



HANDLING HAZARDOUS MATERIALS

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HANDLING HAZARDOUS MATERIALS

DENIOS offers a comprehensive range of professional tools for safe and convenient handling of hazardous substances, including the highly absorbent DENSORB® absorbent materials, which provide optimum protection in the event of leaks.

242 Pumps



304 Drum Lifters with Explosion Protection



258 Pump System



307 Gas cylinder handling



260 Mixers



310 DENSORB absorbent materials and oil barriers



264 Heating jackets and drum heaters



334 DENSORB leak emergency spill kits



269 Heating belts and base heating plates for drums



346 SpillGuard® hazardous substance leak warning system



270 Earthing cables and earthing systems



348 Drain sealing system



279 FALCON drum and IBC funnel



352 Spill trays and door seals



282 Sampler



354 Leak containment systems



286 Drum dollies and drum trolleys



360 Safety drums and drum overpacks



292 Drum tongs and drum hangers



362 Barriers for doors and gates



294 Forklift attachments



298 Drum lifters





NEW PRODUCTS FOR 2024

Safety throughout the year - with numerous new solutions and services, and new products from the DENIOS world! Here's an overview of the highlights in this chapter.

Visit our digital showroom and discover the DENIOS Download Center with a wide range of free specialist publications.

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Universal absorbent materials DENSORB Mineral



Leak barriers





DENIOS MAGAZINE

ALL YOU NEED TO KNOW ABOUT PUMPS

Pumps from DENIOS enable safe, customised dispensing from a drum or container into smaller containers or receptacles of any kind. Depending on requirements, pumps are optimised for different hazardous substances and are available in various designs. The different immersion depths of the various pumps meet individual requirements.

- » GUIDES
- » ARTICLES
- » FAQ
- » INTERVIEWS
- » CHECKLISTS
- » VIDEOS
- » WHITEPAPERS
- » AND MUCH MORE!



www.denios.co.uk/magazine

FAQ

RISK ASSESSMENTS FOR ACTIVITIES WITH HAZARDOUS MATERIALS

Anyone who handles hazardous substances, uses them or even "only" stores them, cannot do so without a risk assessment. For 25 years they have been the central component of workplace safety. In our FAQ we have compiled the answers to the most frequently asked questions concerning "Risk assessments for hazardous substances".



www.denios.co.uk/faqs-risk-assesment

GUIDES

THE PERFECT PUMP: 3 QUESTIONS YOU SHOULD ASK YOURSELF BEFORE BUYING.

- Which substance is to be pumped?
- Which pump drive is required for the application?
- From which container will dispensing take place?

It's easy to find the right pump.



www.denios.co.uk/3questions-pumps

ARTICLES

TIPS AND ACCESSORIES FOR SAFE AND ECONOMICAL PUMPING

For optimum results when dispensing, DENIOS offers a wide range of accessories. Here you will find, for example, flowmeters, level indicators or drum wedges for inclining drums for optimum emptying. Drum pumps generally have a suitable drum thread for each application or to suit the container material. For all other applications we have suitable thread adapters in our range for common container sizes.



www.denios.co.uk/information-pumps

PUMP FINDER

DON'T SEARCH, FIND!

Find the right product - quickly and easily, with just a few clicks.



www.denios.co.uk/pumps

DENIOS TIPS

FOR BETTER SAFETY WHEN DISPENSING FROM DRUMS

ALWAYS REMEMBER YOUR PERSONAL PROTECTIVE EQUIPMENT (PPE)

Before beginning dispensing or filling tasks, suitable PPE must be worn. This should include safety glasses and protective gloves as a minimum. Depending on the substance to be pumped, you may need an apron or suitable respirator mask. If a worker is working alone, monitoring measures must be taken to provide rapid assistance in the event of an emergency.

» www.denios.co.uk/ppe

TAKE PRECAUTIONS TO CATCH ANY DRIPS

When pulling out the pump, any liquid running out can lead to drips. Safety stands for drum pumps with integrated spill pallets offer reliable protection. Keep suitable absorbent materials close at hand. Place the drum on a spill pallet, use special dispensing platforms and/or use funnels to collect drips.

» www.denios.co.uk/densorb

Manual drum pumps

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- + Quick and easy to use
- + Cost-effective
- Need a lot of energy and time for high flow rates
- Need a lot of energy and time for viscous substances
- Sometimes not suitable for high flow rates
- Not suitable for long term operation



Electric or pneumatic pumps

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248

- + Efficient and ergonomic for high flow rates
- + Efficient and ergonomic for viscous substances
- + Suitable for frequent and / or long term operation
- Pneumatic or power connection required on site



RESISTANCE LIST FOR SELECTING MANUAL DRUM PUMP

When selecting the right hand pump it's important to know the container size and type as well as the required pumping capacity together with the suitability of the pump for the medium to be dispensed. The pump must also be resistant to the fluid to be filled. In many areas health and safety and environmental regulations must also be observed e.g. explosion protection.

Here you'll find information on common liquids and their relevant chemical-resistant hand pumps.

Example media	Stainless steel drum pump	FL 205 lever pump	Solvent pump	PP drum pump	PTFE drum pump	950 lever pump	PP piston pump	PP gas tight drum pump	OTAL-pump in PP *	OTAL-pump in PVC *	OTAL-pump in PVDF *	OTAL-pump in VZA *	Canister pump *	Transfer pump Red	Transfer pump Blue	Transfer pump Green
	> 60 litres								< 60 litres							
Acetic acid	•	•	•	○	•		•	•	•		•	•				
Acetone	⚡		○													
Acetonitrile	⚡		○													
Ammonium hydroxide	•	•	•	•	•			○	•		•	•		•		
Benzine	⚡	○	•													
Chlorine water					○											
Ethanol	⚡		○													
Ethyl acetate	⚡		○													
Formaldehyde	•	•	•	•	•			○						•		
Formic acid					○					•						
Glycol/Ethylene glycol	•	•	•	○	•	•	•	•	•		•	•	•	•	•	•
Hydrochloric acid				○	•											
Hydrofluoric acid					○											
Hydrogen peroxide 1-30 %				○	•			•	•		•		•			•
Hydrogen peroxide 100 %					○											
Isopropyl	⚡		○													
Kerosene	⚡	○	•													
MEK Methyl ethyl ketone	⚡		○													
Methanol	⚡		○													
Naphtha	○	•	•		•											
Nitric acid 1-10 %	•	•	•	○	•			•	•		•					•
Nitric acid 100 %					○											
Nitric acid 50-70 %					○						•					
Nitro-cellulose combination thinners	⚡	○	•													
Perchloroethylene					○											
Phosphoric acid				•	○			•	•	•	•		•			•
Sodium chloride				•	•	•	•	•	•	•	•		•		•	•
Sodium hydroxide		•		○	•			•	•	•	•		•	•	•	•
Sodium hypochlorite					○											
Sulphuric acid 1-80 %				○	•				•	•	•					•
Sulphuric acid 95-100 %					○											
Toluene	⚡	•	○													
Trichlorethylene					○											
Turpentine	⚡	○	•	•												
Xylene	⚡	•	○													

* Stopper in PVC, not in direct contact with the medium
 ⚡ Highly flammable/earthing required

• Suitable for the given medium.
 ○ Recommended for the given medium.

Highly flammable media and solvents
 see resistance list. See page **244**

Acids and alkalis See page **246**

Hand pumps for mineral oils can be found See page **247**

RESISTANCE LIST FOR SELECTING A ELECTRIC DRUM PUMP

The following five variants are also available as a ready to use set. The following catalogue pages contain information on all sets and pumps for the example media as well as other types of pump models and their applications.



Media examples	Set 1	Set 2	Set 3	Set 4	Set 5
Acetic acid *	● ⁽¹⁾	●	●		●
Ammonia water	● ⁽³⁾		●		
Antifreeze (Antifrogen)	● ⁽¹⁾	●	●	●	
Battery acid	● ⁽¹⁾	●	●		
Bleaching lye (sodium hypochlorite)	● ⁽³⁾		●		
Boric acid	● ⁽³⁾	●	●		
Butanol / (Butyl alcohol)					●
Calcium chloride	● ⁽³⁾	●	●		
Caustic soda (sodium hydroxide) **	● ⁽¹⁾	●			
Chlorine / Chlorine water	● ⁽³⁾		●		
Diesel	● ⁽²⁾		●	●	
Ethanol (Ethyl alcohol)					●
Ethyl acetate					●
Ferric (III) chloride **	● ⁽¹⁾	●	●		
Foaming agent	● ⁽¹⁾	●	●	●	
Formaldehyde (Formalin)	● ⁽³⁾		●		
Formic acid *	● ⁽¹⁾	●	●		●
Glycol (Ethylene glycol)	● ⁽¹⁾	●	●	●	●
Heating oil	● ⁽²⁾		●	●	●
Hydrochloric acid	● ⁽¹⁾	●	●		
Kerosene					●
Lactic acid	● ⁽³⁾		●		
Lubricants (cooling)	● ⁽²⁾		●	●	●
Methanol (Methyl alcohol)					●
Methyl glycol					●
Mineral oils	● ⁽²⁾		●	●	●
Nitric acid			●		●
Nitro-cellulose combination thinners					●
Perchloroethylene	● ⁽³⁾		●		●
Petrol (unleaded / super)					●
Petroleum / paraffin					●
Phosphoric acid **	● ⁽¹⁾	●	●		
Photo developer	● ⁽¹⁾	●	●		●
Potassium permanganate	● ⁽³⁾		●		
Propanol (propyl alcohol) Isoprop.					●
Seawater	● ⁽¹⁾	●	●		
Silicone oil	● ⁽²⁾			●	
Sodium chloride	● ⁽¹⁾	●	●		
Sodium hypochlorite	● ⁽³⁾		●		
Sulphuric acid	● ⁽³⁾		●		
Turpentine					●
Water (dist. / deionised water)	● ⁽¹⁾	●			●

* depending on the concentration of the acid, an explosion proof design may be required (Set 5)!

** depending on the concentration, density and viscosity of the liquid, a design with a higher motor performance may be required (Set 2, 3 and 4)!

Pump set 1 (PP / stainless steel / PVDF)

Acids and alkalis - laboratory use

PP: (1)
Stainless steel: (2)
PVDF: (3)

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Pump set 2 (PP)

Acids and alkalis - industrial applications

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Pump set 3 (PVDF)

Concentrated acids and alkalis

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249

Pump set 4 (Alu)

Mineral oils, lubricants

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Pump set 5 (stainless steel)

Solvents, Ex-proof



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Not found your medium? Or have a question?
We'd be happy to help - just give us a call!

01952 811 991

Foodstuff pumps in accordance with EC 1935/2004 and FDA regulations



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SAFETY IN EX ZONES

At DENIOS our product range covers all you will ever need for all aspects of explosion protection. Here's an overview!



www.denios.co.uk/ex-protection

The following results have been determined by laboratory tests using raw materials. Plastic parts made from the raw materials are often subject to influences which are not able to be recognised in laboratory tests. The values given are therefore only recommendations. Claims may not be made based on this information. In case of doubt, we recommend that a test is carried out. In addition to chemical resistance, other relevant regulations e.g. explosion protection will also need to be considered.

Drum pumps manufactured from stainless steel

Ideal for pumping flammable liquids

- Tested and suitable for EX zone: IIA T4 zone 0
- Good emptying of drum residual due to submerged non-return valve in the base
- Submersion pipe Ø 32 mm
- Not suitable for acetone
- Incl. Drum screw connection in nickel-plated brass for r2" steel fine thread internal (gas-tight screw connection optional)



- 1** Drum pump with extension nozzle, depth: 570 mm

Order no. 117-592-JB

- 2** Drum pump with hose and ball valve, 910 mm immersion depth

Order no. 117-664-JB



Drum pumps manufactured from stainless steel		
Immersion depth [mm]	570	910
Delivery per stroke [l]	0.35	0.50
Design: Drip nozzle		
Order number	117-592-JB	117-594-JB
Design: PTFE hose, 1.2 M, conductive, lockable ball valve		
Order number	117-663-JB	117-664-JB

Please observe the required electrostatic charge conduction with flammable media (e.g. with the Anti static set)!

Lever pump, for solvents

High pumping capacity

Pump Model FL 205 pumps many chemicals, solvents and mineral oils e.g. ammonium chloride, butanol, ethyl alcohol, (50%), glycol, hexanol, caustic soda (45%), turpentine, petroleum, two-stroke oil and cold cleaners (please ask for a full resistance list).

- Telescopic immersion pipe
- Viton seals in FKM
- With 2" drum thread
- With electrically conductive hose (1.5 M), ball valve and nozzle



Model	FL 205
Use	For 205 litre drums
Delivery per stroke [l]	0.5
Order number	117-674-JB

Transport case

- For discharging static electricity
- Consists of 3 colour-coded copper connecting cables with clamping tongs in a practical plastic case



Order no. 116-058-JB

ORDER AT THE SAME TIME

Drum screw connection gas-tight

- Prevents the escape of gases hazardous to health from the drum
- For stainless steel drum pumps, R2" thread
- Check valve with 1/8" connection
- Nickel-plated brass, FKM seals



Order no. 146-678-JB



Solvent pumps in stainless steel

- For dispensing high-purity fluids
- Approved for: IIA,b ex-zone 0



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HANDLING HAZARDOUS MATERIALS

With foot pedal

- Recommended for acetone
- Sturdy and long-lasting
- Screw connection for r2" fine thread, for drums up to 220 litres
- Drum and pump can be hermetically closed by the screw connection and the stop valve to prevent undesirable vapours from escaping
- Submersion pipe steplessly adjustable to drum depth, pipe Ø: 21 mm
- Clip for quick attachment/removal of the air hose
- Fixed spout or flexible hose (1.2 m), each with stop valve in stainless steel / PTFE



1 Version with drip nozzle and stop valve

2 Solvent pump with flexible dispensing hose and stopcock

With foot pedal	
Immersion depth [mm]	950
Delivery volume max [l/min]	30
Order number with drip nozzle	157-587-JB
Order number with flexible hose	201-951-JB

Hand operated

- For pumping organic solutions and flavourings safely
- Gas-tight and can be shut off completely by 2 ball valves
- Fixed drip nozzle with tap in stainless steel / PTFE
- Drum screw connection for r2" fine thread, for containers up to 60 litres
- Submersion pipe steplessly adjustable, pipe Ø: 15 mm
- Also available as version for tin plate canisters with Ø 35 mm pull-out spouts



Hand operated	
Immersion depth [mm]	600
Delivery volume max [l/min]	10
Order number For containers up to 60 litres	157-589-JB
Order number For tin plate canisters	210-335-JB

Mini solvent pump

Safe dispensing of small quantities

- Suitable for Ex-Zone 0 IIA,B,C
- Ideal for containers 1 to 5 litres
- Thread GL 45
- Adapter for S 40, GL 38 and GL 32 available as an accessory
- Includes 2m earthing cable
- Self-closing spout with auto-stop function, precision dispensing with no dripping.
- Ideal for emptying containers, even those with a domed base



Delivery volume max [l/min]	1.8
Order number Mini solvent pump	242-994-JB
Order number Thread adapter ETFE, GL45 – GL38	242-996-JB
Order number Thread adapter ETFE, GL45 – S40	242-995-JB
Order number Thread adapter ETFE, GL45 – GL32	242-997-JB



Drip safety stands for pump tubes

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Drum and pump must be earthed when dispensing flammable media!
Additional earthing cable

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With optional drip nozzle or flexible PVC dispensing hose (1.2 M) and stop valve



Polypropylene (PP) drum pumps

- For the extraction of various chemicals, acids, alkali, cleaning fluids etc
- For 60 - 205 litre drums
- Piston rod metal, PP-sheathed
- PTFE seal
- Good drum residual emptying due to submerged non-return valve in the base
- Incl. Drum screw connection in PP (Mauser 2")
- Immersion pipe Ø mm: 32

Immersion depth [mm]	500	650	800	1000
Delivery per stroke [l]	0.20	0.25	0.27	0.30
Order number with drip nozzle	117-600-JB	117-604-JB	117-605-JB	117-606-JB
Order number with flexible hose	148-418-JB	148-422-JB	148-424-JB	148-426-JB



With optional drip nozzle incl. PTFE stop valve or with flexible dispensing hose (1.2 M) incl. PVDF Tap



Ultra clean drum pump out of PTFE

For dispensing high-purity fluids

- For many liquids that attack PP or PVC, also for hydrochloric acid up to 33 %
- The stop valve prevents the escape of vapours that pose a health hazard and any dripping of liquid
- Parts that come into contact with the medium made of PTFE/FEP
- All valves of solid PTFE
- Immersion pipe Ø mm: 32
- Drum screw connections for standard drums available as an option

Immersion depth [mm]	400	600	950
Delivery per stroke [l]	0.18	0.27	0.40
Order number with drip nozzle	267-289-JB	193-714-JB	179-491-JB
Order number with flexible hose	267-290-JB	210-181-JB	210-182-JB

ORDER AT THE SAME TIME

Drum screw connection of PP

- To securely hold the pump in the drum
- Suitable for filling of non-flammable liquids



R2" steel fine



Mauser 2" coarse



TriSure coarse

Drum threaded fitting	For threads	Order number
2" BSP/R2"	Fine steel drum inner	179-494-JB
2" Mausier	Coarse inner	179-495-JB
2" TriSure	Coarse inner	179-496-JB

Safety stands for drum pumps PP, PTFE, stainless steel and solvent pumps

- The safety drip stands securely catch residual liquid from pump tubes
- Pipe internal Ø: 35 mm
- Length: 1000 mm
- Incl. Pipe clips for wall mounting and screw-off collection container



Incl Pipe clips for wall mounting and screw-off collection container

Order no. 179-493-JB



Drum pump for petrol

For pumping low viscosity fluids such as mineral oils, diesel, heating oil EL/L, petroleum, fuels (flammable media of the previous hazard class ai-iii), antifreeze

- Suitable for Ex areas: IIA T3
- Diecast, for 205 litre drums with drum thread M 64 x 4 and R 2"
- Pumping capacity: approximately 0.25 ltr/stroke
- Immersion depth: 840 mm
- With conductive hose set DN 19 with anti-kink spring and discharge elbow



Order no. 117-561-JB

Hydraulic oil pump

Sturdy hand crank for drums, for pumping hydraulic oil, engine and gear oil from drums and tanks

- For pumping lubricating oils up to SAE 80
- Pumping capacity: approx. 0.25 L/stroke
- For drums and tanks, thread: 2"
- Includes hose kit 1.5 m, delivery elbow, suction hose (inside the tank) 2 m



Order no. 133-358-JB

Aluminium rotary pump

Ideal for light mineral oil and heavier machinery and lubricant oils, with a viscosity of max. 900 mPas at 20°C

- Pumping capacity: approx. 1 ltr / rotation (about 5 L / min for heavy oils)
- With twin gears and galvanised immersion pipe
- Switching from pumping forwards to pumping backwards, which is always possible, allows for optimum dispensing
- Thread: 2"



Order no. 117-585-JB

Rotary pumps in plastic

- For oils, corrosive and volatile chemicals
- With 3 part immersion pipe set in stainless steel, diameter 32 mm and 2" drum adapter
- Performance: approximately 0,35 ltr./Stroke
- PTFE seal
- Pump casing in PPS (polyphenylene sulfide)



Order no. 117-584-JB

Aluminium lever action drum pump

For e.g. Mineral oil products, anti-freeze

- With additional swivel arm and funnel-shaped storage area Drips flow safely back into the container
- Pumping capacity: approx. 0.5 L/stroke



Order no. 157-298-JB

Light Aluminium Rotary Pump

Ideal for light mineral oils and lubricants

- With 3 piece immersion pipe set, adapts to different container sizes
- Performance: approx. 0.5 ltr / rotation
- Drum thread R 2"



Order no. 171-746-JB



Battery pumps B1 and B2

For safe dispensing from canisters and drums in the lab and in industry

- Light, easy to use and powerful
- Up to 2500 litres per battery charge (B2)
- The plug-in battery with Li-ion technology is not included in the delivery (please order battery and charger separately (see accessories)).
- Automatic overload cut-out
- Stepless adjustment for all requirements
- Compact design and low weight make for easy handling
- Wear-free, particularly low-noise BLDC motor
- Easy disassembly with quick-release fastener
- Drum adapter available as an accessory (B2)

- 1** Model B2 In polypropylene (PP)
2 Battery pump Model B1 with flowmeter (see accessories)



Model Design Pump interior material	B1 For smaller quantities		B2 For medium to large quantities		
	PP	PP	Niro	PVDF	PVDF
Suitable for e.g.	Battery acid, ammonia water, developer, glycol, phosphoric acid, hydrochloric acid, hydrogen peroxide		Oil based lubricants, cold cleaning agents, softeners	Sodium hypochlorite, chloric acid, chromic acid, sulphuric acid, nitric acid and hydrofluoric acid	
Output [W]	75		260		
Density max [kg/l]	1.3		1.6		
Viscosity max [mPas]	200		400		
Delivery volume max [l/min]	20	22	45		
Pump height max [mWS]	6	12	8		
Order number Immersion depth: 500 mm	267-769-JB	267-775-JB	267-778-JB	267-781-JB	
Order number Immersion depth: 700 mm	267-770-JB	267-776-JB	267-779-JB	267-782-JB	
Order number Immersion depth: 1000 mm	267-771-JB	267-777-JB	267-780-JB	267-783-JB	

All drum pumps include a media resistant hose (1.5 m) and nozzle. Please order battery and charger separately (see accessories).

Accessories	Order number
Charger for pump B1	267-797-JB
Li-ion battery 10.8 V for pump B1	267-796-JB
Charger for pump B2	267-799-JB
Li-ion battery 21.6 V for pump B2	267-798-JB

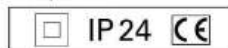


Electric drum pumps

For low viscosity acids and alkali, chemicals and more in laboratories and chemical industry

- Dispense safely into and from small containers
- Light and easy to use
- No seal and grease
- 230 V motor with A 3 M cable and plug
- Delivered complete and ready to use with a PVC process liquid and gas resistant cable (1.5M), nozzle
- And drum adapter

Safety-tested



Pump interior material Immersion depth [mm]	Polypropylene			Niro			PVDF		
	500	700	1000	500	700	1000	500	700	1000
Suitable for e.g.	Hydrochloric acid, formic acid (50%), developer, chloric acid			Oil based lubricants, cold cleaning agents, softeners			Sodium hypochlorite, chloric acid, chromic acid, sulphuric acid, nitric acid and hydrofluoric acid		
Density max [kg/l]				1.3					
Viscosity max [mPas]				300					
Delivery volume max [l/min]	75			68			75		
Pump height max [mWS]*	7			6			7		
Order number	172-086-JB	172-087-JB	172-088-JB	172-089-JB	172-090-JB	172-091-JB	267-793-JB	267-794-JB	267-795-JB

*Maximum values at 20° Celcius

Accessories	Order number
Drum adapter 2" for lab pumps in PP/PVDF (B2 battery, el. drum pump)	187-552-JB
Drum adapter 2" for lab pumps in stainless steel (B2 battery, el. drum pump)	194-183-JB

Flowmeter

- For B1 / B2 battery pumps and el. drum pumps for laboratory operation
- For further details see right hand page.

Material*	Viscosity max [mPas]	Thread	Min. Measuring range	Max. Measuring range	Operating pressure max [bar]	Order number
PP	40	1" BSP	5	120	10	267-935-JB
PVDF	40	1" BSP	5	120	10	267-910-JB

*For stainless steel pumps on request

Electric industrial pumps

For industrial usage to dispense low viscosity acids and alkali

- Light, handy pump for filling and refilling drums and containers
- High performance
- Splash-proof, seal-less
- 230 V motor with 5 M cable and plug
- Available as pump (with immersion pipe, hose connector) or as ready-to-use set with pump, immersion pipe incl. Media resistant hose (2 M), nozzle and drum adapter



- 1 Set with pump made from PVDF (Polyvinylidenfluoride)
- 2 Drum pump with pump interior in PP (polypropylene), set with hose, nozzle and drum adapter

Pump interior material Immersion depth [mm]	Polypropylene				PVDF	
	1000	1200	1000	1200	1000	1200
Suitable for	Sulphuric acid (up to 40%), phosphoric acid, battery acid, hydrochloric acid, iron (III) chloride (up to 30%), caustic soda		Aggressive atmospheres and media with a high concentration such as: ferric (III) chloride up to 50%		Chromic, nitric and sulphuric acid (98%), bleach, bleaching lye, zinc chloride, chlorine water	
Protection category IP	IP 24				IP 54	
Density max [kg/l]	1.4		1.6		1.8	
Viscosity max [mPas]	500				800	
Delivery volume max [l/min]	85		75		80	
Pump height max [mWS]*	19		16		17	
Order number Pump	188-569-JB	188-571-JB	188-572-JB	188-573-JB	188-574-JB	188-575-JB
Order number Pump set	117-529-JB	117-530-JB	172-094-JB	172-095-JB	123-550-JB	123-551-JB

*Maximum values at 20° Celsius



Compressed air double diaphragm pumps in PP and PTFE

- Double diaphragm pump with high hydraulic performance
- In polypropylene (PP) and polytetrafluoroethylene (PTFE) for high resistance
- Suitable for pumping acids and alkalis (e.g. sulphuric acid, phosphoric acid, caustic soda)
- Particularly user-friendly with maintenance-optimised design
- Blockage-free operation and absolutely oil-free



	Model 1/4"	Model 1/2"	Model 1"	Model 1 1/2"	Model 2"
Suitable for e.g.	Sulphuric acid, phosphoric acid, caustic soda, hydrochloric acid, bleaching lye, photographic developer, formic acid, acetic acid				
External dimensions W x D x H [mm]	243 x 160 x 260	465 x 263 x 573	310 x 203 x 345	465 x 263 x 573	594 x 345 x 690
Delivery volume max [l/min]	52	76	175	370	715
Viscosity max [mPas]	3500	7500	10000	30000	30000
Order number	287-070-JB	287-071-JB	287-072-JB	287-073-JB	287-074-JB

Flowmeter

- For industrial pumps
- For measuring low viscosity acids and alkalis using the turbine impeller principle
- Large, illuminated digital display with variable position
- Precision measurement - better than $\pm 1\%$
- Flowmeter display
- Temperature range: -10 to max. +50° C
- Incl. two 1.5 V batteries (AAA)



Material	Viscosity max [mPas]	Thread	Min. Measuring range	Max. Measuring range	Operating pressure max [bar]	Order number
PP	40	1 1/4" BSP	5	120	10	267-933-JB
PVDF	40	1 1/4" BSP	5	120	10	267-934-JB



Container pumps model cm

- 2 in 1 - mixer and pump
- Ideal for media which have to be mixed and pumped, such as emulsions, dispersions and suspensions using water, oil, solids, etc
- The various materials used ensure suitability for nearly all media
- Suitable for 1000 litre IBCs and 205 litre drums
- 230 V motor / 500 W, 5 M cable and plug
- Order with optional accessories kit: ready to use pump incl. Media resistant hose (2.5 M), nozzle and drum adapter

Safety-tested



Pump interior material Suitable for	Polypropylene	Stainless steel	
	Flocculation agents, polymers, chemical mixtures	Water-based paints and dyes, oil mixtures	Solvent-based paints and dyes, alcohol mixtures
Ex-protection class in accordance with ATEX	–	–	Pump interior: Ex II 1/2 G Ex h IIB T4 Ga/Gb Motor: Ex II 2G Ex db eb IIC T6 Gb
Immersion depth [mm]	1200	1200	1200
Protection category IP	IP 24	IP 24	IP 54
Density max [kg/l]	1.1	1.1	1.2
Viscosity max [mPas]	150	350	200
Delivery volume max [l/min]	160	210	178
Pump height max [mWS]*	8	10	9
Order number	137-396-JB	137-397-JB	137-398-JB
Accessories			
Order number Accessories Set: 2.5 m hose, nozzle and drum adapter	138-199-JB	138-200-JB	138-201-JB

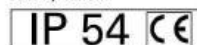
*Maximum values at 20° Celcius

Flowmeter

- For drum and container pumps
- For measuring low to medium viscosity media using the swash plate principle
- It is possible to save 9 calibrations
- Flow speed can be displayed at the press of a button

- Key lock to prevent operating error
- For applications up to max. 4 Bar
- Complete with pump connection
- Relay module for quantity preselection available as an option

Safety-tested



Additional cost - relay module for preselecting volume, non ex-proof version, Order no. 121-590-JB
For further details see right hand page.



Flowmeter for drum and container pumps



Flowmeter for ex-drum pumps and Ex container pumps CM



Flow meter for food pumps

Use	Viscosity max [mPas]	Material	Min. Measuring range	Max. Measuring range	Order number
Explosion-proof	See page 251	Pps	10	100	137-396-JB
For container pumps CM, CP-A, CP-B	See page 254	Ppo	10	100	117-582-JB
For drum pumps for food (non Ex) and eccentric pumps	See page 255	Stainless steel	10	100	243-262-JB



Explosion Proof Drum and Container Pumps

- Ideal for refilling solvents, petrol, alcohol, kerosene, etc
- Filling and refilling of material stored in drums or containers
- Pump made of stainless steel (niro)
- Tested according to Ex II 1/2 G IIB T4, approved according to ATEX
- Electric drive: 230 V / 460 W electric motor with 5 M cable and Schuko plug, protection class IP 54
- Includes equipotential bonding cable
- Compressed air drive: 400 W
- Pump for optimal residue emptying: considerable savings with minimal loss of product
- Maximum pumping characteristics for liquids, if optimally handled, the remaining residue will be smaller than 01 Litres



Available as pump (with immersion pipe, hose connector) or as ready-to-use set with pump, immersion pipe incl. Media resistant hose (2 M), nozzle and drum adapter

Safety-tested



Version Design	Electric				Compressed air			
	1 Standard	3 Emptying residues		2 Standard	4 Emptying residues			
Immersion depth [mm]	1000	1200	1000	1200	1000	1200	1000	1200
Suitable for	Solvents, petrol, petroleum, ethanol, methanol, butanol, kerosene							
Viscosity max [mPas]	350		500		1000			
Delivery volume max [l/min]	95		77		124		67	
Pump height max [mWS]*	14				35		28	
Order number Pump	188-578-JB	188-579-JB	188-582-JB	188-583-JB	188-580-JB	188-581-JB	195-014-JB	195-016-JB
Order number Pump set	117-539-JB	117-540-JB	172-103-JB	172-104-JB	137-422-JB	137-424-JB	195-012-JB	195-013-JB
*Maximum values at 20° Celcius								
Accessories								Order number
Additional cost - ex-plug, 3 pole, IP 65								137-421-JB
Flowmeter								137-395-JB

Compressed air double diaphragm pumps in stainless steel, EPDM-PP and PTFE

- Double diaphragm pump as ATEX version with high hydraulic performance
- In stainless steel (V4A) and polytetrafluoroethylene (PTFE) for high resistance
- Suitable for pumping flammable media (e.g. alcohol, acetone, petrol)
- Particularly user-friendly with maintenance-optimised design
- Conductive version approved according to ATEX Directive 2014/34/EU



	Model 1/2"	Model 1"	Model 1 1/2"	Model 2"
Suitable for e.g.	Alcohol, acetone, benzine, ethylacetate, kerosene, petroleum, nitric acid, methylacetone, trichlorethylene, turpentine, toluene, hydrogen peroxide, xylene, dyes, paints			
External dimensions W x D x H [mm]	400 x 263 x 501	312 x 203 x 322	400 x 263 x 501	479 x 345 x 695
Delivery volume max [l/min]	73	175	370	715
Viscosity max [mPas]	7500	10000	30000	30000
Order number	287-118-JB	287-119-JB	287-120-JB	287-121-JB

Electric Drum and Container Pumps

- For low viscosity mineral oil products
- Filling and refilling of material stored in drums or containers
- Ready for use
- Efficient
- Easy and safe to use
- Suitable for dispensing diesel, heating oil, hydraulic oil, machine oil, engine oil, etc
- Suitable for idle running
- Pump interior in aluminium
- 230 V / 500 W motor with A 5 M cable and plug
- Ready-to-use kit, including a pump, media resistant hose (2 M), nozzle and drum adapter

Safety-tested

 IP 24 CE


1 Pump motor can easily be removed by means of a practical handwheel

2 Media resistant hose

3 Drum adapter 2"

4 Interior of the pump and nozzle manufactured from aluminium



SET PRICE

Drum pump, submersion depth 1000 mm,

Order no. 117-531-JB



Electric Drum and Container Pumps

- For low viscosity mineral oil products
- Filling and refilling of material stored in drums or containers
- Suitable for idle running
- 230 V / 500 W motor with A 5 M cable and plug
- Pump interior in aluminium, alternatively available for vegetable oils (with pump and PP pump nozzle)

The mineral oil pumps are available as a pump without inline fittings or as a complete pump set with hose, nozzle and adapter!

Safety-tested



Pump (incl. Immersion tube, hose connection)

Pump interior material Immersion depth [mm]	Aluminium			Polypropylene	
	700	1000	1200	1000	1200
Suitable for	Diesel, heating oil, hydraulic fluid, machine oil, motor oil up to a viscosity of max. 500 mPa-s			Rapeseed oil (cold pressed) and vegetable oils	
Delivery volume max [l/min]	85				
Pump height max (mWS)	19				
Order number Pump	—	188-576-JB	188-577-JB	188-933-JB	188-934-JB
Order number Pump set	272-240-JB	117-531-JB	144-663-JB	172-097-JB	172-098-JB



Set with hose, nozzle and drum adapter



2

HANDLING HAZARDOUS MATERIALS

Flowmeter

For measuring mineral oils and alternative fuels

- Configured to display both the total amount and a resettable quantity
- With a long life lithium battery
- For applications up to max. 4 Bar

Use	Viscosity max [mPas]	Material	Min. Measuring range	Max. Measuring range	Order number
For drum and container pumps	2000	Aluminium	3	80	172-096-JB



Compressed air double diaphragm pumps in aluminium and NBR

- Double diaphragm pump as ATEX version with high hydraulic performance
- In aluminium and nitrile rubber (NBR)
- Suitable for pumping mineral oils (e.g. diesel, heating oil, motor oil, hydraulic oil)
- Particularly user-friendly with maintenance-optimised design
- Blockage-free operation and absolutely oil-free
- The pump is self-priming, even when dry
- Conductive version approved according to ATEX Directive 2014/34/EU
- Available in 1/2", 1", 1 1/2" and 2" sizes
- The 1 1/2" and 2" variants can be used for larger systems and in large-scale industry

	Model 1/2"	Model 1"	Model 1 1/2"	Model 2"
Suitable for e.g.	Diesel, heating oil, engine oil, hydraulic oil, drilling emulsion, antifreeze, glycerine, glycol			
External dimensions W x D x H [mm]	467 x 283 x 573	310 x 203 x 335	467 x 283 x 573	592 x 345 x 687
Delivery volume max [l/min]	73	175	370	715
Viscosity max [mPas]	7500	10000	30000	30000
Order number	287-094-JB	287-095-JB	287-096-JB	287-097-JB





Safety-tested

IP 54 CE



Container pump Model CP-A

**Quick dispensing / refilling of containers in large quantities
For the safe transfer of chemicals**

- Highest chemical resistance
- Mobile use
- Short emptying times due to high flow rate
- Low speed, low wear
- Adapter for container opening, as standard
- Drive motor 230 V, 2800 rpm, 0.75 kW, 5 m cable with plug
- Can be combined with flowmeter



Use	Material	Immersion depth [mm]	Density max [kg/l]	Viscosity max [mPas]	Delivery volume max [l/min]	Pump height max [mWS]	Order number
Formaldehyde, phosphoric acid, hydrogen peroxide, citric acid up to 50% etc.	PP	1100	1.8	100	200	22	117-705-JB
Accessories							Order number
Connection set (consists of 5 m hose with connectors on each end)							172-109-JB
Flow meter, for container pumps							117-582-JB

Centrifugal pump Model CP-B

Can be run dry, for emptying containers

- Ideal for use when the container needs to be emptied from below (near to the floor)
- Manufactured from high quality materials to ensure high chemical resistance
- Supplied with a hose that is easy to connect to containers (suction side)
- 230V, 0.75 kW motor with a 5 m cable and plug



Order no. 137-419-JB



Use	Hose connection - inlet side	Hose connection - pressure side	Material	Viscosity max [mPas]	Density max [kg/l]	Delivery volume max [l/min]	Pump height max [mWS]	Order number
Acids, alkalis, chemicals for developing photographs, galvanising substances and other low viscosity media	1 1/2" external thread	1 1/4" external thread	PP	30	1.35	280	11	137-419-JB

Flowmeter description

See page
250



Accessories

Accessories	Order number
Trolley (without flow meter)	137-399-JB
Trolley (with flow meter without facility for pre-selecting quantities, battery operated)	137-400-JB
Trolley (with flow meter and facility for pre-selecting quantities, network connection 400 V, 50 Hz)	137-404-JB
Centrifugal pump connection set (pressure side, consists of 5 m hose with connectors on each end)	138-202-JB
Flow meter, for container pumps	117-582-JB

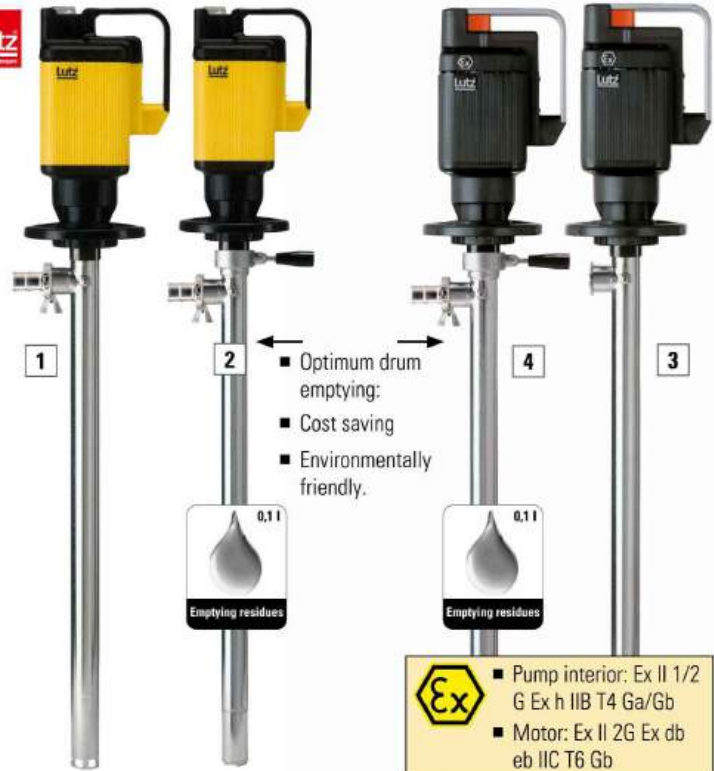
Drum pumps for food products

When producing food, raw materials and finished food products come into contact with various products which must have suitable characteristics. This also applies to equipment and plant components for the commercial production of food. These are defined as "articles intended to come into contact with food" and are specified in food-related legislation.

- Physiologically harmless design
- Materials: stainless steel, ETFE, FPM
- High surface quality
- Food-safe connections
- Simple and easy to clean
- Also for alcohol-containing foodstuffs as well as flammable cleaning materials
- Includes equipotential bonding cable



Safety-tested



- Optimum drum emptying:
- Cost saving
 - Environmentally friendly.



- Pump interior: Ex II 1/2 G Ex h IIB T4 Ga/Gb
- Motor: Ex II 2G Ex db eb IIC T6 Gb

Design	Use	Immersion depth	Viscosity max [mPas]	Density max [kg/l]	Delivery volume max [l/min]	Pump height max [mWS]	Output [W]	Order number
1 Pump	For aqueous and greasy foodstuffs, cosmetics and pharmaceuticals	1000	350	1.6	95	14	460	243-253-JB
2 Pump residue emptying		1000	500	1.6	77	14	460	243-254-JB
3 Pump Ex version	For foodstuffs which contain alcohol and are highly flammable	1000	350	1.6	95	14	460	243-255-JB
4 Pump, residue emptying, Ex version		1000	500	1.6	77	14	460	243-256-JB

Accessories	Use	Features	Operating pressure max [bar]	Order number
Hose set	For drum pumps, food use	FPM seal, 2 m PVC food grade hose DN 19 (3/4")	1.6	243-258-JB
Tri Clamp connection DN 32	For drum pumps, food use Ex	EPDM seal, 2 m food grade chemical hose DN 19 (3/4")	1.6	243-259-JB
Stainless steel nozzle	For drum pumps, food use	FPM seal, protective hoop and rotating joint	3.0	243-260-JB
Tri Clamp connection DN 32	For drum pumps, food use Ex	EPDM seal, protective hoop and rotating joint	3.0	243-261-JB

Eccentric screw pump Model HD-E

Pump Model HD-E brings together the advantages of a handy drum pump with the easy handling of a sturdy eccentric screw pump.

- Ideal for medium viscosity raw materials and foodstuffs from 500 to 4000 mPas.
- Material: stainless steel 1.4571, PTFE, FPM
- Pressure connection: Tri-Clamp DN 32
- 230 V, 0.55 kW single phase motor with 5 m connection cable and safety plug
- Pumping pressure: up to 4 bar



Safety-tested



Use	Immersion depth	Delivery volume max [l/min]	Order number eccentric pump
Medium viscosity foodstuffs	1000	20	243-257-JB

Application-specific accessories are available on request.

Flow meter for food pumps

- For use in the food, cosmetic and pharmaceutical industries.
- Easy to rinse out
- Materials: Stainless steel, ETFE, PTFE

Use	Viscosity max [mPas]	Min. Measuring range	Max. Measuring range	Order number
For drum pumps for food (non Ex) and eccentric pumps	5000	10	100	243-262-JB





Powerful drum pump Model TP 6, incl. automatic nozzle (flow meter optional)

Model TP 6

- For diesel, heating oil and anti-freeze
- Self-priming vane pump with integrated siphon guard and filter on the suction side High pumping capacity
- Automatic nozzle incl. hose swivel joint
- Drum thread G 2"
- Version with console: for practical wall mounting



Electric pump model HP with standard nozzle valve (flowmeter optional)

Type HP 40

Either with standard or automatic nozzle (see table)

- Low wear centrifugal pump
- Thread M 64 x 4 and G 2"
- Priming phase with integrated siphon protection (leakage protection)



Drum pump model V, also available with delivery gauge

Model V

- For engine and gearbox oils up to SAE 80
- Connection: G 2"
- Self-priming



Hybrid drum pump Model W85 (flowmeter optional)

Order no. 243-998-JB

Model W 85

- Self-priming, low wear hybrid pump incl. lever protection
- Especially high pumping capacity
- Includes automatic nozzle
- Nozzle holder incl. drip tray
- Drum thread R2"

Design	V		HP 40		W85	TP 6		
	840	840	1600	1600	1600	1600	1600	
Suitable for	Motor and gear oils up to SAE 80		Diesel, heating oil and coolant anti-freeze (concentrate)					
Delivery volume max [l/min]	25	20	37	31	68	55	55	
Output [W]	740	740	250	250	950	370	370	
Features	4 M pressure hose with oil nozzle	4 M pressure hose with oil nozzle, incl. flowmeter	4-m pressure hose, standard nozzle	4 m pressure hose, automatic nozzle			4 m pressure hose, automatic nozzle, wall console	
Order number	117-701-JB	117-703-JB	117-541-JB	117-565-JB	243-998-JB	267-640-JB	267-642-JB	

ORDER AT THE SAME TIME

Flowmeter

For Model HP 40, TP 6 and W85

- For various fluids such as heating oil/diesel, water, antifreeze
- Method of measurement for a turbine meter
- Suitable for all flow directions
- Illuminated digital display
- Measurement range 5 to 120 litres / min
- Main storage tank and 8 partial storage tanks



When ordering accessories, please specify the pump type (HP40, TP6, W85)!

Order no. 243-999-JB

Drum and tank compressed air pumps

For all situations where reliability plays an important role.

The self-priming compressed air pumps can be classed as either 1:1 (type DP1) for dispensing thin mineral oils quickly over short distances, 1:3 or 1:5 (types DP3 and DP5), which have double the effect and are suitable for heavy oils such as gear oil, rapeseed oil or cooling emulsions.

- For dispensing oils, cooling emulsions etc
- For reliable use in motor vehicle workshops, the agricultural industry, communal car pools and industrial operations
- With a 4 m hose NW 16, G 3/4", nozzle with outlet pipe and anti-drip device
- Self-priming
- Recommended inlet pressure: 6 to 8 bar

Pump on a tank installation

Pump Model DP1 F for 205 litre drums, meter available as accessory



ORDER AT THE SAME TIME



Pressure reducer with pressure gauge, 0 - 12 bar, recommended for all pneumatic pumps, with connection plug and socket

Pressure reducer, G1/4" (i/i)

Order no. 207-747-JB



Flowmeter, can be attached to the filler nozzle

Order no. 128-312-JB

Use Model	For 205 litre drums			For 100 litre tank		
	DP1 F	DP3 F	DP5 F	DP1 T	DP3 T	DP5 T
Features	Suction tube NW25, connection G1", with foot valve (875 mm long)	Suction tube NW25, connection 1" thread, with base valve (1 m long)		Suction hose NW25, connection 1" thread, with base valve (1.6 m long)		
Delivery volume max [l/min]	42	30	25	15	12	25
Order number	128-306-JB	128-307-JB	128-308-JB	128-309-JB	128-310-JB	128-311-JB

Manual Lever Pumps

Depending on the purpose for which they are to be used, the pumps are available with curved outlet pipe (with anti-drip device) or with a hose (2 m), ball valve and outlet pipe.

- Pump types F 52 and F 202 are suitable for dispensing diesel, heating oil, hydraulic oil, engine oil, gear oil

Lever pump with curved spout

Order no. 123-556-JB



Lever pump with hose, ball valve and outlet pipe

Order no. 117-667-JB



Model	F 52/202	F 52	F 202
Design	For 50 to 205 litre drums	For 50 litre drums	For 205 litre drums
Features	With curved outlet pipe	With 1.5 m hose, ball valve and outlet pipe	With hose, ball valve and outlet pipe
Delivery per stroke [l]	0.3	0.2	0.2
Order number	123-556-JB	117-667-JB	117-670-JB

Rotary pumps in plastic

- For oils, corrosive and volatile chemicals
- With 3 part immersion pipe set in stainless steel, diameter 32 mm and 2" drum adapter
- Pump casing in PPS (polyphenylene sulfide)
- PTFE seal
- Performance: approximately 0,35 ltr./Stroke

Order no. 117-584-JB





Mobile pump systems for chemicals and mineral oils

The practical drum pump trolley - for transporting drum and pump

- Practical and easy to move drum trolley in chemical-resistant PE with integrated pump (manual, electric or battery operated)
- Suitable for plastic and steel drums up to 220 / 200 litres
- Integral drip tray, hose guide, nozzle holder
- Easy-to-use pump pipe and cable compartment
- 2 swivel castors with brakes, 2 castors
- For your safety: belt for transport safety
- Supplied with practical accessory set - contents: 25x reusable cleaning cloths, 5x Densorb Universal drum mats for 200 l drum, 1x safety glasses and 12 pairs of nitrile gloves



Practical castors - for easy movement



Accessories ready to hand

Design	Mobile pump systems for mineral oils		Mobile pump systems, for chemicals		
	Manual	Electric	Manual	Electric	Battery operated
Suitable for e.g.	Diesel, heating oil and coolant anti-freeze (concentrate)		Sodium chloride, sodium hydroxide, acetic, phosphoric, nitric, hydrochloric, sulphuric acids, hydrogen peroxide	Hydrochloric acid, formic acid (50%), developer, chloric acid	Battery acid, developer, glycol, phosphoric acid, hydrochloric acid, hydrogen peroxide
Body dimensions W x D x H [mm]	789 x 859 x 1545				
Order number	271-343-JB	271-344-JB	271-142-JB	271-345-JB	271-346-JB

Mobile pump unit V 200 for oil dispensing

Mobile pump unit for mineral oils, engine and gear oils with mobile drum carrier consisting of a steel tube with nozzle holder, hose holder and drip collector

The mobile pump unit in combination with a drum transporter is the ideal solution for drawing and refilling oil in all situations which require fast and frequent processing of the drum in the workshop. The unit has a self-priming gear pump which guarantees an even feed rate with low noise operation (<70 dB). With the pressure switch version the motor automatically switches on and off when opening and closing the nozzle; the optional flowmeter allows the dispensing of exact quantities.



- Self priming pump with sealed 230 V motor with separate ventilation
- Power: 0,75 kW
- Can be used for fluid viscosities from 10 to 2000 mPas
- 6 – 12 bar operating pressure
- Drum carrier load capacity: 250 kg

As standard with:

- 1" intake hose with base valve and filter
- 1/2" dispensing hose 4 M long
- nozzle with flexible End piece and non-drip automatic valve
- 2 M cable
- 2 fixed and 2 swivel castors for easy manoeuvrability



Nozzle with fine measuring tip and integrated flow meter

Model	V 200	V 200 - P	V 200 - K	V 200 - KP
Design	--	With pressure switch	With flow meter	With flowmeter and pressure switch
Delivery volume max [l/min]	9			
Protection category IP	IP 55			
External dimensions W x D x H [mm]	690 x 1090 x 300			
Weight [kg]	34	36	35	37
Order number	172-708-JB	172-709-JB	172-710-JB	172-711-JB

Oil stations, complete and ready for use

On a compact station up to 4 different oils can be stored in 60 or 205 litre drums. The oils can be directly supplied to motors, gears, small containers etc.

- Safe storage and dispensing of various oils
- Powerful pumps
- Safe and environmentally-friendly
- Direct, easy dispensing to motors, gears, small containers etc
- Spill pallet with grid
- Nozzle with joint and electronic flowmeter
- Hose reel with 10 M pressure hose
- Suction unit with hose, filter and 2" bung hole closure
- Easy to move with a pallet truck (ground clearance 100 mm)



The stations can easily be accessed by a pallet truck.

Model DPO

- With pneumatic pumps, 6-8 bar, air connection 1/4" thread



Model EPO

- With electric gear pump, high pressure (suitable for 230 V power connection)



Detailed view: oil station EPO-4, closed hose reel, Order no. 201-608-JB

The stations are available with open or optionally with covered hose reels (e.g. to protect mechanical components and hose if the atmosphere is heavily polluted).

Storage capacity 205 litre drums	2	4	2	4
Design	Hose reel open	Hose reel open	Hose reel closed	Hose reel closed
Use*	For hydraulic, engine, gear, vegetable and other oils up to a viscosity of 1500 cSt, anti-freeze concentrates			
Sump Volume [l]	240	260	240	260
External dimensions W x D x H [mm]	870 x 1350 x 2100	1270 x 1350 x 2100	870 x 1350 x 2100	1270 x 1350 x 2100
Model DPO - with compressed air pumps				
Order number	201-601-JB	201-602-JB	201-605-JB	201-606-JB
Model EPO - with electric pumps				
Order number	201-603-JB	201-604-JB	201-607-JB	201-608-JB

*Pumping capacity per pump approx. 10 L/min (max. Value at 20° Celsius)

Open drum mixer GP 1800

For open containers, up to 50 litre content

- Operated by compressed air
- Max. 6 Bar pressure
- Material 1.4571/PP
- Compressed air connection: R 1/4"

Order no. 128-393-JB



Available in compressed air or electric versions

- For stirring up, homogenising and dissolving, for example, in purification plants, electro-technology and the chemical, beverage and cosmetic industries
- In high quality stainless steel 1.4571/ 1.4581
- Also available in an explosion proof in compliance with ATEX for Zone 1 (see table)

Drum bung mixer FR 4

For closed drums with 2" bung-hole

- For liquids with medium viscosity up to 500 mPas
- Power supply: 400 V
- Protection category IP 54



Order no. 117-713-JB

Drum bung mixer FRP 3000

For closed drums with 2" bung-hole

- Engine power: 0,5 to 1,0 kW at 750 to 3000 upm
- Max. 7 Bar pressure power
- Compressed air connection R 1/2"
- Incl. Filter and device to decrease pressure with manometer reading for the secondary pressure



Order no. 128-396-JB

Drum bung mixer SPR 4

For open drums

- For liquids with medium viscosity up to 500 mPas
- Power supply: 400 V
- Protection category IP 54



Order no. 117-709-JB

Open drum mixer GLP 3000

For open drums

- For liquids with medium viscosity up to 500 mPas
- Like FRP 3000 but with clamp for mounting on container



Order no. 117-708-JB

Drive Model	Compressed air			Electric	
	GP 1800	FRP 3000	GLP 3000	FR 4	SPR 4
Area of application - mixing equipment	Container open	Drum bung hole	Container open	Drum bung hole	Container open
Output [W]	270	1000	1000	750	750
Revolutions [U/min]	1800	3000	3000	1500	1500
Mixing shaft length [mm]	600	750	1000	750	750
Viscosity max [mPas]	1000	1000	500	500	500
Order number Non explosion-proof version*	128-393-JB	-	-	117-708-JB	117-709-JB
Order number Ex-version in accordance with ATEX*	-	128-396-JB	128-397-JB	117-713-JB	117-714-JB

*Compressed air: Ex II 2 G/D c T3 -- electric: Ex II 2 G c T3

Available in compressed air or electric versions

- Transportable
- For stirring, homogenising and dissolving, for example, in purification plants, electroplating, and the chemical, beverage and cosmetic industries
- Mixer shaft in stainless steel 1.4571 / 1.4581
- Suitable for single-use IBCs
- In high quality stainless steel 1.4571/ 1.4581
- Also available in an explosion proof in compliance with ATEX for Zone 1 (see table)


IBC Mixer CR 6
For economical treatment or storage of liquids

- Power supply: 400 V
- Protection category IP 55

Order no. 117-710-JB



Order no. 117-715-JB

Single gear mixer CR 200/ CR 300
two types available with different motor power

- For liquids with very high viscosity
- Power supply: 400 V
- Protection: IP 54


Pneumatic IBC mixer CP 3000/ CP 400
For homogenising, dispersing, emulsifying and suspending

- Compresses air engine power: 400 to 3000 rpm
- max. 7 Bar pressure power
- Motor power: 0.5 To 1.0 kW
- Compressed air connection R 1/2"
- Incl. Filter and device to decrease pressure with manometer reading for the secondary pressure
- Heat resistant



Drive Model	Compressed air		Electric		
	CP 3000	CP 400	CR 6	CR 200	CR 300
Area of application - mixing equipment	Containers				
Output [W]	1000	1000	750	750	1500
Revolutions [U/min]	3000	400	1000	200	300
Mixing shaft length [mm]	1000	1000	1000	1000	1000
Viscosity max [mPas]	1000	2000	500	2000	10000
Order number Ex-version in accordance with ATEX*	128-394-JB	128-395-JB	117-715-JB	117-716-JB	129-343-JB
Order number Non explosion-proof version*	-	-	117-710-JB	117-712-JB	128-392-JB

*Compressed air: Ex II 2 G/D c T3 -- electric: Ex II 2 G c T3



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WHITE PAPERS

TEMPERATURE CONTROL OF PRESSURISED GAS CYLINDERS

A number of production processes require a constant supply of gases to create controlled atmospheric conditions. Precise temperature control is necessary to keep the flow rates constant. Find out how heating systems for pressurised gas cylinders ensure a continuous gas supply in industrial processes and which safety aspects need to be taken into account in our white paper.



www.denios.co.uk/gas-bottle-information

ARTICLES

DENIOS HEATING SYSTEMS

Temperature-sensitive substances play an essential role in the manufacturing processes of the chemical, pharmaceutical and food industries. The demands on modern thermotechnology are many: be it storage at a constant temperature, frost-free storage or the need for thermal processing of materials synchronised with the production process. Efficient solutions are also available for individual containers.

All the info is in the magazine!



www.denios.co.uk/heating-systems

GUIDES

HAZARDOUS MATERIALS STORES VS FIRE-RATED STORES

If there is an **increased fire risk** and safety distances can be used to separate spaces, our **hazardous materials stores** are ideal. They are DIBt-approved and available with additional insulation as an option. A high **fire risk** usually requires fire-resistant partitioning of the store. Stay safe with our **fire-rated stores**. They are also DIBt-approved and have certified fire protection.



www.denios.co.uk/hazmat

THERMOTECHNOLOGY

LOOKING FOR A LARGER SOLUTION?

We also have solutions for larger requirements. You can find more information under the heading Thermotechnology.



www.denios.co.uk/thermotechnology

ADVANTAGES

SOLUTIONS FOR HEATING HAZARDOUS SUBSTANCES

In the chemical, pharmaceutical and food industries, substances are often used that have to be kept under certain thermal conditions. Heating jackets and drum heater systems are developed specifically for these tasks.

- ✔ **Cutting-edge production processes for guaranteed quality**
- ✔ **Delivery free to door:**
 - No hidden costs
 - Transparency and planning security for your purchase
- ✔ **Huge selection:**
 - We offer heating solutions for canisters from 25 litres up to 100 litre IBCs
 - You'll also find heating solutions for Ex areas as well as for weatherproof applications

- Storage at constant temperature
- Frost-free storage
- Thermal processing of materials
- Available with both analogue and digital thermostat



- We also offer solutions for safe heating in Ex areas
- With both automatic and manual temperature adjustment
- in temperature classes T3 and T4



Heating jacket with moderate power

- Heating jacket with low power: ideal for gently heating and maintaining a low temperature of approx. 40 - 45°C
- Black nylon coated on both sides with polyurethane for maximum wear resistance
- The needle-felt polyester insulation provides perfect insulation
- Manually adjustable 0 - 90°C thermostat
- Protection category IP 44
- 240 V electrical connection and 5 metre connection cable for maximum flexibility



Heating jacket for 25/30 litre drums and canisters

Heating jacket for 205 l drums

Design	Non-ex				
	Suitable for	25 - 30 litre steel and plastic drum	50 - 60 litre steel and plastic drum	100 - 120 litre steel and plastic drum	200 - 220 litre steel and plastic drum
Container volume min [mm]		870	1100	1400	1800
Container volume max [mm]		1000	1250	1650	1900
Height [mm]		400	460	440	450
Output [W]		200	250	400	450
Analogue temperature controller					
Order number		117-721-JB	117-722-JB	280-727-JB	117-723-JB

Heating jackets with medium to high power

- Heating jacket with medium power: for rapid heating of media in applications requiring a fast heating rate up to approx. 50 - 70°C
- The outer layer is made of black nylon fabric and the inner layer of high-temperature resistant, silicone-coated glass fibre fabric
- Increased insulation due to sewn fibreglass material
- Manually adjustable 0 - 90°C thermostat
- Protection category IP 44
- 240 V electrical connection and 5 metre connection cable for maximum flexibility
- When using with plastic drums: check maximum temperature
- For 205 litre containers, 1000 litre IBCs and standard gas cylinders



Heating jacket for 205 l drums, with analogue controller

Heating jacket for 1000 l IBC, with analogue controller

Design	Non-ex			
	Suitable for	200 - 220 litre steel and plastic drum	1000 litre IBCs	Gas cylinder
Container volume min [mm]		1800	4060	680
Container volume max [mm]		1950	4310	830
Height [mm]		850	950	1050
Output [W]		1100	2000	450
Analogue temperature controller				
Order number		156-179-JB	117-724-JB	236-439-JB

SET PRICE



Also available in the set: heating jacket for 1000 litre IBC + insulated cover

Order no. 207-857-JB



ORDER AT THE SAME TIME

Insulated cover to protect the IBC from cooling down quickly,



Order no. 129-157-JB



Heating jackets with digital temperature controller



2

HANDLING HAZARDOUS MATERIALS

- Premium quality heating jacket for safe warming or constant temperature control
- Includes digital temperature controller with touch screen:
 - simple temperature setting from 0 - 90° C
 - permanent display and control of the current temperature (on the drum wall / inside the heating jacket)
- High quality, heavy duty, water repellent coating
- Silicon-insulated heating coil
- With 5 m connection cable and protected plug



Digital heating jacket for 205 l drums



Digital heating jacket for 1000 l IBC

ORDER AT THE SAME TIME

Digital drum base heater, can be combined with heating jackets



Order no. 267-383-JB

Design	Digital heating jacket	
Suitable for	200 - 220 litre steel and plastic drum	1000 litre IBCs
Container volume min [mm]	1800	4060
Container volume max [mm]	1950	4310
Height [mm]	850	950
Output [W]	1100	2000
Digital temperature controller		
Order number	267-308-JB	267-309-JB

Heating jacket with maximum power



- Heating jacket with highest performance: for applications that require maximum performance and highest insulation
- High-temperature resistant, silicone-coated glass fibre fabric on both sides of the heating jacket to extend product life in demanding applications
- Insulated by very dense glass fibre material for safe and efficient use, even at the highest temperatures
- Manually adjustable 0 - 160°C thermostat (0 - 90°C for IBC)
- Protection category IP 44
- 240 V electrical connection and 5 metre connection cable for maximum flexibility
- When using with plastic drums, check maximum temperature
- For containers from 25 to 1,000 litres and for standard gas cylinders



Heating jacket with maximum power, for 30 litre drums and canisters



Heating jacket with maximum power, for 120 litre drums

Design	Non-ex				
	25 - 30 litre steel and plastic drum	50 - 60 litre steel and plastic drum	100 - 120 litre steel and plastic drum	205 - 220 litre steel and plastic drum	1000 litre IBCs
Suitable for					
Container volume min [mm]	870	1100	1400	1800	4060
Container volume max [mm]	1020	1250	1650	1950	4310
Height [mm]	400	460	440	850	950
Output [W]	460	640	1050	2060	3990
Analogue temperature controller					
Order number	280-725-JB	280-726-JB	280-728-JB	280-729-JB	280-731-JB

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Ex heating jackets for temperature class T4



- Ideal for gentle heating to reduce viscosity and prevent freezing in winter
- For containers from 25 to 1,000 litres and for standard gas cylinders
- Safe, gentle heating especially in Ex-protected areas of temperature class T4
- For use in Ex zones 1, 2, 21 and 22
- The outside is made of silicone-coated fibreglass, the insulation is made of high-quality glass fibre fabric
- With self-limiting thermostat
- Protection class IP 54
- 240 V electrical connection (without plug) and 5 metre connection cable for maximum flexibility



Ex heating jacket for 25/30 litre drums

Ex heating jacket for 50/60 litre drums

Ex-heating jacket for gas cylinders

Ex heating jackets for 205 litre drums

Design	EX versions					
	25 - 30 litre steel and plastic drum	50 - 60 litre steel and plastic drum	100 - 120 litre steel and plastic drum	200 - 220 litre steel and plastic drum	1000 litre IBCs	Gas cylinder
Suitable for						
Container volume min [mm]	870	1100	1400	1800	4060	680
Container volume max [mm]	1020	1250	1650	1950	4310	830
Height [mm]	400	460	440	850	950	1050
Output [W]	90	130	150	540	960	100
Automatic temperature control						
Order number	236-434-JB	236-436-JB	280-711-JB	280-713-JB	280-715-JB	236-437-JB
Analogue temperature controller						
Order number	280-709-JB	280-710-JB	280-712-JB	280-714-JB	280-716-JB	236-438-JB

Ex heating jackets are available in other sizes to suit your requirements on request, just give us a call.



Ex heating jackets for temperature class T3



- Safe, fast heating especially in Ex-protected areas of temperature class T3
- Ideal for faster heating to higher temperatures
- The manual thermostat is available for containers from 25 to 1,000 litres as well as for standard gas cylinders
- For use in Ex zones 1, 2, 21 and 22
- The outside is made of silicone-coated fibreglass, the insulation is made of high-quality glass fibre fabric
- With self-limiting thermostat
- Protection class IP 54
- 240 V electrical connection (without plug) and 5 metre connection cable for maximum flexibility



Ex heating jacket for 1000 L IBCs, with manual temperature controller and insulating cover



Ex heating jacket for 205 L drums, with manual temperature controller



Ex heating jacket for 25/30 litre drums, with manual temperature controller

60 and 205 litre drums

See page
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Suitable for e.g.	EX versions							
	25 - 30 litre steel and plastic drum	50 - 60 litre steel and plastic drum	100 - 120 litre steel and plastic drum	200 - 220 litre steel and plastic drum	1000 litre IBCs	Gas cylinder		
Container volume min [mm]	870	1100	1400	1800	4060	685		
Container volume max [mm]	1020	1250	1650	1950	4310	830		
Height [mm]	400	460	440	850	950	1050		
Output [W]	160	275	295	620	685	1400	1620	
Analogue temperature controller								
Order number	280-717-JB	280-718-JB	280-719-JB	-	280-720-JB	-	280-721-JB	280-722-JB
Automatic temperature control								
Order number	-	-	-	178-874-JB	-	176-398-JB	-	-
Digital NFC controller								
Order number	-	-	-	-	280-723-JB	-	280-724-JB	-

Induction drum heater for use in ex-zones

- For steel drums up to 205 litres, for quickly heating viscous fluids
- Ideal to liquidise solids
- High performance and low energy usage - save time in production
- Certified in accordance with ATEX for Ex zones 1 and 2; Ex II 2GD Exe II 170 C (T3) Ex tD II A21 T3 (170°C)
- Protection category IP 66
- Protected against overheating



Induction heater

- Instant heat in the drum wall, no time is lost
- Temperature increase dependant on the liquid, approx. 10 -15°C per hour
- Certified, automatic temperature limitation: max. 123°C (at the drum wall, at 20°C ambient temperature)



Order no. 117-719-JB

Induction heating unit, can be combined with induction drum base heater

Induction drum base heater

- Can be used individually or for optimising the heating process in combination with an induction drum heater and GFK cover
- Certified, automatic temperature limitation
- In combination with the induction heater and GFK cover a complete "mini-oven" is created for heating drums in EX zones



Order no. 178-875-JB

Induction drum base heater, for steel drums up to 205 litres

The combination of an induction heater and an additional base heater shortens the heating time, e.g. for light oil, by > 20%

Version	Induction heater Jacket heater	Induction drum base heater Floor heating
Output [W]	2750	500
Nominal voltage [V]	240	240
Internal diameter [mm]	613	560
Weight [kg]	50	55
External dimensions W x D x H [mm]	790 x 790 x 740	750 x 890 x 60
Order number	117-719-JB	178-875-JB

ORDER AT THE SAME TIME

GFK hood

Glass fibre reinforced plastic hood – additional protection against heat loss, approved for EX



Order no. 178-877-JB



ORDER AT THE SAME TIME

Digital NFC controller for induction heater and induction base heater

- Can be combined with induction heating unit or induction drum base heater
- Digital display for informative indication of parameters
- Lock function with password for that extra bit of security
- "Swipe and go" thanks to NFC function with pre-programmed cards
- Adjustable timer for delayed start and duration of switch-on time
- Delivery includes 2 pre-programmed cards (card 1 = 60°C, card 2 = 'off') - further cards to be individually programmed are available as accessories
- the 240V NFC controller with 25 amps is supplied with a 5 metre power cable



Digital NFC controller for maximum safety

Order no. 280-737-JB



Configurable NFC cards for the digital NFC controller.

Order no. 280-738-JB



Heating jackets for weatherproof applications



- Heating jacket for outdoor use: ideal for drums that are exposed to the elements or used in humid factory environments
- Made from water-repellent material
- Protection category IP 56
- With self-limiting thermostat for heating up to approx. 35 - 40°C
- For containers from 25 to 120 litres
- For weatherproof application of 200 litre and 1000 litre IBC heating jackets please use the weatherproof PVC covers



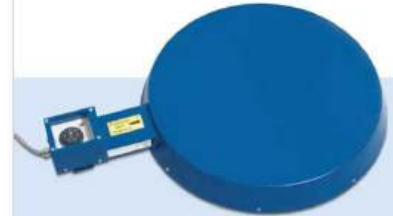
Weatherproof heating jacket for 25 - 30 litre drums

Order no. 280-732-JB

Design	Heating jackets with IP56		
Suitable for	25 - 30 litre steel and plastic drum	50 - 60 litre steel and plastic drum	100 - 120 litre steel and plastic drum
Container volume min [mm]	870	1100	1400
Container volume max [mm]	1020	1250	1650
Height [mm]	400	460	440
Output [W]	200	300	400
Automatic temperature control			
Order number	280-732-JB	280-733-JB	280-734-JB

Drum heating HBD

- Floor heating base for all steel drums of up to 205-litre volume, ideal to heat up and warm up substances
- Variable temperature control 0 - 150°C operated via a control on the drum heater
- Electrical connection: 230 V / 50 Hz
- Ready-to-use including A 2 M long power cord and Schuko plug



Model	Hbd
Version	Floor heating
Min regulation range [°C]	-
Max regulation range [°C]	150
Output [W]	900
Dimensions Ø x H [mm]	600 x 105
Base pad height [mm]	70
Order number	171-803-JB

Flexible drum heating belt HG-F



Example: common usage with several belts

- The heating element is contained in a flexible vulcanised silicone mat
- Thermostat control up to 120° c
- Simple spring catch fastening
- Protection: IP 40
- High mechanical resistance
- Height: 125 mm
- For drum Ø: 550 - 600 mm
- Mains connection 230 V
- 2 M power cable
- Power: 1000 W



Order no. 117-717-JB



Servo Eco drum lifter for easy transport of the drum and for fitting with drum base heaters and for placing on pallets

Order no. 227-162-JB

ORDER AT THE SAME TIME



Insulation cover with folding lid and velcro quick lock

Order no. 210-392-JB



Weatherproof PVC cover for 200 l heating jacket up to 1100 watts

Order no. 280-735-JB



Weatherproof PVC cover for 1000 l IBC heating jacket up to 2000 watts

Order no. 280-736-JB



Earthing cable

Prevent explosion hazards caused by sparks or electrostatic discharge

- Cable length 2 M
- Cables available in a galvanised or a double insulated design
- Cables available with either a crocodile clip and a C clamp that can be screwed in place, or an earthing clamp with a cable eye

Ex-protection class in accordance with ATEX Version	Ex II 1 GD T6	
	Earthing strap, galvanised	Earthing strap, insulated
Cable length [m]	2	2
2 grounding pliers		
Order number	165-880-JB	165-882-JB
1 earthing clip / 1 cable eye		
Order number	165-892-JB	165-894-JB
Version	Without ATEX approval	
	Earthing strap, galvanised	Earthing strap, insulated
Cable length [m]	2	2
2 grounding pliers		
Order number	117-204-JB	137-372-JB
1 earthing clip / 1 cable eye		
Order number	–	137-385-JB
1 C-clamp / 1 cable eye		
Order number	137-378-JB	137-380-JB
1 crocodile clip / 1 C-clamp		
Order number	–	137-382-JB
1 crocodile clip / 1 cable eye		
Order number	137-374-JB	137-376-JB
2 crocodile clips		
Order number	–	137-363-JB
2 C-clamps		
Order number	137-366-JB	137-368-JB



Earth cable reel with earthing clamp

- Automatic cable reel with an earthing clamp
- 15 M cable, wire cross section 6 mm²
- Shock resistant plastic housing with pivoted assembly bracket



Order no. 157-790-JB

Anti static set

- For discharging static electricity
- Consists of 3 colour-coded copper connecting cables with clamping tongs in a practical plastic case
- With 1.40-M copper cable and two insulated 3-m copper cables



Order no. 116-058-JB

Earthing clamps with ATEX approval:



Tested stainless steel clamps in 2 optional sizes

- Model MD (Medium-Duty, aperture angle approx. 15 mm) - for drums, containers up to 200 litres
- Model HD (Heavy Duty, large aperture angle approx. 40 mm) - for larger plant components, drums and containers from 200 litres, IBCs, mixing containers, mobile tanks, tank vehicles etc.

The sharp teeth on the clamps pierce through drum coatings and contamination. The strong springs ensure the necessary pressure.

Stainless steel clamps with high durability and robustness even under toughest operational conditions - to ensure a safe and durable connection.

Earthing cable

Reliably prevents danger of explosion through sparking or electrostatic discharge

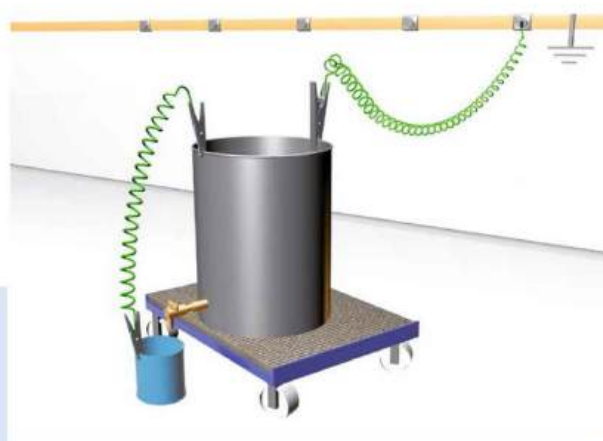
- Also available with ATEX approval: Ex II 1 GD T6
- Low electrical resistance with high mechanical strength
- Chemically resistant and wear-resistant cable sheath
- ATEX version with stainless steel clamps
- Spiral cable in lengths of 3 or 5 M



Spiral earthing cable, ATEX compliant, with 1 earthing clamp model HD and one eyelet



Spiral earthing cable with 2 earthing clamps model HD



Example of use with two spiral earthing cables

Cable length [m]	3		5	
	With 1 earthing clamp and 1 eyelet		With two earthing clamps	
Design in accordance with ATEX				
Order number Stainless steel clamp model MD	201-352-JB	201-353-JB	165-871-JB	165-872-JB
Order number Stainless steel clamp model HD	201-354-JB	201-355-JB	201-356-JB	201-357-JB
Design without ATEX				
Order number	117-406-JB	117-405-JB	117-404-JB	117-407-JB

ORDER AT THE SAME TIME

Wall holder in stainless steel for up to two earthing cables (two clamps and two eyelets)

- Store cables conveniently and in compliance with the law
- Possible to connect customer's earth bar
- Can therefore also be used as convenient earthing point near dispensing area, for example

Order no. 201-358-JB



ORDER AT THE SAME TIME

Earthing set for steel spill pallets

Tested stainless steel clamps in 2 optional sizes

- Model MD (Medium-Duty, aperture angle approx. 15 mm) - for drums, containers up to 200 litres
- Model HD (Heavy Duty, large aperture angle approx. 40 mm) - for larger plant components, drums and containers from 200 litres, IBCs, mixing containers, mobile tanks, tank vehicles etc.

Order no. 285-830-JB



Extra safety

Self-testing earthing systems with visual indication provide operators processing flammable or explosive materials with visual verification that static electricity is discharged effectively:

- The green LED flashes - the earthing clamp has a secure connection to the container and earth. The earthing cable continuously monitors the electrical circuit between containers or container and verified earthing point (e.g. a wall-mounted earthing bar)
- The green LED stops flashing - a resistance >10 Ohm has been detected in the circuit. The user is warned of a potential electrostatic charge risk!

ATEX approved and conforms to international best practice guidelines!

The safer contact between clip and metal container (EG Drum) is indicated



Grounding clamps with monitoring and visual indication

With continuous circuit monitoring: LED on the earthing clamp indicates the safe connection to the equipment

- Approved in accordance with ATEX and IECEx
- Stainless steel clips
- Quick-connect coupling for simple clamp changes (EG when replacing the battery in a safe area)
- Protection class IP 65
- Intrinsically safe electric circuit, incl. 9V battery
- **Model C 52:** 1 clamp with LED, 2 Ring eyes
- 1 clip with LED, 1 clip, either Type MD (L 120 mm) or Type HD (L 235 mm)



Model EZ with 2 clamps Portable and safe – connects 2 containers or 1 container, tanker etc To earthing point and indicates via an LED when both clamps have safe contact



Example of use: connection of 2 drums by model EZ and required connection to operational earthing point by model C 52



Model C 52: 2-core version – checking and indication that a safe contact exists at the container and additionally at the earthing point

Model	C 52	Ez	Ez
Design	1 clamp with LED / 2 Ring eyes	1 clamp with LED / 1 MD	1 clamp with LED / 1 HD
Cable length [m]	5	3	3
Order number	123-554-JB	201-368-JB	195-370-JB



Detailed view: quick-connect - connects clamp and cable quickly and easily

Assembly kit

Our assembly kit contains spiral cable in 3 lengths and ATEX certified stainless steel clamps model MD, HD and BR (with LED), for configuring to your individual needs

- All cables and clamps are fitted with quick-connect couplings, the practical quick-connect coupling for simple changes
- Suitable for all earthing systems with monitoring



Spiral cable, 2 core

Model BR earthing clamp with LED indicator light

Spiral cable, 2-core, length [m]	Order number
5	207-322-JB
10	207-323-JB
15	207-324-JB

Earthing clips, 2-pin	Order number
Stainless steel clamp MD, L 120 mm	206-260-JB
Stainless steel clamp HD, L 235 mm	206-261-JB
Stainless steel clamp BR, with LED display	207-321-JB

Static discharge cable

Cable available in 3 lengths

- Stainless steel clamp with long life and good grip even under the harshest operating conditions - for a secure durable connection
- With retractable cable reel
- Locking mechanism prevents cable tangling
- Antistatic Hytrel steel cable
- Approval in accordance with ATEX - discharge cable: exii 2GD T6 - clamp: exii 1GD t6
- Stainless steel clamps, either: model MD (L 120 mm) or model HD (L 235 mm)



Cable length [m]	6.2	9.2	15.2
Order number Stainless steel clamp model MD	207-309-JB	201-343-JB	201-346-JB
Order number Stainless steel clamp model HD	207-310-JB	201-344-JB	201-347-JB

Safe earthing with magnetic force



Earthing clamps high on a metal drum can be knocked by dispensing equipment for example. As an alternative, the earthing magnet lies flat on the drum lid or can be fitted at the side of the drum. It attaches firmly to the metal of the drum.

- Approved in accordance with ATEX for zones 1, 2 and 21, 22
- Several magnets ensure a good connection to the container.

- With 3 or 5 m cable and eye for customer-side earth connection
- Heat resistant and wear-resistant cable sheath

Model EM-H(X) - for earthing metal containers

- Approved in accordance with ATEX for zones 1, 2 and 21, 22
- Several magnets ensure a good connection to the container.
- With 3 or 5 m cable and eye for customer-side earth connection
- Heat resistant and wear-resistant cable sheath

Model EM – for earthing uncoated containers

- No scratching on containers to be sold on Clamp-free earthing of uncoated and unpainted containers - protects the container
- The small magnet ensures a good connection to smaller containers, eg tins



Earthing magnet EM-HX - for metal containers to 200 L

Order no. 217-934-JB



Earthing magnet EM-H for smaller metal containers

Order no. 217-933-JB



Earthing magnet EM-H for smaller metal containers

Mini earthing clamps for drum pumps

- Approved in accordance with ATEX for use in zone: 1, 2 and 21, 22
- Strong stainless steel mini clamp (L 60 mm, opening 15 mm) - ideal for connection to drum pump Easy to use and secure connection
- With 3 m spiral cable (2.5 mm²)
- Either with eye for customer earth connection or as a mobile version with an additional stainless steel clamp (L 140 mm), e.g. for secure connection to drums

Mini clamp with eye for stationary earth connection, for example



Model	EM	EM-H	EM-HX	Mini
Cable length [m]	5	3	5	3
Equipment - earthing systems	1 magnet / 1 cable eye			2 grounding pliers / 1 earthing clip / 1 cable eye
Suitable for	Non-coated containers	Coated containers 5 - 50 L	Coated drums 50 - 205 l	Pump / container connector / Pump / earthing bar connector
Order number	217-932-JB	267-620-JB	217-933-JB	267-621-JB / 217-934-JB / 244-028-JB / 221-520-JB

Drum tools for emptying and dispensing from containers with 2" threads

- Drums stored horizontally can be completely emptied
- Optimal protection from leaks, as after decanting from the drum, the lid is screwed back on
- Prevents uncontrollable leaks
- Manufactured from polypropylene (PP) or stainless steel / aluminium



Model	1		2	
	Drum tool in PP		Drum tool in aluminium	
Design	-		With "dead man setting"	
Equipment	Adjustable Tap		Adjustable Tap	Self closing, adjustable Tap
External dimensions W x D x H [mm]	100 x 200 x 160		170 x 190 x 160	170 x 190 x 160
Order number	117-117-JB		117-240-JB	117-241-JB

Dispensing taps and taps in steel, alu and cast iron

- Secure dispensing for all containers with A 3/4 or 2 inch TriSure thread



Material	1		2	
	Injection moulded zinc		Cast iron	
Area of application - drum taps	Alkaline liquids Mineral oil products		Viscous liquids	
Thread	3/4"		3/4"	2"
Seal material	Plastic		PTFE	PTFE
Design	Flame arrestor		-	-
Order number	117-196-JB	117-292-JB	117-293-JB	145-222-JB

Dispensing taps and taps in brass

- Secure dispensing for all containers with A 3/4 or 2 inch TriSure thread



Material	Brass			
	Area of application - drum taps	Light viscous liquids	Viscous liquids	Aggressive liquids
Thread	3/4"	2"	3/4"	3/4"
Seal material	PTFE	PTFE	PTFE	Nbr
Design	Self closing, adjustable Tap	Self closing Tap	Self closing Tap	-
Additional equipment	Flame arrestor	-	Flame arrestor	-
Order number	117-132-JB	117-134-JB	117-195-JB	117-291-JB

All products for Drum taps
can be found here:



www.denios.co.uk/kat/12965





PE Drum Taps 3/4" and 2"

- Suitable for corrosive and aggressive chemicals (not for acetone)
- Quick emptying of a 205 litre drum with a 2" drum tap in just 3 min
- Thread: TriSure 3/4" or 2"
- Fast outflow due to separate air intake
- PE locking lever

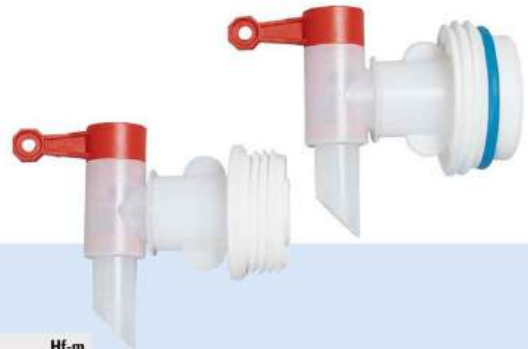


	1	2
Model	FH 1	FH 2
Thread	3/4"	2" fine
Material	Ldpe	
Order number	117-104-JB	117-105-JB

Dispensing tap Model HF

For canisters and steel drums with 2" threads

- Ideal for precise dispensing of liquids from canisters or drums with a 2" thread
- Through flow quantity: approx 5 ltr / min
- Fast outflow due to separate air intake
- Angled cut for optimum dispensing even into smaller openings
- High resistance against chemicals



Model	Hf-g	Hf-k	Hf-m
Thread	2" Mauser coarse	2" TriSure	2" fine
Use	For plastic L Ring drums up to 220 litres		For steel drums up to 205 litres
Order number	158-096-JB	158-097-JB	158-153-JB

Dispensing taps for plastic containers

- Ideal for the exactly measured dispensing of liquids out of plastic canisters
- Through flow quantity: approx. 5 ltr / min
- Suitable for food use (apart from model H 71)
- High resistance against chemicals
- Fast outflow due to separate air intake



Model	H 61	H 71	H 51	H 50	H 45
For thread Ø [mm]	60	72	55	50	45
Use	For 20 - 30 litre canisters	For 30 - 60 litre canisters	For 5 - 30 litre canisters	For 5 - 20 litre canisters	For 2 - 10 litre canisters
Order number	117-296-JB	117-297-JB	123-555-JB	157-963-JB	157-964-JB



Thread adapters

- For connecting different types of thread on canisters, drums, taps and pumps
- Thread: (I) = internal thread, (A) = external thread
- Available as a set of 9 adapters, or individually

Colour 1	Orange	Red	Blue	Yellow	Grey	Green	Black	White	Brown
From thread (INT)	2" fine	2" Mauser coarse	2" fine	2" fine	2" fine	2" fine	–	2" fine	2" fine
From thread (EXT)	–	–	–	–	–	–	2" fine	–	–
To thread (INT)	–	–	–	DIN 61 / 31	–	DIN 51	–	63 mm ASTM	DIN 71
To thread (EXT)	TriSure coarse	TriSure coarse	2" Mauser coarse	–	DIN 61 / 31	–	DIN 61 / 31	–	–
Order number	117-107-JB	117-108-JB	117-109-JB	117-110-JB	117-111-JB	117-112-JB	117-113-JB	117-114-JB	164-153-JB



Level indicator with capacity gauge for Model FS

Suitable for all standard 205 litre drums (also for 60 litre drums), to be used with non-corrosive liquids. The level indicator is placed over the 3/4" opening. A pump can be placed on the 2" bung hole at the same time, to dispense measured amounts.

- Suitable for non corrosive substances, such as anti-freeze, diesel and heating oil
- The level indicator fits 3/4" bung openings

Area of application - drum accessories

External dimensions W x D x H [mm]

Order number

Heating oil / diesel Mineral oils, antifreeze

95 x 80 x 120

137-715-JB

Overflow indicator

Suitable for all standard 205 litre drums (also for 60 litre drums), to be used with non-corrosive liquids. The level indicator is placed over the 3/4" opening. A pump can be placed on the 2" bung hole at the same time, to dispense measured amounts.

- Suitable for non corrosive substances, such as anti-freeze, diesel and heating oil
- The level indicator fits 3/4" bung openings



Design

External dimensions W x D x H [mm]

Order number

Transparent protective CAP

68 x 72 x 245

148-365-JB

Screw lock

68 x 72 x 245

148-370-JB

All products for Thread adapters, dispensing aids, accessories can be found here:



www.denios.co.uk/kat/12971



All products for Level indicators can be found here:



www.denios.co.uk/kat/12970





Drum wrench universal

- Fit all standard bung lids
- Easy opening with long handle
- The drum wrench in bronze largely avoids the build up of sparks



Material	Steel	Bronze
External dimensions W x D x H [mm]	120 x 460 x 40	
Order number	117-250-JB	117-251-JB

Drum wrenches, WKM and WKE models

- For the safe opening of conventional 205 litre steel drums
- The extra large handle gives good leverage
- Sturdy steel design with a quality blade in a special brass alloy
- Replacement blade available as an accessory



Version	Manual
External dimensions W x D x H [mm]	120 x 460 x 130
Order number	156-168-JB

Drum wrench in plastic

- Suitable for 3/4" and 2" bung hole and synthetic lids DIN 51 and DIN 61



Material	Plastic
External dimensions W x D x H [mm]	85 x 265 x 50
Order number	117-253-JB

All products for Drum openers and container openers can be found here:



www.denios.co.uk/kat/12969





Drum funnel in galvanised steel

Equipped with a hinged lid and strainer, external thread 2"

- Galvanized steel drum funnel
- Equipped with a hinged lid and strainer, external thread 2"

Capacity [l]	6	8
Height, external [mm]	350	220
Ø external [mm]	300	
Order number	123-346-JB	171-745-JB



Stainless steel funnel

- Ideal for the measured filling of small amounts of fluids
- Corrosion free and resistant to aggressive media
- With overflow prevention
- Incl. Lid and flame barrier

For container threads	H51	H61	H71	2" Trisure	With S56x4 thread
Ø external [mm]			140		
Order number	187-010-JB	129-142-JB	137-515-JB	129-141-JB	217-947-JB

Funnel - with / without strainer

Galvanised steel funnel, with handle

- Ideal for the measured filling of small amounts of fluids
- High edge offers spray protection



Ø external [mm]	165	200	200	240
Version	Flexible outlt, strainr	Flexible outlt, strainr	Rigid spout, strainer	Straight outlet
Material dispensing	Pe	Pe	Pe	Steel
Order number	145-549-JB	145-548-JB	145-545-JB	145-546-JB



FALCON drum funnels are made from seamless environmentally friendly polyethylene and cover the entire surface of the drum. The drum funnels – in round or honeycomb versions – permit easy filling of 205 litre drums, cans or drip filters can also be placed on the profiled surface.



- Cans or filters can also be conveniently placed on the profiled surface for draining
- Seamlessly made in chemical resistant polyethylene (PE)
- With opening for the use of a fill level indicator (for funnels without lid)
- Optionally available with or without lid
- The drum funnels with lid are also available in an electrically conductive version

FALCON drum funnel - round

- Ideal for effortless filling of 205 litre steel drums



FALCON drum funnels are available with or without lid, as well as in standard or electrically conductive versions

Capacity [l]	5								
	Without strainer			With strainer			With adapter 2" thread		
Model	Without lid	With lid	Dissipative version with lid	Without lid	With lid	Dissipative version with lid	Without lid	With lid	Dissipative version with lid
Design									
Dimensions Ø x H [mm]	580 x 115	605 x 145		580 x 115	605 x 145		580 x 93	605 x 125	
Order number	114-741-JB	114-745-JB	186-546-JB	114-747-JB	114-751-JB	186-547-JB	114-749-JB	114-753-JB	186-548-JB

FALCON drum funnel, honeycomb

- Ideal for easy filling of 205 litre steel and plastic bung hole or lidded drums

ORDER AT THE SAME TIME



The version with a stainless steel adapter permits firm connection of the funnel to the 2" bung hole of the drum. The adapter is used at the same time to connect the immersion pipe.

Immersion pipe, for all FALCON drum funnels with adapter

- For safe below-the-surface filling of e.g. flammable liquids



Order no. 114-755-JB



FALCON drum funnel with extra large volume, available in different versions

Capacity [l]	22								
	Without strainer			With strainer			With adapter 2" thread		
Model	Without lid	With lid	Dissipative version with lid	Without lid	With lid	Dissipative version with lid	Without lid	With lid	Dissipative version with lid
Design									
Dimensions Ø x H [mm]	690 x 200	690 x 230	690 x 190	690 x 200	690 x 230	690 x 190		690 x 230	690 x 190
Order number	114-877-JB	114-879-JB	157-306-JB	114-878-JB	114-880-JB	157-307-JB	114-881-JB	114-882-JB	157-311-JB

FALCON drain funnel

This funnel in the FALCON product family combines many advantages of a typical drum funnel with a "drain" function. While the front area of the funnel is intended for pouring in residual liquids from jugs, canisters, bottles or similar, the rear area is used for catching "drips". The ribbing of the funnel in this area serves as a storage surface for e.g. paint cans, oil filters and other containers that still contain residual amounts of liquid.

- For collecting residual liquids in a 205 litre steel drum
- Covers the whole of the top of the drum
- The sloping surfaces of the drain funnel ensure that even relatively viscous media flow off reliably
- Seamlessly made in chemical resistant polyethylene (PE)



1 The rim of the funnel is shaped as a recessed grip so that the funnel can be transported quickly and safely

2 The ribbed base allows containers to be placed on it to drip or empty

3 Residual liquids are poured directly into the front part of the funnel for quick drainage



Accessories: coarse strainer



Accessories: shelf for draining containers



Accessories: hose and adapter for filling below the surface

FALCON drain funnel	
Contents [l]	22
External diameter [mm]	704
Height, external [mm]	120
Order number	283-431-JB

Accessories	Order number
Drainage sieve Ø 76mm, stainless steel	242-383-JB
Support for FALCON drainage funnel	283-432-JB
Filling below surface for FALCON funnel	283-435-JB



Design	Round
External dimensions W x D x H [mm]	690 x 820 x 200
Capacity [l]	30
Order number	243-312-JB

FALCON IBC funnel in polyethylene (PE), round

- Funnel for use with a conventional IBC
- For safely collecting and channelling liquids
- Spout Ø approx. 100 mm
- Domed base - liquids run off
- In high chemical resistant polyethylene (PE)
- Impact resistant



IBC funnels are easily accessible from practically all sides. In this way, liquids from small containers can be poured into the funnel quickly and easily.





FALCON IBC funnel in polyethylene (PE), square

- Funnel for use with a conventional IBC
- In highly chemical resistant polyethylene (PE)
- Facilitates clean filling of even large quantities of liquids
- With large drain opening (Ø 145 mm)
- With integral 2" connection e.g. for optional level indicator
- Domed base - liquids run off
- Discharge basin with side storage areas, for e.g. IBC lids, lid openers, gloves etc.



2

HANDLING HAZARDOUS MATERIALS



Design	X	Square
External dimensions W x D x H [mm]	790 x 730 x 175	
Design	Non-electrically conductive	Electrically conductive
Capacity [l]	15	15
Order number	218-986-JB	230-342-JB

IBC Funnel "Full Size" - suitable for 600, 800 and 1000 litre plastic IBCs

These extra large funnels cover the entire surface of a standard IBC. This gives you plenty of space to quickly and easily collect liquids from various small containers (buckets, canisters, bottles or even filters) in your existing IBC.

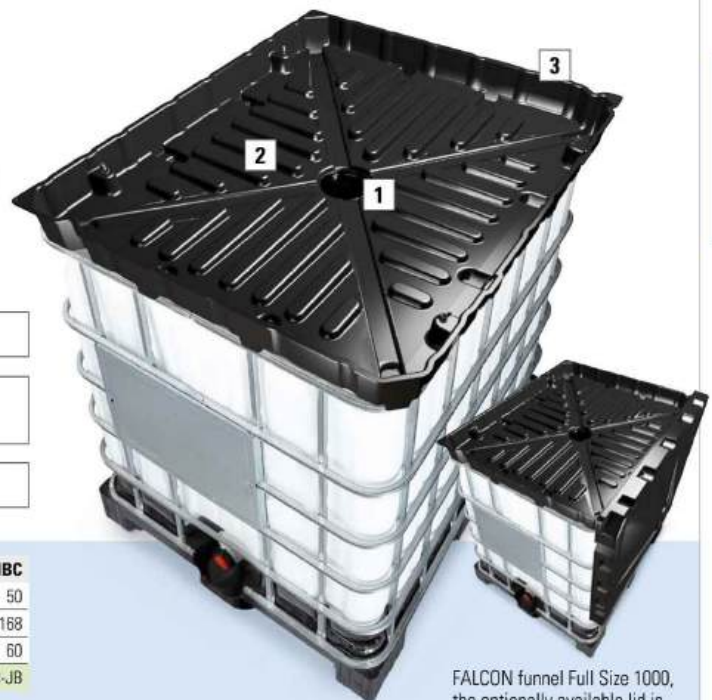


- Placed over the entire surface of the IBC; a firm connection can be made using accessory set 283-438
- Durable construction in highly resistant polyethylene
- Large intake volume for fast emptying
- With large central hole through which the liquids flow into the IBC
- The optionally available cover (funnel Full Size 1000) can be conveniently hung on the IBC or on the side wall of the funnel (with the 283-438-34 mounting kit) when not in use.

1 Optional coarse strainer available

2 With integrated ribbing at the base of the funnel so that residual liquids from containers or oil filters etc. can drain off

3 Large-area funnel, covers the entire surface of a 1000-litre IBC



FALCON funnel Full Size 1000, the optionally available lid is hooked onto the side of the funnel when not in use.

Design	For 600 L IBC	For 800/1000 L IBC
Capacity [l]	40	50
External dimensions W x D x H [mm]	860 x 1260 x 168	1060 x 1260 x 168
Ø outlet opening internal [mm]	60	60
Order number	306-067-JB	283-433-JB

Accessories	Order number
Lid for IBC Funnel Full Size 1000	283-434-JB
Support for IBC funnel Full Size 600	306-068-JB
Support for IBC funnel Full Size 1000	283-437-JB
Set lock FALCON IBC cover, Full Size	283-436-JB
Fastener set IBC funnel Full Size	283-438-JB
Set lock IBC cover, Full Size on IBC	285-970-JB
Fill below surface IBC funnel Full Size	285-971-JB
Coarse strainer bio.x	276-220-JB



Accessories: lock with mounting material, lid to IBC



Accessories: lock with mounting material, funnel to IBC



Accessories: mounting set, funnel to IBC

Telescopic rod for TeleScoop

Length of the aluminium telescopic rod can be adjusted, for sample depths of up to 6 m.

- Snap-on joint with stainless steel springs. With end stop (rods will not slip out).
- Increased rod stiffness with cold rolled steel profiles



Length cm from/to	65-120	70-180	125-250	95-280	115-300	165-450	175-600
Number of bars	2	4	2	4	3	3	4
Order number	179-426-JB	250-476-JB	179-428-JB	179-427-JB	179-429-JB	179-430-JB	179-431-JB

TeleScoop

The exchangeable tools (angular beaker, pendulum beaker, bottle holder, stainless steel beaker) are fitted to the telescopic rod by a snap-on joint.

Bottle holder

For plastic, glass or metal bottles up to 88 mm Ø. Angle can be steplessly adjusted up to 90°.

- Polypropylene/Polyamide
- With universal quick fit ring



Angular beaker

Adjustable angle up to 90°.

- Polypropylene



Pendulum beaker PP

Automatically hangs upright.

- Polypropylene
- Ø 150 mm



Pendulum beaker V2A

Automatically hangs upright. Suitable for deep, narrow drains.

- V2A (1.4301)
- Ø 130 mm



Stainless steel beaker

With scraper. Ideal for powder, granules, pastes, sludge.

- Sterilisable
- V2A (1.4301)



	Angular beaker			Pendulum beaker PP			Pendulum beaker V2A	Stainless steel beaker	Bottle holder
Contents ml	600	1000	2000	600	1000	2000	1000	1000	750
Order number	179-417-JB	179-418-JB	179-419-JB	179-420-JB	179-421-JB	179-422-JB	179-423-JB	179-425-JB	179-424-JB

MiniSampler PE

With the MiniSampler, the sampled fluid only comes into contact with the disposable suction tube and the tamper-evident sample bottle. Cross-contamination is avoided.

- For general sampling
- Complete with accessories in a transport case, contents:
 - Vacuum pump,
 - 10 PE bottles, 100 ml,
 - 10 m PE suction tube
 - 6 x 8µmm,
 - 1 tube cutter,
 - 1 stainless steel tube weight in V2A,
 - 20 seal-it seals.



ProfiSampler Aluminium

- Specially designed for industrial use
- For flammable liquids EX groups IIA, IIB, IIC.
- For sampling liquids from drums, tanks, lorries, train carriages, ships, bodies of water etc
- Cylinder thread GL45
- Set includes: Vacuum pump, glass bottle 500 ml, 5 suction tubes PA black, 220 cm long, electrically conductive, tube cutter, brass tube weight, 20 seal-it bottle seals, earthing cable.



	MiniSampler	Profi Sampler
Design/parts in contact with media	Pe	Aluminium
Approved for Ex	-	Zones 0, 1 IIA, IIB, IIC
Order number	179-407-JB	250-475-JB

Multi-layer sampler

For sampling all layers of the goods to be tested. Open internal tube without separate chambers, large sampling volume.

- Either in aluminium or V4A (1.4404), 25 mm Ø
- Meets ISTA-Norm for seed length 10 mm (wheat, oats) and 5 mm (flax, vetch).



Material	Overall length [mm]	Immersion depth [mm]	Number of openings	Compartment volume [ml]	Order number Multi-layer sampler
Aluminium	550	430	3	70	179-466-JB
	850	710	3	130	179-467-JB
	1500	1355	5	260	179-468-JB
Stainless steel	550	430	3	70	179-469-JB
	850	710	3	130	179-470-JB
	1500	1355	5	260	179-471-JB

Multi-Sampler

With multiple closed chambers for multiple targeted samples at various pre-determined sampling depths.

- Stainless steel V4A/PTFE, 25 mm Ø



Material	Overall length [mm]	Immersion depth [mm]	Number of compartments	Compartment volume [ml]	Order number Multi-Sampler
Stainless steel	550	430	3	14	179-460-JB
	850	710	3	17	179-461-JB
	1500	1355	5	17	179-462-JB

Uno sampler

With a closed sampling chamber for one targeted sample from a pre-determined depth.

- Outer tube in stainless steel V4A (1.4404), collecting chambers in PTFE, 25 mm Ø



Material	Overall length [mm]	Immersion depth [mm]	Number of compartments	Compartment volume [ml]	Order number Uno sampler
Stainless steel	550	430	1	17	179-463-JB
	850	710	1	17	179-464-JB
	1500	1355	1	17	179-465-JB

Accessories	Overall length [mm]	Order number
Cleaning brush for Zone sampler	600	179-473-JB
	1000	179-474-JB

Silo borer

In aluminium for sampling from all layers in silos.

- Length 1500 mm, extends to 3500 mm
- Scraper for cohesive substances



Ø external [mm]	Ø internal [mm]	Compartment volume [ml]	Order number Silo borer
90	40	400	179-475-JB

QuickPicker

- Stainless steel V4A (1.4404), Ø 25 mm
- Removable tip, easy to clean
- Incl. 2 sample bottles and cleaning brush



Length [mm]	Immersion depth [mm]	Capacity [ml]	Order number QuickPicker
500	300	75	179-438-JB

close-it tamper-evident seal

When sampling from sacks, cartons etc with the zone sampler, holes are created which free-flowing bulk goods can trickle out of. The close-it seal prevents this happening.

- Especially suitable for food and pharma (adhesive meets European food guidelines).
- Pack = 500 labels/roll



Colour	Design	Size [mm]	Order number
Red	printed	95 x 95	179-456-JB
Yellow	printed	95 x 95	250-425-JB
Blue	printed	95 x 95	250-426-JB
Green	printed	95 x 95	250-427-JB
Black	printed	95 x 95	250-428-JB
White	unprinted	95 x 95	179-457-JB

Accessories	Order number
Stainless steel label dispenser	179-455-JB



DENIOS MAGAZINE

ALL YOU NEED TO KNOW ABOUT HANDLING HAZARDOUS SUBSTANCES

The DENIOS range contains a wide range of products for everyday tasks such as lifting and turning, mixing, emptying or transporting drums. Drum lifters or drum trolleys ensure safe transport. Products for the safe handling and use of hazardous substances, for storing, transporting and dispensing are also included. Drum accessories such as pumps, taps or funnels round off the range and are suitable for every application.

- » GUIDES
- » ARTICLES
- » FAQ
- » INTERVIEWS
- » CHECKLISTS
- » VIDEOS
- » WHITEPAPERS
- » AND MUCH MORE!



www.denios.co.uk/magazine

FAQ

ALL ABOUT DRUMS

If hazardous or water-polluting substances are stored in drums, improper handling can quickly lead to environmental, fire and health hazards. The hazards stem not only from the drum contents, but also from handling of the drums: manual transport, lifting or holding of drums exposes employees to severe physical stress. Avoid the risks and ensure safe working conditions "all around the drum". In our FAQ below, we give you useful tips on the storage and handling of hazardous substances in drums.



www.denios.co.uk/drum-storing-guide

GUIDES

5 PROVEN DRUM HANDLING AIDS

In many companies, hazardous substances are stored in drums. However, the need for safe and ergonomic transport is often underestimated.

We offer essential products for different application situations.



www.denios.co.uk/5drum-tools

CHECKLIST

ON-SITE TRANSPORT OF HAZARDOUS SUBSTANCES

Transporting hazardous substances optimally and safely

This free DENIOS checklist shows you:

- Which special features should be considered in advance during the risk assessment.
- How to optimally prepare internal transport of hazardous substances.
- What rules are important during transport to ensure that hazardous substances get from A to B safely.



www.denios.co.uk/hazmat-transport

WHITE PAPERS

ENVIRONMENTAL DAMAGE CAUSED BY HAZARDOUS SUBSTANCES – LEGAL CONSEQUENCES, LIABILITY, PREVENTION

Find out

- what the consequences of environmental violations are
- who is liable for environmental damage
- how to protect yourself effectively



www.denios.co.uk/sustainability

CUSTOMER BENEFITS

ON-SITE TRANSPORT AND HANDLING OF GOODS

- ✓ **Huge selection:**
- Customised, safe, certified
 - The right solution for every situation – thus perfectly equipped for audits and all kinds of hazards.

- ✓ **Cutting-edge production processes for guaranteed quality**

- ✓ **10-year warranty:**
- "If you have any trouble, we're always happy to help."

- ✓ **Delivery free to door:**
- No hidden costs
 - Transparency and planning security for your purchase

1 Practical safety lock for locking a drum in the highest position

2 Quick lifting of the drum by means of mechanical lever arm

3 Rigid, torsion-resistant steel frame with blue powder coating, Load capacity: 250 kg

4 Simple loading of drum dollies, base heating plates and Euro pallets

5 Suitable for 60 to 205 litre steel and 120 to 220 litre plastic drums using a drum belt



Drum dolly type DT 1 - DT 5.

- Practical transport of standing 60/205/220 litre drums made of steel or plastic
- Available with additional accessories - suitable for many applications

- For 60 litre steel drums
- Includes towbar for easy, ergonomic transport
- With 4 sturdy hooks keep the drum in position



Steel drum dolly DT 1 / 60 for 60 litre drums, incl Drawbar

Order no. 171-741-JB

With oil-tight welded, closed spill tray

- Edge height 80 mm
- Powder-coated in blue (RAL 5010)



3

- For 205 litre steel drums and 220 litre plastic drums



Drum dolly DT 1 / 200, in steel for 205/220 litre drums

Order no. 148-431-JB

Stainless steel drum dollies

- For easy transport of 205 litre drums and stainless steel drums
- Especially suitable for the food and pharmaceutical industries
- Can be cleaned easily and quickly



5

- Tipping drum dollies in steel
- For 205/220 litre drums
- Mechanical device with foot pedal for easy tilting of the drum, useful for e.g. Emptying the drum using a pump
- Steel construction with long lasting powder coating in RAL 5010 (blue)



Order no. 189-634-JB

The sturdy drum dolly for especially heavy steel drums

- Load capacity up to 500 kg
- Sturdy steel construction, powder coated in blue (RAL 5010)



6

	1	2	3	4	5	6
Model	DT1 / 60	DT 1 / 200	DT 2	DT 3	DT 4	DT 5
Design	With handle	Standard	With oil-tight spill pallet	With tilting mechanism	Made of stainless steel	Especially for heavy drums
Overall load capacity [kg]	100	350	300	350	350	500
Ø internal [mm]	400	610	610	610	610	610
Height [mm]	135	125	185	145	165	165
Number of rollers	4	4	4	4	4	8
Ø roll [mm]	60	75	75	75	80	100
Order number	171-741-JB	148-431-JB	189-637-JB	189-634-JB	189-635-JB	189-636-JB



Drum dollies type DT6 for drum overpacks

- For the safe transport of 205 litre steel drums, salvage drums and drum overpacks
- Adjustable from Ø 680 to 840 mm
- In galvanised steel
- Easy to move on 4 swivel castors

Also available in an electrically conductive version (when used in accordance with the intended use, suitable for potentially explosive areas)



Model	DT 6	
	Non-electrically conductive	Electrically conductive
Design		
Overall load capacity [kg]	450	450
Ø internal [mm]	840	840
Height [mm]	123	123
Order number	115-199-JB	127-147-JB

Drum trolley type FKR-S2

- With long lasting powder-coating in blue (RAL 5010)
- Easy drum pick-up with strap and safety hooks
- Two support castors increase safety
- The drum trolley enables the easy loading of 205 litre drums onto spill pallets (max. Spill pallet height 260 mm)
- Solid rubber wheels or pneumatic tyres. Wheel Ø: 350 mm



Drum trolley FKR-S2, powder coated in RAL 5010, with 2 stabilising, rubber wheels

Order no. 164-364-JB

Drum trolley type FKH

- Drum trolley with solid rubber tyres, for the safe transport and dispensing from 205 litre steel and plastic lidded drums
- For tipping and easy transport
- Easy, safe drum pick-up with safety hooks
- Can also be used as dispensing station
- Large solid rubber wheels, ideal for use on uneven floors



Drum trolley FKH with folding feet for stability



Also suitable as dispensing station

Order no. 164-355-JB

Model	Standard version		Conductive version	
	Fkr-s2	Fkh	Fkr-s2	Fkh
Tyres	Solid rubber	Air	Solid rubber	Solid rubber EL
Overall load capacity [kg]	300			
External dimensions W x D x H [mm]	730 x 545 x 1600		730 x 520 x 1600	730 x 570 x 1590 650 x 600 x 1415
Order number powder coated	164-364-JB	164-362-JB	164-355-JB	180-863-JB 180-861-JB



Drum trolley FKZ for steel and plastic drums

- Solid rubber wheels or pneumatic tyres. Wheel Ø: 350 mm
- For the transport and filling of 60 to 220 litre steel and plastic drums
- With foot plate and belt for secure transportation and safe dispensing



The folding foot prevents the drum trolley tipping over by accident



Drum trolley FKZ, powder coated in RAL 5010, pneumatic wheels

Order no. 164-370-JB

Drum tipper trolley BK-60

- Suitable for 30 and 60 litre containers
- Guarantees safe transport (additional safety chains are optionally available)
- Wheel Ø: 200 mm



Sump pallet type PolySafe PSW 6.2, For directly placing containers into

Order no. 107-262-JB

With spill pallet (see accessories) suitable as dispensing station



ORDER AT THE SAME TIME

Safety chain for 33 kg cylinder

- For transport safety of 33 kg gas cylinders

Order no. 133-938-JB

Hot dip galvanised design, solid rubber tyres, (without safety chain) (pneumatic tyres see table)

Order no. 115-243-JB

Model	Standard version			Conductive version	
	Fkz	Bk-60		Fkz	Bk-60
Tyres	Solid rubber		Air	Solid rubber EL	
Overall load capacity [kg]	300	120		300	120
External dimensions W x D x H [mm]	730 x 565 x 1580	470 x 530 x 1160		730 x 565 x 1580	470 x 530 x 1160
Order number powder coated	164-371-JB	164-368-JB	–	164-370-JB	181-268-JB
Order number Hot dip galvanised	–	115-243-JB	115-246-JB	–	181-315-JB

Drum transport and lifting trolley FTH 1

- For effortless placement of 50 to 205 litre steel bung hole drums on spill pallets
- Functions as both a drum trolley and a drum lifter
- Sturdy frame with stand, handles, wheels
- With height adjustable safety gripper to secure the drum to the frame
- Additional restraint system assists with locking onto the spill pallet during the gas spring assisted lifting process
- Suitable for use with a maximum height of 365mm
- 2 large rubber tyres (with ball bearings) Ø250mm



2 additional hooks anchor the transport lifter to the spill pallet to ensure the drum is set down safely.



Drum transport and lifting trolley FTH 1 for steel drums, load capacity 200 kg

Order no. 128-406-JB

Drum lifting truck for 205 litre steel drums

- For straightforward lifting, placing and transporting of a 200 litre steel drum on level ground
- Load capacity: 350 kg
- Simple single lever control for all functions
- The clamp opens when lowered and picks up the drum
- Clamp closes around the drum automatically when lifting
- Wheels manufactured from nylon
- Powder-coated in blue (RAL 5010)

Combine the comfort of a pallet truck with the functionality of a drum transport and lifting trolley



Drum lifting truck for 205 litre steel drums, load capacity 350 kg

Order no. 158-052-JB



Drum lifting attachment FGH

- For vertically lifting and transporting 110 / 220 litre plastic I-ring drums and 60 / 205 litre steel ribbed drums
- Sturdy chain construction with special grip hooks for picking up the drum
- Load capacity: 300 kg
- Weight: 4 kg

Order no. 115-187-JB



2

HANDLING HAZARDOUS MATERIALS

Drum gripper P 360

- For vertical lifting and transporting of 205 litre steel drums and 220 litre plastic I-ring drums
- With long lasting powder-coating in blue (RAL 5010)
- Height: 350 mm
- Load capacity: 350 kg
- Weight: 5 kg

Order no. 164-641-JB



Clamping drum gripper P 400

- For vertically lifting and transporting 120 litre plastic lidded drums
- Easy to fit onto the drum as the clamp grips the drum automatically
- The clamp releases by pushing the handle
- Zinc-plated
- For drum diameter: 395 mm
- Load capacity: 360 kg
- Height: 370 mm
- Weight: 7 kg

Clamping drum gripper model P 400, hot dip galvanised

Order no. 157-584-JB



ORDER AT THE SAME TIME

Forklift truck hooks



Fork lift truck hooks DZ for lifting drums using two fork lift truck hooks, weight: 29 kg, Order no. 115-190-JB



Fork lift truck hook EZ for lifting drums using one fork lift truck hook, weight: 11 kg, Order no. 115-189-JB

Lifting chain

- In accordance with EN 818-4, goods classification 8 with connecting clip and safety hook
- Length: 1000 mm, load capacity: 1120 kg



Order no. 137-691-JB

TOP PRODUCT



Drum tong FZ 600

- For vertically lifting and transporting 205 litre ribbed steel or clamping Ring drums
- Also suitable for operating amongst drums stored in close proximity to each other or to fill safety or recovery drums
- With long lasting powder-coating in blue (RAL 5010)
- Load capacity: 350 kg
- Weight: 10 kg

Order no. 115-256-JB



Drum lifting chain with belt

Ideal for transporting opened or sealed metal drums with rims around the top. The belt is fastened under the rim at the top of the drum and is secured firmly in place using the fastener. The width of the belt can be altered using the screws.

- Drum diameter: 560 - 610 mm
- Load capacity: 300 kg
- Weight: 10 kg

Order no. 115-197-JB



Drum tong fz-s

For lifting 205 litre ribbed steel drums vertically. Also suitable for lifting open drums as the drum remains in a vertical position. Powder coated in blue (RAL 5010)

- Ideal for closely packed drums
- Load capacity: 350 kg
- Weight: 8 kg

The drum is only gripped on one side, so the drum tongs fz-s can also be used without any problems when several drums are standing close together

Order no. 115-266-JB





Drum lifter FGK

A multi-talented and versatile winner!

- Ideal for putting a horizontal drum in an upright position
- For lifting and transporting horizontal or standing 60 and 205 litre steel ribbed drums
- Sturdy chain construction with special grip hooks for picking up the drum
- Also suitable for closely packed drums or for stocking drum overpacks and recovery drums
- Load capacity: 500 kg
- Weight: 2.2 kg

BESTSELLERS

Putting a horizontal drum up without effort

Drum lifting clamp model FGK - ideal for lifting standing or horizontal drums.

Order no. 164-398-JB



2

HANDLING HAZARDOUS MATERIALS

Drum tongs FZ 500-h, powder coated

- For horizontally lifting and transporting 205 litre ribbed steel or clamping Ring drums
- With a retaining device
- Load capacity: 350 kg
- Weight: 8 kg

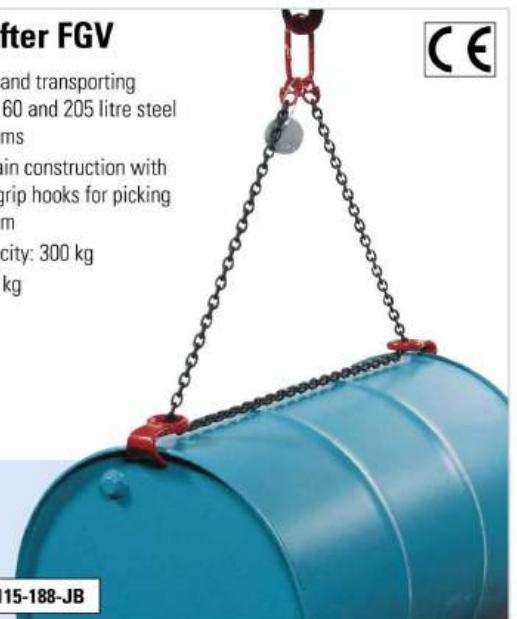


Order no. 164-399-JB



Drum lifter FGV

- For lifting and transporting horizontal 60 and 205 litre steel ribbed drums
- Sturdy chain construction with 2 special grip hooks for picking up the drum
- Load capacity: 300 kg
- Weight: 4 kg



Order no. 115-188-JB

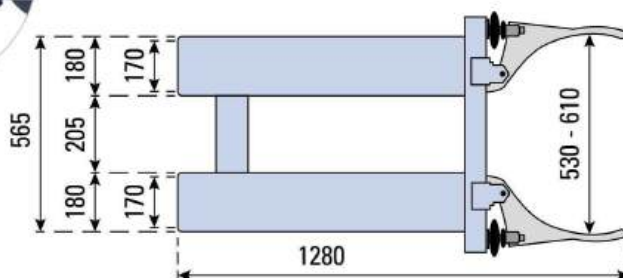




Safe transport of plastic and steel drums



Easy to adjust for any drum type with handwheel and scale



Top view: drum clamp model SK

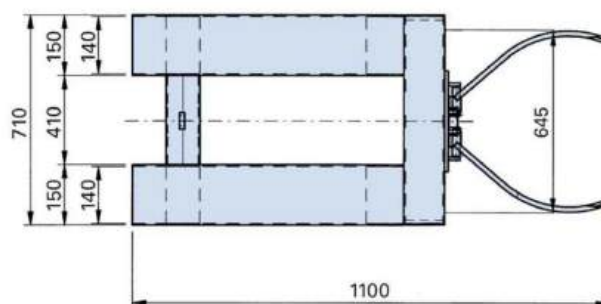
Order no. 212-869-JB

Drum clamp FK

- With automatically closing drum clamp to grasp and firmly hold the steel drum
- Suitable for use with 205 litre steel ribbed drums
- Drum clamps as forklift attachments to transport 1 drum
- Suitable for 220 litre plastic drums or 205 litre steel ribbed drums
- Includes wing nuts to secure the clamp to the forklift
- With long lasting powder-coating in blue (RAL 5010)



Order no. 164-394-JB



Top view: drum clamp FK

Model	Fk	SK
Suitable for	205 litre steel ribbed drum / steel lidded drum	205 litre steel ribbed drum / steel lidded drum and 220 litre plastic lidded drum / plastic L Ring drum
Overall load capacity [kg]	350	300
External dimensions W x D x H [mm]	710 x 1100 x 160	675 x 1280 x 220
Forklift pocket W x H [mm]	150 x 55	170 x 70
Weight [kg]	56	47
Order number	164-394-JB	212-869-JB

Drum gripper SH

- Practical transport of up to 2 x 205 litre steel drums
- Secure grip even on uneven surfaces
- One-person operation - no need for an additional person when approaching and picking up the drum
- Secure attachment of steel drums and clamping Ring drums
- Height adjustable
- Sturdy welded design in steel
- Forklift attachment module with long lasting powder-coating in blue (RAL 5010)
- Quick and easy to fit to the forklift forks
- Automatic grip when the drum is lifted
- Automatic clamp release when the drum is lowered



By driving up to the top rim of the drum and lifting the drum, the gripper will automatically grip the rim of the drum. The gripper anchors itself on the edge of the drum during the lifting process. When placing the drum on the ground again, the locking device on the gripper releases automatically.

Tested spill pallets with approval for the storage of hazardous substances

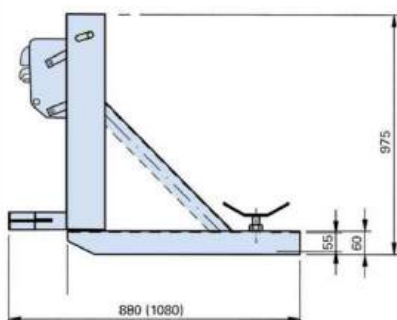
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12



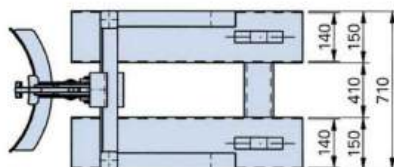
Drum gripper model SH 1 for 1 x 205 litre drum, load capacity: 350 kg



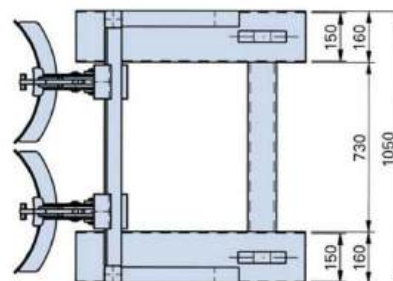
Drum gripper model SH 2 for 2 x 205 litre drums, load capacity: 2x350 kg



Side view: drum gripper SH 1 and SH 2

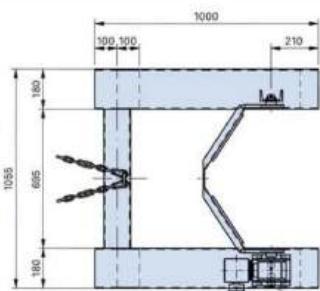


Top view: drum gripper SH 1



Top view: drum gripper SH 2

Model	SH 1	SH 2
Overall load capacity [kg]	350	700
Suitable for	1 x 205 litre steel ribbed drum / steel lidded drum	2 x 205 litre steel ribbed drums / steel lidded drums
External dimensions W x D x H [mm]	710 x 890 x 975	1050 x 1080 x 975
Forklift pocket W x H [mm]	140 x 55	150 x 55
Weight [kg]	70	110
Order number	115-223-JB	115-225-JB



Top view: drum turner SV

Drum turner SV

- Suitable for drums with \varnothing of 380 to 600 mm
- Also available as ex-proof versions complying with ATEX
- Ideal for 60 to 220 litre plastic I-ring and covered drums and 60 and 200 litre steel ribbed and clamping Ring drums
- Self-locking worm gear with an easy to operate hand wheel
- Pivoted prism jaws with securing belt at the front
- Chain to secure the tilting attachment to the fork lift truck
- Rotation range: 180°



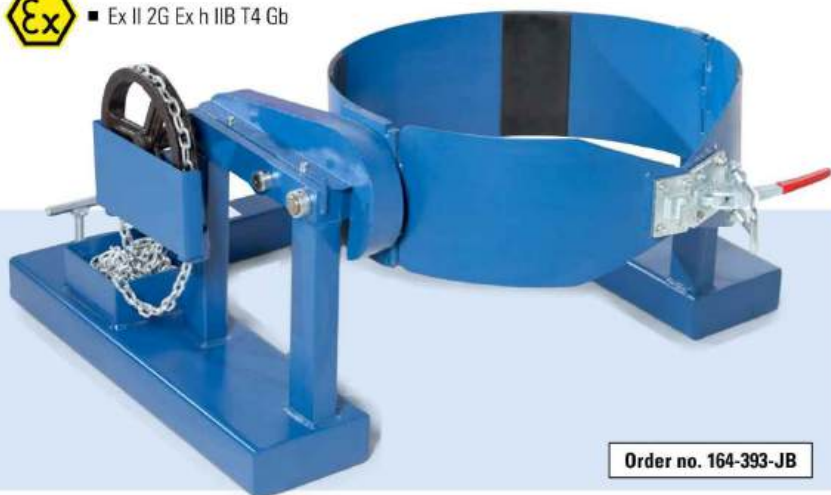
EX version see table



■ Ex II 2G Ex h IIB T4 Gb



■ Ex II 2G Ex h IIB T4 Gb



Order no. 164-393-JB

Drum turner SVK

- The chain ensures controlled emptying of the drum at the desired height and is easy to operate from the driver's seat
- The tilting attachment has bolts to secure it to the fork lift truck
- Sturdy welded design in steel
- With long lasting powder-coating in blue (RAL 5010)
- Rotation range: > 360°



Driver operates the chain from the seat of the forklift truck

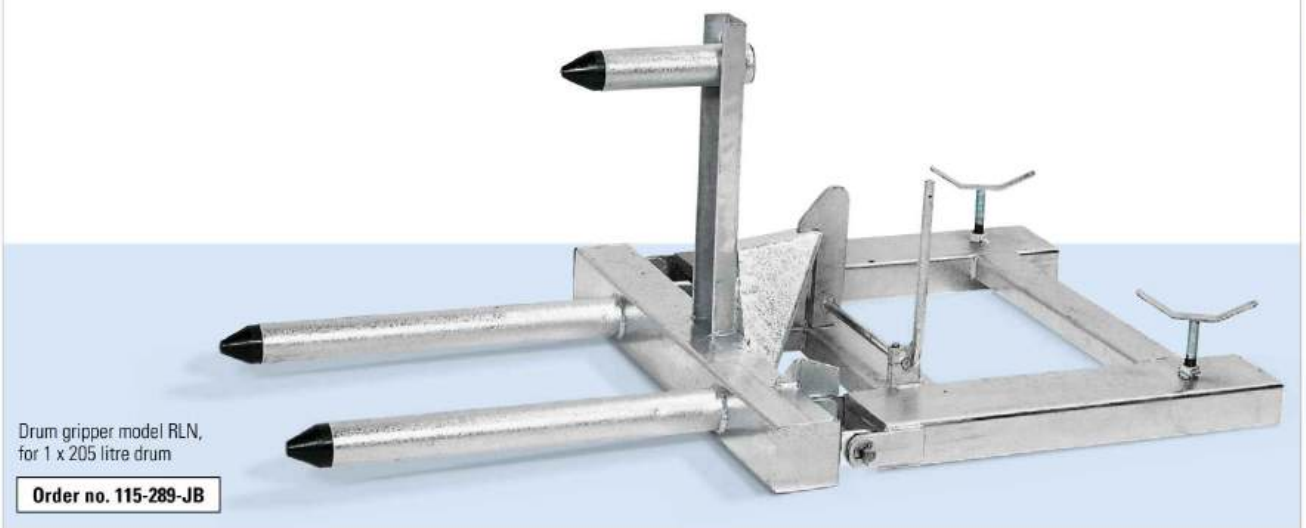
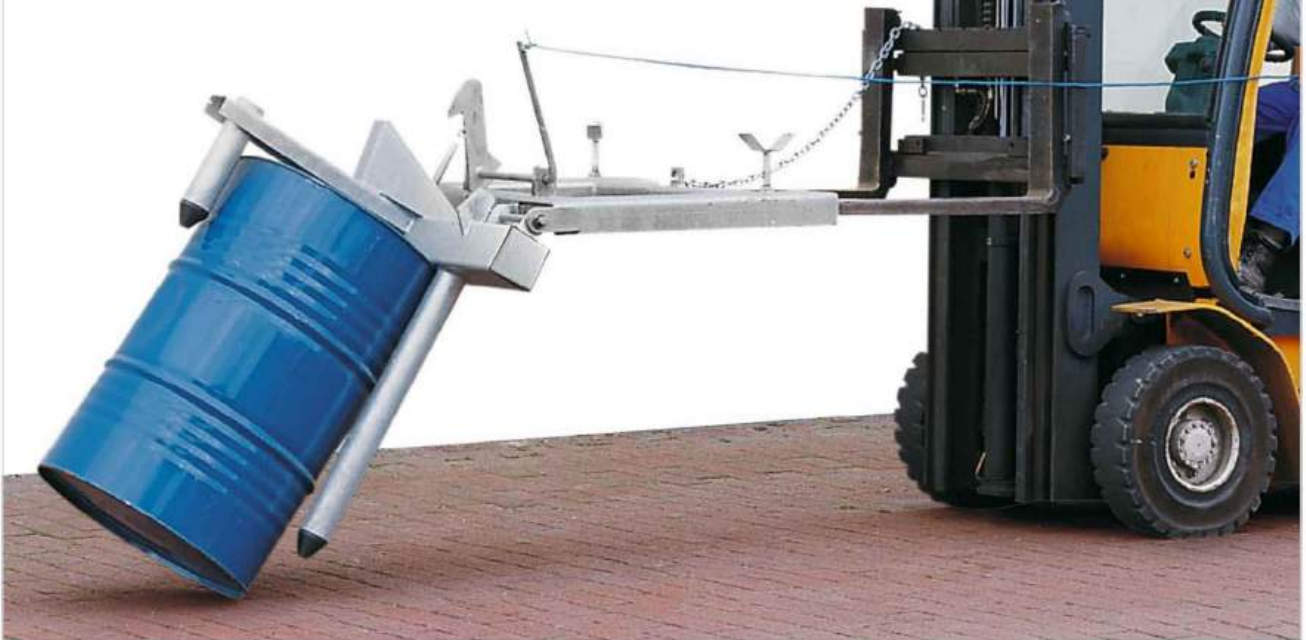
The drum tilting attachment is an accessory for fork lift trucks, and is suitable for lifting, turning, controlled emptying of drums and transporting drums. Easy to use one-man operation.

Model	Sv	Svk
Use	60 to 220 litre plastic and 60/205 litre steel drums	205 litre steel drum
Overall load capacity [kg]	300	300
Weight [kg]	90	70
Forklift pocket W x H [mm]	170 x 70	180 x 65
Distance between fork pockets [mm]	695	620
Order number Standard version	115-286-JB	164-393-JB
Order number	147-724-JB	-
Explosion-proof version	-	-



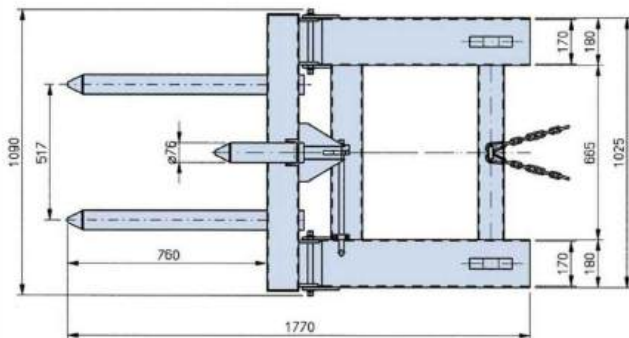
Drum gripper RLN

- For standing and horizontal 205 litre steel drums
- Tested and suitable for use in EX zones: IIB T4 Zone 1
- Compactly designed drum reception
- Automatic locking
- Drums can be placed next to each other on a shelf
- The standing drum is gripped and when the forklift is lowered the drum moves to a horizontal position
- The drum can then be stored without any additional manual effort



Drum gripper model RLN,
for 1 x 205 litre drum

Order no. 115-289-JB



Top view: drum gripper RLN

Model	RLN
Use	205 litre steel drum, standing or horizontal
Overall load capacity [kg]	300
Weight [kg]	75
Forklift pocket W x H [mm]	170 x 70
Distance between fork pockets [mm]	665
Order number	115-289-JB

Servo Eco - The simple drum lifter for pallets, base heating plates and drum dollies

- Suitable for 60 to 205 litre steel and 120 to 220 litre plastic drums using a drum belt
- Quick lifting of the drum by means of mechanical lever arm
- Simple loading of drum dollies, base heating plates and Euro pallets
- Practical safety lock for locking a drum in the highest position
- Rigid, torsion-resistant steel frame with blue powder coating
- Load capacity: 250 kg



For quick loading of drum dollies, drum base heaters and pallets

Suitable for	60 to 205 litre steel drums, 120 to 220 litre plastic drums
Lift height max (mm)*	200
Overall load capacity (kg)	250
External dimensions W x D x H (mm)	909 x 830 x 1782
Clear chassis width (mm)	830
Order number	268-895-JB

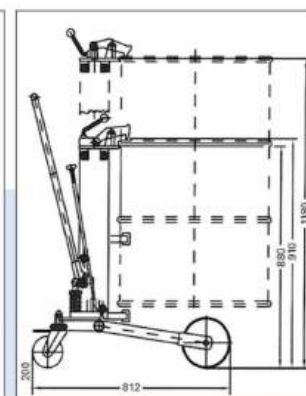
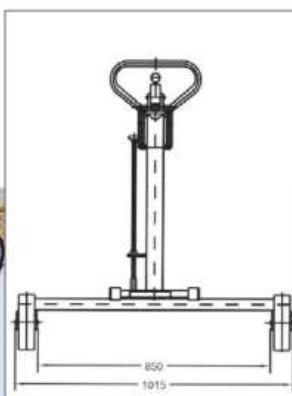
*Measured at lower edge of 205 l steel drum (max. lifting height may vary for other drum types)

Servo Eco - The efficient drum lifter for Euro pallets

Suitable for 205 litre steel ribbed drums

- Simple, easy loading e.g. of Euro pallets and DENIOS spill pallets
- The wheel base of the drum lifter is wide enough to push the lifter either side of Euro pallets to ensure that drums at the back of the pallet can be reached easily
- Special locking mechanism fixes onto the top of the drum to hold the drum in place
- Drum can be lifted easily using a handle
- Load capacity: 250 kg

Order no. 227-162-JB





Servo Eco with v-shaped chassis

Even Euro pallets can be reached over so that a drum in the centre can easily be accessed

- Simple, safe loading over the corner e.g. of Euro pallets and DENIOS spill pallets
- When the foot hydraulics are activated the drum is automatically grabbed and held safely
- Versatile and space saving - 2 swivel castors (with brake) ensure precise parking for storage
- Easy drum lifting using the foot pump, lowering with separate foot pedal
- Available in 2 versions:
 - for 205 l steel drums
 - for 205 l steel drums and 205 l plastic drums

Order no. 227-161-JB



Handwheel with scale for exact fitting of the clamp on any type of drum

Order no. 201-867-JB

Suitable for	205 L steel drums	205 litre steel drums, 220 litre plastic drums
Lift height max [mm]*	485	500
Overall load capacity [kg]	350	300
External dimensions W x D x H [mm]	1120 x 900 x 1260	1120 x 900 x 1260
Order number	227-161-JB	201-867-JB

*Measured at lower edge of 205 l steel drum (max. lifting height may vary for other drum types)

Euro pallets can be reached over so that a drum in the centre can easily be accessed

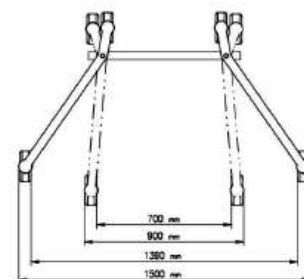
Drum lifter Servo with adjustable chassis

- Easy to manoeuvre in confined spaces
- Adjustable chassis (700 and 1390 mm clear width)
- Flexible use, ideal for loading denios spill pallets and containers or for loading shelving
- Suitable for 205 litre steel ribbed drums
- Special, self-closing gripping mechanism
- Compact size will fit through most standard industrial doors
- 4 large swivel castors (2 with brakes) enable easy manoeuvring and safe transport even over longer distances
- With long lasting powder-coating in blue (RAL 5010)
- Load capacity: 350 kg



Easy approach e.g. to a spill pallet, even in the smallest of spaces

Chassis dimensions retracted / folded out



Order no. 227-164-JB