

Oleodinamica Marchesini V0421/RP18 double counterbalance valve for closed-centre circuits

Manufacturer: Oleodinamica Marchesini
Manufacturer part number / published order designation: V0421/RP18
Published model: V0421/RP18

About this compilation

Prepared by Hydmaster from selected manufacturer documentation. Original technical pages follow without cropped drawings, rewritten data or altered units. This cover and index are Hydmaster editorial material, not a manufacturer-issued exact-execution datasheet.

Coverage: selected pages relevant to the identified size and configuration. Other options or neighbouring models retained on an original page apply only where explicitly identified.

Execution notes and conditions

Exact observed complete article, no generated order combinations or delivered preset.

Representative factory family image; exact option-dependent mass and envelope not inferred.

Exact manufacturer Related label and exact branded supplier 1:8 offer; attached original is BASE FAMILY REFERENCE ONLY. Printed 1:4.5 base ratings, dimensions and circuit are not certified for this RP18 execution. No numeric maximum flow, pressure, mass, preset or dimensions assigned.

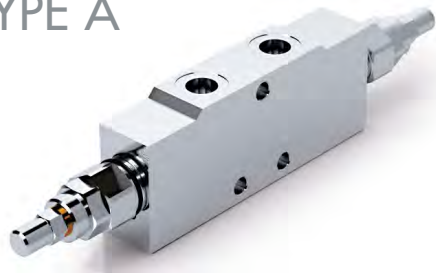
Source-page index

Source page numbers below are physical pages of each complete original PDF. The original printed page labels and technical content remain unchanged. Compiled page numbers count this cover/index.

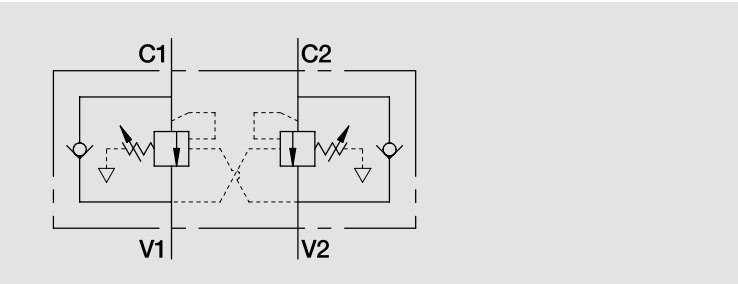
Source A: Oleodinamica Marchesini VBCD base family reference; RP18-specific ratings and dimensions not established

Original pages	Compiled pages	Relevant content
1	2	Complete unaltered original family spread; exact applicability and limitations stated on editorial index

VALVOLE DI BLOCCO E CONTROLLO DISCESA
A DOPPIO EFFETTO TIPO A CENTRO CHIUSO
DOUBLE OVERCENTRE VALVES FOR CLOSED CENTRE
TYPE A



SCHEMA IDRAULICO
HYDRAULIC DIAGRAM



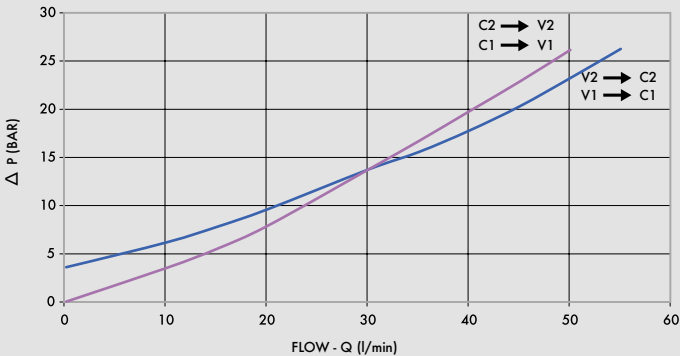
IMPIEGO:
Valvola utilizzata per controllare il movimento e il blocco dell'attuatore in entrambe le direzioni realizzando la discesa controllata del carico che non sfugge trascinato dal proprio peso, in quanto la valvola non consente alcuna cavitazione dell'attuatore. È insensibile alle contropressioni e trova quindi impiego dove le normali overcentre non funzionano correttamente al controllo del carico, consente di utilizzare la pressione impostata dall'impianto per azionare più attuatori in serie. Il tipo "A" si differenzia dal tipo " non A" per la posizione degli attacchi e per il rapporto di pilotaggio."

MATERIALI E CARATTERISTICHE:
Corpo: acciaio zincato.
Componenti interni: acciaio temprato termicamente e rettificato.
Guarnizioni: BUNA N standard.
Tenuta: trafilemento trascurabile.
Taratura standard: 320 Bar.
La taratura della valvola deve essere almeno 1,3 volte superiore alla pressione indotta dal carico per consentire alla valvola di chiudersi anche quando sottoposta alla pressione corrispondente al carico massimo.

MONTAGGIO:
Collegare V1 e V2 all'alimentazione e C1 e C2 all'attuatore da controllare.

A RICHIESTA
• pressione di taratura diversa da quella standard.
• piombatura (CODICE/P000) e predisposizione alla piombatura (CODICE/PP).

PERDITE DI CARICO
PRESSURE DROP CURVE



USE AND OPERATION:
These valves are used to control the actuator movements and block it in both directions. In order to have the descent of a load under control and avoid the load's weight being carried away the valve will prevent any cavitation of the actuator. These valves are ideal when normal overcentre valves doesn't work properly as it's not sensitive to back pressure. They also allow the system pressure to move multiple actuators in series. Type "A" is different due to the connection positions and the pilot ratio.

MATERIALS AND FEATURES:
Body: zinc-plated steel.
Internal parts: hardened and ground steel.
Seals: BUNA N standard.
Leakage: negligible leakage.
Standard setting: 320 Bar.
Valve setting must be at least 1.3 times more than load pressure in order to enable the valve to close even when subjected to the maximum load pressure.

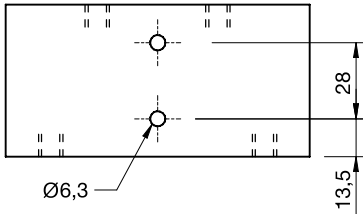
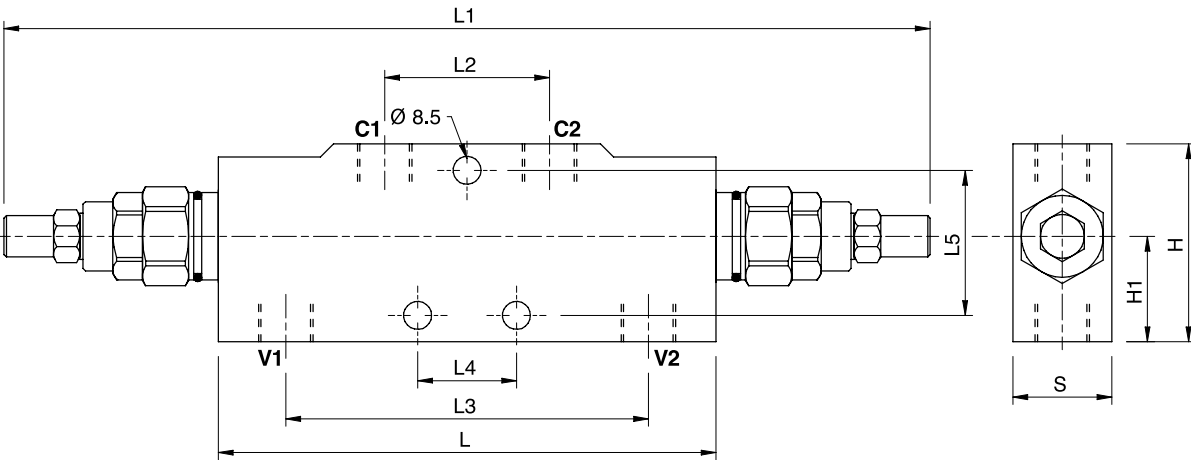
CONNECTIONS:
Connect V1 and V2 to the supply, C1 and C2 to the actuator to be controlled.

ON REQUEST
• other pressure settings are available
• sealing cap (CODE/P) and arrangement for sealing cap (CODE/PP)

Temperatura olio: 50°C - Viscosità olio: 30 cSt
Oil temperature: 50° C - Oil viscosity: 30 cSt

CODICE CODE	SIGLA TYPE	RAPP. PILOT PILOT RATIO	PORTATA MAX MAX FLOW lt. / min	PRESSIONE MAX MAX PRESSURE Bar
V0389	VBCD 1/4" DE A CC	1: 4,5	20	350
V0421	VBCD 3/8" DE A CC	1: 4,5	40	350
V0423	VBCD 1/2" DE A CC	1: 4,5	60	350

V0389 - VBCD 1/4" DE A CC



CODICE CODE	SIGLA TYPE	V1 - V2 C1 - C2	L	L1	L2	L3	L4	L5	H	H1	S	PESO WEIGHT kg
V0389	VBCD 1/4" DE A CC	G 1/4"	125	261	38	94	/	28	55	28	30	1,810
V0421	VBCD 3/8" DE A CC	G 3/8"	151	281	50	110	30	44	60	32	30	2,058
V0423	VBCD 1/2" DE A CC	G 1/2"	151	281	50	110	30	44	60	32	30	1,994