

# Flow Amplifier



## Introduction

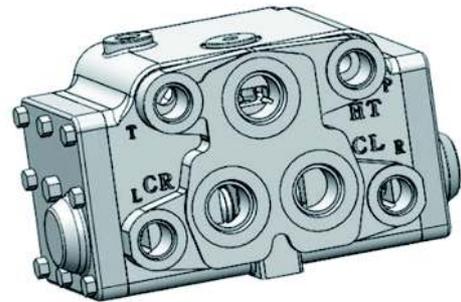
The FA(M) flow amplifier is used in large vehicle typically very large fork lift trucks, loaders, dumpers. The flow amplifier amplifies the oil flow from the power steering unit cylinder ports L or R by an amplification factor. The amplified oil flow is directed from the flow amplifier ports CL or CR to the steering cylinder. The amplified flow is proportional to the rate of steering wheel rotation

## Features

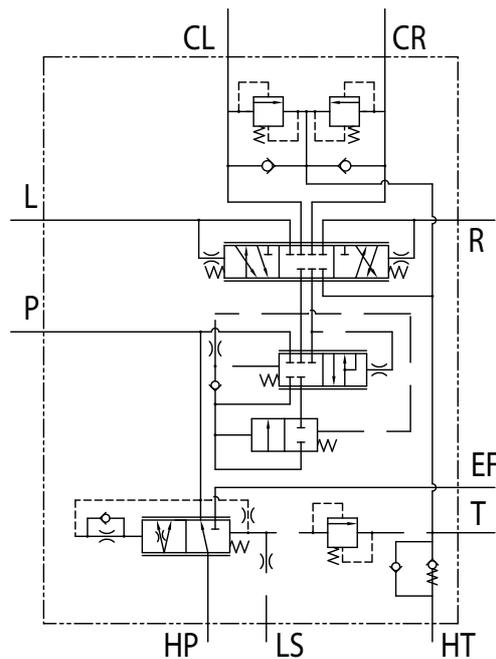
- High steering capacity
- Low pressure drop at high flow
- Built in valve: a direction valve, an amplification stage, a priority valve, a pilot pressure relief valve, a back pressure valve, shock and suction valves

## Specifications

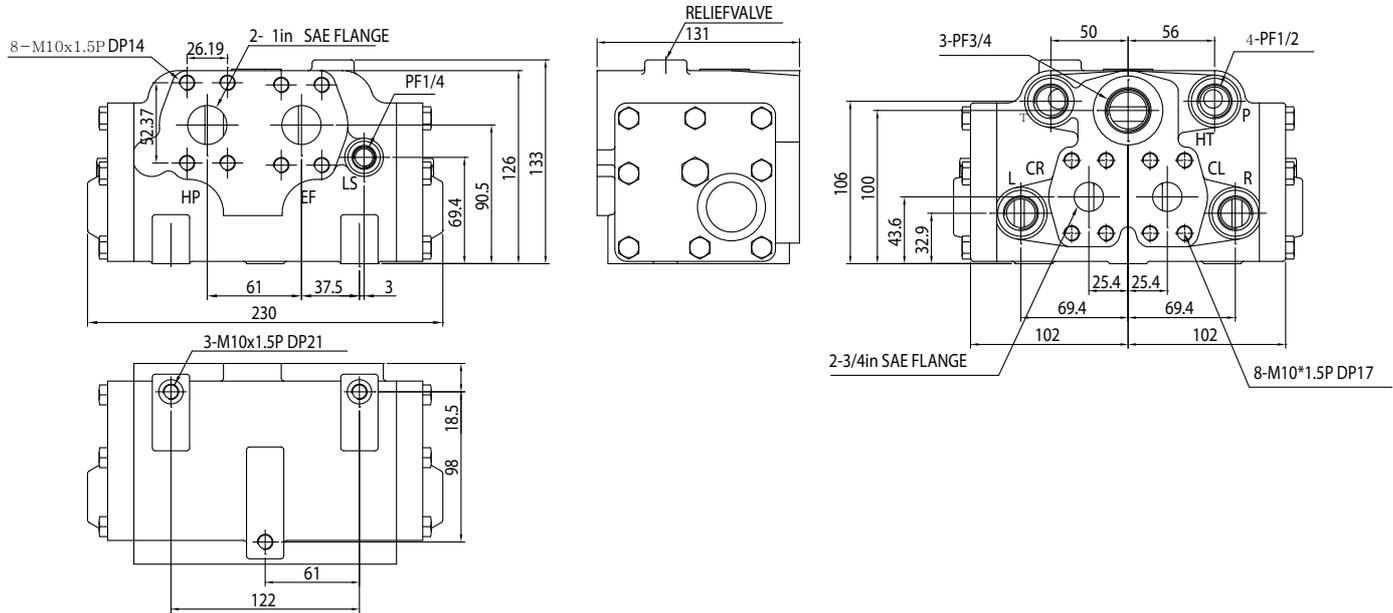
- Max. steering pressure : 210bar(20.6MPa)
- Rated Flow : FAM : 160l/min  
FA : 400l/min
- Amplification factors: 4, 5, 8, 10
- Total displacement of steering system :  
FAM: 480~1600cc/rev  
FA: 1200~4000cc/rev



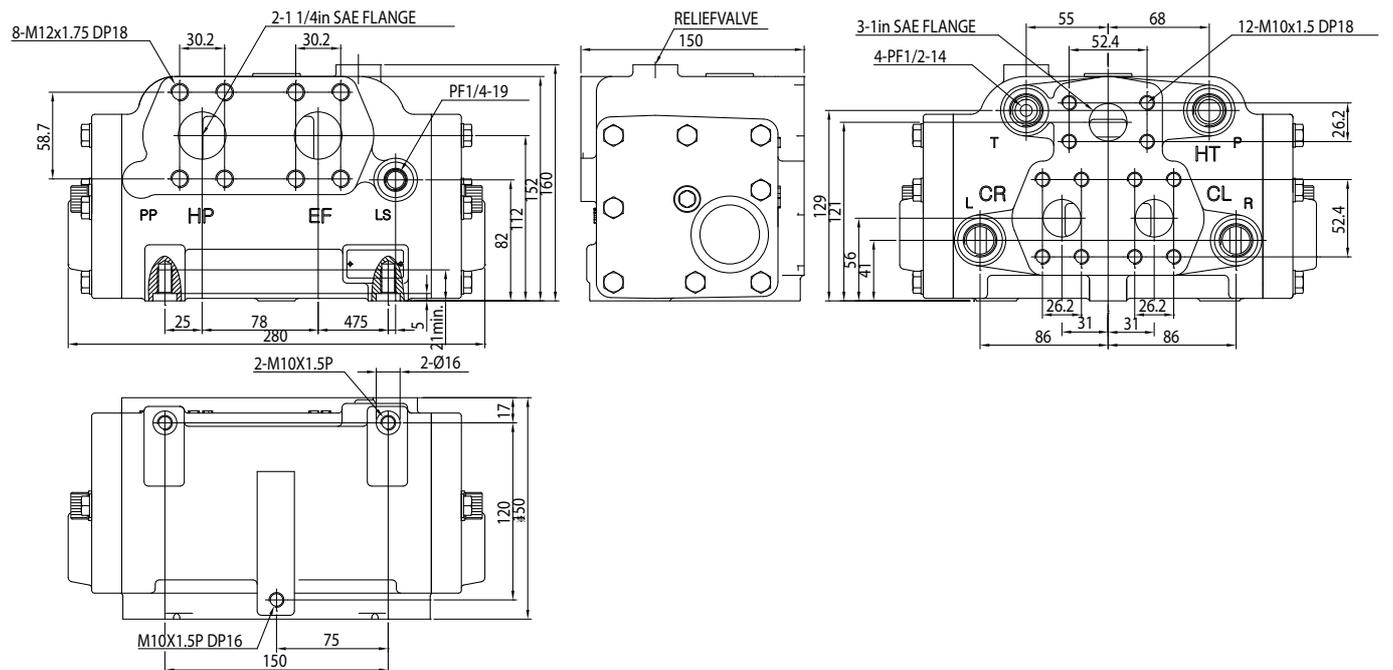
## Hydraulic Circuit



## FAM Type



## FA Type



## Pilot Steering Unit for FA(M)

The FA(M) flow amplifier require special pilot power steering units: FAPS LS, FAPD LS

There are load sensing steering units whose L and R connections are open to tank in neutral position.

## Specifications

- Max. steering pressure: 210bar(20.6MPa)
- Displacement: 80~240cc/rev

## Application

In Large vehicles, a steering system consists of a power steering unit and a flow amplifier

