



Bent Axis Piston Pumps SC Series



DIN



SAE



ISO

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Bent Axis Pumps SC Series - General Information

SC Pumps is a series of bent axis piston pumps with a fixed displacement for mobile and stationary hydraulics.

SC 012 - 108 - DIN and SC 5112 - 5108 - SAE series pumps covers the entire displacement range 12-108 cm³/n. at a max. working pressure of 40 MPa for exacting mobile hydraulics and is either mounted directly on the power take off or on a frame bracket via an intermediate shaft.

SC 034 - 130 - ISO covers the entire displacement range 34-130 cm³/n. at a max. working pressure of 40 MPa for mobile and stationary hydraulics and are well dimensioned; double tapered roller bearings permit high shaft loads and lead to excellent speed characteristics.

SC Series Pumps is a modern, compact pump which meets the market's high demands on flow performance, pressure, efficiency and small installation dimensions.

The **SC** pump should be supplemented with the By-Pass valve in installations where the hydraulics are used while the vehicle is on the move.

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

Other advantages of SC Series Pumps:

- 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.
- The stop shoulder on the angle housing allows the pumps direction of rotation to be changed without the risk of altering the gear meshing.



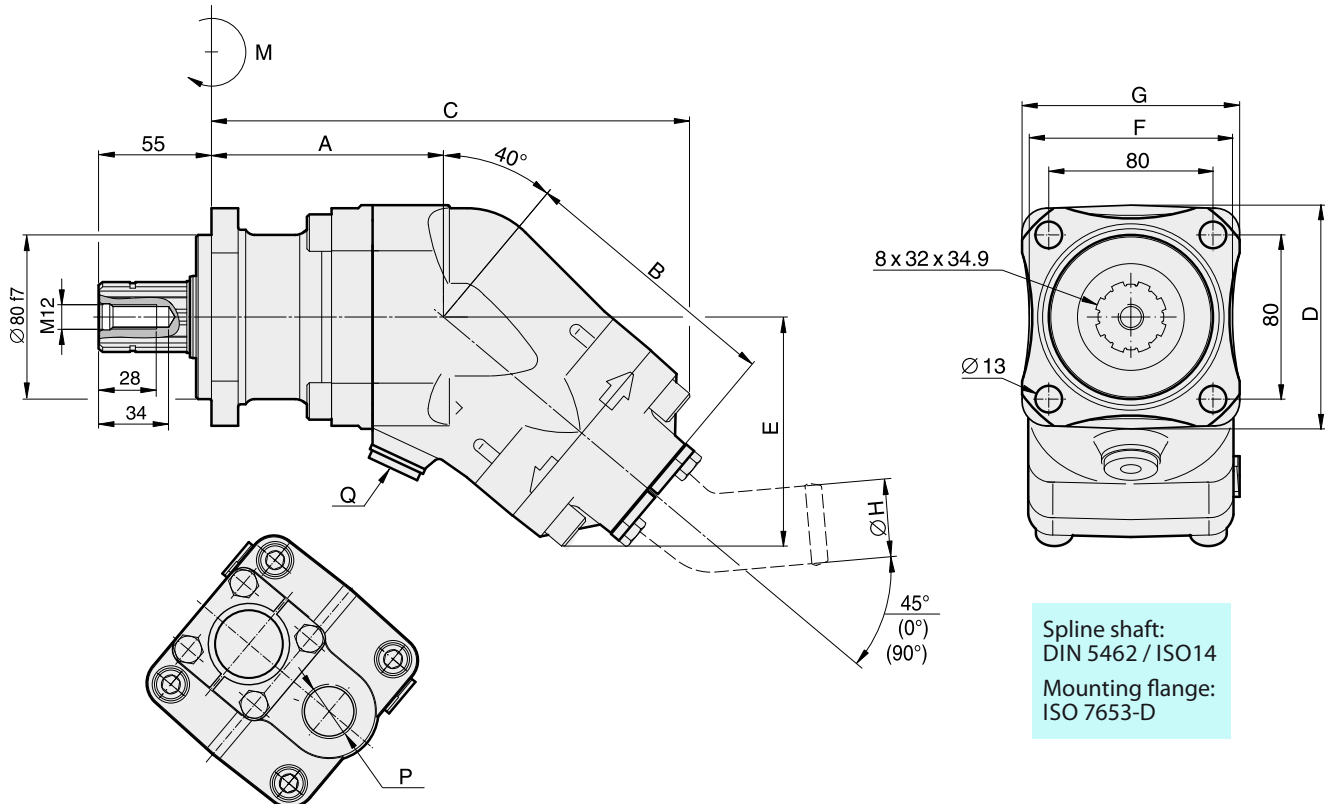
SC 012 - 108 - DIN Pump

Technical Information

Type SC.....DIN		012	017	025	034	047	056	064	084	108
Nominal oil flow at pump speed rpm										
	500	5.8	7.9	12.5	17.0	23.5	28.0	31.5	41.5	54.0
	1000	12.0	16.2	25.0	34.0	47.0	56.0	63.5	83.5	108.0
	1500	18.3	24.7	37.5	51.0	70.5	84.0	95.5	125.0	162.0
Displacement	cm ³ /rev.	12.6	17.0	25.4	34.2	47.1	56.0	63.6	83.6	108.0
Max pump speed: continuous limited										
	rpm	2300	2300	2300	2300	1900	1900	1900	1500	1500
		3000	3000	3000	3000	2500	2500	2500	2000	2000
Max working pressure	MPa	40	40	40	40	40	40	40	40	40
Weight	kg	8.3	8.3	8.5	8.5	11.7	11.7	11.7	17.0	17.0
Dimensions	mm	A	97	97	97	97	113	113	113	123
		B	112	112	112	112	130	130	130	147
		C	202	202	202	202	228	228	228	259
		D	99	99	99	99	109	109	109	126
		E	97	97	97	97	109	109	109	126
		F	89	89	89	89	99	99	99	115
		G	97	97	97	97	106	106	106	123
		H	38	38	38	38	38	38	50	50
	ISO G	P	50	50	50	50	50	50	64	64
		Q	3/4	3/4	3/4	3/4	3/4	3/4	1	1
			1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Tare-weight torque	Nm	M	6.9	6.9	7.4	7.4	13	13	13	21
Direction of rotation	optional									

Subject to design alteration

Installation Drawing



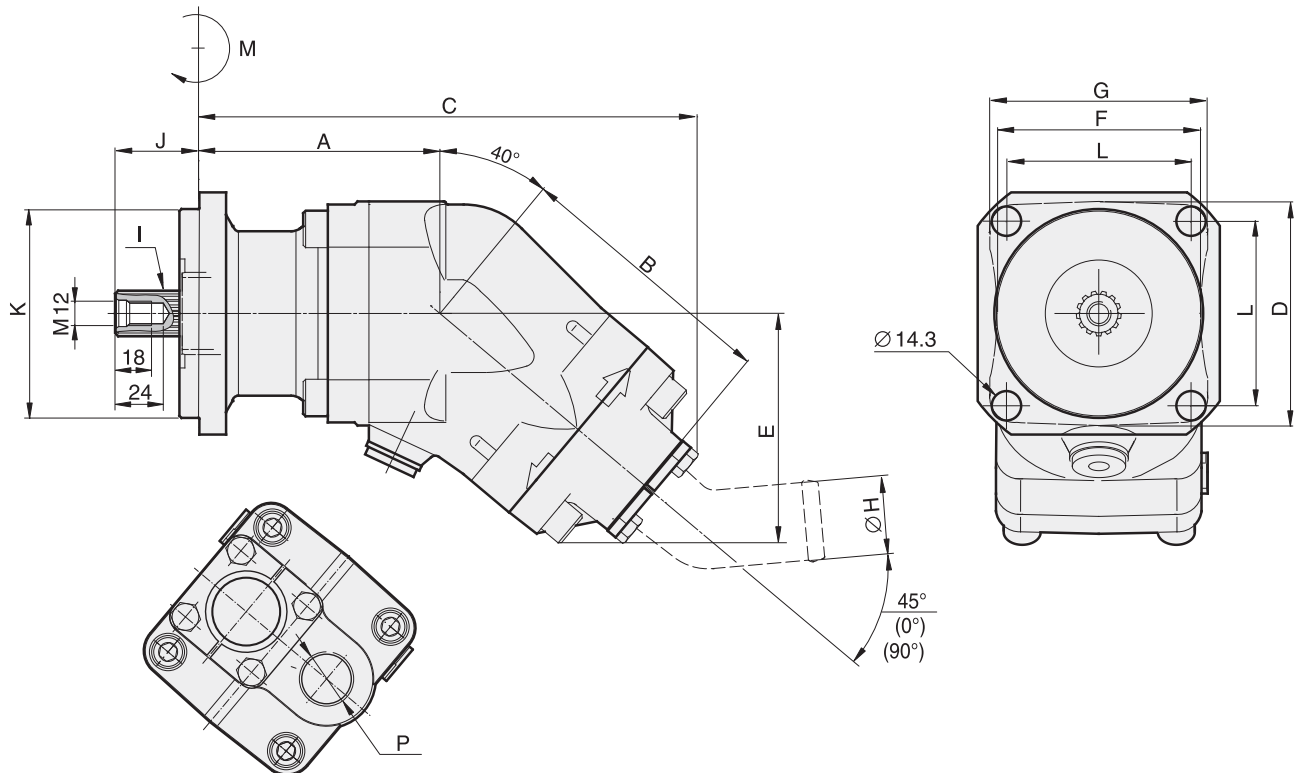
SC 5012 - 5108 - SAE Pump

Technical Information

Type SC.....SAE....		5012	5017	5025	5034	5047	5064	5047	5064	5084	5108	
Nominal oil flow at pump speed rpm				l/min					l/min			
	500	5.8	7.9	12.5	17.0	23.5	31.5	23.5	31.5	41.5	54.0	
	1000	12.0	16.2	25.0	34.0	47.0	63.5	47.0	63.5	83.5	108.0	
	1500	18.3	24.7	37.5	51.0	70.5	95.5	70.5	95.5	125.0	162.0	
Displacement	cm³/rev.	12.6	17.0	25.4	34.2	47.1	63.6	47.1	63.6	83.6	108.0	
Max pump speed: continuous limited	rpm	2300	2300	2300	2300	1900	1900	1900	1900	1500	1500	
		3000	3000	3000	3000	2500	2500	2500	2500	2000	2000	
Max working pressure	MPa	40	40	40	40	40	35	40	40	40	40	
Weight	kg	8.7	8.6	8.9	8.8	12.3	12.2	14.3	14.1	19.0	19.0	
Dimensions	mm	A	101	101	101	101	117	117	119	119	128	128
		B	117	117	117	117	130	130	130	130	147	147
		C	209	209	209	209	235	235	237	237	262	262
		D	99	99	99	99	109	109	109	109	126	126
		E	97	97	97	97	112	112	112	112	126	126
		F	89	89	89	89	99	99	99	99	115	115
		G	97	97	97	97	106	106	106	106	123	123
		H	38	38	38	38	38	38	38	38	50	50
			50	50	50	50	50	50	50	50	64	64
SAE standard		I J K L P Q	SAE B 13 T-16/32DP				SAE C 14T-12/24D P					
			41	41	41	41	41	41	56	56	56	56
			101.6	101.6	101.6	101.6	101.6	101.6	127	127	127	127
			89.8	89.8	89.8	89.8	89.8	89.8	114.5	114.5	114.5	114.5
			¾	¾	¾	¾	¾	¾	¾	¾	1	1
			½	½	½	½	½	½	½	½	½	½
Tare-weight torque	Nm	M	6.9	6.9	7.4	7.4	13	13	13	21	21	
Direction of rotation	optional											

Subject to design alteration

Installation Drawing



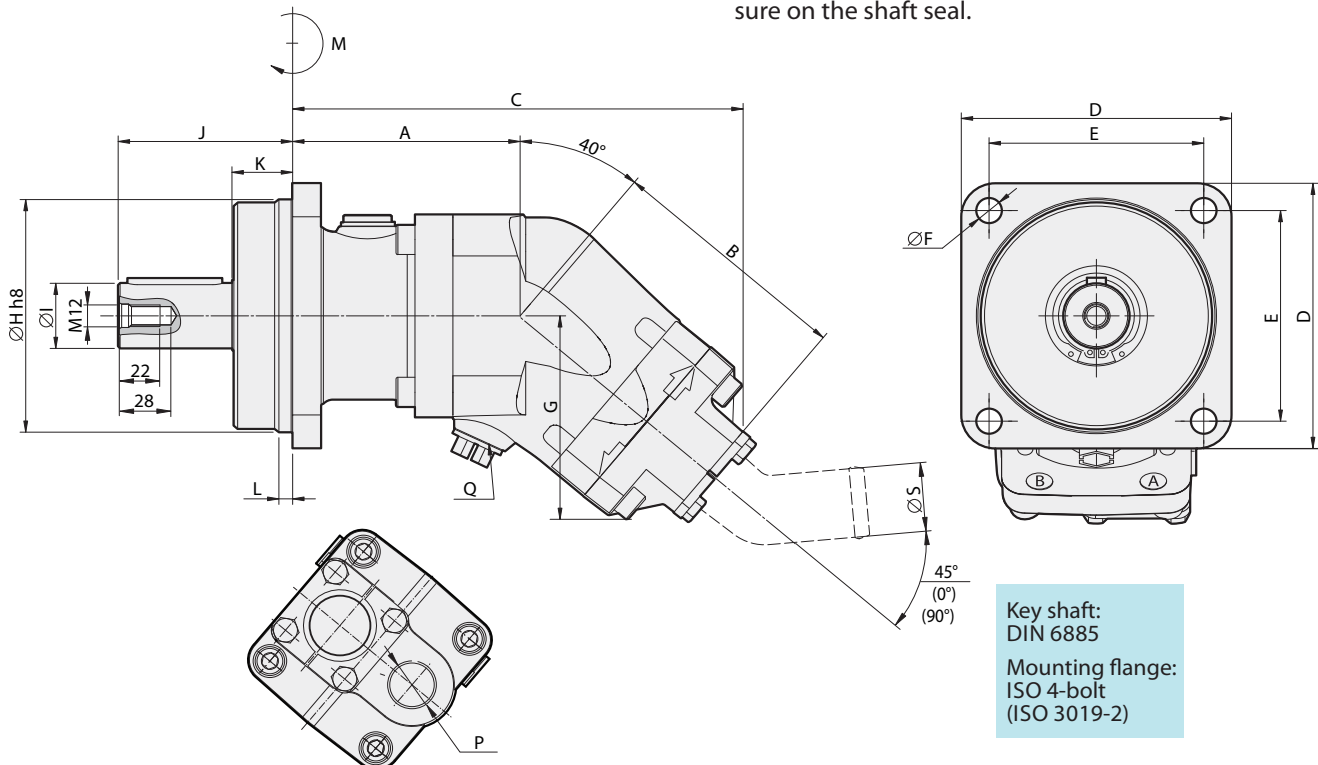
SC 034 - 130 - ISO Pump

Technical Information

Type SC.....ISO			034	047	064	084	108	130	
Nominal oil flow at pump speed rpm					l/min				
		500	17.0	23.5	31.5	41.5	54.0	65.0	
		1000	34.0	47.0	63.5	83.5	108.0	130.0	
		1500	51.0	70.5	95.5	125.0	162.0	195.0	
Displacement	cm ³ /rev.		34.2	47.1	63.6	83.6	108.0	130.0	
Max pump speed: continuous limited	rpm		2300	1900	1900	1500	1500	1500	
			3000	2500	2500	2000	2000	2000	
Max working pressure	MPa		40	40	40	40	40	40	
Weight	kg		8.5	15.5	15.5	27.0	29.5	29.5	
Dimensions	mm	A	101	120	120	121	121	121	
		B	117	130	130	148	148	148	
		C	210	237	237	256	256	256	
		D	118	142.5	142.5	160	160	180	
		E	88.4	113.2	113.2	127.3	127.3	141.4	
		F	11.0	13.5	13.5	13.5	13.5	17.5	
		G	98	110	110	127	127	127	
		H	100	125	125	140	140	160	
		I	30	35	35	40	45	45	
		J	60	92	92	102	102	120	
		K	24	32	32	32	32	40	
		L	7.25	7.25	7.25	7.25	7.25	7.25	
		S	38	38	38	50	50	50	
			50	50	50	64	64	64	
		ISO	G	P	¾	¾	¾	1	1
			ISO G	Q	½	½	½	½	½
Tare-weight torque	Nm	M	7.4	13	13	21	21	21	
Direction of rotation	optional								
Subject to design alteration			Q = External drainage is routed to the con						

Q = External drainage is routed to the con -
section below the tank's oil level.
The housing pressure must be equal
to or greater than the external pres-
sure on the shaft seal.

Installation Drawing



As HANSA-TMP has a very extensive range of products and some products have a variety of applications, the information supplied may often only apply to specific situations. If the catalogue does not supply all the information required, please contact HANSA-TMP.

In order to provide a comprehensive reply to queries we may require specific data regarding the proposed application.

Whilst every reasonable endeavour has been made to ensure accuracy this publication cannot be considered to represent part of any contract, whether expressed or implied.

HANSA-TMP reserves the right to amend specifications at their discretion.



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