



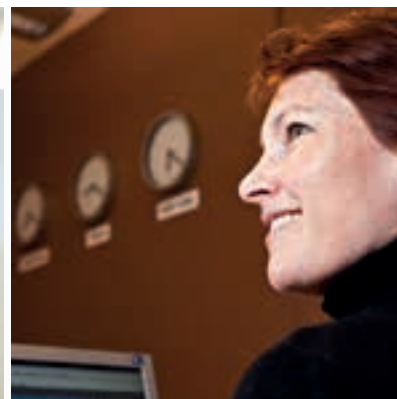
# Hydraulic pumps, motors and accessories

The solution for all your hydraulic needs



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## Our successes continue and we have only just started

**Sunfab develops, produces and sells components to operate hydraulic equipment within the area of mobile vehicles.**

The company Sunfab can trace its roots back to Sundins Fabrik, a family company that was established as long ago as 1925 and, for many years, was a successful manufacturer of skis. A fleet of vehicles ensured reliable transportation of raw materials to the factory. Heavy, irrational loading and unloading gave Eric Sundin, the founder of the company, the incentive required to develop cranes for the vehicles.

The first crane was built in 1947 by HIAB, a separate company. As time went on, demands increased for greater capacity and, in 1954, a hydraulic pump was developed that

laid the foundation for the future successes of the new company, Sunfab.

These days, Sunfab Hydraulics AB supplies companies with some of the world's most sophisticated products in its niche market. Products that meet stringent quality, environmental and safety requirements and offer functional solutions. We are just embarking on a long and successful journey of development.



# Product overview

## Single flow pumps

Sunfab is your supplier of a wide range of hydraulic pumps. The pumps are optimised for all kinds of applications. We offer 12 different sizes in the range of 12-130 cm<sup>3</sup> with pressure up to 400 bar.

**SAP 012-108 DIN**



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**SAP 084, 108 DIN Optimised**



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**SAP 084, 108 DIN Optimised for injector**



8

## Dual flow pumps

The range of fixed displacement dual flow pumps SCPD and SLPD comprises 9 different sizes from 20/20 cm<sup>3</sup> up to 76/76 cm<sup>3</sup>. The SCPD dual flow pumps are of bent-axis design, the SLPD pumps are of inline design with swash plate.

**SCPD 56/26 DIN / By-Pass**



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**SCPD 76/76 DIN**



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**SLPD 20/20-64/32 DIN**



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## Variable flow pumps

We offer variable pumps with a displacement of 62, 92, 112 and 130 cm<sup>3</sup>. An operating pressure of up to 450 bar, different kinds of regulators and tandem pump assembly enable you to use this kind of pump in almost all applications where you need a variable oil flow.

**SVH 062, 092, 112**



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**SVH 130**



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## Fixed motors

Sunfab offers hydraulic motors according to SAE, ISO and DIN standard as well as cartridge motors. The displacement is 12-130 cm<sup>3</sup> with a choice of shafts, seals and connection ports. High revolution speeds and a operating pressure up to 400 bar allows a power output of up to 285 kW.

**SCM 010-130 ISO**



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**SCM 010-130 SAE**



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**SCM 010-034 SAE B2**



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## Accessories

Sunfab's accessories are a unique range of components designed to meet a bodybuilder's need of basic hydraulic installations.

**By-Pass**



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**PTO Tracpower**



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**Splitter Gearbox**



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**Power Take-Off**



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**SAPT 090, 130 DIN**



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**SCP 012-108 SAE**



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**SCP 012-130 ISO**



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**SLPD 20/20-64/32 DIN  
SAVTEC**



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**SLPD 40/20-64/32 SAE**



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**SCM 025-108 M2**



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**SAM 010-130 DIN**



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**Adapters & Flanges**



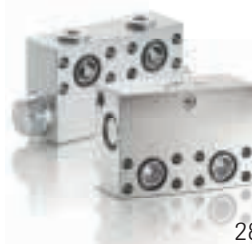
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**Pump Brackets**



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**Anti-cavitation  
& Flushing Valves**



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**Speed Sensors**



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**Injectors**



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# Pumps fixed single flow

## SAP 012-108 DIN



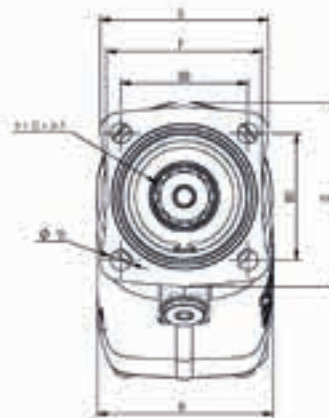
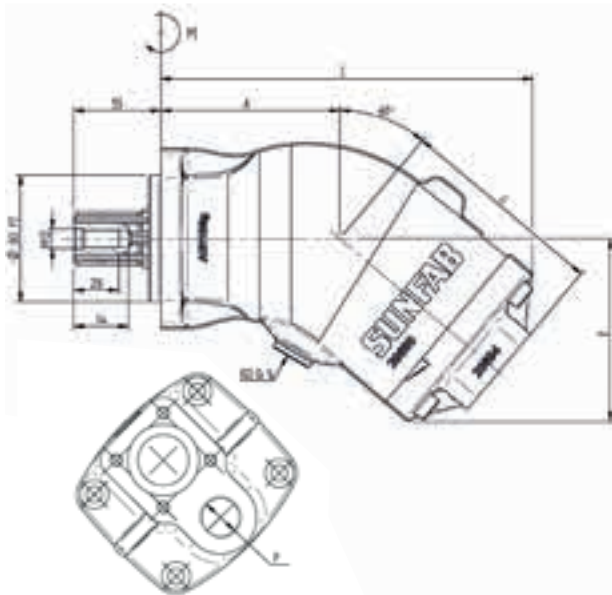
**SAP 012-108 DIN is a series of light weight casing piston pumps with a fixed displacement for demanding mobile hydraulics.**

SAP 012-108 DIN covers the displacement range 012-108 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar. It is a modern, compact pump which meets the market's high demands on flow performance, pressure, efficiency and small installation dimensions. The pump is either mounted directly on the power take-off or on a frame bracket via an intermediate shaft.

### Other advantages:

- Light weight metal casing design
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- Corrosion free lightweight-housing
- Less heat generation due to better ability to dissipate heat through housing

SAP 012-108 DIN			012	017	025	034	040	047	056	064	084	108	
Theoretical oil flow $l/min$ at pump speed	rpm	500	6.3	8.5	12.7	17.1	20.6	23.5	28.0	31.8	41.5	54.0	
		1000	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	83.6	108.0	
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	125.4	162.0	
Displacement	cm <sup>3</sup> /rev		12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	83.6	108.0	
Max pump speed continuous	rpm	2300	2300	2300	2300	1900	1900	1900	1900	1900	1600	1600	
		3000	3000	3000	3000	2500	2500	2500	2500	2500	2100	2100	
Max working pressure	bar		400	400	400	400	400	400	400	400	400	400	
Weight	kg		6.9	6.9	7.1	7.1	9.8	9.8	9.8	9.8	13.9	13.9	
Dimensions	mm	A	97	97	97	97	113	113	113	113	122	122	
		B	116	116	116	116	131	131	131	131	147	147	
		C	206	206	206	206	235	235	235	235	264	264	
		D	115	115	115	115	118	118	118	118	118	127	127
		E	102	102	102	102	115	115	115	115	115	133	133
		F	98	98	98	98	98	98	98	98	98	98	98
		G	106	106	106	106	106	106	106	106	106	106	106
		H	97	97	97	97	111	111	111	111	111	118	118
		P	34	34	34	34	34	34	34	34	34	1	1
Tare-weight torque (M)	Nm		6.0	6.0	6.5	6.5	11.5	11.5	11.5	11.5	18.0	18.0	
Direction of rotation			Left (L) or Right (R)										



Spine shaft:  
DIN 5462 / ISO 14  
Mounting flange:  
ISO 7653-D

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## SAP 084, 108 DIN Optimised

**SAP DIN Optimised is a series of piston pumps with a fixed displacement for demanding mobile hydraulics.**



SAP 084, 108 DIN Optimised covers the displacement range 84 and 108 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar. It is a modern, compact pump which meets the market's high demands on flow performance, pressure, efficiency and small installation dimensions. It is either mounted directly on the power take-off or on a frame bracket via an intermediate shaft.

It is a speed-optimised pump and are therefore supplied for either left (L) or right (R) rotation direction.

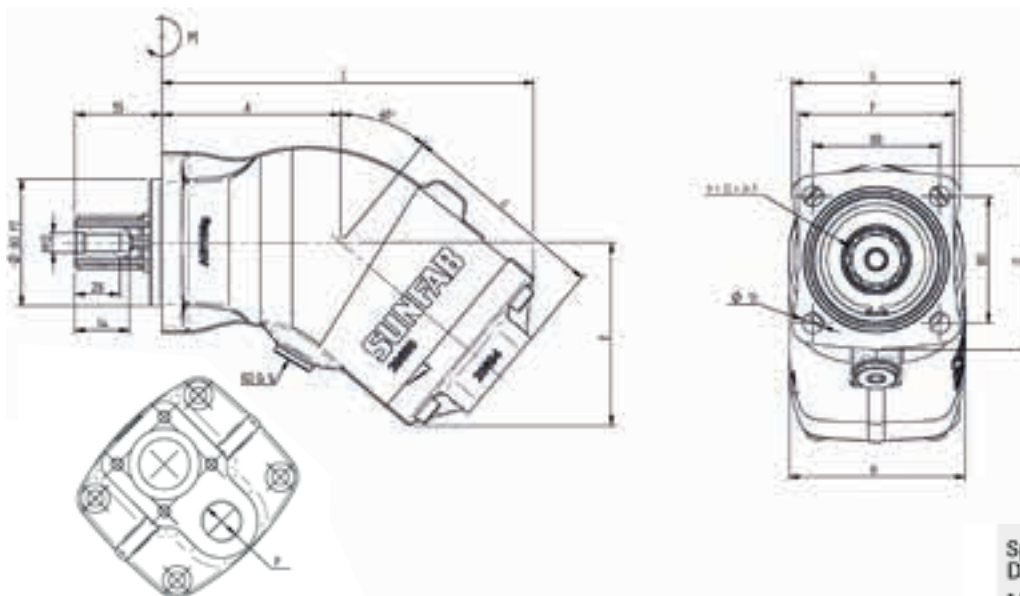
The pump's front shaft seals are manufactured from HNBR to withstand the higher temperatures involved with engine mounting.

### Other advantages:

- Light weight metal casing design
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- Corrosion free lightweight-housing
- Less heat generation due to better ability to dissipate heat through housing

### Pump SAP 084, 108 DIN Optimised

		084	108
Theoretical oil flow $l/min$ at pump speed	rpm	500	41.8
		1000	83.6
		1500	125.4
Displacement	cm <sup>3</sup> /rev	83.6	108.0
Max pump speed continuous limited	rpm	1800	1800
		2300	2300
Max working pressure	bar	400	400
Weight	kg	13.9	13.9
Dimensions	mm	A	122
		B	147
		C	264
		D	127
		E	133
		F	98
		G	106
		H	118
		ISO G	1
		ISO P	1
Tare-weight torque (M)	Nm	18.0	18.0
Direction of rotation	Left (L) or Right (R)		



Spline shaft:  
DIN 5462 / ISO 14  
Mounting flange:  
ISO 7853-D

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

# Pumps fixed single flow

## SAP 084, 108 DIN Optimised for injector



**SAP DIN Optimised for Injector is an externally drained variant of the SAP series, which offers a very high oil flow in combination with the Sunfab injector K-Jet 2.**

SAP 084, 108 DIN Optimised for Injector is suitable for hydraulic motor operations in closed hydraulic systems with injector K-Jet 2 for pressurisation of the suction side. This gives excellent speed characteristics and high flows.

The pump's front shaft seals are manufactured from HNBR to withstand the higher temperatures involved with engine mounting.

It is a speed-optimised pump and therefore supplied for either left (L) or right (R) rotation direction.

### Other advantages:

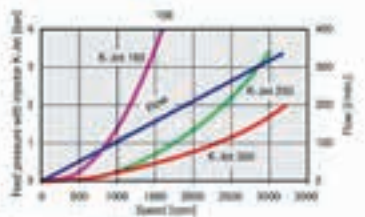
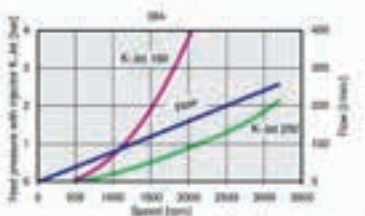
- Light weight metal casing design
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- Corrosion free lightweight-housing
- Less heat generation due to better ability to dissipate heat through housing

### Pump SAP 084, 108 DIN Optimised for injector

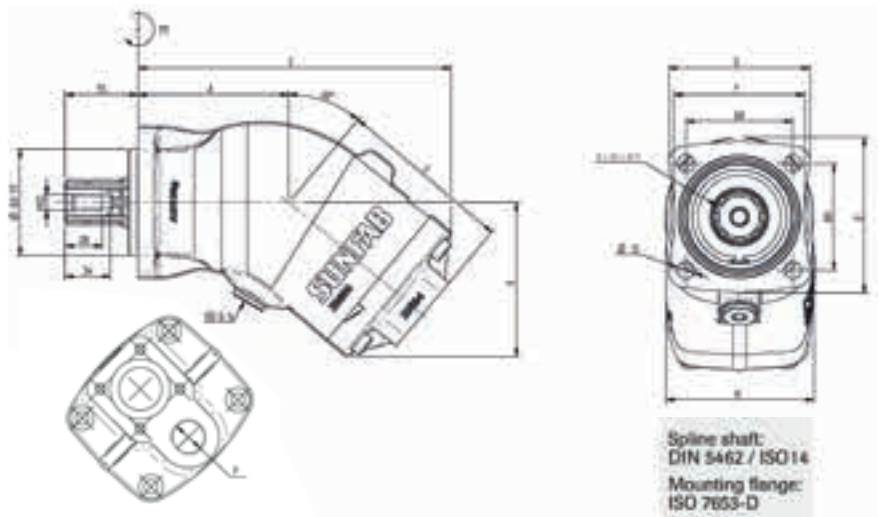
K-Jet 2

Oil flow at 97% vol. efficiency and 20 MPa

		084			108			
		without	160	250	without	160	250	350
	rpm							
	500	41.0	-	-	52.0	52.0	-	-
	1000	81.0	81.0	-	105.0	105.0	105.0	-
	1500	122.0	122.0	122.0	157.0	157.0	157.0	157.0
	2000		162.0	162.0			210.0	210.0
	2500			203.0			262.0	262.0
	3000			243.0				314.0
Displacement	cm <sup>3</sup> /rev	83.6			108.0			
Max pump speed	rpm	300	750	1200	300	550	1000	1200
min continuous		1800	2000	3000	1800	1500	2500	3000
max continuous		2300			2300			
max limited								
Max working pressure	bar	400			400			
Weight	kg	13.9			13.9			
Dimensions	mm							
	A	122			122			
	B	147			147			
	C	264			264			
	D	127			127			
	E	133			133			
	F	98			98			
	G	106			106			
	H	118			118			
	ISO G P	1			1			
Tare-weight torque (M)	Nm	18			18			
Direction of rotation		Left (L) or Right (R)						



Thumbnail suction connection with head pressure above 4 bar



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)





## SAPT 090, 130 DIN



**SAPT 090, 130 DIN is an addition to the SAP series that supports larger flows and pressure up to 300 bar.**

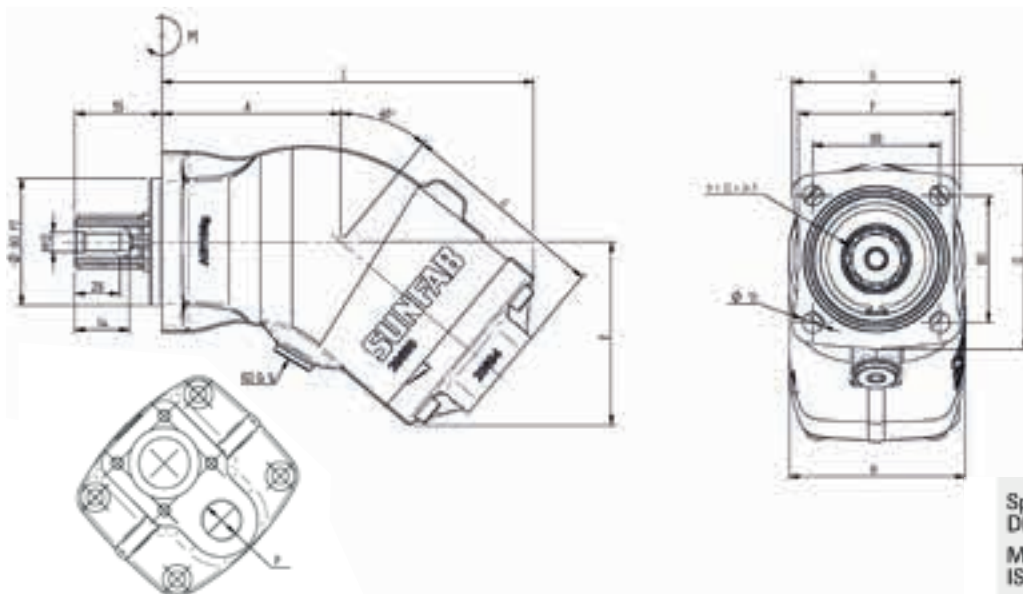
SAPT 090, 130 DIN are ideal for applications that require both a high flow and a high operating pressure in combination with demands on small installation measurements. The pumps are either mounted directly on the power take-off or on a frame bracket via an intermediate shaft.

### Other advantages:

- Light weight metal casing design
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- Corrosion free lightweight-housing
- Less heat generation due to better ability to dissipate heat through housing

### Pump SAPT 090, 130 DIN

			090	130	
Theoretical oil flow $l/min$ at pump speed	rpm	500	45.0	65.0	
		1000	90.0	130.0	
		1500	135.0	195.0	
Displacement	$cm^3/rev$		90.0	130.0	
Max pump speed continuous limited	rpm		1500	1500	
			2000	2000	
Max working pressure	bar		300	300	
Weight	kg		9.8	13.9	
Dimensions	mm	A	113	122	
		B	131	147	
		C	235	264	
		D	118	127	
		E	115	133	
		F	98	98	
		G	106	106	
		H	111	118	
		ISO G	P	34	1
		Tare-weight torque (M)	Nm	M	11.5
Direction of rotation	Left (L) or Right (R)				



Spline shaft:  
DIN 5462 / ISO 14  
Mounting flange:  
ISO 7853-D

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

# Pumps fixed single flow

## SCP 012-108 SAE



### SCP 012-018 SAE is a series of piston pumps with a fixed displacement for demanding mobile hydraulics.

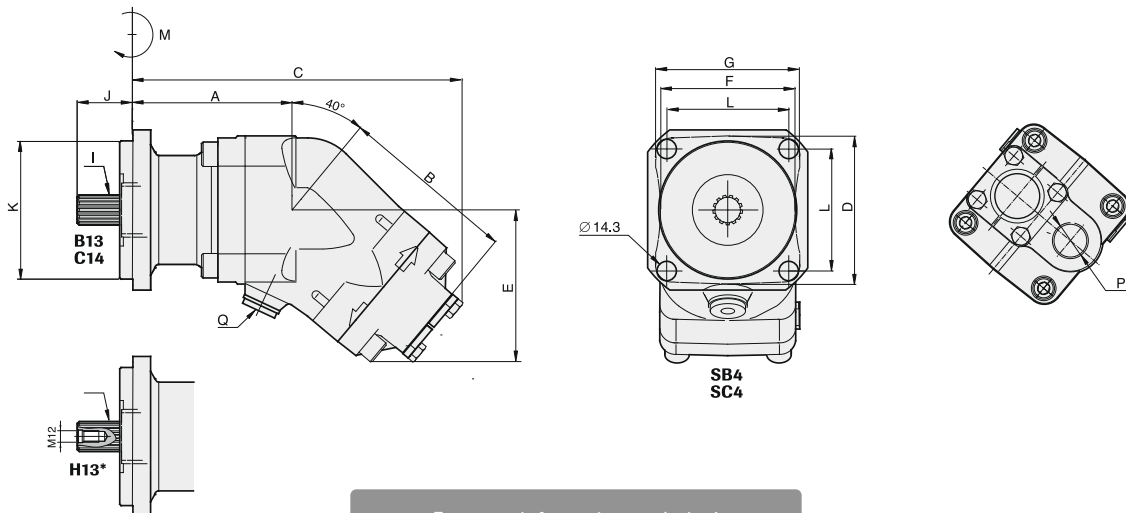
Sunfab's SCP 012-108 SAE pumps are equipped with shafts and flanges according to the SAE-B and SAE-C standard. They are available in the range from 12-108 cm<sup>3</sup>. It is a modern, compact pump which meets the market's high demands on flow performance, pressure, efficiency and small installation dimensions.

The pump is either mounted directly on the power take-off or on a frame bracket via an intermediate shaft. The stop shoulder on the angular housing allows the pump's direction of rotation to be changed without the risk of altering the gear meshing.

#### Other advantages:

- High maximum speed while maintaining low noise levels
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump and power take-off

Pump SCP 012-108 SAE			012	017	025	034	040	047	056	064	040	047	056	064	084	108	
Theoretical oil flow at pump speed	rpm	500	6.3	8.5	12.7	17.1	20.6	23.5	28.0	31.8							
		1000	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	20.6	23.5	28.0	31.8	41.8	54.0	
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	41.2	47.1	56.0	63.6	83.6	108.0	
Displacement	cm <sup>3</sup> /rev		12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	41.2	47.1	56.0	63.6	83.6	108.0	
Max pump speed continuous	rpm	2300	2300	2300	2300	1900	1900	1900	1900	1900	1900	1900	1900	1900	1500	1500	
		3000	3000	3000	3000	2500	2500	2500	2500	2500	2500	2500	2500	2500	2000	2000	
Max working pressure	bar		400	400	400	400	400	400	400	350	400	400	400	400	400	400	
Weight	kg		8.7	8.6	8.9	8.8	12.3	12.3	12.3	12.2	14.3	14.3	14.3	14.1	19.0	19.0	
Dimensions	mm	A	101	101	101	101	117	117	117	117	119	119	119	119	119	128	128
		B	117	117	117	117	130	130	130	130	130	130	130	130	130	147	147
		C	209	209	209	209	235	235	235	235	235	237	237	237	237	262	262
		D	99	99	99	99	109	109	109	109	109	109	109	109	109	126	126
		E	97	97	97	97	112	112	112	112	112	112	112	112	112	126	126
		F	89	89	89	89	99	99	99	99	99	99	99	99	99	115	115
		G	97	97	97	97	106	106	106	106	106	106	106	106	106	123	123
		H	38	38	38	38	38	38	38	38	38	38	38	38	38	50	50
		I	50	50	50	50	50	50	50	50	50	50	50	50	50	64	64
SAE standard	I	SAE B 13T-16/32DP									SAE C 14T-12/24DP						
		J	41	41	41	41	41	41	41	41	56	56	56	56	56	56	
		K	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	127.0	127.0	127.0	127.0	127.0	127.0
		L	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	114.5	114.5	114.5	114.5	114.5	114.5
		P	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	1	1
		Q	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Tare-weight torque (M)	Nm		6.9	6.9	7.4	7.4	13	13	13	13	13	13	13	13	21	21	
Direction of rotation		Left (L) or Right (R)															



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## SCP 012-130 ISO



**SCP 012-130 ISO is a series of piston pumps with a fixed displacement for mobile and stationary hydraulics.**

SCP 012-130 ISO covers the entire displacement range 12-130 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar.

The pump's well dimensioned, double tapered roller bearings permit high shaft loads and lead to excellent speed characteristics. The pump is drained externally. It is speed-optimised and therefore supplied for either left (L) or right (R) rotation direction.

### Other advantages:

- High maximum speed while maintaining low noise levels
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc.

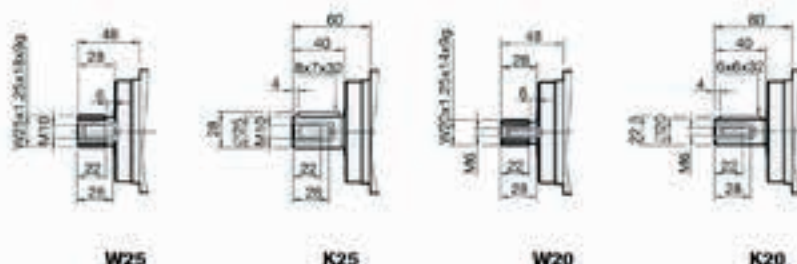
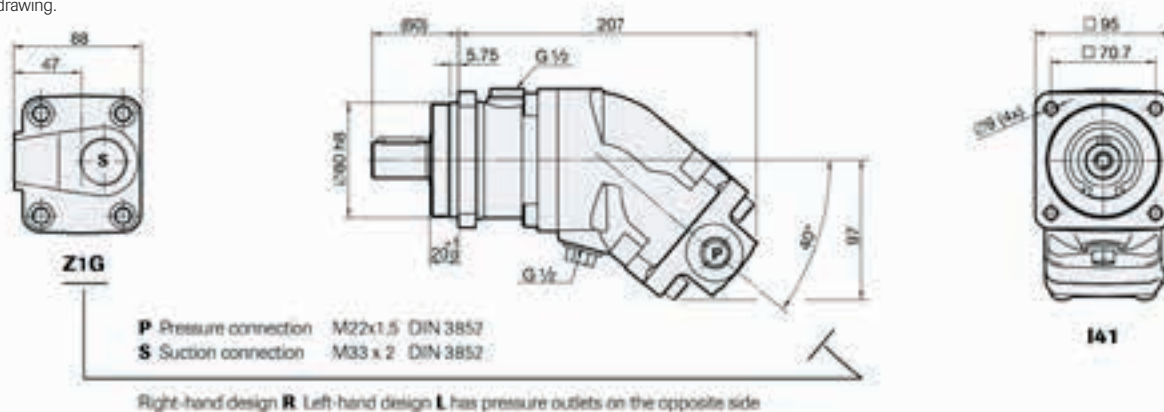
### Pump SCP 012-130 ISO

		012	017	025	034	040	047	056	064	084	090	108	130	
Theoretical oil flow at pump speed		l/min												
	rpm	500	6.3	8.5	12.7	17.1	20.6	23.5	28.0	31.8	41.5	45.4	54.0	65.0
		1000	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	83.6	90.7	108.0	130.0
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	125.4	136.1	162.0	195.0
Displacement	cm <sup>3</sup> /rev	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	83.6	90.7	108.0	130.0	
Max working pressure	bar	400	400	400	400	400	400	400	400	400	400	400	350	
Max pump speed	$n_{max(1)}$	rpm	3300	3200	2550	2250	2200	2100	2050	1700	1700	1700	1600	
	$n_{max(2)}$		6000	5700	4700	4550	4300	4300	3750	3700	3350	3000	2900	
Max power	kW	25	35	40	50	55	65	75	85	90	95	120	120	
Weight	kg	7.5	7.5	8.5	8.5	15.5	15.5	15.5	15.5	27.0	27.0	29.5	29.5	
Mass moment of inertia (x 10 <sup>-3</sup> )	kg m <sup>2</sup>	0.9	0.9	1.1	1.1	2.6	2.6	2.6	2.6	7.4	7.4	7.4	7.4	
Direction of rotation	Left (L) or Right (R)													

(1) The values shown are valid for an absolute pressure of 1 bar at the suction inlet.

(2) By increase of the input pressure the rotational speeds can be increased to the max. admissible speed,  $n_{max}$  limit.

Example drawing.



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

# Pumps fixed dual flow

## SCPD 56/26 DIN / By-Pass



### SCPD 56/26 DIN is a double pump with two separate flows of different sizes.

SCPD 56/26 DIN gives 56.0 and 26.0 cm<sup>3</sup>/rev. and supports a maximum operating pressure of 400 bar. It can effectively be directly mounted on gear boxes equipped with engageable and disengageable power take-offs. It is speed optimised and therefore supplied for either left (L) or right (R) rotation direction.

SCPD 56/26 DIN By-Pass is ideal for combination vehicles which require different flows and where there is a need to operate equipment while moving. The pump is primarily intended for engine-mounted power take-offs.

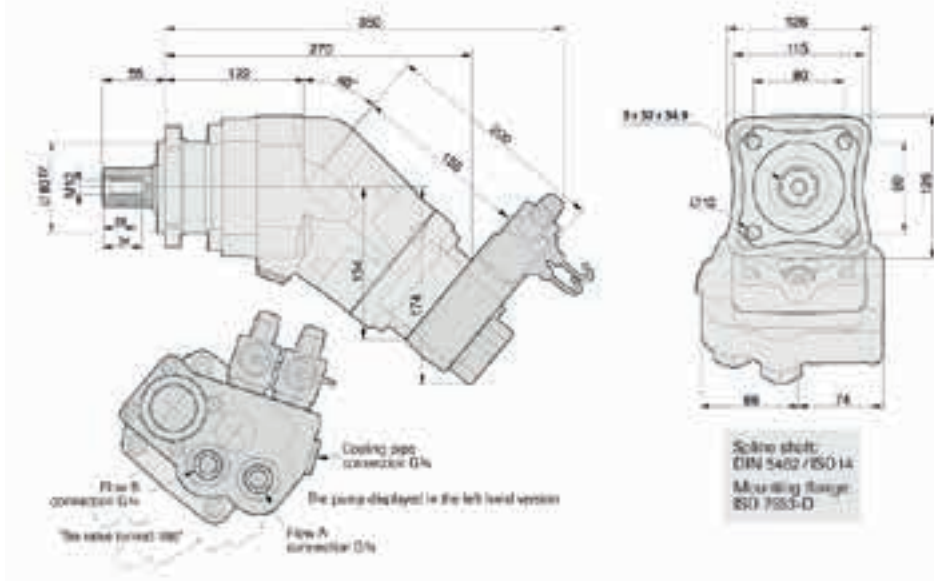
The constant engagement is made possible by the By-Pass valve, which immediately relieves the load on the pump and power take-off when oil is not required. The pressure drop of the By-Pass valve is very low, so its function is energy efficient.

#### Other advantages:

- High self-priming speed
- Constant low noise level
- Long life due to high demands on material selection, such as bearings, seals, etc.
- O-rings on all contact surfaces as well as double shaft seals
- The By-Pass valve can relieve the load from full operating pressure of 400 bar, which allows emergency stop function
- The valve's 24 V solenoids have integrated electrical cables which meet protection class ADR

#### Pump SCPD 56/26 DIN By-Pass

Theoretical oil flow A+B at pump speed	rpm	l/min		
	600	33.5 + 15.5 = 49		
	1000	56.0 + 26.0 = 82		
	1200	67.0 + 31.0 = 98		
	1500	84.0 + 39.0 = 123		
	1800	100.5 + 46.5 = 147		
Displacement A+B	cm <sup>3</sup> /rev	56.0 + 26.0		
Max pump speed A+B	rpm	1850		
Max pump speed A	rpm	1850		
Max pump speed B	rpm	2200		
Max pump speed, relieved	rpm	2700		
Max working pressure	bar	400		
Weight without valve	kg	18		
Weight with valve	kg	22.5		
Tare-weight torque without valve	Nm	21		
Tare-weight torque with valve	Nm	25.5		
Nominal power at pressure and pump speed	rpm	200 Bar	300 Bar	400 Bar
	600	11.2 + 5.2 = 16.4 kW	16.8 + 7.8 = 24.6 kW	22.4 + 10.4 = 32.8 kW
	1200	22.4 + 10.4 = 32.8 kW	33.6 + 15.6 = 49.2 kW	44.8 + 20.8 = 65.6 kW
	1800	33.6 + 15.6 = 49.2 kW	50.4 + 23.4 = 73.8 kW	67.2 + 31.2 = 98.4 kW
Nominal torque on pump shaft at different pressures		200 Bar	300 Bar	400 Bar
		178 + 83 = 261 Nm	267 + 124 = 391 Nm	356 + 165 = 521 Nm
	Direction of rotation	Left (L) or Right (R)		



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## SCPD 76/76 DIN



### SCPD 76/76 DIN is a dual flow pump with two separate flows of equal sizes.

SCPD 76/76 DIN gives a maximum flow of  $127 + 127 = 254$  lit/min and supports a maximum working pressure of 350 bar. It can effectively be directly mounted on gear boxes equipped with engageable and disengageable power take-offs.

SCPD 76/76 DIN is a modern, compact pump, which meets the market's high demands on flow performance, pressure, efficiency and small installation dimensions. It is speed optimized and therefore supplied for either left (L) or right (R) rotation direction.

SCPD 76/76 DIN is superior by offering two big flows in combination with extremely compact size. The compact size makes it possible to mount the pump directly on the power take-off in very restricted spaces.

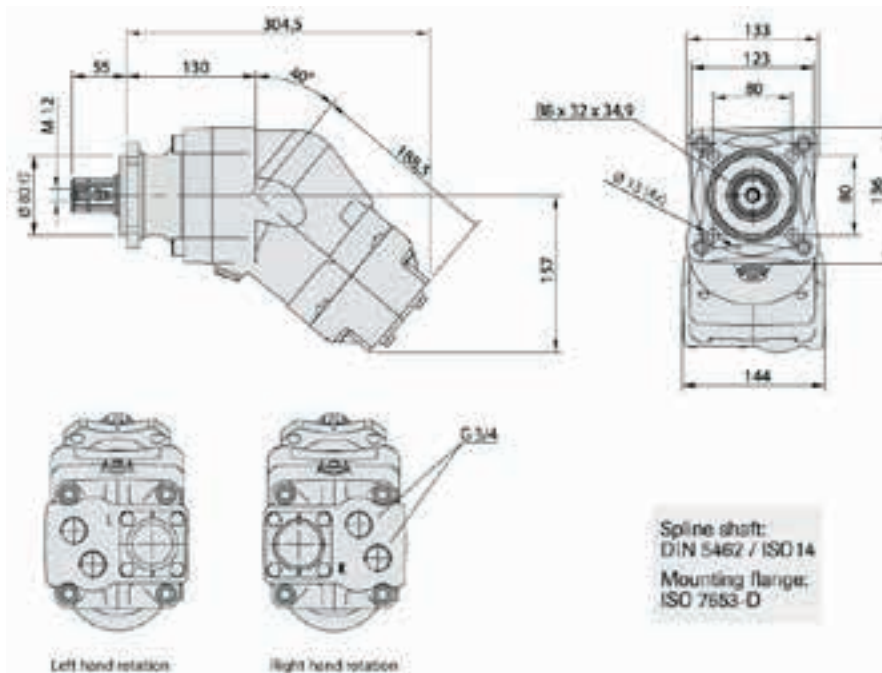
#### Other advantages:

- Large displacement gives the possibility of low engine speeds and low noise levels.
- Long life due to high demands on material selection, such as bearings, seals, etc.
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump and power takeoff.
- Highest displacement-to-size-ratio on the market.

#### SCPD 76/76 DIN

Theoretical oil flow at pump speed	rpm	1000*	l/min		
		1500	75.0 + 75.0 = 150		
			112,5 + 112,5 = 225		
Displacement	cm <sup>3</sup> /rev	75 + 75			
Max pump speed continuous limited	rpm	1500			
		1700			
Max working pressure	bar	350			
Weight	kg	23.2			
Tare-weight torque	Nm	34.5			
Theoretical power at pressure and pump speed	rpm	1000*	200 Bar	250 Bar	350 Bar
		1500	25.0 + 25.0 = 50.0 kW	31.3 + 31.3 = 62.6 kW	43.8 + 43.8 = 87.6 kW
			37.5 + 37.5 = 75 kW	46.9 + 46.9 = 93.8 kW	65.6 + 65.6 = 131.2 kW
Nominal torque on pump shaft at different pressures			200 Bar	250 Bar	350 Bar
			239 + 239 = 478 Nm	298 + 298 = 596 Nm	418 + 418 = 836 Nm
Direction of rotation	Left (L) or Right (R)				

\*We recommend a minimum pump speed of 1000 rpm to obtain optimal performance, efficiency and life-span of the pump.



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

# Pumps fixed dual flow

## SLPD 20/20-64/32 DIN



**SLPD 20/20-64/32 DIN is a series of in-line dual flow pumps with extremely low noise levels for demanding mobile hydraulics.**

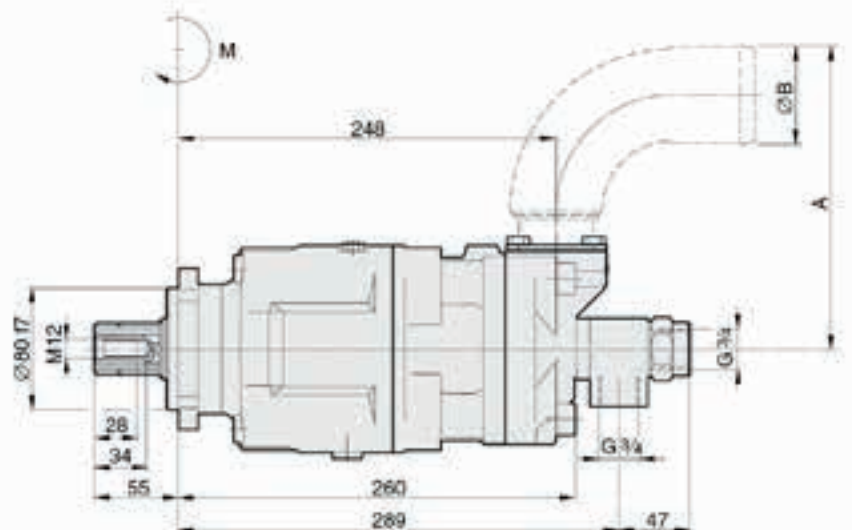
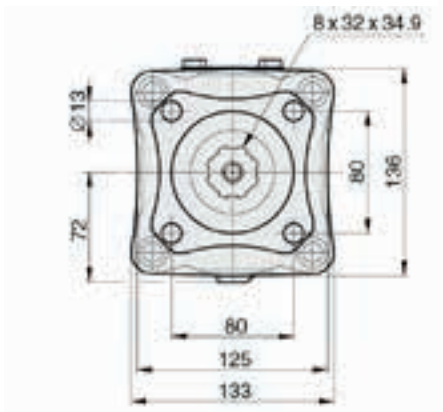
SLPD 20/20-64/32 DIN comes in eight different sizes, where three models feature differentiated flows. Pumps with differentiated flow increase the field of application as they can provide three different flows: one small, one large and one combined flow. Maximum pressure is 330-350 bar depending on the model. Its slim pump housing makes direct mounting on the power take-off possible in very confined areas. SLPD 20/20-64/32 DIN is also ideal for installation using a frame bracket via an intermediate shaft.

It is available in a version with a Savtec valve for applications where the hydraulics need to be used while the vehicle is on the move.

### Other advantages:

- Independent direction of rotation
- A cost effective total solution in relation to a conventional installation using two pumps with a splitter gear box
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc.
- O-rings on all contact surfaces as well as double shaft seals
- Extremely low noise emission over entire speed and pressure ranges

Pump SLPD 20/20-64/32 DIN		20/20	28/28	40/20	35/35	56/28	46/46	53/53	64/32	
Theoretical oil flow at pump speed	rpm	500	10.1 +10.1	13.7 +13.7	20.3 +10.1	16.9 +16.9	27.4 +13.7	22.9 +22.9	26.2 +26.2	31.5 +15.7
		1000	20.3 +20.3	27.5 +27.5	40.7 +20.3	33.9 +33.9	54.9 +27.5	45.8 +45.8	52.5 +52.5	63 + 31.5
		1500	30.4 +30.4	41.3 +41.3	61.0 +30.4	50.8 +50.8	82.3 +41.2	68.7 +68.7	78.7 +78.7	94.5 +47.2
Displacement	cm <sup>3</sup> /rev		20.3 +20.3	27.5 + 27.5	40.7 + 20.3	33.9 + 33.9	54.9 + 27.5	45.8 + 45.8	52.5 + 52.5	63.0 + 31.5
Max pump speed	rpm		2200	1800	2200	2200	1800	1800	1600	1600
Max working pressure	bar		350	350	350	330	350	330	330	350
Weight	kg		22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
Dimensions	mm	A	133	133	133	133	166	166	166	166
	mm	B	50	50	50	50	64	64	64	64
Tare-weight torque (M)	Nm		26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Direction of rotation			Independent							



Spine shaft:  
DIN 5462 / ISO 14  
Mounting flange:  
ISO 7653-D

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



# Pumps fixed dual flow

## SLPD 40/20-64/32 SAE



**SLPD 40/20-64/32 SAE is a series of in-line double pumps with extremely low noise levels for demanding mobile hydraulics.**

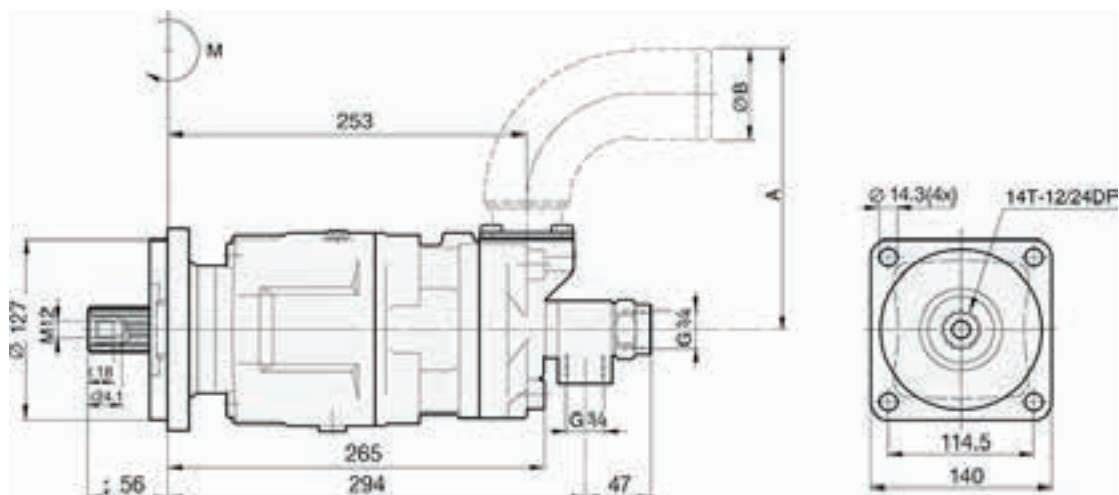
SLPD 40/20-64/32 SAE pumps are equipped with shafts and flanges according to the SAE-C standard. They are available in six different sizes. Its slim pump housing enables direct installation on the power take-off in very confined spaces. SLPD is also easy to install with frame mountings via an intermediate shaft. The high level of reliability is based on the choice of materials, hardening methods, surface structures and the quality assured manufacturing process. Maximum pressure is 330-350 bar, dependent on model.

### Other advantages:

- Independent direction of rotation
- A cost effective total solution in relation to a conventional installation using two pumps with a splitter gear box
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc.
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump and power take-off

### Pump SLPD 40/20-64/32 SAE

		40/20	35/35	56/28	46/46	53/53	64/32
Theoretical oil flow at pump speed	rpm	500	1000	1500			
		20.3 + 10.1	16.9 + 16.9	27.4 + 13.7	22.9 + 22.9	26.2 + 26.2	31.5 + 15.7
		40.7 + 20.3	33.9 + 33.9	54.9 + 27.5	45.8 + 45.8	52.5 + 52.5	63.0 + 31.5
		61.0 + 30.4	50.8 + 50.8	82.3 + 41.2	68.7 + 68.7	78.7 + 78.7	94.5 + 47.2
Displacement	cm <sup>3</sup> /rev	40.7 + 20.3	33.9 + 33.9	54.9 + 27.5	45.8 + 45.8	52.5 + 52.5	63.0 + 31.5
Max pump speed	rpm	2200	2200	1800	1800	1600	1600
Max working pressure	bar	350	330	350	330	330	350
Weight	kg	22	22	22	22	22	22
Dimensions	mm	A	133	133	166	166	166
Min. dimensions	B	50	50	64	64	64	64
Tare-weight torque (M)	Nm	26.5	26.5	26.5	26.5	26.5	26.5
Direction of rotation		Independent					

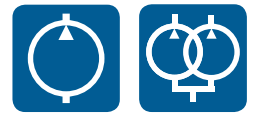


Spine shaft:  
DIN 5462 / ISO14  
Mounting flange:  
ISO 7653-D

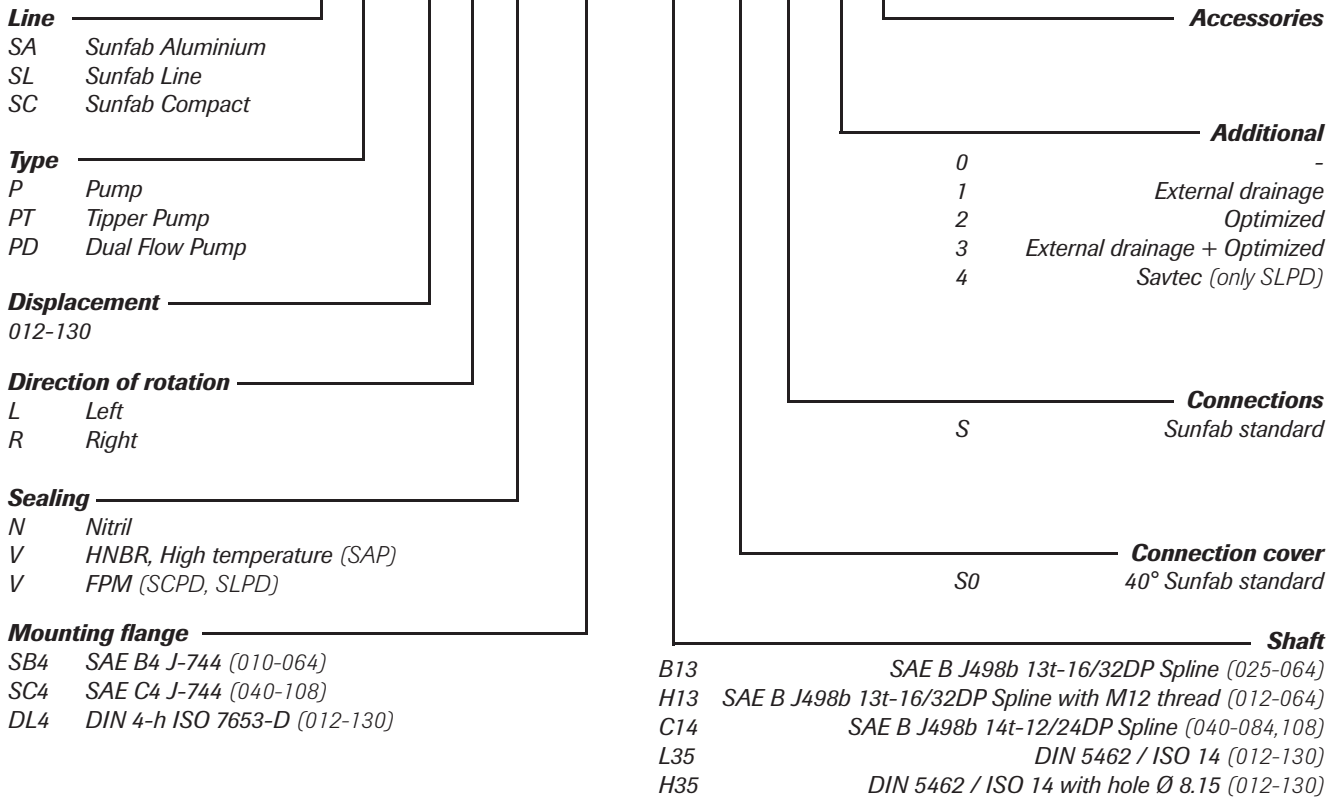
For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



# Versions, Pumps



**SA P - 064 L - N - DL4 - L35 - S0 S - 0 00**

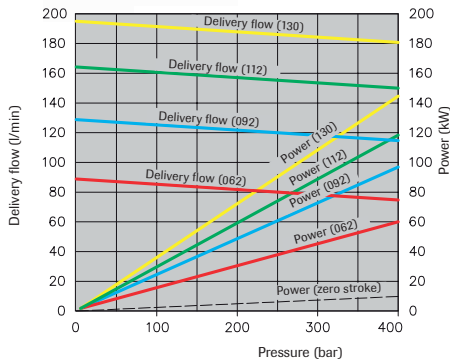


# Pumps variable flow

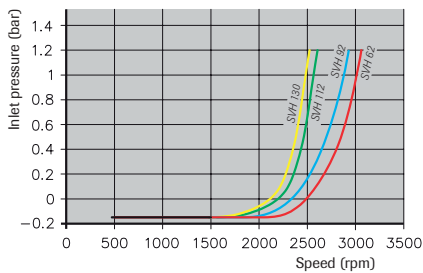
## SVH 062, 092, 112, 130



**Flow and Power**  
Charts show flow/pressure (without controller). Power at max. setting angle and power at min. setting angle and 1500 rpm



**Inlet pressure (LSNR-controller)**  
Graph valid at viscosity 75 mm<sup>2</sup>/s at max. setting angle.



**Sunfab SVH is a variable axial piston pump for load sensing systems, designed for direct installation on the truck's power take-off.**

SVH supports a maximum pressure up to 450 bar, and is available in the sizes 62, 92, 112 and 130 cm<sup>3</sup>/rev. It is intended for use on forestry cranes, general cargo cranes, suction vehicles, refuse collection vehicles, etc. SVH variable pumps uniquely feature a slim pump housing which permits direct mounting on the power take-off.

### Other advantages:

- Short reaction time when resetting the flow
- Compact installation dimensions
- High pressure
- Low noise level

### Description of pump controllers, SVH 062, 092, 112 & 130:

**LSNR** = Load-Sensing controller with integrated pressure limitation.

**NR** = Pressure controller, adjustable directly at the pump. The Pressure controller automatically maintains a constant system pressure independent of the required flow. Therefore it is ideally suited for constant pressure systems, where differing flow is required or as efficient pressure limitation of the hydraulic system.

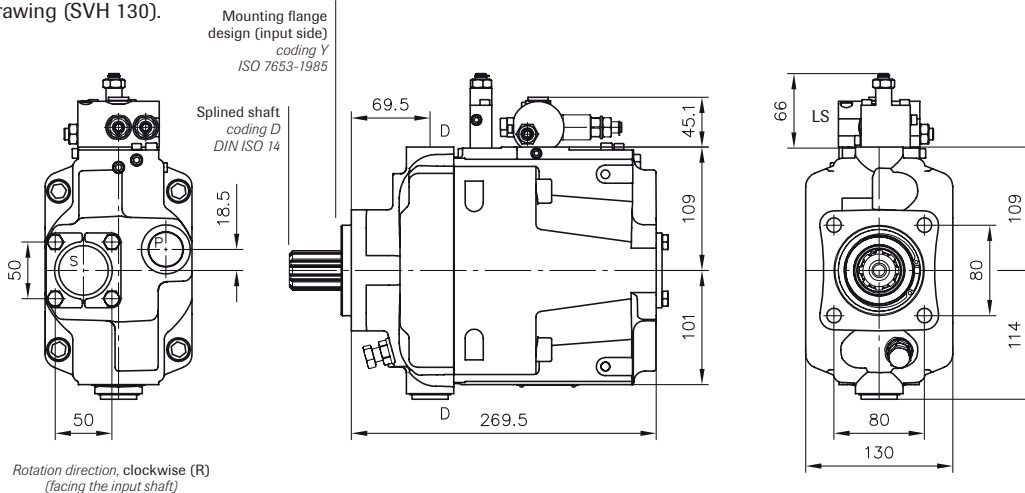
**/ZL (SVH 062, 092, 112)** = Intermediate plate with power controller (torque limitation) "Pressure x Displacement" is held constant. Adjustment range: 25-100% of max. drive torque.

**/ZW** = Angled intermediate plate (45°) mandatory for mounting controller at pumps with radial inlet and outlet.

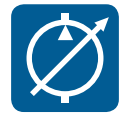
**/L (SVH 130)** = Power controller for SVH 130. Adjustment range: 200-700 Nm

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

### Example drawing (SVH 130).



# Versions, Variable Pumps



## SVH - 092 R DZN - 2 - LSNR/ZL - 2/65 - 350 - C 022

### Basic type

### Nominal size

062  
092  
112  
130

### Direction of rotation

L = Left-hand (counter clockwise)  
R = Right-hand (clockwise)  
always facing the drive shaft

### Shaft design

D = Splined shaft conforming  
DIN ISO 14 (for trucks)  
M = Spline shaft DIN 5480  
only SVH 092, 112  
S = Spline shaft SAE-C J 744  
H = Spline shaft SAE-B J 744  
only SVH 062  
T = Spline shaft SAE-B-B J 744  
only SVH 062  
U = Spline shaft SAE-B J 744 (short)  
only SVH 062  
Q = Spline shaft SAE-C S  
only SVH 112, 130

### Mounting flange design (input side)

Y = Flange ISO 7653-1985 (for trucks)  
P = Flange ISO 7653-1985 10° (for  
trucks), only SVH 112, 130  
G = Flange ISO 3019-2, only SVH 092  
F = Flange SAE-C-4-Hole J 744  
ISO 3019-1  
Z = Flange SAE-B-4-Hole J 744  
ISO 3019-1, only SVH 062  
X = Flange SAE-B-2-Hole-45° offset  
J 744 ISO 3019-1, only SVH-062

### Mounting flange design (output side), see Data Sheet

**no coding** = Ports conforming  
ISO 228/1 (BSPP)  
**UNF** = Ports conforming  
SAE J 514

### Pressure specification (bar)

**no coding** = Without stroke limitation  
(standard)  
**2** = With stroke limitation  
(not available for versions  
with thru-shaft SVH 062, 092, 112)  
**2 /...** = Factory set stroke limitation,  
specification  $V_g$  (cm<sup>3</sup>/rev.)

### Pump controllers / Intermediate plates see Data Sheet

### Shaft design/Housing design

1 = Standard, suction port and  
pressure outlet axial  
2 = Thru-shaft, suction port and  
pressure outlet radial  
3 = Standard, suction port and  
pressure outlet radial  
4 = Standard, suction pressure port  
SAE axial, only SVH 092

### Seals

N = NBR (Nitrile rubber) - Standard  
V = FKM

Type		SVH 062	SVH 092	SVH 112	SVH 130
Geometric displacement $V_g$	cm <sup>3</sup> /rev.	62.4	87.2	110.4	130
Nom. pressure $p_{nom}$	bar	350	350	350	400
Pressure $p_{max}$	bar	400	400	400	450
Angle of the swash plate		21.5°	21.5°	21.5°	21.5°
Required inlet pressure (absolute) for open circuit	bar	0.85	0.85	0.85	0.85
Max. permissible inlet pressure, absolute	bar	2	2	2	2
Max. permissible housing pressure, absolute	bar	3	3	3	3
Max. permissible drive torque (flange/shaft)	Nm	430	530	900	900
Max. torque for the pump (with power controller)	Nm	430	530	600	700
Max. permissible torque for the thru-shaft, dep. on flange	Nm	100	530	600	700
Max. rev. rating when self priming and max. angle of the swash plate at 1 bar absolute inlet pressure	rpm	2500	2300	2200	2100
Min. rev. rating for permanent running	rpm	500	500	500	500
Required torque at 100 bar	Nm	100	151	184	230
Drive power for 250 bar and 2000 rpm	kW	53	79,5	97.2	120
Mass (weight) complete with controller	kg	24	27	30	30.8
Tare weight torque	Nm	30	35.3	40	40
Inertia moment	kg m <sup>2</sup>	0.005	0.008	0.01	0.011
Sound level at 250 bar, 1500 rpm and max. swash plate angle (Measured in a sound measuring room DIN ISO 4412, distance 1 m)	dB(A)	75	75	75	75

## SCM 010-130 ISO



**SCM 010-130 ISO is a range of robust axial piston motors especially suitable for mobile hydraulics.**

SCM 010-130 ISO is of the bent-axis type with spherical pistons. The design results in a compact motor with few moving parts, high starting torque and high reliability. It covers the entire displacement range 10-130 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar. It's well dimensioned, double tapered roller bearings permit high shaft loads and lead to excellent speed characteristics. The motor's high level of reliability is based on the choice of materials, hardening methods, surface structures and the quality assured manufacturing process.

### Other advantages:

- High maximum speed
- Smooth operation over the entire speed range
- Available in many different configurations of shafts and connections
- High efficiency
- Speed sensor available as option
- Suitable for applications with high angular accelerations due to its high rotary stiffness (timing gear)

Motor SCM 010-130 ISO		010	012	017	025	034	040	047	056	064	084	090	108	130
Displacement	cm <sup>3</sup> /rev	9.6	12.6	17.0	25.4	34.2	41.2	47.1	56.7	63.5	83.6	90.7	108.0	130.0
Working pressure														
max intermittent	bar	400	400	400	400	400	400	400	400	400	400	400	400	350
max continuous		350	350	350	350	350	350	350	350	350	350	350	350	300
Revolutions														
max intermittent	rpm	8800	8800	8800	7000	7000	6300	6300	6300	6300	5200	5200	5200	5200
max continuous		8000	8000	8000	6300	6300	5700	5700	5700	5700	4700	4700	4700	4700
min continuous		300	300	300	300	300	300	300	300	300	300	300	300	300
Power														
max intermittent	kW	41	54	74	86	115	125	145	175	195	215	230	275	285
max continuous		15	20	25	40	55	60	65	80	90	100	110	130	135
Starting torque theoretical value	Nm/bar	0.15	0.20	0.27	0.40	0.54	0.66	0.75	0.89	1.0	1.33	1.44	1.71	2.06
Moment of inertia (x 10 <sup>-3</sup> )	kg m <sup>2</sup>	0.9	0.9	0.9	1.1	1.1	2.6	2.6	2.6	2.6	7.4	7.4	7.4	7.4
Weight	kg	8.5	8.5	8.5	9.5	9.5	16.5	16.5	16.5	16.5	28.0	28.0	30.5	30.5

### Information about technical data

Data concerning RPM is based on maximum permitted peripheral velocity for the tapered roller bearings.

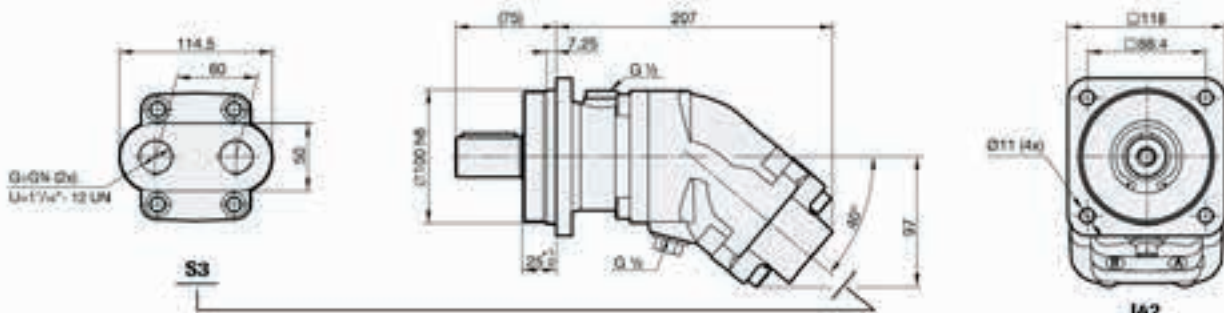
Max intermittent power may depend on application. For further information please contact Sunfab.

Continuous power data is based on maximum output power without external cooling of the motor housing.

Intermittent duty is defined as follows: max 6 seconds per minute, e.g. peak RPM when unloading or accelerating.

Example drawing.

### SCM 025-034 ISO



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## SCM 010-130 SAE / SAE B2



### Sunfab's SCM 010-130 SAE is a range of robust axial piston motors especially suitable for mobile hydraulics.

SCM 010-130 SAE is of the bent-axis type with spherical pistons. The design results in a compact motor with few moving parts, high starting torque and high reliability. It covers the entire displacement range 10-130 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar. It features double tapered roller bearings, which permits high shaft loads and gives superb speed performance.

The high level of reliability is based on the choice of materials, hardening methods, surface structures and the quality assured manufacturing process.

Sunfab also offers a two hole flange, SAE B2 010-034.

#### Other advantages:

- High maximum speed
- Smooth operation over the entire speed range
- Available in many different configurations of shafts and connections
- High efficiency
- Speed sensor available as option
- Suitable for applications with high angular accelerations due to its high rotary stiffness (timing gear)

Motor SCM 010-130 SAE		010	012	017	025	025	034	034	040	047	056	064	084	084	090	090	108	108	130	
		SAE B	SAE B	SAE B	SAE B	SAE C	SAE B	SAE C	SAE C	SAE C	SAE C	SAE C	SAE C	SAE D	SAE C	SAE D	SAE C	SAE D	SAE D	
Displacement	cm <sup>3</sup> /rev	9.6	12.6	17.0	25.4	25.4	34.2	34.2	41.2	47.1	56.7	63.5	83.6	83.6	90.7	90.7	108.0	108.0	130.0	
Working pressure																				
max intermittent	bar	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	350
max continuous		350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	300
Revolutions																				
max intermittent	rpm	8250	8250	8250	6500	6500	6500	6500	5900	5900	5900	5900	4800	4600	4800	4600	4800	4600	4600	4600
max continuous		7500	7500	7500	5900	5900	5900	5900	5300	5300	5300	5300	4400	4200	4400	4200	4400	4200	4200	4200
min continuous		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
Power																				
max intermittent	kW	41	50	70	80	80	110	110	120	135	165	180	200	190	215	205	255	245	255	
max continuous		15	20	25	40	40	55	55	60	65	80	90	100	100	110	110	130	130	135	
Starting torque theoretical value	Nm/bar	0.15	0.20	0.27	0.40	0.40	0.54	0.54	0.66	0.75	0.89	1.00	1.33	1.33	1.44	1.44	1.71	1.71	2.06	
Mass moment of inertia (x 10 <sup>-3</sup> )	kg m <sup>2</sup>	0.9	0.9	0.9	1.1	1.1	1.1	1.1	2.6	2.6	2.6	2.6	6.3	7.4	6.3	7.4	6.3	7.4	7.4	
Weight	kg	9.0	9.0	9.0	9.0	9.0	9.0	9.0	15.0	15.0	15.0	15.0	18.0	35.0	18.0	35.0	18.0	35.0	35.0	

#### Information about technical data

Data concerning RPM is based on maximum permitted peripheral velocity for the tapered roller bearings.

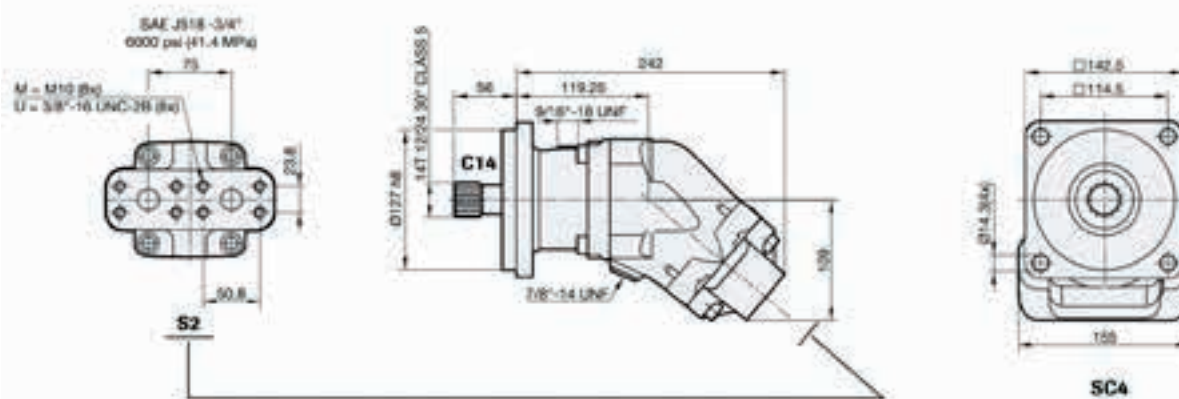
Max intermittent power may depend on application. For further information please contact Sunfab.

Continuous power data is based on maximum output power without external cooling of the motor housing.

Intermittent duty is defined as follows: max 6 seconds per minute, e.g. peak RPM when unloading or accelerating.

Example drawing.

#### SCM 040-064 SAE



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)

## SCM 025-108 M2



Sunfab's SCM 025-108 M2 is a range of robust axial piston motors with cartridge flange especially suitable for winch-, slewing-, wheel- and track drives.

SCM 025-108 M2 is of the bent-axis type with spherical pistons. The design results in a compact motor with few moving parts, high starting torque and high reliability. The SCM 025-108 M2 covers the entire displacement range 25-108 cm<sup>3</sup>/rev. at a maximum pressure of 400 bar.

It's well dimensioned, double tapered roller bearings permit high shaft loads and lead to excellent speed characteristics. It's high level of reliability is based on the choice of materials, hardening methods, surface structures and the quality assured manufacturing process.

### Other advantages:

- High maximum speed
- Smooth operation over the entire speed range
- High efficiency
- Suitable for applications with high angular accelerations due to its high rotary stiffness (timing gear)

Motor SCM 025-108 M2		025	034	040	047	056	064	084	090	108
Displacement	cm <sup>3</sup> /rev	25.4	34.2	41.2	47.1	56.7	63.5	83.6	90.7	108.0
Working pressure										
max intermittent	bar	400	400	400	400	400	400	400	400	350
max continuous		350	350	350	350	350	350	350	350	300
Revolutions										
max intermittent	rpm	7000	7000	6300	6300	6300	6300	5200	5200	5200
max continuous		6300	6300	5700	5700	5700	5700	4700	4700	4700
min continuous		300	300	300	300	300	300	300	300	300
Power										
max intermittent	kW	86	115	125	145	175	195	215	230	230
max continuous		40	55	60	65	80	90	100	110	110
Starting torque theoretical value	Nm/bar	0.40	0.54	0.66	0.75	0.89	1.00	1.33	1.44	1.71
Moment of inertia (x 10 <sup>-3</sup> )	kg m <sup>2</sup>	1.1	1.1	2.6	2.6	2.6	2.6	7.4	7.4	7.4
Weight	kg	11.0	11.0	18.3	18.3	18.3	18.3	26.0	26.0	26.0

### Information about technical data

Data concerning RPM is based on maximum permitted peripheral velocity for the tapered roller bearings.

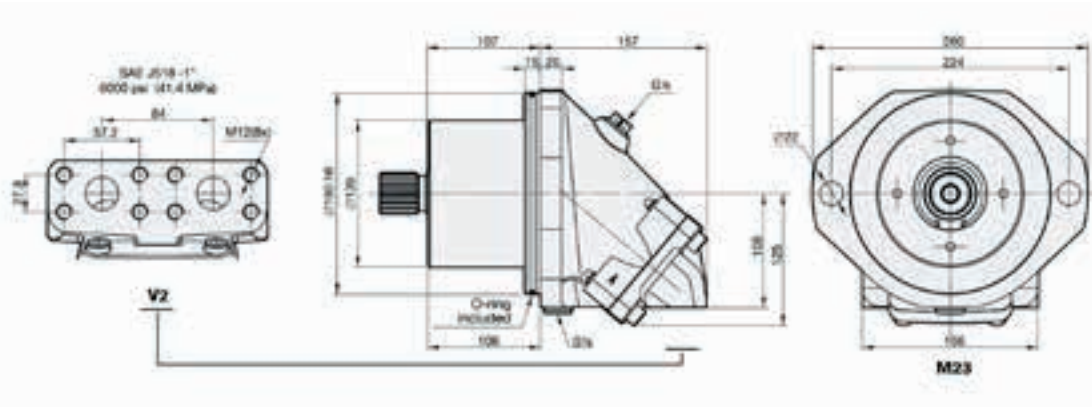
Max intermittent power may depend on application. For further information please contact Sunfab.

Continuous power data is based on maximum output power without external cooling of the motor housing.

Intermittent duty is defined as follows: max 6 seconds per minute, e.g. peak RPM when unloading or accelerating.

Example drawing.

### SCM 084-108 M2



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## SAM 010-130 DIN



**SAM 010-130 DIN is a series of light weight casing axial piston motors, particularly suitable for mobile hydraulics. SAM 010-130 DIN is of the bent-axis type with spherical pistons.**

The design gives a compact motor with few moving parts, high starting torque and high operational reliability. It covers the entire displacement range 10-130 cm<sup>3</sup>/rev. with max. pressure 400 bar.

It's high level of reliability is due to the choice of materials, hardening methods, surface structures and the quality assured manufacturing process.

### Other advantages:

- Corrosion free light metal-housing
- Smooth operation over the entire speed range
- High efficiency
- Suitable for applications with high angular accelerations due to its high rotary stiffness (timing gear)
- Light weight
- Less heat generation due to better ability to dissipate heat through housing

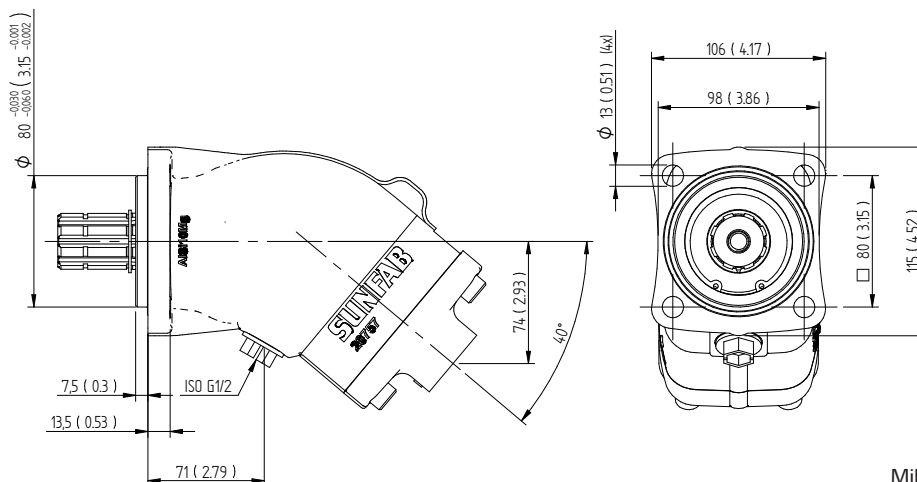
Motor SAM 010-130 DIN		010	012	017	025	034	040	047	056	064	084	090	108	130
Displacement	cm <sup>3</sup> /rev	9.6	12.6	17.0	25.4	34.2	41.2	47.1	56.7	63.5	83.6	90.7	108.0	130.0
Working pressure														
max intermittent	bar	400	400	400	400	400	400	400	400	400	400	400	400	330
max continuous		350	350	350	350	350	350	350	350	350	350	350	350	280
Revolutions														
max intermittent	rpm	3000	3000	3000	3000	3000	2500	2500	2500	2500	2000	2000	2000	2000
max continuous		2400	2400	2400	2400	2400	2000	2000	2000	2000	1600	1600	1600	1600
min continuous		300	300	300	300	300	300	300	300	300	300	300	300	300
Power														
max intermittent	kW	14	18	24	36	49	57	65	78	88	93	100	120	124
max continuous		11	14	19	29	39	46	52	62	70	74	81	96	99
Starting torque theoretical value	Nm/bar	0.15	0.20	0.27	0.40	0.54	0.66	0.75	0.89	1.0	1.33	1.44	1.71	2.06
Moment of inertia (x 10 <sup>-3</sup> )	kg m <sup>2</sup>	0.9	0.9	0.9	1.1	1.1	2.6	2.6	2.6	2.6	7.4	7.4	7.4	7.4
Max intermittent housing pressure	bar	5	5	5	5	5	5	5	5	5	5	5	5	5
Weight	kg	6.9	6.9	6.9	7.1	7.1	9.9	9.9	9.9	9.9	13.8	13.8	13.8	13.8

### Information about technical data

Intermittent operation refers to a max of 6 seconds per minute, representing e.g. peaks in rotational speed during unloading and acceleration.

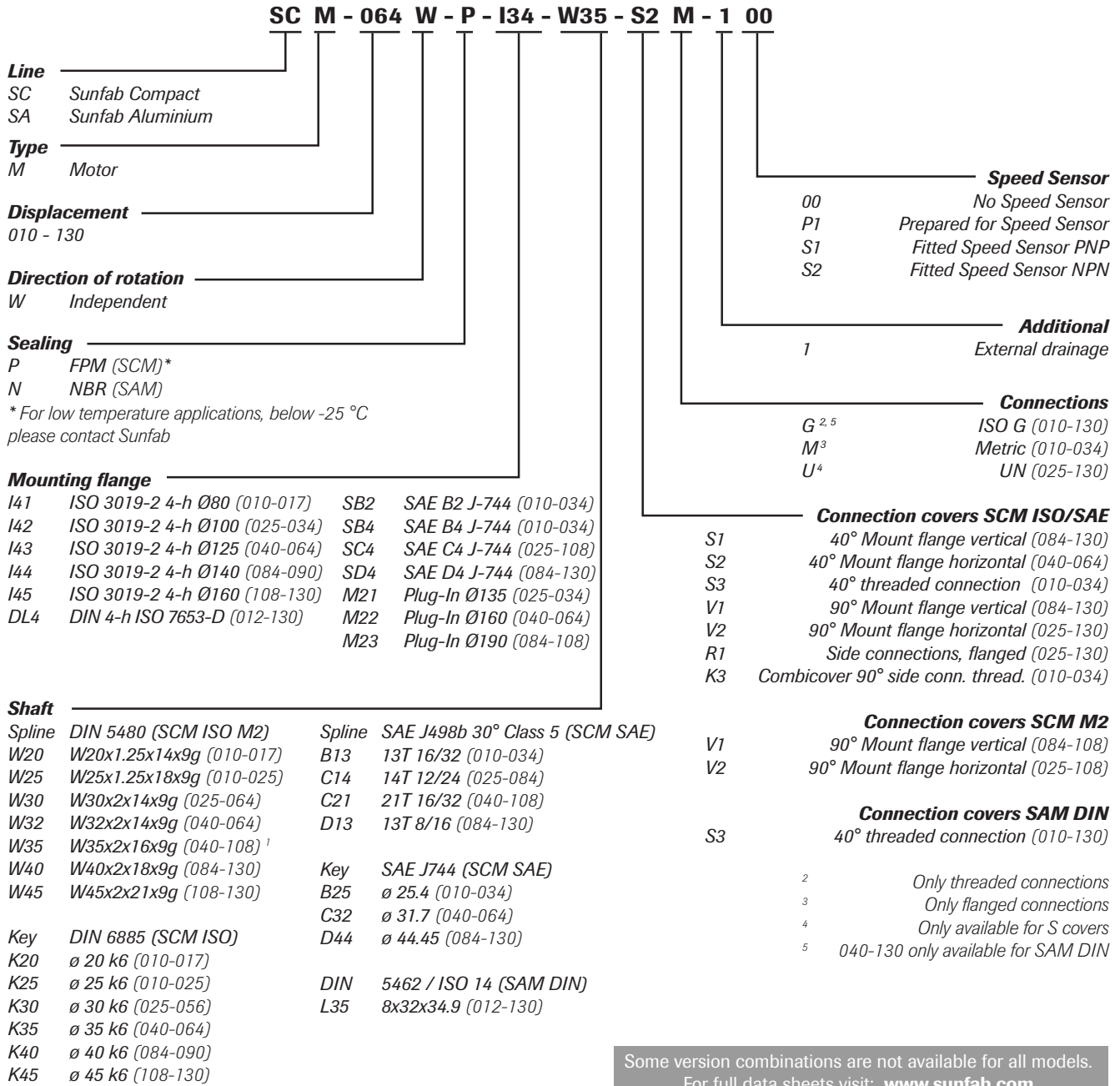
Example drawing.

### SAM 040-064 DIN



Millimeter (inch)

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



Some version combinations are not available for all models. For full data sheets visit: [www.sunfab.com](http://www.sunfab.com)

<sup>1</sup> 108 only SCM M2

SCM	Code	Max. housing pressure bar at rpm							
		1500	3000	5200	6300	7000 (M2)	8250 (SAE)	8800 (ISO)	
010-034	P	7	7	4	3.5	3	2.5	2.5	
040-064	P	7	6	3.5	3	-	-	-	
084-130	P	7	4	3	-	-	-	-	

Code according to diagram above.

For low temperature applications, below -25 °C please contact Sunfab.

The drainage oil should have a maximum temperature of 115 °C with the P shaft seal. This temperature must not be exceeded.

The housing pressure must be equal to or greater than the external pressure on the shaft seal.

To ensure the function of the shaft seal and lubrication of the motor, we recommend a min. housing pressure of 0,5 bar. If needed, a spring loaded check valve of 0,5 bar can be installed on the housing drain line.





**Innovations and  
visions of the future**

# Accessories

## By-Pass



**Sunfab By-Pass is a relief valve for the SCP and SAP pump providing remote switching between idling and operation.**

By-Pass is used in installations where the power take-off is not disengaged during transport. These are usually found on vehicles fitted with hydraulic equipment that needs to be operated while on the move, for example, road maintenance vehicles, concrete mixers, refuse collection trucks, etc.

### Other advantages:

- Symmetrical design supports installation of the magnetic valve in different directions, and use on both right and left-hand rotating pumps
- ATEX approved as an option
- Deutch connector IP69
- Highly efficient due to low pressure drop

## Splitter Gearbox



**Splitter gearbox SZ mounted in a frame bracket, permits the assembly of two pumps on the same power take-off.**

Splitter gearbox SZ provides unlimited freedom to combine pumps with different size flows.

### Other advantages:

- Suitable for all Sunfab pumps with DIN flange
- Can be mounted horizontally or vertically

## Tracpower PTO



**Tracpower increases the speed of the tractor's power take-off 2.5 times, which gives better conditions for hydraulic operation.**

Tracpower is the solution when the tractor's original hydraulics do not give sufficiently large flow and pressure.

### Other advantages:

- Suitable for all Sunfab pumps with DIN flange
- Can be mounted horizontally or vertically

For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## Sunfab's power take-off is the link between the vehicle and the pump. It can be mounted on the gearbox or the engine.

A wide range of power take-offs are available from Sunfab with different ratios and torques to fit most gearboxes. Together with Sunfab's extensive range of pumps these form unbeatable combinations both technically and economically and offer immense choice.

Sunfab's power take-offs are designed for direct mounting of all Sunfab pumps. The power take-off is supplemented with an adapter for intermediate shaft installation.

### Power Take-Off

- PTO adaptors
- Single PTO
- Double PTO
- Adapter for drive shaft
- SAE adapters



### Sunfab has a wide range of accessories that facilitates the mounting of pumps and motors

In applications where it is not possible to directly mount a pump or motor, Sunfab has a wide range of adapters, flanges and brackets to help facilitate

the installation. For example mounting on a countershaft due to lack of space, two or more pump gearboxes and compressors.

### Adapter & Flanges

- Adapter flange for splitter gearbox
- Adapter flanges
- Splined drive flanges
- Neutral drive flanges
- Drive flanges

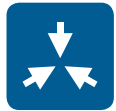


### Pump Brackets

- Frame attachments
- Pump brackets



For more information, technical data and drawings visit: [www.sunfab.com](http://www.sunfab.com)



## Anti-cavitation Valve for SCM



**The Sunfab anti-cavitation valve is designed to be mounted directly on the hydraulic motor and prevents cavitation problems when the load is running down e.g. vacuum pumps.**

Sunfab's anti-cavitation valve is used to minimise the risk of cavitation damage in connection with insufficient inlet pressure.

This can occur, for example, in applications with a relatively large rotating mass with a long run-down time (e.g. fan operations). The hydraulic motor must have a defined direction of rotation when using Sunfab's anti-cavitation valve. The valve can be adapted to both left and right rotation.

## Flushing Valve for SCM



**The flushing valve is required when operating at high speeds and power levels.**

The flushing valve ensures that the oil temperature inside the motor housing remains at the recommended level. Excessively high temperatures reduce the service-life of the shaft seal and the viscosity of the oil deteriorates.

## Speed Sensor for SCM



**For hydraulic motors that require a specific given speed Sunfab offers a speed sensor with electronic measurement.**

Sunfab speed sensor is available for any ISO/SAE motor, displacement 010-130 cc. The sensor is a two channel hall effect sensor. The sensor has two frequency outputs both giving square wave signals, phase shifted. It can operate at high temperatures. The frequency is determined by:

$$f = \frac{30 \cdot n}{60} = \frac{n}{2}, n \text{ (rpm)}$$

### Other benefits:

- It can operate at high temperatures.
- The speed is detected from the gears on the cylinder block. Since the sensor is working with two channels the rotation direction can be detected.
- The number of gears is 30 for all motor displacements.
- Motors manufactured prepared for speed sensor can also have a sensor fitted afterwards.

## Injector




**Sunfab Injector K-JET 2 is a basic technical solution for the recirculation of oil in closed hydraulic systems which is cost efficient and saves weight.**

K-JET 2 recirculates the oil with an injector. This function replaces the previous standard of feed pressure pumps as compensation for leakage oil losses in the main circuit and any scavenging pumps for the cooling and filtering circuits.


### Other advantages:

- Significantly higher pump speed
- Reduced tank size and oil volume. Only 15-20 % of the main pump flow
- Lower weight through smaller oil tanks
- Lower cost for oil





### SAP 084, 108 DIN INJECTOR



**SAP DIN Optimised for injector is an externally drained variant of the SAP series, which offers a very high oil flow in combination with the Sunfab injector K-Jet 2.**

SAP 084, 108 DIN Optimised for injector is suitable for hydraulic motor operations in closed hydraulic systems with injector K-Jet 2 for pressurisation of the suction side. This gives excellent speed characteristics and high flows.

The front seals in the pump are made of HNBR to withstand the higher temperatures that occur at engine PTO mounting. It is a speed-optimised pump and therefore supplied for either left (L) or right (R) rotation direction.

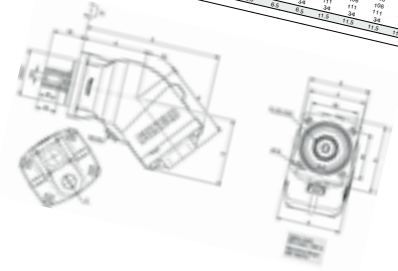
**Other advantages:**

- Light weight metal cast
- Smooth operation
- Long life due to high selection, such as ball bearings
- Corrosion free light
- Less heat generated, dissipates heat through the housing

### SAP 012-108 DIN

Hydraulic Externally Drained

Displacement	cm <sup>3</sup> /rev	012	011	005	004	045	047	006	004	004	108
Max. pump speed	rpm	500	63	81	12,7	17,4	20,0	25,5	26,8	21,8	54,1
Max. pump pressure	bar	130	13,0	17,0	20,4	24,4	27,1	34,0	35,0	28,0	69,0
Weight	kg	13,0	1,3	1,7	2,1	2,5	2,8	3,5	3,6	2,8	6,9
Dimensions											
A	mm	230	230	230	230	230	230	230	230	230	230
B	mm	100	100	100	100	100	100	100	100	100	100
C	mm	140	140	140	140	140	140	140	140	140	140
D	mm	100	100	100	100	100	100	100	100	100	100
E	mm	110	110	110	110	110	110	110	110	110	110
F	mm	100	100	100	100	100	100	100	100	100	100
G	mm	100	100	100	100	100	100	100	100	100	100
H	mm	100	100	100	100	100	100	100	100	100	100
I	mm	100	100	100	100	100	100	100	100	100	100
J	mm	100	100	100	100	100	100	100	100	100	100
K	mm	100	100	100	100	100	100	100	100	100	100
L	mm	100	100	100	100	100	100	100	100	100	100
M	mm	100	100	100	100	100	100	100	100	100	100
N	mm	100	100	100	100	100	100	100	100	100	100
O	mm	100	100	100	100	100	100	100	100	100	100
P	mm	100	100	100	100	100	100	100	100	100	100
Q	mm	100	100	100	100	100	100	100	100	100	100
R	mm	100	100	100	100	100	100	100	100	100	100
S	mm	100	100	100	100	100	100	100	100	100	100
T	mm	100	100	100	100	100	100	100	100	100	100
U	mm	100	100	100	100	100	100	100	100	100	100
V	mm	100	100	100	100	100	100	100	100	100	100
W	mm	100	100	100	100	100	100	100	100	100	100
X	mm	100	100	100	100	100	100	100	100	100	100
Y	mm	100	100	100	100	100	100	100	100	100	100
Z	mm	100	100	100	100	100	100	100	100	100	100



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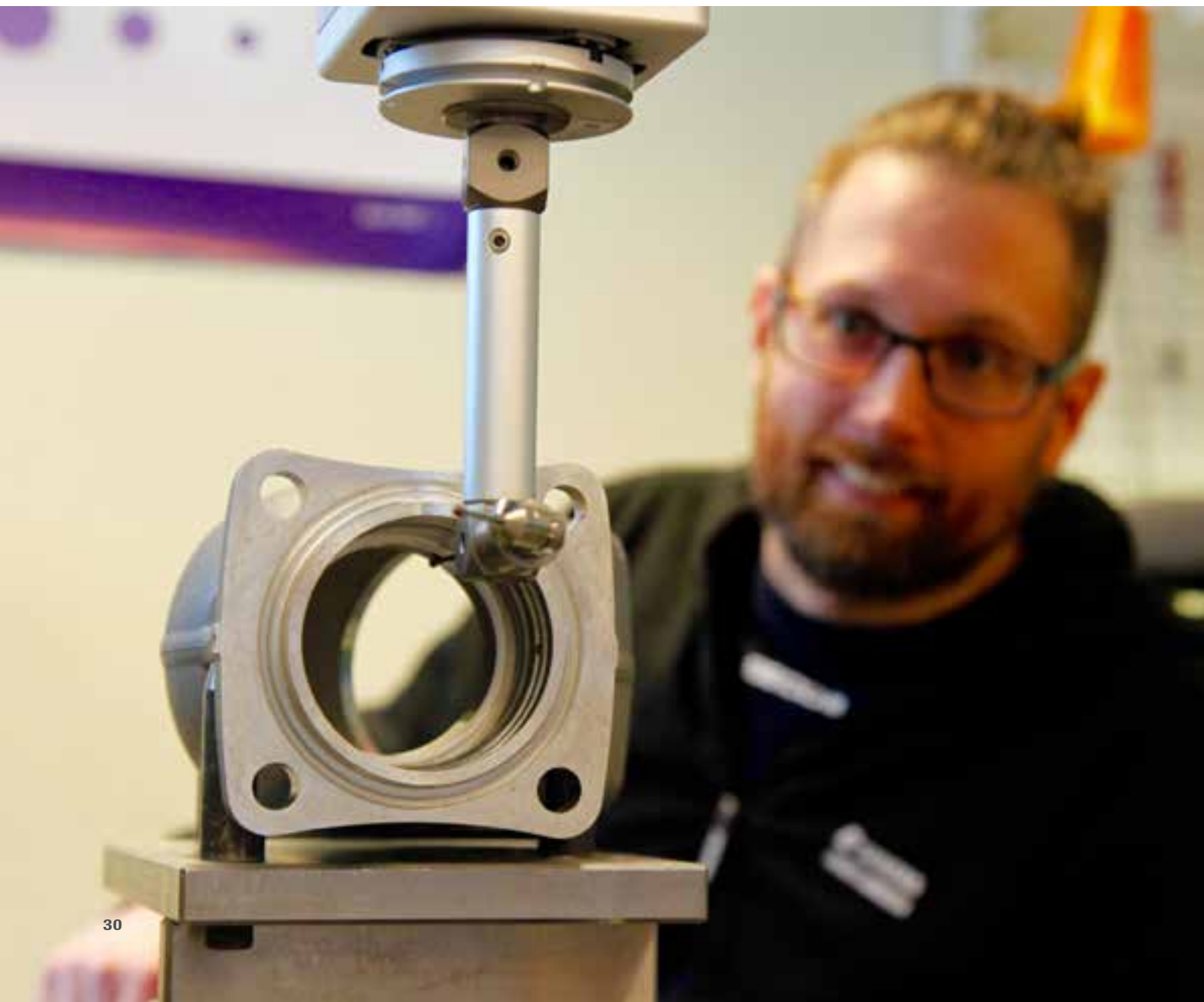
# Development

## **Sunfab's product quality is world famous.**

Our Pumps and Motors undergo stringent testing in our own lab and test rigs during production to ensure unsurpassed reliability in the field. Our state of the art production facility employs only the most experienced CNC operators and Service Technicians.

Cutting edge technology, together with high quality sensors and control components, produce the requisite conditions for structured and accurate measurement results.

Our Design Department is pleased to answer customers' technical questions on the e-mail address [tech@sunfab.se](mailto:tech@sunfab.se).



# Production

## Proven production ensures quality

We are convinced our manufacturing expertise and know-how are key ingredients in our continuing success.

That's why we manufacture all core components in-house, ensuring that our products live up to their well known quality and high performance.



# Our service features

**We are at your service. It is always easy to find the right contact person in our company.**

The service line offers fast help. Please send your technical questions to: [tech@sunfab.se](mailto:tech@sunfab.se)

On the website [www.sunfab.com](http://www.sunfab.com) you can find the newest datasheets, installation guides and news.

In warranty matters we assure a fast reaction: delivery of spare parts within 24h and fast defect analysis are guaranteed.

If you require further information about our products, please send an email to: [sunfab@sunfab.se](mailto:sunfab@sunfab.se)





# Our knowledge gives power to hydraulics

**A series of factors have accounted for Sunfab's success in the market. Creative and innovative development and long-term work have been combined with stringent demands on environmental accountability, function, quality and components.**

Our ability to listen to the real needs of our customers provides the essential impulses for driving developments forward and creating new, improved products. The commitment, sense of responsibility and creativity of our employees are other key factors. We strive to make continual improvements in all areas of our business, which is registered under the ISO 9001:2008 and ISO 14001:2004 standards.

We are constantly upgrading our machinery to ensure we always work with state-of-the-art production equipment and we have total control of the whole manufacturing process that takes place in our own factory in Sweden. At each state of product development, we systematically select design

and production solutions that provide optimal performance and reliability.

Before being released onto the market, all products are subjected to a gruelling series of tests, both in the laboratory and in practice. Since 1995, the demand for our hydraulic pumps and motors has accelerated and sales have tripled. In 2006, to satisfy the demands and needs of the market, we carried out our largest ever investment programme - the construction of a 3,500 sqm workshop area. The new factory was integrated with the existing facilities to offer maximum efficiency.

SAP 012-108 DIN

### VERSIONS, MAIN DATA

Example  
Line 1 - 084 - L - 4 - 014 - L35 - 80 - S - 0 - 00

Line SA Sunfab Alignment 40° Sunfab standard  
P Part

2. Displacement  
012 017 025 034 040 047 056 064 084 108

3. Direction of rotation  
L Right  
R Left

4. Sealing  
N Nipre  
H HBRN

5. Mounting flange  
014 DIN 4.11 ISO 7452D

6. Shaft  
135 DIN 5482 / ISO 14

7. Connection cover  
00

8. Connections  
Sunfab standard

9. Additional  
0

10. Accessories/fit  
00 No accessories available

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Sunfab Hydraulics AB, Box 1094, SE-824 12 Hudiksvall, Sweden. Tel: +46 650-367 00, Fax: +46 650-367 27, E-mail: sunfab@sunfab.se Web: www.sunfab.com

Main data pumps

SCM 012-130 DIN

### VERSIONS, MAIN DATA

Example  
Line M - 012 - W - 4 - 014 - L35 - 80 - S - 0 - 00

Line M Sunfab Compact series/40° Sunfab standard

1. Type  
M

2. Displacement  
012 017 025 034 040 047 056 064 084 108

3. Direction of rotation  
Y

4. Sealing  
N Nipre  
H HBRN

5. Mounting flange  
014

6. Shaft  
135

7. Connection cover  
00

8. Connections  
Sunfab standard

9. Additional  
0

10. Sealed structure  
00

	012	017	025	034	040	047	056	064	084	108
S1										
S2										
S3										
V1										
V2										
R1										
K3										

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Main data motors



# A global company with a local presence

● Head office

■ Subsidiary office

■ Distributors

## We now have representatives in 60 countries.

Our head office is located in Hudiksvall, Sweden. Our subsidiary companies can be found in Germany, USA, France, the UK and Spain. Together we form the Sunfab Group. We also sell our products via distributors and to direct customers all over the world.

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