

## DRUM/BARREL PUMPS

**sera** | EXCELLENCE  
PARTNER PRODUCT



INSPIRED. SOLUTIONS. FOR CUSTOMERS.

# DRUM PUMPS PF-SERIES

## Sealless, High Performance

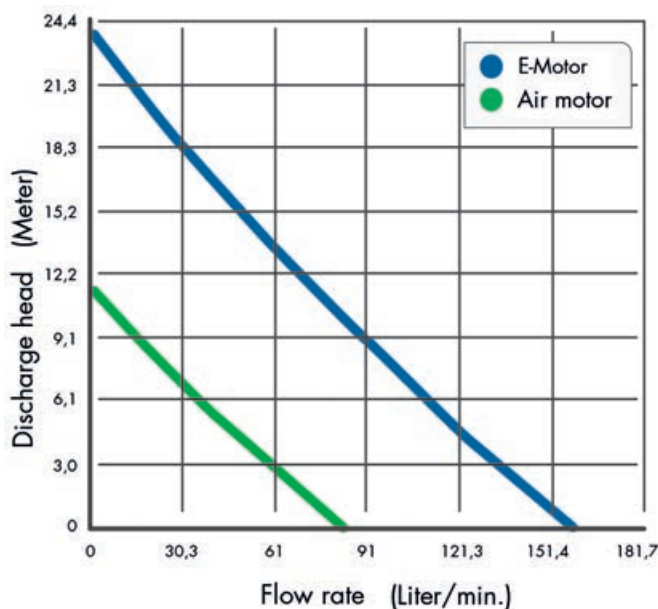
Unique double suction impeller provides high flow and high head. Sealless design improves reliability. Model PFS offers FDA-compliant material and ATEX 2014/34/EU certified options.

### APPLICATIONS

Acids, bases, solvents<sup>1)</sup>, flammables<sup>1)</sup>, water treatment chemicals, cleaners, plating solutions, kidney dialysis solutions, sanitary, diesel exhaust fluid (DEF)/AdBlue

### TECHNICAL DATA

Flow rate <sup>2)</sup>	[max. litres/min]	up to	151
Discharge head <sup>2)</sup>	[max. mWC]	up to	24
		PP	71
Temperature	[max. °C]	PVDF <sup>3)</sup>	49
		316SS	105
Specific gravity	[max. kg/dm³]		1,8
Viscosity	[max. cP]	with electric motor	2.000
		with air motor	330
Tube diameter	[mm]		51
Discharge connection	[mm]		25



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup> When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

<sup>2)</sup> All testing performed with water at 68° F (20° C) in a full container with the discharge barb at maximum opening. Actual performance may vary by +/- 10%.

<sup>3)</sup> PFV-72 = 46°C maximum temperature

Actual performance will decrease with increased fluid viscosity and specific gravity.



### TUBE LENGTHS

69cm (27"), 102cm (40"), 122cm (48"), 152cm (60"), 183cm (72")

### DOUBLE IMPELLER

Double suction impeller provides both high flow rates and high discharge pressure.



### THREADED FOOT

Heavy duty threaded foot prevents breakage.



### MATERIALS

Type	Outer tube	Internals
PFM	PP	316SS, PP, FKM, PVDF, PTFE
PFP	PP	Alloy 625, PP, FKM, PVDF, PTFE
PFV	PVDF	Alloy 625, FKM, PVDF, PTFE
PVS	316SS	316SS, FKM, ETFE, PTFE

# DRUM PUMPS EF-SERIES

## Sealless, Best Value

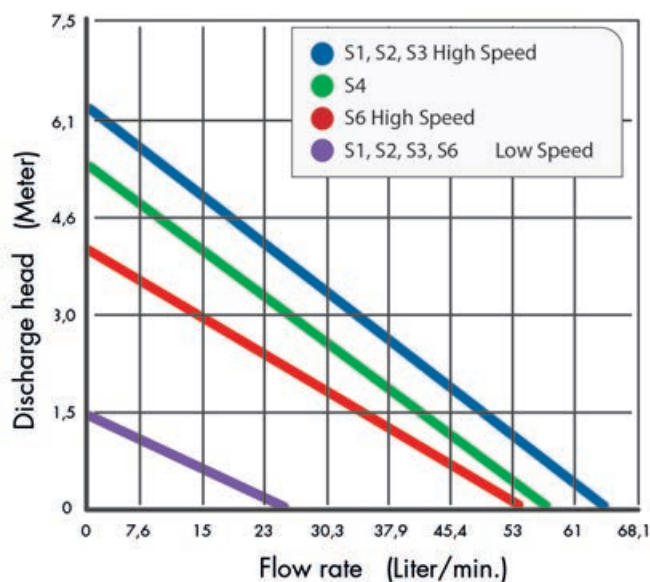
This pump provides an economical choice for light duty transfer. Ideal replacement for hand pumps. ATEX 2014/34/EU certified options available.

### APPLICATIONS

Light acids and bases, solvents<sup>1)</sup>, flammables<sup>1)</sup>, plating solutions, sodium hypochlorite, cleaners, coolants, diesel exhaust fluid (DEF)/Ad-Blue

### TECHNICAL DATA

Flow rate <sup>2)</sup>	[max. litres/min]	up to	64,4
Discharge head <sup>2)</sup>	[max. mWC]	up to	6,1
Temperature	[max. °C]	PP	66
		PVDF	71
		316SS	100
Specific gravity <sup>3)</sup>	[max. kg/dm <sup>3</sup> ]		1,6
Viscosity <sup>3)</sup>	[max. cP]	with electric motor	300
		with air motor	300
		with 12V-Motor	100
Tube diameter	[mm]	EFP, EFS	32
		EFV	33
Discharge connection	[mm]		19



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup> When pumping flammables or combustibles, use air drive motors on stainless steel tubes with static protection kit.

<sup>2)</sup> All testing performed with water at 68°F (20°C). Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.

<sup>3)</sup> Maximum specific gravity is dependent on fluid viscosity; maximum fluid viscosity is dependent upon specific gravity.



EFP

EFV

EFS

### TUBE LENGTHS

**EFP/EFV:** 41cm (16"), 69cm (27"), 102cm (40"), 122cm (48"), 137cm (54")

**EFS:** 41cm (16"), 69cm (27"), 102cm (40"), 122cm (48")

### AXIAL FLOW IMPELLER

Designed to produce higher flow rates.



### BUILT-IN STRAINER

Prevents solids from entering the tube and damaging the pump. (EFP/EFV only).



### MATERIALS

Type	Outer tube	Internals
EFP	PP	316SS, FKM, PTFE, PP
EFV	pure PP/PVDF	Alloy 625, FKM, PTFE, PP
EFS	316SS	316SS, FKM, PTFE, ETFE



# DRUM PUMPS TT-SERIES

## Sealed, Medium Viscosity/Flow

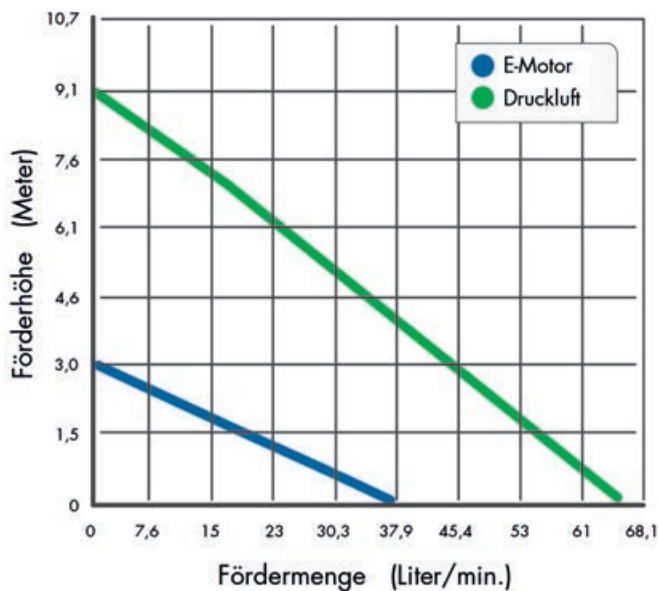
Sealed pump with PTFE screw-type lifting compressors. Ideal for liquids containing small particulate or solvents. Model STTS constructed of FDA-compliant materials.

### APPLICATIONS

Inks, paints, solvents <sup>1)</sup>, sanitary, sodium hypochlorite, food products

### TECHNICAL DATA

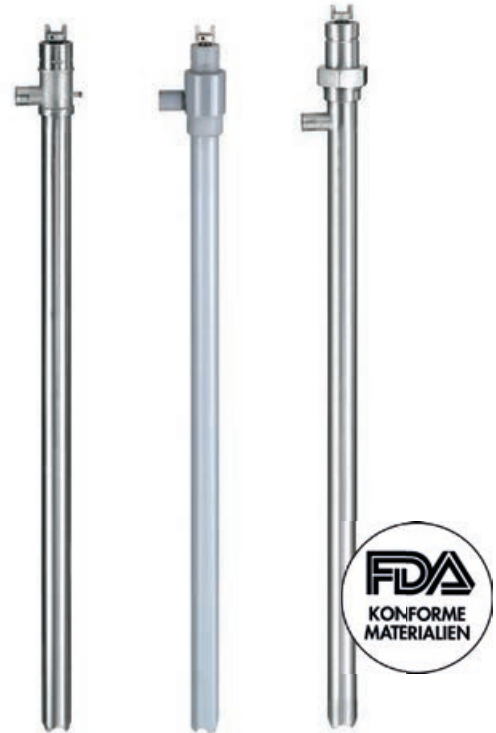
Flow rate <sup>2)</sup>	[max. litres/min]	up to	61
Discharge head <sup>2)</sup>	[max. mWC]	up to	9
Temperature	[max. °C]		66
Specific gravity	[max. kg/dm <sup>3</sup> ]		1,8
Viscosity	[max. cP]	with electric motor	500
		with air motor	2.000
Tube diameter	[mm]	TTS, STTS	38
		TTC	41
Discharge connection	[mm]		25



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup> When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

<sup>2)</sup> All testing performed with water at 20°C. Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.



TTS

TTC

STTS

### TUBE LENGTHS

TTC/TTS: 69cm (27"), 102cm (40"), 122cm (48")  
STTS: 102cm (40")

### SCREW-TYPE LIFTING COMPRESSOR

Designed to allow passage of small solids.



### BOTTOM BEARING/STRAINER

PTFE bottom bearing/strainer prevents potentially damaging large solids from entering the pump.



### MATERIALS

Type	Outer tube	Internals
TTS	316SS	316SS, PTFE
TTC	CPVC	Alloy 625, PTFE
STTS	316SS	316SS, PTFE

# DRUM PUMPS BT-/HVDP-SERIES

## High Viscosity/High Head

**BT Series** - High viscosity sealed design with PTFE screw-type lifting compressors for liquids up to 15.000 cP.

**HVDP Series** - Progressive cavity, positive displacement, mechanically sealed pump for high viscosity liquids up to 20.000 cP (HR model - pictured) or 100.000 cP (LR model).

FDA-compliant material options.

### APPLICATIONS

Oils, resins, solvents <sup>1)</sup>, waxes, adhesives, gear lube, glycerin, silicone, lotions, polymers, honey, juice concentrate, hair and bath gel, corn syrup, etc.

### TECHNICAL DATA

Flow rate <sup>2)</sup>	[max. litres/min]	up to	38
Discharge head <sup>2)</sup>	[max. mWC]	BTS	61
		HVDP	91
Temperature	[max. °C]	BTS	93
		HVDP	82
Specific gravity	[max. kg/dm <sup>3</sup> ]		1,8
		BTS	15.000
Viscosity	[max. cP]	HVDP-HR	20.000
		HVDP-LR	100.000
Tube diameter	[mm]		51
Discharge connection	[mm]	BTS	38
		HVDP	38 (optional 50)

### TUBE LENGTHS

**BTS:**  
102cm (40")

**HVDP:**  
69cm (27"), 102cm (40"), 122cm (48")

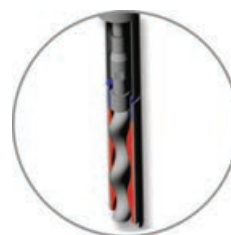


**BTS**

**HVDP**

### HVDP PROGRESSIVE CAVITY POSITIVE DISPLACEMENT

Designed for high viscosities.



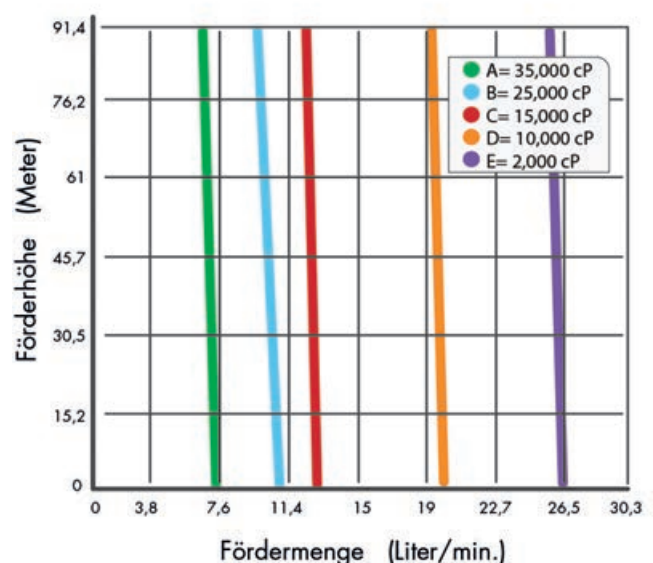
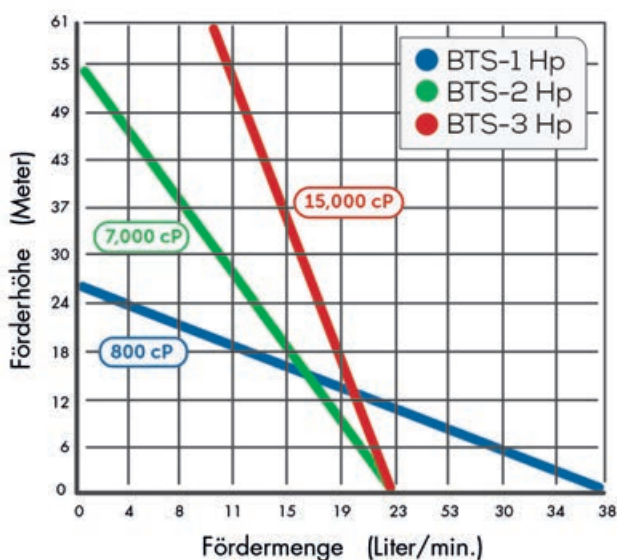
### BT SCREW-TYPE LIFTING COMPRESSOR

Designed to allow passage of small solids.



### UNIQUE CAMLOCK FEATURE

For quick disassembly of the HVDP.



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup> When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

<sup>2)</sup> All testing performed with water at 20°C. Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.

### MATERIALS

Type	Outer tube	Internals
BTS	316SS	316SS, PTFE
HVDP	316SS	316SS, Buna N, FKM, PTFE

# DRUM PUMPS TB-SERIES

## Sealed, Lightweight Economy Drum Pump

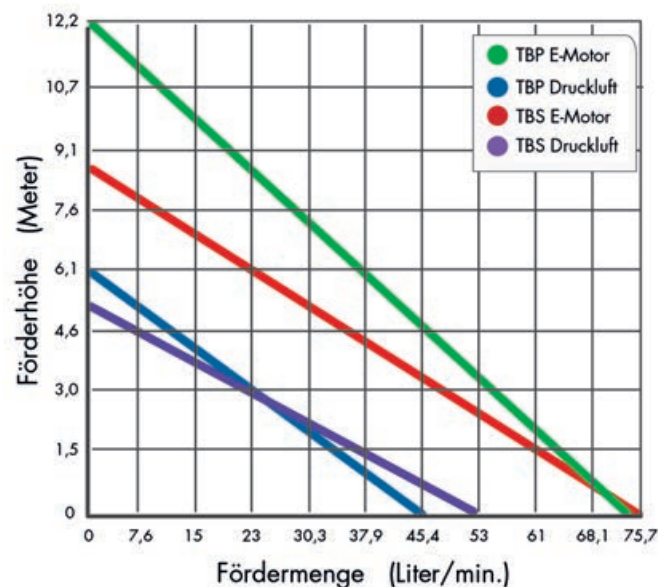
Lightweight pumps suitable for low to medium viscosity mild corrosives, solvents, and chemicals. Fits smaller bung openings.

### APPLICATIONS

Acids, bases, solvents <sup>1)</sup>, water treatment chemicals, bleach, swimming pool chemicals, cleaners

### TECHNICAL DATA

Flow rate <sup>2)</sup>	[max. litres/min]	up to	75,7
Discharge head <sup>2)</sup>	[max. mWC]	TBS	8,5
		TBP	12,5
Temperature	[max. °C]		66
Specific gravity	[max. kg/dm <sup>3</sup> ]		1,4
Viscosity	[max. cP]		200
Tube diameter	[mm]	TBS	38
		TBP	41
Discharge connection	[mm]		22



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup> When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

<sup>2)</sup> All testing performed with water at 20°C. Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.



TBS



TBP

### TUBE LENGTHS

TBS: 69cm (27"), 102cm (40"), 122cm (48")

TBP: 102cm (40")

### SCREW-TYPE LIFTING COMPRESSOR

Designed to allow passage of small solids.



### VARIABLE ORIFICE

The TBP variable flow barb allows flow to be increased by removing steps on barb.



### MATERIALS

Type	Outer tube	Internals
TBS	316SS	316SS, PTFE
TBP	pure PP	pure PVDF, Alloy 625, PTFE

# PUMP MIXER TM-SERIES

## Sealed, Light/Medium Viscosity

Sealed mixer with 4-blade turbine mixing/blending capability. Ideal for mixing drums with settled materials.

### APPLICATIONS

Dyes, inks, paints, stains, mild corrosives, solvents <sup>1)</sup>, flammables <sup>1)</sup>

### TECHNICAL DATA

Circulation	[max. litres/min]	53
Temperature	[max. °C]	93
Specific gravity:	[max. kg/dm <sup>3</sup> ]	1,8
Viscosity	[max. cP]	1.000
Tube diameter	[mm]	51
Discharge connection	[mm]	25

Fluid is pulled into the top of the mixer tube and is discharged under pressure out of the bottom in a continuous blending cycle.

Top-to-bottom mixing action allows rapid suspension of settled solids.



See [MOTOR DATA](#) pages for applicable motor models.

<sup>1)</sup>When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit,



### TUBE LENGTH

102cm (40")



### TURBINE

Provides high intensity mixing and suspension of settled solids.



### MATERIALS

Type	Outer tube	Internals
TMS	316SS	316SS, PTFE

# MOTOR DATA

## for Drum/Barrel Pumps



M3V, M5V,  
M5V-US, M3V-UK



S1, S2, S3, S6



M3T, M5T,  
M7T, M8T



M15, M16, M17



M73, M74,  
M75, M76

### STANDARD MOTORS, SPLASHPROOF, IP24

Type	for Series	Description	Certification	Electrical Requirements [Volt/Hz]	Input [Watt]	Output [Watt]	Speed [U/min.]	Maximum Viscosity [cP]
M3V	PF, TB	quick connects to pump without tools. Downdraft cooling system and double wall housing. Continuous duty, variable speed. 3,5m cord and integral circuit breaker included.	CSA	115 V AC / 50-60 Hz	650	400	3.500-10.000	500
M5V	PF, TB		CE	230 V AC / 50-60 Hz	650	400	3.500-10.000	500
M5V-US*	PF, TB		CE	230 V AC / 50-60 Hz	650	400	3.500-10.000	500
M3V-UK	PF, TB		CE	115 V AC / 50-60 Hz	650	400	3.500-10.000	500
S1	EF	ergonomic, lightweight design with downdraft cooling. Continuous duty, dual speed, double insulated. 3,5m cord and manual reset circuit breaker included.	CSA	115 V AC / 60 Hz	230	110	8.000-14.000	300
S2	EF		CE	230 V AC / 50-60 Hz	230	110	8.000-14.000	300
S3	EF		CE	115 V AC / 50-60 Hz	230	110	8.000-14.000	300
S6	EF	Lightweight cordless design. Built-in rechargeable lithium ion battery, dual speed, overload protection. Charging jack w/ flip cover.	CE	12 V (10,8 V work load)	150	100	8.000-12.000	100

### STANDARD MOTORS, TOTALLY ENCLOSED FAN COOLED, IP54

Type	for Series	Description	Certification	Electrical Requirements [Volt/Hz]	Input [Watt]	Output [Watt]	Speed [U/min.]	Maximum Viscosity [cP]
M3T	PF, TB	Molded plastic housing features integral handle. Continuous duty. A 3,5m cord and circuit breaker with manual reset are provided.	CSA	115 V AC / 60 Hz	1.000	680	12.000	1.000
M5T	PF, TB		CE	230 V AC / 50-60 Hz	1.000	680	12.000	1.000
M3TV	PF, TB		CSA	115 V AC / 60 Hz	1.000	680	0 - 12.000	2.000
M5TV	PF, TB		CE	230 V AC / 50-60 Hz	1.000	680	0 - 12.000	2.000
M7TV	TT, TM		CSA	115 V AC / 50-60 Hz	450	250	0 - 6.000	500
M8TV	TT, TM		CE	230 V AC / 50-60 Hz	450	250	0 - 6.000	500
M15	BT	Continuous duty. A 3,5m cord is provided.	..	230 / 460 V / 60 Hz	***	0,75 kW	3.450	800
M16	BT			230 / 460 V / 60 Hz	***	1,5 kW	1.725	7.000
M17	BT			230 / 460 V / 60 Hz	***	2,2 kW	1.725	15.000
M73	HVDP	IP55, Continuous duty, variable speed. A 3,5m cord and circuit breaker with manual reset is provided.	CSA	115 V AC / 50-60 Hz	1.000	680	12.000	10.000
M74	HVDP		CE	230 V AC / 50-60 Hz	1.000	680	12.000	10.000
M75	HVDP		CSA	115 V AC / 50-60 Hz	1.000	680	0 - 12.000	20.000
M76	HVDP		CE	230 V AC / 50-60 Hz	1.000	680	0 - 12.000	20.000

\* Suitable for 230V, 60 Hz. Includes a NEMA 6-15 plug.

\*\* Carries independent testing laboratory approval.

\*\*\* Input power for induction motors will vary by manufacturer.

**Note:** Maximum viscosity can vary by pump series.



# MOTOR DATA

## for Drum/Barrel Pumps



M3XV, M5XV, M8XV



M6, M6X



M18, M19, M20



M65, M66



S4

## EXPLOSION PROOF MOTORS

Type	for Series	Description	Certification	Electrical Requirements [Volt/Hz]	Input [Watt]	Output [Watt]	Speed [U/min.]	Maximum Viscosity [cP]
<b>M3XV</b>	PF	Explosion proof design suitable for use in hazardous areas and ideal for applications with flammable liquids. The TEFC housing protects the motor internals from dust, corrosive vapors and water splashes. A 3,5m cord and internal circuit breaker are provided. Continuous duty rated.	CSA	115 V AC / 60 Hz	1.000	680	0 - 12.000	2.000
<b>M5XV</b>	TT, TM, PF		CE/ATEX Ex II 2G Ex d ib IIB T5 Gb	230 V AC / 50-60 Hz	1.000	680	0 - 12.000	2.000
<b>M8XV</b>	PF, TB		CE/ATEX Ex II 2G Ex d ib IIB T5 Gb	230 V AC / 50-60 Hz	450	250	0 - 6.000	500

## AIR MOTORS <sup>1)</sup>

Type	for Series	Description	Certification	Luftanforderungen	Output [Watt]	Speed [U/min.]	Maximum Viscosity [cP]
<b>M6</b>	PF, TT, TB	Variable speed via supplied control valve. Motors are provided with muffler and control valve.	CE	5,5 - 6,9 bar @ 25-54 m³/h	400	300 - 9.000	330
<b>M6X</b>	PF, TT, TB, TM		CE	5,5 - 6,9 bar @ 25-54 m³/h	600	300 - 6.000	330
<b>M18</b>	BT		CE	6,9 bar @ 68-119 m³/h	750	300 - 3.000	800
<b>M19</b>	BT			6,9 bar @ 136-204 m³/h	1.500	300 - 3.000	7.000
<b>M20</b>	BT			6,9 bar @ 204-289 m³/h	2.200	300 - 2.500	15.000
<b>M65</b>	HVDP		CE	6,9 bar @ 42,5 m³/h	560	300 - 3.000	15.000
<b>M66</b>	HVDP			6,9 bar @ 119 m³/h	1.000	300 - 3.000	100.000
<b>S4</b>	EF		CE	2,8 bar @ 46 m³/h	400	300 - 11.000	300

<sup>1)</sup> An air motor is a non-electrical device which means the possibility of explosion from igniting flammables or combustibles is reduced. Air motor performance will depend upon user's compressor and system setup.

# ACCESSORIES

## FLOW METERS

- Dispense precise amount of fluids from containers.
- Handles chemicals and corrosive liquids.
- Large LCD display in GPM or LPM, 20 cP maximum +/-1% accuracy and repeatability.
- All models are factory calibrated.
- Some models may be field calibrated.
- Batch control versions available.
- Corrosion resistant polypropylene or PVDF.
- Engineered connections for fast assembly to PFM, PFP and PFV drum pumps.



## DISCHARGE TUBING

Flexible tubing connects to the pump discharge. Available in PVC, reinforced PVC and special EPDM for Diesel Exhaust Fluid applications.

## STRAINERS

Strainers attach to pump tubes preventing foreign objects from entering the pump.



## WALL MOUNT BRACKET

Allows pump to be stored in an upright position.

## DRUM ADAPTERS

Secures the pump tube in the barrel's bung opening. Fits standard 2" NPT bung opening. Available in polypropylene, galvanized or stainless steel.



# ACCESSORIES

## CHARGERS

Double insulated with LED charge status indicator for recharging S6 battery motor. Available in 115V with US plug, 230V with Euro plug or 12V for use in most vehicle outlets.



## STATIC PROTECTION KIT

Increases safety when transferring flammable or combustible liquids. Kit includes cross-linked polyethylene grounded hose, ground wire and clamps.



## AIR HOSE

4,6m air hose assembly sold separately.



## FILTER/ LUBRICATOR ASSEMBLY

Conditions compressed air by removing free moisture and solids. Also lubricates the air for longer air motor life.

## NOZZLES

Nozzles provide a convenient way to control liquid flow. Available in polypropylene, aluminum and stainless steel.



