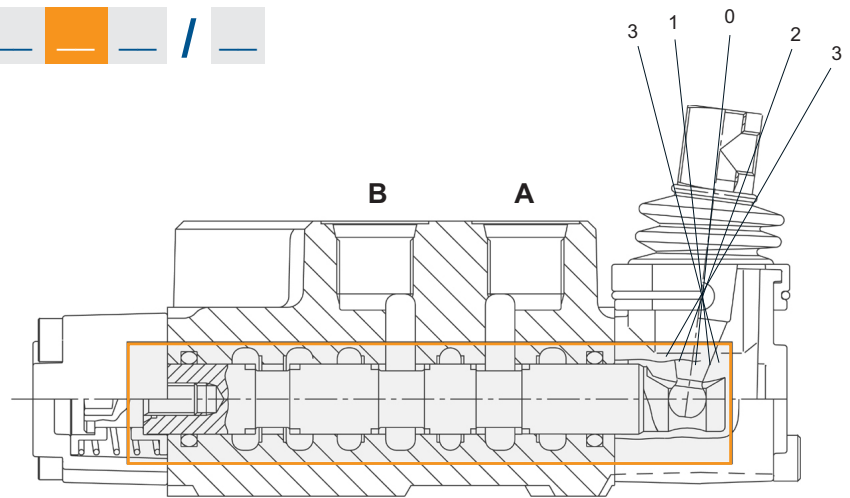
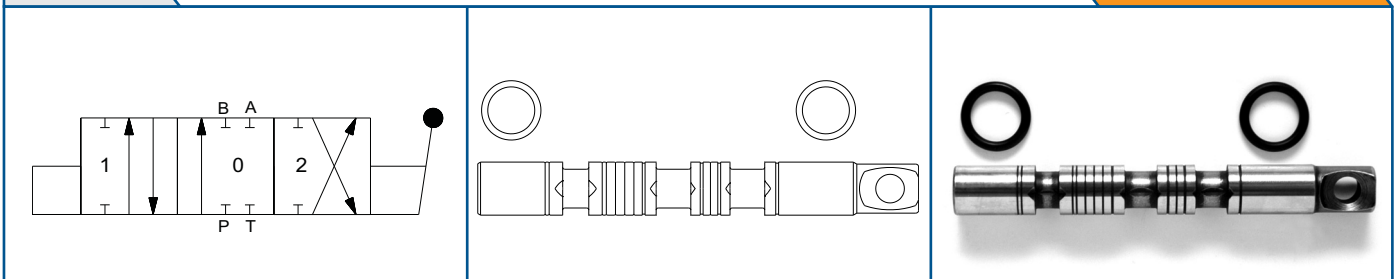
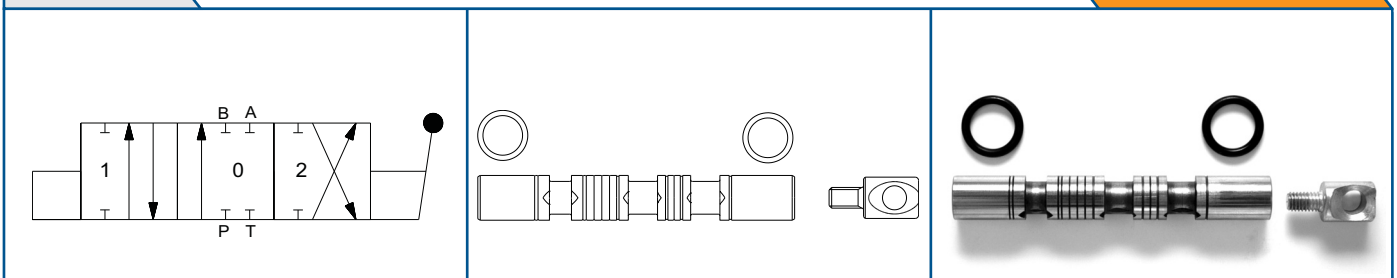


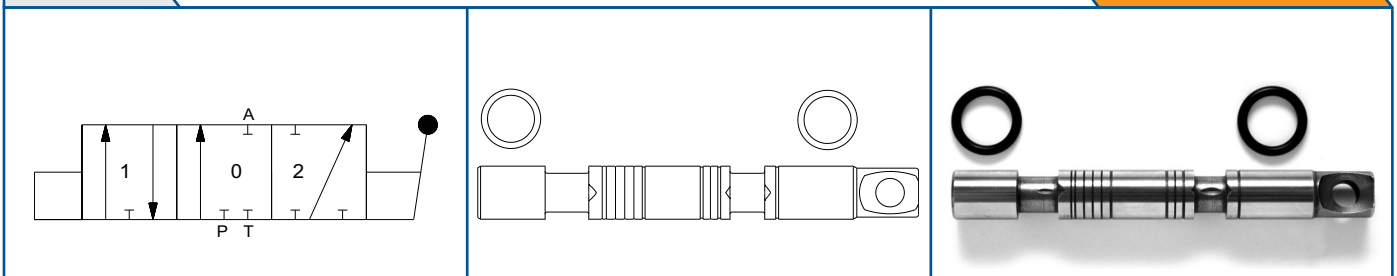
BM \_ / \_ / \_ / \_ / \_ / \_

**SPOOL A****COD. 560075**

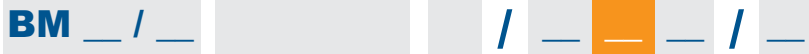
4-WAY / 3-POSITION SPOOL. Provides control of double-acting cylinders or bi-directional hydraulic motors. In position 0 work ports are blocked.

**SPOOL A DX****COD. 560085**

4-WAY / 3-POSITION SPOOL. Same features as spool A but with threaded spool end. Required to assembly the joystick (JS) or for special applications.

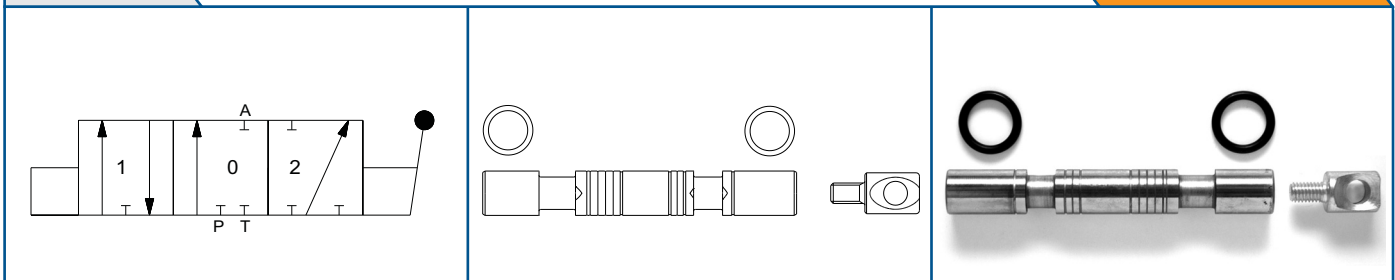
**SPOOL B****COD. 560076**

3-WAY / 3-POSITION SPOOL. Provides control of single-acting cylinders or start and stop of uni-directional hydraulic motors. In position 0 work port is blocked. B port is plugged.



**SPOOL B DX**

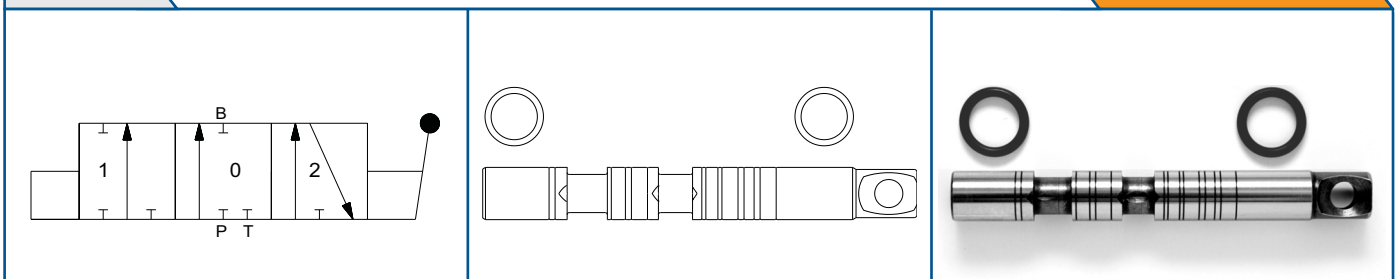
**COD. 560086**



3-WAY / 3-POSITION SPOOL. Same features as spool B but with threaded spool end. Required to assembly the joystick (JS) or for special applications.

**SPOOL C**

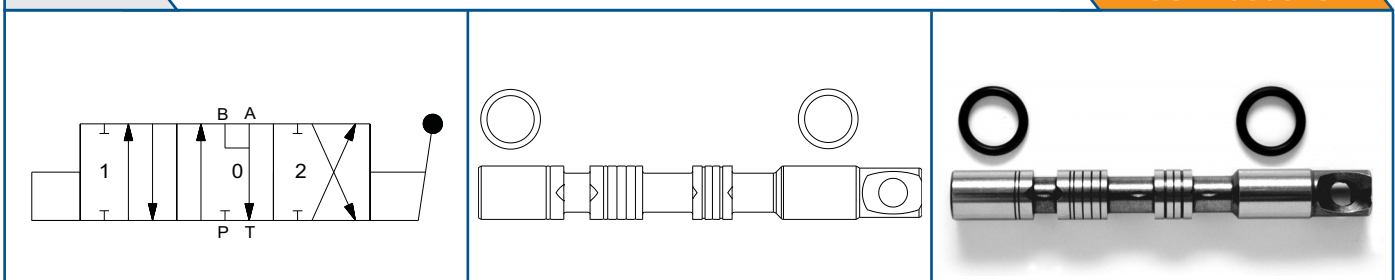
**COD. 560077**



3-WAY / 3-POSITION SPOOL. Provides control of single-acting cylinders or start and stop of uni-directional hydraulic motors. In position 0 work port is blocked. A port is plugged.

**SPOOL D**

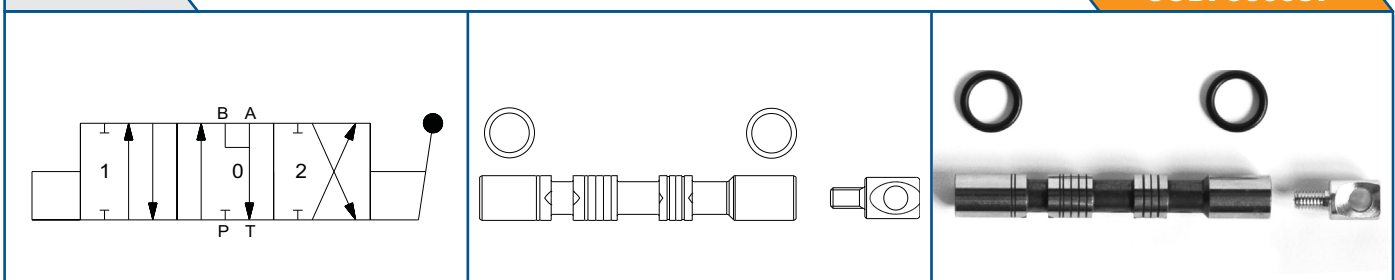
**COD. 560078**



4-WAY / 3-POSITION SPOOL, OPEN CENTER (MOTOR SPOOL). Provides control of double acting cylinders or bi-directional hydraulic motors. Allows a cylinder to float or a motor to wheel free when the spool is in position 0. Work ports are open to the tank port when the spool is in position 0.

**SPOOL D DX**

**COD. 560087**

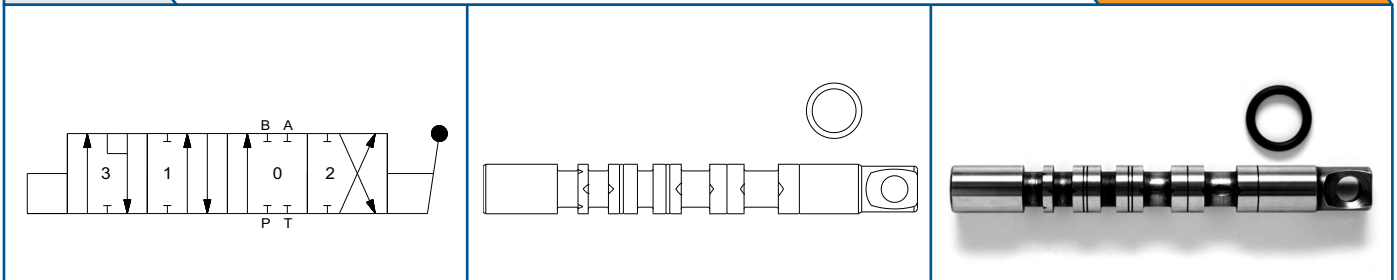


4-WAY / 3-POSITION SPOOL, OPEN CENTER (MOTOR SPOOL). Same features of spool D but with threaded spool end. Required to assembly the joystick (JS) or for special applications.

BM \_ / \_ / \_ / \_ / \_ / \_

## SPOOL K

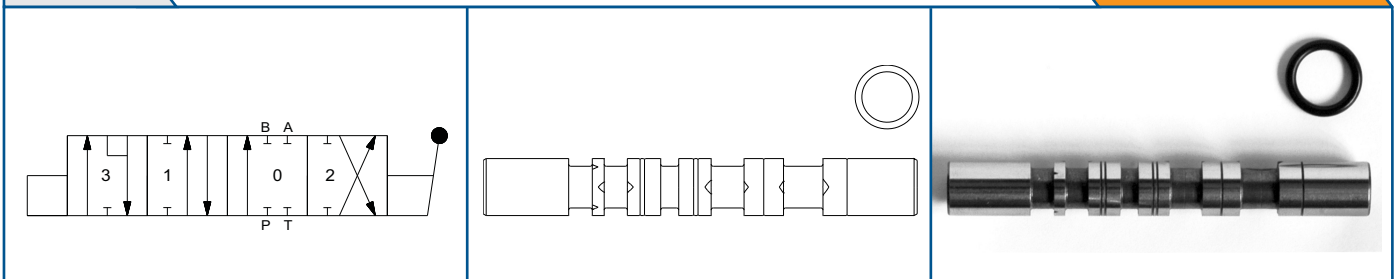
COD. 560081



4-WAY / 4-POSITION, FLOATING SPOOL. Same features as spool A with the addition of a fourth floating position. The floating position allows a cylinder to float or a motor to wheel free when the spool is in position 3. To be combined only with spool controls 16 or 54. Special machining on the body is required.

## SPOOL KS

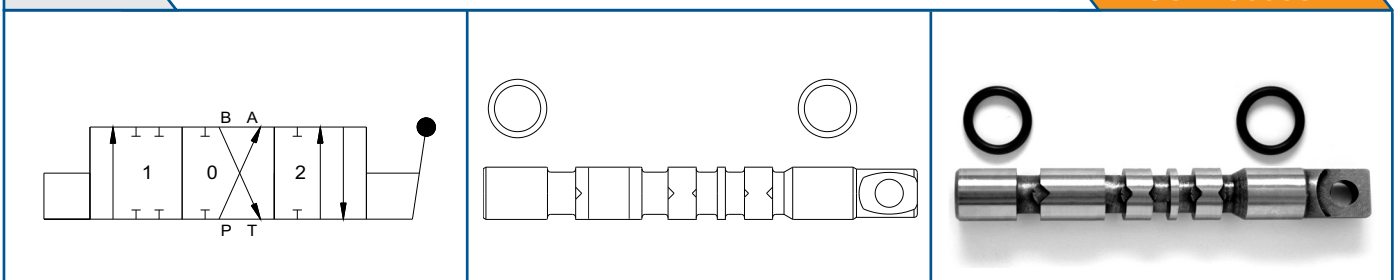
COD. 560420



4-WAY / 4-POSITION, FLOATING SPOOL. Same features as spool K but with threaded spool end. Required to assembly the joystick (JS) or for special applications. To be combined only with spool controls 16 or 54. Special machining on the body is required.

## SPOOL Y

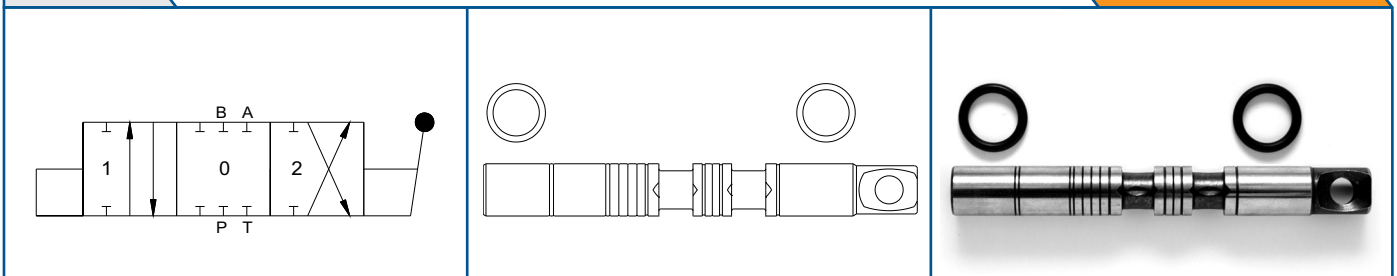
COD. 560084



4-WAY / 3-POSITION SPOOL. Provides control of bi-directional motors. Required when the sequence of the stop and go of the motor is different than usual. The neutral position is in position 1.

## SPOOL M

COD. 560082

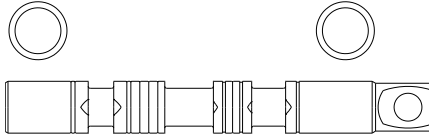
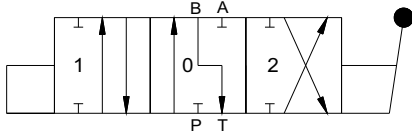


4-WAY / 3-POSITION SPOOL. Same features as spool A to be used in a closed center system.



**SPOOL E**

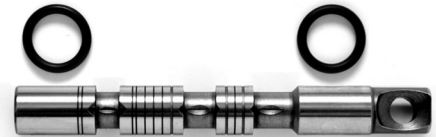
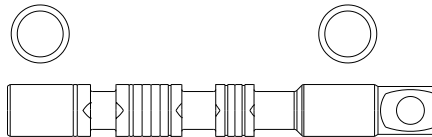
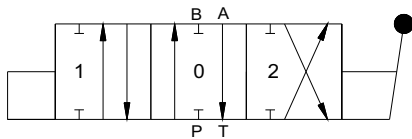
**COD. 560079**



4-WAY / 3-POSITION SPOOL. Same features as spool A. In position 0 B port is connected to the tank.

**SPOOL F**

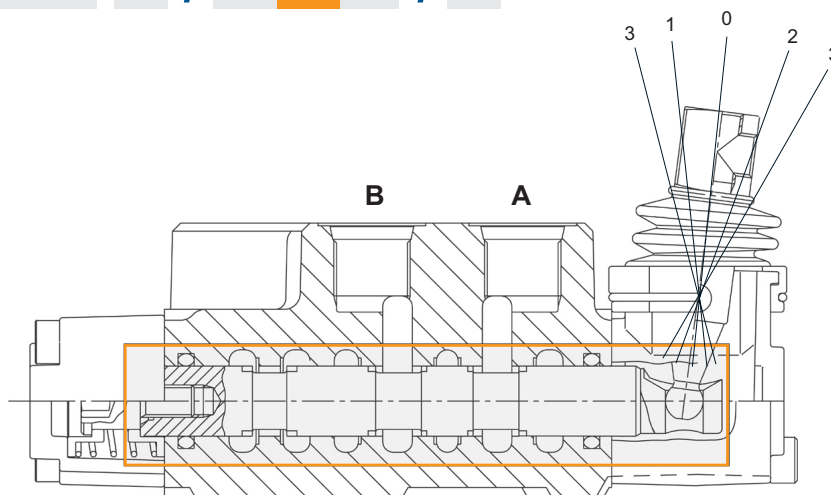
**COD. 560080**



4-WAY / 3-POSITION SPOOL. Same features as spool A. In position 0 A port is connected to the tank.

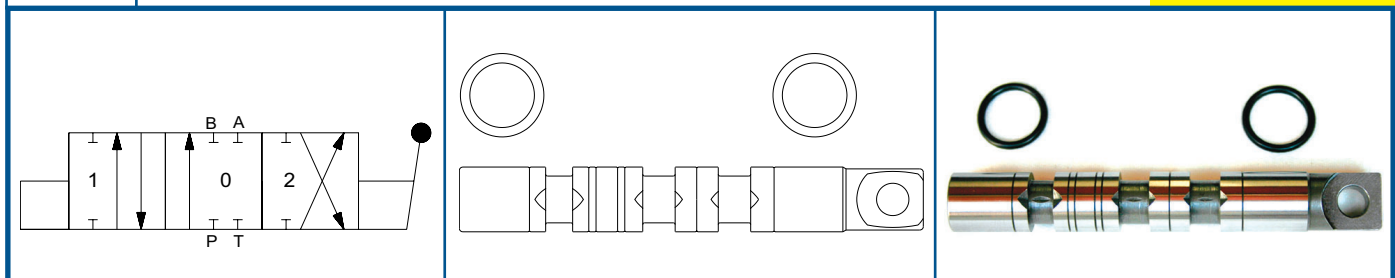
**SPOOLS**

BM \_\_ / \_\_



**SPOOL A**

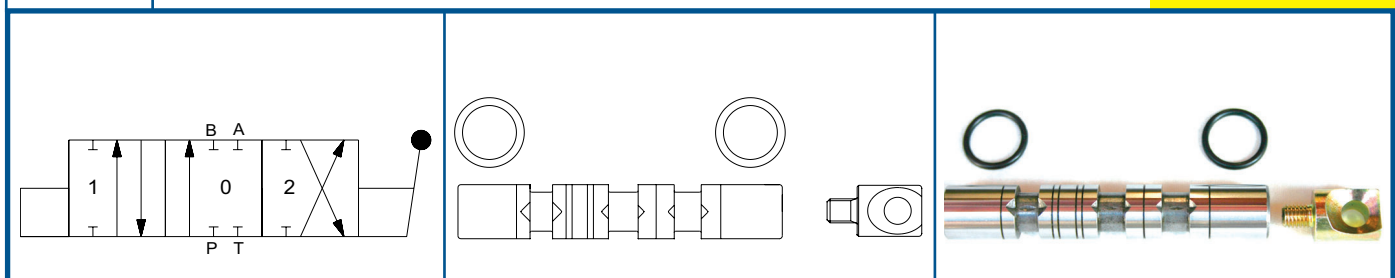
**COD. 560096**



4-WAY / 3-POSITION SPOOL. Provides control of double-acting cylinders or bi-directional hydraulic motors. In position 0 work ports are blocked.

**SPOOL AS**

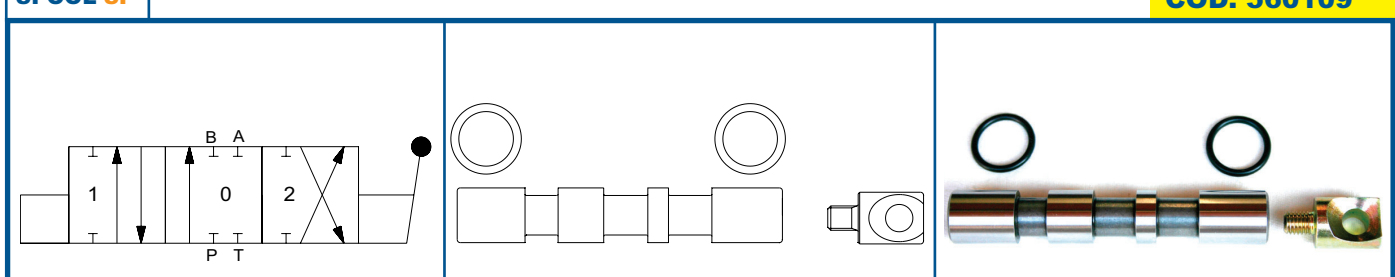
**COD. 560111**



4-WAY / 3-POSITION SPOOL. Same features as spool A but with threaded spool end. Required to assembly the joystick (JS) or for special applications.

**SPOOL SP**

**COD. 560109**

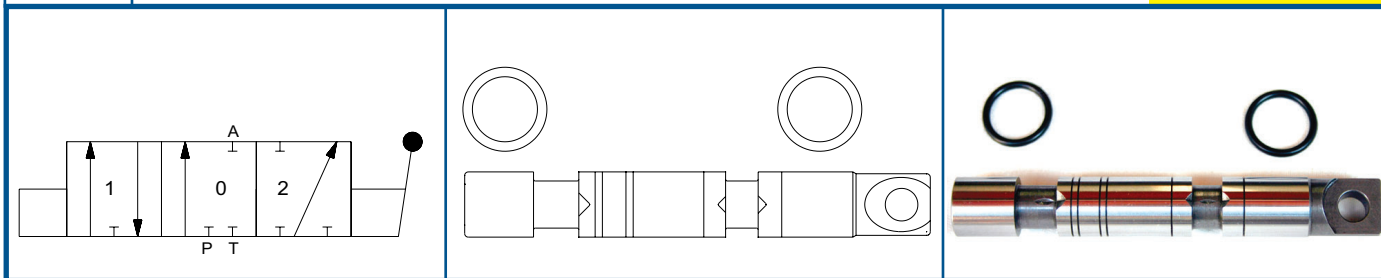


4-WAY / 3-POSITION SPOOL. Same features as spool AS but without metering. Required for special applications (i.e. woodsplitter).



**SPOOL B**

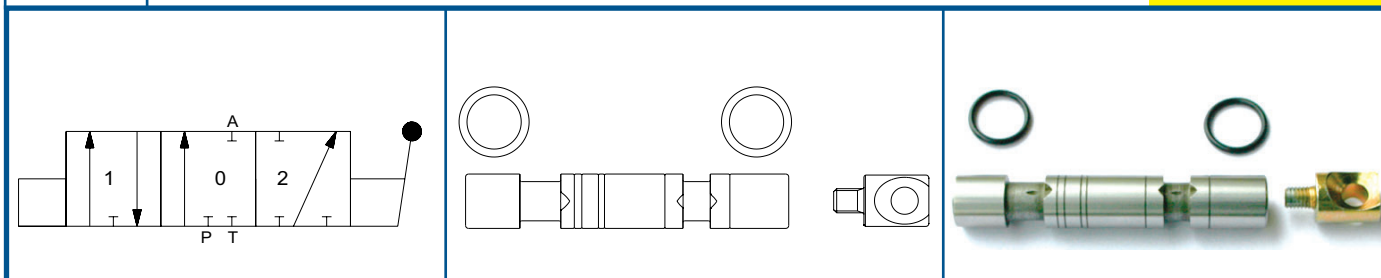
**COD. 560097**



3-WAY / 3-POSITION SPOOL. Provides control of single-acting cylinders or start and stop of uni-directional hydraulic motors. In position 0 work port is blocked. B port is plugged.

**SPOOL BS**

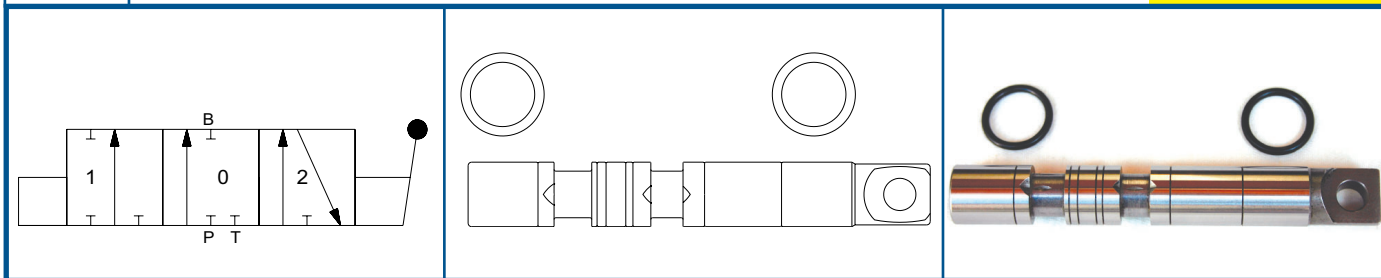
**COD. 560112**



3-WAY / 3-POSITION SPOOL. Same features as spool B but with threaded spool end. Required to assembly the joystick (JS) or for special applications.

**SPOOL C**

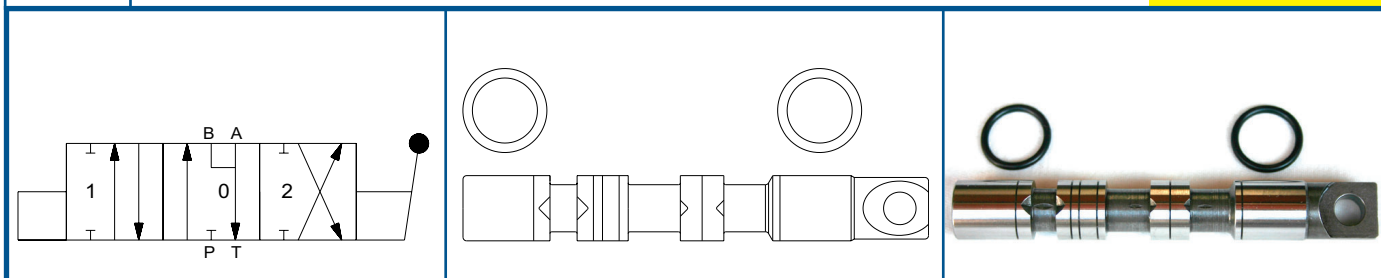
**COD. 560098**



3-WAY / 3-POSITION SPOOL. Provides control of single-acting cylinders or start and stop of uni-directional hydraulic motors. In position 0 work port is blocked. A port is plugged.

**SPOOL D**

**COD. 560099**



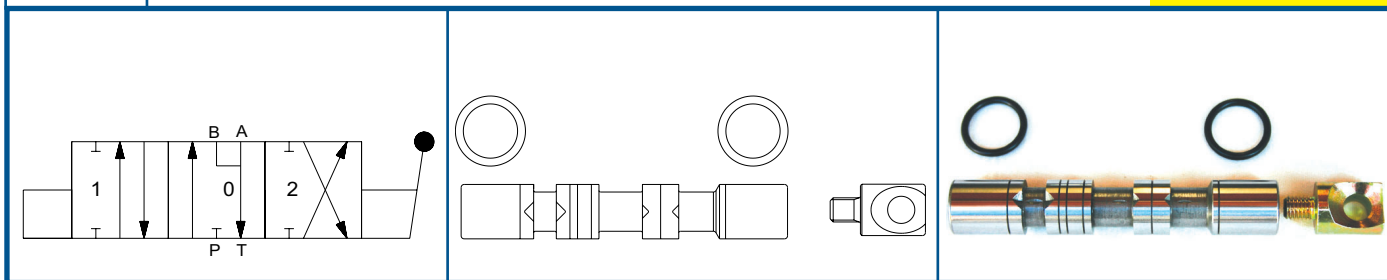
4-WAY / 3-POSITION SPOOL, OPEN CENTER (MOTOR SPOOL). Provides control of double acting cylinders or bi-directional hydraulic motors. Allows a cylinder to float or a motor to wheel free when the spool is in position 0. Work ports are open to the tank port when the spool is in position 0.

**SPOOLS**

BM \_\_\_ / \_\_\_

**SPOOL DS**

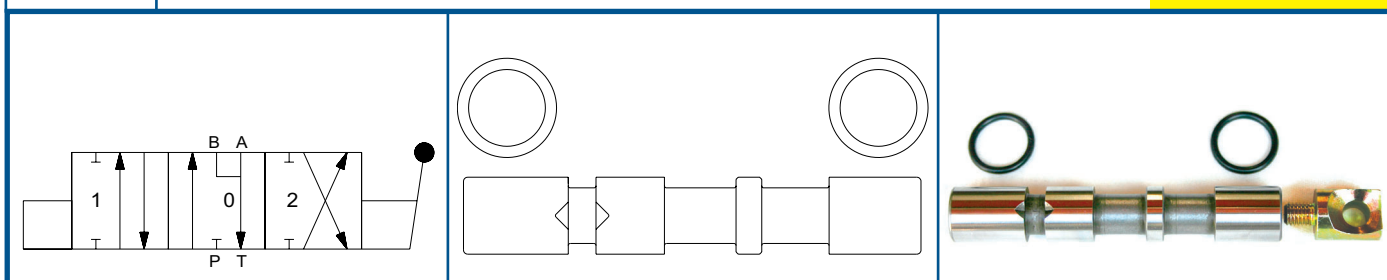
**COD. 560114**



4-WAY / 3-POSITION SPOOL, OPEN CENTER (MOTOR SPOOL). Same features of spool D but with threaded spool end. Required to assemble the joystick (JS) or for special applications.

**SPOOL INS**

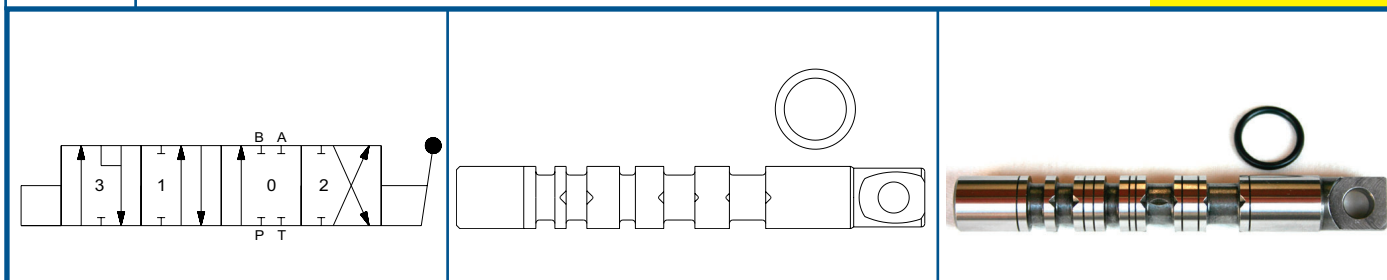
**COD. 560110**



4-WAY / 3-POSITION SPOOL, OPEN CENTER (MOTOR SPOOL). Same features as spool DS but without metering. Required for special applications.

**SPOOL K**

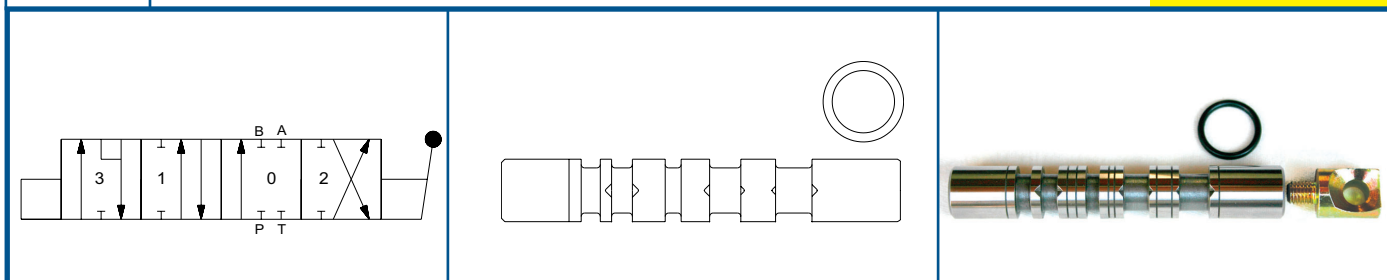
**COD. 560102**



4-WAY / 4-POSITION, FLOATING SPOOL. Same features as spool A with the addition of a fourth floating position. The floating position allows a cylinder to float or a motor to wheel free when the spool is in position 3. To be combined only with spool controls 16 or 54. Special machining on the body is required.

**SPOOL KS**

**COD. 560421**

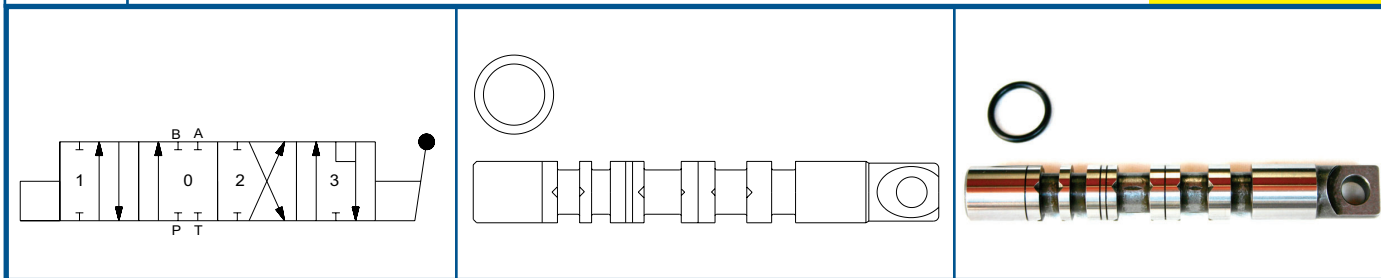


4-WAY / 4-POSITION, FLOATING SPOOL. Same features as spool K but with threaded spool end. Required to assemble the joystick (JS) or for special applications. To be combined only with spool controls 16 or 54. Special machining on the body is required.



**SPOOL L**

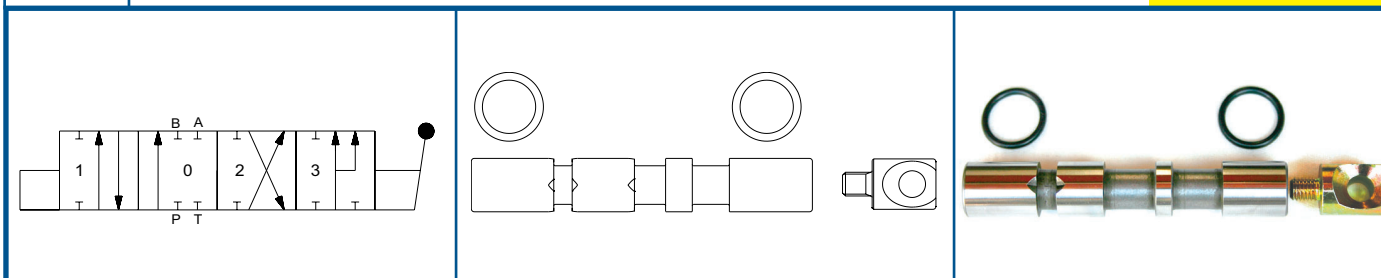
**COD. 560103**



4-WAY / 4-POSITION, FLOATING SPOOL. Same features as spool A with the addition of a fourth floating position. The floating position allows a cylinder to float or a motor to wheel free when the spool is in position 3. To be combined only with spool controls 12, 13 or 53. Special machining on the body is required.

**SPOOL Z**

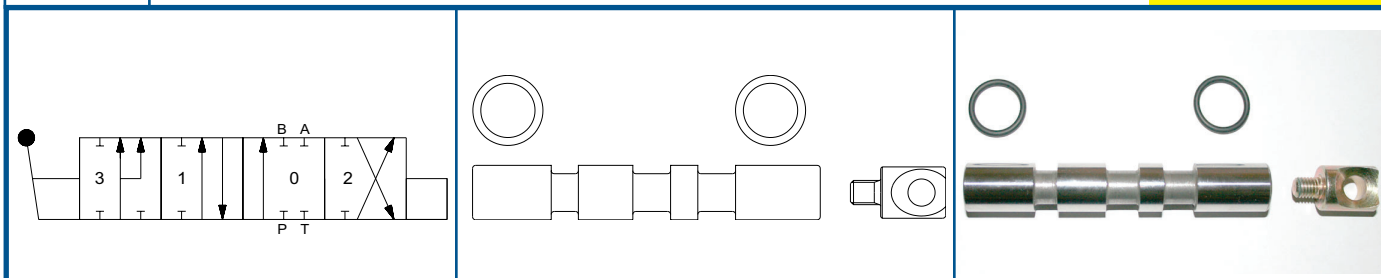
**COD. 560108**



4-WAY / 4-POSITION REGENERATIVE SPOOL. Same features as spool A with the addition of a fourth regenerative circuit in position 3. The regenerative circuit allows the cylinder to increase its speed, in one way only, adding the oil returning from the rod chamber of the cylinder to the pump flow. To be combined only with spool controls 14, 42, 43 or 44. Special machining on the body is required.

**SPOOL WS**

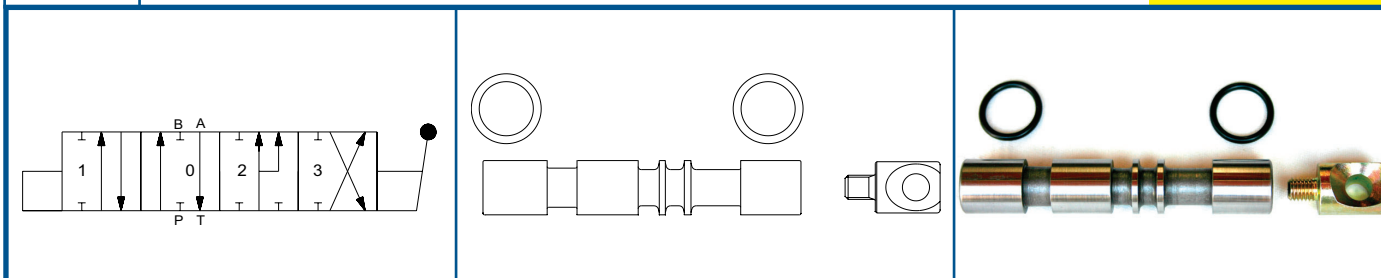
**COD. 560772**



4-WAY / 4-POSITION REGENERATIVE SPOOL. Same features as spool Z but with threaded spool end. To be combined only with spool controls 42 or 43. Special machining on the body is required.

**SPOOL ZI**

**COD. 560645**



4-WAY / 4-POSITION REGENERATIVE SPOOL. Same features as spool Z. The fourth regenerative circuit is in position 2. To be combined only with spool control 17. Special machining on the body is required.

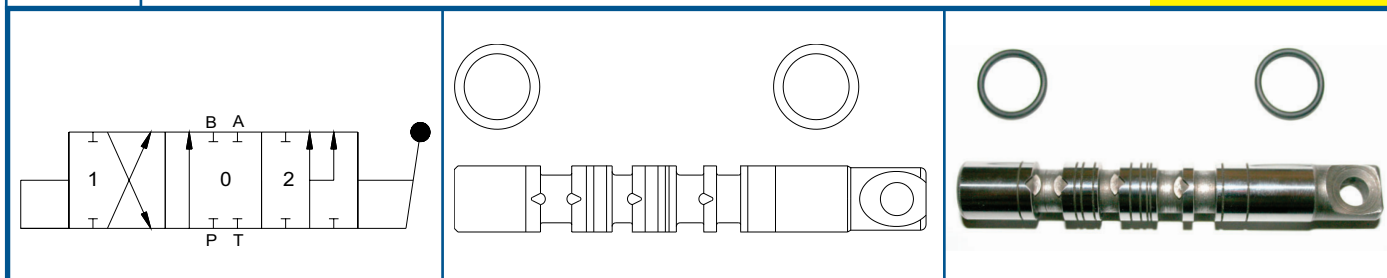


**SPOOLS**

BM \_\_ / \_\_ / \_\_ / \_\_ / \_\_ / \_\_

**SPOOL R**

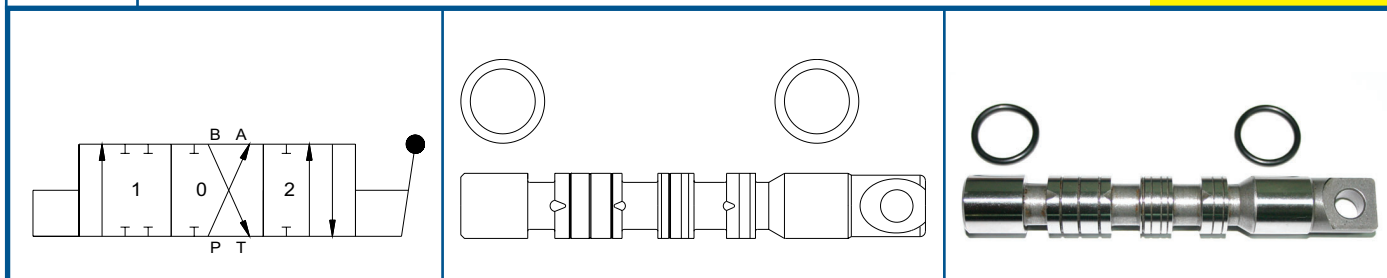
**COD. 560228**



4-WAY / 3-POSITION REGENERATIVE SPOOL. Provides control of double-acting cylinders or bi-directional hydraulic motors. The regenerative circuit is in position 2. The regenerative circuit allows the cylinder to increase its speed, in one way only, adding the oil returning from the rod chamber of the cylinder to the pump flow. Special machining on the body is required.

**SPOOL Y**

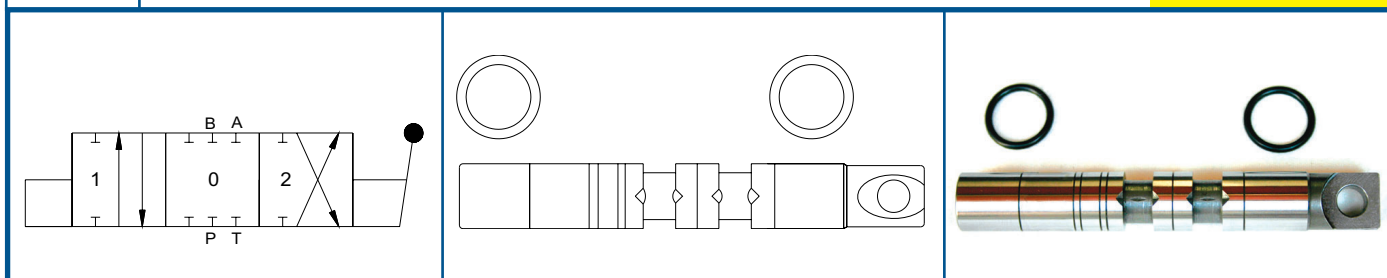
**COD. 560107**



4-WAY / 3-POSITION SPOOL. Provides control of bi-directional motors. Required when the sequence of the stop and go of the motor is different than usual. The neutral position is in position 1.

**SPOOL M**

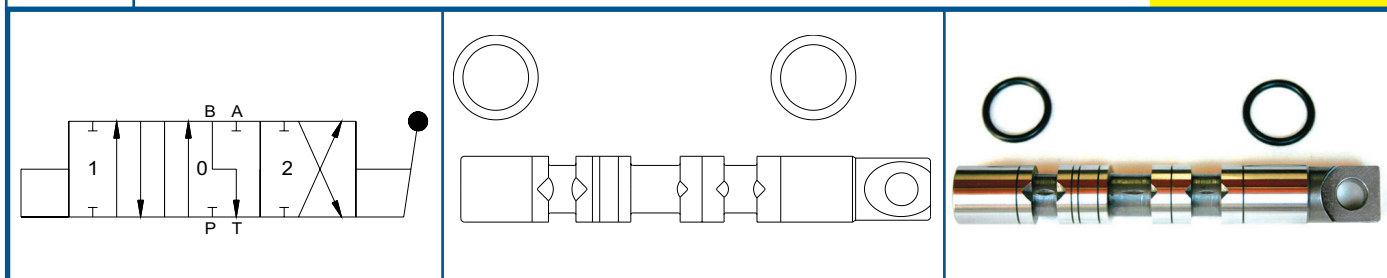
**COD. 560104**



4-WAY / 3-POSITION SPOOL. Same features as spool A to be used in a closed center system.

**SPOOL E**

**COD. 560100**

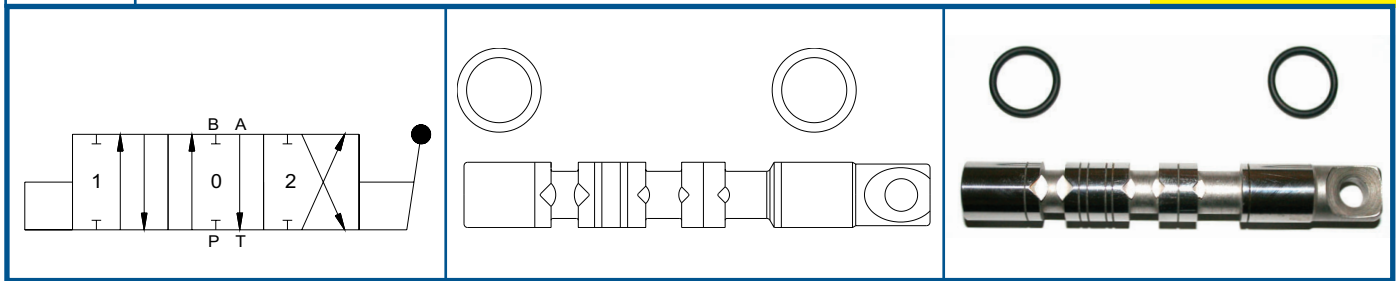


4-WAY / 3-POSITION SPOOL. Same features as spool A. In position 0 B port is connected to the tank. Required for special applications.

BM \_\_\_ / \_\_\_ / \_\_\_ / \_\_\_ / \_\_\_

SPOOL F

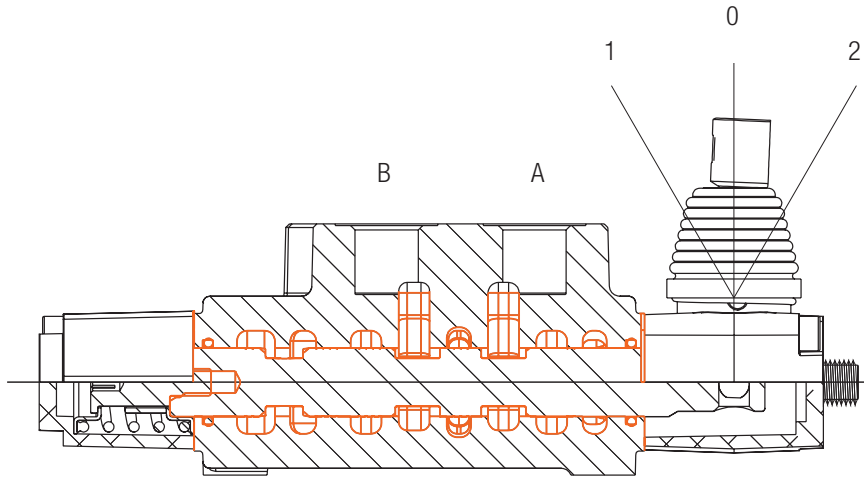
COD. 560101



4-WAY / 3-POSITION SPOOL. Same features as spool A. In position 0 A port is connected to the tank. Required for special applications.

# RICAMBI

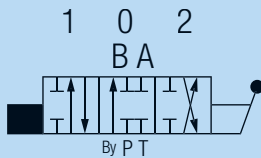
## Spole



A/B = Utilizzi  
 By = Bypass  
 P = Pressione  
 T = Scarico

### SPOLA A | 4 VIE / 3 POSIZIONI

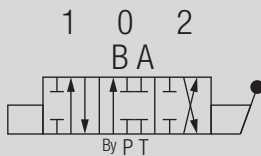
Codice 560381



Fornisce il controllo di cilindri doppio effetto o motori idraulici bidirezionali. In posizione 0 gli utilizzi sono chiusi.

### SPOLA AS | 4 VIE / 3 POSIZIONI

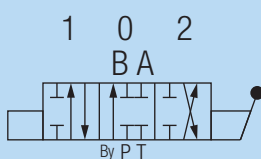
Codice 560852



Stesse caratteristiche della spola A ma con estremità filettata. Necessaria per assemblare il joystick (JS), per distributori con entrata a destra o per applicazioni speciali.

### SPOLA SP | 4 VIE / 3 POSIZIONI

Codice 560337

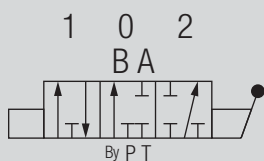


Stesse caratteristiche della spola A ma senza regolazione (*metering*). Necessaria per applicazioni speciali (i.e. spaccalegna).

# RICAMBI

## SPOLA B | 3 VIE / 3 POSIZIONI

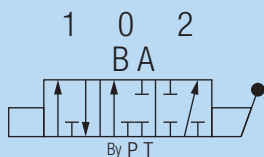
**Codice 560378**



Fornisce il controllo a cilindri a semplice effetto o per l'accensione e spegnimento di motori unidirezionali. In posizione 0 l'utilizzo A è chiuso. L'utilizzo B è tappato.

## SPOLA BS | 3 VIE / 3 POSIZIONI

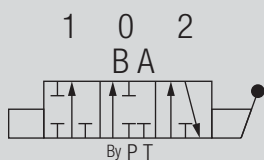
**Codice 560126**



Stesse caratteristiche della spola B ma con estremità filettata. Necessaria per assemblare il joystick (JS), per distributori con entrata destra o per applicazioni speciali.

## SPOLA C | 3 VIE / 3 POSIZIONI

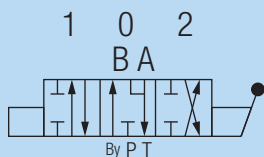
**Codice 560138**



Fornisce il controllo a cilindri a semplice effetto o per l'accensione e spegnimento di motori unidirezionali. In posizione 0 l'utilizzo B è chiuso. L'utilizzo A è tappato.

## SPOLA D | 4 VIE / 3 POSIZIONI, CENTRO APERTO

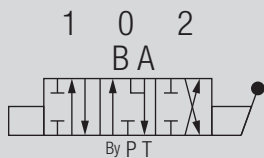
**Codice 560379**



Spola a centro aperto (motore). Fornisce il controllo a cilindri doppio effetto o a motori bidirezionali. Consente ad un cilindro di flottare o ad un motore di girare liberamente quando la spola è in posizione 0. In posizione 0 gli utilizzi sono collegati allo scarico.

## SPOLA DS | 4 VIE / 3 POSIZIONI, CENTRO APERTO

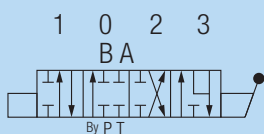
**Codice 560128**



Stesse caratteristiche della spola D ma con estremità filettata. Necessaria per assemblare il joystick (JS), per distributori con entrata a destra o per applicazioni speciali.

## SPOLA L | 4 VIE / 4 POSIZIONI, SPOLA FLOTTANTE

**Codice 560142**

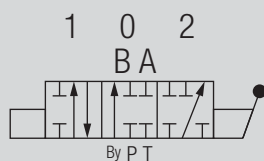


Stesse caratteristiche della spola A con l'aggiunta di una quarta posizione flottante. La posizione flottante permette al cilindro di flottare o al motore di ruotare liberamente quando la spola è in posizione 3. Da combinare solo con i posizionatori 12 o 13. Richiede lavorazione speciale sul corpo.

# RICAMBI

## SPOLA S | 4 VIE / 3 POSIZIONI, SPOLA RIGENERATIVA (BM70 AUTOSPEED)

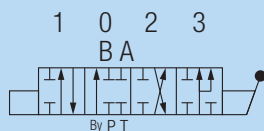
**Codice 560874**



Spola rigenerativa per BM70 Autospeed. In posizione 2, con bassa pressione (fino a 70 bar), aumenta la velocità di apertura del cilindro; superati i 70 bar, il circuito è un doppio effetto standard.

## SPOLA Z | 4 VIE / 4 POSIZIONI, SPOLA RIGENERATIVA

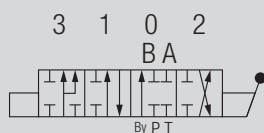
**Codice 560146**



Spola rigenerativa in posizione 3. Il circuito rigenerativo permette al cilindro di aumentare la sua velocità, in una sola direzione, aggiungendo l'olio che torna dalla camera del cilindro al flusso della pompa. Da combinare solo con i posizionatori 14, 26, 42 o 43. Richiede lavorazione speciale sul corpo.

## SPOLA WS | 4 VIE / 4 POSIZIONI, SPOLA RIGENERATIVA

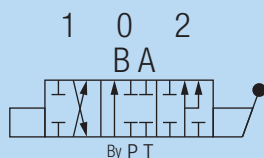
**Codice 560807**



Spola doppio effetto rigenerativa in posizione 3 per distributori con entrata a destra. Il circuito rigenerativo permette al cilindro di aumentare la sua velocità, in una sola direzione, aggiungendo l'olio che torna dalla camera del cilindro al flusso della pompa. Da combinare solo con i posizionatori 42 e 43. Richiede lavorazione speciale sul corpo.

## SPOLA R | 4 VIE / 3 POSIZIONI, SPOLA RIGENERATIVA

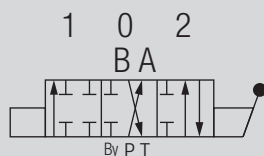
**Codice 560474**



Spola rigenerativa in posizione 2. Il circuito rigenerativo permette al cilindro doppio effetto di aumentare la sua velocità, in una sola direzione, aggiungendo l'olio che torna dalla camera del cilindro al flusso della pompa. Richiede lavorazione speciale sul corpo.

## SPOLA Y | 4 VIE / 3 POSIZIONI

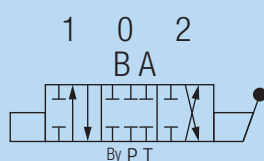
**Codice 560778**



Fornisce il controllo ad un motore bidirezionale. La posizione neutrale è in posizione 1. Richiede lavorazione speciale sul corpo.

## SPOLA M | 4 VIE / 3 POSIZIONI

**Codice 560143**

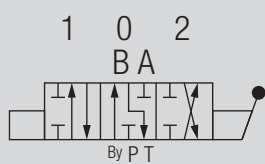


Stesse caratteristiche della spola A, da usarsi in sistemi con circuito a centro chiuso (John Deere).

# RICAMBI

## SPOLA E | 4 VIE / 3 POSIZIONI

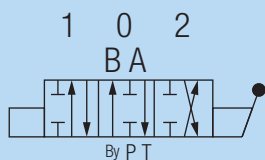
Codice 560140



Stesse caratteristiche della spola A. In posizione 0 l'utilizzo B è collegato allo scarico.

## SPOLA F | 4 VIE / 3 POSIZIONI

Codice 560141



Stesse caratteristiche della spola A. In posizione 0 l'utilizzo A è collegato allo scarico.