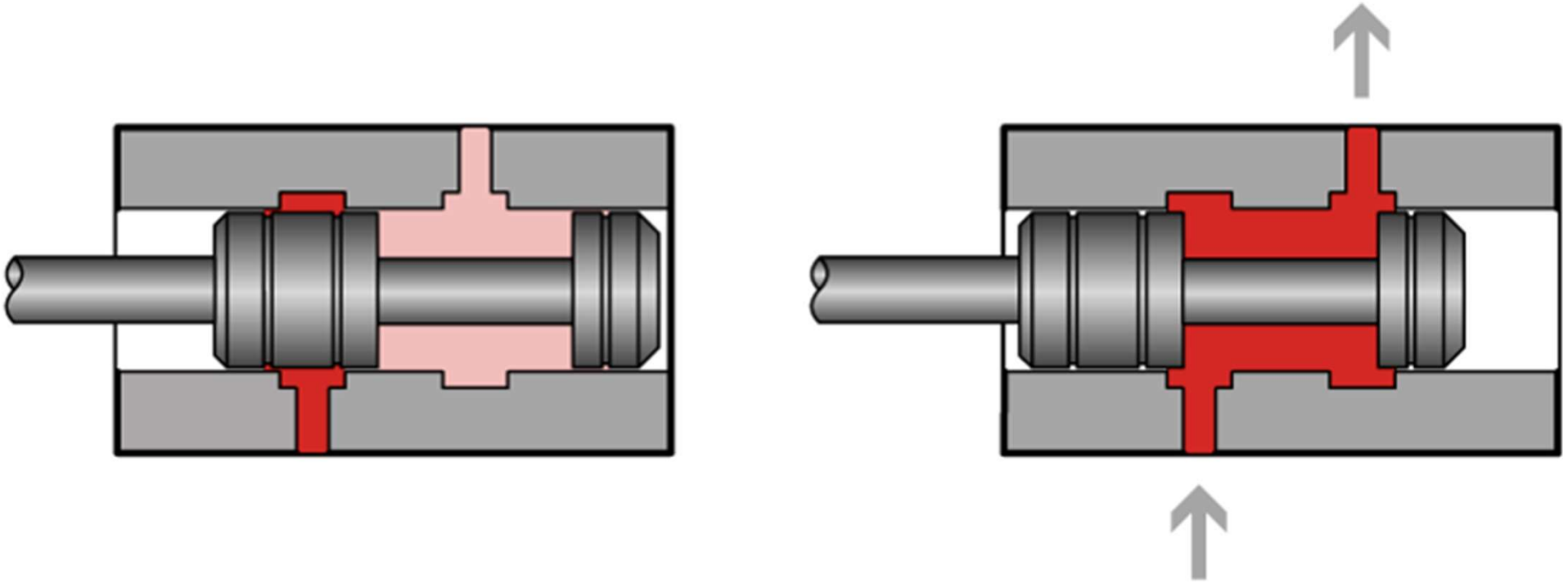
Automação Hidráulica
Parte - 2

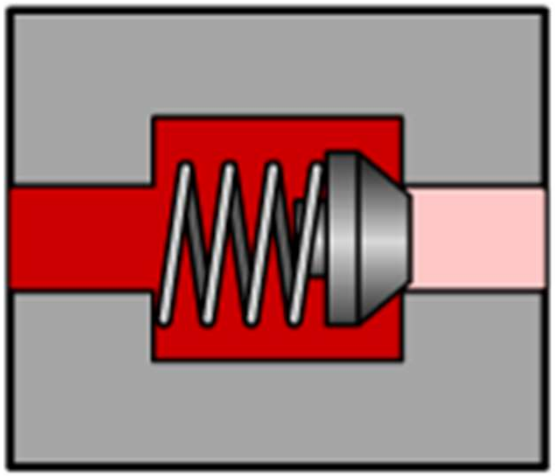
Paulo Vitor Silva

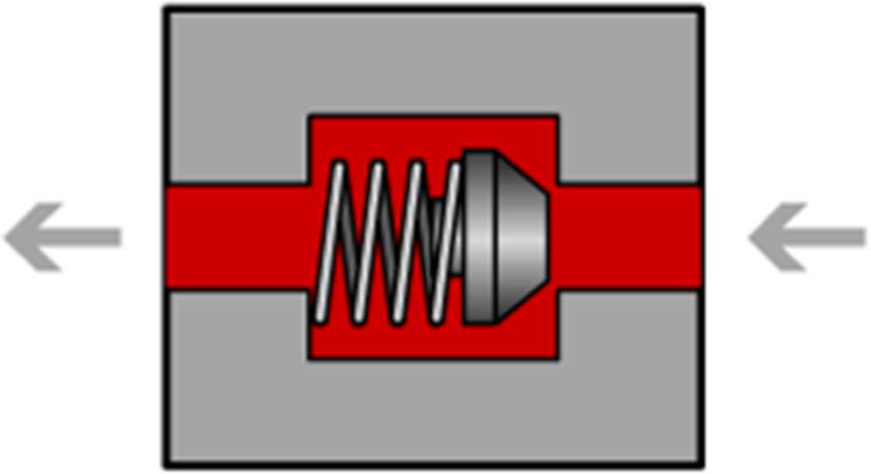
Tipo de Vedação - Carretel



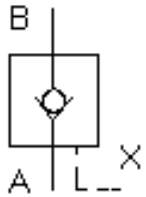
Válvula de Bloqueio - Retenção

Símbolo





Válvula de Bloqueio - Retenção Pilotada



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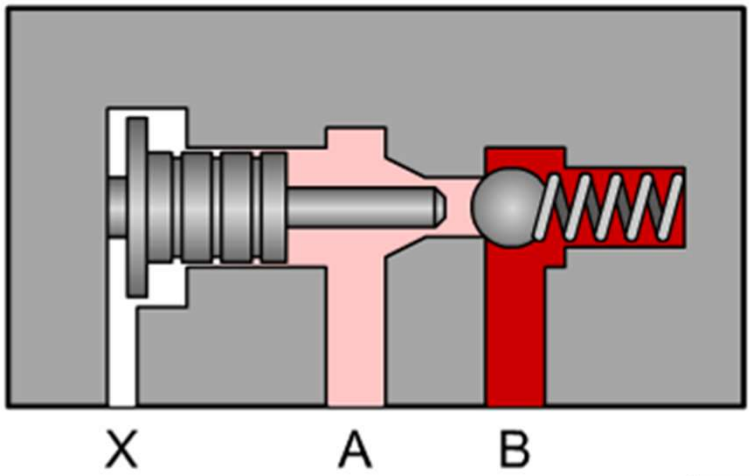
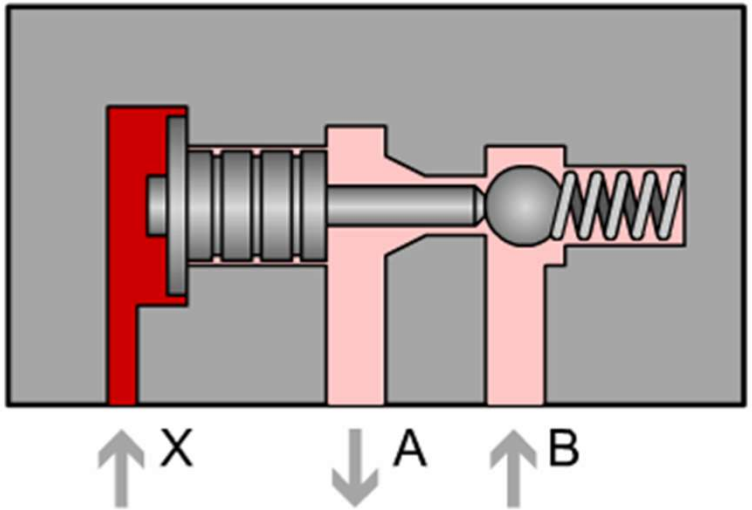
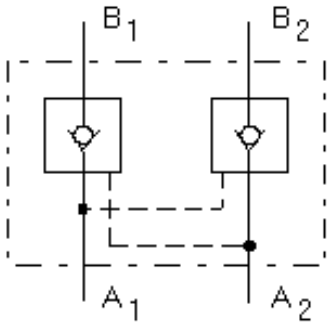




Válvula de Bloqueio - Retenção Dupla



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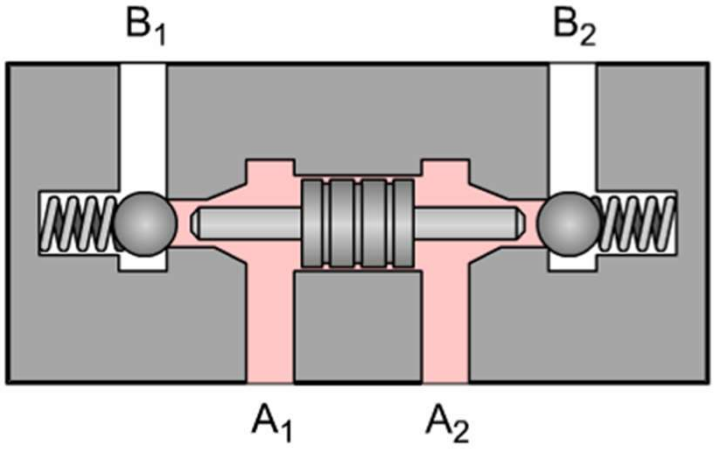
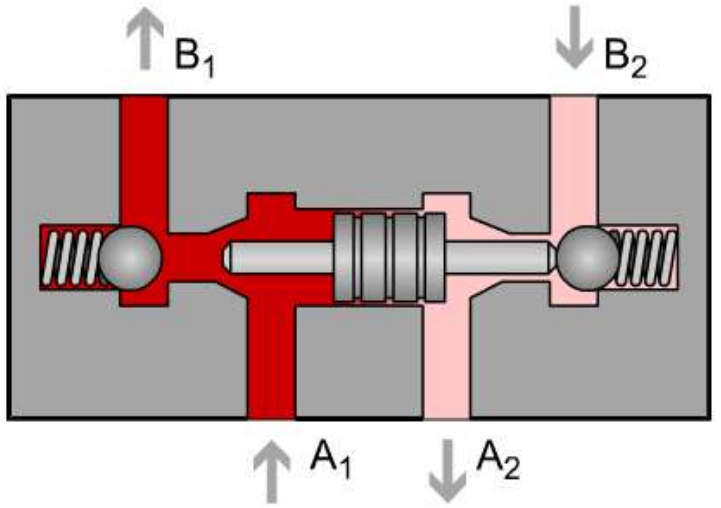
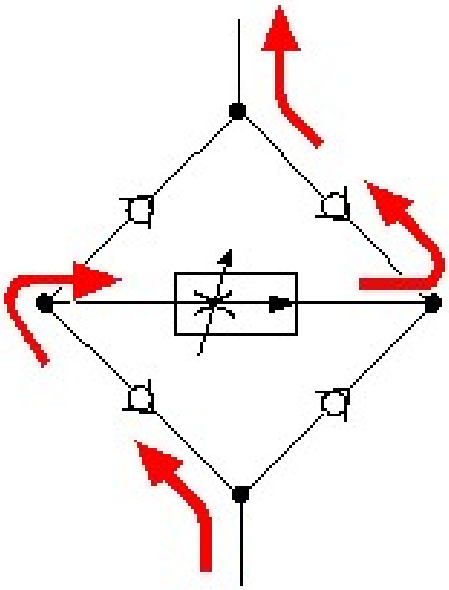
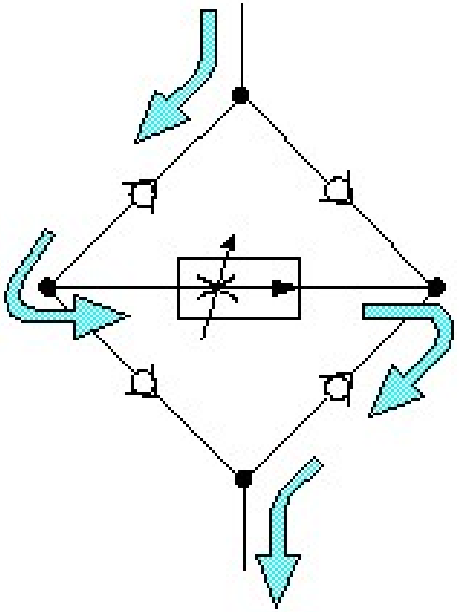
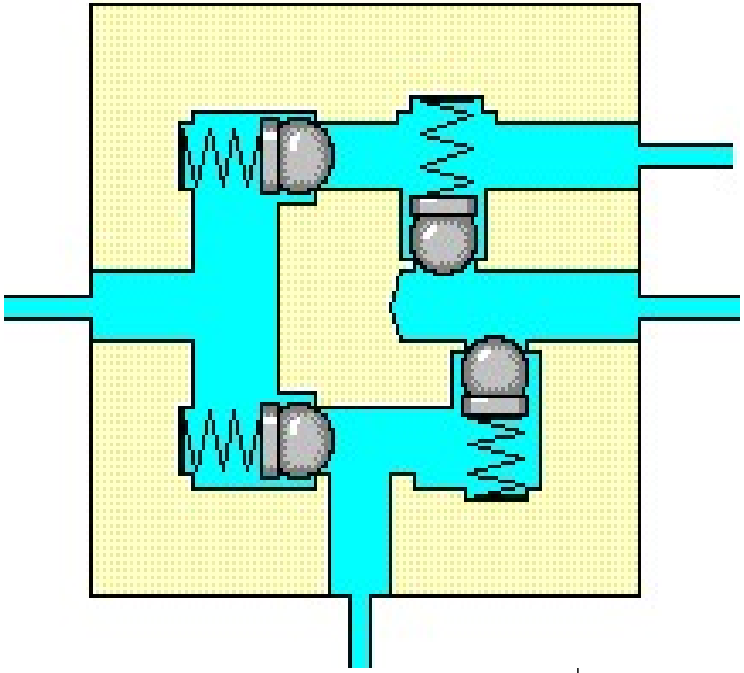




Placa de GRAETZ

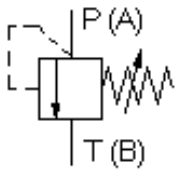






Com uma combinação e união correspondente de quatro válvulas de retenção, podemos obter um circuito chamado “circuito de retificação” (Circuito Graetz).

Válvula de Pressão - Limitadora de Pressão



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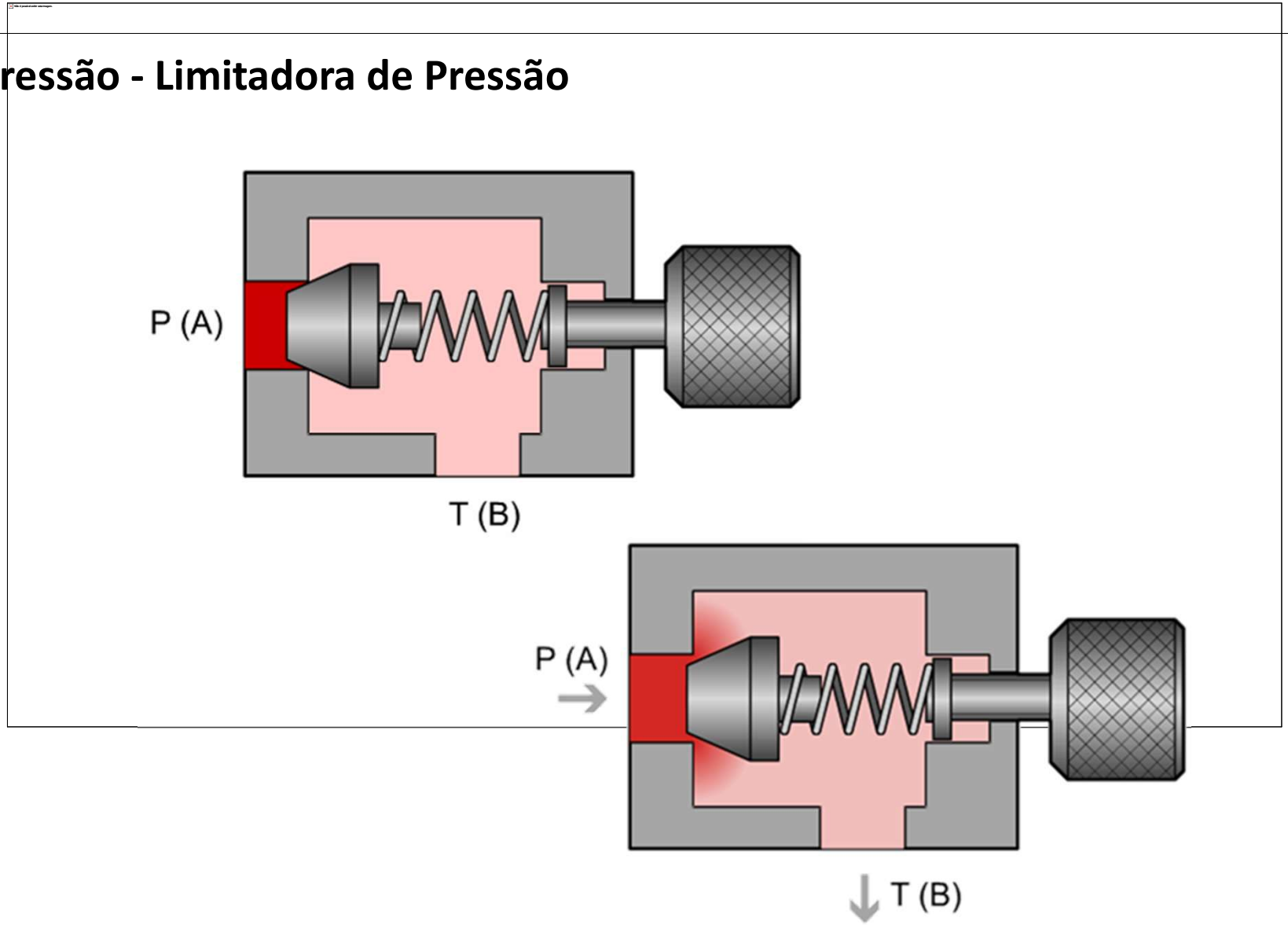
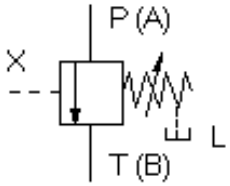


Válvula de Pressão - Limitadora de pressão compensada externamente



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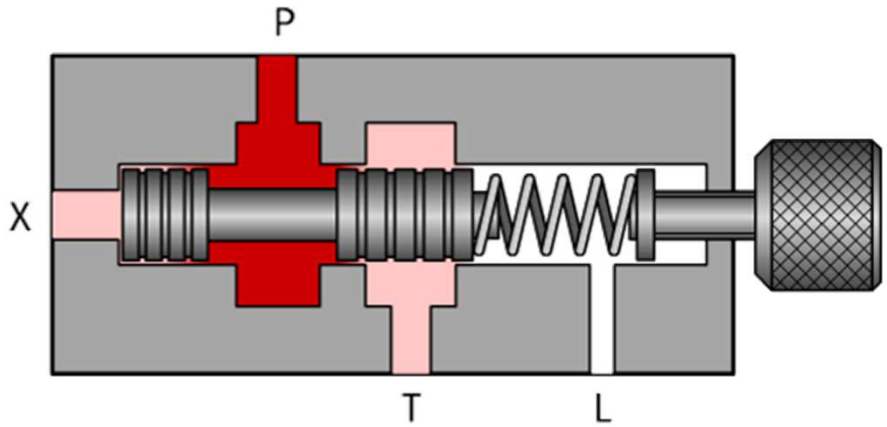
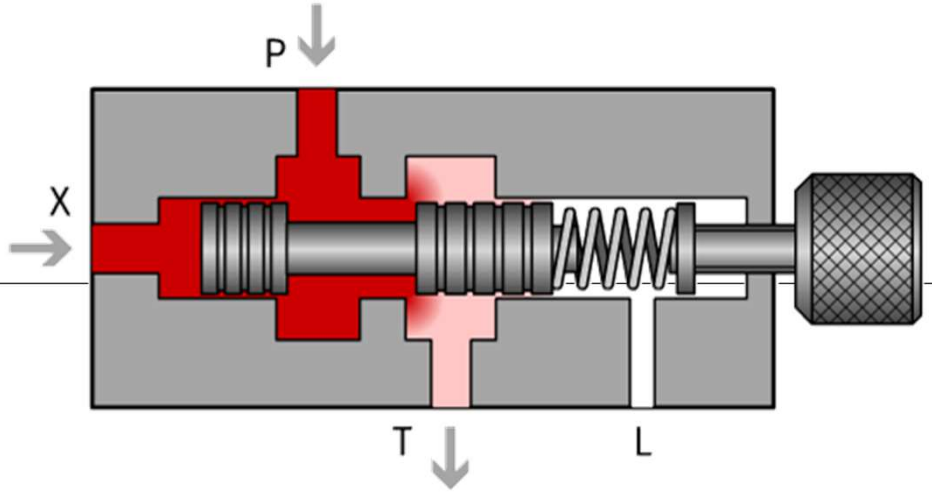
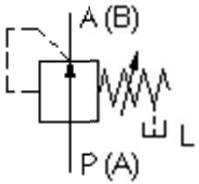




Válvula de Pressão - Reguladora de pressão com 2 vias



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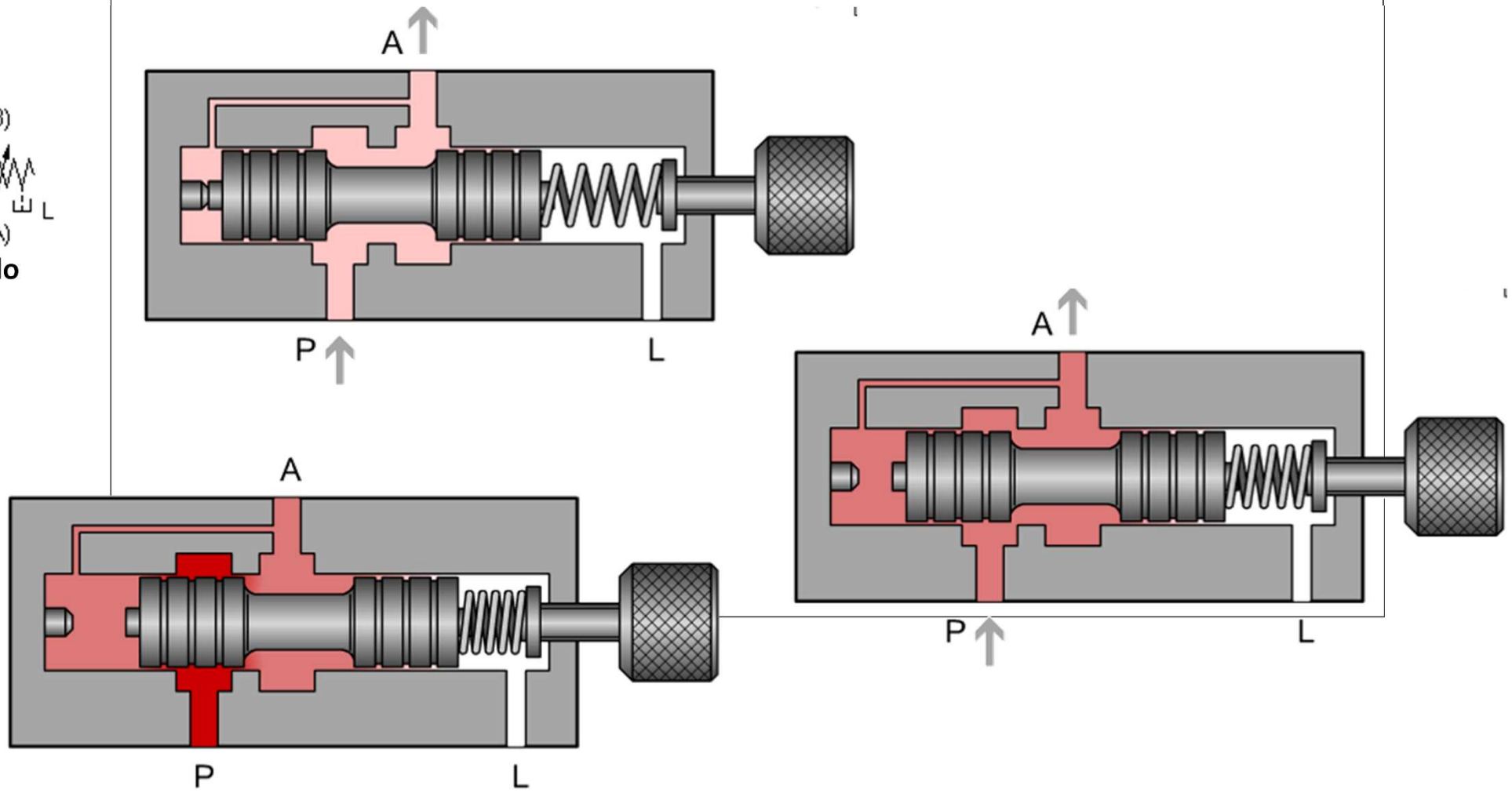
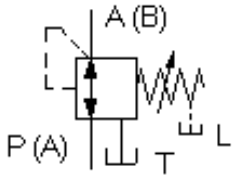


Válvula de Pressão - Reguladora de pressão com 3 vias



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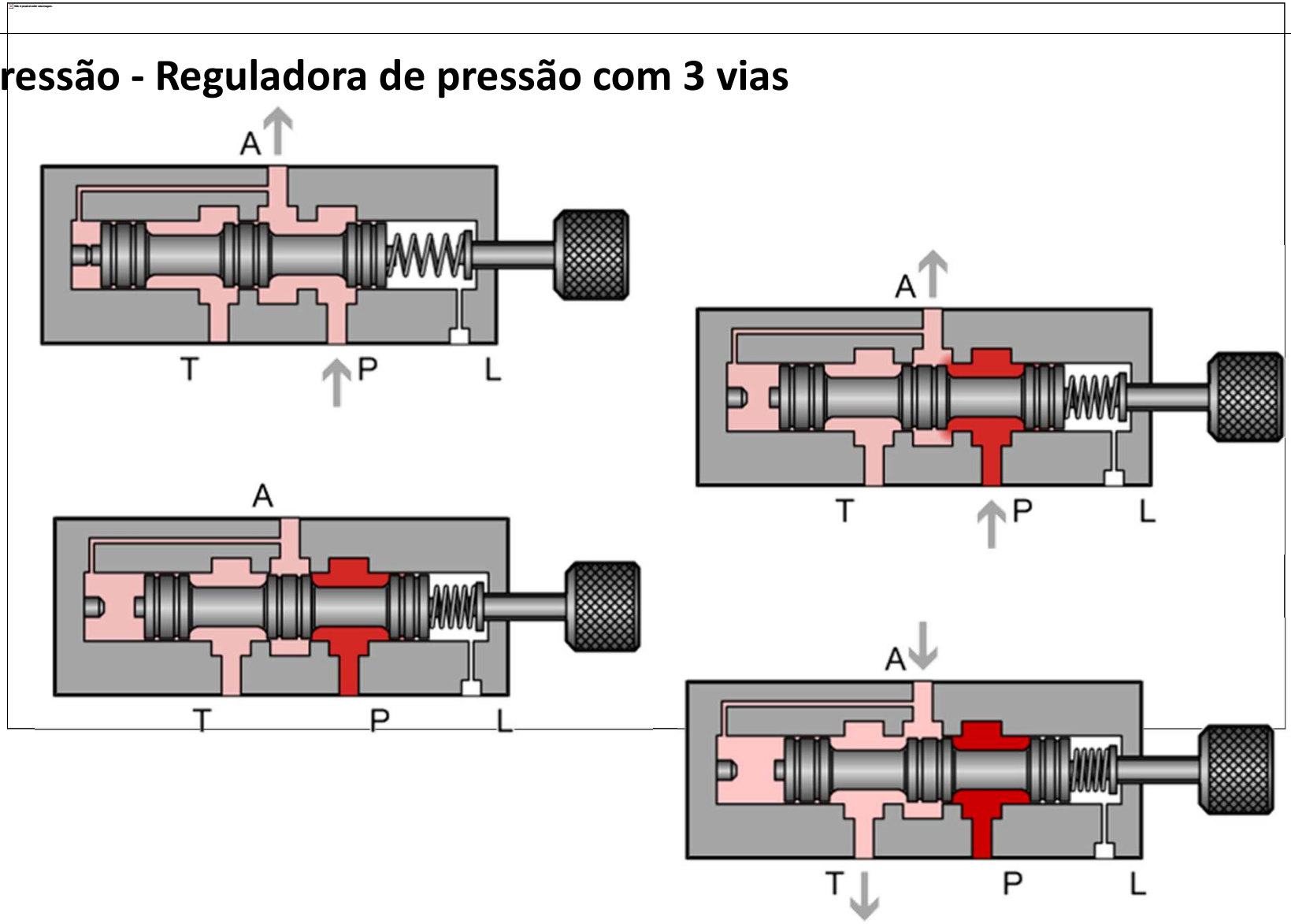
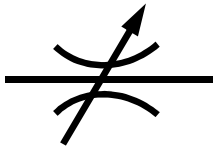
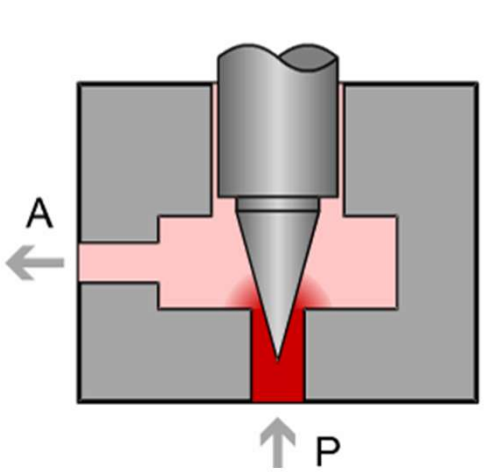


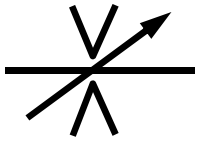
Válvula de Fluxo - Regulagem de vazão



Símbolo

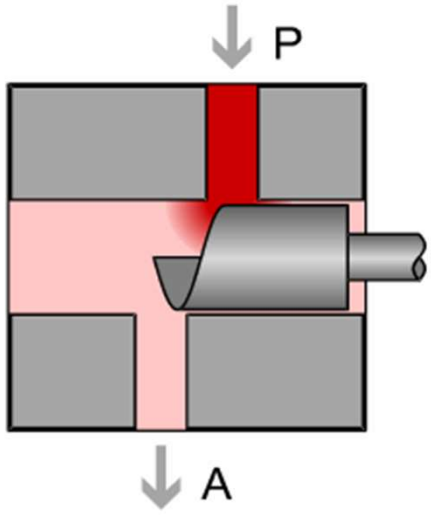
Restrição por agulha

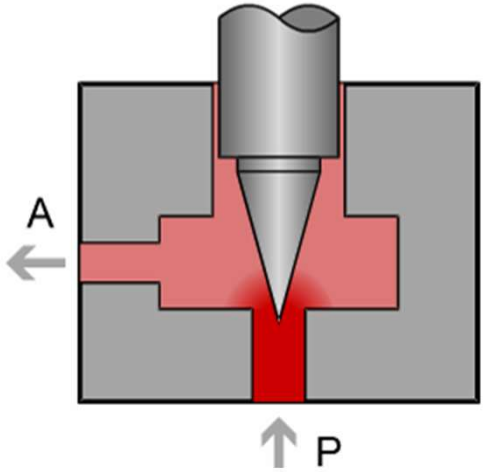


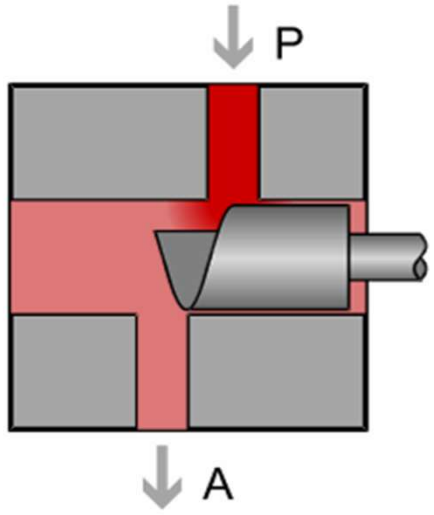


Símbolo

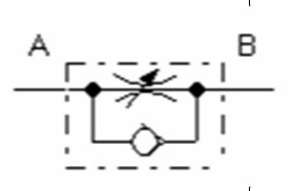
Restrição por diferencial em hélice







Válvula de Fluxo - Válvula reguladora de fluxo unidirecional



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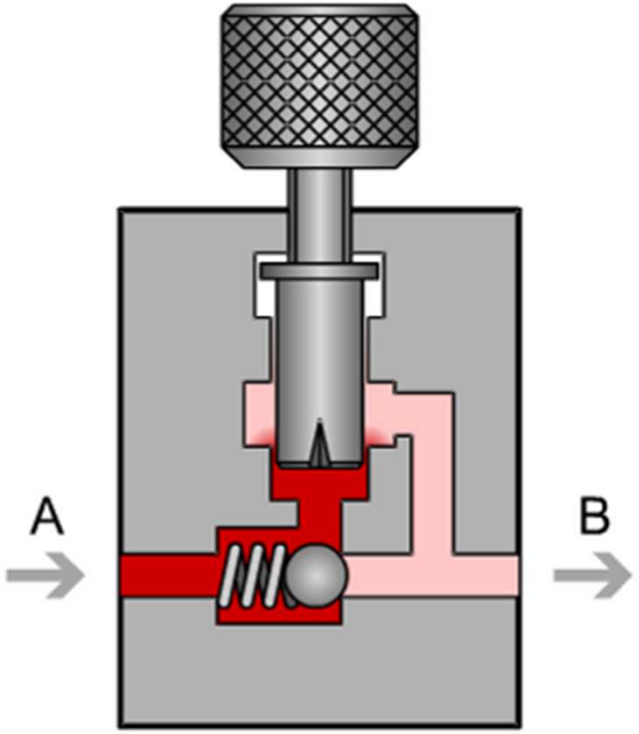
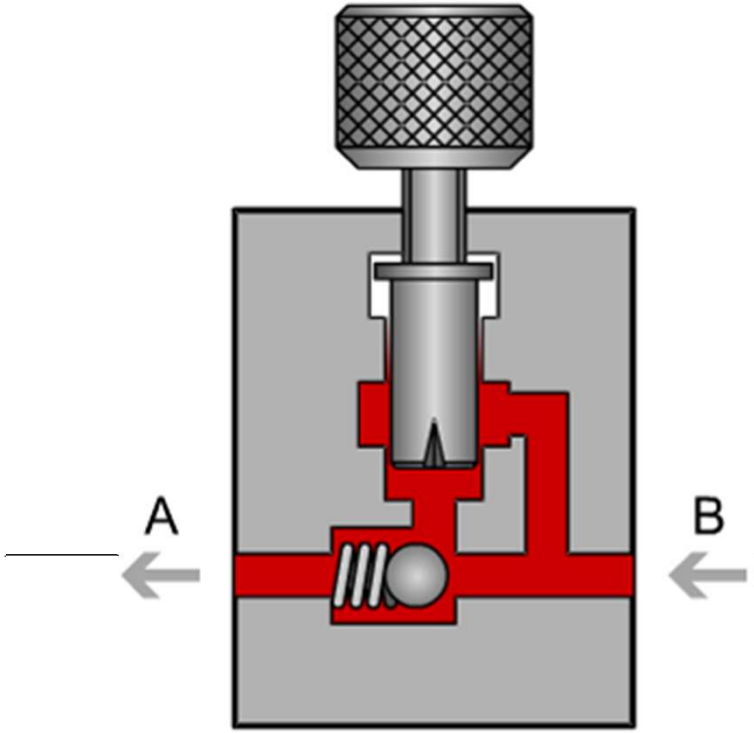


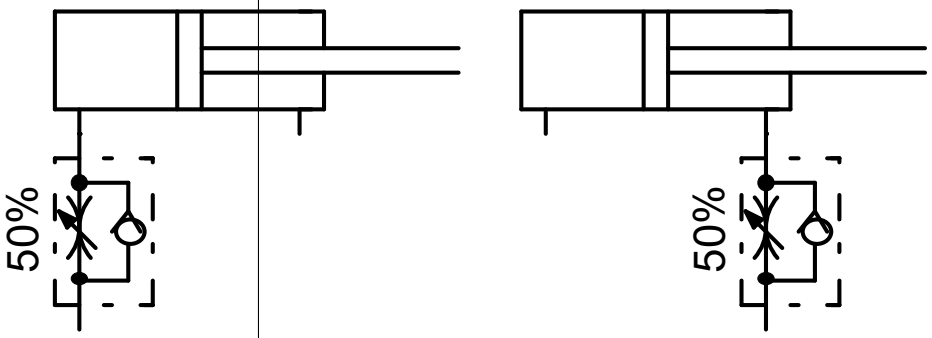


Válvula de Fluxo - Válvula reguladora de fluxo unidirecional - aplicações

METER IN

AVANÇANDO

RECUANDO

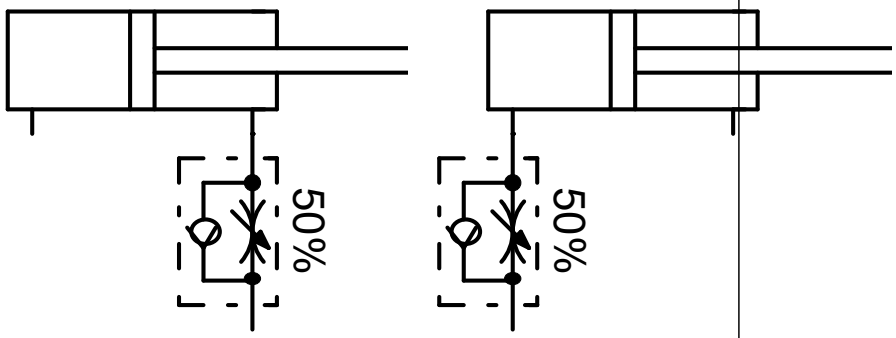


CONTROLE DO FLUXO DE ÓLEO QUE ESTÁ ENTRANDO NO ATUADOR

METER OUT

AVANÇANDO

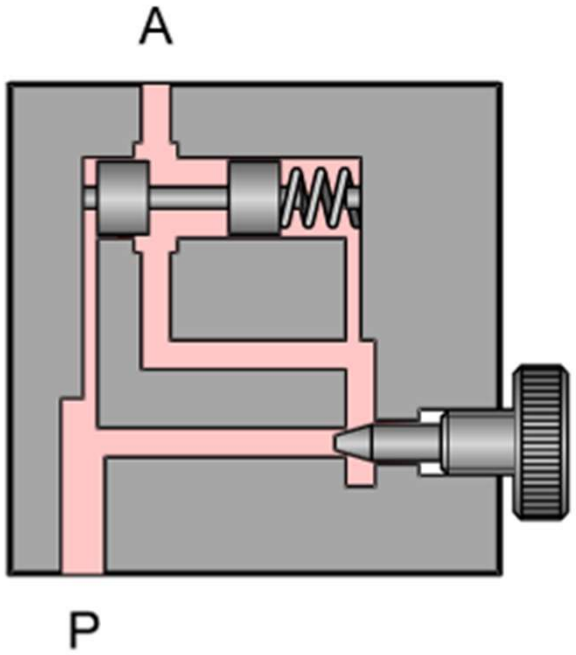
RECUANDO

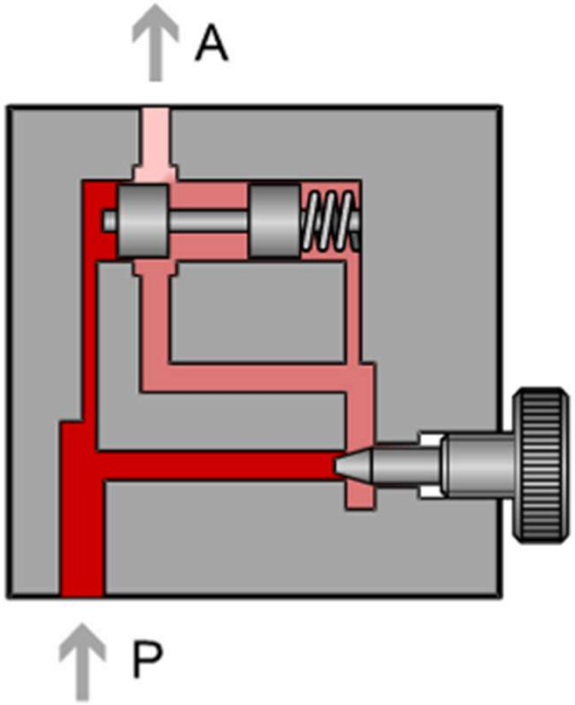


CONTROLE DO FLUXO DE ÓLEO QUE ESTÁ SAINDO DO ATUADOR

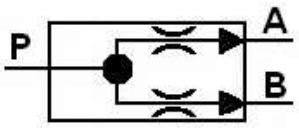
Válvula de Fluxo - Válvula reguladora de fluxo compensada

Símbolo





Divisor de fluxo



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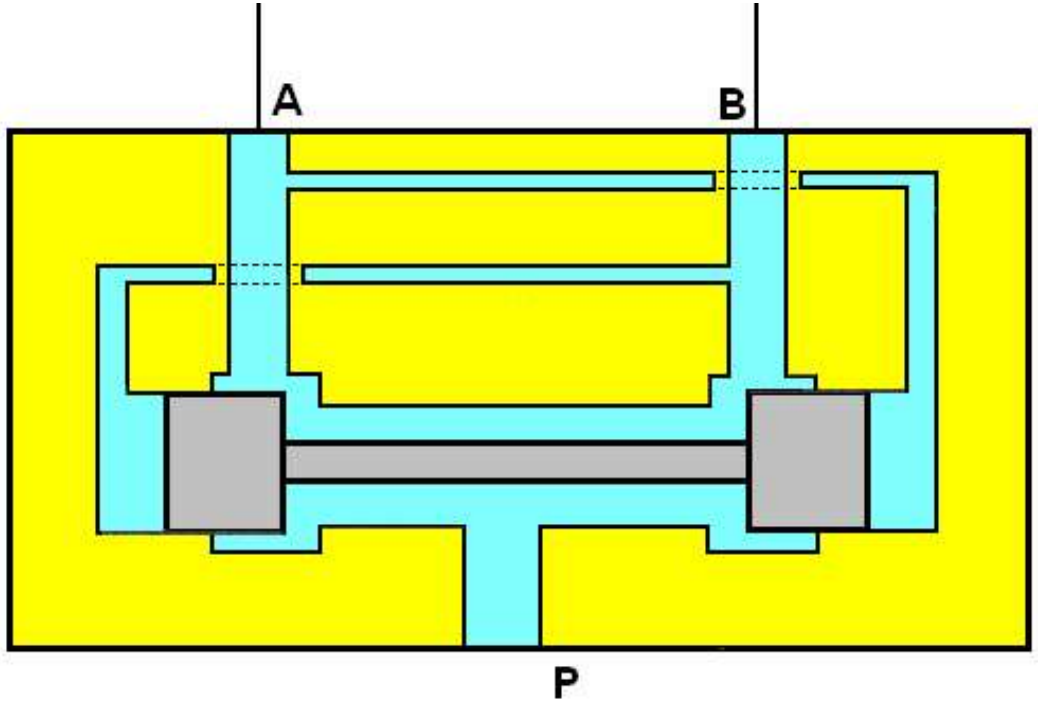
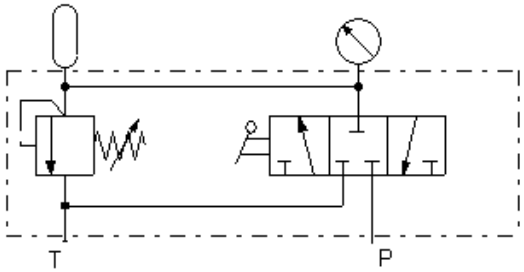


O fluxo que existe nas saídas tem o mesmo valor de vazão independente da vazão de entrada. São utilizados por exemplo, para comandos sincronizados de dois atuadores.

Acumulador hidráulico



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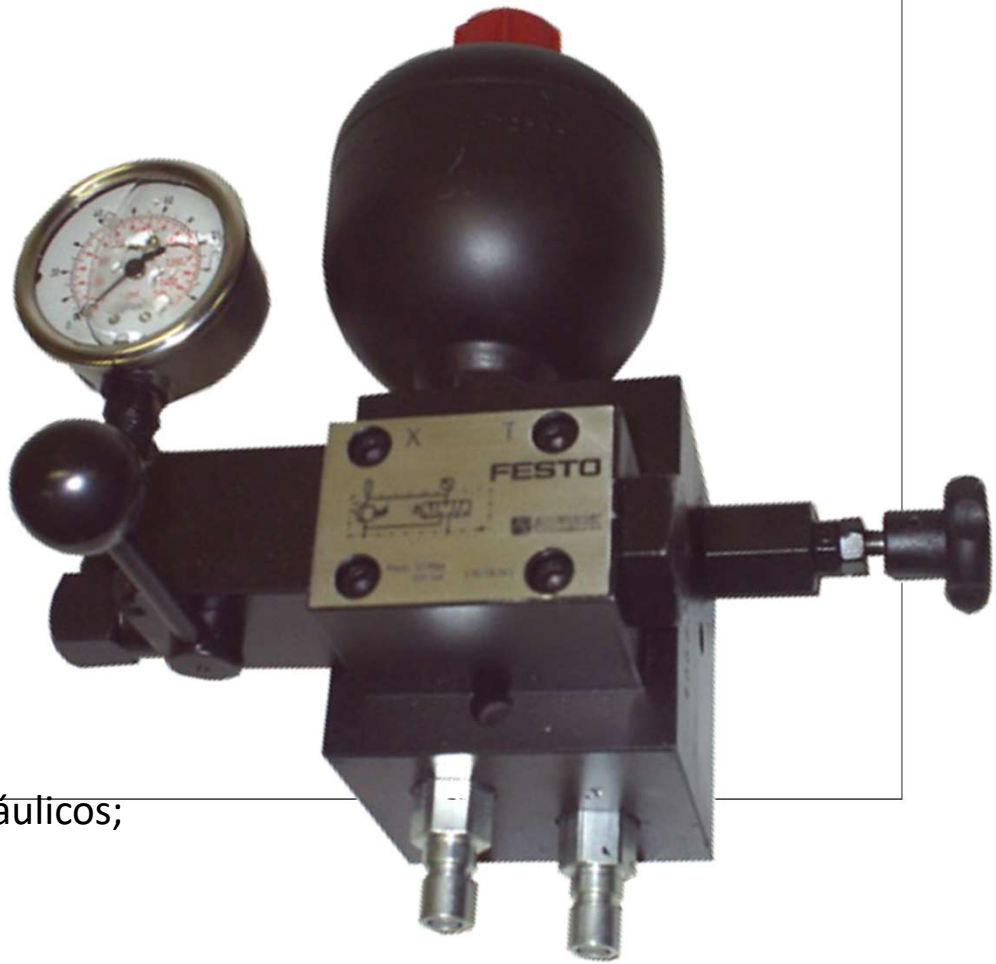

PRINCIPAIS APLICAÇÕES DE ACUMULADORES

- Fonte auxiliar de energia (reserva de fluído);
- Compensador de vazamento ou perdas por dreno;
- Atenuação de golpes mecânicos e de pressão;
- Amortecimento de pulsação de bomba e choques hidráulicos;
- Compensação de força;
- Reserva para operação de emergência;