

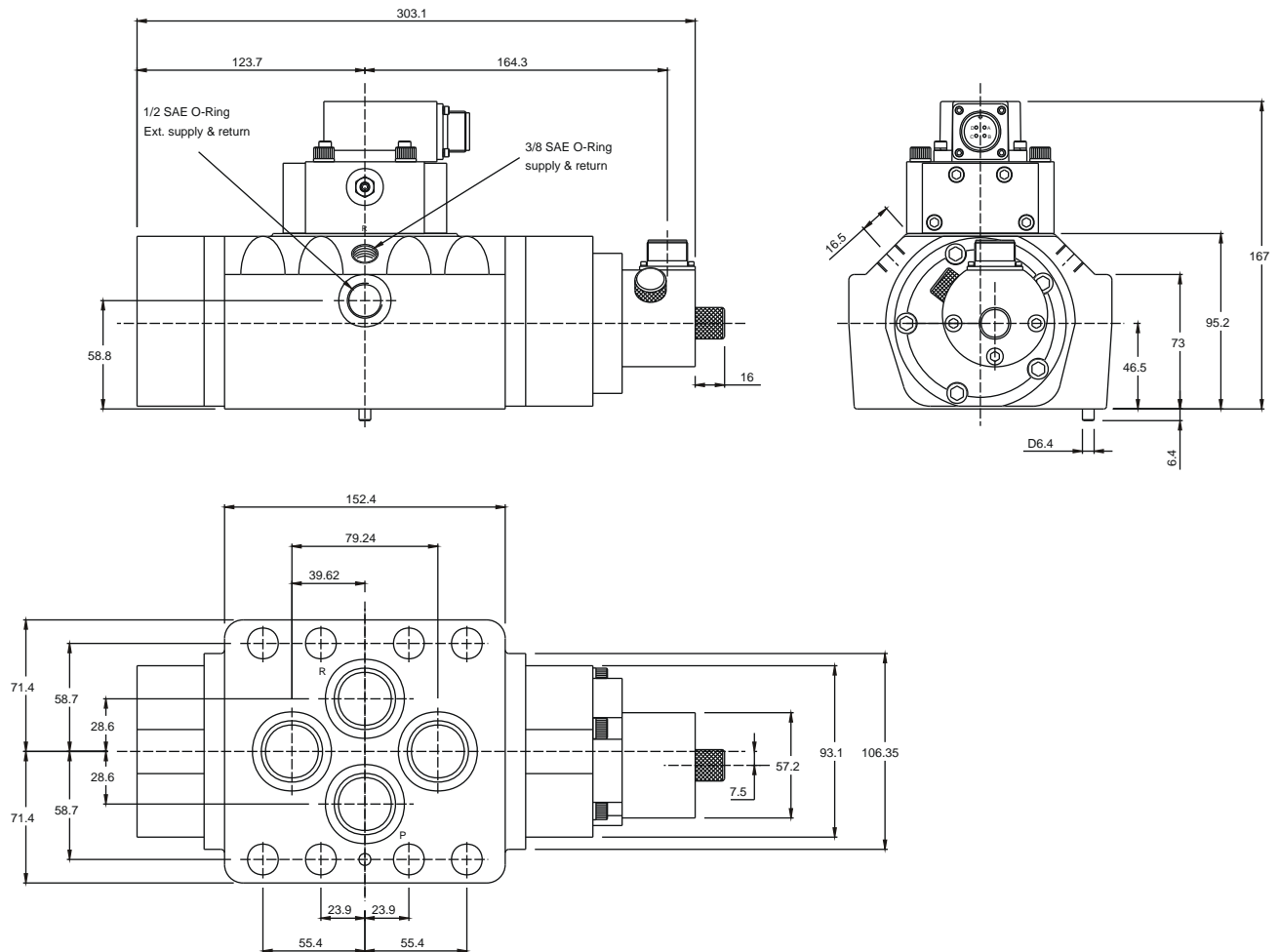
# Model 240H

4 - 6 port configuration

3 Stage High Response Servo Valve

**star**  
**hydraulics**

SERVO TECHNOLOGY & RESEARCH



## Installation Data

Suggested mounting bolts: 5/8 - 11 UNC x 4.0 inch high tensile steel socket head cap screws.

Mating connector: 3106-14S-2S (pilot) & 3106-14S-5S (main stage).

Base seals: BS221 [36,1 mm I/D x 3,53 mm section].

Mounting surface requires a finish of Ra 1,6 micron; flat within 0,05 mm TIR.

Null adjustment: External.

Mass: 16,5 Kg.

240H-e0601

# Technical Specification

Threshold	< 0,25% without dither
Hysteresis	< 0,5% without dither
Null bias	< 2,0%
Null shift with 50°C temperature change	< ±1,0%
500 psi change in pilot supply pressure	< ±1,0%
500 psi change in pilot return pressure	< ±1,0%
Pressure gain	>30% supply pressure for 1% rated input signal, can be as high as 100%
Supply pressure minimum recommended	15 bar
maximum continuous	280 bar
Proof pressure at pressure port	150% max supply pressure
at return port	100% max supply pressure
Burst pressure return port open	250% max supply pressure
External leakage	zero
Operating temperature range	-20°C to +80°C
Fluid	Petroleum based mineral oil 10 to 110 cSt at 38°C
Seal material	Buna-N
Cleanliness level	ISO 4406 code 14/11 recommended

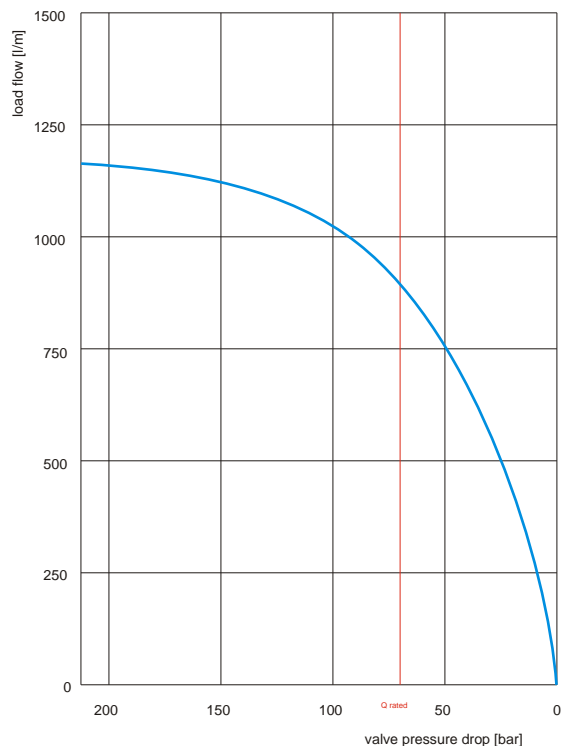
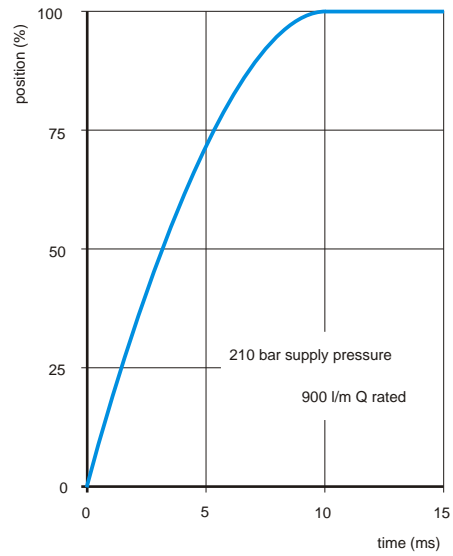


Figure 1

The nominal rated flow of a servovalve is the load flow under conditions of 100% electrical input and 70 bar total valve pressure drop. The load flow pressure characteristic closely approximates the theoretical square-root relationship of a sharp edged orifice (figure 1).

The flow tolerance for standard servovalves is ±10% of the nominal rated flow at ±100% input signal. Flow gain at null is determined by the relationship of the spool and bushing metering edges and may vary with standard production tolerances, flow gain in the region of ±5% rated current from null may range from 50% to 200% of the nominal flow gain (figure 2).

# Transient Response



# Dynamic Response

