



LIQUID  
SILICONE  
RUBBER – LSR

> **SilcoStar** - the metering and mixing systems

**KRACHT**®

FLUID TECHNOLOGY AND SYSTEMS

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## SilcoStar E-Drive

### I General

The SilcoStar E-Drive series is a servo-electrically driven metering machine with variably adjustable mixing ratio for the production of liquid silicone molded parts.



### I Characteristics

- > Servo-electric linear drive with planetary roller screw drive (up to 10 times longer service life than conventional ball screws)
- > High-precision metering even with small shot weights
- > Uniform emptying of the drums through volumetric adjustment of the mixing ratio (adjustable 0 ... 15%) and patented barrel bottom support. This reduces the residual quantity in the barrels is reduced to less than 1%. (only included in Smart and Pro versions)
- > Patented mixture pressure control directly at the mixing head for constant metering time of the injection molding machine
- > Pressure monitoring via pressure sensors at the pump outputs (for all versions) and on the mixing head (for smart optional / for pro version incl.)
- > Standardized connection panel (smart-port)
- > Level and status display with a dynamic LED band (only included with Smart and Pro versions)
- > Pressure sensor for material shortage and overpressure
- > Adjustable machine foot for easy positioning of the machine
- > Follower plate combination for the use of 200l / 52.83 gal or 20l / 5.28 gal barrels
- > Automatic system venting (for smart optional / for pro version incl.)
- > Automatic pump venting (for smart optional / for pro version incl.)

### Technical and electrical data

Viscosity	< 1.000.000 mPas
Output mixed material	1.000 g/min (depending on viscosity)
Mixing ratio	variable
Colour metering	0.3 ... 4 %
Actuation	servo-electric
Electrical data	380 ... 480 VAC, 50 ... 60 Hz (3P + PE), 16 A
Connection LIM system	24 V
Pneumatic system	R 1/4", 6 bar / 87 psi
Weight	730 kg / 1609.37 lbs
Dimensions (mm/inch)	1 030 x 1 112 x 1 950 mm (W x D x H) 40.55 x 43.78 x 76.77 inch (W x D x H) Attention: Height plus 950 mm / 37.40 inch when pump is completely raised

### I New mixing head design

- > Pressure sensor for material shortage and overpressure
- > Pressure control of mixed material (patented mixture pressure control)
- > Volumetric metering control directly at the mixing head of A and B components as well as up to 2 color additions or additives
- > Cooling trays for static mixers

## SilcoStar E-Drive

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### I Options

- > Rolling device for easy positioning of the barrels and a faster barrel change
- > Automatic drum bottom support
- > 1 liter / 0.26 gal pressure tank for paint with level display
- > 10 liter / 2.64 gal paint container with feed pump
- > Mobile 20 liter / 5.28 gal paint supply unit with agitator
- > Paint metering system with metering valve and position indicator

### I Interfaces

- > Digital EA
- > EUROMAP 82.3

## SilcoStar HY-Drive

### I General

The alternative SilcoStar HY-Drive series are hydraulically driven metering machines. These series are the perfect solution for simple applications. The basic equipment included forms the basic model of our SilcoStar product line. Thanks to its easy operation, the HY-Drive is particularly suitable for newcomers. The hydraulically driven HY-Drive series has a higher energy efficiency than comparable pneumatic machines. The hydraulically coupled drive cylinders ensure a fixed mixing ratio of 1:1.

#### Technical and electrical data

Viscosity	< 1 000 000 mPas
Output mixed material	1 000 g/min (depending on viscosity)
Mixing ratio	1 : 1 (variable)
Colour metering	0.3 ... 4 %
Actuation	hydraulic
Electrical data	180 ... 480 VAC, 50 ... 60 Hz (3P + PE), 16 A
Connection LIM system	24 V
Pneumatic system	R 1/4", 6 bar / 87 psi
Weight	730 kg / 1609.37 lbs
Dimensions (mm/inch)	1 030 x 1 112 x 1 950 mm (W x D x H) 40.55 x 43.78 x 76.77 inch (W x D x H) Attention: Height plus 950 mm / 37.40 inch when pump is completely raised

### I Characteristics

- > Hydraulic metering pump drive
- > High-precision metering even with small shot weights
- > Follower plate combination with automatic venting (optional for Smart and Pro versions) for the use of 200l / 52.83 gal or 20l / 5.28 gal barrels
- > Automatic pump venting (optional for Smart / included for Pro version)
- > Uniform emptying of the barrels by volumetric adjustment of the mixing ratio (adjustable 0 ... 5%) and patented barrel bottom support. This reduces the residual quantity in the barrels is reduced to less than 1%. (only included in Smart and Pro version)
- > Mechanical mixture pressure control directly at the mixing head for a constant metering time of the injection molding machine
- > Pressure monitoring via pressure sensors at the pump outputs (all versions) and on the metering head (optional for Smart / included for Pro version)
- > Standardized connection panel (smart-port)
- > Level and status display with a dynamic LED band (only included with Smart and Pro versions)
- > Pressure sensor for material shortage and overpressure
- > Adjustable mounting foot for easy positioning of the machine

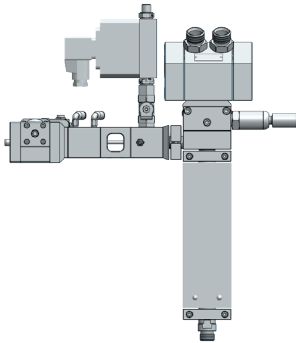
### I New mixing head design

- > Pressure sensor for material shortage and overpressure
- > Pressure control of mixed material
- > Volumetric metering control directly at the mixing head of A and B components as well as up to 2 color additions or additives

## SilcoStar HY-Drive

### I Options

- > Rolling device for easy positioning of the of the barrels and a faster barrel change
- > Automatic barrel bottom support
- > 1 liter / 0.26 gal pressure tank for paint with level indicator
- > 10 liter / 2.64 gal paint container with feed pump
- > Mobile 20 liter / 5.28 gal paint supply unit with agitator work
- > Paint metering with metering valve and position indicator
- > Cooling jacket for static mixer
- > Machine connection with metering control (gear type flow meter VC), cooled static mixer and sensor for monitoring the mixing ratio



## Equipment and options

	EASY	SMART	PRO
<b>Equipment</b>			
Simple operation using buttons and potentiometers	•	-	-
7" multi-touch display	-	•	-
Variable mixing ratio adjustable via software	-	•	•
Full operation via 13" multi-touch display	-	-	•
Predictive maintenance	-	-	•
Maintenance intervals (guided maintenance)	-	-	•
Chart and operational data analysis	-	-	•
Login of different user groups via user login / optional RFID identification	-	-	•
Configurable HomeScreen per user	-	-	•
Configurable access rights per user	-	-	•
<b>Options</b>			
Remote maintenance module	-	-	•
Guided barrel change	-	•	•
ColourTech	-	•	•
CPP.reader	-	•	•
Tandem operation	-	•	•
Cloud connection	-	•	•
<b>Interfaces</b>			
Digital EA	•	-	-
EUROMAP 82.3	-	•	•

## Type key

<b>E</b>	<b>Drive</b>	<b>20</b>	<b>easy</b>
1	2	3	4

<b>1 Product</b>	
<b>E</b>	Electrically driven
<b>HY</b>	Hydraulically driven
<b>2 Drive</b>	
<b>3 Volume</b>	
<b>20</b>	20 litres / 5.28 gal
<b>200</b>	200 litres / 52.83 gal



## ColourTech – the automated colour and additive metering

### I General

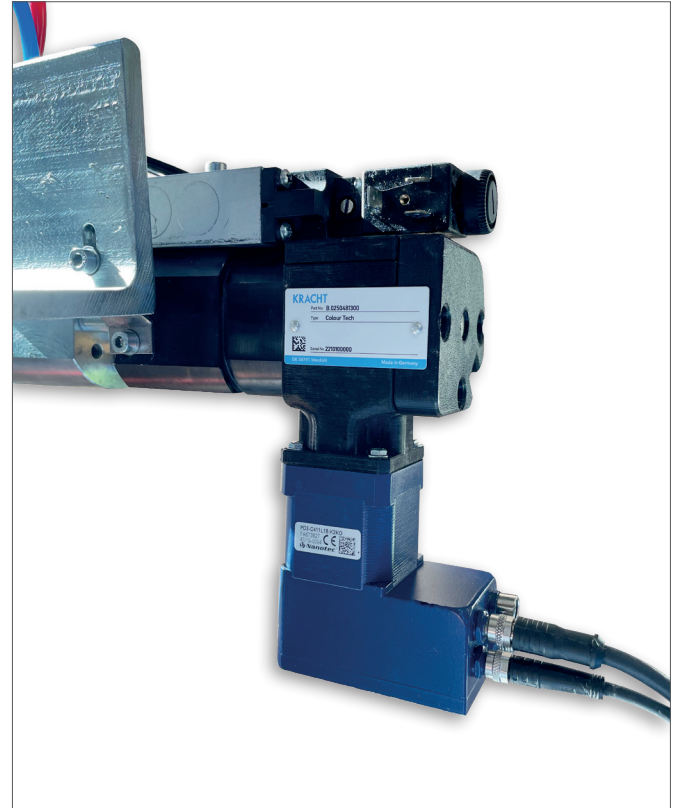
Usually, the stroke is calculated and set for metering valves. The input value must then be stored in the control system. This is an error-prone process. With color and additive metering module ColourTech this problem has now been eliminated.

The ColourTech portioning valve module integrates seamlessly into the SilcoStar product line. After entering the percentage of colorant or additive, the metering quantity is automatically calculated and transferred via a module. If the parameters or the metering speed of the injection molding system change, the amount of color or additive is automatically adjusted. The cycle frequency of the color or additive remains constant to ensure a homogeneous mixture.

Colours or additives can be added in quantities from 0 to 0.288 ml / 0 to 0.01 fl oz with automatic adjustment of the dosing stroke. The ColourTech module is completely equipped with pneumatic valves and thus ensures a high level of operational reliability and long service life.

### I Characteristics

- > Precise color and additive addition
- > First automated portioning valve module

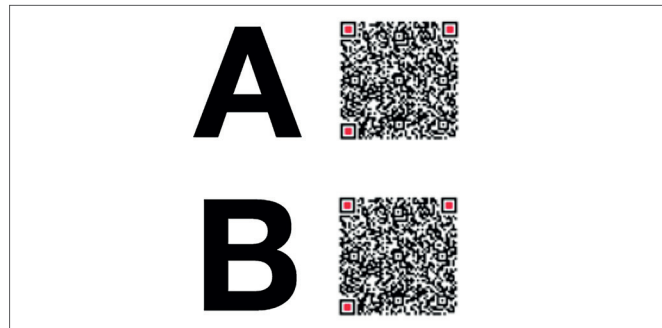


## CPP.reader – the intelligent barrel differentiation

### I General

When it comes to correctly positioning the two components or the two barrels, confusion often occurs - subsequent costs can be extremely high. For example, by cleaning the machine or stopping production. This is avoided by the patented CPP.reader. The CPP.reader ensures smooth process reliability.

If there is an incorrect barrel in the feeder, the process is stopped. The material manufacturers label the delivery containers with the letters A and B on the outside. The CPP.reader recognizes these Letters. If the barrel fits the location, the process is started; If it doesn't fit,



The CPP.reader not only differentiates between A and B, it can also read out significantly more information such as batch numbers, production data, compositions and much more.

the process is stopped and an alarm is issued.

The CPP.reader consists of two compact camera modules with integrated processor technology. With the CPP.reader, QR codes attached to the band can also be read out and passed on. Traceability of batch numbers, production data, shelf life, etc. is thus possible.



Small box, big effect:  
The CPP.reader keeps the production chain clean

**Notes**

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