



HYDRAULIC COMPONENTS
HYDROSTATIC TRANSMISSIONS
GEARBOXES - ACCESSORIES

Certified Company ISO 9001 - 14001



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HT 16 / P / 152 / 0215 / E

Fixed Displacement Bent Axis Single Flow Pumps

SAP, SCP and SCPT Series



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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 12-108 cm³/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 light metal-housing
- Less heat generation due to better ability to dissipate heat through housing

VERSIONS, MAIN DATA

Example

SA	P	-	084	L	-	N	-	DL4	-	L35	-	S0	S	-	0	00
Line	1		2	3		4		5		6		7	8		9	10

Line

SA	Aluminium
P	Pump

7. Connection cover

S0	40° standard
----	--------------

2. Displacement

012	017	025	034	040	047	056	064	084	108
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

8. Connections

S	standard
---	----------

3. Direction of rotation

R	Right
L	Left

9. Additional

0	-
---	---

4. Sealing

N	Nitrile
V	HNBR

10. Accessories

00	No accessories available
----	--------------------------

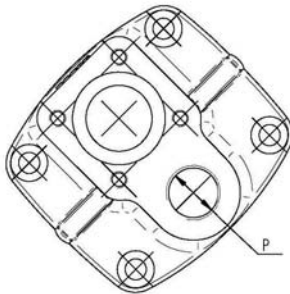
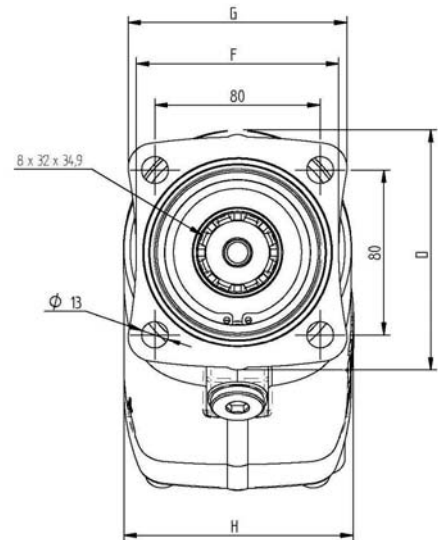
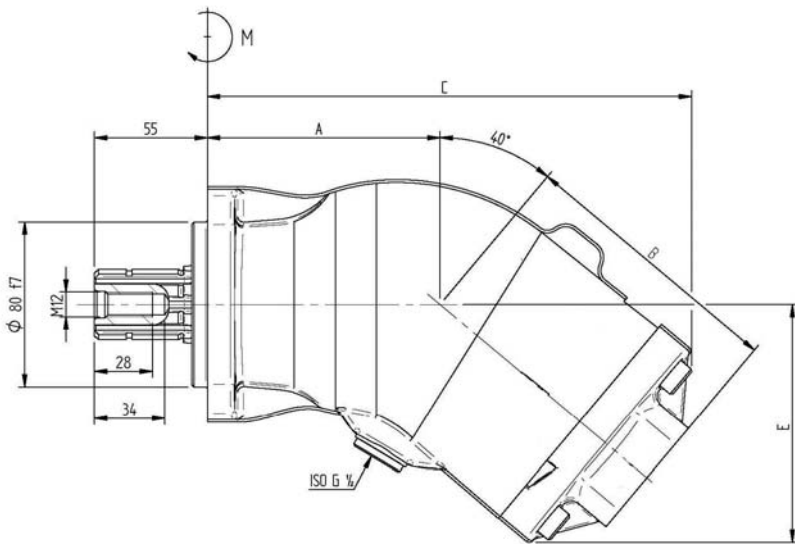
5. Mounting flange

DL4	DIN 4-h (ISO 7653D)
-----	---------------------

6. Shaft

L35	DIN 5462 / ISO 14
-----	-------------------

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^3/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 limited	rpm	2300	2300	2300	2300	1900	1900	1900	1900	1500	1500	1500
		3000	3000	3000	3000	2500	2500	2500	2500	2000	2000	2000
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	127	127
		E	102	102	102	102	115	115	115	115	133	133
		F	98	98	98	98	98	98	98	98	98	98
		G	106	106	106	106	106	106	106	106	106	106
		H	97	97	97	97	111	111	111	111	118	118
		ISO G	P	34	34	34	34	34	34	34	34	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)									



SCP 012-108 DIN



SCP 012-108 DIN is a series of piston pumps with a fixed displacement for demanding mobile hydraulics.

SCP 012-108 DIN covers the entire displacement range 12-108 cm³/rev. at a maximum working 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.

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
- 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

VERSIONS, MAIN DATA

Example

SC	P	084	L	N	DL4	L35	S0	S	0	00
Line	1	2	3	4	5	6	7	8	9	10

Line

SC	Compact
----	---------

7. Connection cover

S0	40° standard
----	--------------

1. Type

P	Pump
---	------

8. Connections

S	standard
---	----------

2. Displacement

012	017	025	034	040	047	056	064	084	108
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

9. Additional

0	-
---	---

3. Direction of rotation

R	Right
L	Left

10. Accessories

00	No accessories available
----	--------------------------

4. Sealing

N	Nitrile
---	---------

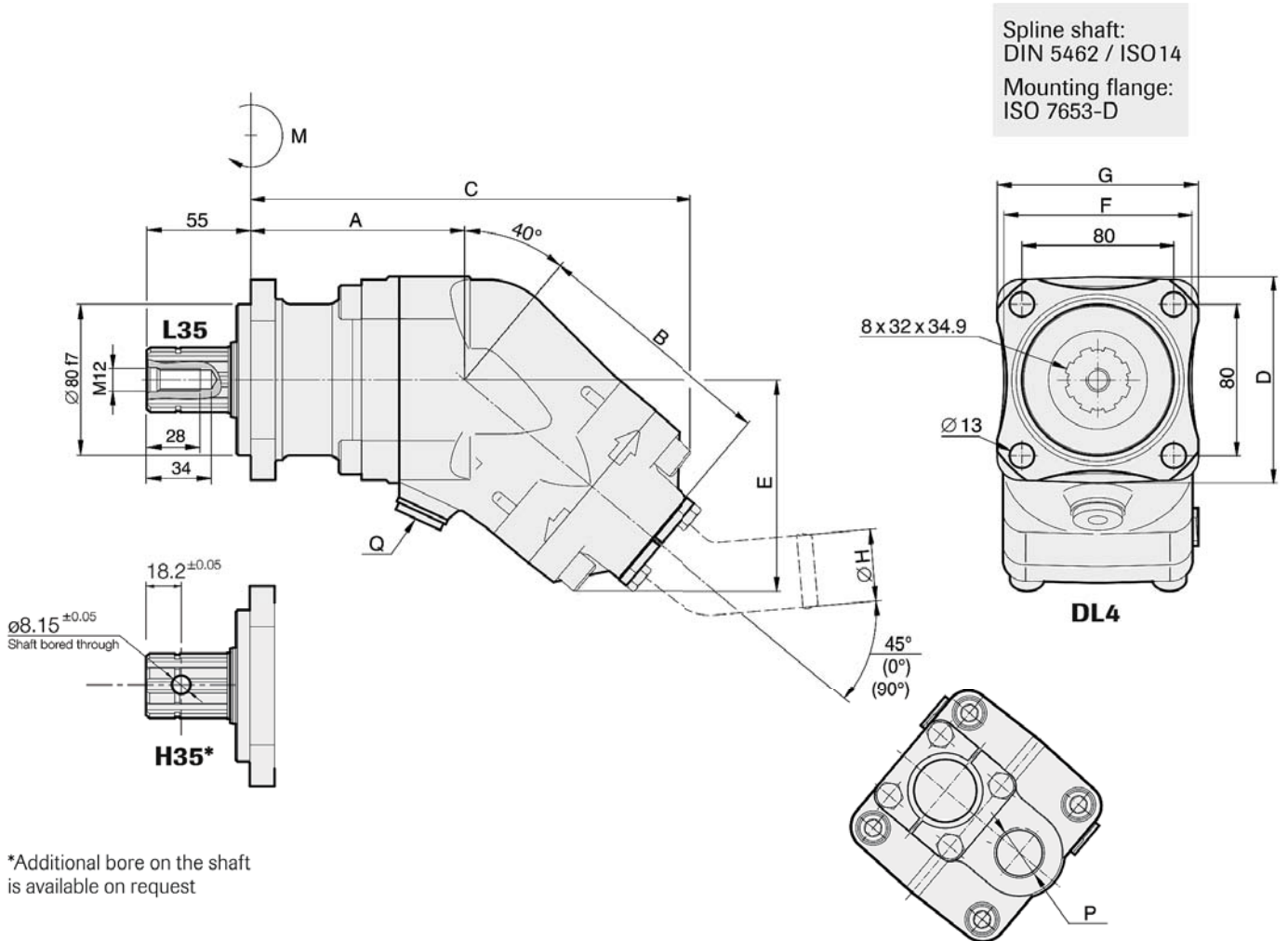
5. Mounting flange

DL4	DIN 4-h (ISO 7653D)
-----	---------------------

6. Shaft

L35	DIN 5462 / ISO 14
H35	DIN 5462 / ISO 14 Ø 8.15

SCP 012-108 DIN		012	017	025	034	040	047	056	064	084	108	
Theoretical oil flow V_{min} at pump speed	rpm	500	6.3	8.5	12.7	17.1	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	
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	125.4	
Displacement	cm^3/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 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	bar	400	400	400	400	400	400	400	400	400	400	
Weight	kg	8.3	8.3	8.5	8.5	11.7	11.7	11.7	11.7	17.0	17.0	
Dimensions	mm	A	97	97	97	97	113	113	113	113	123	123
		B	112	112	112	112	130	130	130	130	147	147
		C	202	202	202	202	228	228	228	228	259	259
		D	99	99	99	99	109	109	109	109	126	126
		E	97	97	97	97	109	109	109	109	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	64	64
	ISO G	P	3/4	3/4	3/4	3/4	3/4	3/4	3/4	1	1	
	ISO G	Q	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	21	21	
Direction of rotation	Left (L) or Right (R)											



*Additional bore on the shaft is available on request

SCP 084-108 DIN OPTIMISED



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

SCP 084, 108 DIN Optimised covers the displacement range 84 and 108 cm³/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 front seals of the pump are manufactured from fluor rubber to withstand the higher temperatures involved with engine mounting.

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

VERSIONS, MAIN DATA

Example

SC	P	084	L	V	DL4	L35	S0	S	2	00
Line	1	2	3	4	5	6	7	8	9	10

Line	SC	Compact	7. Connection cover	S0	40° standard
1. Type	P	Pump	8. Connections	S	standard
2. Displacement	084	108	9. Additional	2	Optimized
3. Direction of rotation	R	Right	10. Accessories	00	No accessories available
	L	Left			
4. Sealing	V	HNBR			
5. Mounting flange	DL4	DIN 4-h (ISO 7653D)			
6. Shaft	L35	DIN 5462 / ISO 14			

Pump SCP 084, 108 DIN Optimised		084	108
Theoretical oil flow l/min at pump speed	rpm	500	54
		1000	108
		1500	106
Displacement	cm ³ /rev	83.6	108.0
Max pump speed	rpm	1700	1800
		2200	2300
Max working pressure	bar	400	400
Weight	kg	17.0	17.0
Tare-weight torque (M)	Nm	21	21
Direction of rotation	Left (L) or Right (R)		

SCPT 090-130 DIN



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

SCPT 090, 130 DIN are ideal for applications that require both a high flow and a high working 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:

- 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 angular housing allows the pump's direction of rotation to be changed without the risk of altering the gear meshing

VERSIONS, MAIN DATA

Example

SC	PT	-	090	L	-	N	-	DL4	-	L35	-	S0	S	-	0	00
Line	1		2	3		4		5		6		7	8		9	10

Line

SC	Compact
----	---------

7. Connection cover

S0	40° standard
----	--------------

1. Type

PT	Tipper pump
----	-------------

8. Connections

S	standard
---	----------

2. Displacement

090	130
-----	-----

9. Additional

0	-
---	---

3. Direction of rotation

R	Right
L	Left

10. Accessories

00	No accessories available
----	--------------------------

4. Sealing

N	Nitrile
---	---------

5. Mounting flange

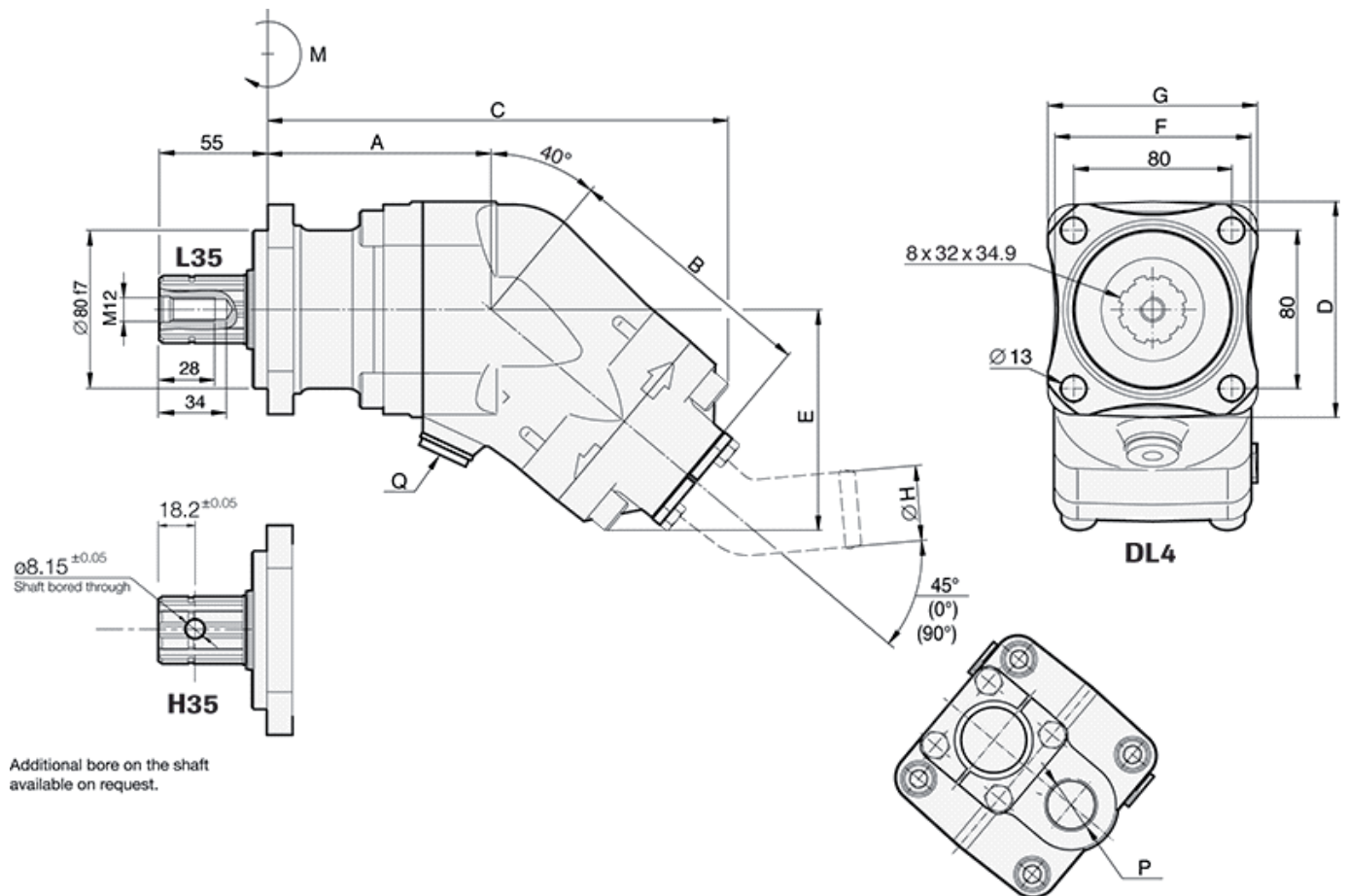
DL4	DIN 4-h (ISO 7653D)
-----	---------------------

6. Shaft

L35	DIN 5462 / ISO 14
-----	-------------------

Pump SCPT 090, 130 DIN

		090	130		
Nominal oil flow at pump speed	rpm	500	65.0		
		1000	130.0		
		1500	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	11.7	17.0		
Dimensions	mm	A	113	123	
		B	130	147	
		C	228	259	
		D	109	126	
		E	109	126	
		F	99	115	
		G	106	123	
		H	38	50	
		ISO G	P	34	1
		ISO G	Q	12	1/2
Tare-weight torque (M)	Nm	M	13	21	
Direction of rotation	Left (L) or Right (R)				



SCP 084-108 DIN INJECTOR



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

SCP 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 fluor rubber 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:

- 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

VERSIONS, MAIN DATA

Example

SC	P	084	L	V	DL4	L35	S0	S	3	00
Line	1	2	3	4	5	6	7	8	9	10

Line

SC	Compact
----	---------

7. Connection cover

S0	40° standard
----	--------------

1. Type

P	Pump
---	------

8. Connections

S	standard
---	----------

2. Displacement

084	108
-----	-----

9. Additional

3	Optimised for injector
---	------------------------

3. Direction of rotation

R	Right
L	Left

10. Accessories

00	No accessories available
----	--------------------------

4. Sealing

V	HNBR
---	------

See separate brochure "Injector" for more information.

5. Mounting flange

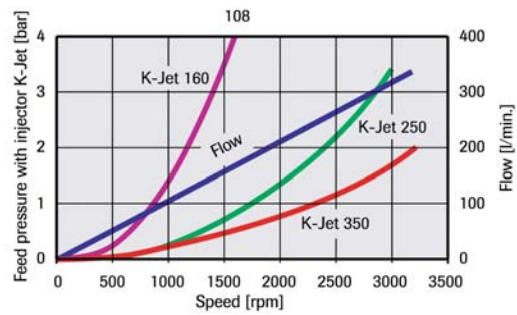
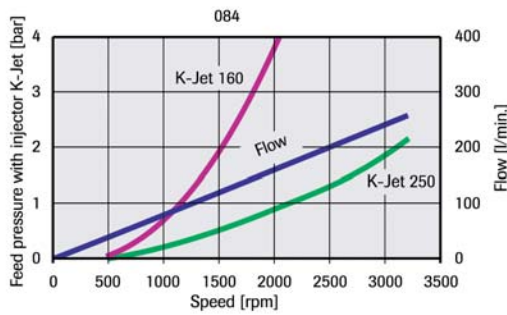
DL4	DIN 4-h (ISO 7653D)
-----	---------------------

6. Shaft

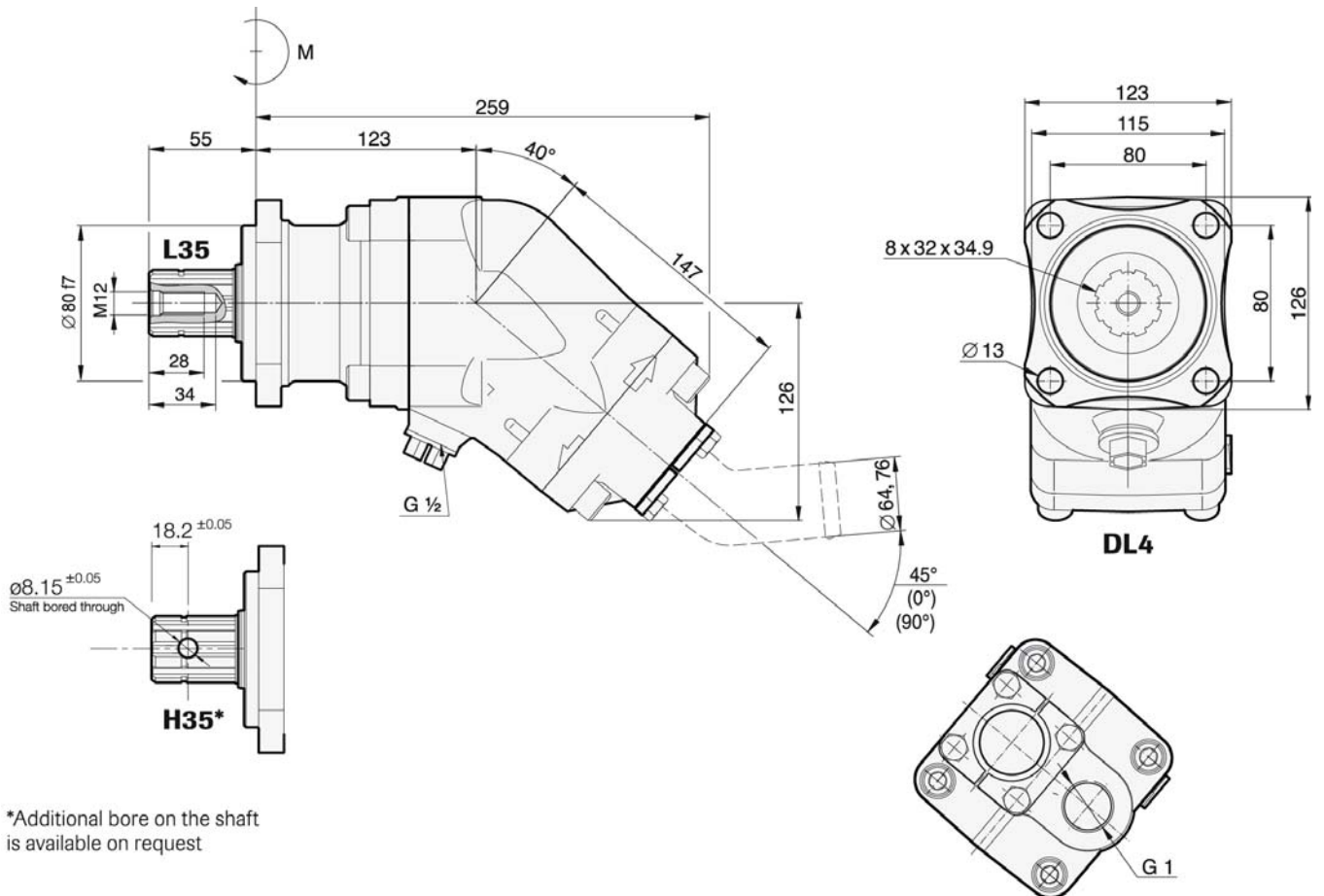
L35	DIN 5462 / ISO 14
-----	-------------------

Pump SCP 084, 108 DIN Optimised for injector

	084				108			
	without	160	250		without	160	250	350
K-Jet 2								
Oil flow at 97% vol. efficiency and 20 MPa	rpm	l/min	l/min	l/min	l/min	l/min	l/min	l/min
	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	314.0
Displacement	cm ³ /rev	83.6			108.0			
Max pump speed	rpm	300	750	1200	300	550	1000	1200
min continuous		1700	2000	3000	1800	1500	2500	3000
max continuous		2200			2300			
max limited								
Max working pressure	bar	400			400			
Weight	kg	17.0			17.0			
Tare-weight torque (M)	Nm	21			21			
Direction of rotation		Left (L) or Right (R)						



Threaded suction connection with feed pressure above 4 bar.



*Additional bore on the shaft is available on request

SCP 012-108 SAE



SCP 012-108 SAE is a series of piston pumps with a fixed displacement for demanding mobile hydraulics.

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 cm³. 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

VERSIONS, MAIN DATA

Example

SC	P	-	084	L	-	N	-	SC4	-	C14	-	S0	S	-	0	00
Line	1		2	3		4		5		6		7	8		9	10

Line

SC	Compact
----	---------

7. Connection cover

S0	40° standard
----	--------------

1. Type

P	Pump
---	------

8. Connections

S	standard
---	----------

2. Displacement

012	017	025	034	040	047	056	064	084	090	108
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

9. Additional

0	-
---	---

3. Direction of rotation

R	Right
L	Left

10. Accessories

00	No accessories available
----	--------------------------

4. Sealing

N	Nitrile
---	---------

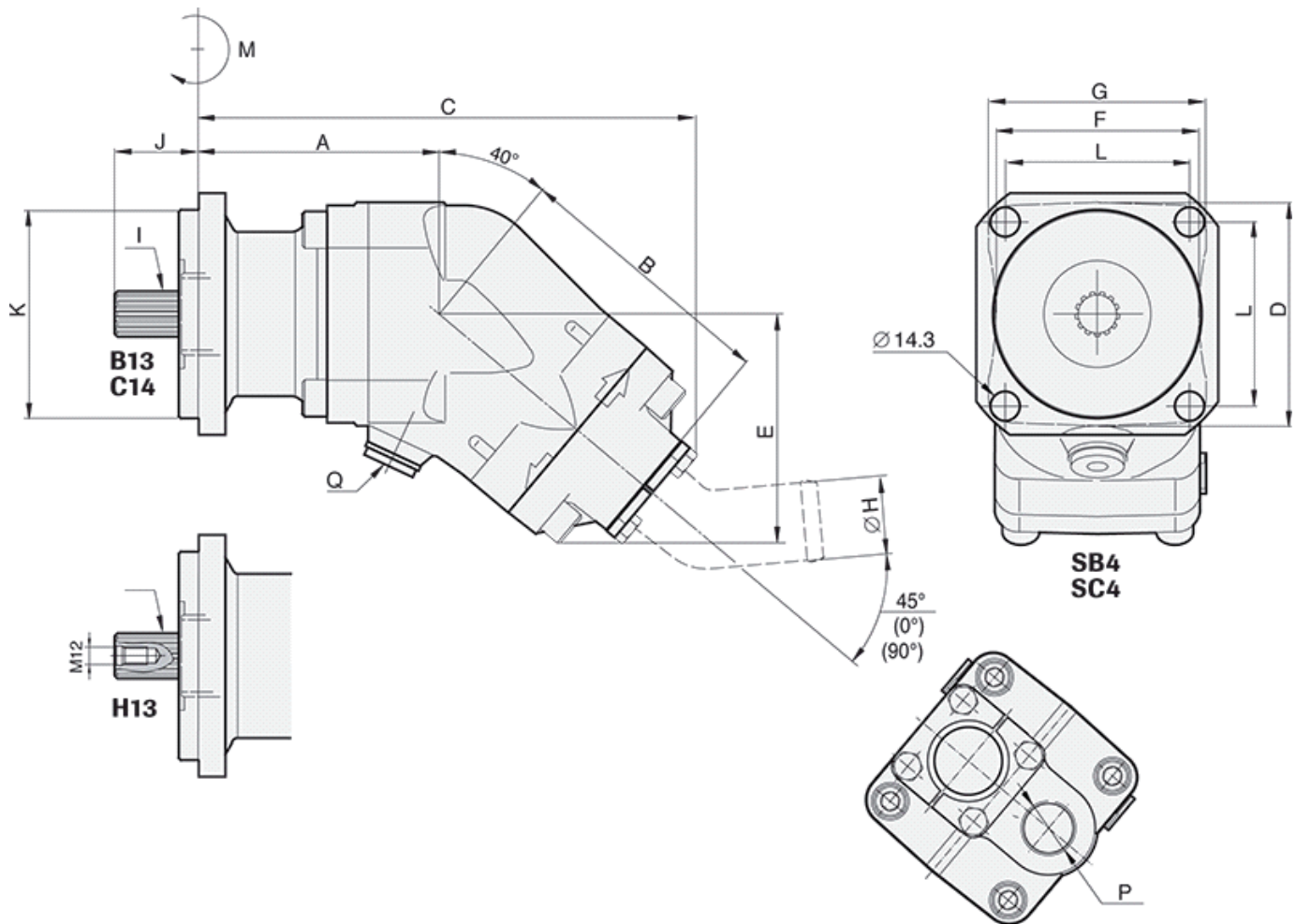
5. Mounting flange

		012	017	025	034	040	047	056	064	084	090	108
SB4	SAE B4	X	X	X	X	X	X	X	X	-	-	-
SC4	SAE C4	-	-	-	-	X	X	X	X	X	-	X

6. Shaft

		012	017	025	034	040	047	056	064	084	090	108
B13	SAE B 13t	X	X	X	X	X	X	X	X	-	-	-
C14	SAE C 14t	-	-	-	-	X	X	X	X	X	-	X

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	20.6	23.5	28.0	31.8	41.8	54.0	
		1000	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	
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	61.8	70.6	84.0	95.4	125.4	162.0	
Displacement	cm ³ /rev	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	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	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	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	128	128	
		B	117	117	117	117	130	130	130	130	130	130	130	130	147	147	
		C	209	209	209	209	235	235	235	235	235	237	237	237	262	262	
		D	99	99	99	99	109	109	109	109	109	109	109	109	126	126	
		E	97	97	97	97	112	112	112	112	112	112	112	112	126	126	
		F	89	89	89	89	99	99	99	99	99	99	99	99	115	115	
		G	97	97	97	97	106	106	106	106	106	106	106	106	123	123	
		H	38	38	38	38	38	38	38	38	38	38	38	38	50	50	
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	13	21	21	
Direction of rotation	Left (L) or Right (R)																



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 cm³/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.

VERSIONS, MAIN DATA

Example

SC	P	012	L	N	I41	W25	Z1	G	3	00
Line	1	2	3	4	5	6	7	8	9	10

Line

SC	Compact, bent-axis design
----	---------------------------

1. Type

P	Pump
---	------

2. Displacement

012	017	025	034	040	047	056	064	084	090	108	130
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

3. Direction of rotation

L	Left
R	Right

4. Sealing

N	Nitrile
H	High pressure, nitrile
V	Viton

5. Mounting flange

ISO 3019-2	012	017	025	034	040	047	056	064	084	090	108	130
I41 ISO 4-h Ø80	X	X	-	-	-	-	-	-	-	-	-	-
I42 ISO 4-h Ø100	O	O	X	X	-	-	-	-	-	-	-	-
I43 ISO 4-h Ø125	-	-	-	-	X	X	X	X	-	-	-	-
I44 ISO 4-h Ø140	-	-	-	-	-	-	-	-	X	X	O	O
I45 ISO 4-h Ø160	-	-	-	-	-	-	-	-	O	O	X	X

6. Shaft

	012	017	025	034	040	047	056	064	084	090	108	130
Spline DIN 5480												
W20 W20x1.25x14x9g	X	X	-	-	-	-	-	-	-	-	-	-
W25 W25x1.25x18x9g	X	X	X	O	-	-	-	-	-	-	-	-
W30 W30x2x14x9g	-	-	X	X	X	X	X	O	-	-	-	-
W32 W32x2x14x9g	-	-	-	-	X	X	X	O	-	-	-	-
W35 W35x2x16x9g	-	-	-	-	X	X	X	X	X	X	-	-
W40 W40x2x18x9g	-	-	-	-	-	-	-	-	X	X	X	X
W45 W45x2x21x9g	-	-	-	-	-	-	-	-	O	O	X	X
Key DIN 6885												
K20 Ø 20 k6	X	X	-	-	-	-	-	-	-	-	-	-
K25 Ø 25 k6	X	X	X	O	-	-	-	-	-	-	-	-
K30 Ø 30 k6	O	O	X	X	X	X	X	O	-	-	-	-
K35 Ø 35 k6	-	-	-	-	X	X	X	X	-	-	-	-
K40 Ø 40 k6	-	-	-	-	-	-	-	-	X	X	O	O
K45 Ø 45 k6	-	-	-	-	-	-	-	-	O	O	X	X

X = Standard, preferred
O = Contact our Tech Dpt.

7. Connection cover

	012	017	025	034	040	047	056	064	084	090	108	130
Z1 Suction rear, pressure at side	X	X	X	X	X	X	X	X	X	X	X	X

8. Connections

	012	017	025	034	040	047	056	064	084	090	108	130
G ISO G*	X	X	-	-	-	-	-	-	-	-	-	-
M Metric **	-	-	X	X	X	X	X	X	X	X	X	X

* Only threaded connections
** Only flanged connections

9. Additional

3	External drainage + optimized
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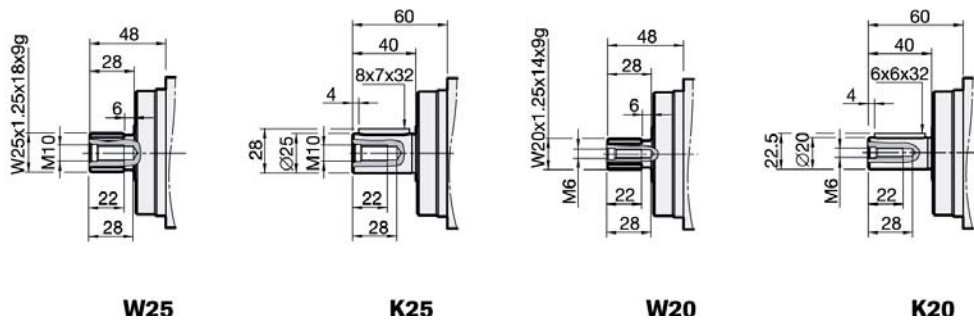
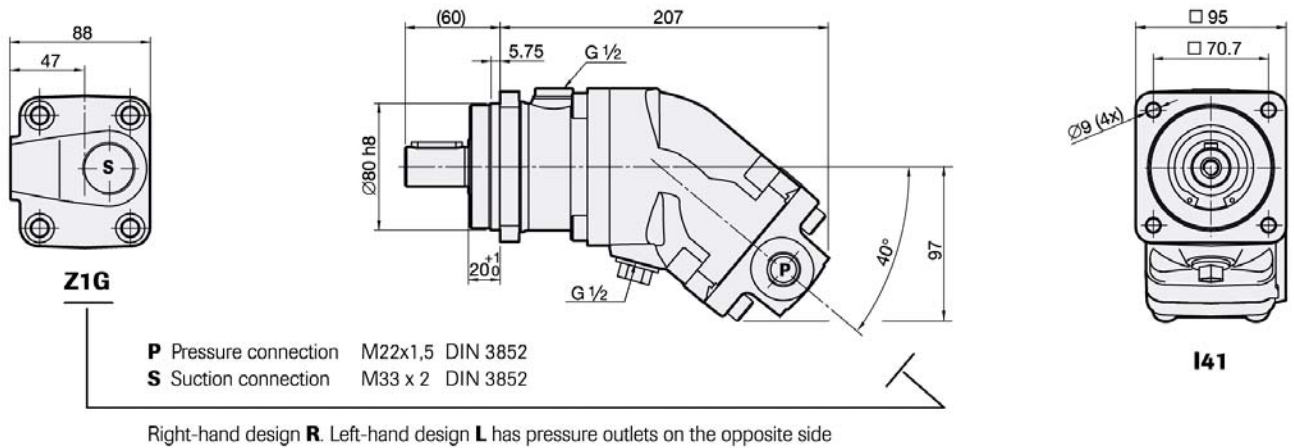
10. Accessories

00	No accessories available
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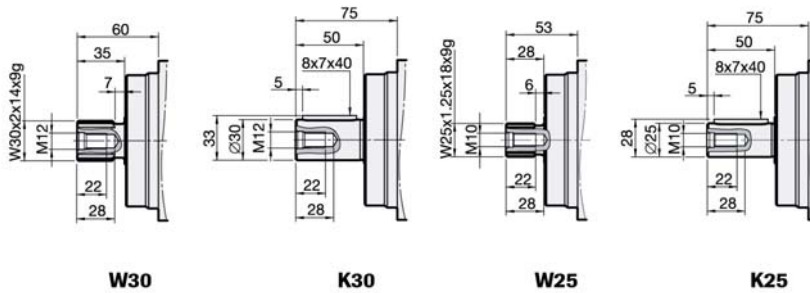
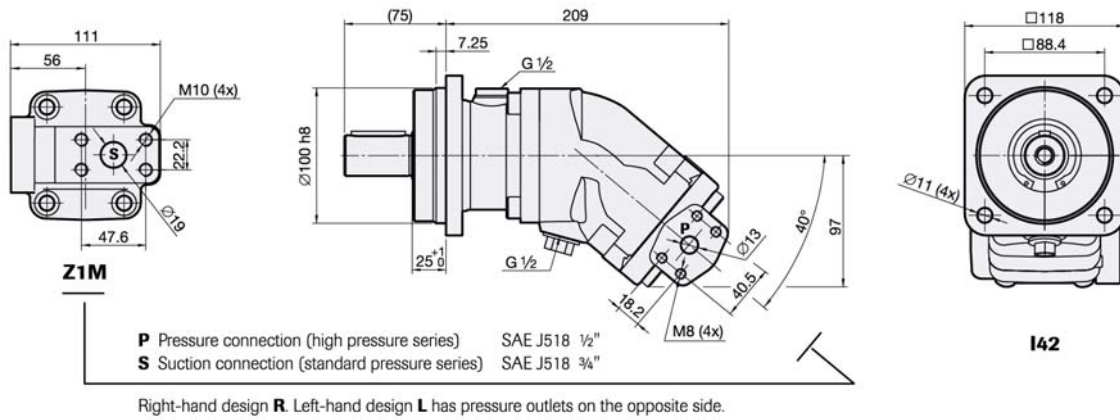
Pump SCP 012-130 ISO		012	017	025	034	040	047	056	064	084	090	108	130
Nominal oil flow at pump speed	rpm	500	6.3	8.5	12.7	17.1	20.6	23.5	28.0	31.8	41.5	54.0	65.0
		1000	12.6	17.0	25.4	34.2	41.2	47.1	56.0	63.6	83.6	90.7	108.0
		1500	18.9	25.5	38.1	51.3	61.8	70.6	84.0	95.4	125.4	136.1	162.0
Displacement	cm ³ /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	MPa	40	40	40	40	40	40	40	40	40	40	40	35
Max pump speed	n _{max} (1)	rpm	3300	3200	2550	2250	2200	2100	2050	1700	1700	1700	1600
	n _{max} limit (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 ³)	kg m ²	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.

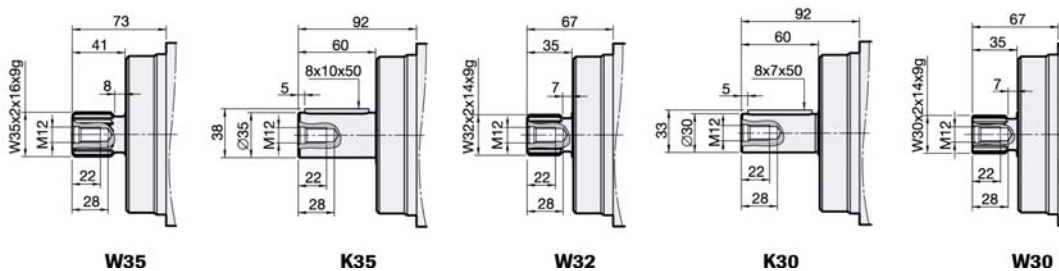
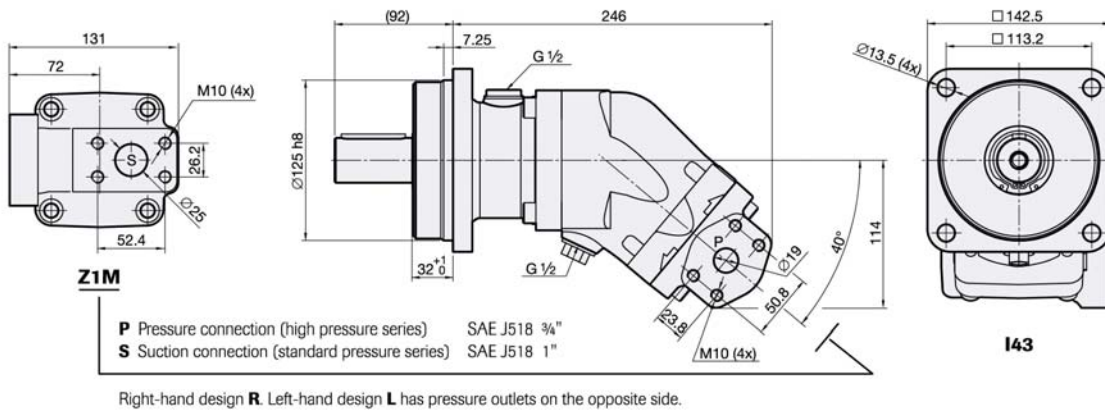
Dimensions SCP 012-017



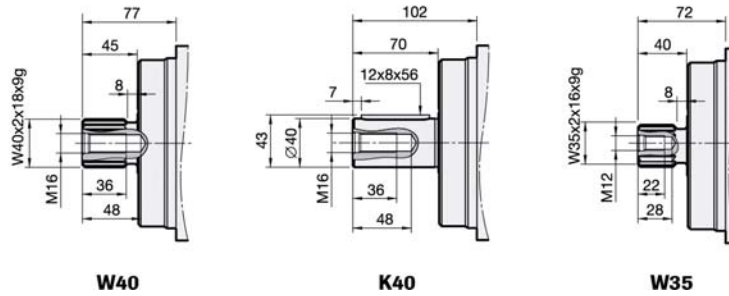
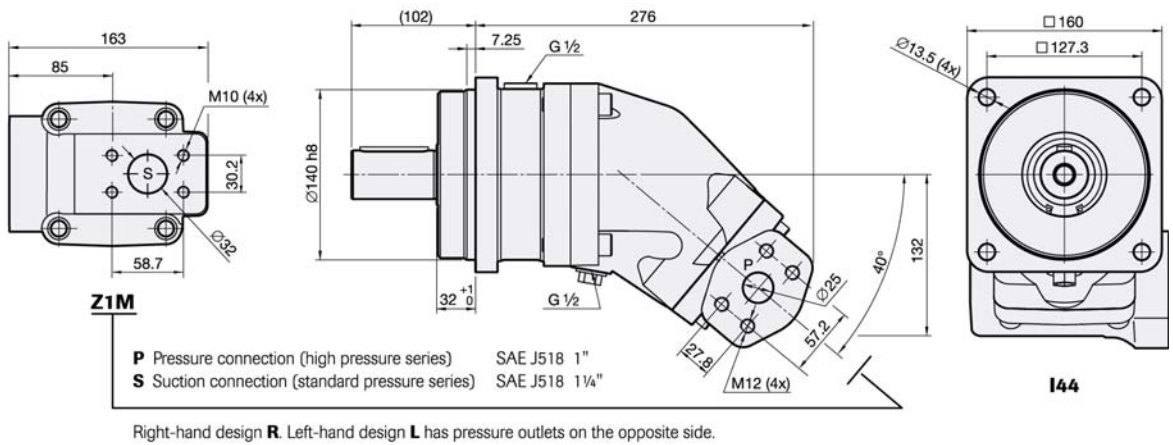
SCP 025-034



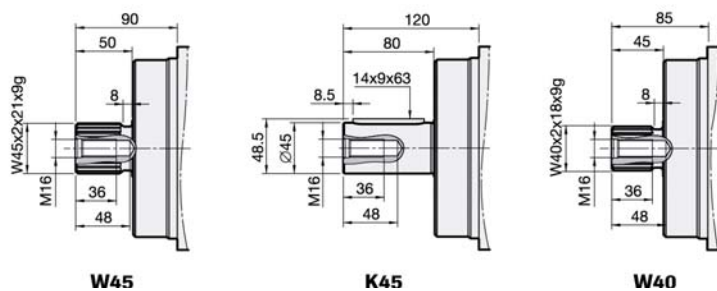
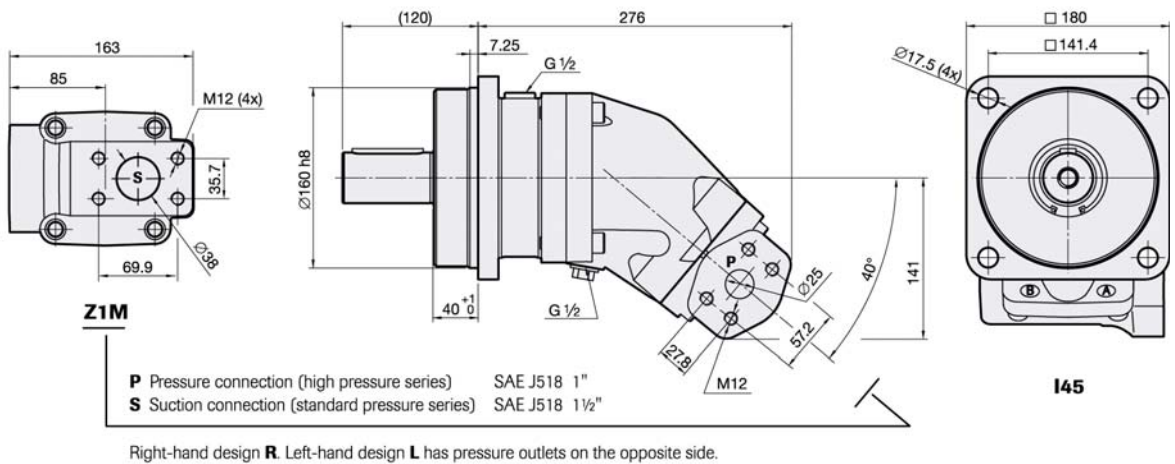
SCP 040-064



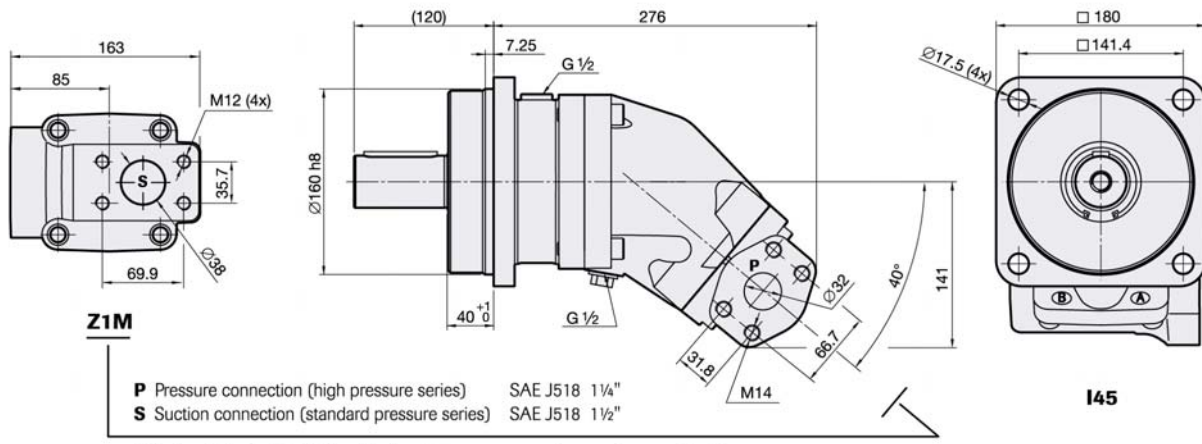
SCP 084-090



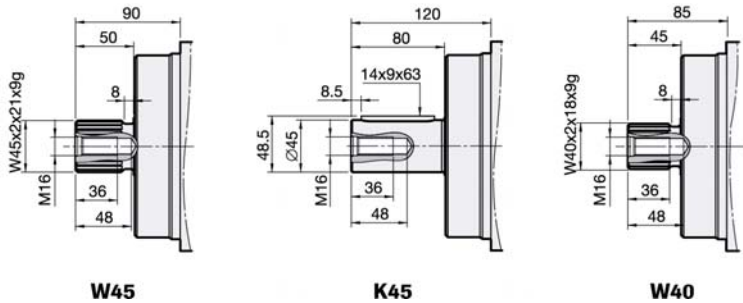
SCP 108



SCP 130



Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



General instructions

Choice of shaft seal

Pump SCP ISO	Code	Temp. °C	Max. housing pressure MPa at rpm					
			500	1000	1500	2000	2500	3000
012-034	N	75	1.09	0.55	0.36	0.27	0.22	0.18
	H	75	4.91	2.46	1.64	1.23	0.98	0.82
	V	90	1.09	0.55	0.36	0.27	0.22	0.18
040-064	N	75	1.09	0.55	0.36	0.27	0.22	0.18
	H	75	4.91	2.46	1.64	1.23	0.98	0.82
	V	90	1.09	0.55	0.36	0.27	0.22	0.18
084-130	N	75	0.76	0.38	0.25	0.19	0.15	0.13
	H	75	3.44	1.72	1.15	0.86	0.69	0.57
	V	90	0.76	0.38	0.25	0.19	0.15	0.13

Code according to page 2, Versions, main data

Factors affecting the choice of shaft seal include the hydraulic pump housing pressure and the drainage oil temperature.

The drainage oil should have a maximum temperature of 75 °C with a Nitrile shaft seal and 90 °C with a Viton shaft seal.

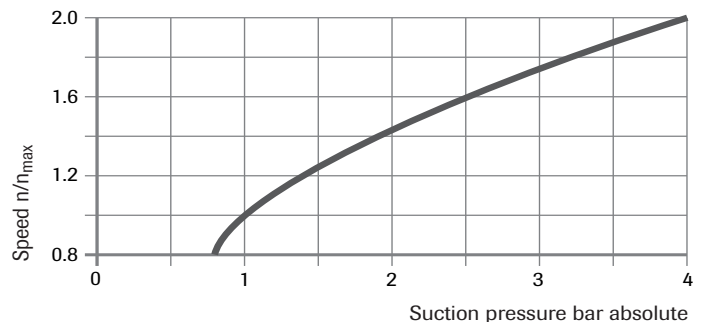
These temperatures must not be exceeded.

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

Minimum inlet pressure at suction port with increased speed

Operating above the max. pump speed n_{max} requires increased inlet pressure.

Note that the max. permissible speed n_{max} limit must not be exceeded.



Filtering

Cleanliness according to ISO norm 4406, code 16/13.

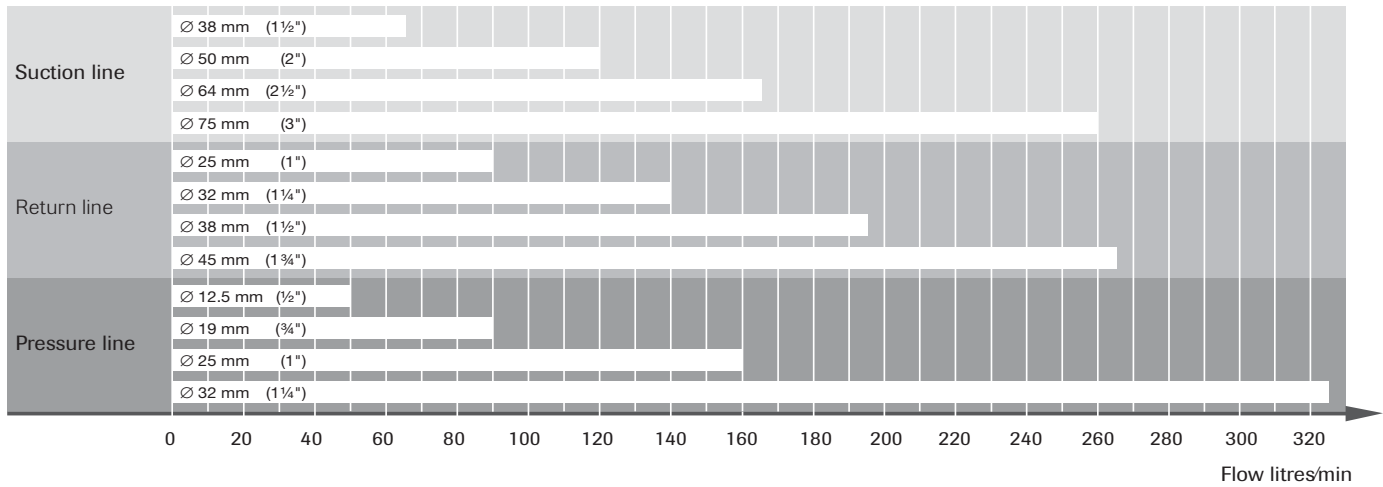
Hydraulic fluids

High performance oils meeting ISO specifications – such as HM, DIN 51524-2 HLP, or better – must be used.

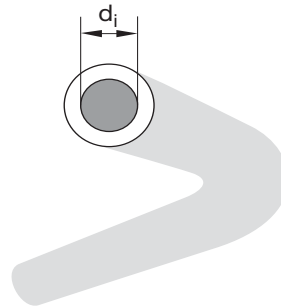
A min. viscosity of 10 cSt is required to keep the lubrication at a safe level.

The ideal viscosity is 20 - 40 cSt.

Recommended line size (d_i)

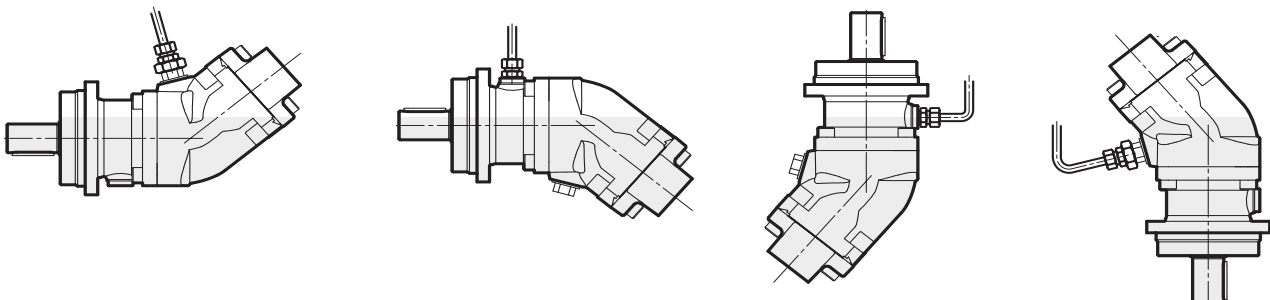


If the suction line is more than 2 m long the internal diameter must be increased by 10 mm for each meter extension.



Installation

- The pump housing should be filled with oil to at least 50% before starting.
- The drainage line must be at least 1/2" (13 mm) internal diameter and should be connected to topmost drainage outlet.
- The other end of the line should be connected to the oil tank at a point below the oil level.



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.

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