

MIXING TECHNOLOGY

Rührtechnik

Techniques d'agitation





The new Mixing Technology Catalogue



Buddeberg Mixing Technology

We are pleased to present you with the new Mixing Technology Catalogue.

Consequently, we have enhanced and optimised our proven and well-planned range of products to provide you with the exact solution for any challenge you may encounter in mixing technology.

Additionally, we are offering you some individual devices tailored to suit your special requirements.

Please feel free to contact us and we look forward to assisting you upon your request.

Kind regards,

Your Mixing Technology Team

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How to select the correct **STIRRING ROTOR SIZE**



Choice of stirrer size in relation to the container diameter:

Propeller stirrer

D1 = Inside diameter of container x **min. 0.1 to max. 0.5**

Diagonal blade stirrer

D1 = Inside diameter of container x **min. 0.25 to max. 0.5**

Anchor stirrer

D1 = Inside diameter of container x **min. 0.9 to max. 0.98**

Dissolver stirrer

D1 = Inside diameter of container x **min. 0.2 to max. 0.5**

BuddeMix

D1 = Inside diameter of container x **min. 0.3 to max. 0.75**



The higher the viscosity, the wider the stirrer diameter should be.

Basic tasks of MIXING



Homogenising



Mixing liquids which are soluble in each other to balance differences of concentration and temperature. The liquids which are to be mixed may vary in concentration, colour or temperature.

Suitable stirring rotors



Low to medium viscosity:
Propeller stirrers, diagonal blade stirrers, BuddeMix, paddle stirrers
Medium to high viscosity:
BuddeMix, anchor stirrers, spiral stirrers

Heat exchange



To intensify the heat exchange in stirring vessels especially with viscous liquids. Transfer of liquid to and away from the heat exchanger (e.g. heating jacket) by means of suitable flows.

Suitable stirring rotors



Low to medium viscosity:
Propeller stirrers, diagonal blade stirrers, BuddeMix, paddle stirrers
Medium to high viscosity:
BuddeMix, anchor stirrers, spiral stirrers

Gas injection



The purpose of treating a liquid with gas is to increase the phase boundary between liquid and gas that can, for example, shorten chemical reaction times. The stirring rotor needs to divide the gas flow into small bubbles and distribute them evenly in the liquid.

Suitable stirring rotors:



Gas injection stirrers, disc stirrers*
*External gas insertion via riser pipe

Dispersing



Dispersing describes the mixture of two compounds which are not or hardly soluble in each other, e.g. to intensify the exchange of components. Dispersions (heterogeneous mixture) are instable and segregate without energy supply.

Suitable stirring rotors:



Dissolver stirrers or toothed disc stirrers, dispersion tools (rotor-stator)

Suspending



Suspending distributes or disperses solid particles homogeneously throughout the liquid. The stirrer shall prevent sedimentation of the solid particles.

Suitable stirring rotors:



Propeller stirrers, diagonal blade stirrers, BuddeMix





**Viscosity and flow characteristic-
One of the most important parameters for the mixing technology**

This applies to both the selection of a suitable stirring rotor and required performance of the stirrer drive. Viscosity describes the thickness or fluidity of liquids and/or fluids. In viscous liquids particles are bound together more strongly and thus less movable which is referred to as internal friction.

Dynamic viscosity is measured in pascal seconds (Pa·s) or millipascal seconds (mPa·s) (obsolete expression poise 'P' or centipoise 'cP').

Kinematic viscosity is expressed in m²/s. It describes the inner friction of a liquid and is calculated by dividing the dynamic viscosity by the density of a liquid.

Dynamic viscosity of common substances in comparison at 20°C and normal pressure:

Millipascal second mPa·s (centipoise cP)	Example
0.3	acetone
1	water
2	milk
80	olive oil
200	maple syrup
3.000	honey
5.000 to 10.000	molasses
50.000 to 70.000	ketchup
150.000 to 250.000	tomato puree



Our

MATERIALS

Stainless steel 1.4301

X5CrNi18-10, AISI 304
austenite, acid-resistant 18/10 Cr-Ni steel

Resistance

Water, vapour, humidity, salt, acids in food and weak organic or inorganic acids.

Applications

Food industry, mechanical engineering, beverage production, pharmaceutical and cosmetics industry, chemical apparatus engineering.

Stainless steel 1.4404

X2CrNiMo17-12-2, AISI 316L
austenite, acid-resistant Cr-Ni-Mo steel

Resistance

Better corrosion resistance compared to Cr-Ni steel, resistant to organic or inorganic acids, media containing halogen, good resistance to intercrystalline corrosion. High temperature resistance up to 450°C.

Applications

Food industry, chemical industry, mechanical engineering, beverage production, pharmaceutical and cosmetics industry.



Stainless steel 1.4435

X2CrNiMo18-14-3, AISI 316L
austenite, acid-resistant Cr-Ni-Mo steel

Resistance

Better corrosion resistance compared to Cr-Ni steel, resistant to organic or inorganic acids, media containing halogen, good resistance to intercrystalline corrosion. Improved pitting corrosion compared to 1.4404 due to the higher content of molybdenum. High temperature resistance up to 450°C.

Applications

Food industry, chemical industry, mechanical engineering, beverage production, pharmaceutical and cosmetics industry.

Stainless steel 1.4980

X6NiCrTiMoVB25-15-2, alloy 286, AISI 660
high temperature resistant, austenite superalloy

Resistance

High corrosion resistance to organic or inorganic acids. Excellent thermal stability and corrosion properties at temperatures up to 800°C.

Applications

High pressure engineering, chemical industry, thermal process engineering. Excellent properties for applications under high pressure and temperature, e.g. with high pressure reactors.

**Hastelloy® B3, 2.4600**

NiMo29Cr, alloy B3
nickel-molybdenum alloy

Resistance

Excellent corrosion resistance to reducing media as e.g. hydrochloric acid in its complete range of concentrations and temperatures, acetic acid, hydrogen chloride, sulphuric acid, phosphoric acid

Applications

Chemical industry, phenol production.

Hastelloy® C22, 2.4602

NiCr21Mo14W, alloy C22
nickel-chrome-molybdenum-tungsten alloy

Resistance

High corrosion resistance to pitting, crevice and stress at high temperatures under oxidising and reducing conditions. Resistant to, for example sulphuric acid, acid mixtures from sulphuric acid, phosphoric acid, nitric acid, chlorine gas and oxidising acids with chloride ions.

Applications

Chemical industry, flue gas desulphurisation, cellulose and paper industry.

Kalrez®, FFKM (FFPM)

group of fluoro- and perfluoro-elastomers
FDA conform (compound 6221, 6230 only)

Resistance

Depending on the compound superior chemical resistance to acids, alkalis, amines, vapour, ethylene oxide as well as many other aggressive chemicals. Temperature resistance -20°C to +275°C, at a brief time +325°C.

Applications

Sealing technology and especially high vacuum applications.

Viton®, FKM (FPM)

fluor rubber, group of fluoroelastomers
FDA conform

Resistance

Good chemical resistance to propane, butane and natural gas, fuels, mineral oils and greases, silicone oils and greases, and aromatic hydrocarbons. Temperature resistance -20°C to +250°C, at a brief time +300°C.

Applications

Sealing technology and especially high vacuum applications.

PTFE, polytetrafluoroethylene

highly resistant plastic
FDA conform

Resistance

Superior chemical resistance because of its inertness. Extremely resistant to all bases, alcohols, ketones, benzines. The thermal capacity ranges from -260°C up to +250°C, at a brief time +300°C (e.g. no embrittlement of boiling helium at +269°C).

Applications

Chemical industry, apparatus construction, medical technology.



ATEX certification



Information about ATEX certification

The compressed air stirrers from Buddeberg GmbH are explosion-protected according to the current ATEX regulation and are assigned to device categories II, zone 1 and 2 (gas atmosphere G) or zone 21 and 22 (atmosphere GD). Compressed air laboratory mixers of device category II include the explosion subgroups IIA, IIB and IIC, and can thus be used for mixing work in these areas.

Marking	Description	Definition
II	Equipment group II	Equipment for use in potentially explosive atmosphere containing gases, vapours, mists or dusts
2	Equipment category 2	High level of protection
G	For gas atmospheres	A place in which an explosive atmosphere consisting of a mixture with air or flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally
GD	For gas and dust atmospheres	A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally
c	Constructive safety	Protection class for non-electric equipment
T4/T5	Temperature class	Maximum permitted surface temperature of the used appliances in accordance with EN 13463-1

Depending on the type, the stirrers are classified in temperature class T4 (max. 135°C) or T5 (max. 100°C).

Permitted ambient temperature in a potentially explosive atmosphere is -20°C to +40°C.

A		I	
Accessories		Industrial stirrers up to 200 L	
- Accessories for laboratory stirrers	15-19	- pharmaceutical/food grade stirrers PLM 38	20
- Accessories for pharmaceutical/food grade stirrers	21-23	- with swivel support arm PM 64-A-V	24
- Accessories for industrial stirrers	31-37	- with floor stand BSR 64	25
- Accessories for magnetic stirrer couplings	46,48-50	- with wall bracket WSR 64	26
Anchor stirrers AR	15	- with screwthread for drums AFR 64	27
ATEX documentation for PMRK	58-61	Industrial stirrers up to 500 L	
		- pharmaceutical/food grade stirrers PLM 38	20
		- with flange PM 64	28
		Industrial stirrers up to 1500 L	
		- with flange PM 120	29
		- complete set for IBC containers PMC	30
B		L	
Bossheads	18,22,34	Laboratory stirrers up to 30 L	
BuddeMix stirring system Mini and 1-4	16,49	- standard PLR	9
BuddeMix stirring system 5-12	21,32	- with tachometer PLR-T	10
BuddeMix swing-out stirring system	32,33	Laboratory stirrers up to 40 L	
		- with exhaust air vent PLR-GA	11
		- with tachometer and vent PLR-GA-T	12
		Laboratory stirrers up to 40 L with flange	
		- with exhaust air vent PMR-GA	13
		- with tachometer and vent PMR-GA-T	14
		Lid seals for BUK and PMRK	46,48,54,61
		Lip seals PTFE	50
C		M	
Cardan couplings	17,50	Magnetic stirrer couplings BUK	
Clamp holder SP	18,23,35	- with ground joint NS 14/23 and NS 19/26	40
Clamps	18,23,34	- with ground joint NS 19/32	41-42
Compressed air preparation		- with ground joint NS 45/40	42
- Motor oil	19,23,35	- with flange from stainless steel	44
- Oiler for PLR laboratory stirrers	19	- with flange from HC 22	45
- Service unit	18,23,35	- with thread M 18	46
Compressed air stirrers see industrial stirrers, laboratory stirrers, magnetic stirrer couplings		- with thread M 30	47-48
Connection couplings		- with electric drive	54-57
- cardan couplings	17,50	- with pneumatic drive PMRK	58-61
- flexible glass stirrer couplings	17,50	Motor oil	19,23,35
- VK 10 for laboratory stirrers	17		
- VK 12 for pharmaceutical/food grade stirrers	22		
- VK 14 and VK 19 for industrial stirrers	34		
- VKG and VK 7 for magnetic stirrer couplings	50		
Container heating jackets CHM	37		
Container stirrers	30		
D		O	
Diagonal blade stirrers PSR	15	Oil	19,23,35
Dissolver stirrers DS	16,31	Oiler for PLR laboratory stirrers	19
Double blade stirrers DR	15,31		
Double-cardan-couplings DCK	50		
Drum heating jackets FHM	36		
Drum stirrers AFR	27		
F		P	
Flexible glass stirrer couplings	17,50	Pharmaceutical and food grade stirrers PLM	20
Floor stands	17,22,34	Propeller stirrers PR	15,31
Food grade stirrers PLM 38	20	Propeller stirrers PRP, PTFE	16
Food grade oil	23	PTFE lip seals for glass flanges	50
		PTFE-coated stirring rotors	16
G		R	
Gas injection stirrers BR	49	Retort stand PS	17
H			
Heating jackets CHM for IBC containers	37		
Heating jackets FHM for drums	36		

S

Seals PTFE	50
Seals for BUK and PMRK	46,48,54,61
Service unit WE-2018	18,23,35
Shaft protection RWS	18
Speed regulation valve V	19
Stands	17,22,34
Stand clamps	18,22,34

Stirrers see industrial stirrers, laboratory stirrers, magnetic stirrer couplings

Stirring rotors

- Stirring rotors for laboratory stirrers	15,16
- Stirring rotors for pharma/food grade stirrers	21
- Stirring rotors for industrial stirrers	31-33
- Stirring rotors for magnetic stirrer couplings	49
Stirring shaft protection RWS	18
Swing-out stirring system BuddeMix SW	33
Swing-out stirring system BuddeMix SWK	32

T

Traverse support for IBC	35
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V

Valve for PLR laboratory stirrers	19
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W

Wall bracket WS	17,22,34
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PLR compressed air laboratory stirrers up to 30 L for use in potentially explosive atmospheres

PLR compressed air laboratory stirrers are designed for all kinds of standard mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar

- clockwise rotation
- ATEX certification

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- support arm Ø 14 mm
- plug-in connector DN 5
- output shaft L x Ø 26 x 10 mm



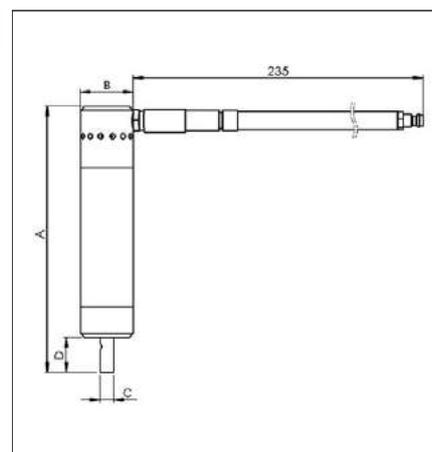
Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PLR 10	200	3	1000	15000	0.3	Ex II 2G c T4	40 26446 00247 3
PLR 11	200	30	50000	1900	3.5	Ex II 2G c T5	40 26446 00251 0
PLR 12	200	30	70000	1000	5.3	Ex II 2G c T5	40 26446 00260 2
PLR 28	200	30	100000	580	10.4	Ex II 2G c T5	40 26446 00364 7
PLR 13	200	30	150000	80	19.8	Ex II 2G c T5	40 26446 00268 8

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories

Dimensions of PLR

Type	A mm	B mm	C mm	D mm
PLR 10	125	Ø 38	Ø 10	26
PLR 11	160	Ø 38	Ø 10	26
PLR 12	195	Ø 38	Ø 10	26
PLR 28	195	Ø 38	Ø 10	26
PLR 13	228	Ø 38	Ø 10	26



Application example for PLR

Shown here is a PLR 12 compressed air laboratory stirrer, mounted on a floor stand and connected to a diagonal blade stirring rotor in a 10 L container.



PLR compressed air lab stirrers

Model Selection



PLR compressed air laboratory stirrers with tachometer up to 30 L for use in potentially explosive atmospheres

PLR compressed air laboratory stirrers are designed for all kinds of standard mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

- clockwise rotation
- ATEX certification

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- analogue tachometer
- support arm \varnothing 14 mm
- plug-in connector DN 5
- output shaft L x \varnothing 26 x 10 mm

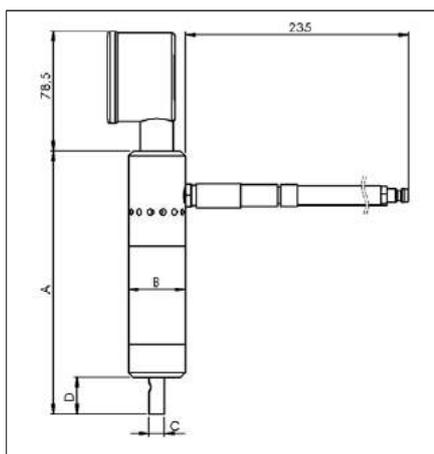
General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar

Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PLR 10 T	200	3	1000	15000	0.3	Ex II 2G c T4	40 26446 00248 0
PLR 11 T	200	30	50000	1800	3.5	Ex II 2G c T5	40 26446 00253 4
PLR 12 T	200	30	70000	950	5.3	Ex II 2G c T5	40 26446 00261 9
PLR 28 T	200	30	100000	550	10.4	Ex II 2G c T5	40 26446 00365 4
PLR 13 T	200	30	150000	80	19.8	Ex II 2G c T5	40 26446 00269 5

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories



Dimensions of PLR-Tachometer

Type	A mm	B mm	C mm	D mm
PLR 10 T	142	\varnothing 38	\varnothing 10	26
PLR 11 T	180	\varnothing 38	\varnothing 10	26
PLR 12 T	213	\varnothing 38	\varnothing 10	26
PLR 28 T	213	\varnothing 38	\varnothing 10	26
PLR 13 T	247	\varnothing 38	\varnothing 10	26

Application example for PLR-Tachometer

Shown here is a PLR 11T compressed air laboratory stirrer with analogue speed indicator, mounted on a floor stand and connected to a dissolver stirring rotor in a 10 L container.



PLR compressed air laboratory stirrers with exhaust air vent "GA" up to 40 L for use in potentially explosive atmospheres

PLR compressed air laboratory stirrers are designed for all kinds of standard mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

No emission of the exhaust air from the housing

GA models feature a separate outlet connection to duct exhaust air away which leads to improved performance at low speed and results in reduced noise levels.

General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar
- clockwise rotation
- ATEX certification

Basic models include:

- all-stainless steel housing
- exhaust air vent GA
- continuously adjustable speed control valve
- support arm \varnothing 14 mm
- plug-in connector DN 5
- output shaft L x \varnothing 26 x 10 mm



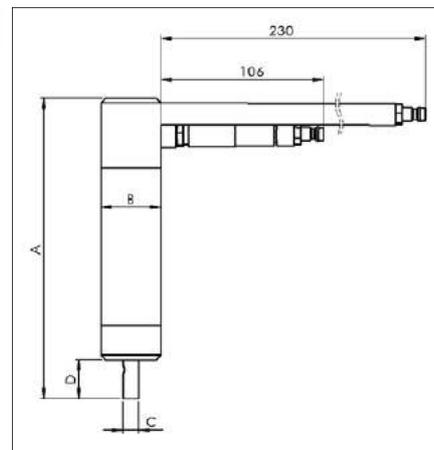
Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PLR 10 GA	200	5	1000	15000	0.3	Ex II 2G c T4	40 26446 00480 4
PLR 11 GA	200	30	50000	1300	3.5	Ex II 2G c T5	40 26446 00481 1
PLR 12 GA	200	40	70000	750	5.3	Ex II 2G c T5	40 26446 00482 8
PLR 28 GA	200	40	100000	450	10.4	Ex II 2G c T5	40 26446 00483 5
PLR 13 GA	200	40	150000	80	19.8	Ex II 2G c T5	40 26446 00484 2

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories

Dimensions of PLR-GA

Type	A mm	B mm	C mm	D mm
PLR 10 GA	125	\varnothing 38	\varnothing 10	26
PLR 11 GA	160	\varnothing 38	\varnothing 10	26
PLR 12 GA	195	\varnothing 38	\varnothing 10	26
PLR 28 GA	195	\varnothing 38	\varnothing 10	26
PLR 13 GA	228	\varnothing 38	\varnothing 10	26



Application example for PLR with GA

Shown here is a PLR 12-GA compressed air laboratory stirrer, mounted on a floor stand and connected to a BuddeMix stirrer in a 10 L container. "GA"-models feature a separate outlet connection to duct exhaust air away.



PLR compressed air lab stirrers

Model Selection



PLR compressed air laboratory stirrers with tachometer and exhaust air vent "GA" up to 40 L for use in potentially explosive atmospheres

PLR compressed air laboratory stirrers are designed for all kinds of standard mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar
- clockwise rotation
- ATEX certification

No emission of the exhaust air from the housing

GA models feature a separate outlet connection to duct exhaust air away which leads to improved performance at low speed and results in reduced noise levels.

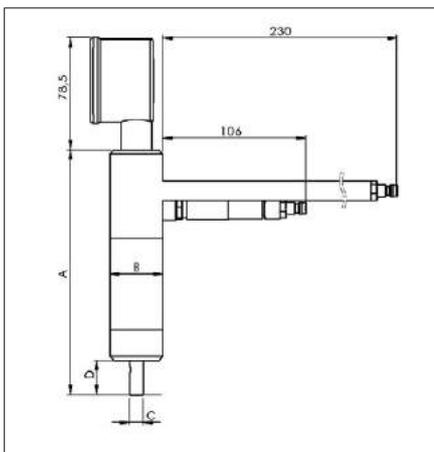
Basic models include:

- all-stainless steel housing
- exhaust air vent GA
- continuously adjustable speed control valve
- analogue tachometer
- support arm \varnothing 14 mm
- plug-in connector DN 5
- output shaft L x \varnothing 26 x 10 mm

Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PLR 10 T GA	200	5	1000	15000	0.3	Ex II 2G c T4	40 26446 00485 9
PLR 11 T GA	200	30	50000	1200	3.5	Ex II 2G c T5	40 26446 00486 6
PLR 12 T GA	200	40	70000	750	5.3	Ex II 2G c T5	40 26446 00487 3
PLR 28 T GA	200	40	100000	400	10.4	Ex II 2G c T5	40 26446 00488 0
PLR 13 T GA	200	40	150000	80	19.8	Ex II 2G c T5	40 26446 00489 7

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories



Dimensions of PLR-Tachometer with GA

Type	A mm	B mm	C mm	D mm
PLR 10 T GA	142	\varnothing 38	\varnothing 10	26
PLR 11 T GA	180	\varnothing 38	\varnothing 10	26
PLR 12 T GA	213	\varnothing 38	\varnothing 10	26
PLR 28 T GA	213	\varnothing 38	\varnothing 10	26
PLR 13 T GA	247	\varnothing 38	\varnothing 10	26

Application example for PLR-Tachometer with GA

Shown here is a PLR 12 T-GA compressed air stirrer with PK 10 cardan coupling and magnetic stirrer coupling BUK K90 S1 with NS 29/32 ground joint mounted on a 3 L double-jacketed reaction vessel with NW 150 lid.



PMR compressed air laboratory stirrers up to 40 L with circular flange and exhaust air vent "GA" for use in potentially explosive atmospheres

PMR compressed air laboratory stirrers are designed for all kinds of routine mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

No emission of the exhaust air from the housing

GA models feature a separate outlet connection to duct exhaust air away which leads to improved performance at low speed and results in reduced noise levels.

General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar
- clockwise rotation
- ATEX certification

Basic models include:

- all-stainless steel housing
- circular flange Ø 70 mm, bolt circle Ø 54 - 2x Ø7
- exhaust air vent GA
- continuously adjustable speed control valve
- plug-in connector DN 5
- output shaft L x Ø 26 x 10 mm



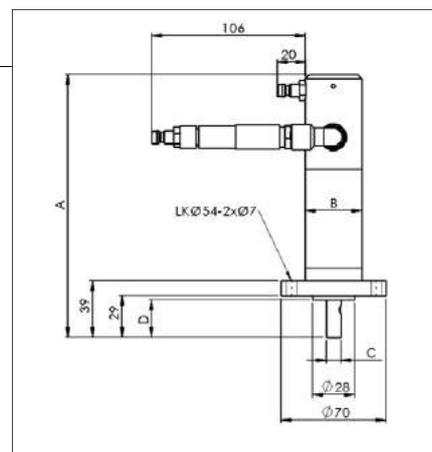
Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PMR 10 GA	200	5	1000	15000	0.3	Ex II 2G c T4	40 26446 00610 5
PMR 11 GA	200	30	50000	1300	3.5	Ex II 2G c T5	40 26446 00603 7
PMR 12 GA	200	40	70000	700	5.3	Ex II 2G c T5	40 26446 00612 9
PMR 28 GA	200	40	100000	500	10.4	Ex II 2G c T5	40 26446 00771 3
PMR 13 GA	200	40	150000	80	19.8	Ex II 2G c T5	40 26446 00770 6

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories

Dimensions of PMR with exhaust air vent

Type	A mm	B mm	C mm	D mm
PMR 10 GA	125	Ø 38	Ø 10	26
PMR 11 GA	160	Ø 38	Ø 10	26
PMR 12 GA	195	Ø 38	Ø 10	26
PMR 28 GA	195	Ø 38	Ø 10	26
PMR 13 GA	228	Ø 38	Ø 10	26



Application example for PMR

Shown here is a PMR 11 compressed air laboratory stirrer with NW 25 flange, mounted on a 3 L double-jacketed reaction vessel with NW 150 lid. This assembly allows use with highly viscous media and temperatures up to 150°C under ambient pressure.



PLR compressed air lab stirrers

Model Selection



PMR compressed air laboratory stirrers up to 40 L with circular flange, tachometer and exhaust air vent "GA" for use in potentially explosive atmospheres

PMR compressed air laboratory stirrers are designed for all kinds of routine mixing tasks. The vane type, air-driven motor offers a high power density and is significantly lighter and smaller than an equivalent electric motor.

No emission of the exhaust air from the housing

GA models feature a separate outlet connection to duct exhaust air away which leads to improved performance at low speed and results in reduced noise levels.

General specifications:

- operating pressure max. 6 bar
- air consumption 260 L/min. at 6 bar
- power output 200 W at 6 bar
- clockwise rotation
- ATEX certification

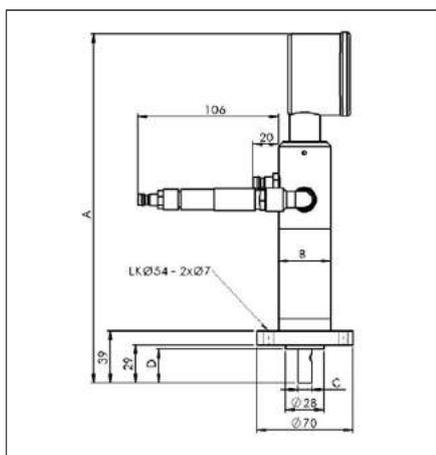
Basic models include:

- all-stainless steel housing
- circular flange Ø 70 mm, bolt circle Ø 54 - 2x Ø7
- exhaust air vent GA
- analogue tachometer
- continuously adjustable speed control valve
- plug-in connector DN 5
- output shaft L x Ø 26 x 10 mm

Type	Power output Watt	Volume max. L	Viscosity mPas	No-load speed rpm	Torque Nm	ATEX Code	Code-No.
PMR 10T GA	200	5	1000	15000	0.3	Ex II 2G c T4	40 26446 00772 0
PMR 11T GA	200	30	50000	1300	3.5	Ex II 2G c T5	40 26446 00578 8
PMR 12T GA	200	40	70000	700	5.3	Ex II 2G c T5	40 26446 00579 5
PMR 28T GA	200	40	100000	500	10.4	Ex II 2G c T5	40 26446 00773 7
PMR 13T GA	200	40	150000	80	19.8	Ex II 2G c T5	40 26446 00774 4

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 10 for the connection to a stirring shaft, see accessories



Dimensions of PMR with tachometer and GA

Type	A mm	B mm	C mm	D mm
PMR 10T GA	142	38	10	26
PMR 11T GA	180	38	10	26
PMR 12T GA	213	38	10	26
PMR 28T GA	213	38	10	26
PMR 13T GA	247	38	10	26



PLR compressed air lab stirrers

Stirring rotors for compressed air lab stirrers

Diagonal blade stirring rotors PSR

The 4-blade diagonal blade stirring rotor provides axial flow and creates increasing shear forces at higher stirring speeds. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
PSR 1	1.4404	350	50	8	40 26446 00115 5
PSR 3	1.4404	550	100	10	40 26446 00796 6



Anchor stirring rotors AR

The anchor-shaped rotor creates a tangential flow and high shear forces between vessel wall and stirring blades. This stirrer is especially suitable for medium to high viscosity fluids. Recommended for low speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
AR 1	1.4404	500	80	10	40 26446 00793 5
AR 2	1.4404	500	100	10	40 26446 00794 2
AR 3	1.4404	500	150	10	40 26446 00795 9



Double blade stirring rotors DR

The double blade rotor creates 2 counter-currents. Vortices are prevented. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
DR 1	1.4404	500	60	8	40 26446 00127 8
DR 2	1.4404	500	80	8	40 26446 00128 5



Propeller stirring rotors PR

The 3-blade propellers produce axial flow and reduce shear forces to a minimum even at high stirring speeds, thanks to their optimised blade design. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
PR 1	1.4404	350	45	8	40 26446 00123 0
PR 2	1.4404	350	55	8	40 26446 00124 7
PR 3	1.4404	550	140	10	40 26446 00125 4
PR 4	1.4404	850	140	10	40 26446 00126 1
PR 5	1.4404	550	75	10	40 26446 00766 9



PR 1,2,5



PR 3,4

Customised shaft length available upon request.

PLR compressed air lab stirrers

Stirring rotors for compressed air lab stirrers



Dissolver stirring rotors DS

The dissolver stirrer creates a radial flow with high turbulence. The mixture is drawn from top to bottom. High shear forces are created at the dissolver disk which provides effective particle reduction. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
DS 1	1.4404	350	30	8	40 26446 00109 4
DS 2	1.4404	350	40	10	40 26446 00800 0
DS 3	1.4404	550	50	10	40 26446 00677 8
DS 4	1.4404	550	60	10	40 26446 00801 7
DS 5	1.4404	550	70	10	40 26446 00802 4
DS 6	1.4404	550	80	10	40 26446 00735 5



PRP1



PRP2 and PRP3

Propeller stirring rotors, PTFE-coated

The 3-blade propellers produce axial flow and feature a fluoroplastics-jacketed, stainless steel shaft and a stirrer paddle made of solid PTFE. The stainless steel core assures firm attachment of the stirrer chuck, but will not come into contact with the medium. Operating temperature -200°C to +250°C.

Type	Material no.	Length mm	Shaft Ø mm	to fit chuck Ø mm	Paddle width mm	Paddle Ø mm	Code-No.
PRP 1	PTFE	600	10	8	3	75	40 26446 00380 7
PRP 2	PTFE	800	10	8	4	140	40 26446 00381 4
PRP 3	PTFE	1000	16	14	6	200	40 26446 00382 1

Customised shaft length available upon request.



BuddeMix 1-4



BuddeMix Mini 30/40

BuddeMix Stirring System 1-4

This novel stirring system has been conceived to mix low viscosity fluids as well as highly viscous media at slow speeds.

Its special design creates inherent dynamic currents to produce perfectly homogeneous mixing results in very little time.

Additional components like baffles, bottom bearings, etc. are not needed.

Your advantages at a glance:

- suitable for low to highly viscous fluids
- stirs media containing solids and fibres without any difficulty
- gentle, low-shear stirring, due to slow stirring speed
- constant product temperature, with no heating effect
- short mixing times as the entire contents of the container are agitated
- no air addition, no foaming
- no baffles required
- low gear wear due to balanced forces

- minimal power consumption thanks to low speeds and short operation times
- easy cleaning

Particularly for potentially explosive atmospheres:

- a single stirring zone near to the container base ensures easy mixing of settled residues, e.g. in flow-through mixing containers
- no baffles required, thus no additional sources of ignition

Available upon request:

- customised shaft length
- fine surface polishing Ra 0.6 to 0.8 µm, except BuddeMix Mini
- certificate of roughness, except BuddeMix Mini
- material certificate 3.1 B



Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
BuddeMix Mini 30	1.4404	350	35	8	40 26446 00806 2
BuddeMix Mini 40	1.4404	350	46	8	40 26446 00834 5
BuddeMix 1	1.4404	350	60	10	40 26446 00799 7
BuddeMix 2	1.4404	350	80	10	40 26446 00535 1
BuddeMix 3	1.4404	550	120	10	40 26446 00536 8
BuddeMix 4	1.4404	850	150	10	40 26446 00537 5

PLR compressed air lab stirrers

Accessories for compressed air lab stirrers

Connection couplings VK

Fixed-diameter connection between motor and stirring shafts.
Suitable for use in potentially explosive atmospheres (ATEX).

Type	Description	Material no.	Receiver Ø mm	Code-No.
VK 10 x 6	Connection coupling	1.4404	10 x 6 mm	40 26446 00745 6
VK 10 x 8	Connection coupling	1.4404	10 x 8 mm	40 26446 00742 3
VK 10 x 10	Connection coupling	1.4404	10 x 10 mm	40 26446 00741 6



Flexible glass stirring shaft couplings PK

For stirring tasks using glass stirring rods. Provides precise alignment of motor and shaft and evens out axial and height differences. Shaft clamping width 6 to 10 mm.

Type	Receiver drive side	Clamp width, output side	Length	Code-No.
PK 10	i.d. Ø 10 mm	6-10 mm	80 mm	40 26446 00058 5
PK 10/13	i.d. Ø 10/13 mm	6-10 mm	80 mm	40 26446 00059 2



Colour may vary

Flexible glass stirring shaft couplings K

Type	Receiver drive side	Clamp width, output side	Length	Code-No.
K 10	i.d. Ø 10 mm	6-10 mm clamping width	105 mm	40 26446 00054 7
K 10/13	i.d. Ø 10/13 mm	6-10 mm clamping width	105 mm	40 26446 00055 4
K 15	i.d. Ø 15 mm	6-10 mm clamping width	105 mm	40 26446 00061 5



Stands

Floor stand BS

With angled foot, powder-coated or stainless steel, side length 600 mm, stainless steel rod Ø 34 mm

Wall bracket WS

Stainless steel rod Ø 34 mm, clearance from wall: 200 mm

Retort stand PS

Powder-coated steel base 210 x 315 mm, stainless steel rod Ø 14 mm

Type	Description	Length	Code-No.
BS 1	Plastic coating / stainless steel	1000 mm	40 26446 00086 8
BS 2	Plastic coating / stainless steel	1500 mm	40 26446 00083 7
BS 3	All in stainless steel	1000 mm	40 26446 00826 0
WS	Stainless steel rod	1000 mm	40 26446 00087 5
PS 1	Powder-coated / stainless steel	1000 mm	40 26446 00324 1



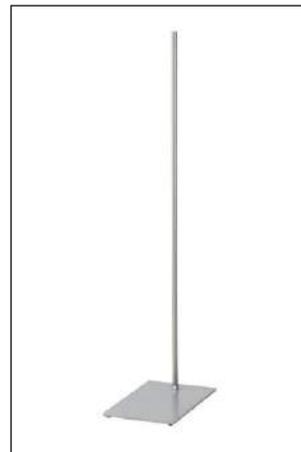
BS1 and BS2



BS3



WS



PS1

PLR compressed air lab stirrers

Accessories for compressed air lab stirrers

Bossheads

Bosshead KR 260

Clamping width max. 36 mm

Stainless steel bosshead KR 360

Bosshead with prism clamping on both sides, clamping range 12 to 36 mm, heavy design all in stainless steel.

Bosshead KK-16, swivelling

Clamping width 16 mm

Type	Code-No.
KR 260	40 26446 00386 9
KR 360	40 26446 00815 4
KK-16	40 26446 00325 8



KR 260



KR 360



KK-16



Clamp holder SP

With bosshead KR 260, strap length 150 mm

Type	Description	Code-No.
SP	Clamp holder with bosshead KR 260	40 26446 00792 8



Stirring shaft protection RWS

Prevents injuries from rotating stirrers during use. Length adjustable 190-310 mm, incl. support arm L=275 mm. Bosshead not included.

Type	Description	Code-No.
RWS	Stirring shaft protection	40 26446 00095 0



Service unit type WE-2018

The service unit with filter, regulator and lubricator function provides both clean air with the recommended air purity class at the output and lubrication of motors.

Service unit combination consisting of filter regulator with pressure gauge, rotary knob with detent, mist lubricator. Pneumatic connection G1/4".

Type	Description	Code-No.
WE-2018	Service unit	40 26446 00751 5

PLR compressed air lab stirrers

Accessories for compressed air lab stirrers

Finger-operated oiler OT

For manual lubrication of compressed air coming into the motor.

Type	Description	Code-No.
OT	Finger-operated oiler	40 26446 00047 9



Motor oil

Cylinder oil

Resin-free and non-corrosive oil for lubrication of compressed air stirrers.

Motor oil for the food industry LT-Oil

Fully synthetic food grade oil according to NSF H1, FDA 21 CFR 178.3570, LMBG §31 para. 1. Operating temperature -60°C to +135°C.

Type	Description	Code-No.
Oil	Cylinder oil 500 ml	40 26446 00081 3
LT-Oil	Food grade oil 500 ml	40 26446 00524 5



Speed regulation valve V

Fine control valve for stepless speed regulation.

Type	Description	Code-No.
V	Speed regulation valve	40 26446 00046 2



Pharma/Food grade stirrers

Model Selection



PLM 38 compressed air pharma/food grade stirrers up to 500 L

PLM series stirrers are specially designed for use in the pharmaceutical and food industry.

No contamination

The sealed motor housing combined with exhaust air ducting avoids noisy, uncontrolled leaks of compressed air into the product or out into its surroundings.

Oil-free operation

Specially constructed drive vane material allows the motor to run dry without any lubrication.

CIP, FDA

All parts that come into contact with the product conform to FDA regulations.

General specifications:

- operating pressure max. 6 bar
- air consumption 500 L/min. at 6 bar
- power output 380 W at 6 bar
- clockwise rotation
- ATEX certification

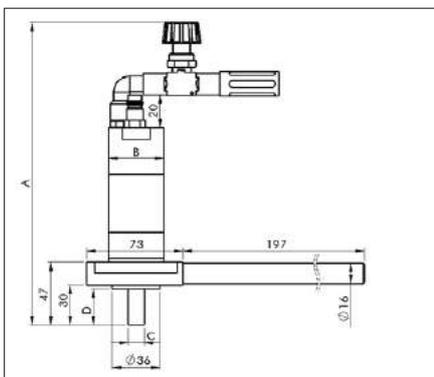
Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- flange Ø 73 mm, bolt circle Ø 55 - 2x Ø 6.5
- support arm Ø 14 mm to fit on a stand
- plug-in connector for DN 5 mm
- output shaft L 27 x Ø 12 mm

Type		PLM 38/1180	PLM 38/580	PLM 38/260
Power output	Watt	380	380	380
Volume	max. L	200	500	500
Viscosity	mPas	10000	50000	100000
No-load speed	rpm	1180	580	260
Torque	Nm	6.3	8.6	19
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00376 0	40 26446 00375 3	40 26446 00374 6

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 12 for the connection to a stirring shaft, see accessories



Dimensions of PLM 38

Type	A	B	C	D
	mm	mm	mm	mm
PLM 38/1180	204.5	41.5	12	27
PLM 38/580	238	41.5	12	27
PLM 38/260	238	41.5	12	27

Application example for PLM 38

Shown here is a PLM 38-type compressed air stirrer which has been specially developed for use in pharma and food industries. These stirrers can operate in both open containers and in sealed vessels through a flange.



BuddeMix Stirring System 5-7

This novel stirring system has been conceived to mix low viscosity fluids as well as highly viscous media at slow speeds. Its special design creates inherent dynamic currents to produce perfectly homogeneous mixing results in very little time. Additional components like baffles, bottom bearings, etc: are not needed.

Your advantages at a glance:

- conform to FDA regulations
- suitable for low to highly viscous fluids
- stirs media containing solids and fibres without any difficulty
- gentle, low-shear stirring, due to slow stirring speed
- constant product temperature, with no heating effect
- short mixing times as the entire contents of the container are agitated
- no air addition, no foaming

- no baffles, no bottom bearings required
- low gear wear due to balanced forces
- minimal power consumption thanks to low speeds and short operation times
- easy cleaning

Particularly for potentially explosive atmospheres:

- a single stirring zone, near to the container base, ensures easy mixing of settled residues, e.g. in flow-through mixing containers
- no baffles or bottom bearings required, thus no additional sources of ignition

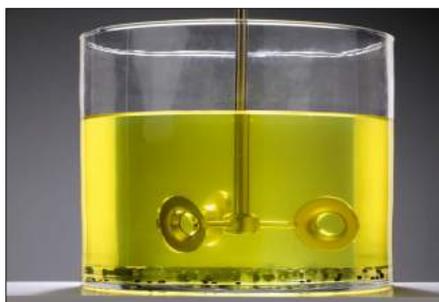
Available upon request:

- customised shaft length
- fine surface polishing Ra 0.6 to 0.8 μm
- certificate of roughness
- material certificate 3.1B

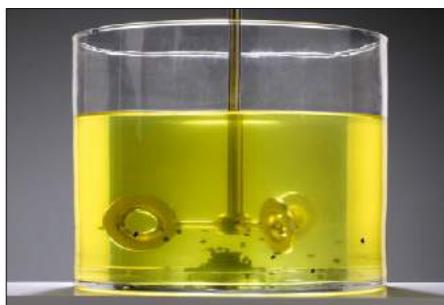


Type	Material no.	Length mm	Stirrer \varnothing mm	Shaft \varnothing mm	Code-No.
BuddeMix 5	1.4404	550	150	12	40 26446 00528 3
BuddeMix 6	1.4404	550	170	12	40 26446 00529 0
BuddeMix 7	1.4404	850	210	14	40 26446 00530 6

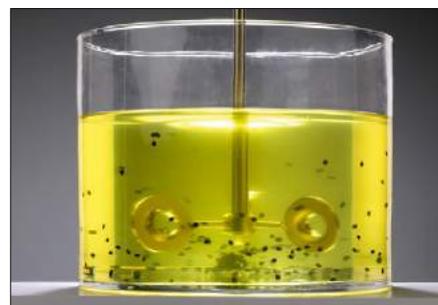
Application example for BuddeMix Stirring System



BuddeMix 0 rpm.



BuddeMix 80 rpm.



BuddeMix 120 rpm.

Pharma/Food grade stirrers

Accessories for pharma/food grade stirrers



Connection couplings VK

Fixed-diameter connection between motor and stirring shafts. Suitable for use in potentially explosive atmospheres (ATEX).

Type	Description	Material no.	Receiver Ø mm	Code-No.
VK 12 x 10	Connection couplings VK	1.4404	12 x 10 mm	40 26446 00525 2
VK 12 x 12	Connection couplings VK	1.4404	12 x 12 mm	40 26446 00526 9
VK 12 x 14	Connection couplings VK	1.4404	12 x 14 mm	40 26446 00647 1

Stands

Floor stand BS

With angled foot, powder-coated or stainless steel, side length 600 mm, stainless steel rod Ø 34 mm

Wall bracket WS

Stainless steel rod Ø 34 mm, clearance from wall: 200 mm

Type	Description	Length	Code-No.
BS 1	Plastic coating / stainless steel	1000 mm	40 26446 00086 8
BS 2	Plastic coating / stainless steel	1500 mm	40 26446 00083 7
BS 3	All in stainless steel	1000 mm	40 26446 00826 0
WS	Stainless steel rod	1000 mm	40 26446 00087 5



BS1 and BS2



BS3



WS

Bossheads

Bosshead KR 260

Clamping width max. 36 mm

Stainless steel bosshead KR 360

Bosshead with prism clamping on both sides, clamping range 12 to 36 mm, heavy design all in stainless steel.

Type	Code-No.
KR 260	40 26446 00386 9
KR 360	40 26446 00815 4



KR 260



KR 360

Clamp holder SP

With bosshead KR 260, strap length 150 mm

Type	Description	Code-No.
SP	Clamp holder with bosshead KR 260	40 26446 00792 8



Service unit type WE-2018

The service unit with filter, regulator and lubricator function provides both clean air with the recommended air purity class at the output and lubrication of motors.

Service unit combination consisting of filter regulator with pressure gauge, rotary knob with detent, mist lubricator. Pneumatic connection G1/4".

Type	Description	Code-No.
WE-2018	Service unit	40 26446 00751 5



Motor oil for the food industry

Fully synthetic food grade oil according to NSF H1, FDA 21 CFR 178.3570, LMBG §31 para. 1. Operating temperature -60°C to +135°C.

Type	Description	Code-No.
LT-Oil	Food grade oil 500 ml	40 26446 00524 5



Compressed air industrial stirrers

Model Selection



Compressed air industrial stirrers with spherical swivel clamp up to 200 L

PM series stirrers are suitable for routine mixing tasks in open vessels.

- power output 640 W at 6 bar
- clockwise rotation
- ATEX certification

Swivel support arm

Stirrers of the A-V series come with a support arm to fit on a stand. The swivel device allows an easy and flexible orientation of the stirrer at any desired angle.

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- spherical clamping device with support arm \varnothing 16 mm, length 200 mm
- plug-in connector DN 7.8
- silencer
- output shaft L 32 mm x \varnothing 14 mm

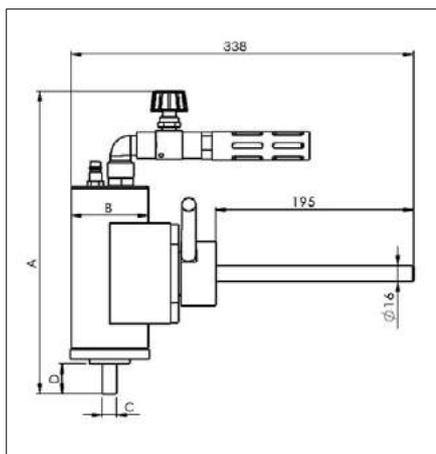
General specifications:

- operating pressure max. 6 bar
- air consumption 800 L/min. at 6 bar

Type		PM 64/160-A-V	PM 64/65-A-V	PM 64/30-A-V
Power output	Watt	640	640	640
Volume	max. L	200	200	200
Viscosity	mPas	20000	50000	100000
No-load speed	rpm	1600	650	300
Torque	Nm	4.7	9.4	21
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00492 7	40 26446 00491 0	40 26446 00493 4

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 14 for the connection to a stirring shaft, see accessories



Dimensions of PM 64-A-V

Type	A	B	C	D
	mm	mm	mm	mm
PM 64/160-A-V	265	76	14	32
PM 64/65-A-V	300	76	14	32
PM 64/30-A-V	300	76	14	32

Application example for PM 64-A-V

Shown here is a PM 64-A-V compressed air industrial stirrer with floor stand and spherical swivel clamp. These models can mix low to medium viscosity media in open containers up to 250 L.



Compressed air industrial stirrers with floor stand up to 200 L

Complete set with a stand

BSR series stirrers perform routine mixing tasks up to approx. 200 l. Floor stand and clamp are included in the scope of delivery. The swivel device allows an easy and flexible orientation of the stirrer at any desired angle.

General specifications:

- operating pressure max. 6 bar
- air consumption 800 L/min. at 6 bar
- power output 640 W at 6 bar
- clockwise rotation

- ATEX certification

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- spherical clamping device with support arm \varnothing 16 mm, length 200 mm
- floor stand with rod (height 1000 mm, width 600 mm) and bosshead
- plug-in connector DN 7.8
- silencer
- output shaft L 32 mm x \varnothing 14 mm



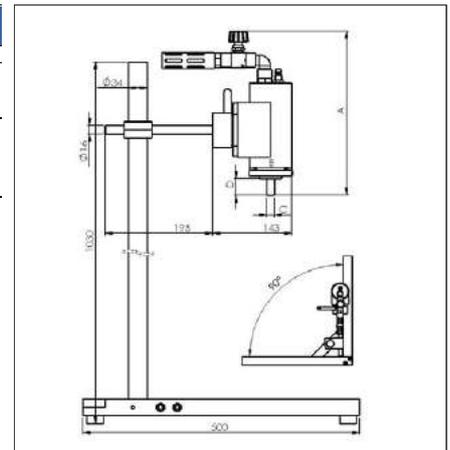
Type		BSR 64/160-A-V	BSR 64/65-A-V	BSR 64/30-A-V
Power output	Watt	640	640	640
Volume	max. L	200	200	200
Viscosity	mPas	20000	50000	100000
No-load speed	rpm	1600	650	300
Torque	Nm	4.7	9.4	21
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00494 1	40 26446 00495 8	40 26446 00496 5

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 14 for the connection to a stirring shaft, see accessories

Dimensions of BSR 64-V

Type	A	B	C	D
	mm	mm	mm	mm
BSR 64/160-A-V	265	76	14	32
BSR 64/65-A-V	300	76	14	32
BSR 64/30-A-V	300	76	14	32



Application example for BSR 64-A-V

Shown here is a BSR 64 compressed air industrial stirrer with floor stand and spherical swivel clamp, connected to a dissolver stirring rotor, mixing approximately 150 L of aqueous medium.



Compressed air industrial stirrers

Model Selection



Compressed air industrial stirrers with wall bracket up to 200 L

Complete set with a stand

WSR series stirrers perform routine mixing tasks up to approx. 200 l. Wall bracket and clamp are included in the scope of delivery. The swivel device allows an easy and flexible orientation of the stirrer at any desired angle.

General specifications:

- operating pressure max. 6 bar
- air consumption 800 L/min. at 6 bar
- power output 640 W at 6 bar

- clockwise rotation
- ATEX certification

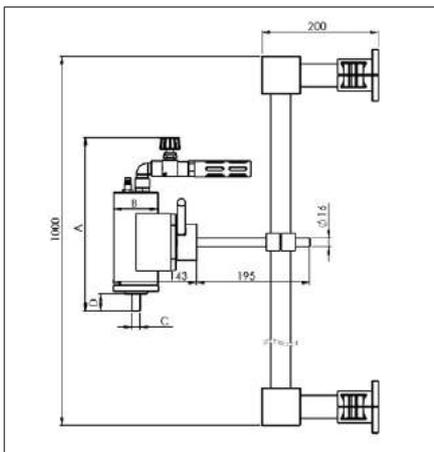
Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- spherical clamping device with support arm Ø 16 mm, length 200 mm
- wall bracket (length 1000 mm, depth 200 mm without motor) and bosshead
- plug-in connector DN 7.8
- silencer
- output shaft L 32 mm x Ø 14 mm

Type		WSR 64/160-A-V	WSR 64/65-A-V	WSR 64/30-A-V
Power output	Watt	640	640	640
Volume	max. L	200	200	200
Viscosity	mPas	20000	50000	100000
No-load speed	rpm	1600	650	300
Torque	Nm	4.7	9.4	21
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00497 2	40 26446 00498 9	40 26446 00499 6

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 14 for the connection to a stirring shaft, see accessories



Dimensions of WSR 64-A-V

Type	A	B	C	D
	mm	mm	mm	mm
WSR 64/160-A-V	265	76	14	32
WSR 64/65-A-V	300	76	14	32
WSR 64/30-A-V	300	76	14	32

Application example for WSR 64

Shown here is a WSR 64 compressed air industrial stirrer with wall bracket, spherical swivel clamp and dissolver stirring rotor, mixing approximately 150 L of aqueous medium. WSR models are very compact and offer enhanced flexibility when considering the stirring container to be used.



Compressed air industrial stirrers with screwthread device for bunghole drums of 200 L

AFR series stirrers are specially designed for the use with DIN standard industrial drums. They may be screwed directly into the bunghole by means of the AFR adapter.

General specifications:

- operating pressure max. 6 bar
- air consumption 800 L/min. at 6 bar
- power output 640 W at 6 bar
- clockwise rotation
- ATEX certification

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- connection coupling VK 14 x 14 mm
- AFR screwthread device for standard industrial drums with bungholes
- plug-in connector DN 7.8
- silencer
- output shaft L 32 mm x Ø 14 mm



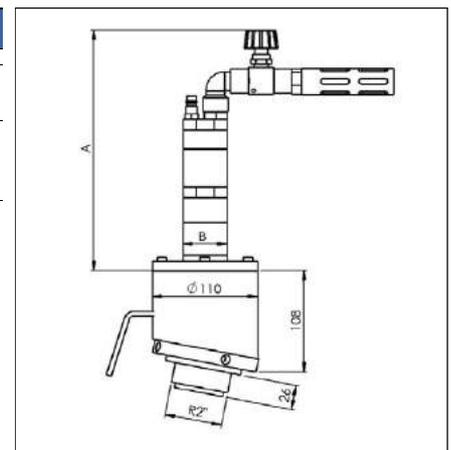
Type		AFR 64/160-V	AFR 64/65-V	AFR 64/30-V
Power output	Watt	640	640	640
Volume	max. L	200	200	200
Viscosity	mPas	20000	50000	100000
No-load speed	rpm	1600	650	300
Torque	Nm	4.7	9.4	21
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00503 0	40 26446 00504 7	40 26446 00505 4

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

Suitable stirring rotor type BuddeMix SW 4, see accessories.

Dimensions of AFR 64-V

Type	A	B	C	D
	mm	mm	mm	mm
AFR 64/160-V	220	46	14	32
AFR 64/65-V	250	46	14	32
AFR 64/30-V	250	46	14	32



Application example for AFR 64-V

Shown here is an AFR 64 compressed air industrial stirrer, mounted into the bunghole of a 208 L DIN industrial drum which itself is fitted with a heating jacket. The BuddeMix SW 4 stirring system can fit through a 2" bunghole. With its special stirring geometry BuddeMix SW ensures an effective mixing result even at slow speeds. The complete stirring unit as well as the drum heater can also be supplied for use in Ex zones.



Compressed air industrial stirrers

Model Selection



Compressed air industrial stirrers with circular flange up to 500 L

PM 64 series stirrers are suitable for routine mixing tasks in closed or half-open vessels. The stirrers include a 4-hole, circular flange to be mounted directly onto a container top.

General specifications:

- operating pressure max. 6 bar
- air consumption 800 L/min. at 6 bar
- power output 640 W at 6 bar
- clockwise rotation
- ATEX certification

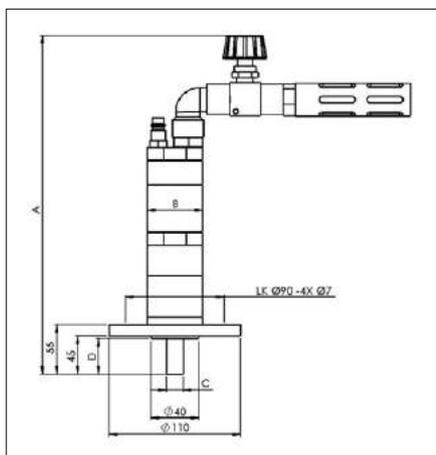
Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- circular flange \varnothing 110 mm, bolt circle \varnothing 90 - 4x \varnothing 7
- plug-in connector DN 7.8
- silencer
- output shaft L 32 mm x \varnothing 14 mm

Type		PM 64/280-V	PM 64/160-V	PM 64/65-V	PM 64/30-V
Power output	Watt	640	640	640	640
Volume	max. L	100	200	200	500
Viscosity	mPas	10000	20000	50000	100000
No-load speed	rpm	2800	1600	650	300
Torque	Nm	2.5	4.7	9.4	21
ATEX	Code	Ex II 2G c T5			
Code-No.		40 26446 00516 0	40 26446 00506 1	40 26446 00507 8	40 26446 00508 5

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 14 for the connection to a stirring shaft, see accessories



Dimensions of PM 64-V

Type	A	B	C	D
	mm	mm	mm	mm
PM 64/280-V	260	46	14	32
PM 64/160-V	260	46	14	32
PM 64/65-V	295	46	14	32
PM 64/30-V	295	46	14	32

Application example for PM 64-V

Shown here is a PM 64-V compressed air industrial stirrer flanged onto the lid of a drum. Also visible is our swing-out stirrer BuddeMix SW operating in a 100 L container of medium viscosity food oil at approx. 150 rpm.



Compressed air industrial stirrers

Model Selection

Compressed air industrial stirrers with circular flange up to 1500 L

PM 120 series stirrers are suitable for routine mixing tasks in closed or half-open vessels. The stirrers include a 4-hole, circular flange to be mounted directly onto a container top or suitable traverse support.

Customised installation options are possible upon request.

General specifications:

- operating pressure max. 6 bar
- air consumption approx. 23 l/s at 6 bar
- power output 1200 W at 6 bar
- clockwise rotation

- ATEX certification
- all technical data at 6 bar

Basic models include:

- all-stainless steel housing
- continuously adjustable speed control valve
- circular flange Ø 200 mm, B.C. Ø 170 mm - 4 x Ø 9
- plug-in connector for DN 7.8
- output shaft L 32 mm x Ø 19 mm
- silencer



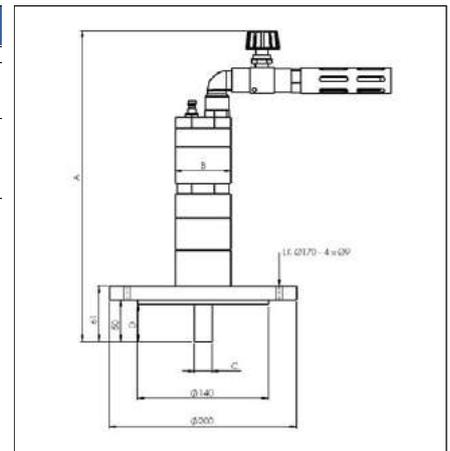
Type		PM 120/300-V	PM 120/600-V	PM 120/1000-V
Power output		1.2 kW	1.2 kW	1.2 kW
Volume	max. L	1500	1500	1500
Viscosity	mPas	150000	100000	80000
No-load speed	rpm	300	600	1000
Torque	Nm	63	19	9.5
ATEX	Code	Ex II 2G c T5	Ex II 2G c T5	Ex II 2G c T5
Code-No.		40 26446 00828 4	40 26446 00829 1	40 26446 00830 7

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.

We recommend connection coupling VK 19 for the connection to a stirring shaft, see accessories

Dimensions of PM 120

Type	A	B	C	D
	mm	mm	mm	mm
PM 120/300-V	320	60	19	45
PM 120/600-V	320	60	19	45
PM 120/1000-V	320	60	19	45



Application example for PM 120



Compressed air industrial stirrers

Model Selection



Compressed air container stirrers PMC 120 for Intermediate Bulk Container (IBCs) up to 1500 L

Complete set with accessories

Powerful and highly flexible container stirrer, compact and lightweight construction.

General specifications:

- operating pressure max. 6 bar
- air consumption approx. 23 l/s at 6 bar
- clockwise rotation
- ATEX certification
- all technical data at 6 bar

Basic models include:

- motor drive PM 120 all-stainless steel
- continuously adjustable speed control valve
- traverse support made of stainless steel
- stirring system type SW 2 Ø 400 mm with residue paddle
- connection coupling VK 19 x 25
- plug-in connector DN 7.8
- silencer

Explosion-proof

PMC container stirrers are certified to ATEX regulations für use in zones 1 and 2, potentially explosive atmospheres.

Traverse support stainless steel

Thanks to its light weight and compact design, no trolleys or other hoisting devices are required to detach the motor.

Foldable stirrer with swing-out system

The BuddeMix SW folding system allows access through the smallest container openings whilst ensuring maximum stirring effect.

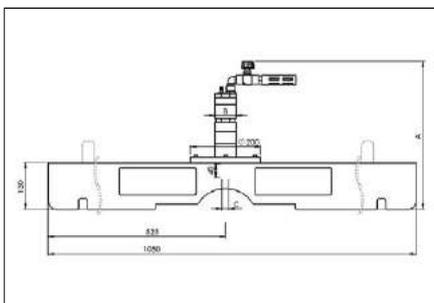
Suitable for low to high viscosity media.

Easy to clean

The stirrer can easily be dismantled without tools which eases cleaning.

Type		PMC 120/300	PMC 120/600	PMC 120/1000
Power output		1.2 kW	1.2 kW	1.2 kW
Volume	max. L	1500	1500	1500
Viscosity	mPas	150000	100000	80000
No-load speed	rpm	300	600	1000
Torque	Nm	63	38	19
ATEX	Code	II 1/2G Ex h IIB T4	II 1/2G Ex h IIB T4	II 1/2G Ex h IIB T4
Code-No.		40 26446 00810 0	40 26446 00811 6	40 26446 00812 3

Viscosity data to be considered as guidelines. All technical data pertaining to 6 bar.



Dimensions of PMC 120

Type	A	B	C
	mm	mm	mm
PMC 120/300	450	60	19
PMC 120/600	450	60	19
PMC 120/1000	450	60	19

Application example for PMC 120



Compressed air industrial stirrers

Stirring rotors for compressed air industrial stirrers

Propeller stirring rotor PR

The 3-blade propellers produce axial flow and reduce shear forces to a minimum even at high stirring speeds thanks to their optimised blade design. Recommended for medium to high speed operations.

Available upon request:

- customised shaft length
- fine surface polishing Ra 0.6 to 0.8 µm
- certificate of roughness
- material certificate 3.1B

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
PR 10	1.4404	1000	125	14	40 26446 00134 6
PR 11	1.4404	1000	150	14	40 26446 00135 3
PR 13	1.4404	1000	175	14	40 26446 00139 1
PR 15	1.4404	1000	200	20	40 26446 00138 4
PR 17	1.4404	1000	250	20	40 26446 00144 5
PR 18	1.4404	1000	300	20	40 26446 00143 8
PR 19	1.4404	1000	350	25	40 26446 00818 5
PR 20	1.4404	1000	400	25	40 26446 00819 2



Dissolver stirring rotor DS

The dissolver stirring rotor creates a radial flow with high turbulence. The mixture is drawn from top to bottom. High shear forces are created at the dissolver disk which provides effective particle reduction. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
DS 7	1.4404	850	100	14	40 26446 00149 0
DS 8	1.4404	850	125	14	40 26446 00150 6
DS 9	1.4404	1000	150	14	40 26446 00151 3
DS 10	1.4404	1000	200	20	40 26446 00152 0
DS 11	1.4404	1000	250	20	40 26446 00153 7
DS 12	1.4404	1000	300	25	40 26446 00820 8
DS 13	1.4404	1000	350	25	40 26446 00821 5



Double blade stirring rotor DR

The double blade stirrer creates two counter-currents. Vortices are prevented. Recommended for medium to high speed operations.

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
DR 5	1.4404	1000	120	14	40 26446 00147 6
DR 6	1.4404	1000	140	14	40 26446 00148 3



Customised shaft length available upon request.



Compressed air industrial stirrers

Stirring rotors for compressed air industrial stirrers



BuddeMix stirring system 5-12

This novel stirring system has been conceived to mix low viscosity fluids as well as highly viscous media at slow speeds. Its special design creates inherent dynamic currents to produce perfectly homogeneous mixing results in very little time. Additional components like baffles, bottom bearings, etc. are not needed.

- minimal power consumption thanks to low speeds and short operation times
- easy cleaning

Particularly for potentially explosive atmospheres:

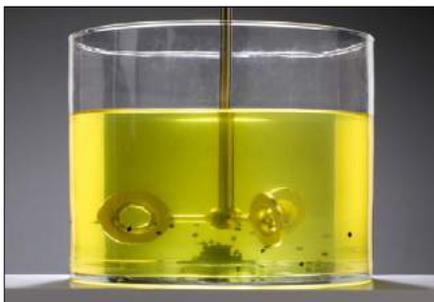
- a single stirring zone near to the container base ensures easy mixing of settled residues, e.g. in flow-through mixing containers
- no baffles or bottom bearings required, thus no additional sources of ignition

Available upon request:

- customised shaft length
- fine surface polishing Ra 0.6 to 0.8 µm
- certificate of roughness
- material certificate 3.1B

Your advantages at a glance:

- conform to FDA regulations
- suitable for low to highly viscous fluids
- stirs media containing solids and fibres without any difficulty
- gentle, low-shear stirring, due to slow stirring speed
- constant product temperature with no heating effect
- short mixing times as the entire contents of the container are agitated
- no air addition, no foaming
- no baffles, no bottom bearings required
- low gear wear due to balanced forces



Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
BuddeMix 5	1.4404	550	150	12	40 26446 00528 3
BuddeMix 6	1.4404	550	170	12	40 26446 00529 0
BuddeMix 7	1.4404	850	210	14	40 26446 00530 6
BuddeMix 8	1.4404	850	320	20	40 26446 00531 3
BuddeMix 9	1.4404	1000	430	25	40 26446 00822 2
BuddeMix 10	1.4404	1000	500	25	40 26446 00823 9
BuddeMix 11	1.4404	1000	550	25	40 26446 00824 6
BuddeMix 12	1.4404	1000	600	25	40 26446 00825 3



Swing-out stirring system BuddeMix SWK

The novel swing-out stirring system BuddeMix SWK has now been complemented by the SWK series for 30 to 60 l canisters.

BuddeMix SWK are especially suitable for small container openings starting from Ø 40 mm.

The stirrer unfolds and creates its novel, inherent dynamic current, even at low speeds. The entire contents of the container are put into motion in next to no time. The stirrer can be dismantled easily into its three parts without any tools to allow easy and efficient cleaning.

Your advantages at a glance:

- suitable for container openings from 40 mm
- dismantling without tools
- quick and easy cleaning
- suitable for thin liquids to medium viscous fluids
- stirs media containing solids and fibres without any difficulty
- gentle, low-shear stirring due to slow stirring speed
- constant product temperature with no heating effect
- short mixing times as the entire contents of the container are agitated
- no air addition, no foaming
- minimal power consumption thanks to low speeds and short operation times

The SWK series is suitable for low and medium viscosity fluids.



Type	Material no.	Length mm	Stirrer Ø mm	Ø folded mm	Shaft Ø mm	Code-No.
BuddeMix SWK 1	1.4404	600	180	42	10	40 26446 00575 7
BuddeMix SWK 2	1.4404	600	170	35	10	40 26446 00576 4

Customised shaft length and /or different sizes available upon request.

Compressed air industrial stirrers

Stirring rotors for compressed air industrial stirrers

Swing-out stirring system BuddeMix SW

The new BuddeMix SW is specially designed for the use with containers. Quite small if it needs to fit through 2", 150 mm or 70 mm openings, but great when it comes to mixing. The stirrer unfolds and creates its novel, inherent dynamic current, even at low speeds. The entire contents of the container are put into motion in next to no time. The stirrer can be dismantled easily into its three parts without any tools.

Few parts to clean - little effort!

This is our definition of progress: Easier and faster.

The SW series is suitable for low viscosity fluids to highly viscous media.

Your advantages at a glance:

- suitable for bunghole openings of 2" to 150 mm
- dismantling without tools
- quick and easy cleaning
- suitable for thin liquids to highly viscous fluids
- stirs media containing solids and fibres

without any difficulty

- gentle, low-shear stirring, due to slow stirring speed
- constant product temperature with no heating effect
- short mixing times as the entire contents of the container are agitated
- no air addition, no foaming
- no baffles, no bottom bearings required
- low gear wear due to balanced forces
- minimal power consumption thanks to low speeds and short operation times

Particularly for potentially explosive atmospheres:

- a single stirring zone near to the container base ensures easy mixing of settled residues, e.g. in flow-through mixing containers
- no baffles or bottom bearings required, thus no additional sources of ignition



BuddeMix SW



BuddeMix SW with residue paddle



Residue paddle

Type	Material no.	Length mm	Stirrer Ø mm	Ø folded mm	Shaft Ø mm	Code-No.
BuddeMix SW 4	1.4404	750	300	44	14	40 26446 00574 0
BuddeMix SW 1	1.4404	850	300	58	14	40 26446 00538 2
BuddeMix SW 2	1.4404	1000	400	78	25	40 26446 00539 9
BuddeMix SW 3	1.4404	1000	500	100	25	40 26446 00540 5
Residue paddle	1.4404		138			40 26446 00513 9

Customised shaft length available upon request.

Application example for BuddeMix SW

Shown here is our swing-out stirrer BuddeMix SW operating in a 100 L container of medium viscosity food oil at approx. 150 rpm.



Compressed air industrial stirrers

Accessories for compressed air industrial stirrers



Connection couplings VK

Fixed-diameter connection between motor and stirring shaft. Suitable for use in potentially explosive atmospheres (ATEX).

Type	Description	Receiver Ø mm	Material no.	Code-No.
VK 14 x 10	Connection coupling	14 x 10 mm	1.4404	40 26446 00705 8
VK 14 x 12	Connection coupling	14 x 12 mm	1.4404	40 26446 00647 1
VK 14 x 14	Connection coupling	14 x 14 mm	1.4404	40 26446 00744 7
VK 14 x 16	Connection coupling	14 x 16 mm	1.4404	40 26446 00044 8
VK 14 x 20	Connection coupling	14 x 20 mm	1.4404	40 26446 00079 0
VK 19 x 20	Connection coupling	19 x 20 mm	1.4404	40 26446 00080 6
VK 19 x 25	Connection coupling	19 x 25 mm	1.4404	40 26446 00550 1

VK 14 x 20, VK 19 x 20, VK 19 x 25 welded to the stirring rotor shaft.

Stands

Floor stand BS

With angled foot, powder-coated or stainless steel, see table, side length 600 mm, stainless steel rod Ø 34 mm

Wall bracket WS

Stainless steel rod Ø 34 mm, clearance from wall: 200 mm

Type	Description	Length	Code-No.
BS 1	Plastic coating / stainless steel	1000 mm	40 26446 00086 8
BS 2	Plastic coating / stainless steel	1500 mm	40 26446 00083 7
BS 3	All in stainless steel	1000 mm	40 26446 00826 0
WS	Stainless steel rod	1000 mm	40 26446 00087 5



BS1 and BS2



BS3



WS



Bosshead KR 260

Clamping width max. 36 mm

Type	Description	Code-No.
KR 260	Bosshead	40 26446 00386 9



Stainless steel bosshead KR 360

Bosshead with prism clamping on both sides, clamping range 12 to 36 mm, heavy design all in stainless steel.

Type	Description	Code-No.
KR 360	Stainless steel bosshead	40 26446 00815 4

Compressed air industrial stirrers

Accessories for compressed air industrial stirrers

Clamp holder SP

With bosshead KR 260, strap length 150 mm

Type	Description	Code-No.
SP	Clamp holder with bosshead KR 260	40 26446 00792 8



CTR traverse support for IBCs

Allows centred installation of agitators on IBCs.

Type	Description	Code-No.
CTR	Traverse support stainless steel	40 26446 00552 8



Service unit type WE-2018

The service unit with filter, regulator and lubricator function provides both clean air with the recommended air purity class at the output and lubrication of motors.

Service unit combination consisting of filter regulator with pressure gauge, rotary knob with detent, mist lubricator. Pneumatic connection G1/4".

Type	Description	Code-No.
WE-2018	Service unit	40 26446 00751 5



Motor oil

Cylinder oil

Resin-free and non-corrosive oil for lubrication of compressed air stirrers.

Motor oil for the food industry LT-Oil

Fully synthetic food grade oil according to NSF H1, FDA 21 CFR 178.3570, LMBG §31 para. 1. Operating temperature -60°C to +135°C.

Type	Description	Code-No.
Oil	Cylinder oil 500 ml	40 26446 00081 3
LT-Oil	Food grade oil 500 ml	40 26446 00524 5



Compressed air container stirrers

Accessories for compressed air container stirrers



FHM heating jacket for 200 L drums

Drum heating jacket for 200 L drums, operating temperature up to 200°C.

Ready-to-use, flexible heating jacket with insulation. Designed for standard 200 litre drums. An optimum heat transfer is guaranteed through flexibility and close fit.

Tension belts and Velcro fasteners allow quick and flexible attachment and removal. The electronic temperature controller heats the product to and/or maintains it at the temperature desired.

Specifications:

Nominal voltage:

230 V a.c.

Nominal power:

see table

Size:

1840 x 880 mm

Cover material:

polyurethane coated fibre-glass

Inner sheath:

silicone coated

Insulation:

felt mat

Heat conductor:

PTFE insulated resistance element with protective layer

Integral temperature sensor:

Pt100

Temperature control:

jacket-mounted

Electronic temperature control:

0 to 200°C

Fastening:

Velcro fasteners and tension belts

Protection class:

I

Protection rating:

IP 65 (spray-proof)

Max. heat conductor temperature:

250°C

Power supply cable:

2 m length with safety plug

An optional temperature limiter may be integrated into the heating circuit.

Applications:

Chemical and petrochemical industry, paint and varnish, resins, adhesives and sealants, disposal of wastes, etc.

Other sizes and models, also for use in hazardous atmospheres, are available on request.

Type	Description	Nominal power	Application	Code-No.
FHM 1	Drum heating jacket	950 Watt	Temperature maintenance	40 26446 00520 7
FHM 2	Drum heating jacket	1500 Watt	Heating	40 26446 00521 4



Compressed air container stirrers

Accessories for compressed air container stirrers

IBC heating jacket CHM

Heating jacket for 1000 litre Intermediate Bulk Containers (IBCs), operating temperature up to 100°C

The heating jacket is made from PUR coated, washable cover material.

An electromechanical thermostat in a Polycarbonate housing with transparent lid (indicator light for power and operation) is attached. A separate, insulating mat for the container top is also supplied.

Tailor-made solutions, according to container size, are available on request.

Velcro fasteners guarantee quick attachment and removal of the jacket. An optional temperature limiter may be integrated into the heating circuit.

Specifications:

Nominal voltage:	230 V a.c.
Nominal power:	2200 W
Size:	1200 x 1000 x 1160 mm
Jacket material:	polyurethane coated
Insulation:	felt mat
Heat conductor:	PTFE insulated, resistance element with protective layer
Fastening:	Velcro fastening system
Protection class:	I
Protection rating:	IP 65 (spray-proof)

Temperature range

Freeze protection:	-20°C to +40°C
Temp. maintenance:	0 to +100°C
Power supply cable:	1.5 m with 5-pole CEE-plug for connection to the controller

Type	Description	Temperature max. °C	Application	Code-No.
CHM 1	IBC heating jacket CHM	-20+40°C	Freeze-protection	40 26446 00548 1
CHM 2	IBC heating jacket CHM	0+100°C	Temperature maintenance	40 26446 00549 8

Used for freeze-protection or product temperature maintenance. Liquids may be used right away from storage for the production process, which means a remarkable reduction of time required in a warming room.

Applications:

Chemical and petrochemical industry, paint and varnish, resins, adhesives and sealants, disposal of wastes, etc.

Other sizes on request. Also available for use in hazardous atmospheres.





Discover our

VARIETY OF PRODUCTS

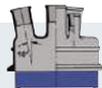
Dropping funnels

Cylindrical
With or without a pressure equalising tube
To be found on page 620 of our Laboratory Catalogue 2018/2020



Stands

Stand variations, e.g. retort stands, floor stands or telescopic stands
To be found on pages 475 and 476 of our Laboratory Catalogue 2018/2020



Flat ground flange lids

Individual configurations are possible on demand, e.g. NS 29/32, NS 45/40, DN 15, DN 25, GL 18, and GL 32
To be found on page 616 of our Laboratory Catalogue 2018/2020

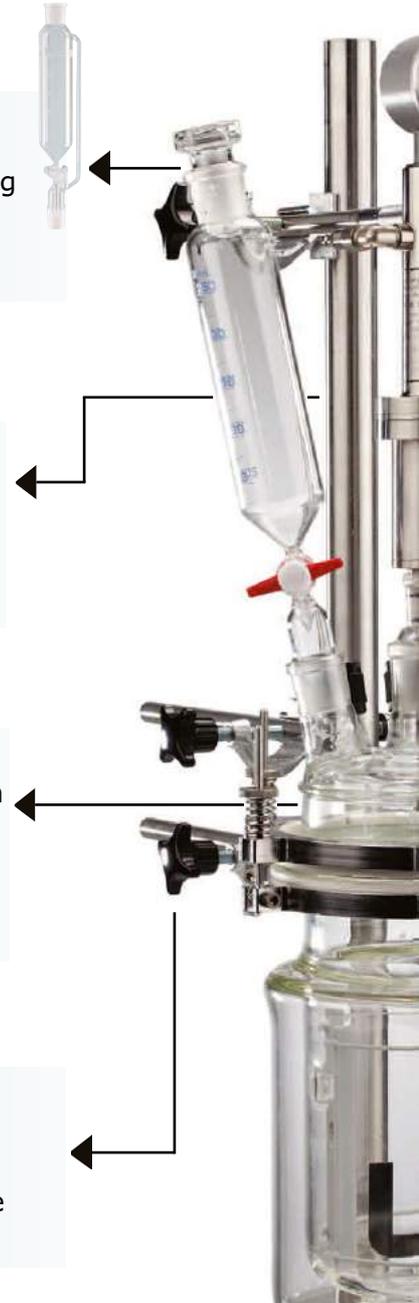


Bossheads

Clamping range:
11-19mm / 18-36mm
To be found on page 18 of the Mixing Technology Catalogue

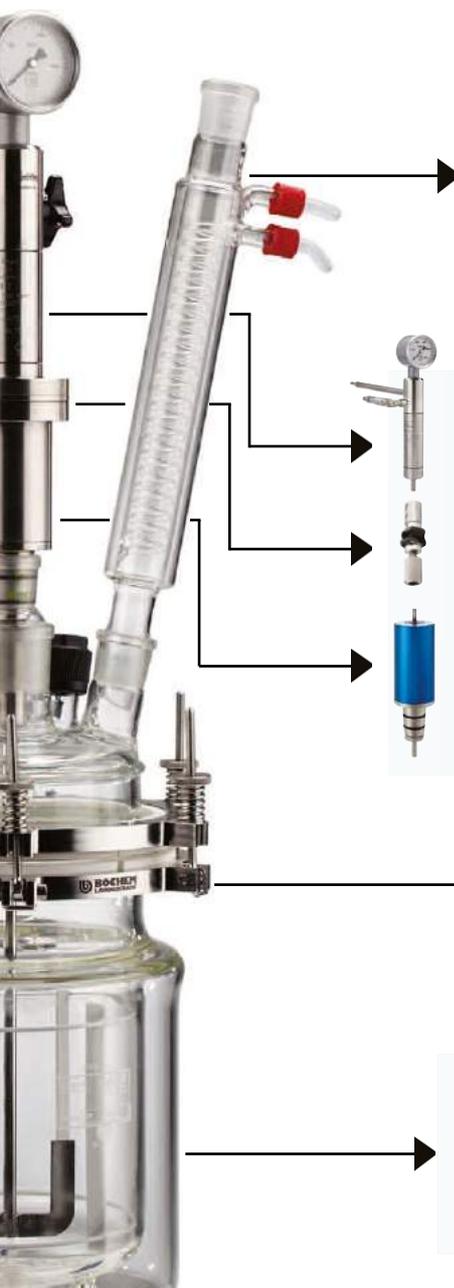
Stirring rotors

A suitable stirring rotor for all kinds of applications, offering different flows and viscosities, e.g. anchor-shaped stirrers, propellers, BuddeMix and diagonal blade stirrers.
To be found on pages 15 and 16 of the Mixing Technology Catalogue



Did you know?

You can assemble your own reactor to suit your needs. We are showing you the choice of components from which you can choose individually, according to your own special demands.



Condensers

PP or glass olives
DURAN® and borosilicate glass
Available in different lengths, cone and socket sizes.
To be found on pages 621-623 of the Laboratory Catalogue 2018/2020



Overhead stirrer with coupling and connector

Compressed air stirrer

To be found on pages 9-14 of the Mixing Technology Catalogue

Electrical stirrer

To be found on pages 466-475 of the Laboratory Catalogue 2018/2020

Connectors

Connection between motor and stirring rotor shaft

To be found on page 17 of the Mixing Technology Catalogue 2018/2020

Magnetic stirrer couplings

Torque sizes 20 to 200 Ncm

To be found on pages 40-48 of the Mixing Technology Catalogue 2018/2020



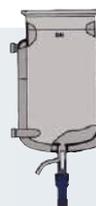
Supporting rings

Fixation of reactor and flat ground flange lid
To be found on page 617 of the Laboratory Catalogue 2018/2020.



Reaction vessel

Capacity 250 to 10.000 ml
Available in different shapes and sizes
To be found on pages 616 and 617 of the Laboratory Catalogue 2018/2020



Magnetic stirrer couplings

Model Selection



Magnetic stirrer couplings BUK Mikro with NS 14 and 19 ground joint

BUK Mikro - our smallest series of permanent magnetic couplings. The compact design allows space-saving installation. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. BUK Mikro series are available in stainless steel, Hastelloy®, titanium, zirconium and other materials. Stirring shafts made from similar materials or glass may be fitted.

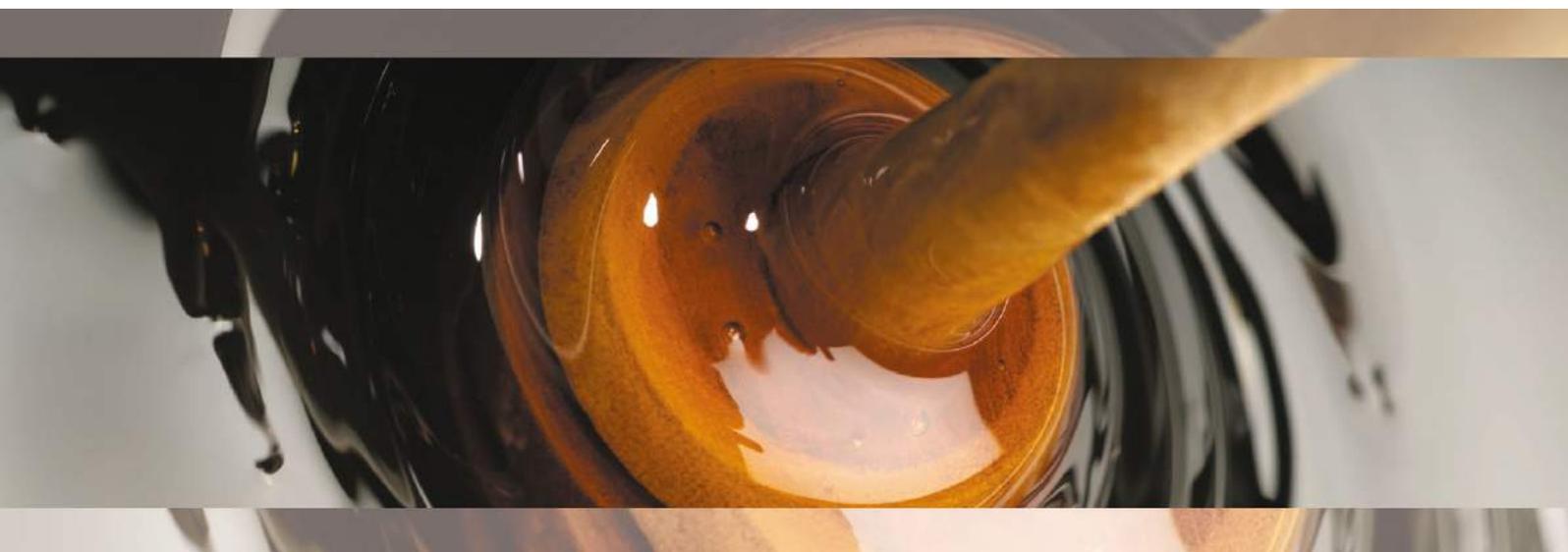
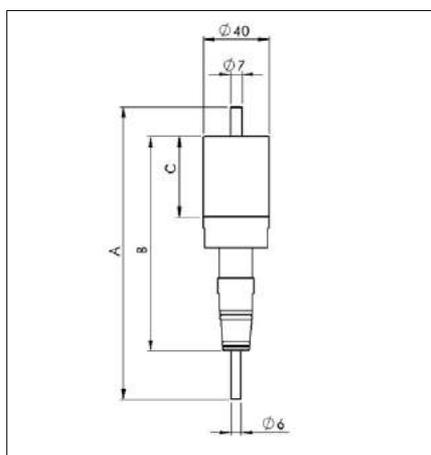
Type	BUK Mikro K50S.1	BUK Mikro K50S.1 HC	BUK Mikro K50S.2	BUK Mikro K50S.2 HC
Joint size	NS 14/23	NS 14/23	NS 19/26	NS 19/26
Volume max. ml	250	250	500	500
Temperature max. °C	200	200	200	200
Viscosity mPas	1500	1500	1500	1500
Torque Ncm	50	50	50	50
Speed rpm	1750	1750	1750	1750
Material no.	1.4435	2.4602	1.4435	2.4602
Seals	O-rings Viton®	O-rings Kalrez®	O-rings Viton®	O-rings Kalrez®
Bearings	Ball bearings stainless steel	Slide bearings PTFE/carbon	Ball bearings stainless steel	Slide bearings PTFE/carbon

Code-No. 40 26446 00816 1 40 26446 00817 8 40 26446 00813 0 40 26446 00814 7

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

Dimensions of magnetic stirrer coupling BUK Mikro

Type	Joint size	A mm	B mm	C mm
BUK Mikro K50S.1	NS 14/23	180	132	68
BUK Mikro K50S.1 HC	NS 14/23	180	132	68
BUK Mikro K50S.2	NS 19/26	180	132	68
BUK Mikro K50S.2 HC	NS 19/26	180	132	68



BUK Mini magnetic stirrer couplings with NS 29/32 ground joint

A compact design, permanent magnetic coupling allows space-saving installation. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels. Stirring shafts made from similar materials or glass may be fitted.

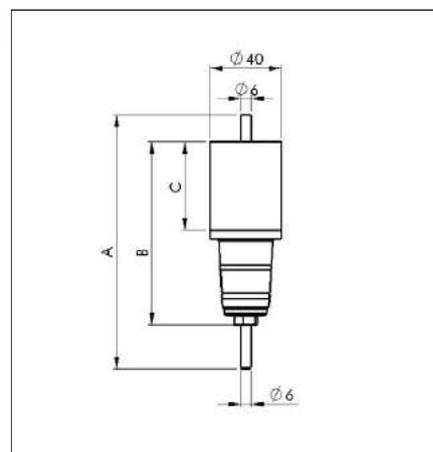
Type		BUK K20S Mini	BUK K50S Mini	BUK K20S Mini HC	BUK K50S Mini HC
Volume	max. ml	500	1000	500	1000
Temperature	max. °C	200	200	200	200
Viscosity	mPas	500	1500	500	1500
Torque	Ncm	20	50	20	50
Speed	max. rpm.	2000	2000	1150	1150
Material	no.	1.4435	1.4435	2.4602	2.4602
Seals		O-rings Viton®	O-rings Viton®	O-rings FFKM	O-rings FFKM
Bearings		Ball bearings stainless steel	Ball bearings stainless steel	Slide bearings PTFE/carbon	Slide bearings PTFE/carbon

Code-No. 40 26446 00372 2 40 26446 00373 9 40 26446 00387 6 40 26446 00388 3

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

Dimensions of BUK Mini

Type	A	B	C
	mm	mm	mm
BUK K20S Mini	148	104	50
BUK K50S Mini	166	122	68
BUK K20S Mini HC	148	104	50
BUK K50S Mini HC	166	122	68



Application example for BUK Mini

Shown here is a BUK Mini magnetic stirrer coupling with NS 29/32 ground joint on a 1 l capacity reaction vessel with NW 100 lid. The compact size of this range requires minimal space for installation. Two o-rings arranged one above the other on the cone compensate for any heat-expansion between glass and metal. The system seals vacuum-tight up to 250°C.



Magnetic stirrer couplings

Model Selection



BUK magnetic stirrer couplings with NS 29/32 ground joint

A compact design, permanent magnetic coupling allows space-saving installation. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels. Stirring shafts made from similar materials or glass may be fitted.

Specifications

BUK

Material no.: 1.4435 (AISI 316L)
 Temperature: max. 240°C
 Seals: Viton®

BUK HC

Material no.: 2.4602 (HC 22)
 Temperature: max. 250°C
 Seals: FFKM

Type	Volume max. ml	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
BUK K20 S1	500	500	20	2500	Ball bearings stainless steel	40 26446 00157 5
BUK K40 S1	1000	1500	40	2500	Ball bearings stainless steel	40 26446 00158 2
BUK K60 S1	3000	6000	60	2500	Ball bearings stainless steel	40 26446 00159 9
BUK K90 S1	5000	10000	90	2500	Ball bearings stainless steel	40 26446 00160 5
BUK K20 S1 HC	500	500	20	1150	Slide bearings PTFE/carbon	40 26446 00389 0
BUK K40 S1 HC	1000	1500	40	1150	Slide bearings PTFE/carbon	40 26446 00390 6
BUK K60 S1 HC	3000	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00391 3
BUK K90 S1 HC	5000	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00392 0

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm.
 Viscosity data to be considered as guidelines.



BUK magnetic stirrer couplings with NS 45/40 ground joint

A compact design, permanent magnetic coupling allows space-saving installation. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels. Stirring shafts made from similar materials or glass may be fitted.

Specifications

BUK

Material no.: 1.4435 (AISI 316L)
 Temperature: max. 240°C
 Seals: Viton®

BUK HC

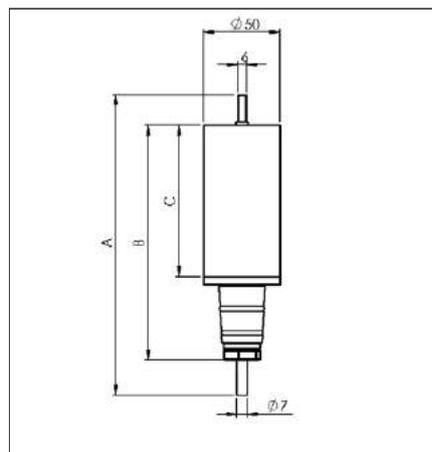
Material no.: 2.4602 (HC 22)
 Temperature: max. 250°C
 Seals: FFKM

Type	Volume max. ml	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
BUK K60 S2	5000	6000	60	2500	Ball bearings stainless steel	40 26446 00162 9
BUK K90 S2	10000	10000	90	2500	Ball bearings stainless steel	40 26446 00163 6
BUK K120 S2	15000	15000	120	2500	Ball bearings stainless steel	40 26446 00614 3
BUK K150 S2	20000	15000	150	2500	Ball bearings stainless steel	40 26446 00833 8
BUK K60 S2 HC	5000	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00395 1
BUK K90 S2 HC	10000	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00396 8
BUK K120 S2 HC	15000	15000	120	1150	Slide bearings PTFE/carbon	40 26446 00832 1
BUK K150 S2 HC	20000	15000	150	1150	Slide bearings PTFE/carbon	40 26446 00839 0

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

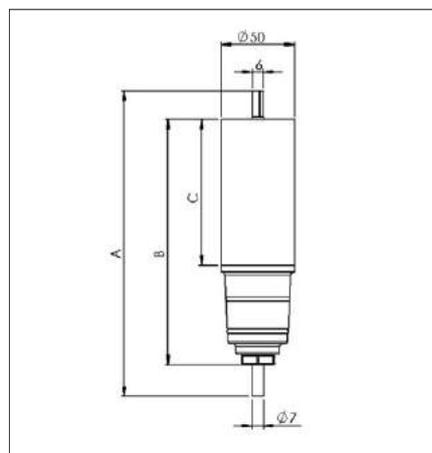
Dimensions of BUK with ground joint NS 29/32

Type	A	B	C
	mm	mm	mm
BUK K20 S1 - BUK K20 S1 HC	143	99	44
BUK K40 S1 - BUK K40 S1 HC	155	111	56
BUK K60 S1 - BUK K60 S1 HC	177	133	78
BUK K90 S1 - BUK K90 S1 HC	199	155	100



Dimensions of BUK with ground joint NS 45/40

Type	A	B	C
	mm	mm	mm
BUK K20 S2 - BUK K20 S2 HC	156	113	44
BUK K40 S2 - BUK K40 S2 HC	168	125	56
BUK K60 S2 - BUK K60 S2 HC	190	147	78
BUK K90 S2 - BUK K90 S2 HC	212	169	100



Application example for BUK with ground joint

Shown here is a BUK K90 S1 magnetic stirrer coupling with NS 29/32 ground joint on a 3 l double-jacketed reaction vessel with NW 150 lid. Two O-rings, arranged one above the other on the cone, compensate for any heat-expansion between glass and metal. The system seals vacuum-tight up to 250°C. The NS 45/40 ground joint allows use with larger stirring volumes due to its improved mechanical stability.



Magnetic stirrer couplings

Model Selection

BUK magnetic stirrer couplings with flange, max. 10 bar, stainless steel grade 1.4435

A permanent magnetic coupling with flange suitable for applications under vacuum and pressure up to 10 bar. The advantage of a flange connection is that forces are distributed over a larger contact surface, allowing the use of higher torques and larger container volumes. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels. Stirring shafts made from similar materials or glass may be fitted.

We can also make alternative flanges to your requirements - details on request.



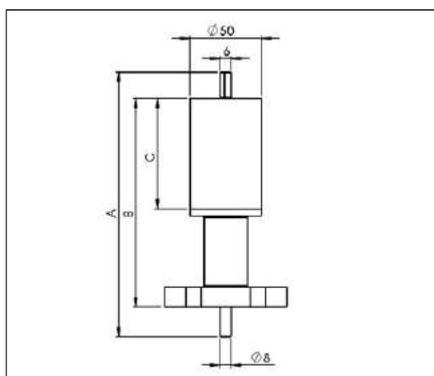
DN 15 and DN 25



DN 40 and DN 50

Type	Flange DN	Volume max. ml	Temperature max. °C	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
BUK K60 F15	15	3000	240	6000	60	2000	Ball bearings stainless steel	40 26446 00175 9
BUK K90 F15	15	5000	240	10000	90	2000	Ball bearings stainless steel	40 26446 00397 5
BUK K120 F15	15	10000	240	10000	120	2000	Ball bearings stainless steel	40 26446 00398 2
BUK K150 F15	15	10000	240	30000	150	2000	Ball bearings stainless steel	40 26446 00399 9
BUK K60 F25	25	3000	240	6000	60	2000	Ball bearings stainless steel	40 26446 00176 6
BUK K90 F25	25	5000	240	10000	90	2000	Ball bearings stainless steel	40 26446 00183 4
BUK K120 F25	25	10000	240	10000	120	2000	Ball bearings stainless steel	40 26446 00400 2
BUK K150 F25	25	10000	240	30000	150	2000	Ball bearings stainless steel	40 26446 00401 9
BUK K60 F40	40	3000	240	6000	60	2000	Ball bearings stainless steel	40 26446 00178 0
BUK K90 F40	40	5000	240	10000	90	2000	Ball bearings stainless steel	40 26446 00179 7
BUK K120 F40	40	10000	240	10000	120	2000	Ball bearings stainless steel	40 26446 00402 6
BUK K150 F40	40	10000	240	30000	150	2000	Ball bearings stainless steel	40 26446 00403 3
BUK K60 F50	50	3000	240	6000	60	2000	Ball bearings stainless steel	40 26446 00181 0
BUK K90 F50	50	5000	240	10000	90	2000	Ball bearings stainless steel	40 26446 00182 7
BUK K120 F50	50	10000	240	10000	120	2000	Ball bearings stainless steel	40 26446 00404 0
BUK K150 F50	50	10000	240	30000	150	2000	Ball bearings stainless steel	40 26446 00405 7

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.



Dimensions of BUK with flange

Type	A mm	B mm	C mm
BUK K60 - BUK K60 HC	233	143	78
BUK K90 - BUK K90 HC	255	165	100
BUK K120 - BUK K120 HC	277	187	122
BUK K150 - BUK K150 HC	299	209	144

BUK magnetic stirrer couplings with flange, max. 10 bar, in HC 22 material no. 2.4602

A permanent magnetic coupling with flange suitable for applications under vacuum and pressure up to 10 bar. The advantage of a flange connection is that forces are distributed over a larger contact surface, allowing the use of higher torques and larger container volumes. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning. This magnetic stirrer coupling is also available in titanium, zirconium and other materials or offering alternative torque levels. Stirring shafts made from similar materials or glass may be fitted.

We can also make alternative flanges to your requirements - details on request.



DN 15 and 25



DN 40 and 50

Type	Flange DN	Volume max. ml	Temperature max. °C	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
BUK K60 F15 HC	15	3000	240	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00407 1
BUK K90 F15 HC	15	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00408 8
BUK K120 F15 HC	15	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00409 5
BUK K150 F15 HC	15	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00410 1
BUK K60 F25 HC	25	3000	240	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00412 5
BUK K90 F25 HC	25	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00413 2
BUK K120 F25 HC	25	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00414 9
BUK K150 F25 HC	25	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00415 6
BUK K60 F40 HC	40	3000	240	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00417 0
BUK K90 F40 HC	40	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00418 7
BUK K120 F40 HC	40	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00419 4
BUK K150 F40 HC	40	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00420 0
BUK K60 F50 HC	50	3000	240	6000	60	1150	Slide bearings PTFE/carbon	40 26446 00422 4
BUK K90 F50 HC	50	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00423 1
BUK K120 F50 HC	50	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00424 8
BUK K150 F50 HC	50	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00425 5

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

Application example for BUK with flange

Shown here is a BUK K90 S1 magnetic stirrer coupling with NW 25 flange on a 3 l double-jacketed reaction vessel with NW 150 lid. Depending on the reaction vessel, range is suitable for pressures up to 10 bar and temperatures up to 250°C. The flange enhances mechanical stability and therefore allows higher torque levels up to 200 Ncm to be used.



Magnetic stirrer couplings

Model Selection



Magnetic stirrer couplings BUK Mini with thread M18 up to 700 bar

A magnetic stirrer coupling with M18x1 thread connection which can easily be screwed into an autoclave lid.

Lid seals

Sealing to the autoclave lid is achieved using an o-ring (FFKM) or cutting ring (HC 22) which is not included with delivery. Please choose desired version.

A reed contact and speed sensor at the output shaft is fitted as standard.

BUK Mini series permanent magnetic couplings provide a space-saving installation with their compact design. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning.

Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials on request.

Specifications:

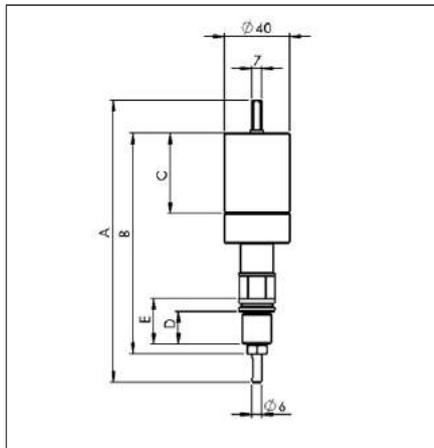
Temperature: max. 200°C
Seals: FFKM/cutting ring

Type	Pressure max. bar	Viscosity mPas	Torque Ncm	Volume max. ml	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK K20G Mini	300	500	20	500	2000	1.4435	Ball bearings stainless steel	40 26446 00184 1
BUK K50G Mini	300	1500	50	1000	2000	1.4435	Ball bearings stainless steel	40 26446 00189 6
BUK K20G Mini HP	700	500	20	500	2000	1.4980	Ball bearings stainless steel	40 26446 00185 8
BUK K50G Mini HP	700	1500	50	1000	2000	1.4980	Ball bearings stainless steel	40 26446 00187 2
BUK K20G Mini HC	300	500	20	500	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00426 2
BUK K50G Mini HC	300	1500	50	1000	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00427 9

Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

Lid seals for BUK Mini

Type	Size	Application	Code-No.
O-Ring Kalrez® (FFKM)	for BUK Mini	High temperature up to 300°C	55101127
Cutting ring HC 22 mat.no. 2.4602	for BUK Mini	High temperature, high pressure seal	55100112



Dimensions of BUK Mini

Type	A mm	B mm	C mm	D mm	E mm
BUK K20G Mini - BUK K20G Mini HC	175	137	50	20	28
BUK K50G Mini - BUK K50G Mini HC	193	155	68	20	28

Application example for BUK Mini

Shown here is a BUK Mini magnetic stirrer coupling with 50 Ncm torque and speed adjustment by a frequency-controlled, swivelling electric motor. The coupling is mounted on a 200 ml high pressure autoclave at 200 bar and 300°C. BUK Mini couplings have been specially developed for small high pressure reactors. Their design and construction allows use in applications up to 450°C, 700 bar and 50 Ncm, depending on the material they are manufactured from.



BUK magnetic stirrer couplings with thread M30 up to 700 bar

A magnetic stirrer coupling with M30x2 thread connection which can easily be screwed into an autoclave lid. Sealing to the autoclave lid is achieved using a cutting ring (HC 22)*, see accessories. A reed contact and speed sensor at the output shaft is fitted as standard.

The thread series permanent magnetic couplings provide a space-saving installation

with their compact design. Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning.

Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials.

Different torque levels and seals are offered on request.



Specifications

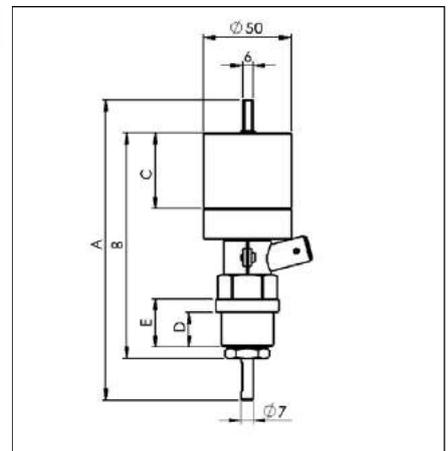
Temperature: max. 300°C

Type	Volume max. ml	Pressure max. bar	Viscosity mPas	Torque Ncm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK K20G	500	200	500	20	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00190 2
BUK K40G	1000	200	1500	40	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00192 6
BUK K60G	3000	200	6000	60	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00194 0
BUK K90G	5000	200	10000	90	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00198 8
BUK K20G HC	500	200	500	20	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00428 6
BUK K40G HC	1000	200	1500	40	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00429 3
BUK K60G HC	3000	200	6000	60	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00430 9
BUK K90G HC	5000	200	10000	90	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00431 6
BUK K20G HP	500	700	500	20	2500	1.4980	Ball bearings stainless steel	40 26446 00191 9
BUK K40G HP	1000	700	1500	40	2500	1.4980	Ball bearings stainless steel	40 26446 00193 3
BUK K60G HP	3000	700	6000	60	2500	1.4980	Ball bearings stainless steel	40 26446 00196 4
BUK K90G HP	5000	700	10000	90	2500	1.4980	Ball bearings stainless steel	40 26446 00199 5

* seal not included with delivery. Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.

Dimensions of BUK with thread M30

Type	A mm	B mm	C mm	D mm	E mm
BUK K20G	175	130.5	44	20	28
BUK K40G	187	142.5	56	20	28
BUK K60G	209	164.5	78	20	28
BUK K90G	231	186.5	100	20	28



Application example for BUK with M30 thread

Shown here is a BUK K40G magnetic stirrer coupling with 40 Ncm torque and speed adjustment by a frequency-controlled, swivelling electric motor. The complete autoclave is controlled separately. The coupling is mounted on a 200 ml high pressure autoclave at 200 bar and 300°C.



Magnetic stirrer couplings

Model Selection



BUK magnetic stirrer coupling with thread and valve

An additional purging gas connection valve is fitted laterally to this magnetic stirrer coupling. The mounting onto an autoclave lid is by means of the M30x2 thread connection. Sealing to the autoclave lid by a cutting ring (HC 22)*, see accessories. A reed contact and speed sensor at the output shaft is fitted as standard.

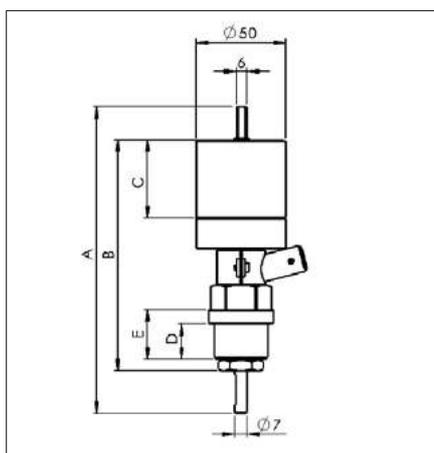
Magnetic stirrer couplings are available in stainless steel, Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels.

Specifications

Temperature: max. 300°C

Type	Volume max. ml	Pressure max. bar	Viscosity mPas	Torque Ncm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK K20G-V	500	200	500	20	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00203 9
BUK K40G-V	1000	200	1500	40	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00205 3
BUK K60G-V	3000	200	6000	60	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00207 7
BUK K90G-V	5000	200	10000	90	2500	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00209 1
BUK K20G-V HC	500	200	500	20	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00432 3
BUK K40G-V HC	1000	200	1500	40	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00433 0
BUK K60G-V HC	3000	200	6000	60	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00434 7
BUK K90G-V HC	5000	200	10000	90	1150	2.4602 (HC 22)	Slide Bearings PTFE/carbon	40 26446 00435 4
BUK K20G-V HP	500	700	500	20	2500	1.4980	Ball bearings stainless steel	40 26446 00204 6
BUK K40G-V HP	1000	700	1500	40	2500	1.4980	Ball bearings stainless steel	40 26446 00206 0
BUK K60G-V HP	3000	700	6000	60	2500	1.4980	Ball bearings stainless steel	40 26446 00208 4
BUK K90G-V HP	5000	700	10000	90	2500	1.4980	Ball bearings stainless steel	40 26446 00210 7

* Seal not included with delivery. Drive shaft supplied with 6 mm external square stub and brass adapter Ø 8 mm. Viscosity data to be considered as guidelines.



Dimensions of BUK with thread and valve

Type	A mm	B mm	C mm	D mm	E mm
BUK K20G-V	175	130.5	44	20	28
BUK K40G-V	187	142.5	56	20	28
BUK K60G-V	209	164.5	78	20	28
BUK K90G-V	231	186.5	100	20	28

Lid seal for BUK with M30 thread

Type	Code-No.
Cutting ring mat.no. 2.4602 (HC 22)	55100093

Application example for BUK with thread and valve

Shown here is a BUK K40G-V magnetic stirrer coupling with 40 Ncm torque and speed adjustment by a frequency-controlled, swivelling electric motor. The complete autoclave is controlled separately. The coupling is mounted on a 200 ml high pressure autoclave at 200 bar and 300°C.

The thread series with their compact design are especially suitable for small high pressure reactors. Models for applications up to 550°C, 700 bar and 150 Ncm are offered, depending on the material they are manufactured from.



Magnetic stirrer couplings

Stirring rotors for magnetic stirrer couplings

BuddeMix Mini

Our proven BuddeMix stirring system in a mini version. The special hollow disc stirrer is suitable for low to medium viscous fluids, stirs gentle and effective even at slow stirring speed. Short operation times as the entire contents of the vessel are mixed quickly.

Available upon request:

- customised shaft length
- material certificate 3.1B

Type	Material no.	Length mm	Stirrer Ø mm	Shaft Ø mm	Code-No.
BuddeMix Mini 30	1.4404	350	35	8	40 26446 00806 2



Gas injection stirrers BR for volumes up to 10 L

Gas injection stirrers considerably shorten reaction times compared to conventional stirring systems. During clockwise rotation, a vacuum is created behind the 45-degree bevels of the propeller. This vacuum has an enormous suction effect, meaning gas is forced quickly into the medium through the hollow shaft.

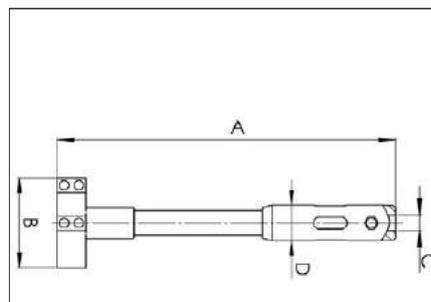
Suitable for BUK with a shaft diameter of 7mm. Alternative sizes or materials available upon request.

Type	Material no.	Diameter mm	Length mm	Volume max.	Code-No.
BR 1	1.4435 (AISI 316L)	25 mm	80 mm	500 ml	40 26446 00263 3
BR 1	1.4435 (AISI 316L)	25 mm	105 mm	750 ml	40 26446 00264 0
BR 1	1.4435 (AISI 316L)	25 mm	162 mm	1000 ml	40 26446 00265 7
BR 2	1.4435 (AISI 316L)	38 mm	162 mm	1000 ml	40 26446 00271 8
BR 2	1.4435 (AISI 316L)	38 mm	187 mm	2000 ml	40 26446 00272 5
BR 2	1.4435 (AISI 316L)	38 mm	240 mm	3000 ml	40 26446 00273 2
BR 3	1.4435 (AISI 316L)	60 mm	240 mm	5000 ml	40 26446 00276 3
BR 3	1.4435 (AISI 316L)	60 mm	285 mm	10000 ml	40 26446 00277 0



Dimensions of BR

Type	A	B	C	D
BR 1	80 mm	Ø 25 mm	Ø 7 mm	Ø 18 mm
BR 1	105 mm	Ø 25 mm	Ø 7 mm	Ø 18 mm
BR 1	162 mm	Ø 25 mm	Ø 7 mm	Ø 18 mm
BR 2	162 mm	Ø 38 mm	Ø 7 mm	Ø 18 mm
BR 2	187 mm	Ø 38 mm	Ø 7 mm	Ø 18 mm
BR 2	240 mm	Ø 38 mm	Ø 7 mm	Ø 18 mm
BR 3	240 mm	Ø 60 mm	Ø 7 mm	Ø 18 mm
BR 3	285 mm	Ø 60 mm	Ø 7 mm	Ø 18 mm



Application examples for gas injection stirrers type BR

These pictures show the function of gas injection stirrers. At various rotation speeds, gas injection stirrers provide considerably greater gas absorption than a disk stirrer. This is visible by the increasing volume of the fluid. Additionally, gas injection stirrers create smaller gas bubbles which crucially increase the active surface area. This facilitates reaction between substances, resulting in shorter production times.



Gas injection stirrer BR 0 rpm.



Gas injection stirrer BR 500 rpm.



Gas injection stirrer BR 1000 rpm.

Magnetic stirrer couplings

Accessories for magnetic stirrer couplings



PTFE lip seals for glass flanges

These seals are ideal for use in glass reactors. They seal all-glass flanges as well as glass to metal flanges (e.g. when used with a BUK coupling). The self-centring seals have a Viton® o-ring with steel core and can be used under pressures up to 10 bar.

They are available in two versions: Single collar, which is recommended for the use with magnetic stirrer couplings, or double collar for sealing two glass flanges.

Single collar	Code-No.	Double collar	Code-No.
DN 15	40 26446 00012 7	DN 15	40 26446 00004 2
DN 25	40 26446 00013 4	DN 25	40 26446 00005 9
DN 40	40 26446 00014 1	DN 40	40 26446 00006 6
DN 50	40 26446 00015 8	DN 50	40 26446 00007 3
DN 80	40 26446 00016 5	DN 80	40 26446 00008 0
DN 100	40 26446 00017 2	DN 100	40 26446 00009 7
DN 150	40 26446 00018 9	DN 150	40 26446 00010 3
DN 200	40 26446 00019 6	DN 200	40 26446 00011 0



Connection couplings VKG for glass stirring shafts

For shaft diameter 8 and 10 mm.

Type	Suits	Material no.	Code-No.
VKG 6	BUK Mini	1.4435 (AISI 316L)	40 26446 00471 2
VKG 7	Joint BUK	1.4435 (AISI 316L)	40 26446 00472 9
VKG 8	Flange BUK	1.4435 (AISI 316L)	40 26446 00473 6
VKG 6 HC	BUK Mini HC	2.4602 (HC 22)	40 26446 00474 3
VKG 7 HC	Joint BUK HC	2.4602 (HC 22)	40 26446 00475 0
VKG 8 HC	Flange BUK HC	2.4602 (HC 22)	40 26446 00476 7



Connection couplings between stirring motor and magnetic stirrer coupling

Double-cardan-coupling DCK made of stainless steel. DCK I with stud to be used with a chuck. DCK II suits PLR stirrers.

Type	Receiver drive side	Clamp width, output side	Length	Code-No.
DCK I	external hex 8 mm	square socket 6 mm	110 mm	40 26446 00141 4
DCK II	i.d. 10 mm	square socket 6 mm	110 mm	40 26446 00368 5



Cardan coupling PK made of plastic

Type	Receiver drive side	Clamp width, output side	Length	Code-No.
PK 10	i.d. 10 mm	6-10 mm	80 mm	40 26446 00058 5
PK 10/13	i.d. 10/13 mm	6-10 mm	80 mm	40 26446 00059 2



Flexible coupling K

Type	Receiver drive side	Clamp width, output side	Length	Code-No.
K 10	i.d. 10 mm	6-10 mm	105 mm	40 26446 00054 7
K 10/13	i.d. 10/13 mm	6-10 mm	105 mm	40 26446 00055 4
K 15	i.d. 15 mm	6-10 mm	105 mm	40 26446 00061 5
FK 1	with stud Ø 8 mm	6-10 mm	108 mm	40 26446 00595 5



Connection couplings VK

Fixed-diameter connection between drive/magnetic coupling and stirring shafts. Suitable for use in potentially explosive atmospheres (ATEX).

Type	Description	Receiver Ø mm	Material no.	Code-No.
VK 7 x 6	Connection coupling	7 x 6 mm	1.4404	40 26446 00803 1
VK 7 x 8	Connection coupling	7 x 8 mm	1.4404	40 26446 00746 1
VK 7 x 10	Connection coupling	7 x 10 mm	1.4404	40 26446 00036 3

ATEX certification



Information about ATEX certification

The compressed air stirrers from Buddeberg GmbH are explosion-protected according to the current ATEX regulation and are assigned to device categories II, zone 1 and 2 (gas atmosphere G) or zone 21 and 22 (atmosphere GD). Compressed air laboratory mixers of device category II include the explosion subgroups IIA, IIB and IIC, and can thus be used for mixing work in these areas.

Marking	Description	Definition
II	Equipment group II	Equipment for use in potentially explosive atmosphere containing gases, vapours, mists or dusts
2	Equipment category 2	High level of protection
G	For gas atmospheres	A place in which an explosive atmosphere consisting of a mixture with air or flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally
GD	For gas and dust atmospheres	A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally
c	Constructive safety	Protection class for non-electric equipment
T4/T5	Temperature class	Maximum permitted surface temperature of the used appliances in accordance with EN 13463-1

Depending on the type, the stirrers are classified in temperature class T4 (max. 135°C) or T5 (max. 100°C).

Permitted ambient temperature in a potentially explosive atmosphere is -20°C to +40°C.

MAGNETIC STIRRER DRIVES

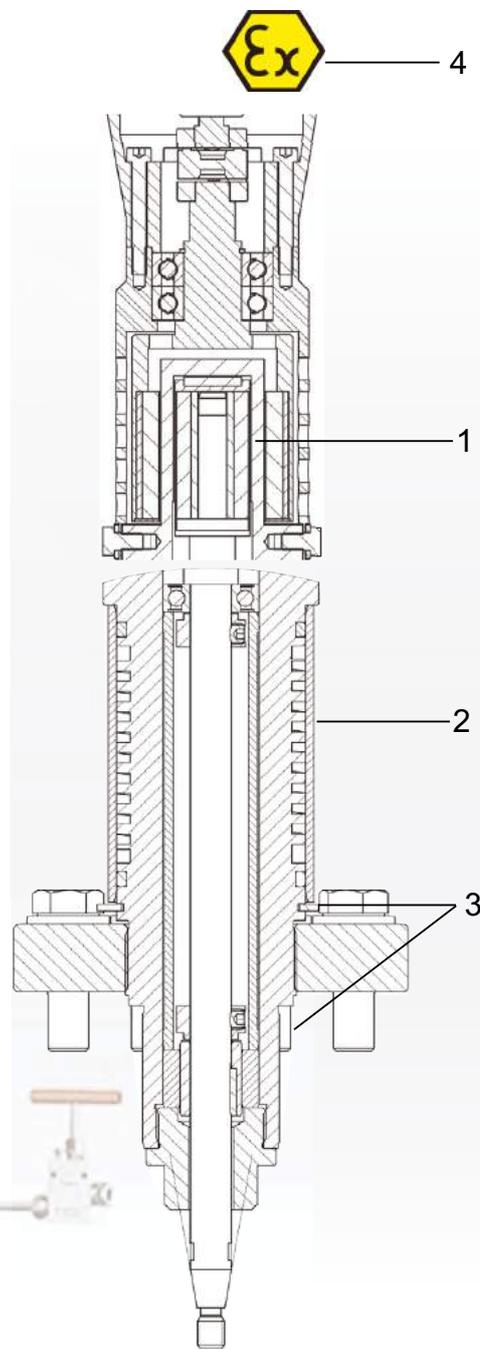
Tailored to your wishes

Magnetic stirrer couplings and drives custom-made for industry and laboratory

We will be pleased to assist you with detailed product knowledge and expertise before and during the planning phase. We offer magnetic stirrer couplings and drives custom designed individually to meet your requirements and needs.

Apart from our standard range we develop, construct and design various arrangements of magnetic stirrer heads and drives for you.

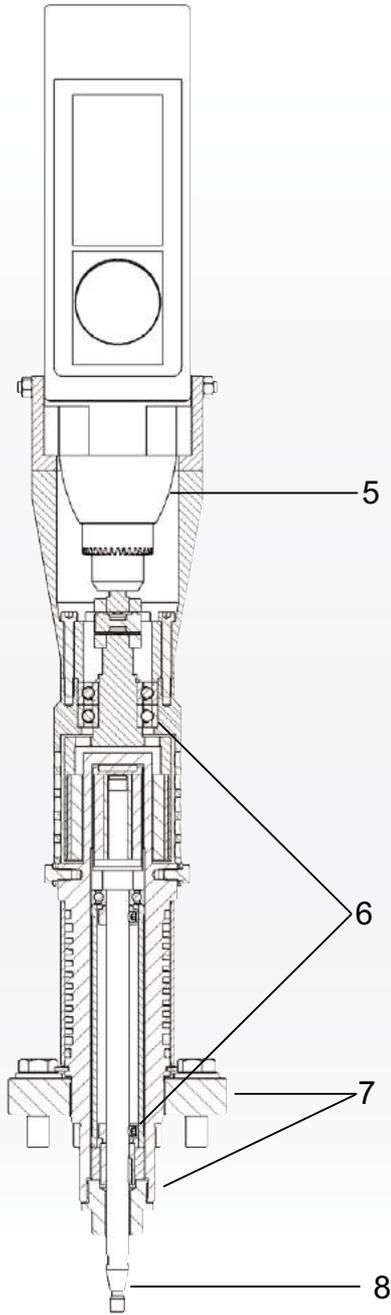
All the components described are available in different variations – always perfectly adapted to meet your special requirements.



No.	Configuration	Selection option
1	Torques	300 Ncm, 400 Ncm, 500 Ncm
2	Product materials*	1.4435 (ASIS 316L), 1.4980 (AISI 660), 2.4602
3	Sealing options*	O-ring, cutting ring, grooved metal gasket
4	ATEX**	

* Which are dependent on the operational specifications (pressure, temperature, corrosion resistance)

** ATEX optional up to temperature class T4, zone 0/1 inside/outside



5 —



No.	Configuration	Selection option
5	Drive	Electrical with or without torque meter, pneumatic
6	Shaft bearings	Ball bearings stainless steel/hybrid/ceramic, sliding bearings PTFE/carbon, ceramic
7	Connection options	Threads metric/inches, e.g. M48, DN flange, TriClamp
8	Shaft connection	Ø 12, 14 with or without ground joint and thread

Magnetic stirrer drives

Model Selection



Magnetic stirrer drives BUK complete, max. 700 bar, torque 90 Ncm

Magnetic coupling with electric drive for speed control by frequency converter*

The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced.

A speed monitor incorporating a pulse generator and a reed contact is fitted to the output shaft as standard.

Speed control of the 3-phase, a.c. motor (supply req. 3x240/400 V, 50 Hz) by frequency converter*.

All parts coming into contact with the medium are made of stainless steel.

A bore with blind plug is positioned laterally to fit an optional valve. For sealing to the autoclave lid we recommend using a cutting ring made from HC 22*, see accessories.

Magnetic stirrer drives are also available in Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels.

All magnetic stirrer drives are available with ATEX certification on request.

Type	Volume max. ml	Temperature max. °C	Pressure max. bar	Viscosity mPas	Torque Ncm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK M40G	1000	300	200	1500	40	2500	1.4435	Ball bearings stainless steel	40 26446 00219 0
BUK M60G	3000	300	200	6000	60	2500	1.4435	Ball bearings stainless steel	40 26446 00223 7
BUK M90G	5000	300	200	10000	90	2500	1.4435	Ball bearings stainless steel	40 26446 00227 5
BUK M40G HP	1000	300	700	1500	40	2500	1.4980	Ball bearings stainless steel	40 26446 00221 3
BUK M60G HP	3000	300	700	6000	60	2500	1.4980	Ball bearings stainless steel	40 26446 00225 1
BUK M90G HP	5000	300	700	10000	90	2500	1.4980	Ball bearings stainless steel	40 26446 00229 9

* not included with delivery. Viscosity data to be considered as guidelines.



Magnetic stirrer drives BUK complete with gear system, max. 700 bar, torque 90 Ncm

Magnetic coupling with gear drive for manual speed control by hand wheel.

The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced.

A speed monitor incorporating a pulse generator and a reed contact is fitted to the output shaft as standard. Speed control of the 3-phase, a.c. motor (supply req. 3x240/400 V, 50 Hz) is by ball-roller gear system with hand wheel.

All parts coming into contact with the medium are made of stainless steel.

A bore with blind plug is positioned laterally to fit an optional valve. For sealing to the autoclave lid we recommend using a cutting ring made from HC 22, see accessories.

Magnetic stirrer drives are also available in Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels.

Type	Volume max. ml	Temperature max. °C	Pressure max. bar	Viscosity mPas	Torque Ncm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK MG40G	1000	300	200	1500	40	1150	1.4435	Ball bearings stainless steel	40 26446 00218 3
BUK MG60G	3000	300	200	6000	60	1150	1.4435	Ball bearings stainless steel	40 26446 00222 0
BUK MG90G	5000	300	200	10000	90	1150	1.4435	Ball bearings stainless steel	40 26446 00226 8
BUK MG40G HP	1000	300	700	1500	40	1150	1.4980	Ball bearings stainless steel	40 26446 00220 6
BUK MG60G HP	3000	300	700	6000	60	1150	1.4980	Ball bearings stainless steel	40 26446 00224 4
BUK MG90G HP	5000	300	700	10000	90	1150	1.4980	Ball bearings stainless steel	40 26446 00228 2

Lid seal for BUK with electric drive

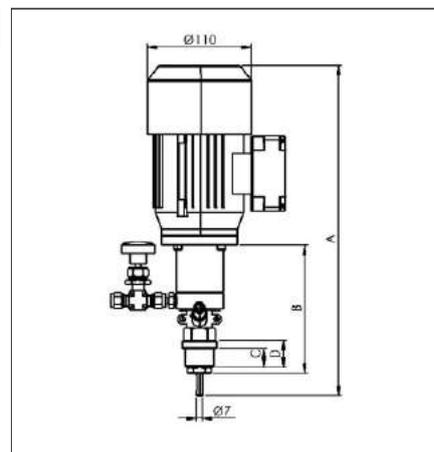
Type	Code-No.
Cutting ring mat.no. 2.4602 (HC 22)	55100093

Magnetic stirrer drives

Model Selection

Dimensions of BUK M-G

Type	A	B	C	D
	mm	mm	mm	mm
BUK M40G	354	137.5	20	28
BUK M60G	366	149.5	20	28
BUK M90G	387	161.5	20	28
BUK MG 40G	466	137.5	20	28
BUK MG 60G	478	149.5	20 </td <td>28</td>	28
BUK MG 90G	490	161.5	20	28



Application example for BUK M-G

Shown here is a magnetic stirrer drive with 90 Ncm torque and speed adjustment by a frequency-controlled, swivelling electric motor. The magnetic stirrer coupling is mounted on a 1000 ml high pressure autoclave at 200 bar and 300°C. These BUK couplings are specially designed for high pressure reactors. Models for applications up to 350°C, 350 bar and 150 Ncm are offered, depending on the material they are manufactured from. ATEX documentation for the complete assembly is available on request.



Magnetic stirrer drives

Model Selection



Magnetic stirrer drives BUK complete, max. 700 bar, torque 800 Ncm

Magnetic coupling with electric drive
for speed control by frequency converter*.

Their constructional design allows use with reactors up to 700 bar and torques up to 150 Nm. All parts coming into contact with the medium are made of stainless steel. A bore with blind plug is positioned laterally to fit an optional valve. The sealing to the autoclave lid is metal to metal.

Speed control of the 3-phase, a.c. motor (supply req. 3x240/400 V, 50 Hz) by

frequency converter*.

A speed monitor incorporating a pulse generator and reed contact is fitted to the output shaft as standard.

Magnetic stirrer drives are also available in Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels.

All magnetic stirrer drives are available with ATEX certification on request.

Type	Temperature max. °C	Pressure max. bar	Motor kW	Torque Nm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK M200G	300	200	0.25	2	1200	1.4435	Ball bearings stainless steel	40 26446 00230 5
BUK M500G	300	200	0.37	5	1200	1.4435	Ball bearings stainless steel	40 26446 00234 3
BUK M800G	300	200	1.10	8	1200	1.4435	Ball bearings stainless steel	40 26446 00238 1
BUK M200G HP	300	700	0.25	2	1200	1.4980	Ball bearings stainless steel	40 26446 00232 9
BUK M500G HP	300	700	0.37	5	1200	1.4980	Ball bearings stainless steel	40 26446 00236 7
BUK M800G HP	300	700	1.10	8	1200	1.4980	Ball bearings stainless steel	40 26446 00240 4

* not included with delivery



Magnetic stirrer drives BUK complete with gear system, max. 700 bar, torque 800 Ncm

Magnetic coupling with gear drive
for manual speed control by hand wheel.

Their constructional design allows use with reactors up to 700 bar and torques up to 150 Nm. All parts coming into contact with the medium are made of stainless steel. A bore with blind plug is positioned laterally to fit an optional valve. The sealing to the autoclave lid is metal to metal.

Speed control of the 3-phase, a.c. motor (supply req. 3x240/400 V, 50 Hz) by

ball-roller gear system with hand wheel.

A speed monitor incorporating a pulse generator and reed contact is fitted to the output shaft as standard.

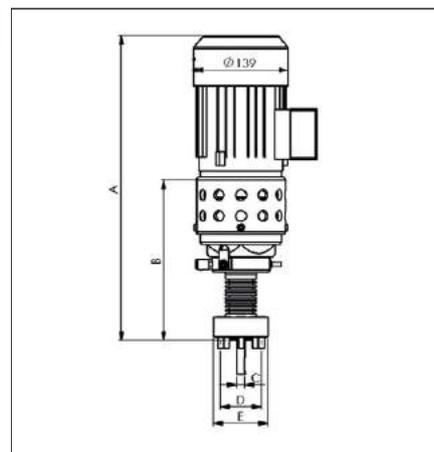
Magnetic stirrer drives are also available in Hastelloy®, titanium, zirconium and other materials or offering alternative torque levels.

All magnetic stirrer drives are available with ATEX certification on request.

Type	Temperature max. °C	Pressure max. bar	Motor kW	Torque Nm	Speed max. rpm.	Material no.	Bearings	Code-No.
BUK MG200G	300	200	0.25	2	1150	1.4435	Ball bearings stainless steel	40 26446 00231 2
BUK MG500G	300	200	0.37	5	1150	1.4435	Ball bearings stainless steel	40 26446 00235 0
BUK MG800G	300	200	1.10	8	1150	1.4435	Ball bearings stainless steel	40 26446 00239 8
BUK MG200G HP	300	700	0.25	2	1150	1.4980	Ball bearings stainless steel	40 26446 00233 6
BUK MG500G HP	300	700	0.37	5	1150	1.4980	Ball bearings stainless steel	40 26446 00237 4
BUK MG800G HP	300	700	1.10	8	1150	1.4980	Ball bearings stainless steel	40 26446 00241 1

Dimensions of BUK up to 800 Ncm

Type	A	B	C	D	E	Thread
	mm	mm	mm	mm	mm	
BUK M200G	453	232	Ø 12	60	80	M 45 x 1,5
BUK M500G	565	344	Ø 20	90	120	M 60 x 2,0
BUK M800G	578	357	Ø 20	90	120	M 60 x 2,0
BUK MG200G	588	232	Ø 12	60	80	M 45 x 1,5
BUK MG500G	700	344	Ø 20	90	120	M 60 x 2,0
BUK MG800G	848	357	Ø 20	90	120	M 60 x 2,0



Application example for BUK MG-G

Shown here is a magnetic stirrer drive with 40 Ncm torque and manual speed control by hand wheel. It is mounted on a 100 l high pressure autoclave at 80 bar and 230°C.

These BUK drives are specially constructed for use with high pressure autoclaves. Models for applications up to 350°C, 350 bar and 150 Nm are offered, depending on the material they are manufactured from. ATEX documentation for the complete assembly is available on request.



Magnetic stirrer drives

Model Selection



PMRK compressed air magnetic stirrer drives with ground joint

PMRK series drives feature a permanent magnetic coupling and a flanged, compressed air-driven motor. The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced. The speed is regulated by a continuously adjustable fine control valve, with an analogue tachometer fitted as standard.

The stirring system is supplied certified to ATEX regulations. Please order desired documentation separately.

We can also make alternative flanges to your requirements - details on request.

Specifications

PMRK 11/1 and PMRK 11/2

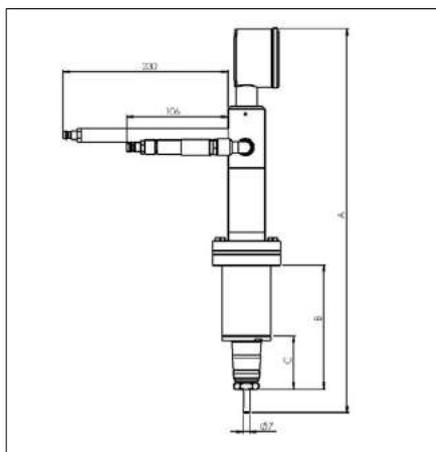
Material no.: 1.4435 (AISI 316L)
 Temperature: max. 240°C
 Seals: Viton®

PMRK 11/1 HC and PMRK 11/2 HC

Material no.: 2.4602 (HC 22)
 Temperature: max. 250°C
 Seals: FFKM

Type	Joint size	Volume max. ml	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
PMRK 11/1/90	NS 29/32	5000	10000	90	1750	Ball bearings stainless steel	40 26446 00332 6
PMRK 11/1/90 HC	NS 29/32	5000	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00335 7
PMRK 11/2/90	NS 45/40	10000	10000	90	1750	Ball bearings stainless steel	40 26446 00338 8
PMRK 11/2/90 HC	NS 45/40	10000	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00341 8

Viscosity data to be considered as guidelines. Technical data pertaining to 6 bar operating pressure.



Dimensions of PMRK with ground joint

Type	A mm	B mm	C mm
PMRK 11/1/90	398	130	56
PMRK 11/2/90	411	142	69

ATEX documentation 0/1:

Zone 0 in the reactor, zone 1 outside, EU declaration of conformity

ATEX documentation 1/1:

Zone 1 in the reactor, zone 1 outside, EU declaration of conformity

Type	Code-No.
ATEX documentation 0/1	40 26446 00727 0
ATEX documentation 1/1	40 26446 00767 6

Application example for PMRK with ground joint

Shown here is a PMRK 11/1/90 compressed air-operated magnetic stirrer drive with NS 29/32 ground joint, mounted on a 3 l double-jacketed reaction vessel with NW 150 lid. Depending on the reaction vessel, this range is suitable for work under vacuum and temperatures up to 250°C. The whole stirring unit is designed for use in EX zones (ATEX).



PMRK 11/3 compressed air magnetic stirrer drives with flange up to 10 bar, mat.no. 1.4571

PMRK series drives feature a permanent magnetic coupling and a flanged, compressed air-driven motor. The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced.

The flange version is suitable for applications under vacuum and pressure up to 10 bar.

The advantage of a flange connection is that forces are distributed over a larger contact surface, allowing the use of higher torques and larger container volumes.

The speed is regulated by a continuously adjustable fine control valve, with an

analogue tachometer fitted as standard.

Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning.

We can also make alternative flanges to your requirements - details on request.

The stirring system is supplied certified to ATEX regulations. Please order desired documentation separately.



Type	Flange DN	Volume max. ml	Temperature max. °C	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
PMRK 11/3/90	15	5000	240	10000	90	1750	Ball bearings stainless steel	40 26446 00344 9
PMRK 11/3/120	15	10000	240	10000	120	1750	Ball bearings stainless steel	40 26446 00345 6
PMRK 11/3/150	15	10000	240	30000	150	1750	Ball bearings stainless steel	40 26446 00346 3
PMRK 11/3/90	25	5000	240	10000	90	1750	Ball bearings stainless steel	40 26446 00349 4
PMRK 11/3/120	25	10000	240	10000	120	1750	Ball bearings stainless steel	40 26446 00350 0
PMRK 11/3/150	25	10000	240	30000	150	1750	Ball bearings stainless steel	40 26446 00351 7
PMRK 11/3/90	40	5000	240	10000	90	1750	Ball bearings stainless steel	40 26446 00354 8
PMRK 11/3/120	40	10000	240	10000	120	1750	Ball bearings stainless steel	40 26446 00355 5
PMRK 11/3/150	40	10000	240	30000	150	1750	Ball bearings stainless steel	40 26446 00356 2

Viscosity data to be considered as guidelines. Technical data pertaining to 6 bar operating pressure.

ATEX documentation 0/1:

Zone 0 in the reactor, zone 1 outside, EU declaration of conformity

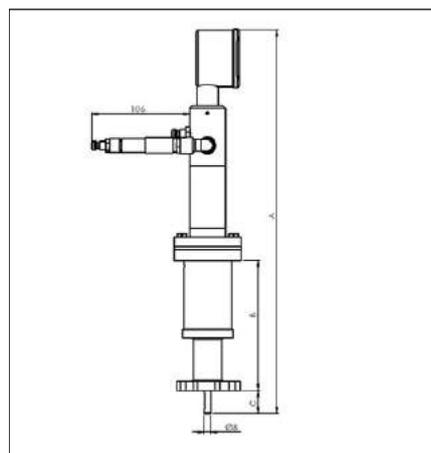
ATEX documentation 1/1:

Zone 1 in the reactor, zone 1 outside, EU declaration of conformity

Type	Code-No.
ATEX documentation 0/1	40 26446 00727 0
ATEX documentation 1/1	40 26446 00767 6

Dimensions of PMRK with flange

Type	A mm	B mm	C mm
PMRK 11/3/90	472	126	90
PMRK 11/3/120	484	138	90
PMRK 11/3/150	496	150	90



Magnetic stirrer drives

Model Selection



PMRK 11/3 compressed air magnetic stirrer drives with flange up to 10 bar, mat.no. 2.4602 (HC 22)

PMRK series drives feature a permanent magnetic coupling and a flanged, compressed air-driven motor. The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced.

The flange version is suitable for applications under vacuum and pressure up to 10 bar. The advantage of a flange connection is that forces are distributed over a larger contact surface, allowing the use of higher torques and larger container volumes.

The speed is regulated by a continuously

adjustable fine control valve, with an analogue tachometer fitted as standard.

Ball bearings ensure rapid, easy replacement to facilitate maintenance and cleaning.

We can also make alternative flanges to your requirements - details on request.

The stirring system is supplied certified to ATEX regulations. Please order desired documentation separately.

Type	Flange DN	Volume max. ml	Temperature max. °C	Viscosity mPas	Torque Ncm	Speed max. rpm.	Bearings	Code-No.
PMRK 11/3/90 HC	15	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00556 6
PMRK 11/3/120 HC	15	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00557 3
PMRK 11/3/150 HC	15	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00558 0
PMRK 11/3/90 HC	25	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00561 0
PMRK 11/3/120 HC	25	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00562 7
PMRK 11/3/150 HC	25	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00563 4
PMRK 11/3/90 HC	40	5000	240	10000	90	1150	Slide bearings PTFE/carbon	40 26446 00566 5
PMRK 11/3/120 HC	40	10000	240	10000	120	1150	Slide bearings PTFE/carbon	40 26446 00567 2
PMRK 11/3/150 HC	40	10000	240	30000	150	1150	Slide bearings PTFE/carbon	40 26446 00568 9

Viscosity data to be considered as guidelines. Technical data pertaining to 6 bar operating pressure.

ATEX documentation 0/1:

Zone 0 in the reactor, zone 1 outside, EU declaration of conformity

ATEX documentation 1/1:

Zone 1 in the reactor, zone 1 outside, EU declaration of conformity

Type	Code-No.
ATEX documentation 0/1	40 26446 00727 0
ATEX documentation 1/1	40 26446 00767 6

Application example for PMRK with flange

Shown here is a PMRK 11/3/90 compressed air-operated magnetic stirrer drive with NW 25 flange, mounted on a 3 l double-jacketed reaction vessel with NW 150 lid. Depending on the reaction vessel, this range is suitable for pressures up to 10 bar and temperatures up to 250°C. The whole stirring unit is designed for use in EX zones (ATEX).



PMRK compressed air magnetic stirrer drives with M30 thread up to 200/700 bar

PMRK series drives feature a permanent magnetic coupling and a flanged, compressed air-driven motor. The use of a cardan coupling is unnecessary, meaning both vibrations and the installation height are reduced.

This version with M30x2 screw thread is suitable for applications under pressure up to 700 bar, depending on the material, and can easily be screwed into an autoclave lid.

Sealing to the autoclave lid is achieved using a cutting ring (HC 22)*, see accessories.

The speed is regulated by a continuously

adjustable fine control valve, with an analogue tachometer fitted as standard.

Magnetic stirrer drives are also available in titanium, zirconium and other materials or offering alternative torque levels.

The stirring system is supplied certified to ATEX regulations. Please order desired documentation separately.



Specifications

PMRK 11/16

Temperature: max. 300°C

Pressure: max. 200 bar

PMRK 11/17

Temperature: max. 300°C

Pressure: max. 700 bar

Type	Volume max. ml	Viscosity mPas	Torque Ncm	Speed max. rpm.	Material no.	Bearings	Code-No.
PMRK 11/16/90	5000	10000	90	1750	1.4435 (AISI 316L)	Ball bearings stainless steel	40 26446 00359 3
PMRK 11/16/90 HC	5000	10000	90	1150	2.4602 (HC 22)	Slide bearings PTFE/carbon	40 26446 00371 5
PMRK 11/17/90	5000	10000	90	1750	1.4980	Ball bearings stainless steel	40 26446 00479 8

* not included with delivery. Viscosity data to be considered as guidelines. Technical data pertaining to 6 bar operating pressure.

Dimensions of PMRK with thread

Type	A mm	B mm	C mm	D mm
PMRK 11/16/90	428	159.5	20	28
PMRK 11/17/90	428	159.5	20	28

Lid seal

Type	Code-No.
Cutting ring mat.no. 2.4602 (HC 22)	55100093

ATEX documentation 0/1:

Zone 0 in the reactor, zone 1 outside, EU declaration of conformity

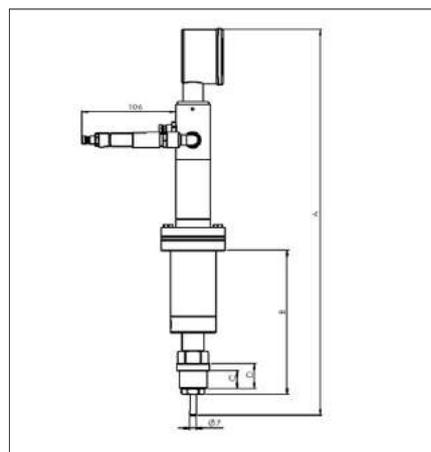
ATEX documentation 1/1:

Zone 1 in the reactor, zone 1 outside, EU declaration of conformity

Type	Code-No.
ATEX Documentation 0/1	40 26446 00727 0
ATEX Documentation 1/1	40 26446 00767 6

Application example for PMRK with thread

Shown here is a PMRK 11/16/90 compressed air-powered magnetic stirrer drive, mounted on a 1000 ml capacity high pressure reactor at 200 bar and 250°C. Its design and construction allows use in applications up to 700 bar and 300°C, depending on the material it is manufactured from. The advantage of this series is its compact size compared to Ex-proof electrical drives. The whole stirring unit is suitable for use in Ex zones.



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Magnetrührkupplungen	Magnetic stirrer couplings	Accouplements magnétiques pour agitateurs
Magnetrührantriebe	Magnetic stirrer drives	Agitateurs magnétiques