



SAP DIN Optimized is a series of light weight casing piston pumps with a fixed displacement for demanding mobile hydraulics. It is variant of the standard SAP series, also suitable for electric motor drives due to the pump's higher speed properties and lower noise level.

SAP 012-108 DIN Optimized covers the displacement range 0.77-6.59 cu in/rev. at a maximum pressure of 5800 psi. 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.

The optimized option gives a more silent operation with higher pump speeds. It is a speed-optimised pump and therefore supplied for either left (L) or right (R) rotation direction.

Other advantages:

- Less noise than the standard SAP series
- Less pulsations in the system
- 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	-	2	00
Line	1		2	3		4		5		6		7	8		9	10

Line

SA	Sunfab Aluminium
----	------------------

1. Type

P	Pump
---	------

2. Displacement

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

3. Direction of rotation

R	Right
L	Left

4. Shaft seal

N	Nitrile
V*	HNBR

*Can withstand higher temperature, e.g. on engine PTO. Not available for 012-034.

5. Mounting flange

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

6. Shaft

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

7. Connection cover

S0	40° Sunfab standard
----	---------------------

8. Connections

S	Sunfab standard
---	-----------------

9. Additional

2	Optimized
---	-----------

3	Optimised + External drainage*
---	--------------------------------

*Only available for 084 & 108. See separate brochure "Injector" for more information.

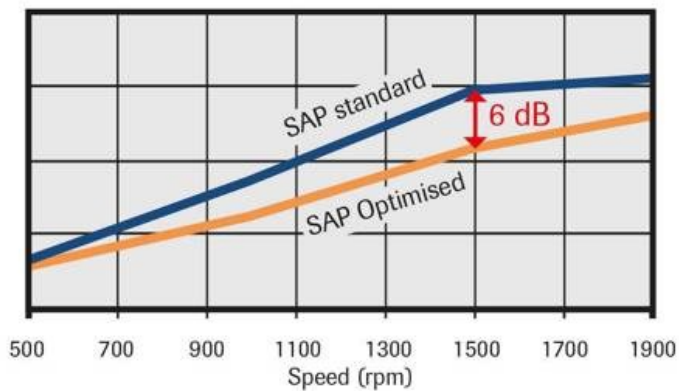
10. Accessories

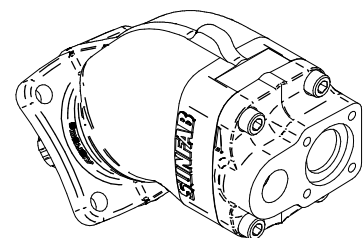
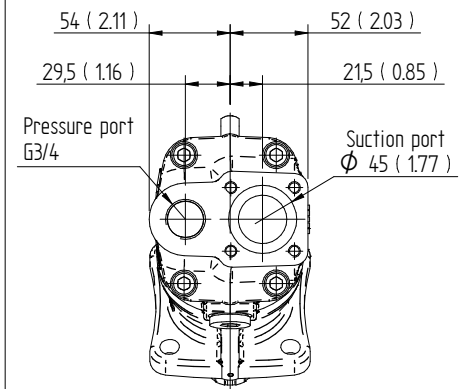
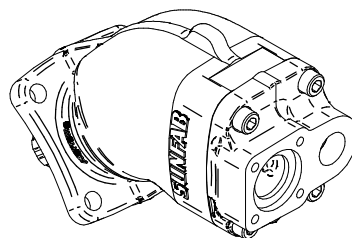
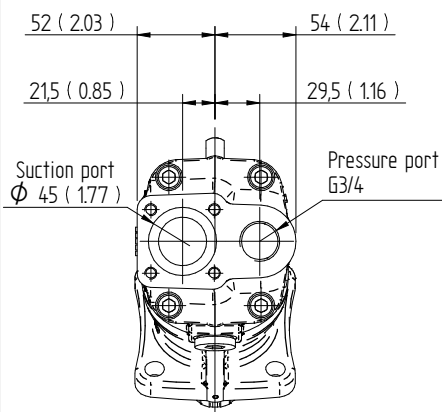
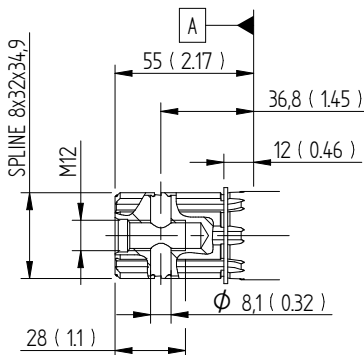
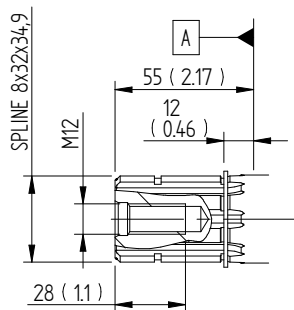
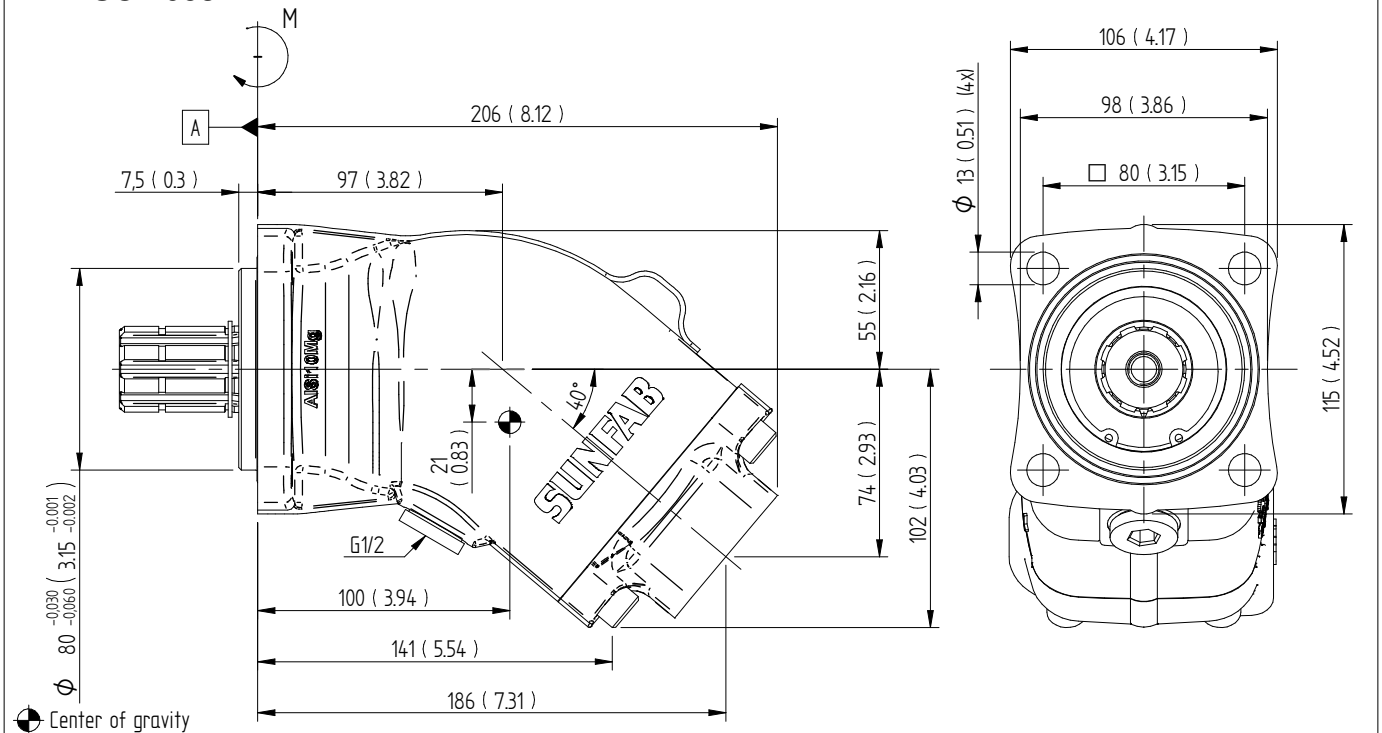
00	No accessories available
----	--------------------------

SAP 012-108 DIN Optimized		012	017	025	034	040	047	056	064	084	108
rpm	500	1.7	2.2	3.4	4.5	5.4	6.2	7.5	8.4	11.0	14.3
	1000	3.3	4.5	6.7	9.0	10.9	12.4	15.0	16.8	22.1	28.5
	1500	5.0	6.7	10.1	13.6	16.3	18.7	22.5	25.2	33.1	42.8
Displacement											
cu in/rev		0.77	1.04	1.55	2.09	2.51	2.87	3.46	3.88	5.10	6.59
Max pump speed											
continuous	rpm	3000	3000	2500	2500	2000	2000	2000	2000	1800	1800
intermittent		3500	3500	3200	3200	2600	2600	2600	2600	2300	2300
Max working pressure											
psi		5800	5800	5800	5800	5800	5800	5800	5800	5800	5800
Weight											
lb		15.2	15.2	15.7	15.7	21.6	21.6	21.6	21.6	30.6	30.6
Tare-weight torque (M)											
lb-ft		4.9	4.9	5.2	5.2	8.5	8.5	8.5	8.5	13.6	13.6
Direction of rotation											
Left (L) or Right (R)											

Noise levels compared to SAP standard pump

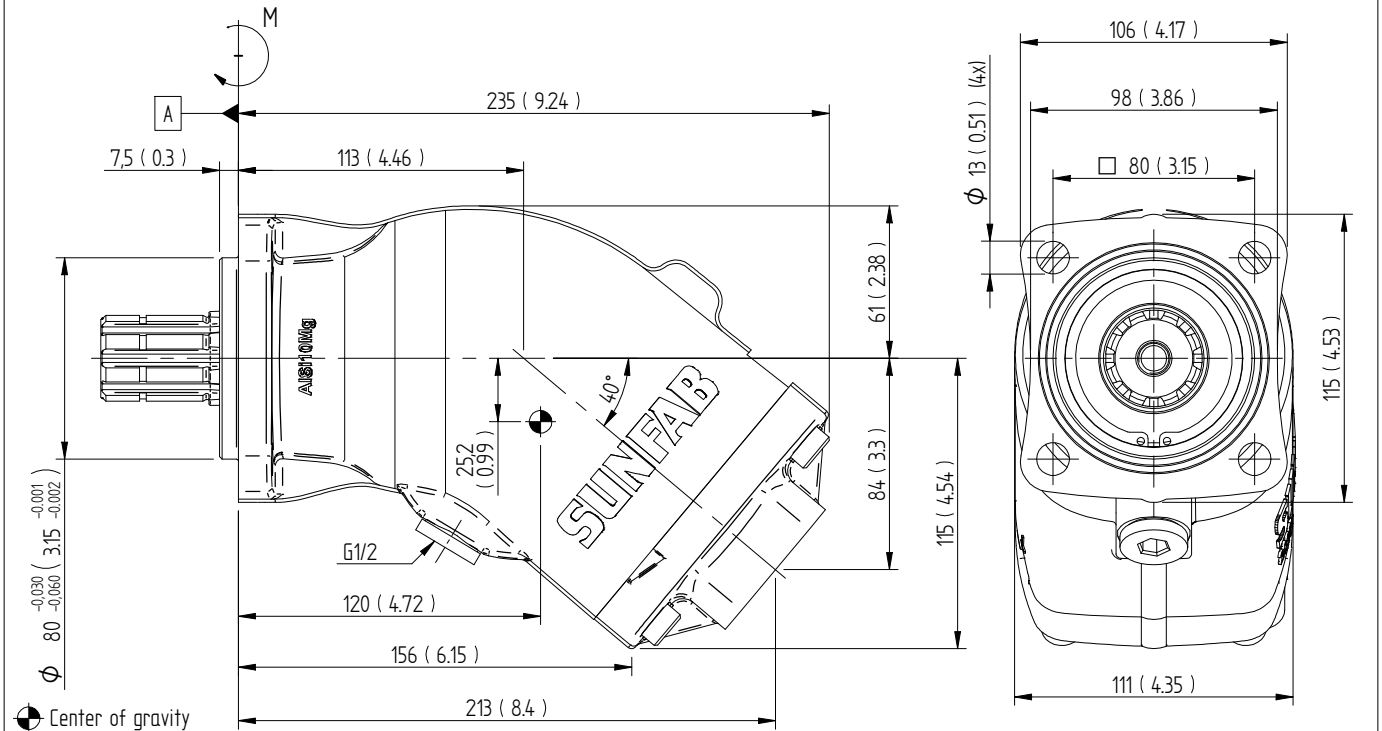
Measured at 200 bar



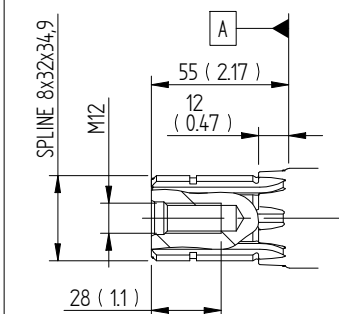


Dimensions SAP 040-064 DIN

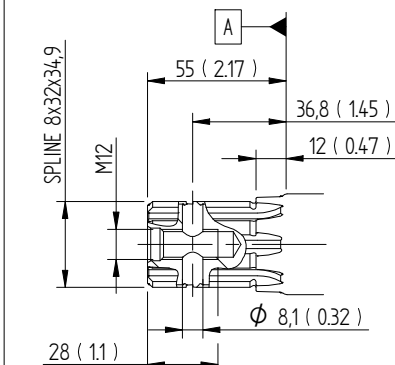
Millimeter (inch)



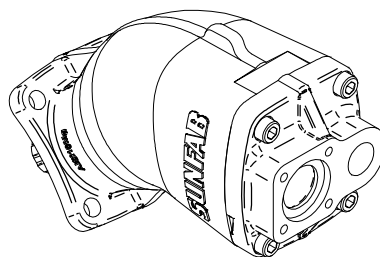
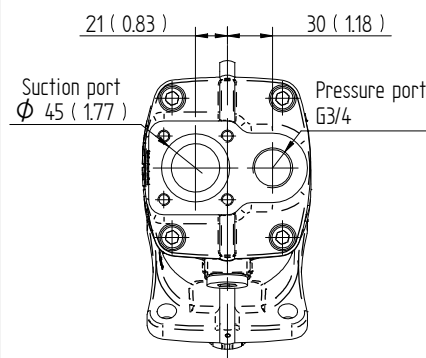
L35 DIN 5462 / ISO 14



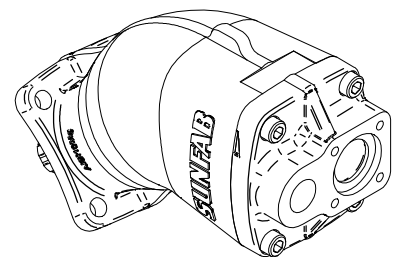
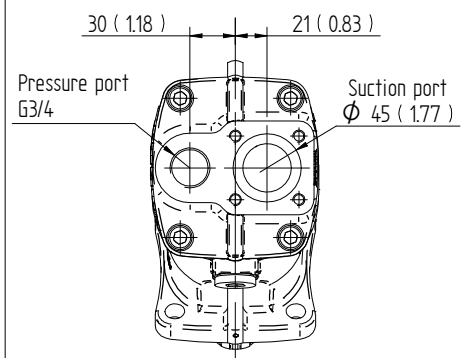
H35 DIN 5462 / ISO 14

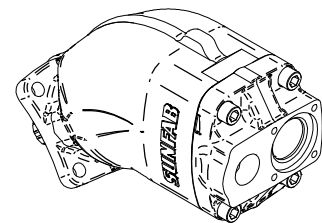
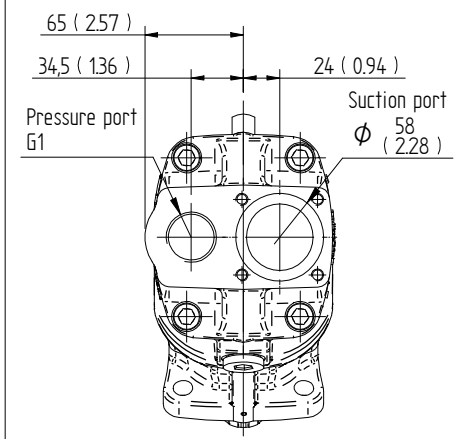
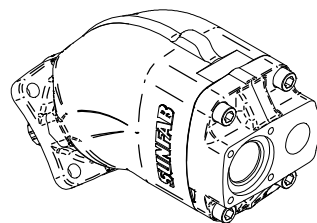
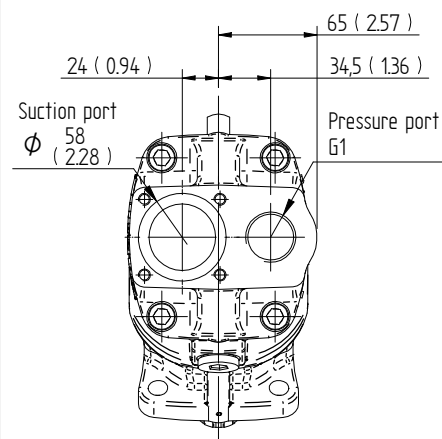
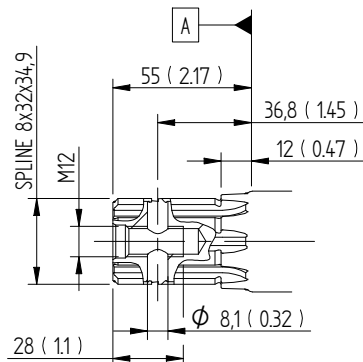
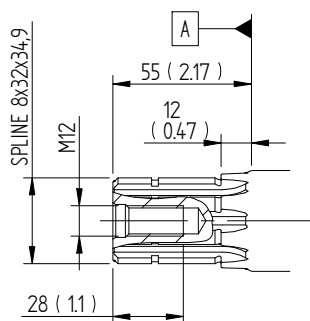
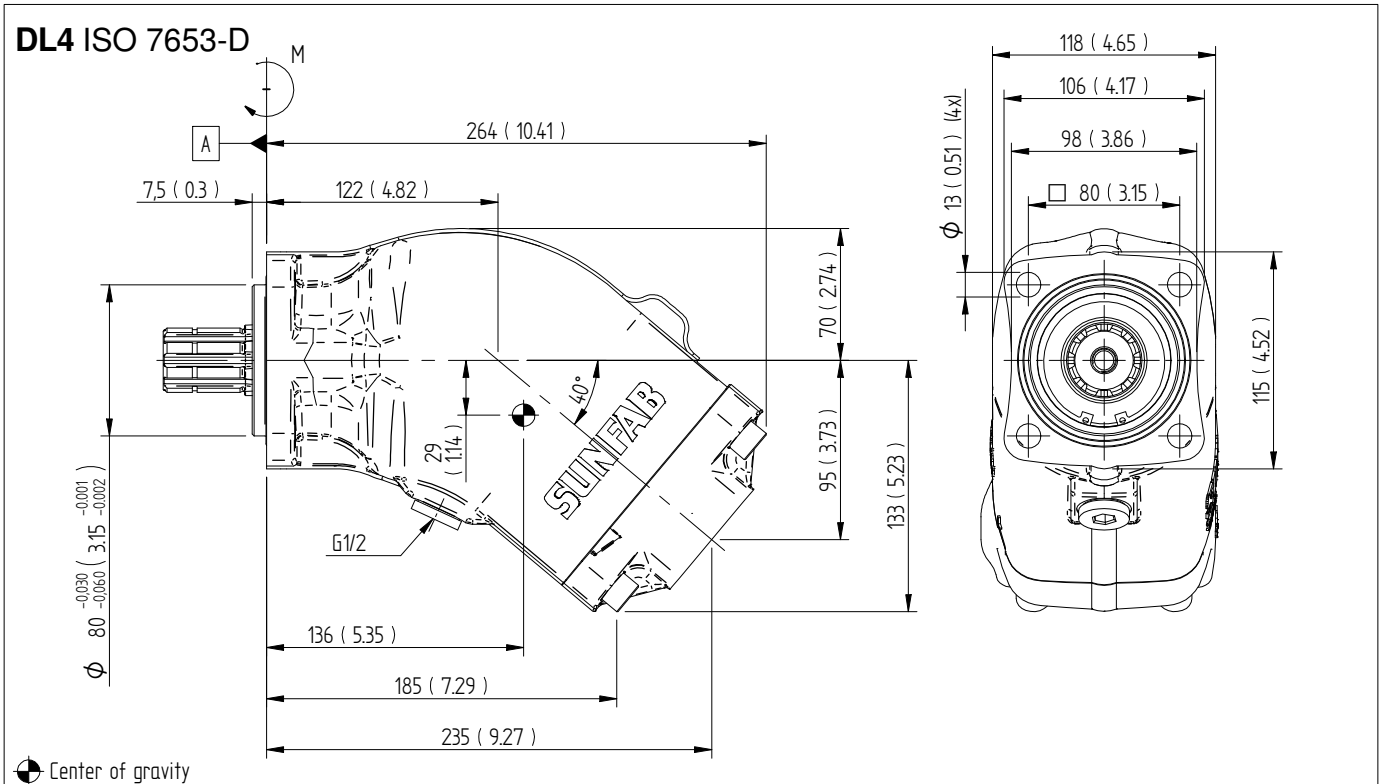


SOS Left rotation (L)



SOS Right rotation (R)







WARNING!

When the pump is running:

1. Do not touch the pressure hose
2. Watch out for rotating parts
3. The pump and hoses may be hot

Sunfab reserves the right to make changes in design and dimensions without notice. Printing and typesetting errors reserved.

© Copyright 2023 Sunfab Hydraulics AB. All Rights Reserved.