ Ex D St2

Rotary valves certified as explosion protection system for pressure up to 6 bar.





EAC Ex



EAC

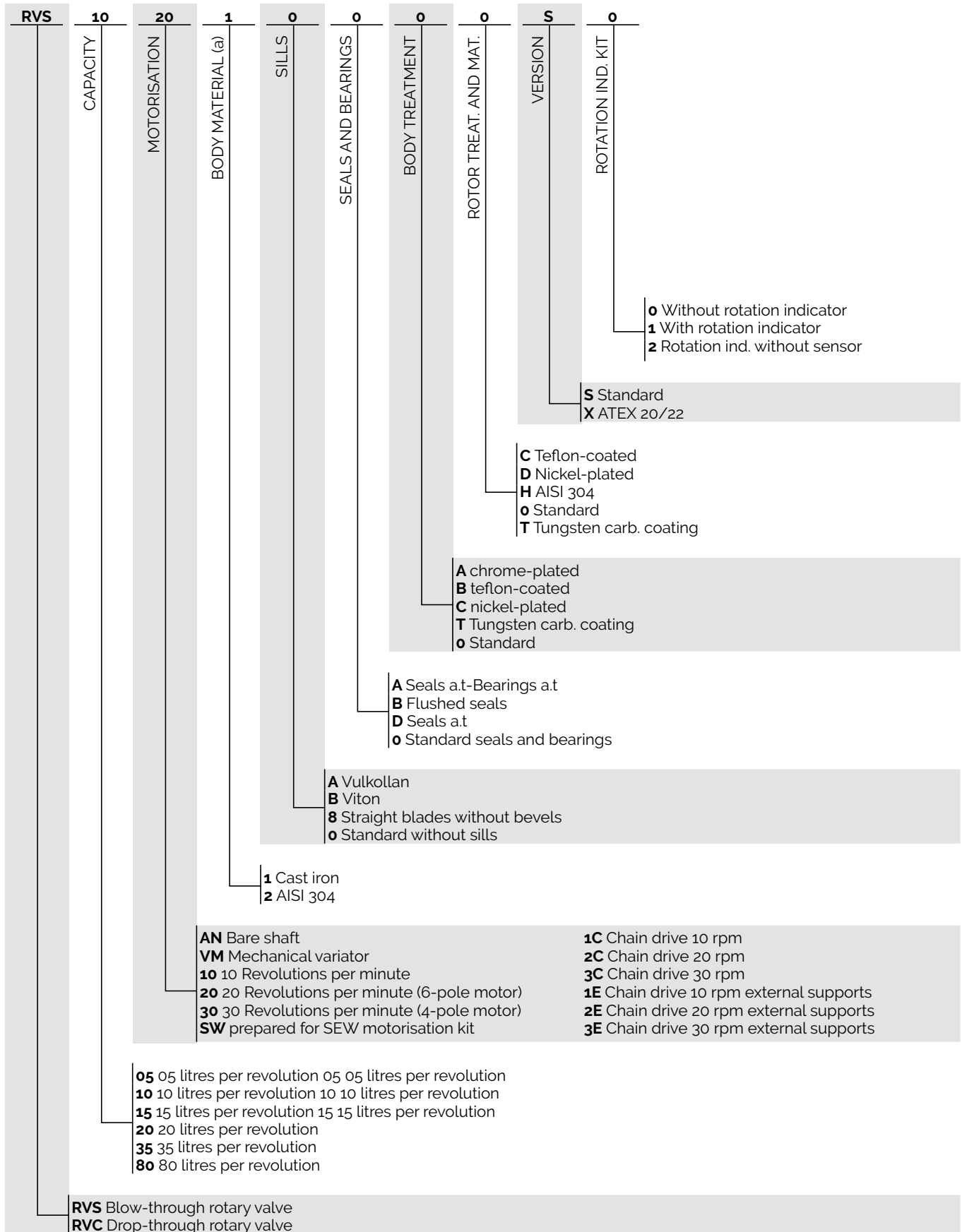


CE



RVC - RVS ROTARY VALVES

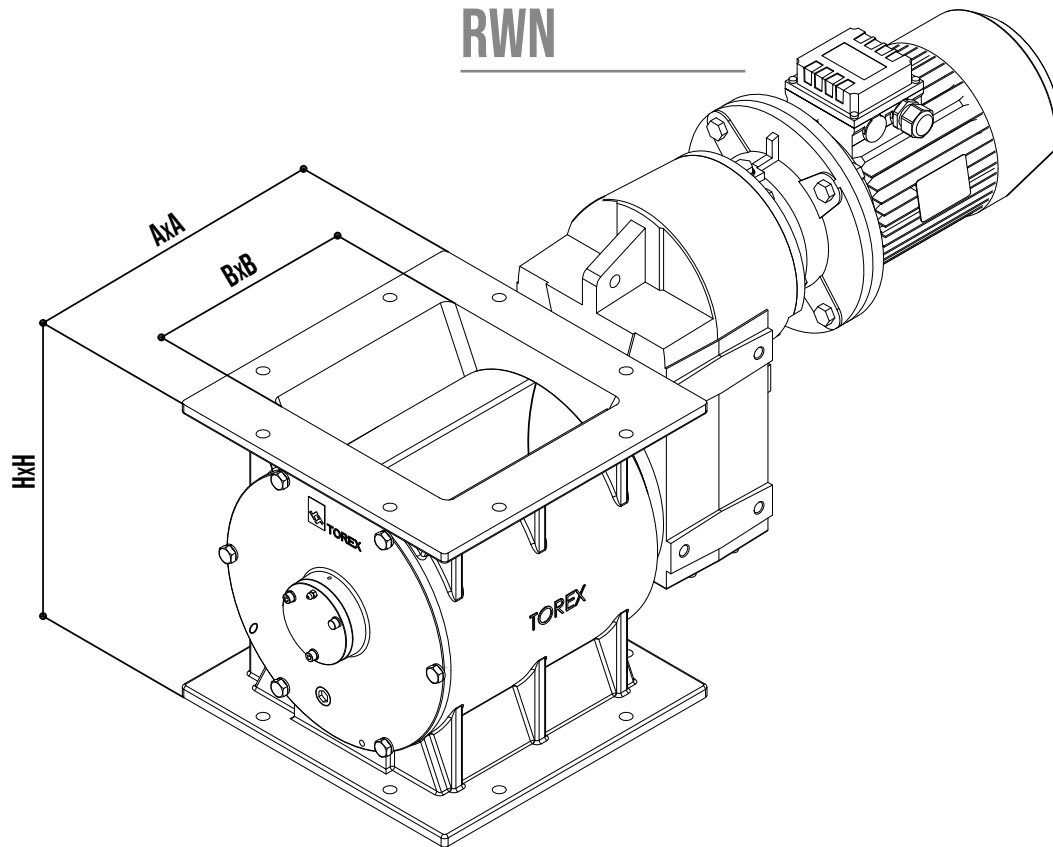
CONFIGURATION



ROTARY VALVES

RWN ROTARY VALVE FOR PELLETS AND WOOD CHIPS

The **RWN** rotary valves are designed to unload pellets and wood chips. Thanks to their high cutting action and reduced compressive force, the robust construction guarantees complete protection against backfire, while the motorisation installed directly on the shaft without joints or assemblies ensures easy access to internal mechanical parts.



RWN MODEL (dimensions in mm)

Type	A	B	H
RWN 02	265	150	220
RWN 05	320	200	280
RWN 10	375	250	360
RWN 20	440	300	445

TECHNICAL DATA

- Cast iron body;
- Hardox400 rotor;
- Capacity: 2-5-10-20 litres/rev;
- Speed: 20 or 30 rpm;
- Working temperatures: from -20°C to +150°C;
- Tested as a safety device according to dIn En 303-5:2012-10.

RWN...X

Atex rotary valves

ATEX 20/22 certified

EU certificate, type TÜV IT 20 ATEX 011 X

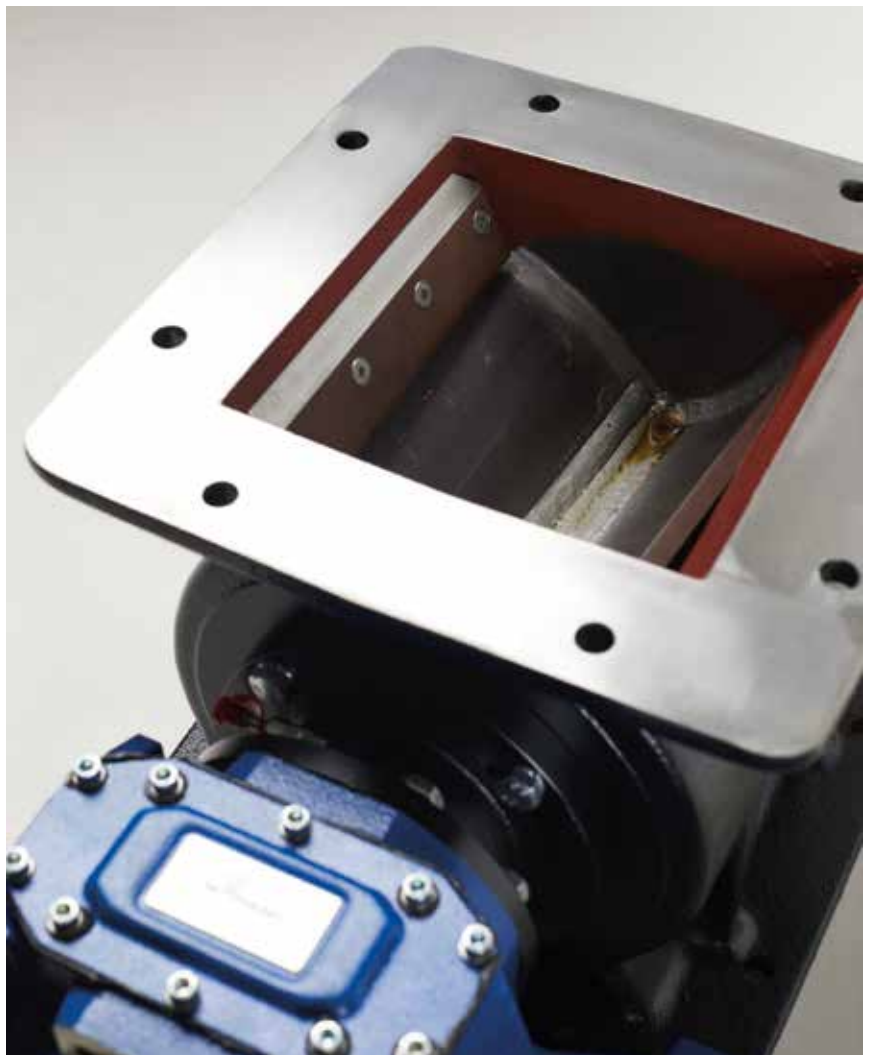
CE₀₉₄₈ Ex II 1/3

Ex h IIIc T135°C Da/Dc

ATEX rotary valves are designed and tested for use in potentially explosive areas classified as ZONA 22 and with a process atmosphere (inside the valve) classified as ZONA 20 in accordance with Directives 2014/34/EU and 1999/92/EC.

RWN ROTARY VALVE:

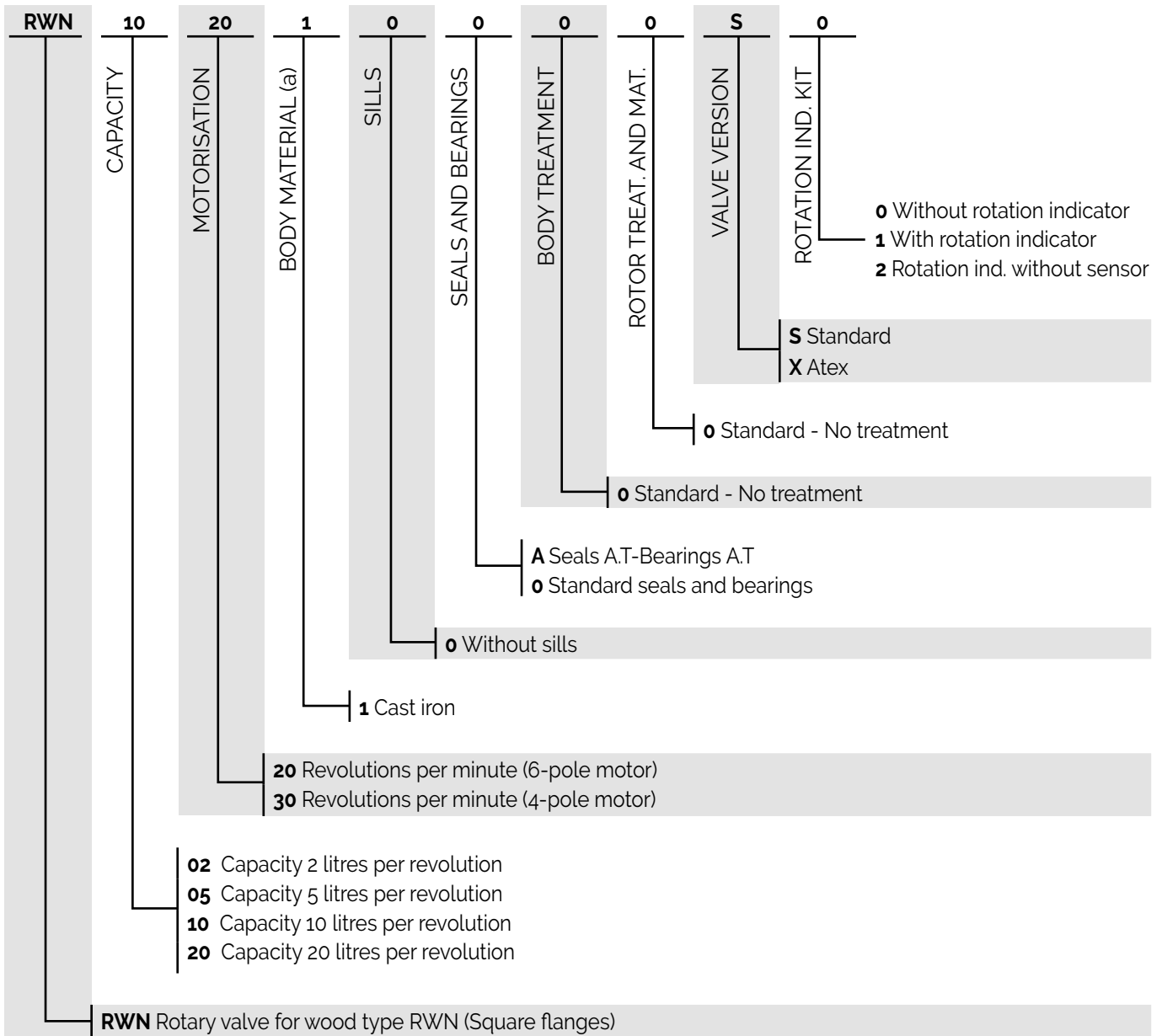
The rotary valves are tested for the supply of automatic combustion systems according to the standard En 303-5 : 2012





RWN ROTARY VALVES

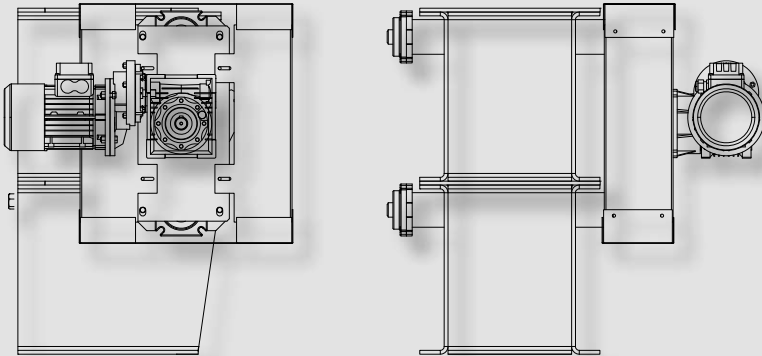
CONFIGURATION



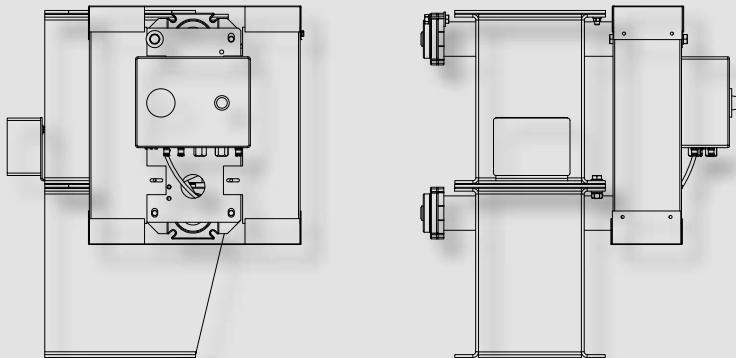
DOUBLE DUMP VALVE



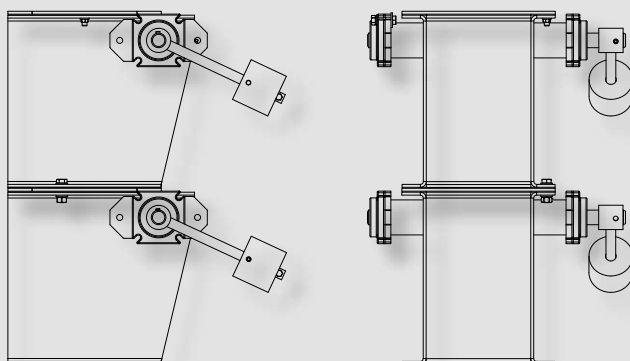
VDC DOUBLE DUMP VALVE - MOTORISED VERSION



VDC DOUBLE DUMP VALVE - PNEUMATIC VERSION



VDC DOUBLE DUMP VALVE - COUNTERWEIGHT VERSION



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



PLANTS
& MACHINERY

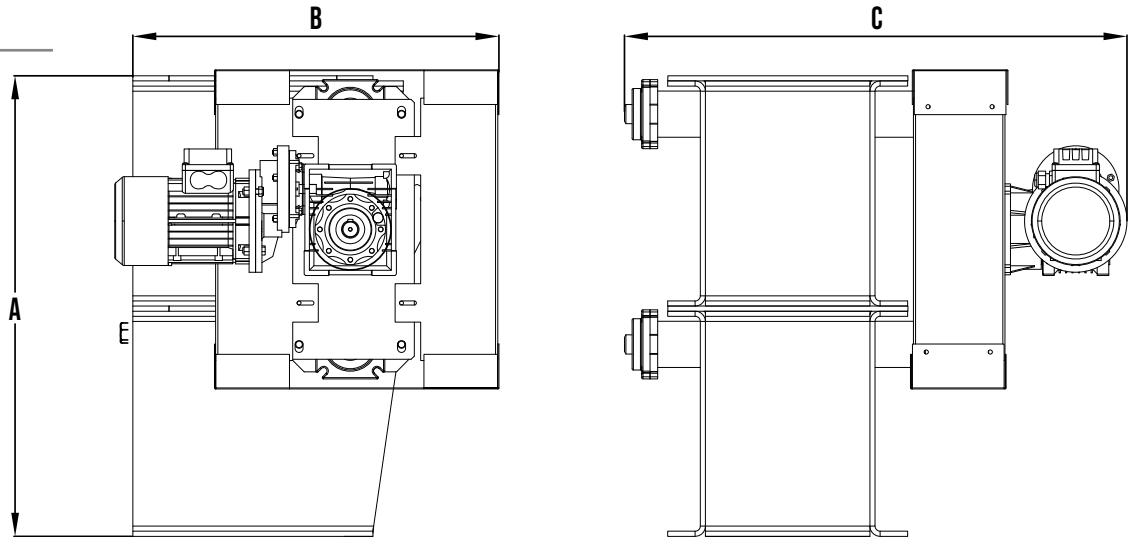


ENVIRONMENTAL
TECHNOLOGIES

VDC DOUBLE DUMP VALVE

The **VDC** double dump valve is ideal for controlling the unloading of powdered or granular materials, particularly suitable for heavy applications. Designed to work with high temperatures and highly abrasive materials. The VDC double dump valve consists of a body and two alternately activated flaps, installed one above the other to preserve the pressure difference below and above the valve.

VDC

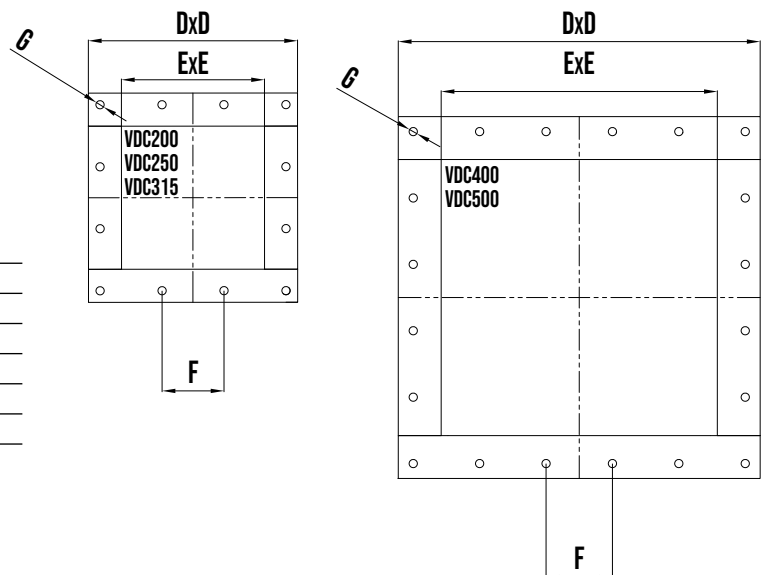


VDC DOUBLE DUMP VALVE (dimensions in mm)

Type	A	B	C
VDC 200	720	600	734
VDC 250	720	600	785
VDC 315	920	665	857
VDC 400	1074	763	1018
VDC 500	1074	825	1116

VDC FLANGING DIMENSIONS (dimensions in mm)

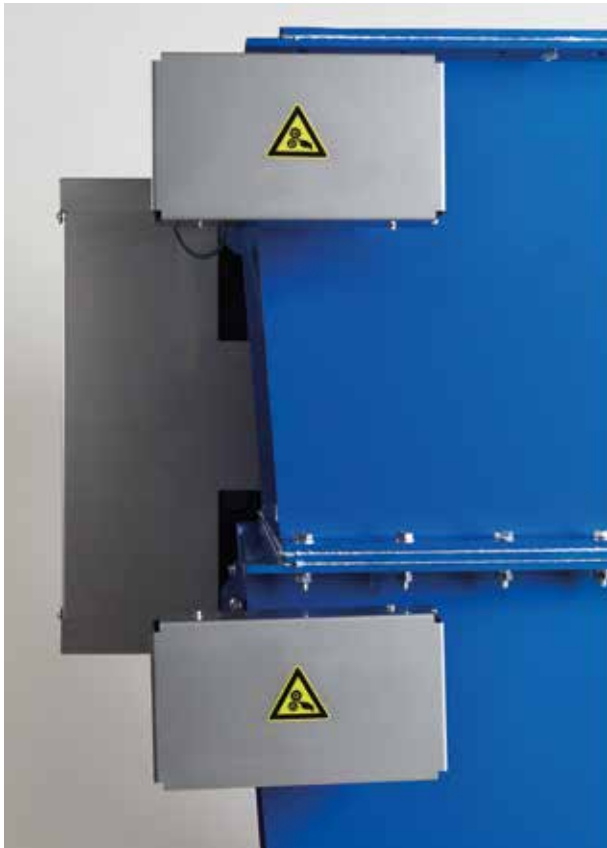
Type	D	E	F	G
VDC 200	315	200	93,3	12,5
VDC 250	423	250	110	12,5
VDC 315	470	315	128,3	12,5
VDC 400	545	400	100	15
VDC 500	655	500	120	15



TECHNICAL DATA

- Body available in: Carbon steel or AISI 304 or AISI 316;
- Hopper and clapper available in: Carbon steel, AISI 304, AISI 316 or HARDOX 400;
- Working temperatures: from -20°C to +500°C;
- Side opening for easy access for maintenance operations;
- Flap movement: counterweight, motorised or pneumatically actuated.

ACCESSORIES



Rotation indicator

CONTROL SYSTEM



MOTORISED VALVE: the flaps are activated by gearmotor and retracted by a spring.



PNEUMATICALLY ACTUATED VALVE: the flaps are opened and closed by means of pneumatic cylinders.



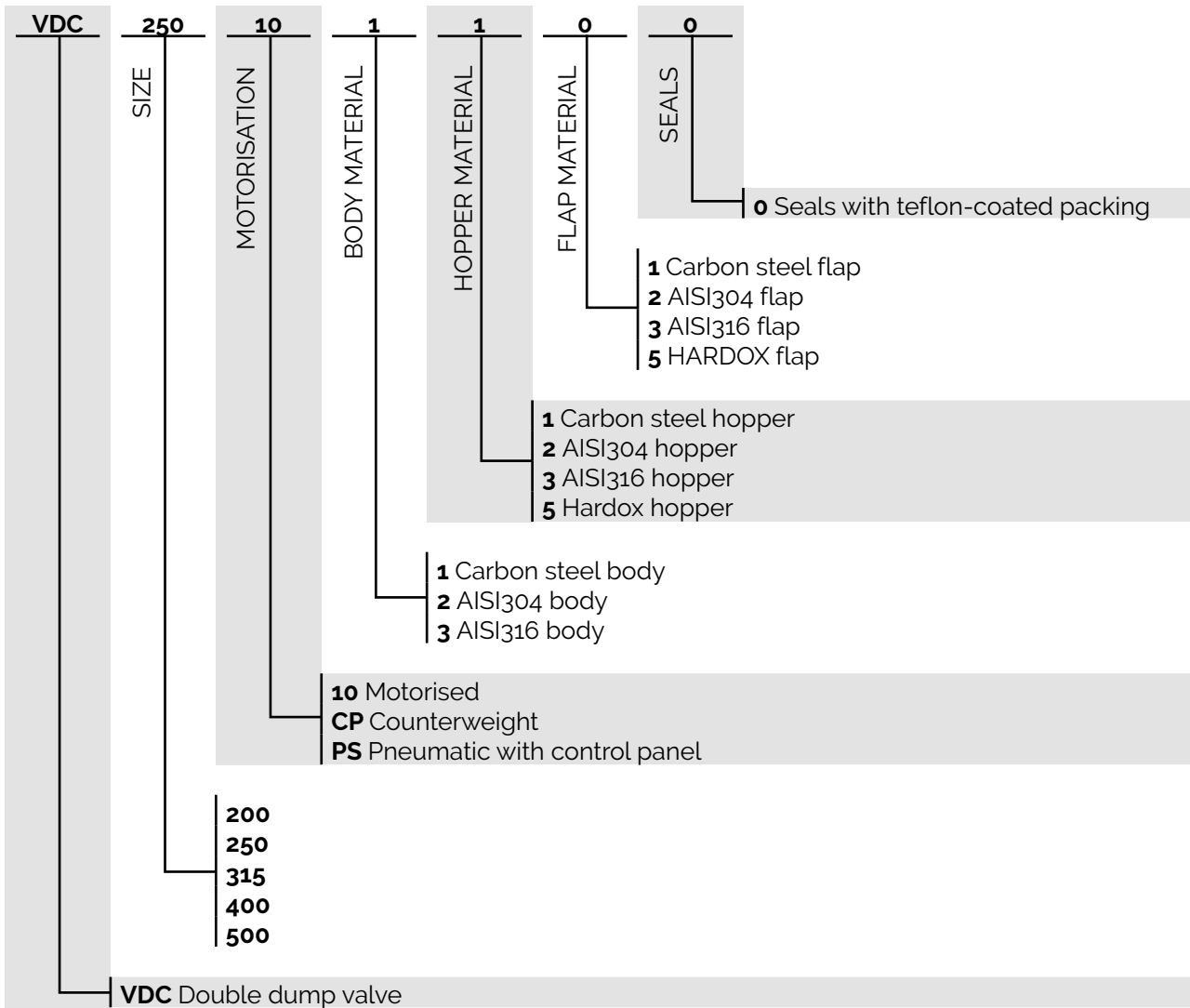
COUNTERWEIGHT VALVE: in this case, the activation of the flaps depends on the weight of the material.



CE EAC

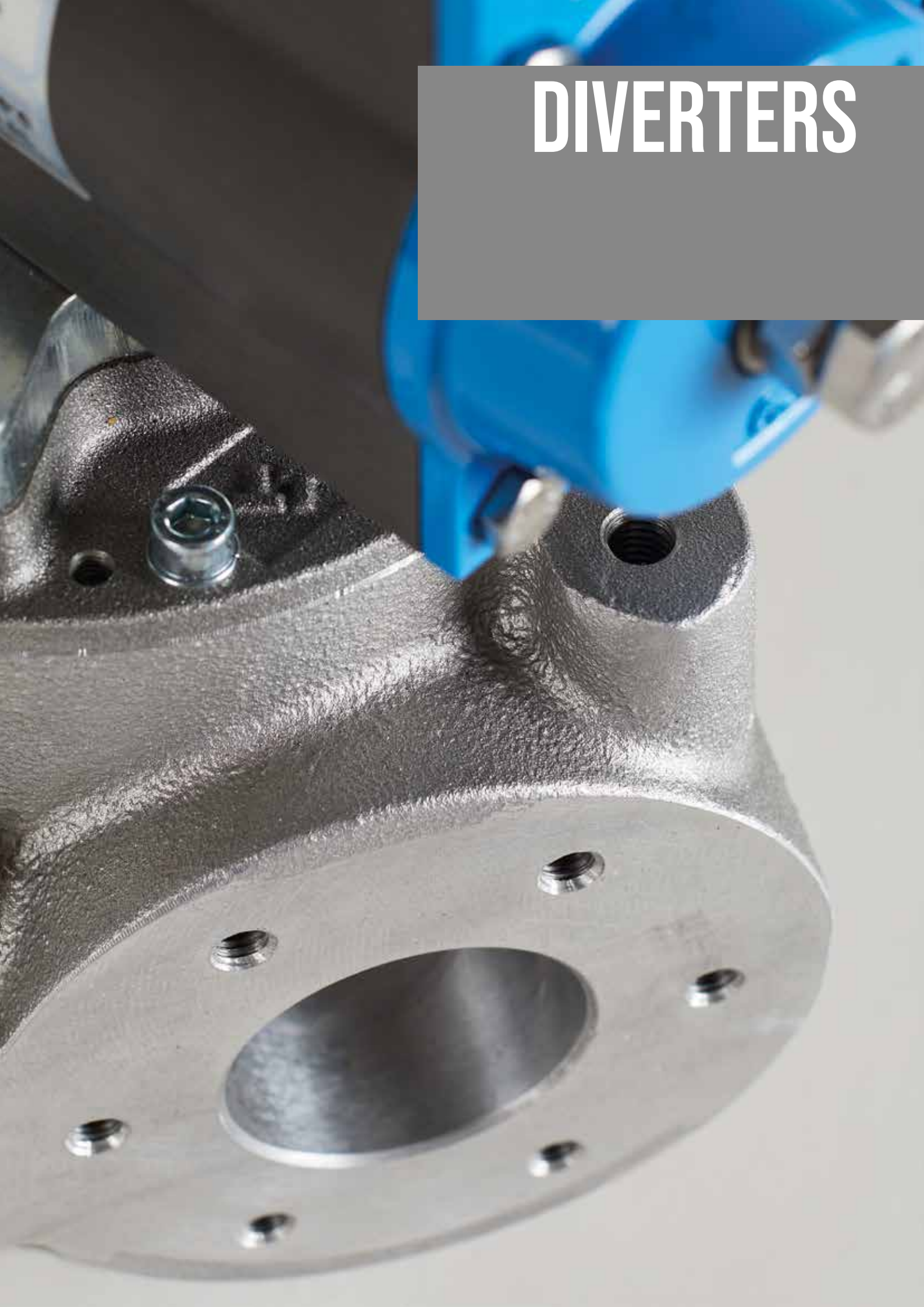
VDC DOUBLE DUMP VALVE

CONFIGURATION

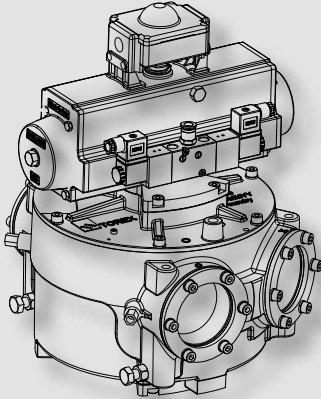


VDC DOUBLE DUMP VALVE

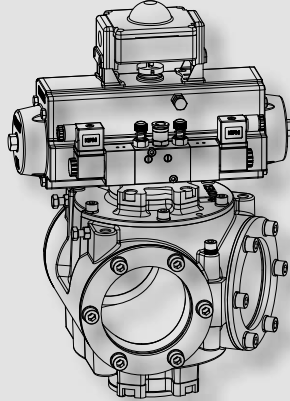
DIVERTERS



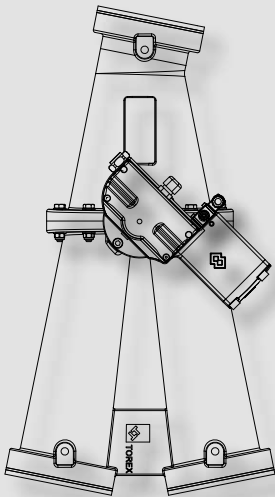
VAR DRUM DIVERTER



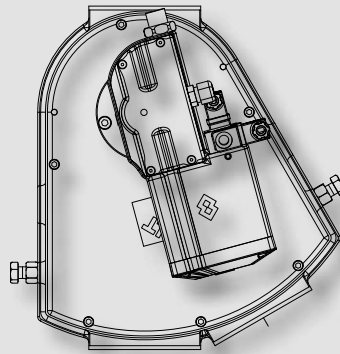
VAS PLUG DIVERTER



VAB FLAP DIVERTER



VAD TUBE DIVERTER



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



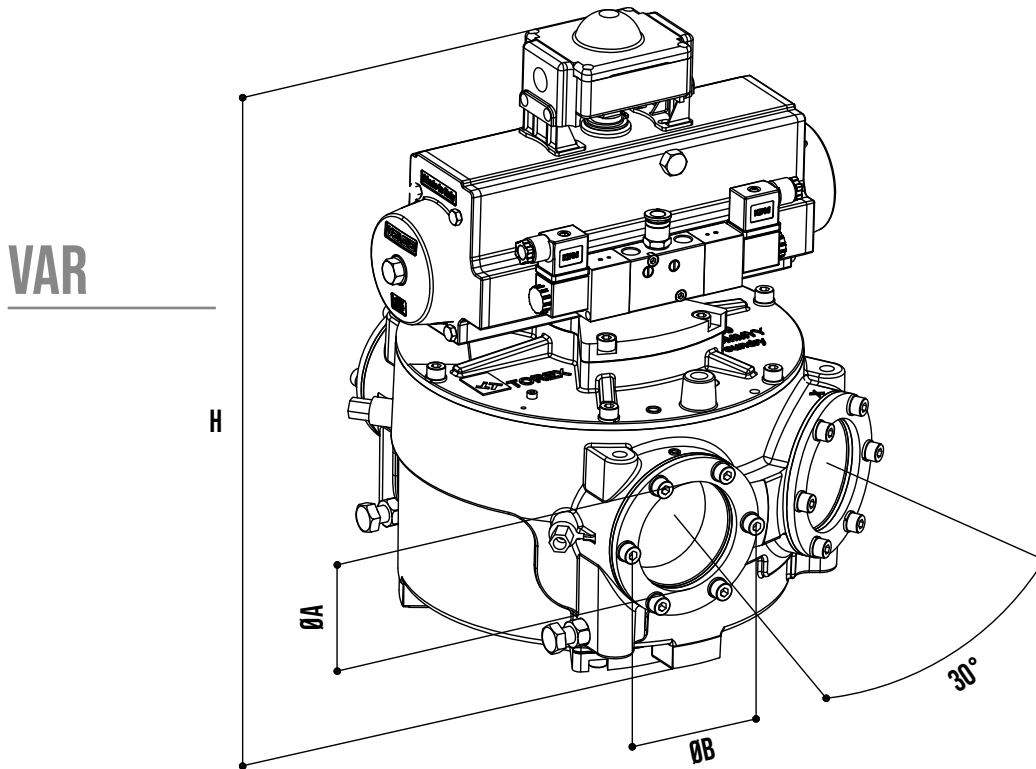
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

VAR DRUM DIVERTER

The compact, simple and complete **VAR** diverter is suitable for the transport of any type of powder or granule product, in low/medium and high pressure lines. An essential component in all conveying systems where the flow of material must be directed from one line to another.



VAR DRUM DIVERTER (dimensions in mm)

Type	A	B	H
VAR 050	52	85	441
VAR 065	67	85	441
VAR 080	82	103	468
VAR 100	102	127	480
VAR 125	127	158	579
VAR 150	158	185	611
VAR 200	280	245	719

TECHNICAL DATA

- Cast aluminium body;
- Pneumatic actuator;
- Inflatable seals and static seals;
- Working temperatures: from -20°C to +80°C;
- Contact parts in aluminium, nickel-plated aluminium, AISI 304, AISI 316, TUNGSTEN CARBIDES (for extremely abrasive products);
- Operating pressure: from -0.5 bar to 3.5 bar;
- Used as both diverter and conveyor.

ACCESSORIES



Line change control board



Regulator + Manometer 1/8

COMPONENTS



Pneumatic actuator equipped with flow direction indicator



Inflatable seals



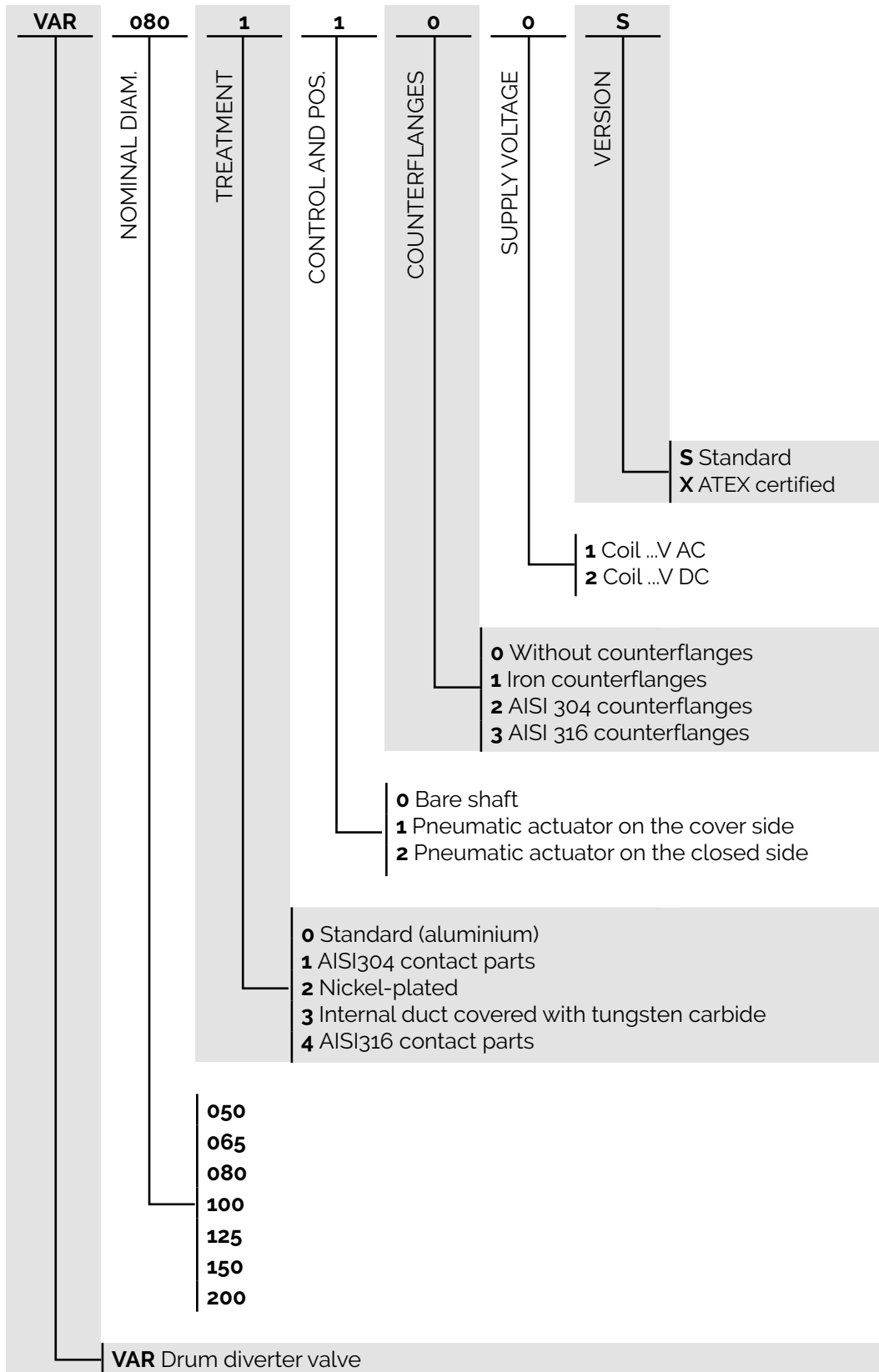
EAC Ex



CE EAC

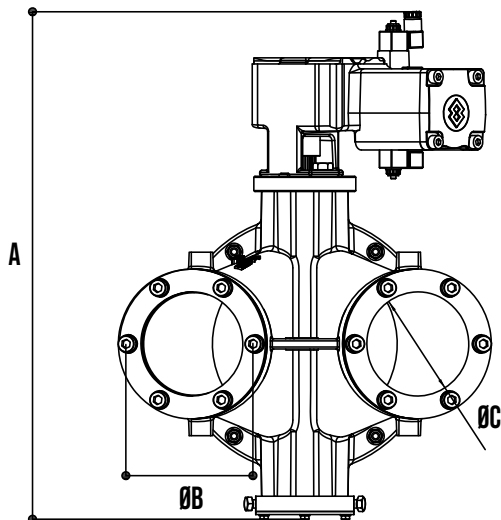
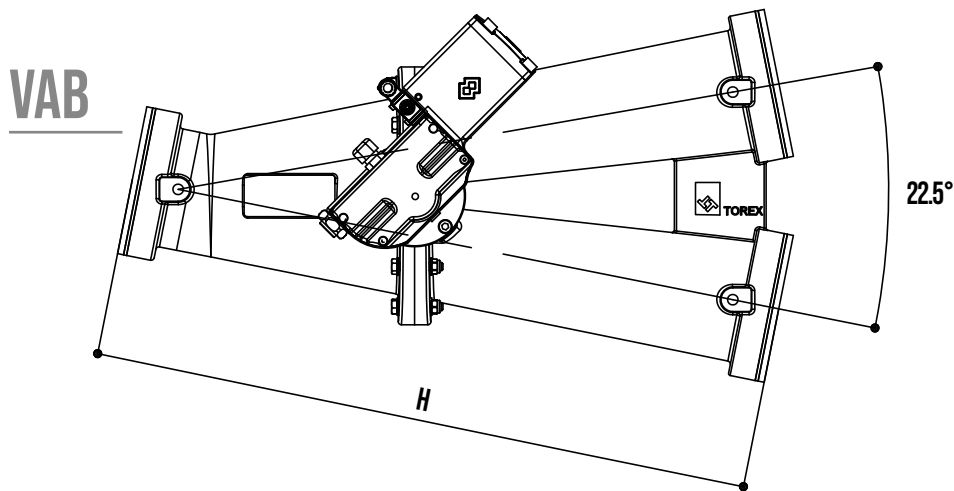
VAR DRUM DIVERTER

CONFIGURATION

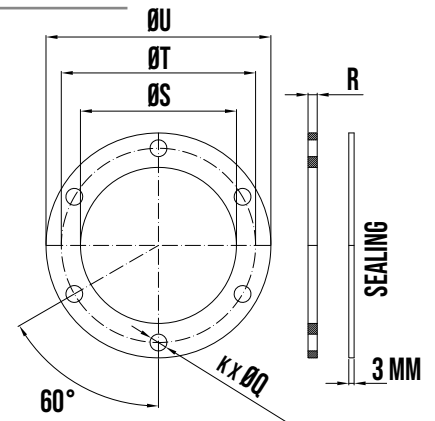


VAB FLAP DIVERTER

The **VAB** flap diverter valve is particularly suitable for low and medium pressure pneumatic conveying, versatile and easy to maintain, and available in different configurations.



TOREX FLANGE



VAB FLAP DIVERTER (dimensions in mm)

Type	A	B	C	H
VAB 050	468	85	50	493
VAB 065	468	85	65	545
VAB 080	508	103	80	574
VAB 100	508	127	100	629
VAB 125	553	158	125	712
VAB 150	732	185	156	818
VAB 200	732	245	206	922

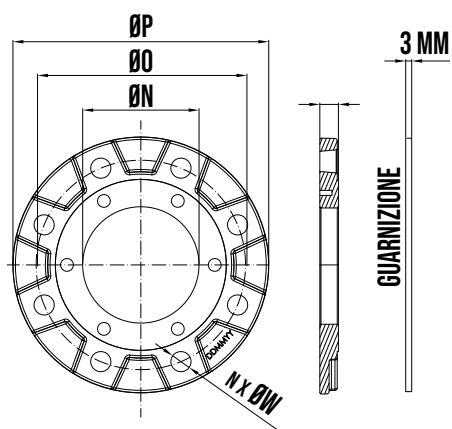
TOREX FLANGE (dimensions in mm)

Type	S	T	U	k	Q	R
VAB 050	52	85	100		9	6
VAB 065	67	85	100		9	6
VAB 080	82	103	118		9	6
VAB 100	102	127	147	6	11	6
VAB 125	127	158	178		11	6
VAB 150	158	185	205		11	10
VAB 200	208	245	267		11	10

TECHNICAL DATA

- Cast aluminium body;
- AISI 304 flap;
- Pneumatic actuator, manual actuator;
- Food-grade NBR static seals;
- Working temperatures: from -20°C to +80°C;
- Contact parts in aluminium, nickel-plated aluminium;
- Torex flanges, DIN 1092-1 Pn10 flanges.

ACCESSORIES



EN 1092-1 PN10 FLANGE (dimensions in mm)

Type	N	O	P	n	W	R
VAB 050	50	125	165		17	17
VAB 065	65	145	185		17	17
VAB 080	80	160	200		17	17
VAB 100	100	180	220	8	17	20
VAB 125	125	210	250		17	17
VAB 150	156	240	285		21	20
VAB 200	206	295	340		23	27

CONTROL SYSTEM



CPU064/CPU102 pneumatic actuator



CM4 manual actuator



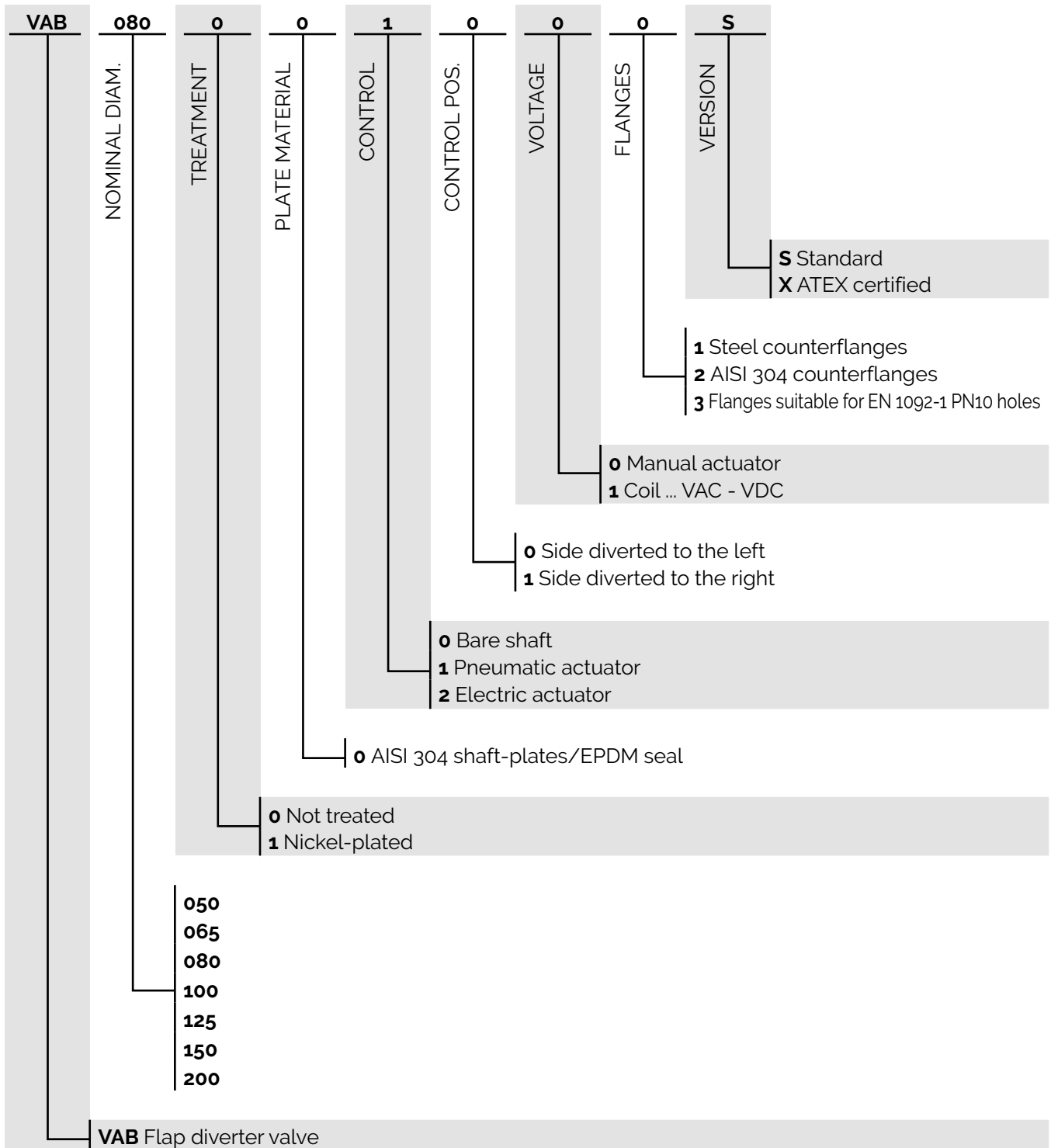
ERL Ex



CE ERL

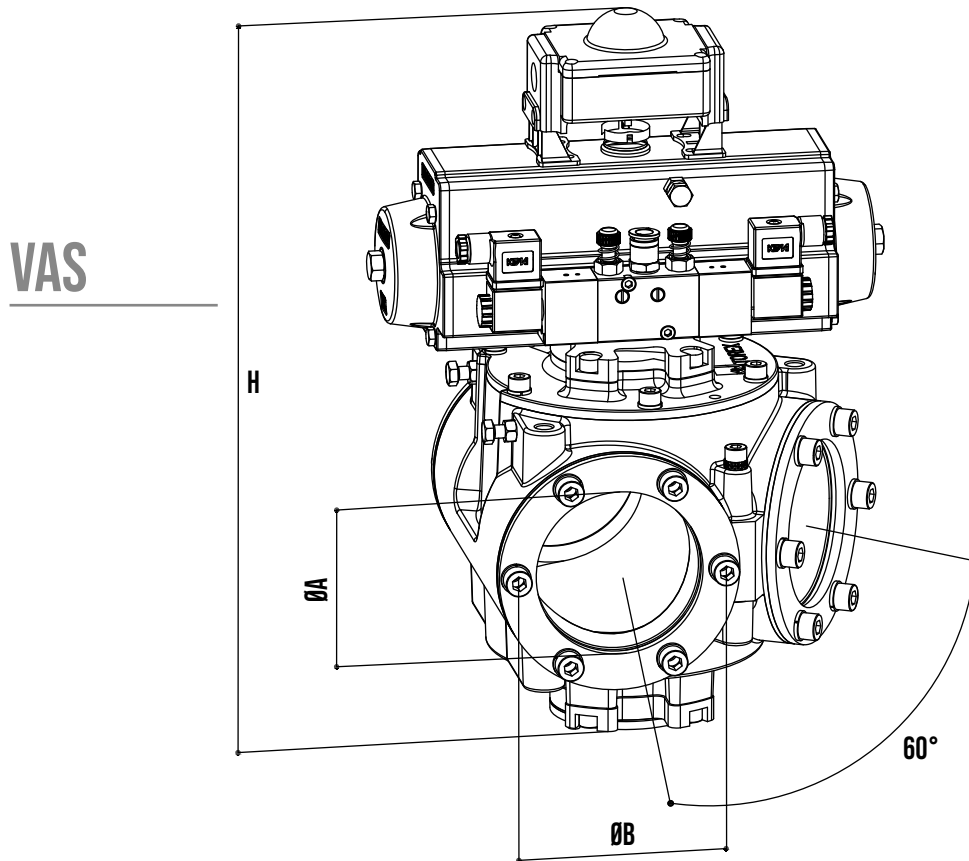
VAB FLAP DIVERTER

CONFIGURATION



VAS PLUG DIVERTER

The **VAS** diverter is used in pneumatic conveying systems both under pressure and in suction. Its design allows it to be used in any direction of transport and its technical characteristics make it particularly suitable for applications in the milling industry.



VAS PLUG DIVERTER (dimensions in mm)

Type	Ø A	Ø B	Ø H
VAS 050	50	85	405
VAS 065	65	85	405
VAS 080	80	103	405
VAS 100	100	127	446
VAS 125	125	158	470
VAS 150	156	185	530
VAS 200	206	245	590

TECHNICAL DATA

- Cast aluminium body;
- Pneumatic actuator;
- Static seals;
- Working temperatures: from -20°C to + 80°C;
- Contact parts in aluminium, nickel-plated aluminium;
- Operating pressure: from -0.5 bar to +1 bar.

COMPONENTS



Pneumatic actuator equipped with flow direction indicator



Sliding seal



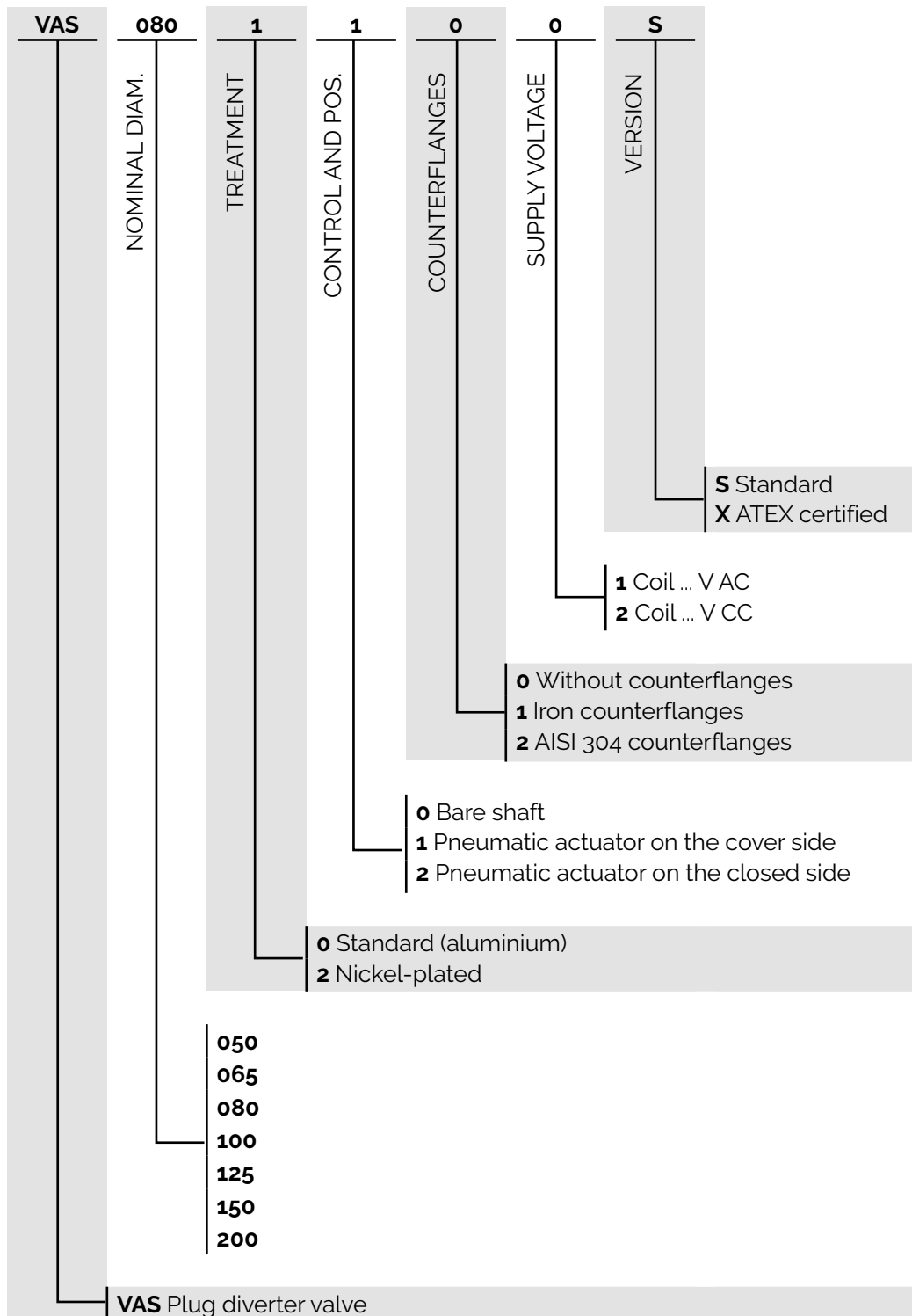
ERAC Ex



CE ERAC

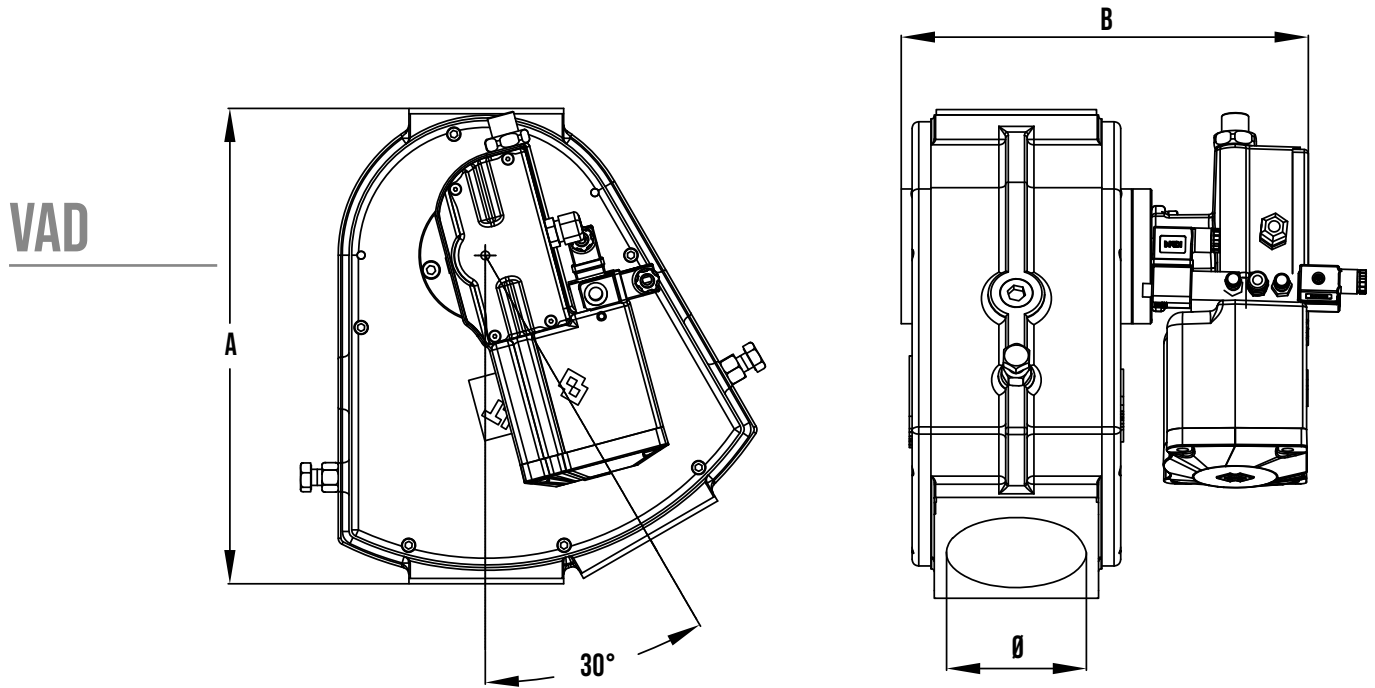
VAS PLUG DIVERTER

CONFIGURATION



VAD TUBE DIVERTER

The **VAD** diverters, made entirely of aluminium, are ideal for the pressurised transport of powders and granules. Compact, reliable and easy to maintain, they can be used both with pneumatic actuator and with manual lever.



VAD TUBE DIVERTER

VAD TUBE DIVERTER (dimensions in mm)

Type	A	B	Ø
VAD 050	245	268	45
VAD 080	320	284	76
VAS 100	345	301	96

TECHNICAL DATA

- Cast aluminium body;
- Pneumatic actuator, manual actuator;
- Static seals and low friction;
- Working temperatures: from -20°C to +80°C;
- Contact parts in aluminium, nickel-plated aluminium;
- Operating pressure: from -0.5 bar to +2.5 bar.



CPU102 pneumatic actuator



CM4 manual actuator



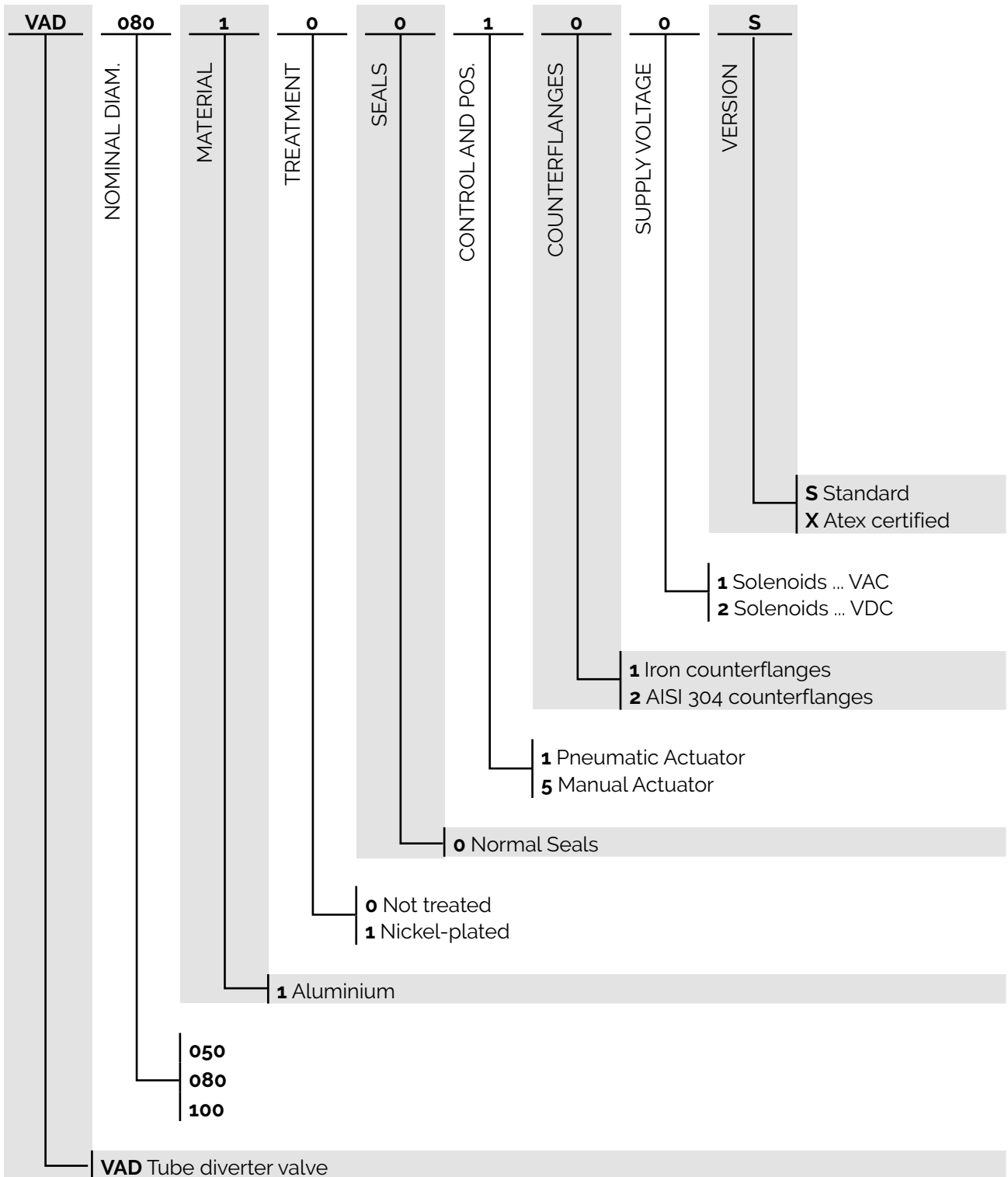
ERL Ex



CE EAC

VAD TUBE DIVERTER

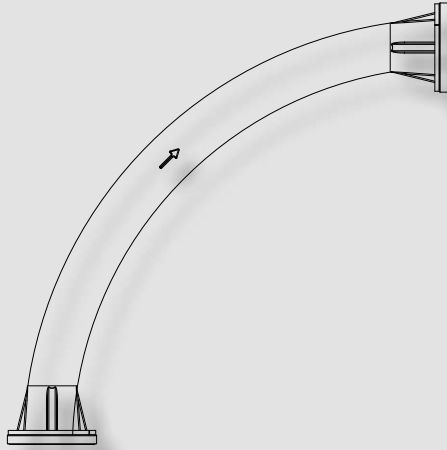
CONFIGURATION



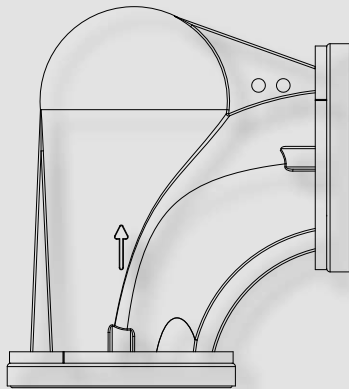
ELBOWS



EW EXTRABEND ANTI-ABRASION ELBOWS



EB EXTRABEND ANTI-ABRASION ELBOWS



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



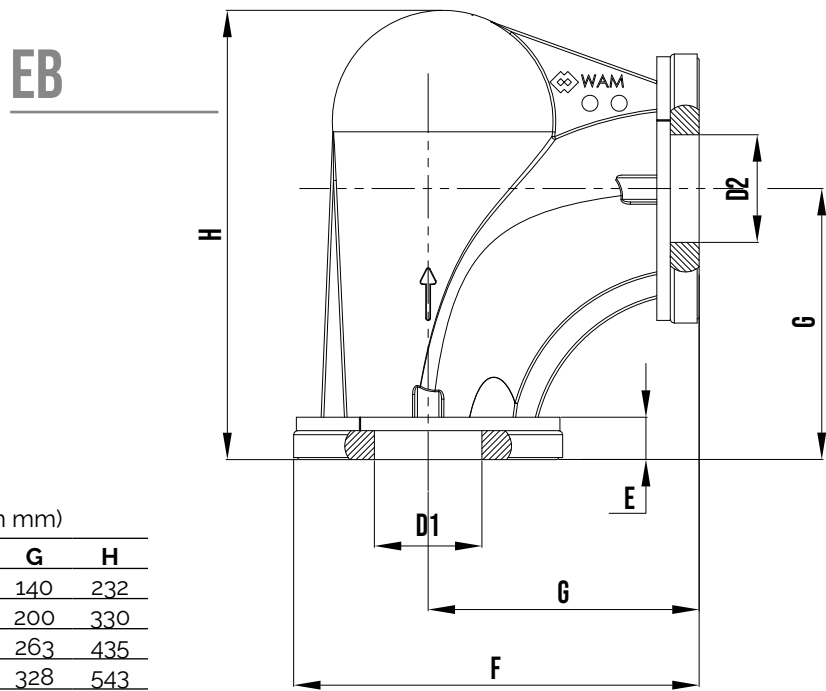
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

EB EXTRABEND ANTI-ABRASION ELBOWS

The **EXTRABEND** short radius elbow is suitable for pneumatic conveying of abrasive materials in granules or powders. The special geometry allows the passage of material flow with minimum wear, while the SINTER technology guarantees lightness and resistance to abrasion.

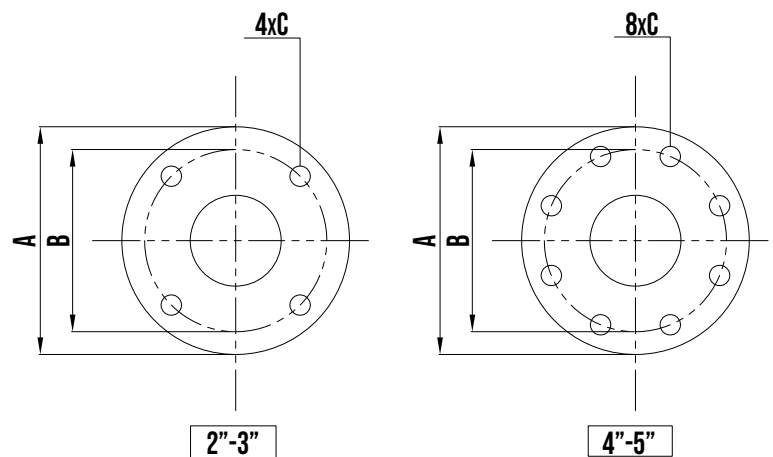


EB SHORT RADIUS ELBOW (dimensions in mm)

Type Ø	D1	D2	E	F	G	H
2"	55	52	23	220	140	232
3"	85	80	30	300	200	330
4"	108	105	30	373	263	435
5"	132	129	37	453	328	543

FLANGING DIMENSIONS (dimensions in mm)

Type Ø	A	B	C
2"	165	125	18
3"	200	160	18
4"	220	180	18
5"	250	210	18



TECHNICAL DATA

- Pn flanges;
- Transport pressure: from -0.5 to +1.5 bar;
- Operating temperatures: -20°C to +70°C.

COMPONENTS



2" - 3" half-flange



4" - 5" half-flange

ACCESSORIES

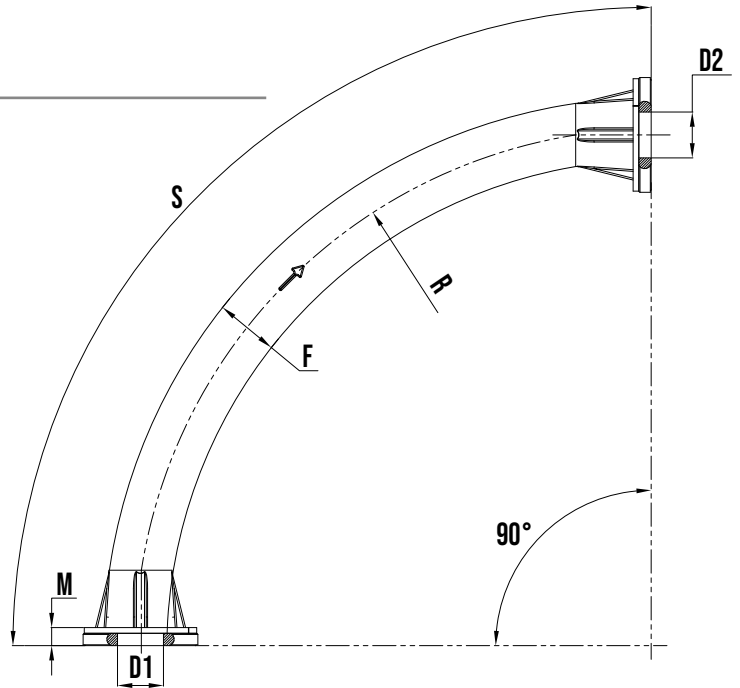


Containment band

EW EXTRACURVE ANTI-ABRASION ELBOWS

The **EXTRACURVE** short radius elbow is suitable for pneumatic conveying of abrasive materials in granules or powders. The particular geometry allows the passage of material flow with minimum wear, while the SINTER technopolymer guarantees elasticity, lightness and resistance to abrasion.

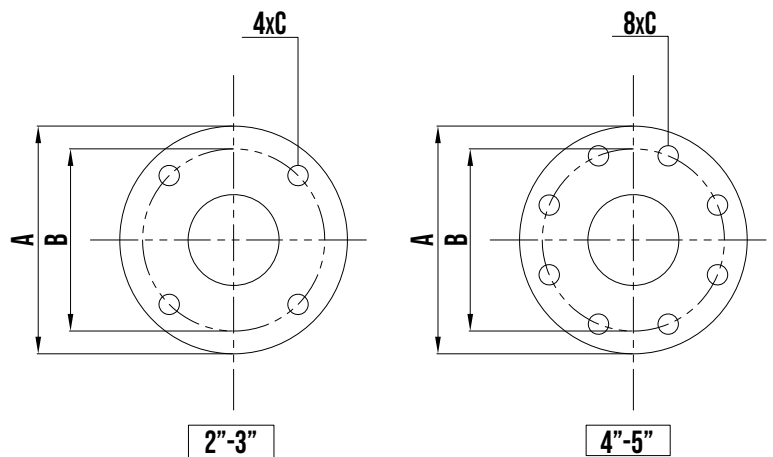
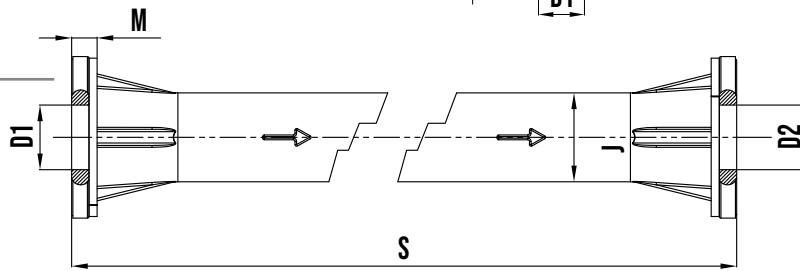
EW90°



EW 0° - 90° LONG RADIUS ELBOW (dimensions in mm)

Type Ø	D1	D2	J	M	R	S
2"	55	52	85	23	900	1400
3"	83	80	110	30	900	1400
4"	108	105	140	30	900	1400
5"	132	129	180	37	1100	1800

EW 0°



FLANGING DIMENSIONS (dimensions in mm)

Type Ø	A	B	C
2"	165	125	18
3"	200	160	18
4"	220	180	18
5"	250	210	18

TECHNICAL DATA

- Pn flanges;
- Transport pressure: from -0.5 to +1.5 bar;
- Operating temperatures: -20°C to +70°C.



2" - 3" half-flange

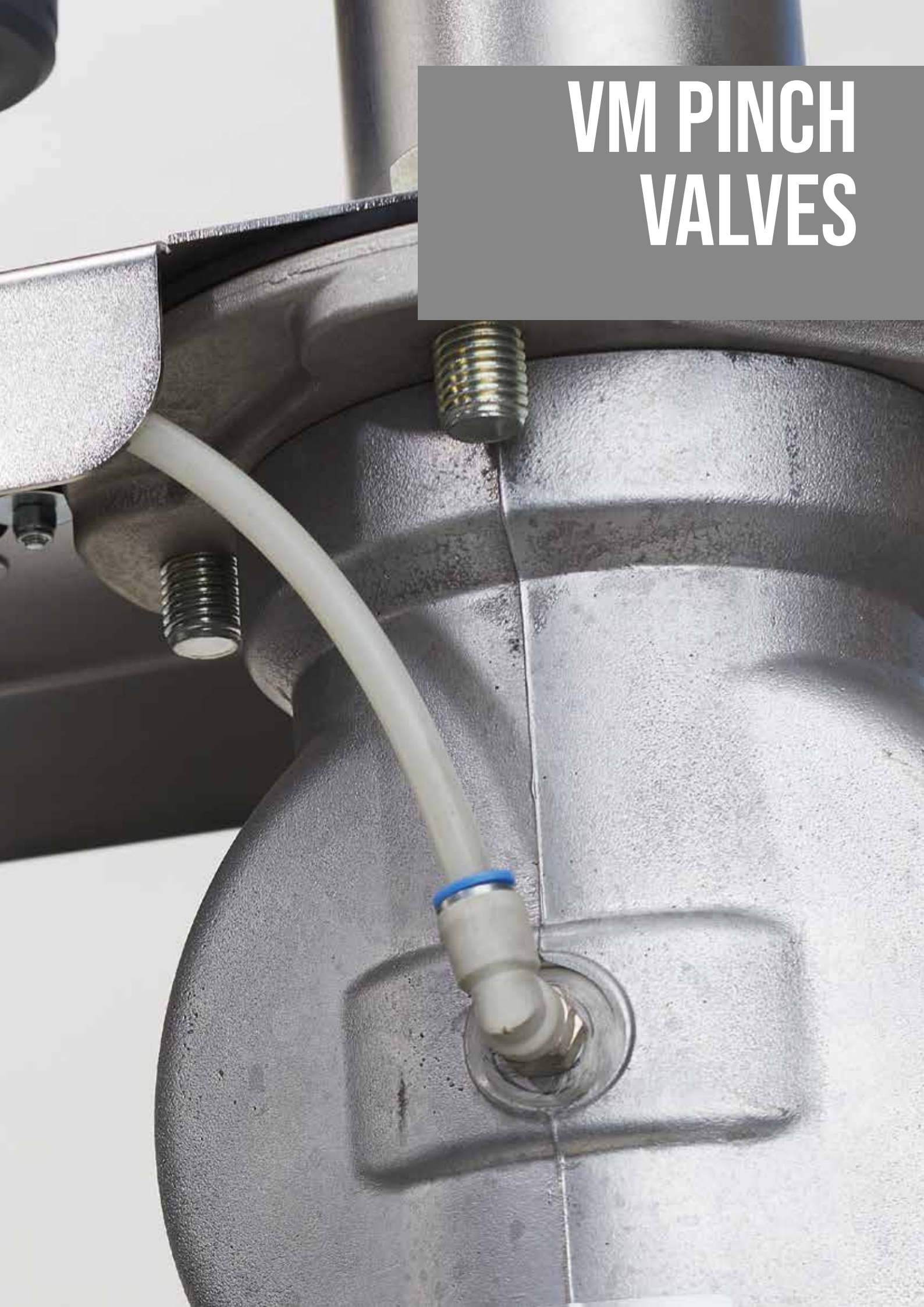


4" - 5" half-flange

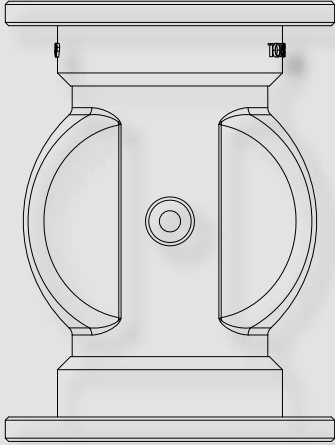




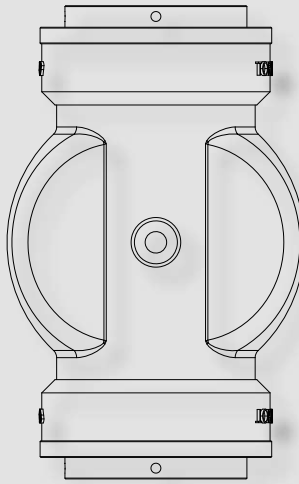
VM PINCH VALVES



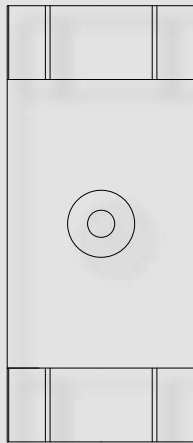
**VM PINCH VALVES
WITH FLANGES AND BUSHINGS**



**VM PINCH VALVES
WITH THREADED BUSHINGS**



**VM PINCH VALVES
WITH THREADED BUSHINGS FROM 13 TO 32 MM**



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

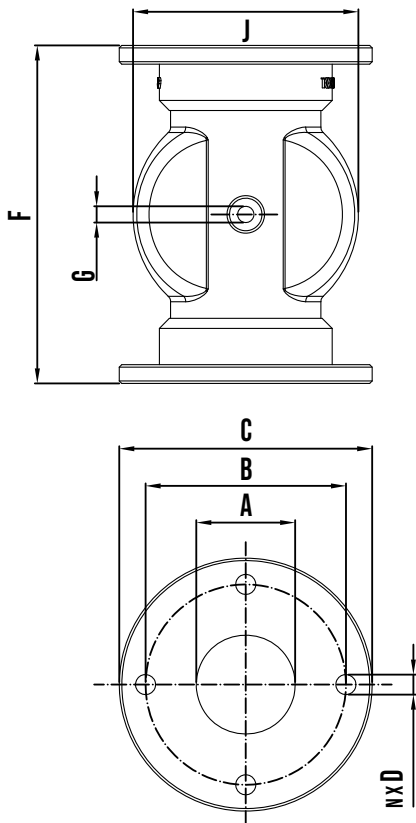
VM PINCH VALVE

The **VM** pinch valve is used to intercept the flow of material in pneumatic conveying, as a closing system for silo loading pipes or in pipes with falling material passing through.

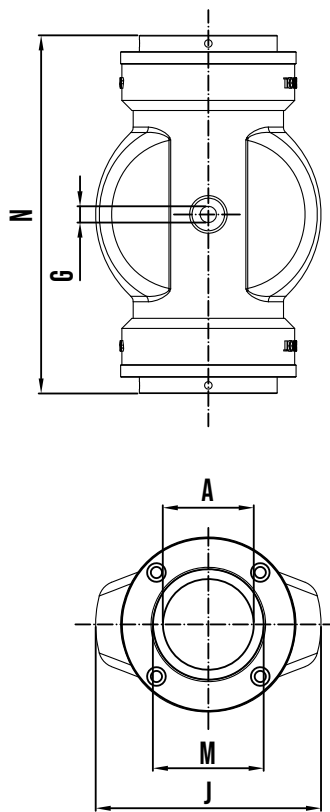
In the open position, the internal section is identical to the diameter of the connected pipe, avoiding loss of pressure or turbulence as the product passes through.

They are able to intercept products in powder, granules, fibres, dense mixtures and liquids.

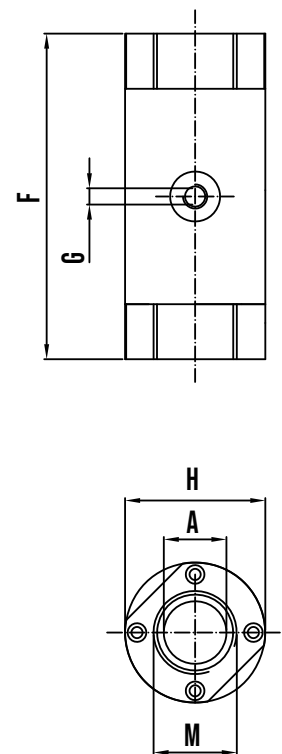
VM WITH FLANGES AND BUSHINGS
FROM 40 MM TO 200 MM



VM WITH THREADED BUSHINGS
FROM 40 MM TO 100 MM



VM WITH THREADED BUSHINGS
FROM 13 MM TO 32 MM



VM PINCH VALVE (dimensions in mm)

Type	A	B	C	D	n	F	G	H	J	M
VM013	13					120	1/8"	42		1/2"
VM020	20					130	1/8"	50		3/4"
VM025	25					130	1/8"	56		1"
VM032	32					165	1/8"	70		1+1/4"
VM040	40	110	150	M 16	4	178	1/8"		99	1+1/2"
VM050	50	125	165	M 16	4	190	1/4"		114	2"
VM065	65	145	185	M 16	4	225	1/4"		138	2+1/2"
VM080	80	160	200	M 16	4	270	1/4"		180	3"
VM100	100	180	220	M 16	8	310	1/4"		214	4"
VM125	125	210	250	M 16	8	350	1/4"		250	
VM150	150	240	285	M 16	8	396	1/4"		285	
VM200	200	295	340	M 16	8	460	1/4"		374	

TECHNICAL DATA

- Body and flanges in: Aluminium;
- Contact parts (bushings) in: Aluminium, AISI 304, AISI 316, hardened steel;
- Inner sleeve in anti-wear rubber or food-grade NBR;
- Working temperature: from -20°C to +80°C;
- Internal pressure (IP) of the pneumatic transport: max +3,5 bar;
- Closing pressure (CP): IP + 2,5 bar (max. 6 bar);
- Quick sleeve replacement without dedicated tools.

ACCESSORIES



VMX01N standard version control panel



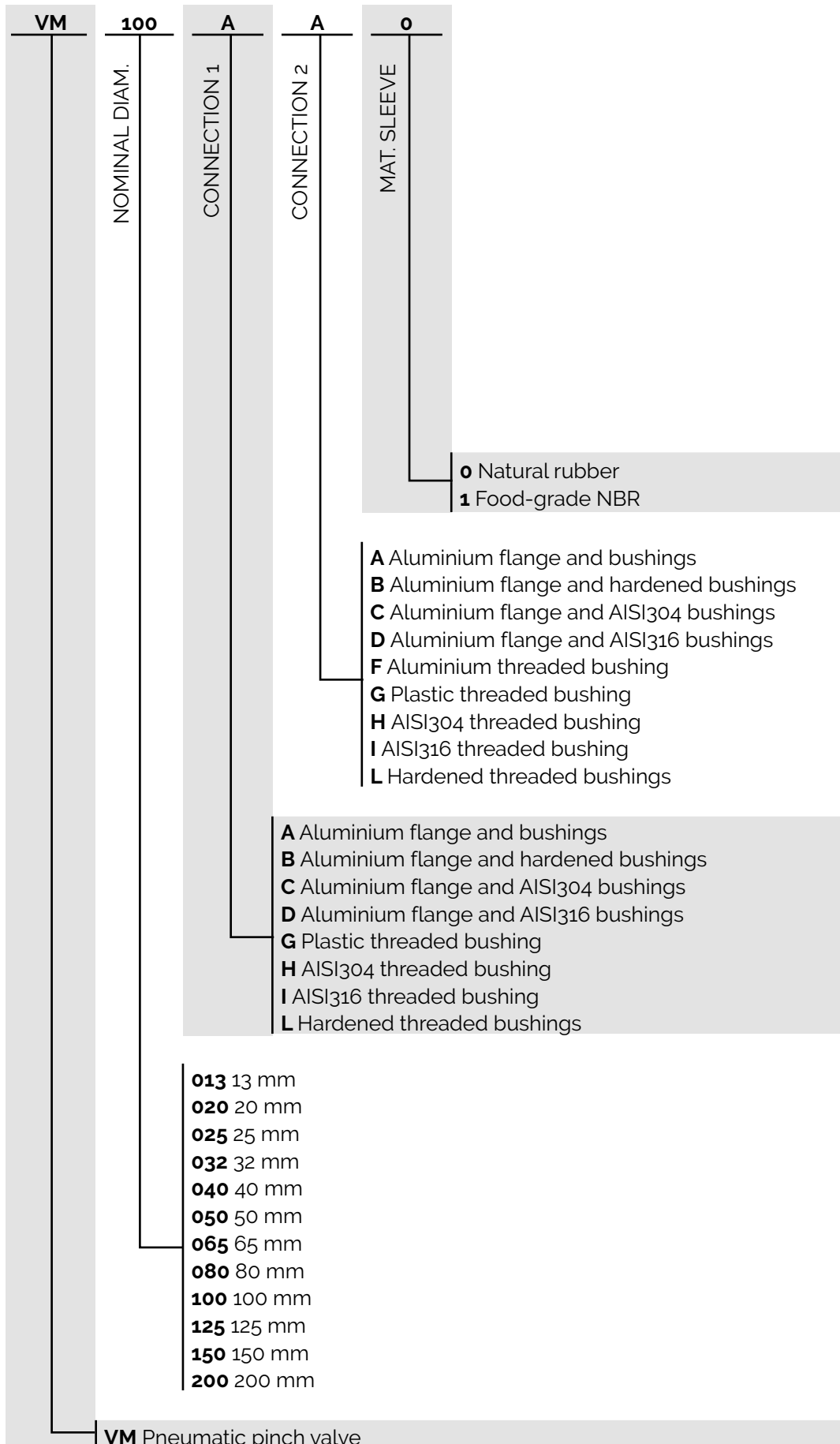
ATEX VMX01NX version control panel



CE

VM PINCH VALVE

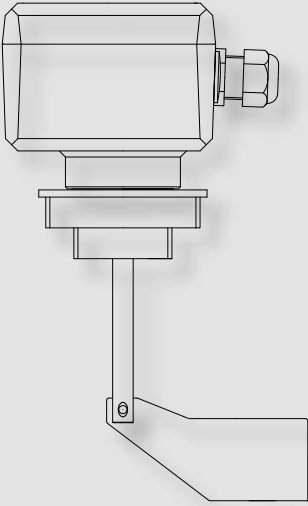
CONFIGURATION



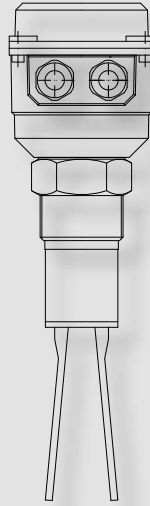
INDICATORS



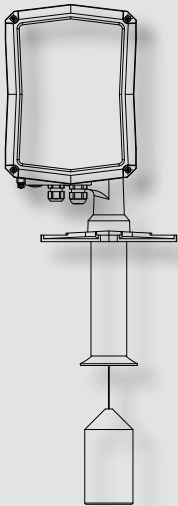
ILT BIN LEVEL INDICATOR



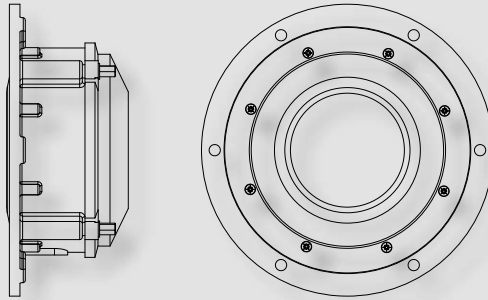
ILV VIBRATION LEVEL INDICATOR



ILS CONTINUOUS LEVEL INDICATOR



IPE-IPM PRESSURE GAUGE



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



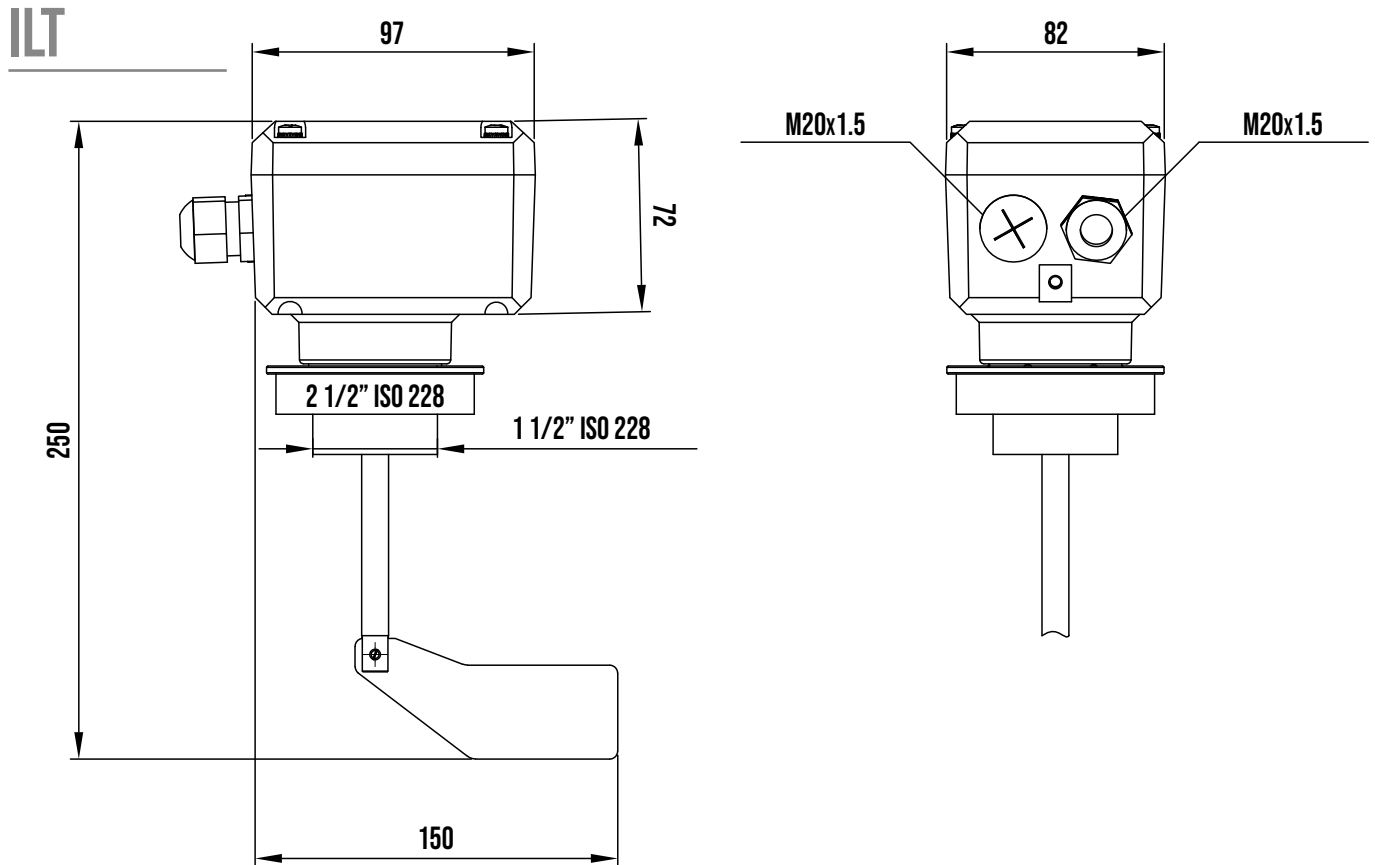
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

ILT BIN LEVEL INDICATOR

The **ILT** indicator has been designed to indicate the level of the material inside silos, hoppers and bins, using the rotary movement.



TECHNICAL DATA

- IP65 cast aluminium body;
- Power supply 24/48 VAC – 115/230 VAC – 12 VdC – 24 VdC;
- Plastic hub for thread connection: G1 1/4" – G1 1/2" – G2 1/2";
- Shaft and paddle material: AISI 304;
- Sensitivity adjustable in 3 positions;
- Product temperature: -20°C / +80°C;
- Container pressure: max. 0.8 bar.
- ATEX certified: II 1/2d Ex ta/tb IIIC T100°C da/db

ACCESSORIES



1 ½" threaded bushing
2 ½" ISO228 threaded bushing



Double paddle



Shaft extension from 500 mm to 1000 mm



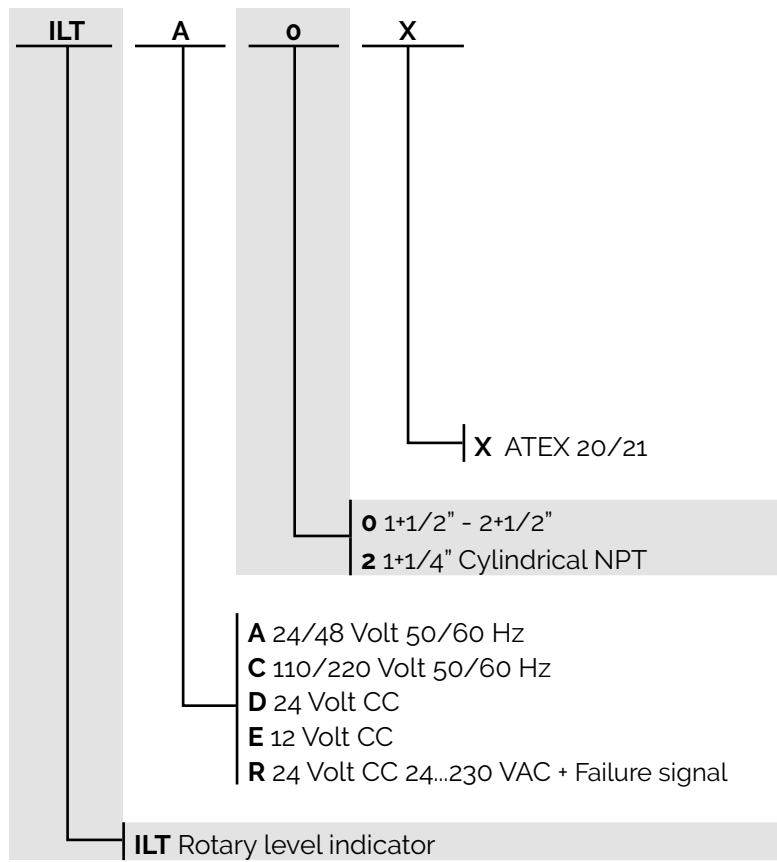
EAC Ex



CE EAC

ILT BIN LEVEL INDICATOR

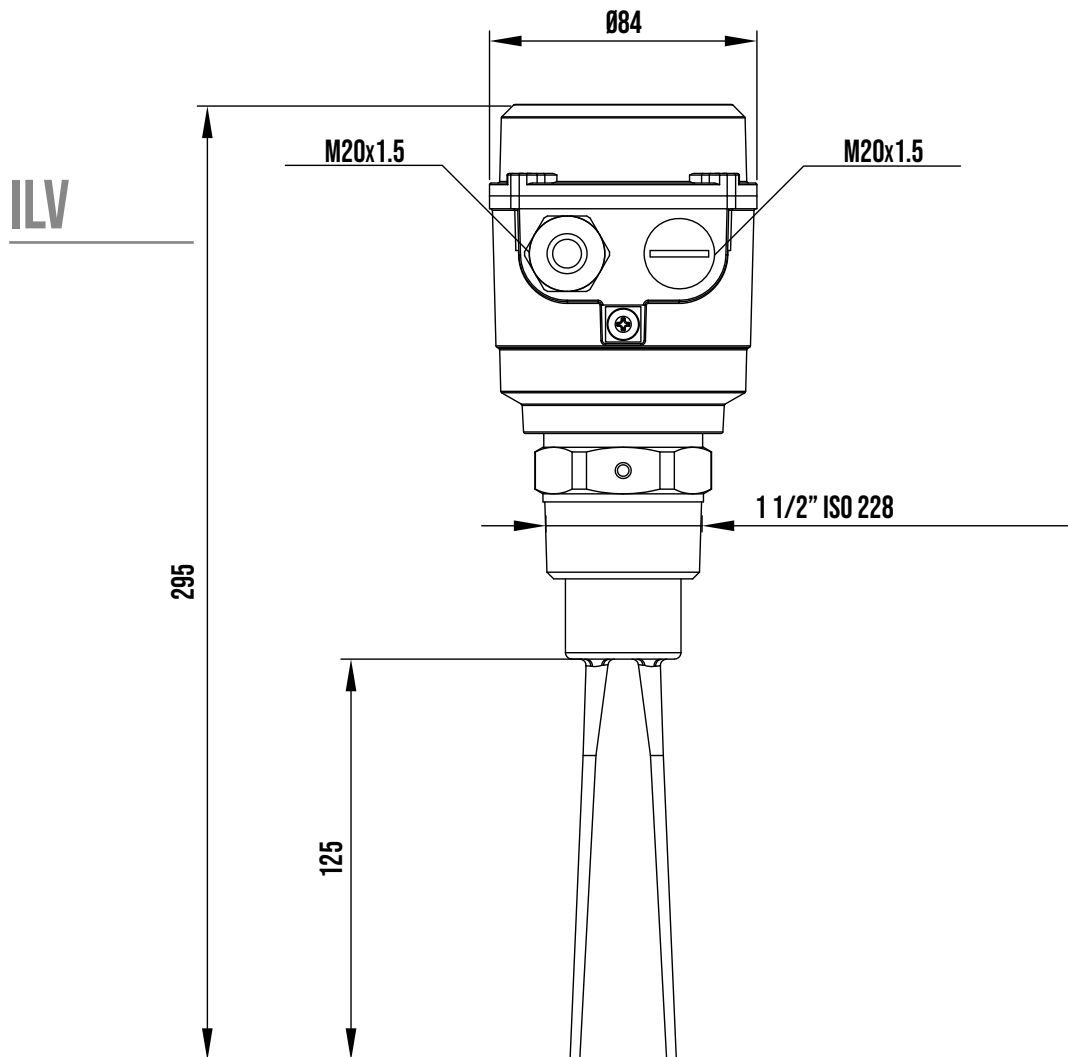
CONFIGURATION



INDICATORS

ILV VIBRATION LEVEL INDICATOR

The **ILV** vibrating fork level indicator is particularly suitable for powders with density starting from 0.06 t/m. The forks are stimulated by a piezoelectric element and oscillate at their resonance frequency. If covered by the material, the change of vibration generates and sends an output signal.



TECHNICAL DATA

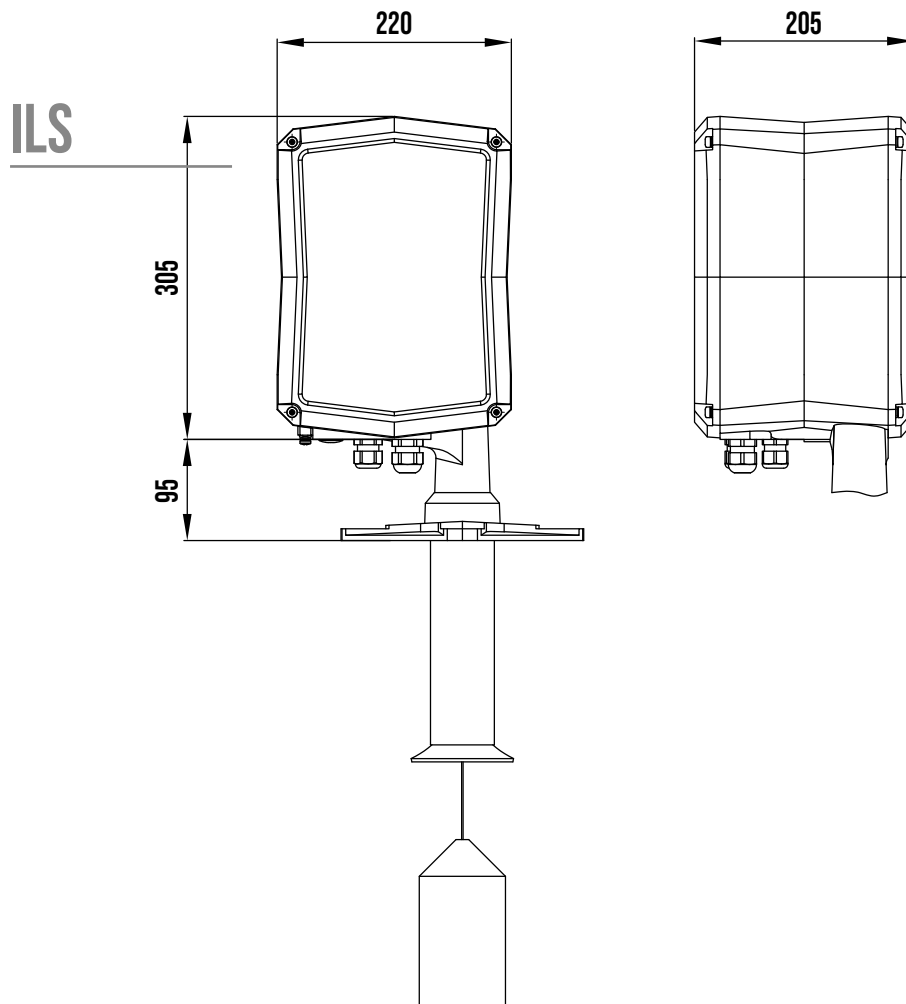
- Cast aluminium body;
- AISI 304 contact parts;
- G 1-1/2" threaded connection;
- Working temperatures: from -40°C to $+150^{\circ}\text{C}$;
- Power supply 19V...230 VAC, 50/60 hZ – 19V... 40 VDC;
- Operating pressure: from -1 bar to +16 bar;
- Rigid extension up to 4,000 mm.



CE

ILS CONTINUOUS LEVEL INDICATOR

The **ILS** continuous level indicator is suitable for measuring any type of bulk product stored in silos or containers. A sensor weight, connected to a rope that descends inside the silo, touches the heap of material and returns to its rest position. By measuring the distance travelled by the sensor weight, the level of the material is detected. Insensitive to dust in the silo and changes in humidity, with maximum ease of installation on the silo roof.



TECHNICAL DATA

- Silo pressure: -0.3 / +0.3 bar standard;
-0.5 / +1.5 bar as an option.
- Silo temperatures: -40°C / +80°C (-40°F / +176°F) standard;
+150°C / +250°C (+302°F / +482°F) as an option.
- Ambient temperature: -20°C / +60°C (-4°F / +140°F) standard;
-40°C / +60°C (-40°F / +140°F) ATEX II 1/2 D on request;
-40°C / +60°C (-40°F / +140°F) with heater.
- Output: 0 / 4-20 mA;
MODBUS;
5 / 10 cm Relay Pulses;
1 / 2.5 cm Opto Pulses.
- Certification for explosive environments (ATEX, FM);
- Microprocessor-controlled measurement;
- Belt cleaning device for particularly difficult products (belt version);
- Various different sensor weights, suitable for any type of application;
- Solid construction in die-cast IP66 aluminium, NEMA 4.

ACCESSORIES



Sensor weight
standard



Sensor weight
with pin



Sensor weight
AISI 304 stainless steel



Foldable parachute



Single remote control



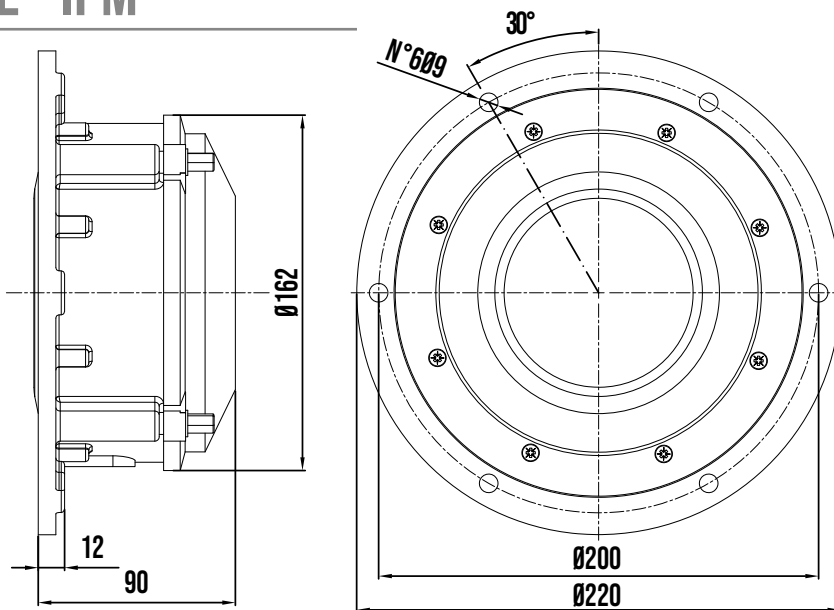
IPE-IPM PRESSURE GAUGE

IPE-IPM pressure indicators offer a reliable and economical solution for pressure control in silos.

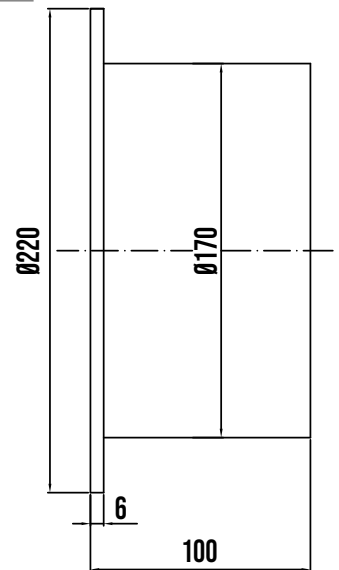
IPE (electronic pressure gauge): indicates the pressure inside the silo by means of an electrical output signal 0-20 mA or 4-20 mA.

IPM (mechanical pressure gauge): indicates whether the pressure value is higher or lower than the limit set by the gauge, calibration 0.02-0.03-0.04 bar.

IPE - IPM



IPX

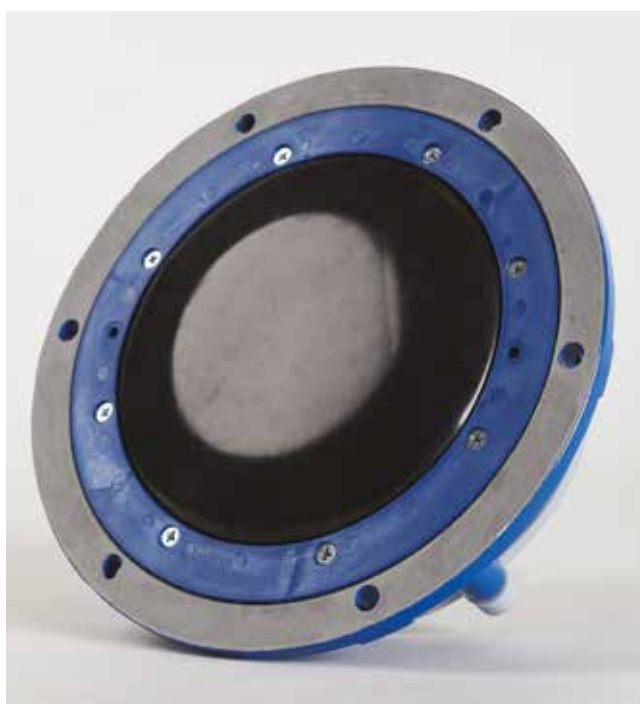


TECHNICAL DATA

- Self-cleaning EPDM/NBR membrane resistant to thermal excursion;
- Aluminium body;
- IP55 protection;
- Working temperatures: from -25°C to +80°C;
- Voltage 14-25 VdC



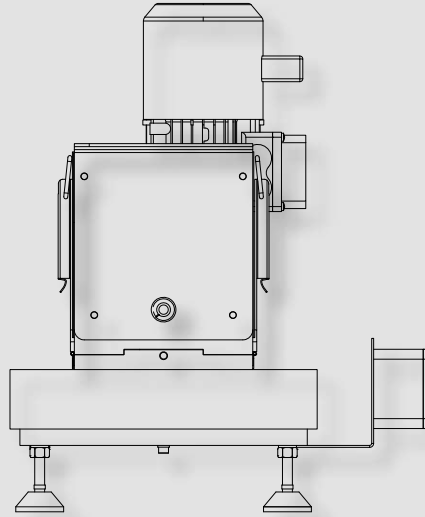
IPX adapter



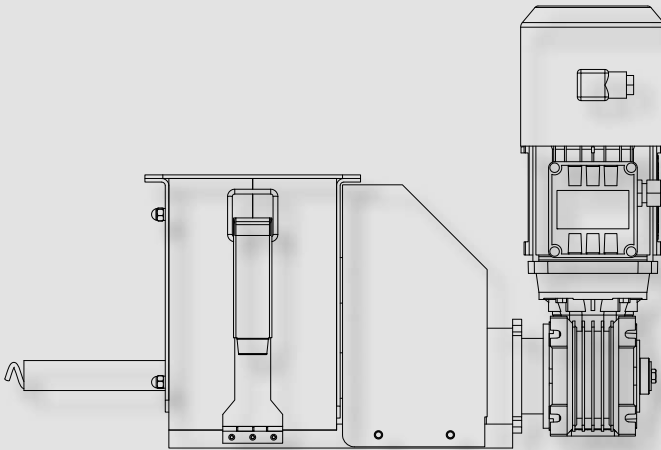
FEEDERS



GRAVIMETRIC FEEDER DCC MOD.



VOLUMETRIC FEEDER DVC MOD.



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



PLANTS
& MACHINERY



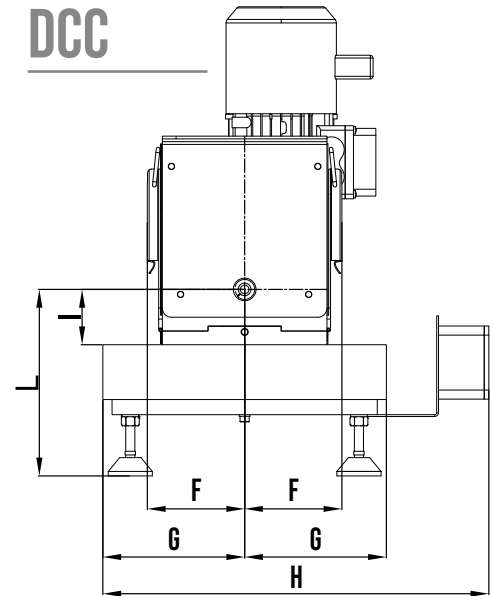
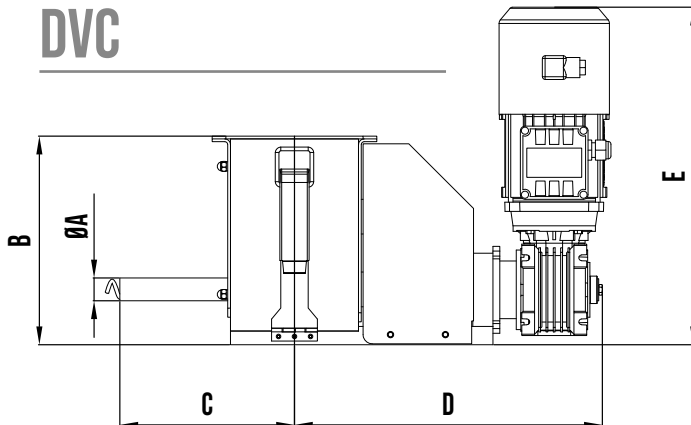
ENVIRONMENTAL
TECHNOLOGIES

GRAVIMETRIC FEEDER DCC MOD. VOLUMETRIC FEEDER DVC MOD.

The ideal solution for feeding small flow rates of powdered or granular products.

DCC Mod.: positioned on a weighing plate, it unloads the material due to weight decrease.

DVC Mod.: volumetric feeding of the material, constantly fed from the hopper mounted on the feeder.



DVC VOLUMETRIC FEEDER (dimensions in mm)

Type	ØA	B	C	D	E
DVC 31	25	228	191	337	258
DVC 32	42		221		264

DCC GRAVIMETRIC FEEDER (dimensions in mm)

Type	F	G	H	I	L
DCC 31				54	
DCC 32	106	155	422	61	125

- Real-time control and self-regulation of the material flow (DCC mod.);
- Feeding accuracy: between 0.5% and 1%;
- Compact system with non-stick contact parts in AISI 316;
- Loading hoppers of various capacities;
- Version available for batch or continuous feeding;
- Operating temperatures: from -10°C to +50°C;
- Feeding screw diameter: 18 mm or 32 mm.

TECHNICAL DATA

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- Feeding accuracy: between 0.5% and 1%;
- Compact system with non-stick contact parts in AISI 316;
- Loading hoppers of various capacities;
- Version available for batch or continuous feeding;
- Operating temperatures: from -10°C to +50°C;
- Feeding screw diameter: 18 mm or 32 mm.

ACCESSORIES



Electronic control



LCC25 converter



Vertical drain and valve
with pneumatic guillotine



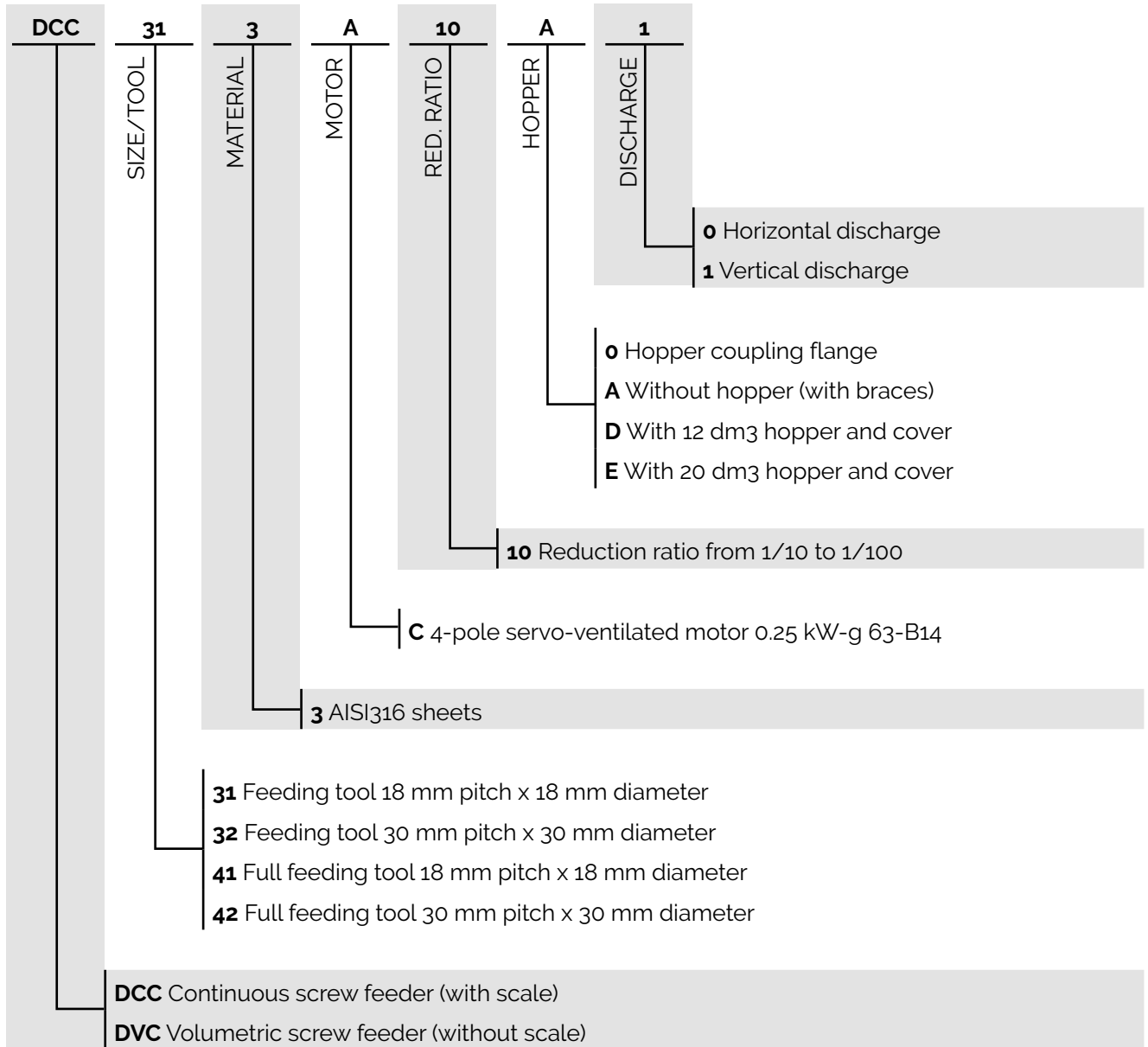
90° fitting



CE

DCC GRAVIMETRIC FEEDER - DVC VOLUMETRIC FEEDER

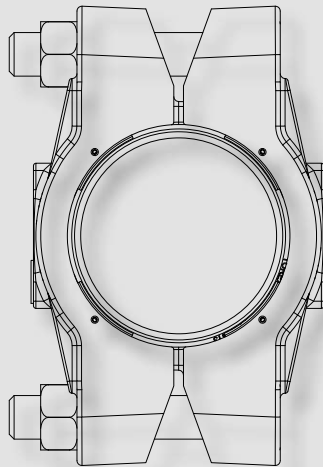
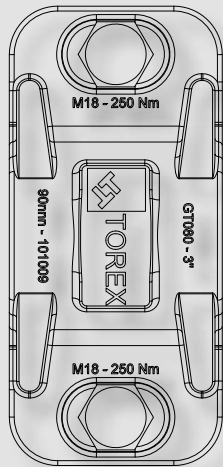
CONFIGURATION



COUPLINGS



GT PIPE COUPLINGS



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



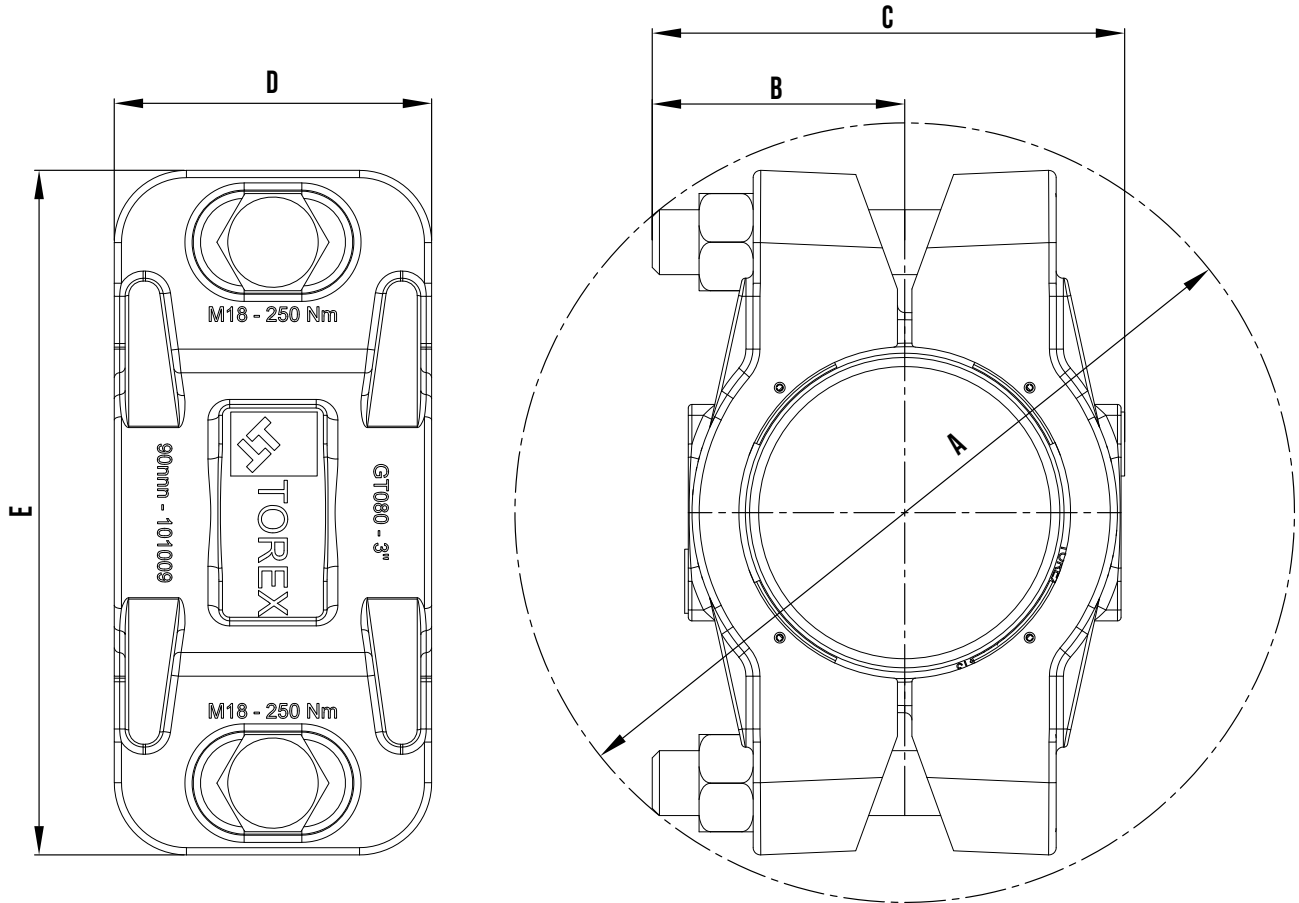
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

GT PIPE COUPLINGS

The **GT** pipe coupling has been designed to easily, safely and quickly connect two pipes with flat ends and aligned with each other. Suitable for joining carbon steel and stainless steel pipes.



GT PIPE COUPLINGS (dimensions in mm)

Type	A	B	C	D	E
GT040	130	43	83	80	114
GT050	170	59	110	88	134
GT065	200	59	110	88	176
GT080	220	70	131	88	188
GT100	260	82	157	95	216
GT125	310	102	189	95	244
GT150	360	105	219	125	316
GT200	410	143	286	125	358

Body in spheroidal cast iron En GJS 500-7 Rn 1563;
 Carbocemented carbon steel teeth;
 Food-grade EPDM or SILICON seals;
 Operating temperatures: from -40°C to +110°C;
 Operating pressure: min. -0.5 bar max. +7.0 bar;
 Diameters from 40 mm to 200 mm.

TECHNICAL DATA

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- Diameters from 40 mm to 200 mm.



KCS SILO SAFETY SYSTEM

KCS Silo Safety System



IP 55



SECTORS OF APPLICATION



CONSTRUCTION



FOOD &
ANIMAL FEED



PLASTICS &
CHEMICALS



HEAVY
INDUSTRY



RENEWABLE
ENERGY



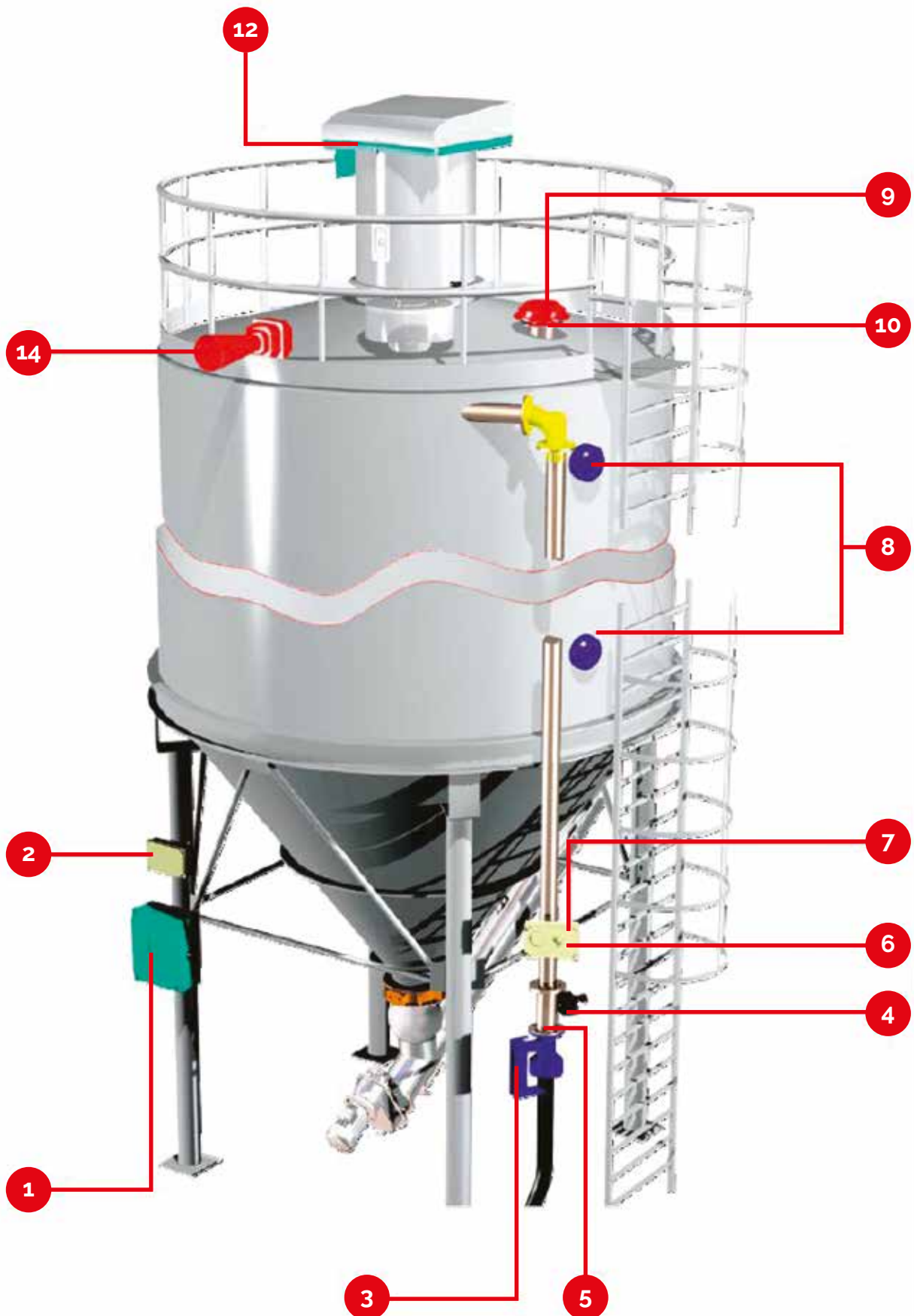
PLANTS
& MACHINERY



ENVIRONMENTAL
TECHNOLOGIES

KCS SILO SAFETY SYSTEM

The ideal solution to prevent problems during the pneumatic loading of the silo. The **KCS** safety system protects the silo from overfilling, depression or overpressure, protects the filter and any accessory mounted on the silo, and minimises the risk of dust emissions.



BENEFITS

- Avoids damage to the silo and accessories;
- Reduces the risk of air pollution;
- Eliminates the risk of loading the wrong silo;
- Automatic filter start and stop;
- Receives indication if the filter needs maintenance.

CHECK THROUGH THE CONTROL PANEL:

- Internal pressure of each silo;
- Product level;
- Presence of compressed air for the filter;
- Presence of compressed air for the pinch valves.

COMPONENTS



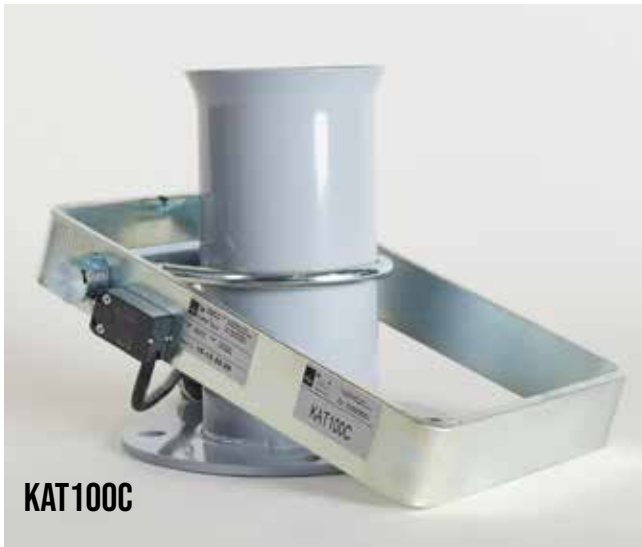
1) SC - TOUCH CONTROL PANEL

Program and manage all components. Usually installed in the plant control room. Manages up to 32 silos.



2) SP2 - POWER PANELS

Installed in each silo, it collects signals from the various components of the KCS.



KAT100C



KAT100B



KAT100A

3) KAT TRUCK HOSE CONNECTION

Coupling system between tanker hose and silo loading hose.



4) VM PINCH VALVE

Positioned on the silo loading pipe, it blocks the passage of product or air in the event of an alarm.



5) XKF CONNECTION FLANGE

Pinch valve counterflange.



6) VMX01N

Pinch valve control box



7) AIR LINE LIMIT SWITCH

Sends a signal if there is no air for the pinch valve.



IPM



IPE

9) IPE / IPM PRESSURE INDICATOR

Measures the pressure inside the silo.



8) ILTAO LEVEL INDICATOR

Signals the presence of material:

- Minimum/Maximum level
- Intermediate or emergency level



10) IPX

IPE / IPM connection socket.



14) LS SIREN

Makes an emergency warning sound.



12) PF12 PRESSURE SWITCH

Sends a signal if there is no compressed air to clean the filter.



KCS SILO SAFETY SYSTEM

VALUES

It is thanks to the integrity of our people and teamwork
that with passion and responsibility
we are at the customer's side every day.

~~SQUADRA~~

~~RESPONSABILITÀ~~

~~CLIENTE~~

~~PASSIONE~~

~~PERSONE~~

~~INTEGRITÀ~~



VALUES

Our values are the reason why we always make the same choice... every day

We choose integrity.

We choose to do a good deed,

We choose to lend a hand...

... rather than to prevaricate.

We choose passion.

We choose the destination and the journey that precedes it.

We choose the path

... and never the shortcut.

We choose the customer...

We choose... their needs...

... their challenges...

... their success.

We choose responsibility...

We choose to give the best of ourselves

We choose to honour promises

and to honour the trust others place in us.

We choose the team...

A goal...

... to be shared...

And... victory for everyone.

We choose people.

We choose to walk together.

We choose to guide each other.

We choose to get there together.



WAM ROMANIA



WAM VIETNAM



WAM POLSKA



SAVECO ITALIA



WAMGROUP
ITALIA

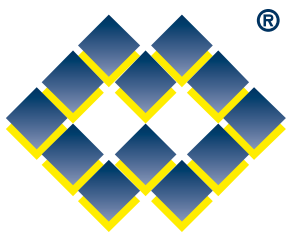


WAM B.H.M. (WUXI-CHINA)

60  **TRADING
SUBSIDIARIES**

20  **MANUFACTURING
PLANTS**

2,0



WAMGROUP



00+



EMPLOYEES
WORLDWIDE

250+



INTERNATIONAL
PATENTS





Total area:
25,070 m²



Covered area:
10,765 m²



Green area:
2,000 m²

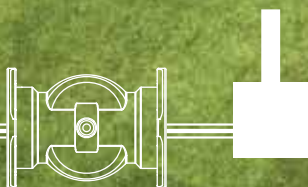


Parking:
121 parking spaces

2021

SAN PROSPERO

Inauguration and transfer
to the new plant







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