



**SAP DIN Optimised 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 Optimised covers the displacement range 12-108 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.

The optimised 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

<b>SA</b>	<b>P</b>	-	<b>084</b>	<b>L</b>	-	<b>V</b>	-	<b>DL4</b>	-	<b>L35</b>	-	<b>S0</b>	<b>S</b>	-	<b>2</b>	<b>00</b>
Line	1		2	3		4		5		6		7	8		9	10

Line	
SA	Sunfab Aluminium
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 *

\*Only available for 040-108

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	Optimised
3	Optimised + external drainage*

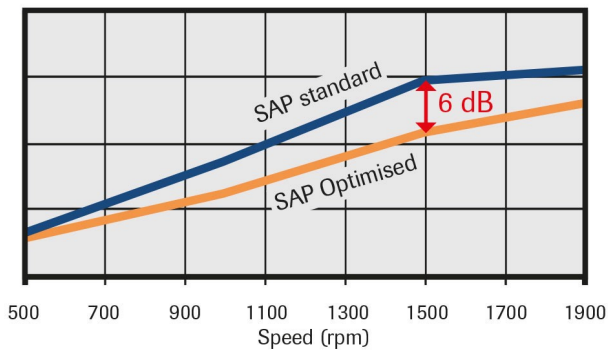
\*Only available for 084 &amp; 108. See separate brochure "Injector" for more information.

10. Accessories	
00	No accessories available

SAP 012-108 DIN Optimised		012	017	025	034	040	047	056	064	084	108	
Theoretical oil flow l/min at pump speed												
	rpm	500	6	9	13	17	21	24	28	32	42	54
		1000	13	17	25	34	41	47	57	64	84	108
		1500	19	26	38	51	62	71	85	95	125	162
Displacement	cm <sup>3</sup> /rev	12.6	17.0	25.4	34.2	41.2	47.1	56.7	63.5	83.6	108.0	
Max pump speed												
<i>continuous</i>	rpm	3000	3000	2500	2500	2000	2000	2000	2000	1800	1800	
<i>intermittent</i>		3500	3500	3200	3200	2600	2600	2600	2600	2300	2300	
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	
Tare-weight torque (M)	Nm	6.7	6.7	7.0	7.0	11.5	11.5	11.5	11.5	18.5	18.5	
Direction of rotation	Left (L) or Right (R)											

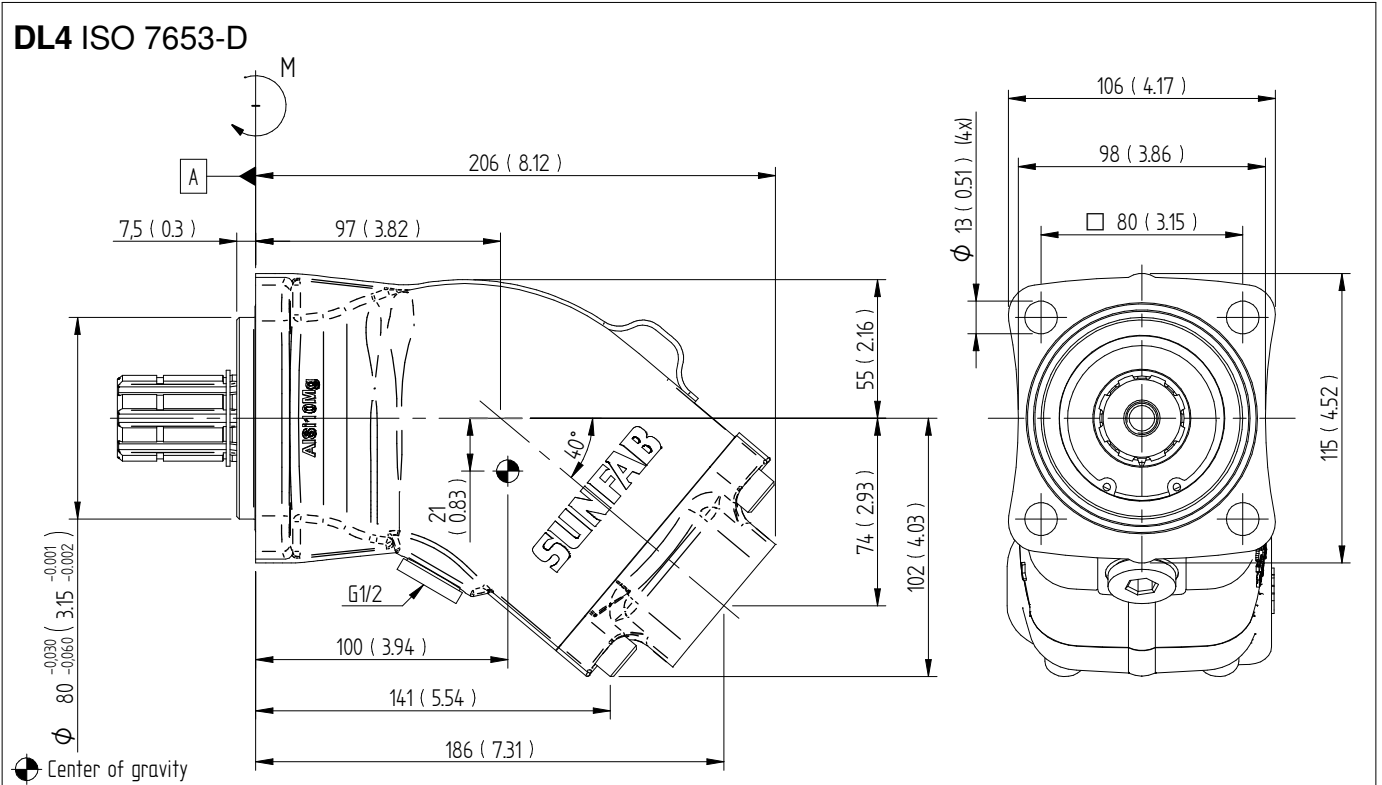
**Noise levels compared to SAP standard pump**

Measured at 200 bar

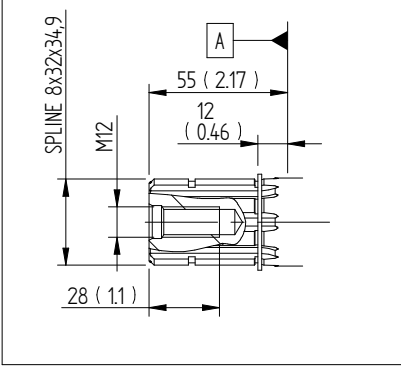


# Dimensions SAP 012-034 DIN

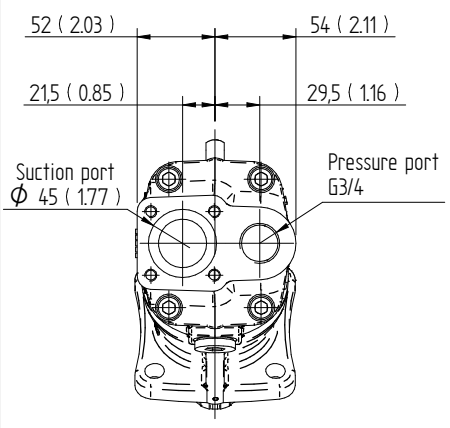
Millimeter (inch)



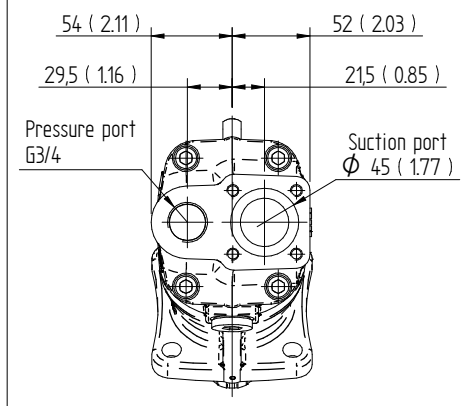
**L35 DIN 5462 / ISO 14**



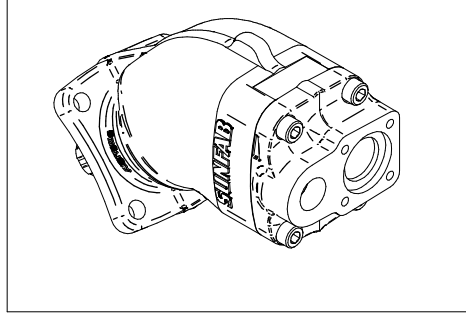
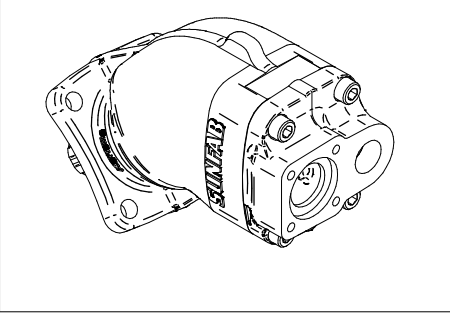
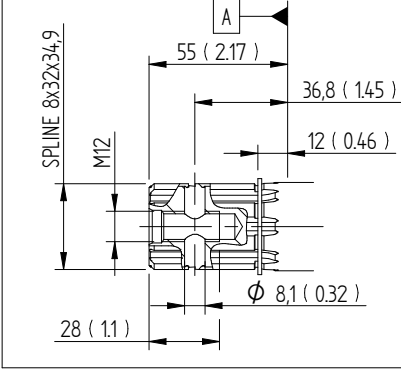
**S0S Left rotation (L)**



**S0S Right rotation (R)**

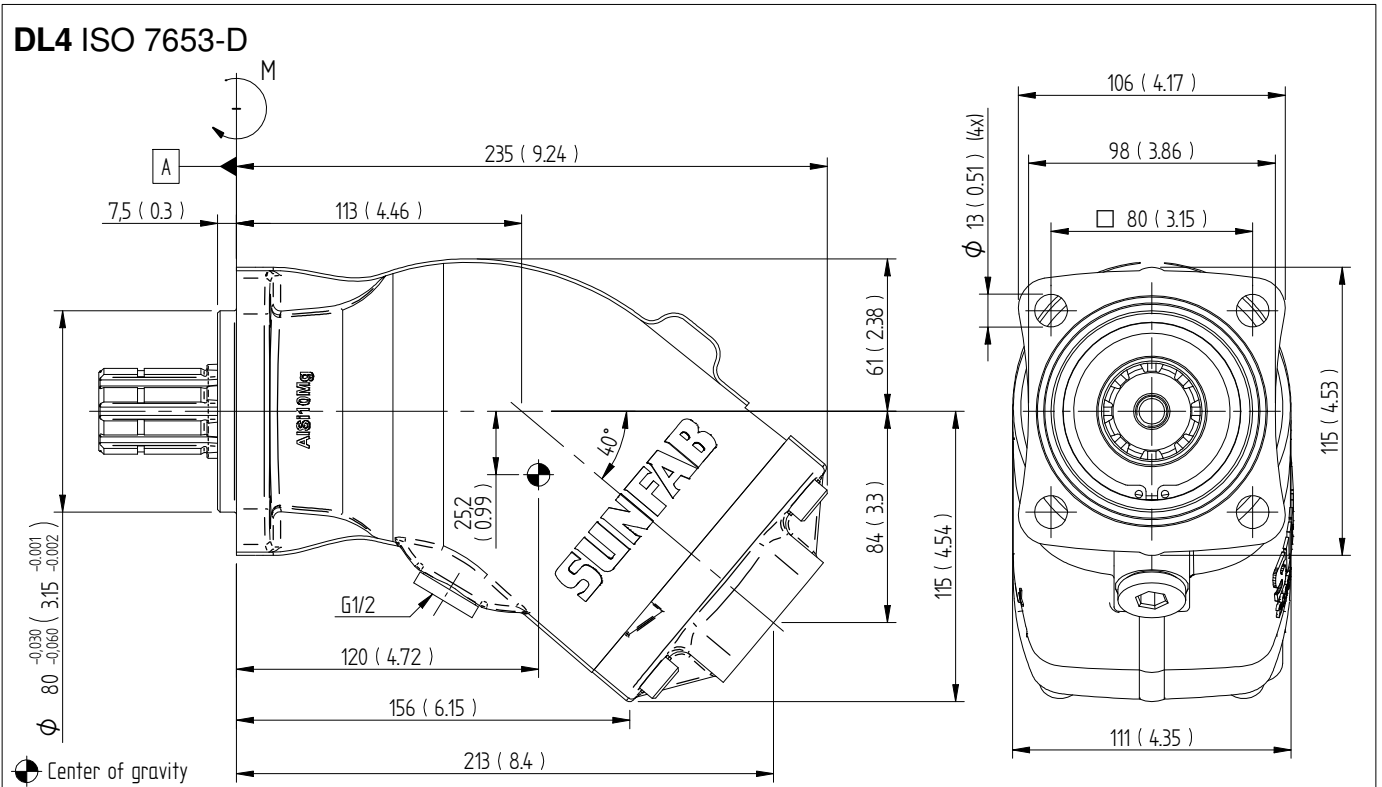


**H35 DIN 5462 / ISO 14**

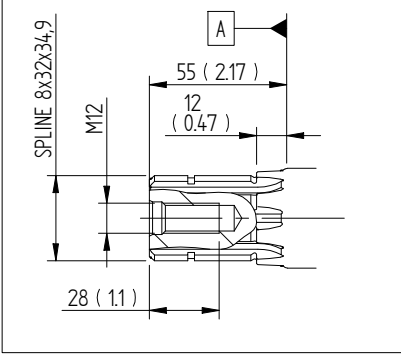


# Dimensions SAP 040-064 DIN

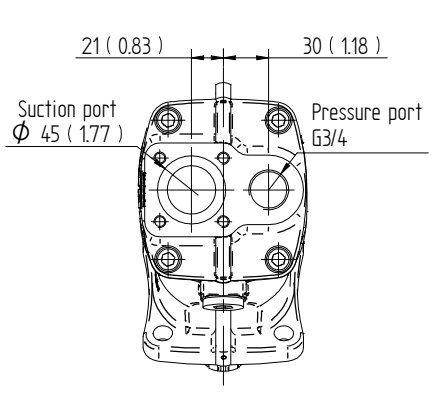
Millimeter (inch)



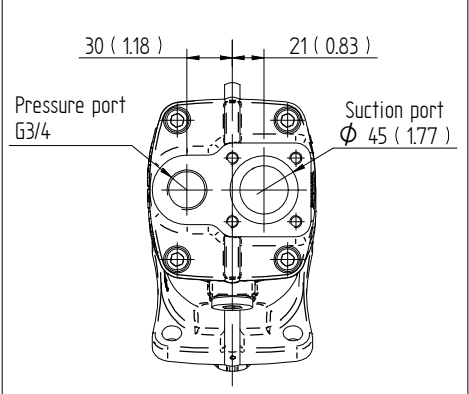
**L35 DIN 5462 / ISO 14**



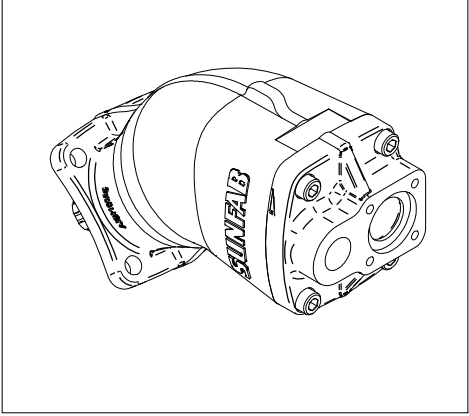
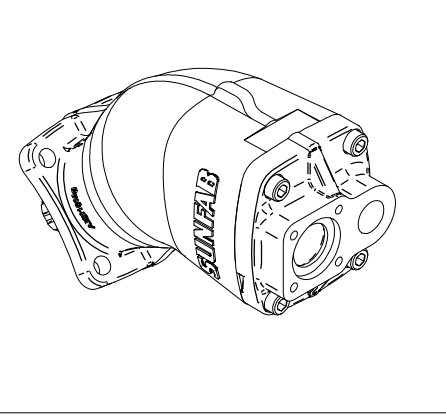
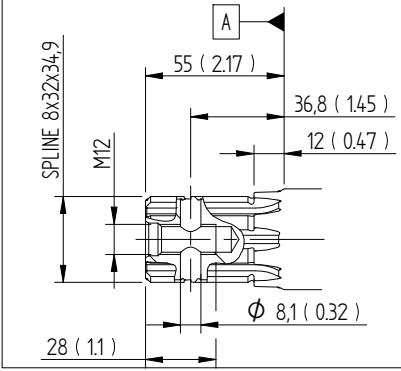
**S0S Left rotation (L)**



**S0S Right rotation (R)**

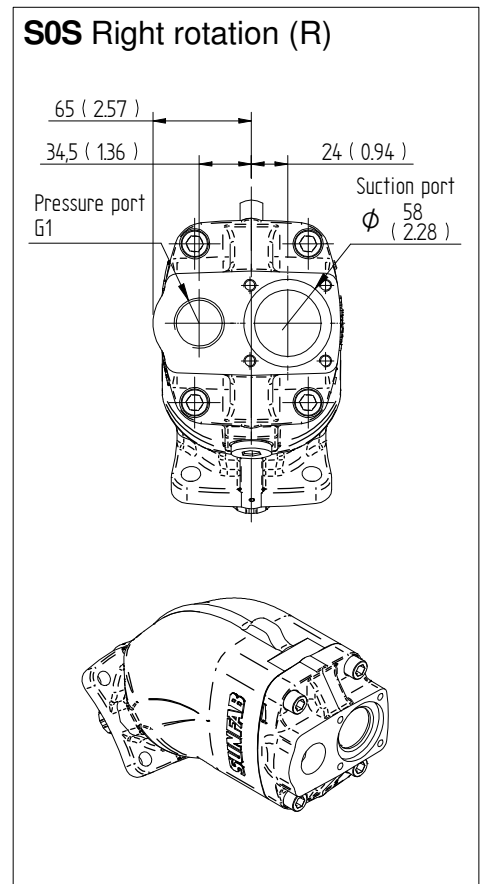
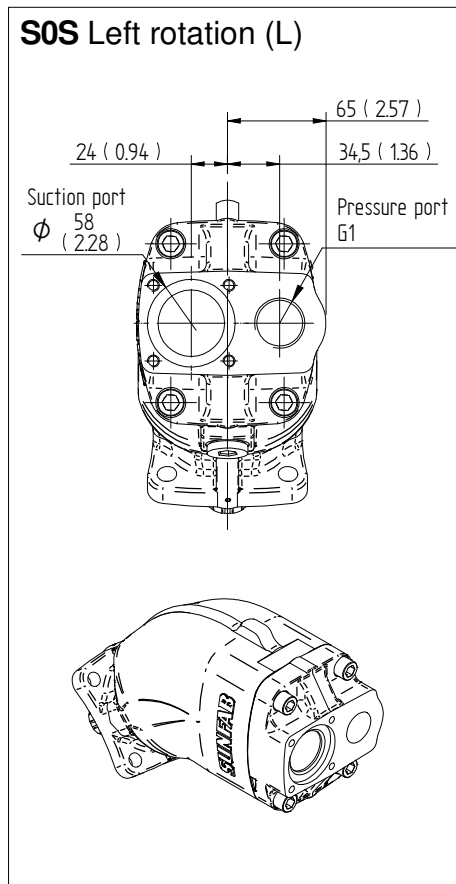
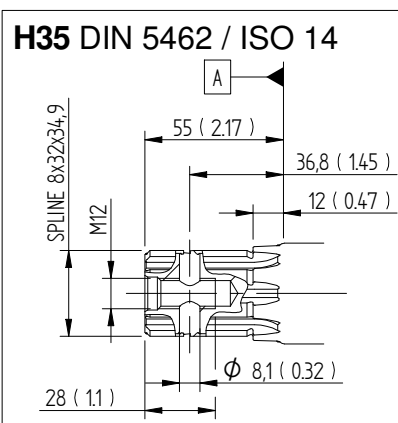
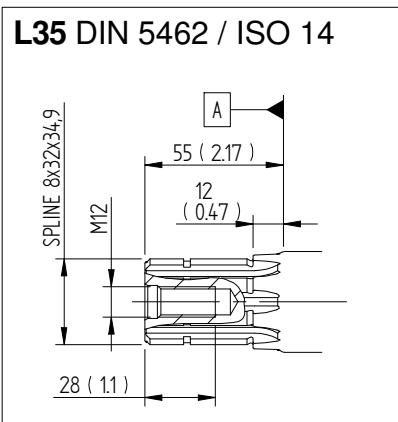
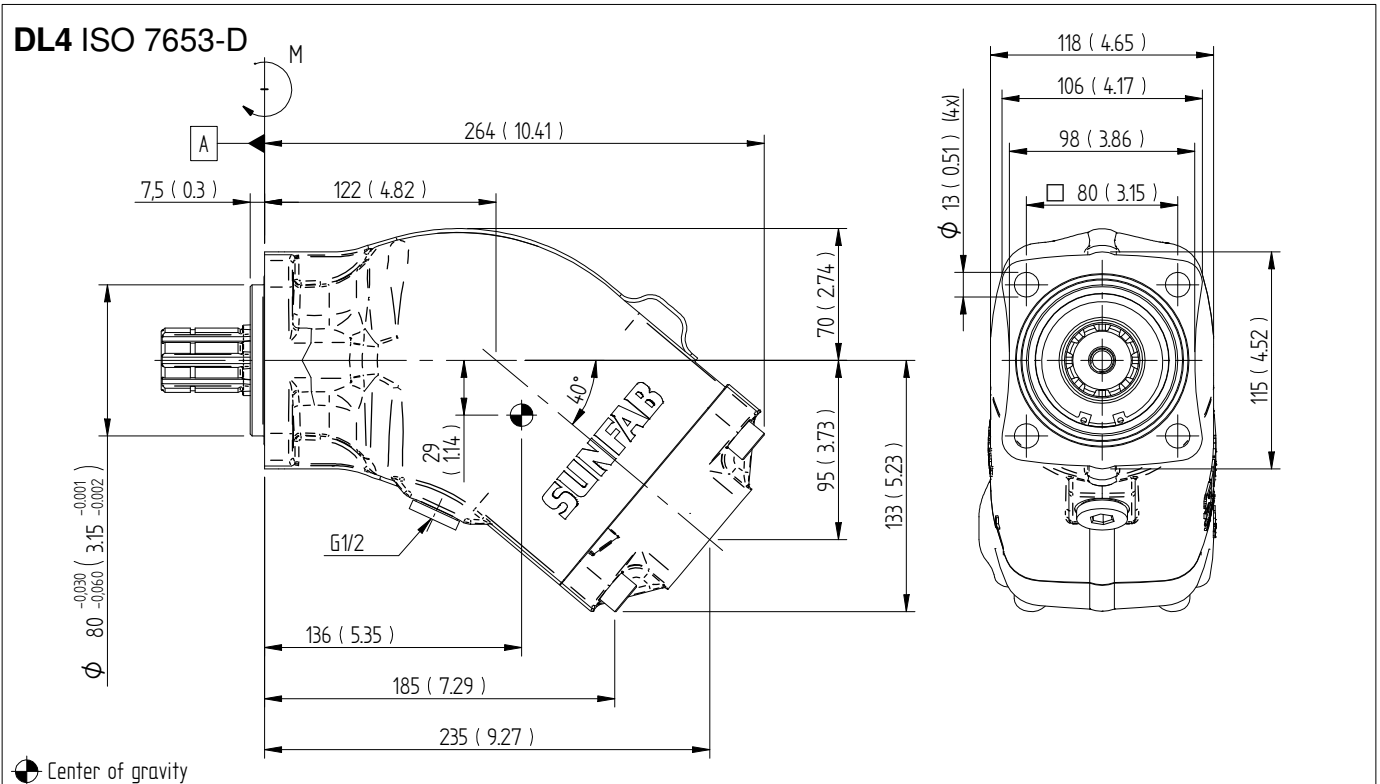


**H35 DIN 5462 / ISO 14**



# Dimensions SAP 084-108 DIN

Millimeter (inch)





**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 2022 Sunfab Hydraulics AB. All Rights Reserved.