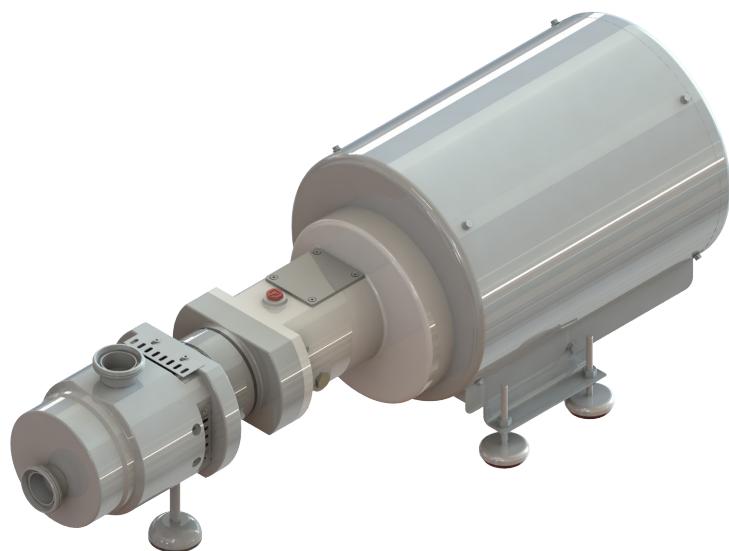


# DCS

## Twin Screw Pump



### APPLICATION

The DCS is a twin screw pump, with sanitary design, suitable for use in the dairy, food and beverage, cosmetics, etc.

The flow is uniform and in an axial direction, so there are no changes of volume or physical properties of the product. Therefore it is an ideal pump for handling shear-sensitive fluids.

It has a high suction lift capability with very low NPSH values.

It is capable of pumping liquids with high viscosity, but also with low viscosity, so it can be used as a CIP-supply pump.

The design ensures a fully cleanability and drainability.

### DESIGN AND FEATURES

The DCS pumps are available in two versions: close coupled and bare shaft construction. They have a two part design (pumpcasing and separate flange). The mechanical seals have a sanitary design. When required, other materials can be used.

### TECHNICAL SPECIFICATIONS

#### Materials

Parts in contact with the product	1.4404 (AISI 316L)
Bearing support	1.4401 (AISI 316)
Gear housing	aluminium
Gaskets in contact with the product	EPDM

#### Mechanical seal

Rotary part	silicon carbide (SiC)
Stationary part	silicon carbide (SiC)
Gasket	EPDM

#### Surface finish

Internal	$R_a \leq 0,8 \mu m$
External	Matt

#### Connections

DIN 11851

### Operating limits

Maximum flow	110 m <sup>3</sup> /h
Maximum differential pressure	12 bar (174 PSI)
Maximum working pressure	10 bar <sup>1</sup> (145PSI)
Temperature range (EPDM)	-20°C to 120°C (4°F to 248°F)
Temperature SIP	140°C (284°F) (maximum 30 minutes)
Maximum speed	2400 rpm

1) 20 bar (290 PSI) for models DCS4B2 and DCS4B3

	Maximum flow (m <sup>3</sup> /h)	Maximum differential pressure (bar)	Maximum speed (rpm)	Maximum solid size (mm)
DCS 1B2	11,5	8	2400	9
DCS 1B3	16	6	2200	14
DCS 2B2	22	8	2200	10
DCS 2B3	30	6	2000	17
DCS 3B2	41	10	2000	18
DCS 3B3	46,5	8	1800	24
DCS 4B2	100	12	1600	22,5
DCS 4B3	110	8	1400	33

## MOTOR

Triphasic induction motor with B5 flange and B3 legs for monoblock version.

Triphasic induction motor with B3 legs for bare shaft version.

In both versions the motor complies with the IEC standards, efficiency class according to EC regulation, IP 55 protection and F-class insulation.

3 phases, 50 Hz, 230 V Δ / 400 V Y, ≤ 4 kW

3 phases, 50 Hz, 400 V Δ / 690 V Y, ≤ 5,5 kW

## OPTIONS

Mechanical seals: TuC/TuC

Knife-edge single mechanical seals

Double mechanical seals

Gaskets: FPM, HNBR, FFKM

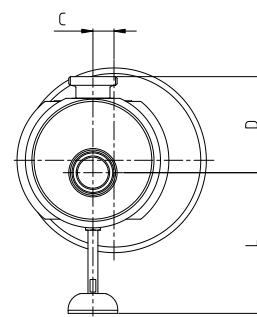
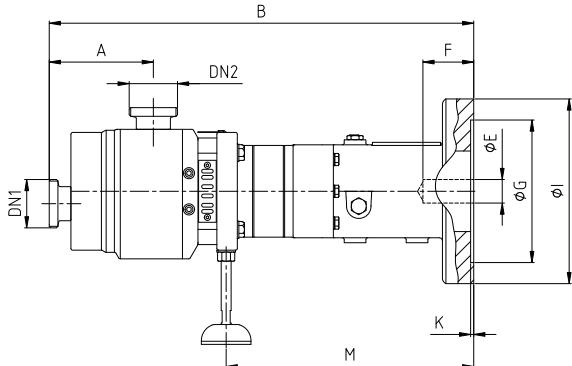
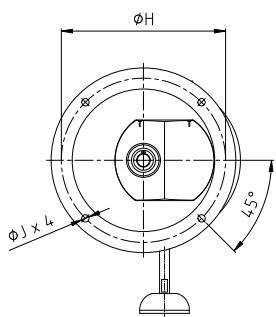
Heating chamber

Bare shaft version

Connections: Clamp, SMS, Flanges

ATEX Certification

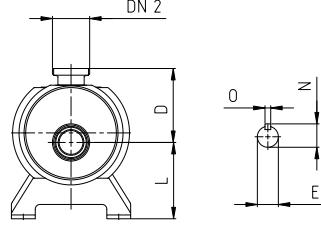
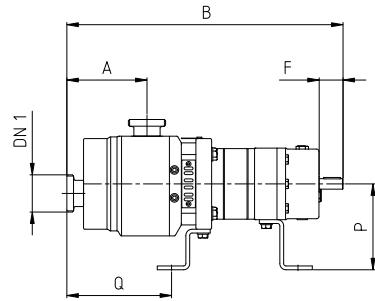
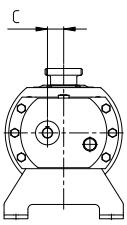
## MONOBLOCK PUMP DIMENSIONS



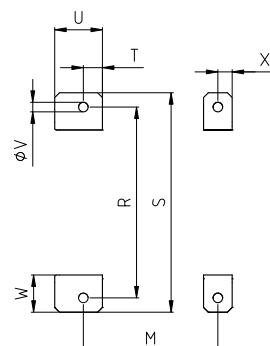
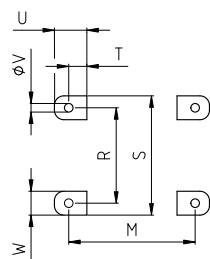
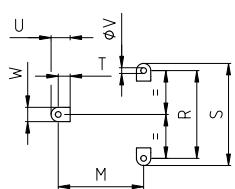
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	IEC MOTOR	DN1	DN2	A	B	C	D	E	F	G	H	I	J	K	L	M	kg
	90				627			24	52	130	165	248	M10		366	50	
<b>DCS 1B2</b>					627	28	136	28	62	180	215	248	M14	5	162	366	50
<b>DCS 1B3</b>	100/112	40	40	155				38	82	230	265	298	M14			398	55
	132				659												
	100/112				660			28	62	180	215	260	M14			378	76
<b>DCS 2B2</b>					682	34	154	38	82	230	265	298	M14	5	225	400	80
<b>DCS 2B3</b>	132	50	50	167				42	112	250	300	348	M16			430	84
	160				712												
	132				876			38	82	230	265	348	M14	5		509	161
<b>DCS 3B2</b>					894	45	194	42	112	250	300	348	M16	6	244	527	165
<b>DCS 3B3</b>	160	100	100	216				48	112	250	300	348	M16	6		527	165
	180				894												

## BARE SHAFT PUMP DIMENSIONS



01.531.32.0003



DCS 1B2 / 1B3

DCS 2B2 / 2B3 / 3B2 / 3B3

DCS 4B2 / 4B3

	DN1	DN2	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	kg
<b>DCS 1B2</b>	40	40	155	545	28	136	18	45	152	179	21	6	172	216	184	214	25	40	12	30	-	50					
<b>DCS 1B3</b>																											
<b>DCS 2B2</b>	50	50	167	576	34	154	22	50	160	200	25	6	180	216	265	325	25	50	18	68	-	98					
<b>DCS 2B3</b>																											
<b>DCS 3B2</b>	65	65	216	756	45	194	35	70	194	250	38	10	225	303	317	377	25	50	20	70	-	160					
<b>DCS 3B3</b>																											
<b>DCS 4B2</b>	150	150	259	920	62	259	45	90	202	400	48,5	14	247	371	333	406	52	82	20	86	30	310					
<b>DCS 4B3</b>																											