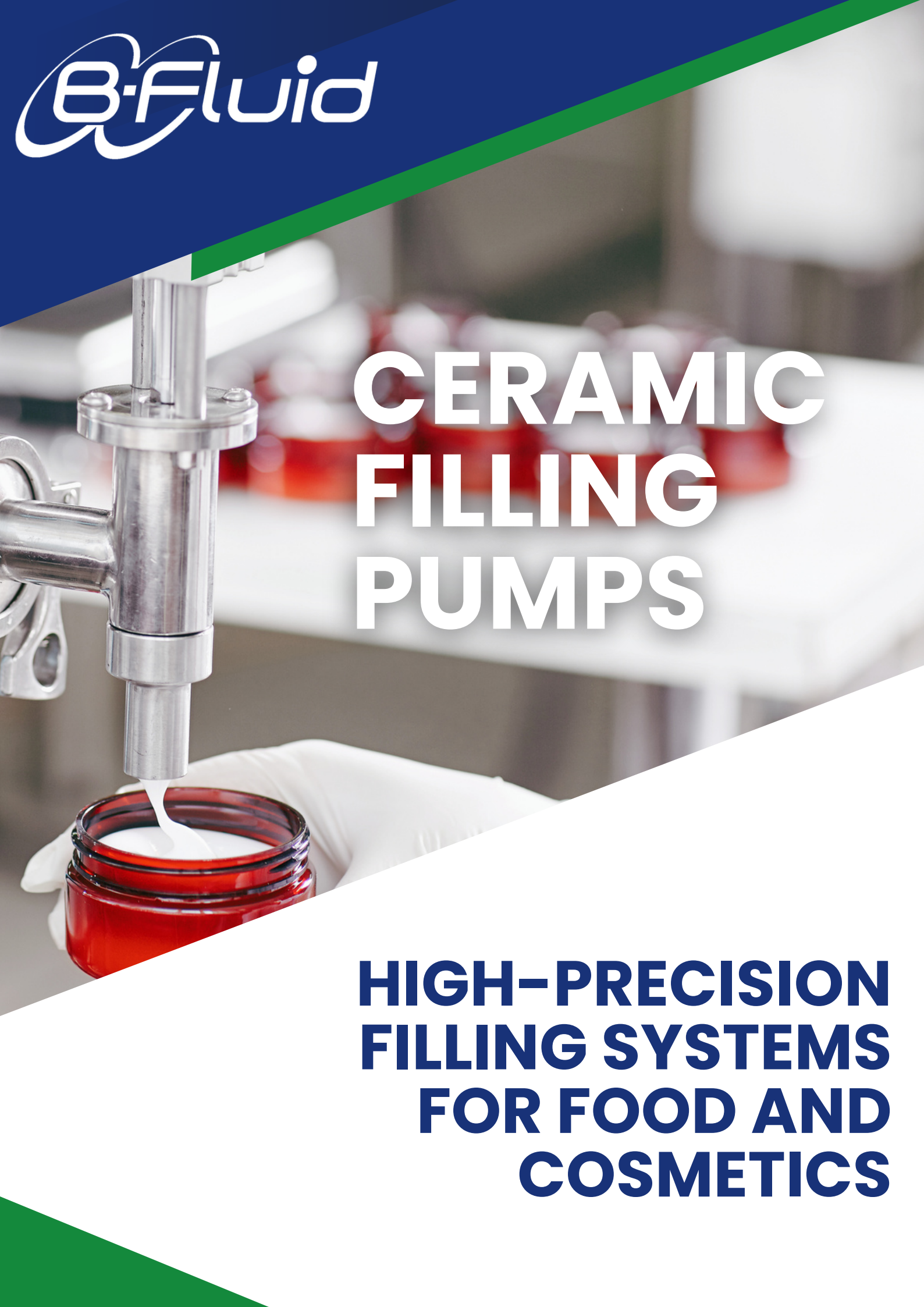


The background of the entire page is a photograph of a ceramic filling pump in operation. A stainless steel pump head is dispensing a white liquid into a small red jar held by a gloved hand. In the blurred background, several other red jars are visible on a white surface.

CERAMIC FILLING PUMPS

**HIGH-PRECISION
FILLING SYSTEMS
FOR FOOD AND
COSMETICS**

The X2 Series is a range of precision dosing pumps with ceramic technology, designed to ensure accurate and repeatable dispensing of high-purity liquids. It uses the rotary motion of a piston to dose homogeneous fluids with low to medium viscosity (from 1 to 1000 cPs), achieving superior dosing accuracy with an error margin of less than $\pm 0.5\%$. The mechanical adjustment system for the joint angle between the motor and pump allows precise control of the desired dispensing volume.

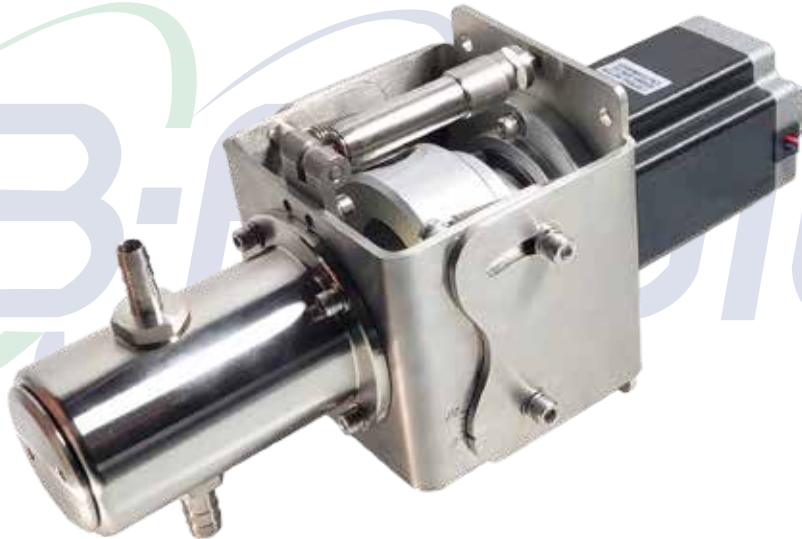
Each X2 Series pump is equipped with a dosing confirmation sensor, ensuring reliable process performance.

Applications

Designed for easy integration into packaging machines, the X2 Series is ideal for both new installations and retrofit operations. It is used in a wide range of cosmetic and food applications, including:

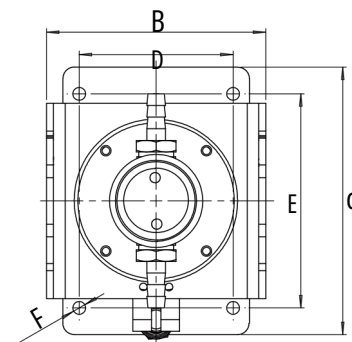
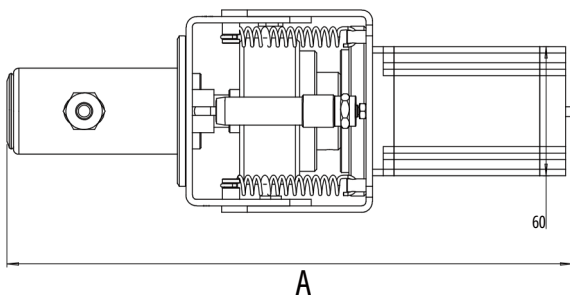
Cosmetics: Dosing of essential oils, perfumes, serums, lotions, emulsions, nail polishes, fragrances, and fluid bases for makeup.

Food: Filling of liquid flavorings, natural extracts, additives, condiments, syrups, food colorings, and liquid supplements.



Data:

Model	Dosing range	Precision	Speed	Motor	Power	Sensor	Pump dimensions (mm)						
			RPM				A	B	C	D	E	F	
X2-03	4-80 µL	±2 µL	0-200	NEMA 42	AC 220 V 50/60 Hz	5-24 V PNP	132,86	53,4	75	28	65	4-φ4,3	
X2-06	10-140 µL						132,86	53,4	75	28	65	4-φ4,3	
X2-09	20-240 µL						132,86	53,4	75	28	65	4-φ4,3	
X2-12	50-700 µL	±5 µL		NEMA 57			201,12	75	90	46	72	4-φ4,5	
X2-15	0,2-1,5 ml		201,12				75	90	46	72	4-φ4,5		
X2-18	0,2-2,9 ml		±0,5 %				0-120	NEMA 57	263,5	94	115	66	92
X2-21	0,6-6 ml	263,5							94	115	66	92	4-φ5,5
X2-24	1-12 ml	0-80		NEMA 86					287,6	116	132	86	118
X2-27	2-25 ml		287,6				116	132	86	118	4-φ5,5		



The X2-D Series is a range of precision dosing pumps with ceramic technology, designed to ensure accurate and repeatable dispensing of high-purity liquids. It uses the rotary motion of a piston to dose homogeneous fluids with low to medium viscosity (from 1 to 1000 cPs), achieving superior dosing accuracy with an error margin of less than $\pm 0.5\%$. The mechanical adjustment system for the joint angle between the motor and pump allows precise control of the desired dispensing volume.

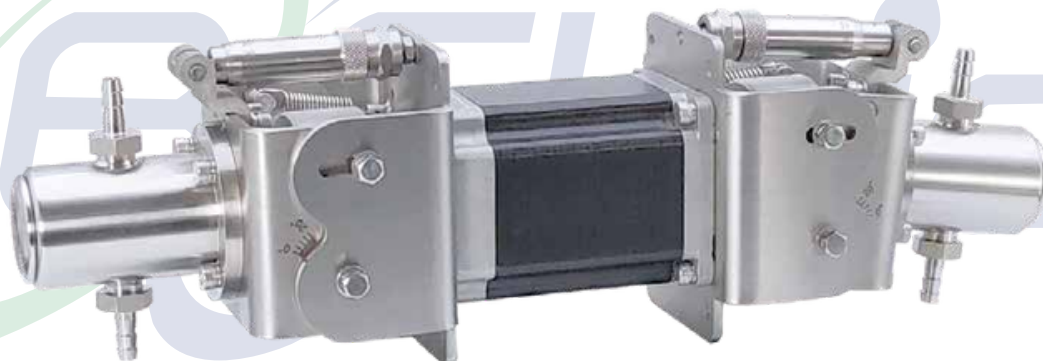
The dual configuration enables independent adjustment of the dosing volume for each pump. Each X2-D Series pump is equipped with a dosing confirmation sensor, ensuring process reliability.

Applications

Designed for easy integration into packaging machines, the X2-D Series is ideal for both new installations and retrofit operations. It is used in a wide range of cosmetic and food applications, including:

Cosmetics: Dosing of essential oils, perfumes, serums, lotions, emulsions, nail polishes, fragrances, and fluid bases for makeup.

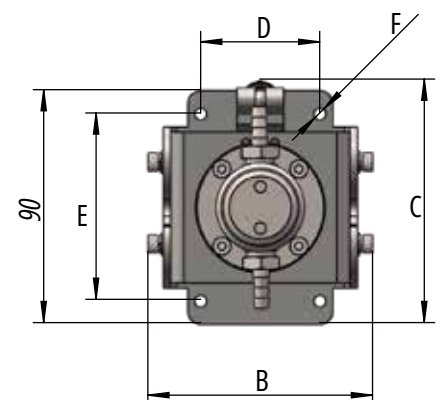
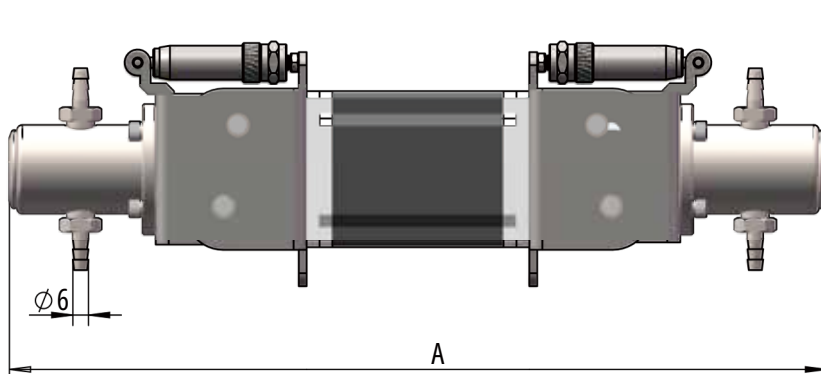
Food: Filling of liquid flavorings, natural extracts, additives, condiments, syrups, food colorings, and liquid supplements.



X2-D12

Data:

Model	Dosing Range	Precision	Speed	Motor	Power	Sensor	Pump dimensions (mm)					
			RPM				A	B	C	D	E	F
X2-D03	4-80 µL	±2 µL	0-200	NEMA 42	AC 220 V 50/60 Hz	5-24 V PNP	218,72	53,4	75	28	65	4-φ4,3
X2-D06	10-140 µL						218,72	53,4	75	28	65	4-φ4,3
X2-D09	20-240 µL						±5 µL	218,72	53,4	75	28	65
X2-D12	50-700 µL	315,84		75				90	46	72	4-φ4,5	
X2-D15	0,2-1,5 ml	±0,5 %	0-120	NEMA 57			315,84	75	90	46	72	4-φ4,5
X2-D18	0,2-2,9 ml						440,6	94	115	66	92	4-φ5,5
X2-D21	0,6-6 ml						440,6	94	115	66	92	4-φ5,5



X2-L-N Series – Precision Ceramic Dosing Pumps

The X2-L-N Series is a range of precision dosing pumps with ceramic technology. Each unit contains four independent dispensers, designed to ensure precise and consistent multi-channel dosing of high-purity liquids. It uses the rotary motion of a piston to dose homogeneous fluids with low to medium viscosity (from 1 to 1000 cPs), achieving superior dosing accuracy with an error margin of less than $\pm 0.5\%$. The mechanical adjustment system for the joint angle between the motor and pump allows precise control of the desired dispensing volume.

It is possible to adjust the dosing volume of each pump independently. Each X2-L-N Series pump is equipped with a dosing confirmation sensor, ensuring reliable process performance.

Applications

Designed for easy integration into packaging machines, the X2-L-N Series is ideal for both new installations and retrofit operations. It is used in a wide range of cosmetic and food applications, including:

Cosmetics: Dosing of essential oils, perfumes, serums, lotions, emulsions, nail polishes, fragrances, and fluid bases for makeup.

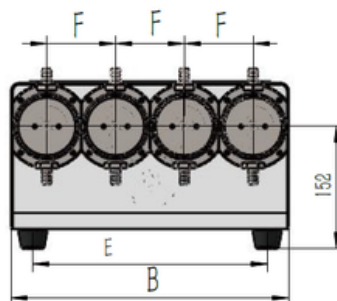
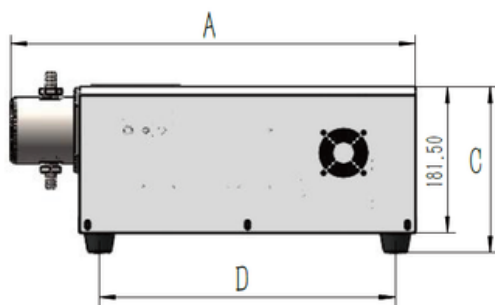
Food: Filling of liquid flavorings, natural extracts, additives, condiments, syrups, food colorings, and liquid supplements.



X2-4L-30

Data:

Model	Dosing Range	Precision	Speed	Motor	Servo-motor	Power	Sensor	Pump dimensions (mm)					
			RPM					A	B	C	D	E	F
X2-4-L03	4-80 µL	±2 µL	35-40	NEMA 42	400 W quadro 60	AC 220 V 50/60 Hz	5-24 V PNP	460	347	206	370	293	86
X2-4-L06	10-140 µL							460	347	206	370	293	86
X2-4-L09	20-240 µL							460	347	206	370	293	86
X2-4-L12	50-700 µL	±5 µL		NEMA 60				480	347	206	370	293	86
X2-4-L15	0,2-1,5 ml							480	347	206	370	293	86
X2-4-L18	0,2-2,9 ml							506	347	206	370	293	86
X2-4-L21	0,6-6 ml	506						347	206	370	293	86	
X2-4-L24	1-12 ml	±0,5 %		NEMA 86				506	347	206	370	293	86
X2-4-L27	2-25 ml							506	347	206	370	293	86
X2-4-L30	5-40 ml							506	347	206	370	293	86



The Q-S Series is a high-precision piston dosing pump, designed for the controlled injection of homogeneous, low-viscosity liquids. Thanks to its advanced design, it ensures accurate and repeatable dosing, with precision exceeding $\pm 0.8\%$.

All fluid-contact parts are made of ceramic and 316L stainless steel, materials known for their excellent corrosion resistance and compatibility with sensitive products. Quick-release connections simplify the disassembly and cleaning of all fluid-contact components, making the pump ideal for applications requiring high hygiene standards, such as those in the food and cosmetic industries.

Applications

The Q-S Series integrates seamlessly into packaging machines, suitable for both new installations and retrofit projects. It is particularly well-suited for dosing low-viscosity liquids (1–1000 cPs), including:

Cosmetics: Essential oils, perfumes, liquid essences, serums, tonics, and fluid lotions.

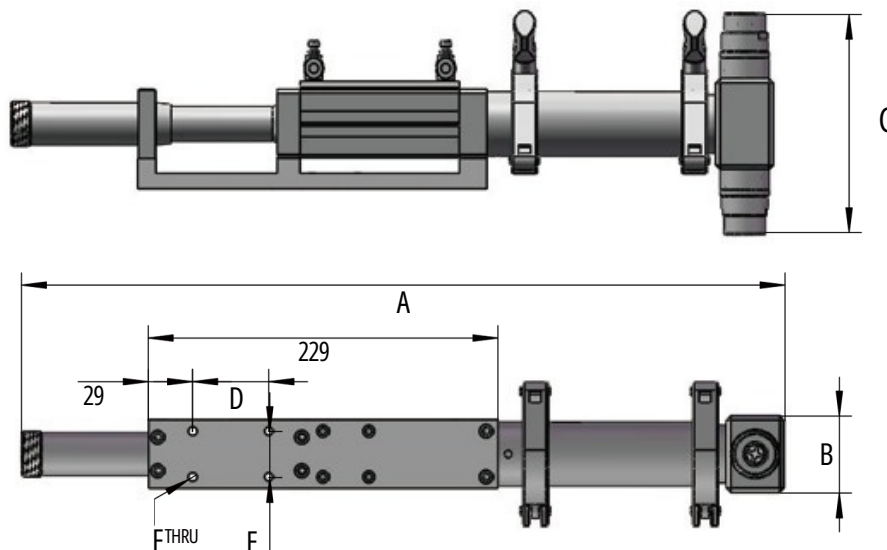
Food: Natural flavorings, liquid extracts, light syrups, condiments, and liquid supplements.



Q-12S

Data:

Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed	Pump Sizes (mm)					
			ml		Cycles/min	A	B	C	D	E	F
Q-12S	15	70	1-12	$\pm 0.8-1\%$	40-60	500	50.5	141	50	30	$\varnothing 5.5$
Q-25S	23		2-25			500	50.5	141	50	30	$\varnothing 5.5$
Q-50S	32		5-50			500	50.5	141	50	30	$\varnothing 5.5$
Q-100S	44		10-100			527	50.5	195	90	35	M6
Q-200S	50	110	20-200			747	50.5	195	350	95	$\varnothing 9$
Q-300S	64	100	30-300			705	75	195	350	95	$\varnothing 9$



The QD-S Series is a high-precision ceramic piston dosing pump, designed for controlled injection of homogeneous, low-viscosity liquids. Its advanced design ensures accurate and repeatable dosing, with precision exceeding $\pm 0.8\%$.

All fluid-contact parts are made of ceramic and 316L stainless steel, materials renowned for their excellent corrosion resistance and compatibility with sensitive products. Quick-release connections simplify disassembly, cleaning, and sanitization, making the pump ideal for applications that require high hygiene standards, such as in the food and cosmetic industries.

Applications

The QD-S Series integrates seamlessly into packaging machines, suitable for both new installations and retrofit projects. It is particularly well-suited for dosing low-viscosity liquids (1–1000 cPs), including:

Cosmetics: Essential oils, perfumes, liquid essences, serums, tonics, and fluid lotions.

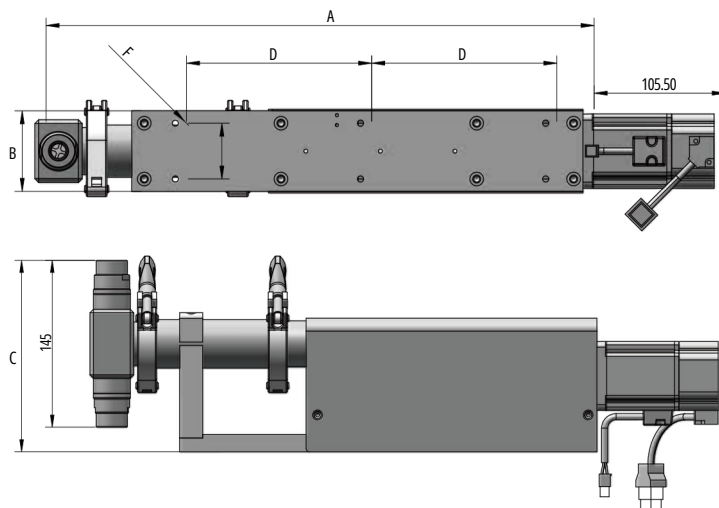
Food: Natural flavorings, liquid extracts, light syrups, condiments, and liquid supplements.



QD-100S

Data

Model	Plunge Diameter (mm)	Stroke (mm)	Dose ml	Precision	Speed Cycles/min	DPump Dimensions (mm)					
						A	B	C	D	E	F
QD-12S	15	70	1-12	$\pm 0,8-1\%$	30-40	441	65	141	190	50	M6
QD-25S	23		2-25			441	65	141	190	50	M6
QD-50S	32		5-50			441	65	141	190	50	M6
QD-100S	44		10-100			469	65	195	190	45	M6
QD-200S	50	110	20-200			639	123	197,5	110	90	$\varnothing 9$
QD-300S	64	100	30-300			639	123	197,5	110	90	$\varnothing 9$



Motor Sizes:

- From QD12-S to QD50-S → 400 W
- From QD100-S to QD300-S → 750 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + controller

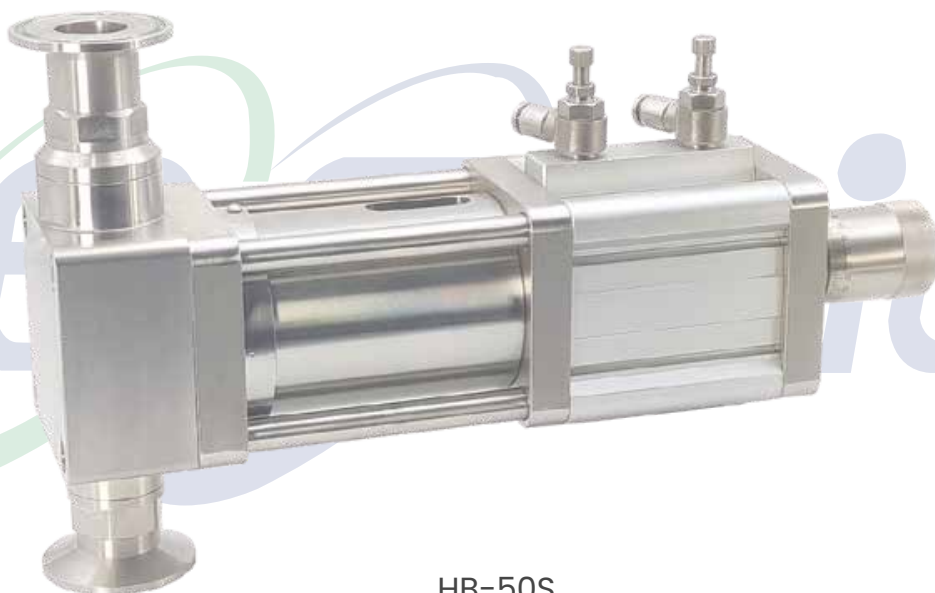
The HB-S Series pneumatic pumps feature a compact design with a high-precision piston, ideal for controlled dosing of low-viscosity liquids. Designed to ensure reliable measurements, they offer high accuracy and good repeatability, with precision exceeding $\pm 0.8\%$. Fluid-contact materials—316L stainless steel and ceramic—provide excellent chemical resistance, making the HB-S Series particularly suitable for handling delicate and corrosive substances while meeting the highest hygiene standards. The pumps are distinguished by their compact size and high operating speed.

Applications

This series is designed for integration or retrofit within packaging machine filling systems. It is ideal for dosing homogeneous, low-viscosity liquids (1–1000 cPs), including:

Cosmetics: Essential oils, fluid lotions, perfumes, light serums, and liquid essences.

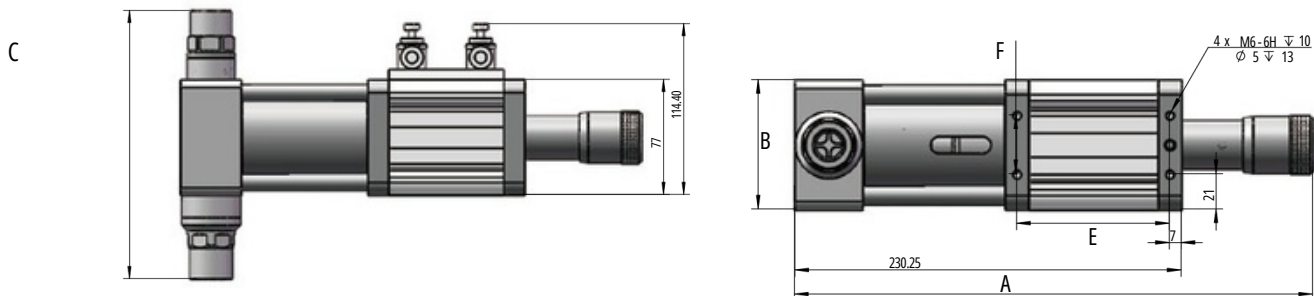
Food: Natural flavorings, syrups, liquid extracts, condiments, and food additives.



HB-50S

Data:

Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed Cycles/min	Pump Dimensions						
			ml			A	B	C	D	E	F	G
HB-10S	25	25	1–12	$\pm 0,8-1\%$	50–60	308,9	77	180	91	35	G ½	M6
HB-30S	42		2–25			308,9	77	180	91	35	G ½	M6
HB-50S	54		5–50			308,9	77	180	91	35	G ½	M6
HB-100S	54	50	10–100			433,5	77	180	116	35	G ½	M6
HB-200S	56	90	20–200			624	93	213	163	40	φ50,5	M6
HB-300S	70		30–300			624	93	213	163	40	φ50,5	M6



The HBD-S Series is a high-precision electric piston pump, designed for controlled dosing of homogeneous, low-viscosity liquids. The filling volume is electronically managed via a ball screw driven by a servomotor, with direct adjustment from the control panel, eliminating the need for manual mechanical intervention.

Thanks to its compact design and high-speed capability, the HBD-S Series is ideal for production lines that require high performance in limited spaces. It ensures high accuracy and consistent repeatability, with precision exceeding $\pm 0.8\%$.

Fluid-contact parts, made of 316L stainless steel and ceramic, provide maximum corrosion resistance and compatibility with delicate and sensitive substances, in compliance with the hygiene standards of the cosmetic and food industries.

Applications

The HBD-S pump is designed for integration into new packaging machines or retrofit projects, adapting to a variety of production configurations. It is particularly suitable for dosing fluids with viscosities ranging from 1 to 1000 cPs, including:

Cosmetics: Perfumes, essential oils, liquid essences, fluid lotions, tonics, and serums.

Food: Liquid flavorings, natural extracts, light syrups, food additives, and electrolyte solutions for liquid supplements.



HBD-50S

Data:

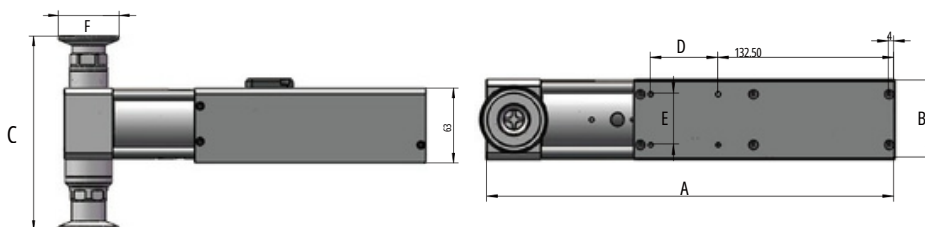
Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed Cycles/min	Pump Dimensions (mm)						
			ml			A	B	C	D	E	F	G
HBD-10S	25	25	1-12	$\pm 0,5-1\%$	30-40	346,5	77	180	110	60	G ½	φ6,8
HBD-30S	42		2-25			346,5	77	180	110	60	G ½	φ6,8
HBD-50S	54		5-50			346,5	77	180	110	60	G ½	φ6,8
HBD-100S	54	50	10-100			396,5	77	180	110	60	G ½	φ6,8
HBD-200S	56	90	20-200			505,5	96	213	213	75	φ50,5	φ6,8
HBD-300S	70		30-300			505,5	96	213	213	75	φ50,5	φ6,8

Motor Sizes:

- From HBD-10S to HBD-50S → 400 W
- From HBD-100S to HBD-300S → 750 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + driver + controller



The QD-R pump features a precision ceramic piston design, specifically engineered for quantitative dosing of medium- to high-viscosity fluids (from 1,000 to 100,000 cPs), including homogeneous creams and materials containing micro-particles in suspension.

The filling volume is electronically controlled via a ball screw driven by a servomotor, fully programmable from the control panel. This allows for fast and precise adjustment without the need for manual intervention.

The pump ensures accurate and repeatable dosing, with precision exceeding $\pm 0.8\%$. Fluid-contact parts are made of 316L stainless steel and ceramic, providing excellent corrosion resistance. Quick-release connections simplify disassembly and cleaning, complying with the highest hygiene standards in the cosmetic and food industries.

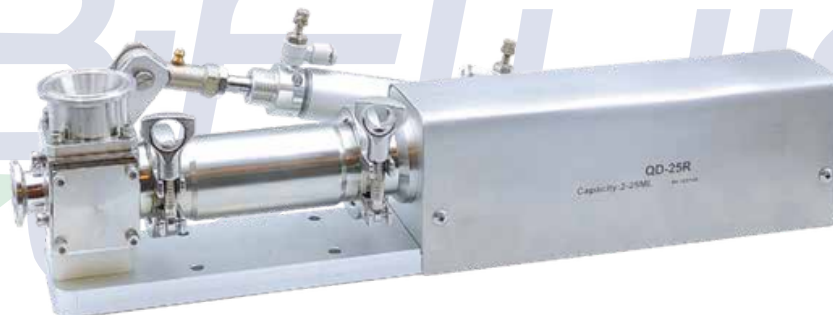
A clamp connection is included for direct attachment to the fluid supply hopper.

Applications

Ideal for integration or upgrade of filling units in automatic packaging lines, the QD-R Series is compatible with multi-station machines, multi-column systems, blister machines, and other customized solutions. It is perfect for precise dosing of viscous products such as:

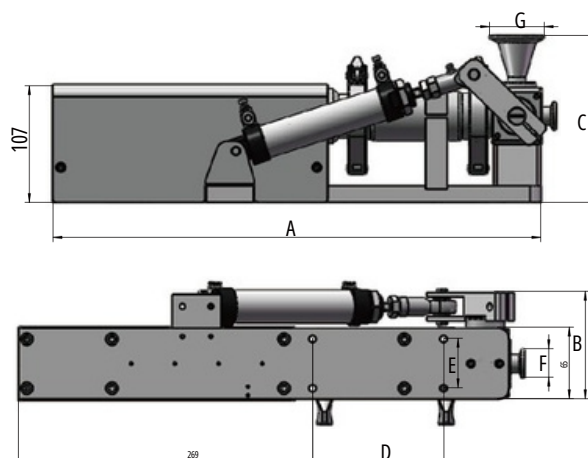
Cosmetics: Face and body creams, masks, balms, scrubs, high-density gels, nail polishes, pigment pastes.

Food: Honey, spreads, concentrated food pastes, fruit or vegetable pastes, icings, dense fillings, and purees.



QD-25R

Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed Cycles/min	Pump Dimensions (mm)							
			ml			A	B	C	D	E	F	G	H
QD-12R	15	70	1-12	$\pm 0,5-1\%$	30-40	449	97,5	153	75	45	$\varnothing 26$	$\varnothing 50,5$	$\varnothing 6,5$
QD-25R	22		2-25			449	97,5	153	75	45	$\varnothing 26$	$\varnothing 50,5$	$\varnothing 6,5$
QD-50R	32		5-50			449	97,5	153	75	45	$\varnothing 26$	$\varnothing 50,5$	$\varnothing 6,5$
QD-100R	44		10-100			511	97,5	164,2	120	45	$\varnothing 34$	$\varnothing 50,5$	$\varnothing 6,5$
QD-200R	50	110	20-200			685	160	185	130	90	$\varnothing 34$	$\varnothing 64$	$\varnothing 9$
QD-300R	70	100	30-300			499	160	185	130	90	$\varnothing 34$	$\varnothing 64$	$\varnothing 9$



Motor Sizes:

- From QD-12R to QD-50R → 400 W
- From QD-100R to QD-300R → 750 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + controller

The HB-R Series pneumatic ceramic pump is designed for quantitative dosing of medium- to high-viscosity fluids (from 1,000 to 100,000 cPs), homogeneous creams, and mixtures containing small particles. At the heart of the system is a precision ceramic piston, ensuring consistent, accurate, and repeatable dosing, with precision exceeding $\pm 0.8\%$.

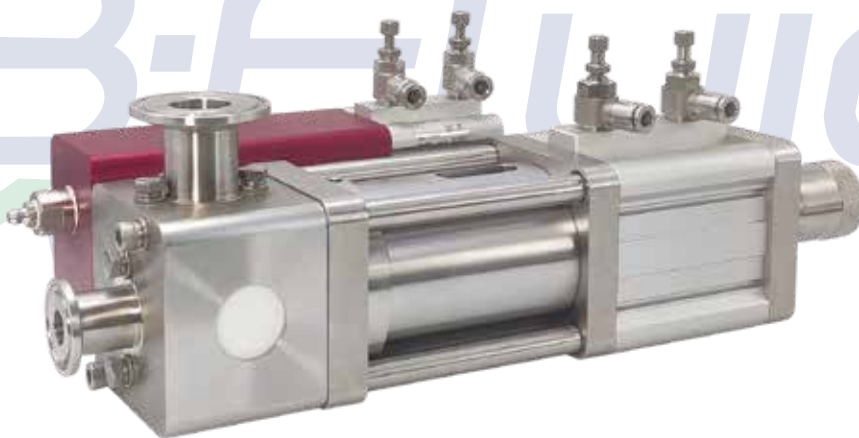
The pump body is compact and optimized for high-speed operation, making it ideal for packaging lines that require high productivity in limited spaces. Fluid-contact parts are made of ceramic and 316L stainless steel, offering excellent corrosion resistance and compliance with the hygiene standards of the food and cosmetic industries.

Applications

The HB-R Series integrates easily into new or existing packaging lines and is compatible with multi-station filling machines, multi-column systems, blister machines, and other automated filling equipment.

It is ideal for dosing viscous and structured products, such as:

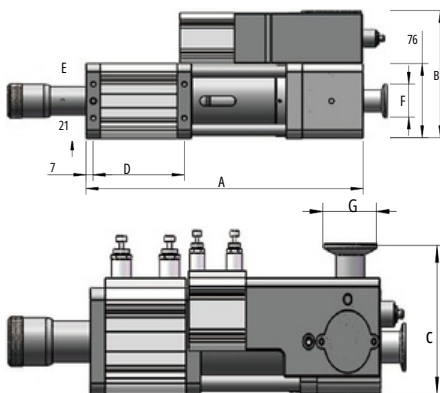
Cosmetics: Face and body creams, masks, thick gels, scrubs, balms, nail polishes, and pigment pastes.
Food: Honey, spreads, dense icings, structured fillings, purees, concentrated condiments, dense flavorings, and liquid supplements.



HB-50R

Data

Model	Plunge Diameter (mm)	Stroke (mm)	Dose ml	Precision	Speed Cycles/min	Pump Dimensions (mm)						
						A	B	C	D	E	F	G
HB-10R	25	25	1-10	$\pm 0,5-1\%$	40-60	276,5	133,5	106,6	91	35	$\varnothing 26$	$\varnothing 64$
HB-30R	42		3-30			276,5	133,5	106,6	91	35	$\varnothing 26$	$\varnothing 64$
HB-50R	54		5-50			276,5	133,5	106,6	91	35	$\varnothing 26$	$\varnothing 50,50$
HB-100R	54	50	10-100			351,5	133,5	106,6	116	35	$\varnothing 50,50$	$\varnothing 50,50$
HB-200R	56	90	20-200			454	149,5	123,2	165	40	$\varnothing 50,50$	$\varnothing 50,50$
HB-300R	70		30-300			454	149,5	123,2	165	40	$\varnothing 50,50$	$\varnothing 50,50$



The HBD-R-Micro is a precision electric piston pump, developed for controlled dosing of medium- to high-viscosity liquids (from 1,000 to 100,000 cPs), homogeneous creams, and fluids containing micro-particles. Designed for micro-dosing applications, the pump uses a ball screw driven by a servomotor, with full electronic control of the filling volume via the operator panel, eliminating the need for manual adjustments. The HBD-R-Micro Series ensures high dosing accuracy and consistent repeatability, with precision exceeding $\pm 0.8\%$. All fluid-contact surfaces are made of 316L stainless steel and ceramic, offering excellent corrosion resistance and full compatibility with dense and delicate substances.

Applications

Thanks to its compact design and capability to dose very small volumes with extreme precision, this pump is ideal for integration or upgrade of filling units in automatic packaging machines.

It is perfect for precise dosing of viscous and structured products in:

Cosmetics: Face creams, balms, dense serums, nail polishes, concentrated lotions, masks, and pigment pastes.

Food: Honey, spreads, dense flavorings, sweet or savory pastes, concentrated fillings, and electrolyte solutions for liquid supplements.



HBD-0.6R

Data:

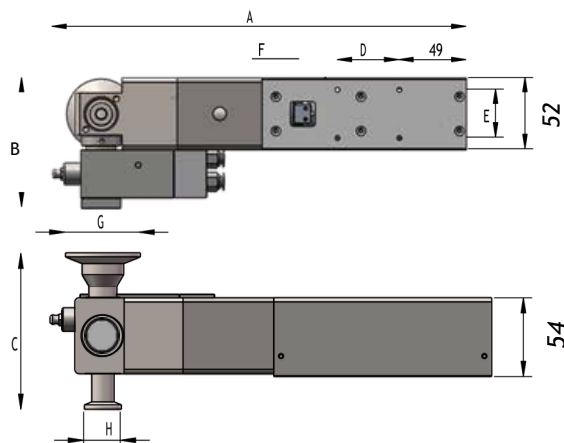
Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed	Pump Dimensions (mm)							
			ml		RPM	A	B	C	D	E	F	G	H
HBD-0,6R	8	25	0-0,63	$\pm 0,5-1\%$	30-45	302	94,5	107	45	35	4-M4	$\varnothing 50,50$	$\varnothing 25$
HBD-1R	11		0-1,2			302	94,5	107	45	35	4-M4	$\varnothing 50,50$	$\varnothing 25$
HBD-2R	16		0-2,5			302	94,5	107	45	35	4-M4	$\varnothing 50,50$	$\varnothing 25$
HBD-7R	19		0-7			302	94,5	107	45	35	4-M4	$\varnothing 50,50$	$\varnothing 25$

Motor Size:

- 400 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + controller



The HBD-R Series is a precision electric piston pump, designed for quantitative dosing of medium- to high-viscosity fluids (from 1,000 to 100,000 cP), including homogeneous creams and materials containing micro-particles in suspension. The filling volume is controlled via a ball screw driven by a servomotor, with fully automated adjustment from the control panel, eliminating the need for manual settings.

The pump ensures high accuracy and consistent repeatability, with precision exceeding $\pm 0.8\%$. All product-contact components are made of 316L stainless steel and ceramic, providing corrosion resistance and compatibility with dense, sensitive, or abrasive substances.

Applications

Ideal for integration or retrofit of filling units in automatic packaging lines, the HBD-R Series is compatible with multi-station machines, multi-column systems, blister machines, and other automated dosing equipment.

It is perfect for filling high-viscosity products in the following sectors:

Cosmetics: Body and face creams, masks, balms, nail polishes, thick gels, structured lotions, pigment pastes.

Food: Honey, spreads, dense fillings, food pastes, icings, purees.



HBD-100R

Data:

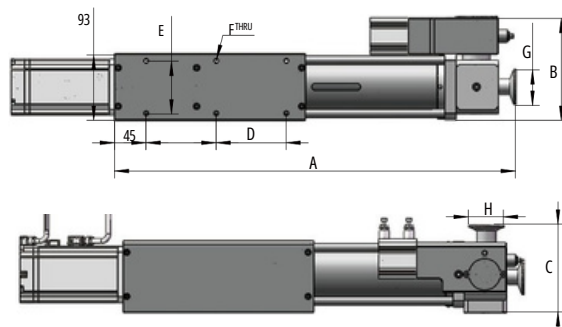
Model	Plunge Diameter (mm)	Stroke (mm)	Dose ml	Precision	Speed Cycles/min	Pump Dimensions (mm)							
						A	B	C	D	E	F	G	H
HBD-10R	25	25	1-10	$\pm 0,5-1\%$	30-45	417,4	133,5	112,2	110	60	$\varnothing 6,8$	$\varnothing 34$	$\varnothing 50,5$
HBD-30R	42		3-30			417,4	133,5	112,2	110	60	$\varnothing 6,8$	$\varnothing 34$	$\varnothing 50,5$
HBD-50R	54		5-50			417,4	133,5	112,2	110	60	$\varnothing 6,8$	$\varnothing 34$	$\varnothing 50,5$
HBD-100R	54	50	10-100		25-40	467,4	133,5	112,2	110	60	$\varnothing 6,8$	$\varnothing 50,5$	$\varnothing 50,5$
HBD-200R	56	90	20-200			572,5	149,5	123,2	100	75	$\varnothing 6,8$	$\varnothing 50,5$	$\varnothing 64$
HBD-300R	70		30-300			572,5	149,5	123,2	100	75	$\varnothing 6,8$	$\varnothing 50,5$	$\varnothing 64$

Motor Sizes:

- From 10R to 50R → 400 W
- From 100R to 300R → 750 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + controller



The HBD-RN Multi-Channel is a precision electric piston pump with a ceramic piston, designed for simultaneous dosing of medium- to high-viscosity liquids (from 1,000 to 100,000 cP), including homogeneous creams and formulations containing micro-particles. Its multi-channel configuration enables parallel dosing across multiple lanes, optimizing cycle times and increasing productivity on automatic packaging lines.

The filling volume is managed via a ball screw driven by a servomotor, with fully electronic adjustment from the control panel, eliminating the need for mechanical intervention. With precision exceeding $\pm 0.8\%$, the HBD-RN Series ensures excellent repeatability and reliable dosing even with viscous materials or liquids containing solid particles in suspension. Fluid-contact surfaces are made of ceramic and 316L stainless steel, providing maximum corrosion resistance and hygienic compliance with industry standards.

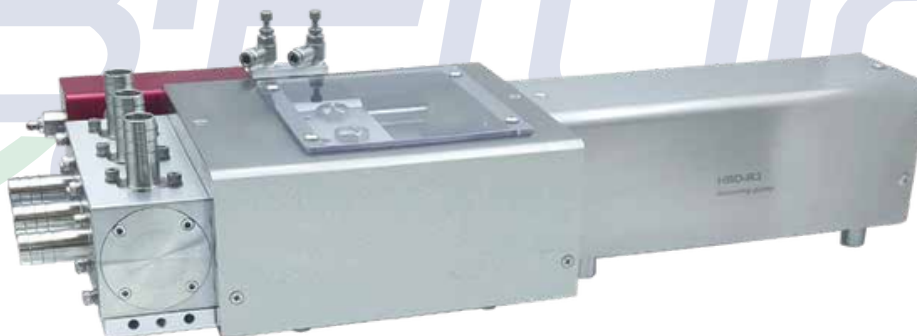
Applications

Ideal for integration into new packaging machines or upgrading existing systems, the HBD-RN Multi-Channel is compatible with multi-station machines, multi-column systems, blister machines, and other automated filling equipment.

It is perfect for synchronized dosing of products such as:

Cosmetics: Creams, masks, balms, nail polishes, viscous serums, structured lotions, pigment pastes.

Food: Honey, spreads, purees, icings, dense fillings, food pastes



HBD-R3

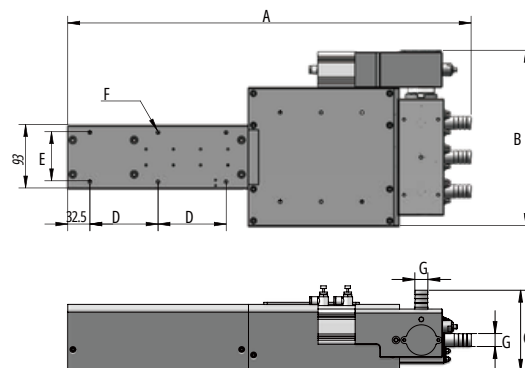
Data

Model	Plunge Diameter (mm)	Stroke (mm)	Dose	Precision	Speed	Pump Dimensions (mm)						
			ml		Cicli/min	A	B	C	D	E	F	G
HBD-10R3	20	50	1-10	$\pm 0,5-1\%$	30-45	592	257	119	100	72	6-M6	$\varnothing 19$
HBD-30R3	30		3-30			592	257	119	100	72	6-M6	$\varnothing 19$
HBD-50R3	38		5-50			592	257	119	100	72	6-M6	$\varnothing 19$

Motor Size 400 W

Available Versions:

- Bare shaft
- With brushless motor + driver
- With brushless motor + controller





The X2-21-N is a filling unit that integrates ceramic pumps from the X2 series with a dedicated control system. It can be used as a standalone device or integrated with packaging machines, making it particularly suitable for applications in the cosmetics, pharmaceutical, medical, and related industries.

Model	X2-21-10	X2-21-N
Data	See X2 Pumps	
Filling Units	10	Custom
Power	AC 220 V 50/60 Hz (o 110 V)	
Sizes	1060*490*425 mm	Custom
Configuration	Custom	

The Q-50R-6 is a filling system that integrates ceramic pumps from the Q-R series with high-capacity hoppers. It can be equipped with a customized control system according to operational requirements and is widely used in automatic packaging lines for dosing various types of creams and high-viscosity materials.

Model	Q-50R-6	Q-50R-N
Data	See QR Pumps	
Filling Units	6	Custom
Air Supply	5-7 bar	
Sizes	615*800*790 mm	Custom
Configuration	Custom	



The HBD-10R-6 is a filling unit that integrates ceramic pumps from the Q-R series with high-capacity hoppers. It can be equipped with a configurable control system tailored to specific operational requirements and is widely used in automatic packaging lines for dosing various types of creams and high-viscosity materials.

Model	HBD-10R-6	Q-10R-N
Data	See HBD-R	
Filling Units	6	Custom
Air Supply	5-7 bar	
Sizes	615*800*790 mm	Custom
Configuration	Custom	





Modular Kit for High-Precision Ceramic Pumps

A modular kit designed for the creation or upgrade of high-precision ceramic pumps. Available in various standard capacities and fully customizable according to the customer's specific application requirements.

Available Capacities (Standard):

80 µl, 140 µl, 280 µl, 600 µl, 1.5 ml, 2.9 ml, 6 ml, 12 ml, 25 ml

Materials:

- Ceramic Components: High-purity alumina (Al_2O_3), zirconia (ZrO_2), silicon carbide (SiC), etc.
- Metal Components: 316L stainless steel

Kit for Piston Pump Production and Upgrades

A kit designed for the production and upgrading of piston pumps, featuring high-performance technical ceramic components. Available in standard sizes and fully customizable to meet specific project requirements.

Standard Sizes:

Through-hole Ø12 mm, Ø25 mm (others available on request)

Materials:

- Ceramic Parts: High-purity alumina (Al_2O_3), zirconia (ZrO_2), etc.
- Metal Parts: 316L stainless steel



A complete kit designed for the construction or upgrading of high-precision ceramic pumps, engineered to deliver high performance in applications requiring reliability, chemical resistance, and long service life.

Standard Capacities Available:

0.2–2 ml · 0.5–5 ml · 1–10 ml · 1–12 ml · 3–30 ml
(Other sizes available upon request)

Materials:

- Ceramic Components: High-purity alumina (Al_2O_3), zirconia (ZrO_2), silicon carbide (SiC), etc.
- Metal Components: 316L stainless steel



Customizable Ceramic Pump Kit – Available on Request
A complete kit designed for the production or upgrading of high-precision ceramic pumps. It offers modular solutions for a wide range of industrial applications requiring chemical resistance, reliability, and accurate dosing.

Standard Capacities Available:

40 µl, 80 µl, 140 µl, 700 µl, 1.5 ml, 2.9 ml, 6 ml, 12 ml, 25 ml
(Other sizes available on request)

Materials:

- Ceramic Parts: High-purity alumina (Al_2O_3), zirconia (ZrO_2), silicon carbide (SiC), etc.
- Metal Parts: 316L stainless steel

Technical Kit for High-Performance Ceramic Pumps

A technical kit designed for the production and upgrading of high-performance ceramic pumps, ideal for applications requiring precise dosing, long service life, and compatibility with chemically aggressive fluids.

Standard Capacities Available:

1–12 ml · 2–25 ml · 5–50 ml

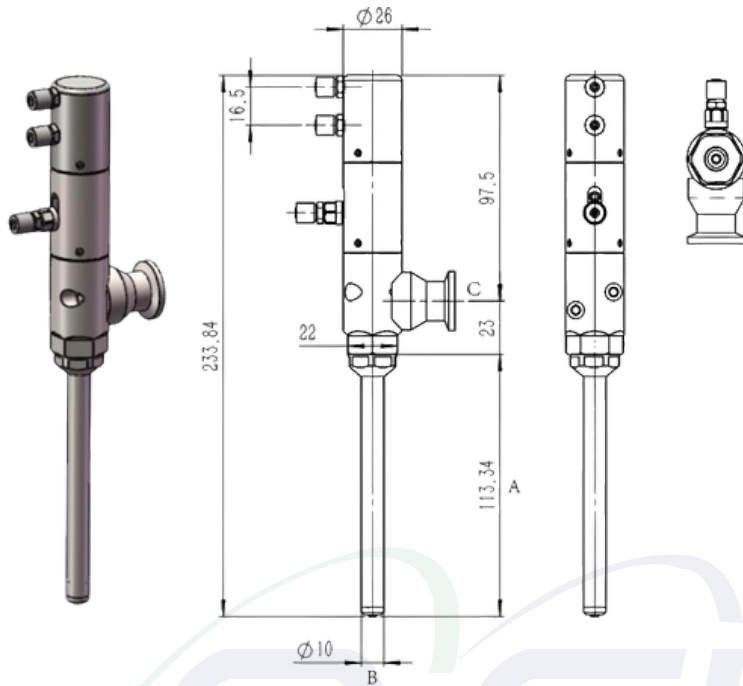
(Other configurations available on request)

Materials:

- Ceramic Components: High-purity alumina (Al_2O_3), zirconia (ZrO_2), silicon carbide (SiC), etc.
- Metal Components: 316L stainless steel



The B-Fluid MonoDose Controller is an advanced solution for volumetric dosing of viscous fluids such as resins and greases. It provides precise automatic dosing, intelligent manual control, program customization, and communication protocols (I/O, Profinet, Ethernet). The controller is adaptable to pumps and interfaces with pressure and flow sensors. Its intuitive interface allows efficient management and continuous monitoring of the production process.



The XQGN Series represents the ideal solution for drip-free dispensing of low-viscosity liquids, specifically designed for the food, cosmetic, and pharmaceutical industries. Available in various sizes, the XQGN Series can be customized to best meet each customer's specific requirements, ensuring precision, reliability, and ease of maintenance.

Key Features:

- Automatic shut-off with precise, drip-free dosing
- Body made of SUS316 stainless steel
- Length customizable according to customer requirements
- Designed for easy disassembly and cleaning
- Metal-to-metal sealing for high reliability
- Pneumatic actuation with precise flow control
- Inlet fittings available in various styles and designs to suit different applications



Pneumatic Tubing Dimensions	$\varnothing 4 - \varnothing 6$ mm
Nozzle Length (A)	Customizable
Nozzle Diameter (B)	Customizable
Nozzle Connection (C)	Customizable
Filling Tube Thickness	Customizable



 +39 011/6822282

 info@bfluid.it

 Via Pastrengo 122/1 10024 Moncalieri (TO)

 www.bfluid.it