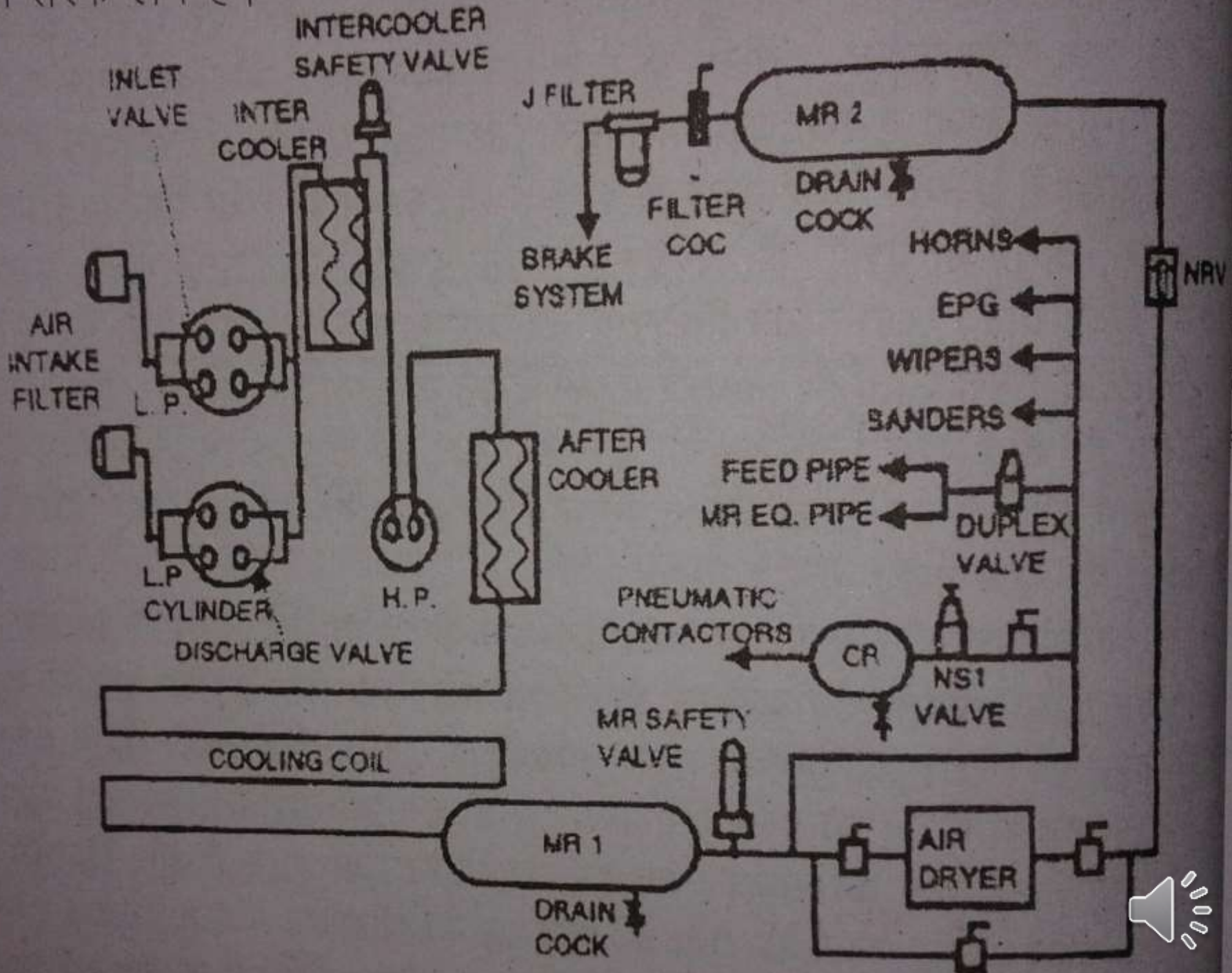


BRAKE SYSTEM IRAB 1

Lecturer(E)



पाना तरफ लग है



SUB SYSTEM:

- Independent Brake System
- Automatic Brake System
 - a) Brake Pipe System
 - b) Proportionate Brake System
 - c) Feed Pipe System



SALIENT FEATURES OF IRAB BRAKE SYSTEM

1. The loco brakes can be applied with any desired pressure independently...
2. All air brake valves have self lapping arrangements.
3. Loco brake can be applied by automatic brake valve (A9)
4. Shortest braking distance is possible during emergency brake application.
5. Suitable for MU operation.
6. Emergency brake application is possible from any loco coupled together.



VALVES USED & THEIR FUNCTION

SL.	DESCRIPTION	PURPOSE
1.A9. Automatic Valve		Brake application for Loco as well as Formations
2.SA 9 Ind. Brake Valve		Brake Application for Loco only.
3. MU – 2B		M.U. Operation
4. F 1 – Selector		M.U. Operation
5. C ₂ W. or AddC ₂ Valve		Feeding B. P. Pressure to the formation
6. 24 A. Double Check Valve		This will allow only one operation at a time.
7. C ₃ W. Distributor Valve		Proportionate Brake application during A9 application.
8. C ₂ . Relay Valve		For Locomotive Brake.
9. Pressur Switch		Loco will be brought to idle during A9 emergency application.

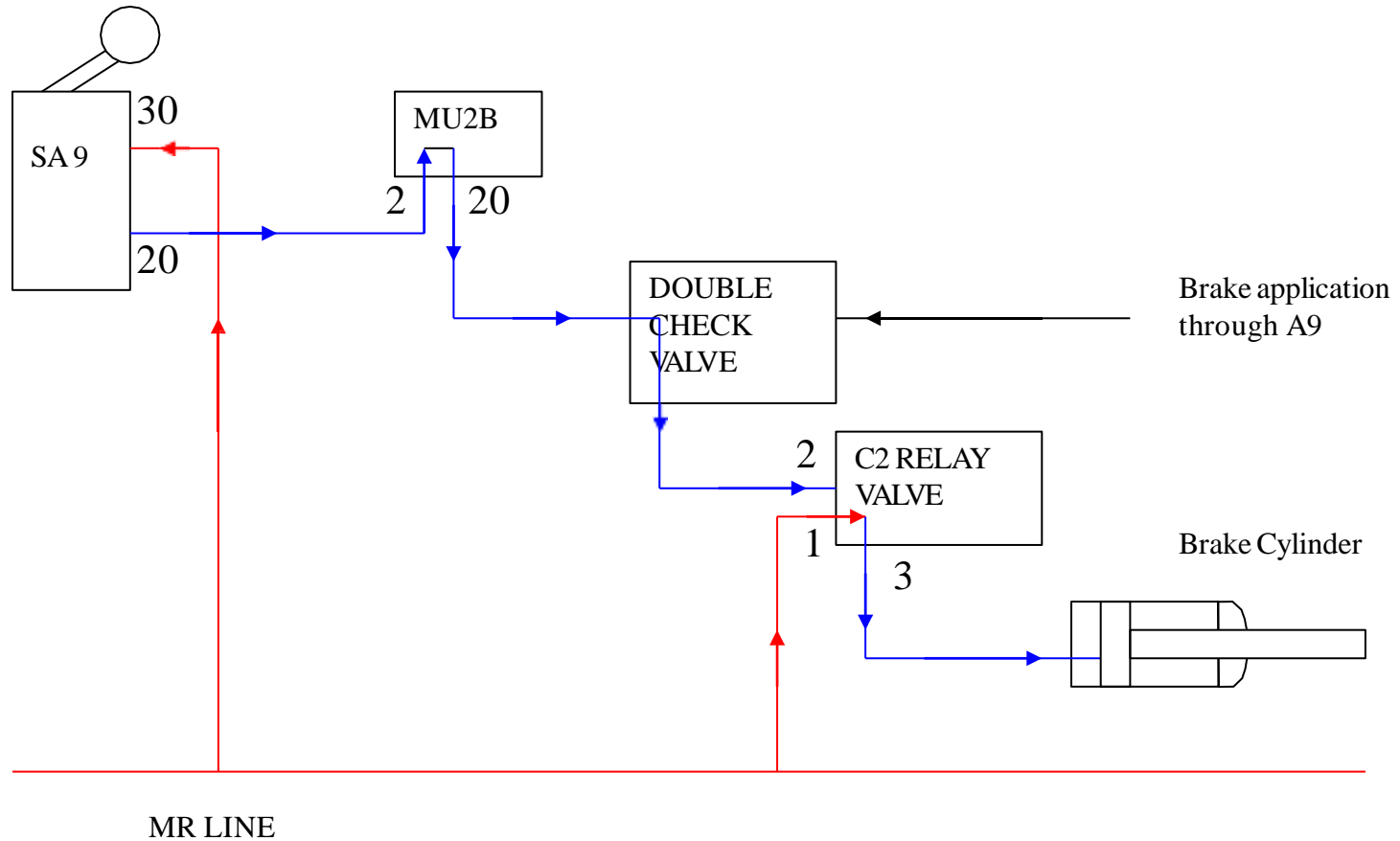


10.	D1. Emergency Valve	For Emergency brake application.
11.	D1. Pilot air valve	During Dynamic brake Loco brake will be released.
12.	Pressure Limiting Valve	Pilot air to C ₂ . – Relay is Limiting to 1.8 kg / Cm ²
13.	M. R. Safety Valve (Main Reservoir)	When M. R. Pressure goes beyond 10.5 kg This valve will function.
14.	Duplex Check Valve Set at 5 kg / Cm²	It will not allow MR equalising pipe Air to return back to MR
15.	D 24 – Feed Valve	To maintain Feed pipe Pr at 6 kg / Cm ² .

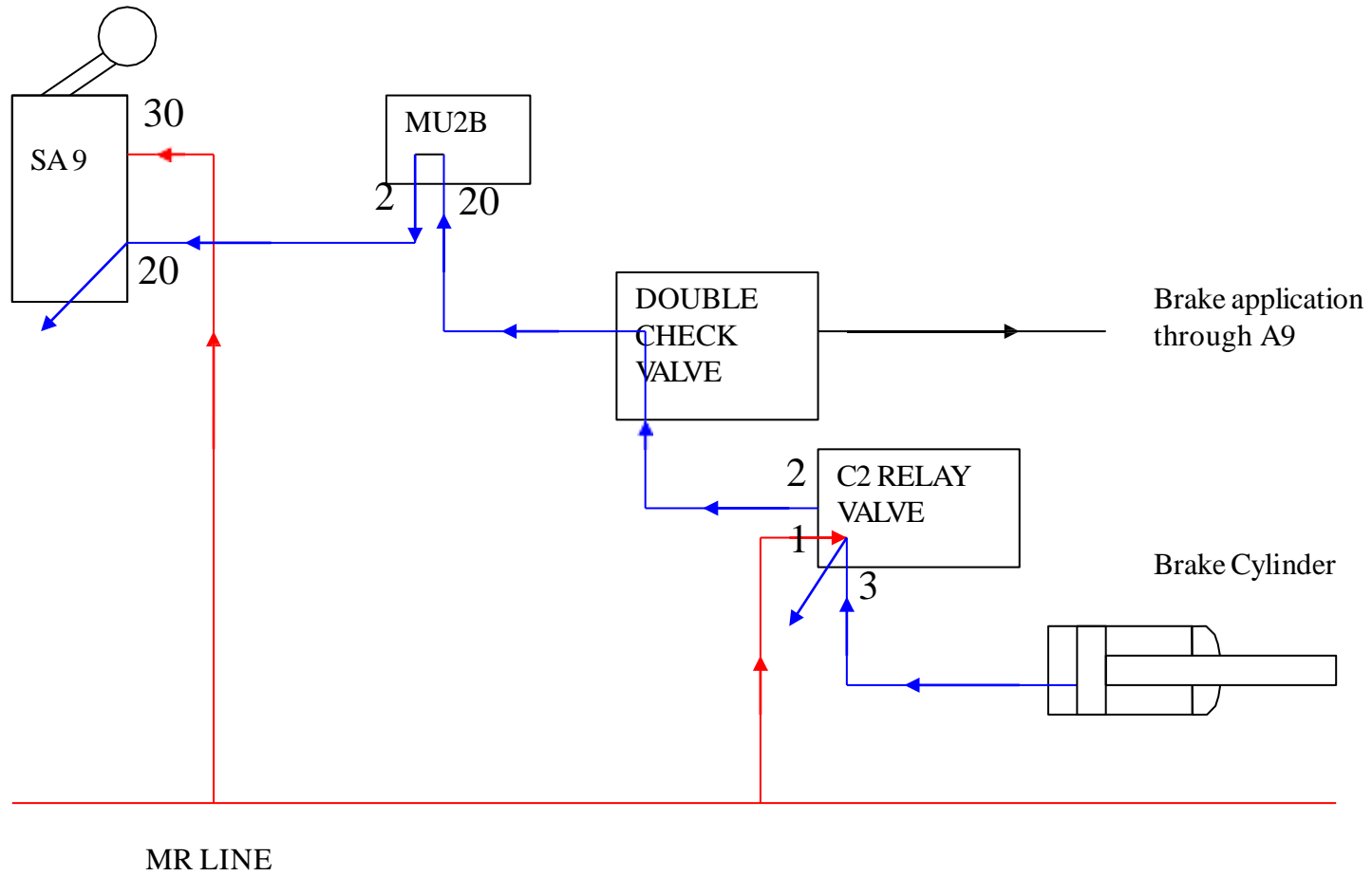


INDEPENDENT BRAKE SYSTEM

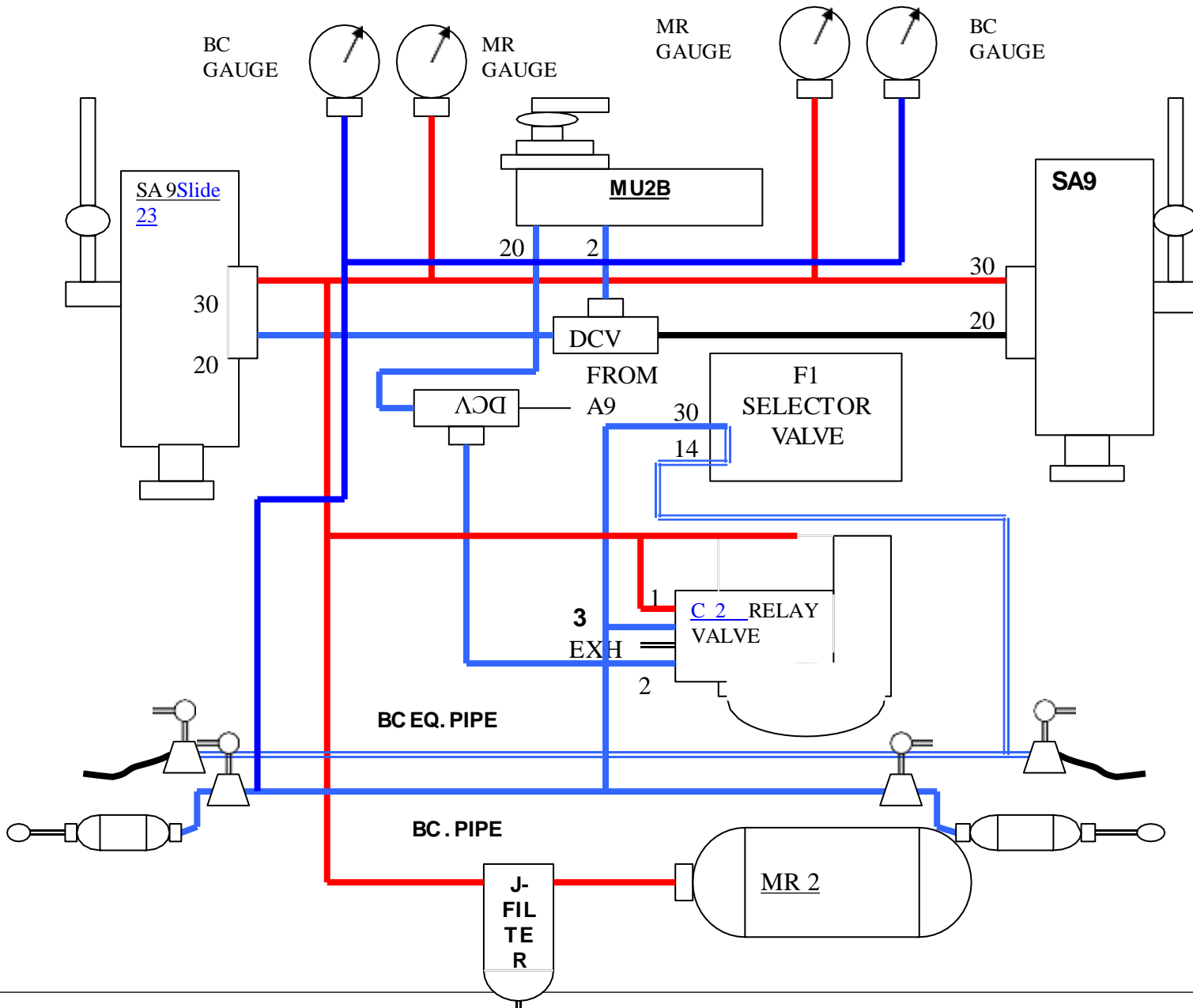
BRAKE APPLICATION



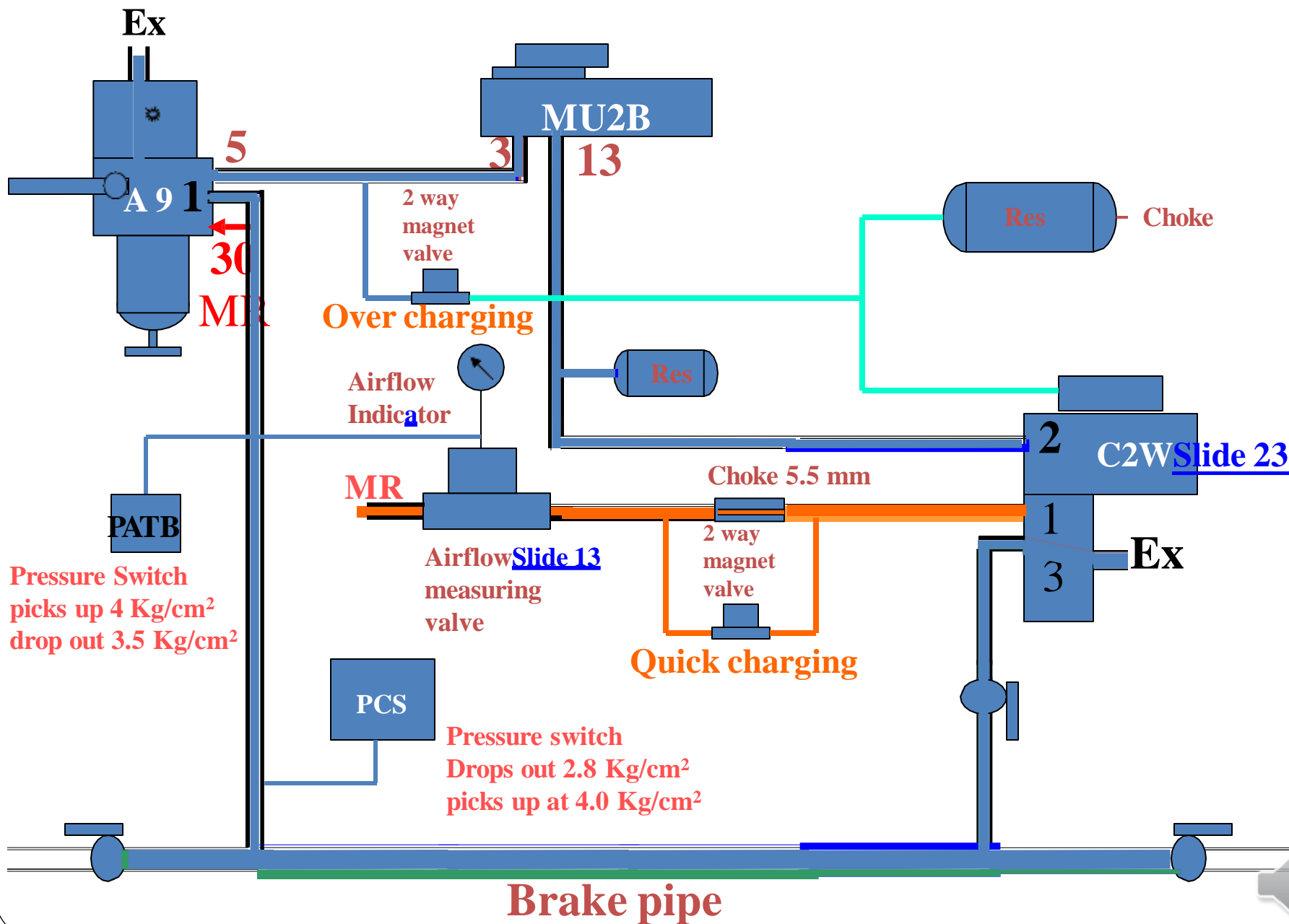
INDEPENDENT BRAKE RELEASE



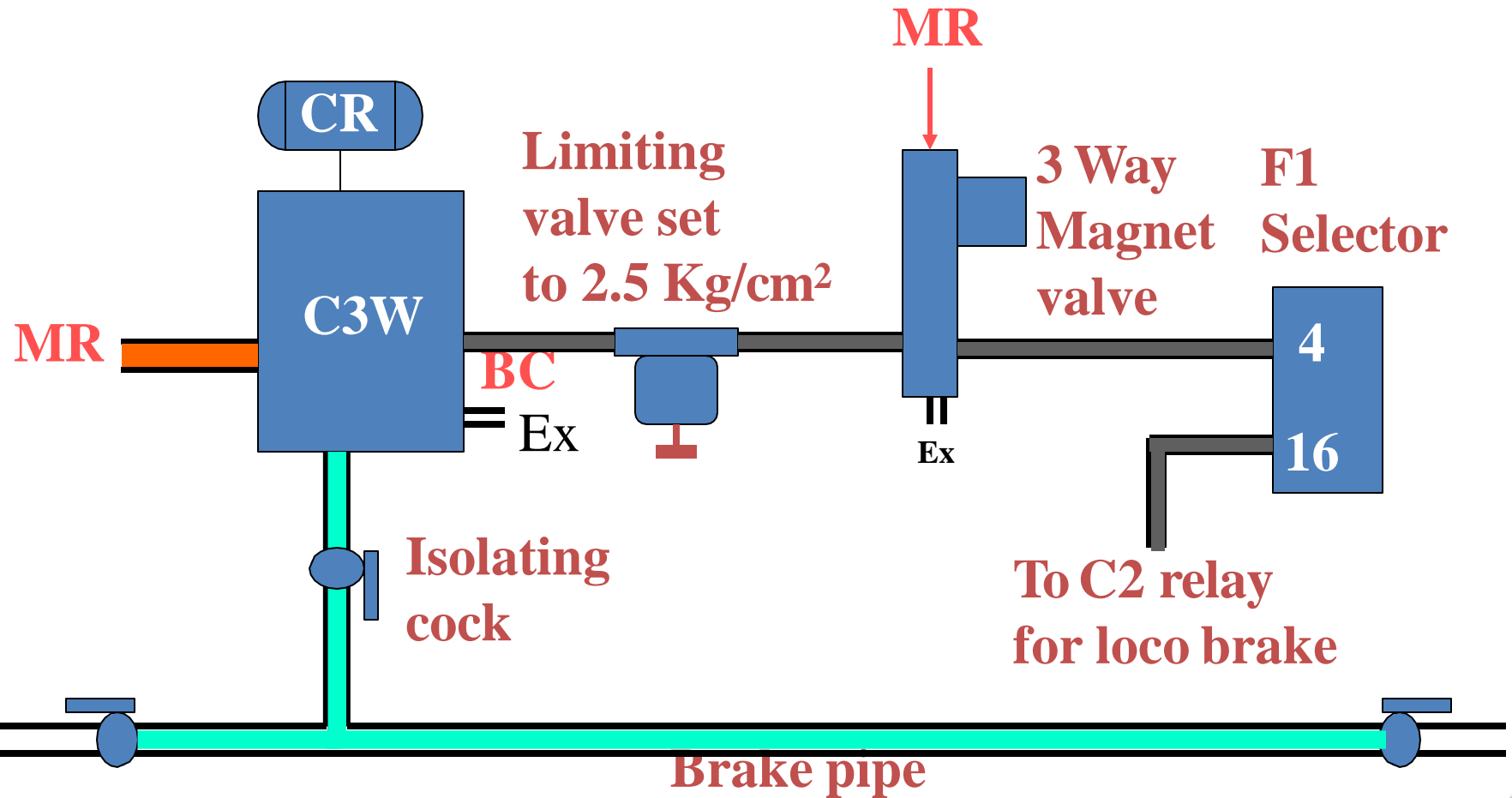
INDEPENDENT BRAKE SYSTEM LAYOUT



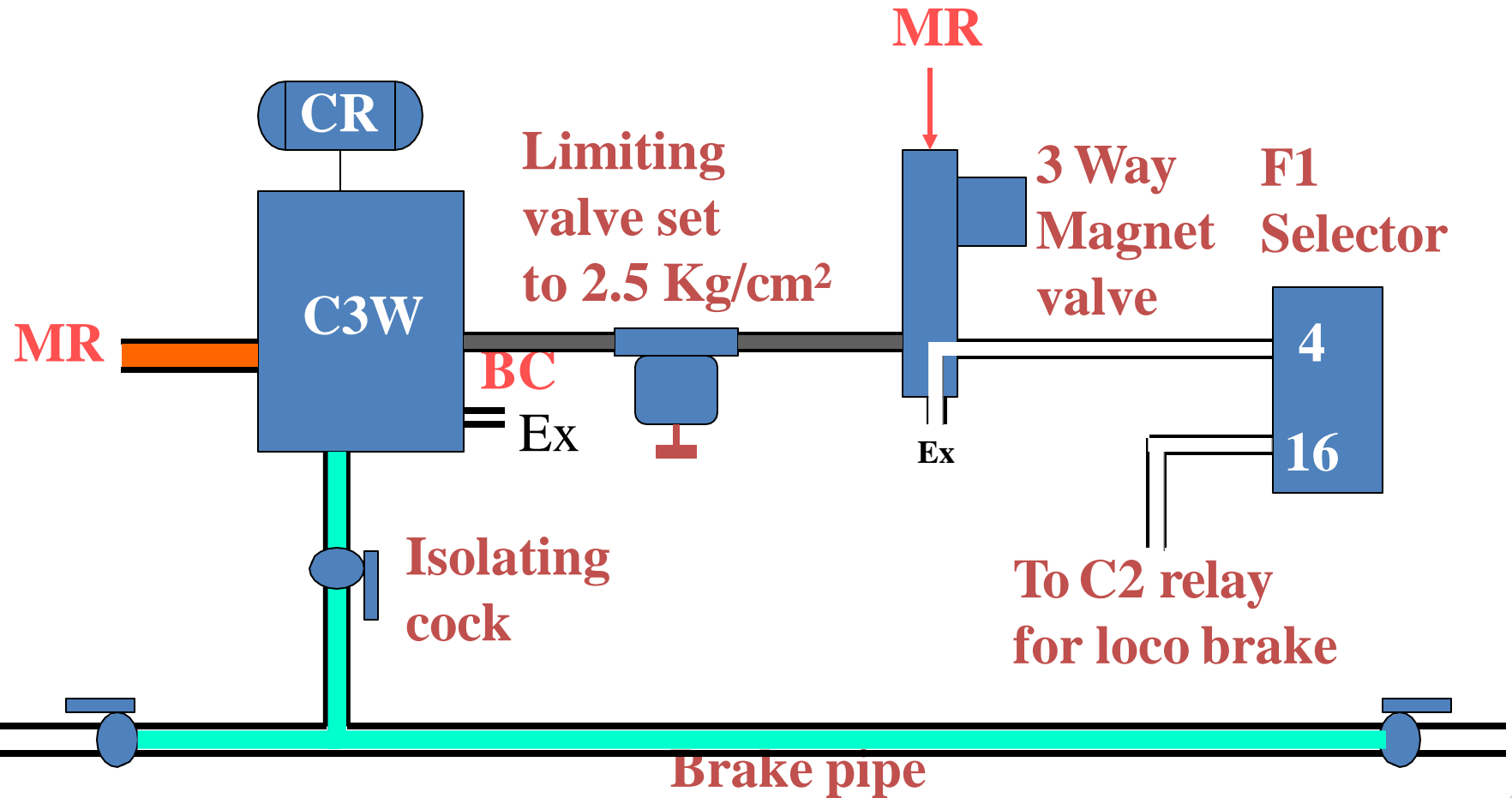
BRAKE PIPE CHARGING (IRAB)



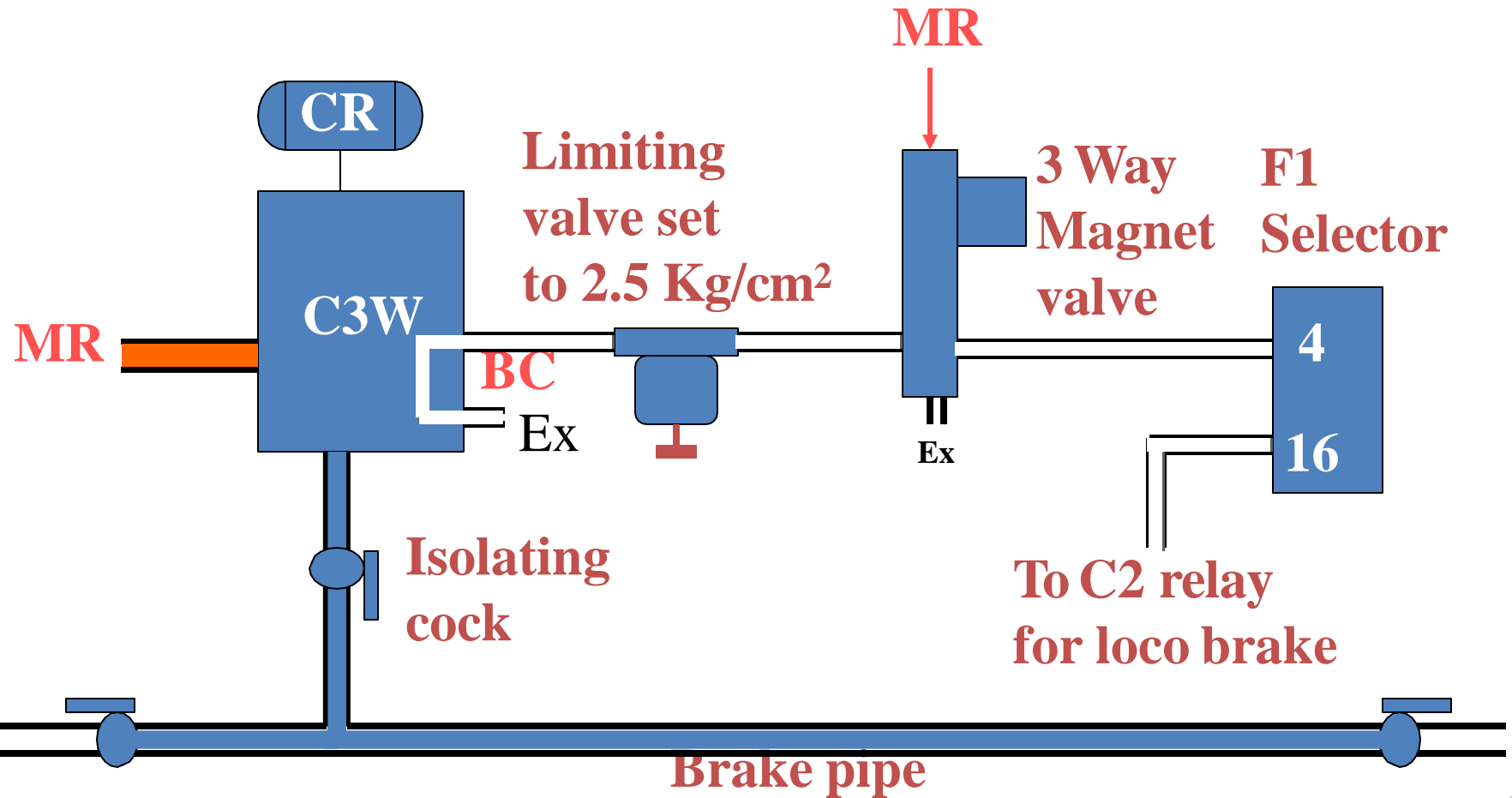
CO-ORDINATED BRAKING APPLICATION



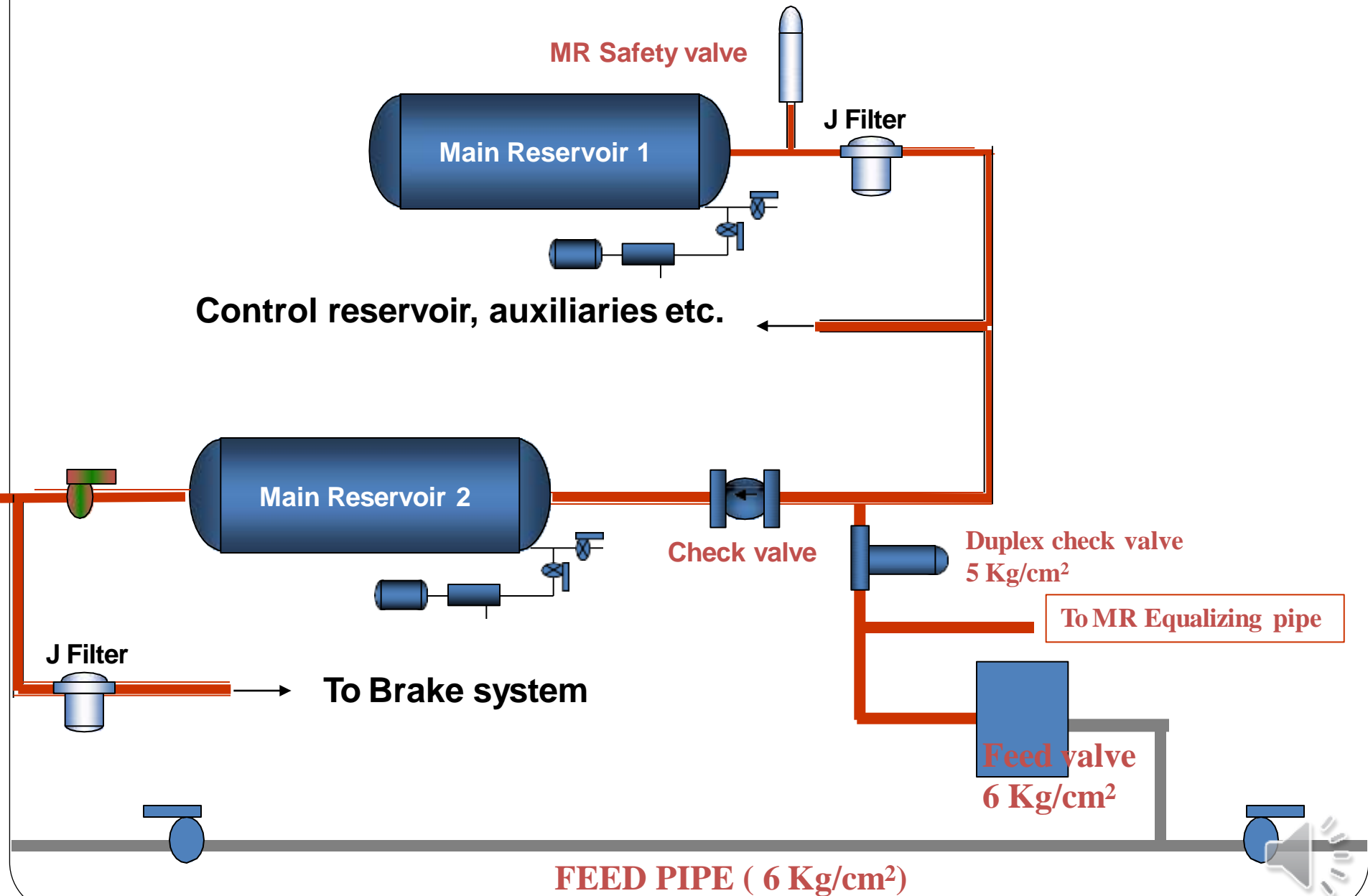
BRAKE RELEASE DURING DYNAMIC BRAKING



CO-ORDINATED BRAKING RELEASING



FEED PIPE CHARGING





THANK
YOU

