Oleodinamica Marchesini V0490/SF180 dual-branch motor relief valve with brake release

Manufacturer: Oleodinamica Marchesini

Manufacturer part number / published order designation: V0490/SF180

Published model: V0490/SF180

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

Selected spring range not printed in exact supplier type; no numeric range/preset inferred from suffix.

Exact original SF circuit row and G1/8 SF table cell reviewed; standard/AC rows not assigned to SF.

Exact actually offered fullcode + primary original circuit/option legend, never ordering-matrix expansion. Base circuit row mass qualified; no preset or option envelope invented.

Source-page index

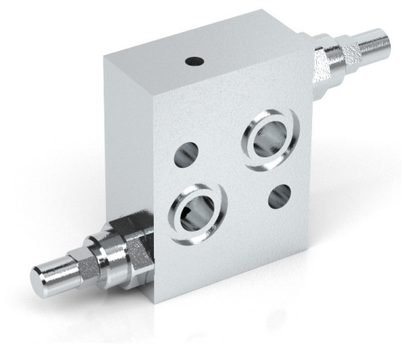
Source page numbers below are physical pages of each complete original PDF. The original printed page labels and technical content remain unchanged. Compiled page numbers count this cover/index.

Source A: Oleodinamica Marchesini VAU OMS exact circuit execution reference

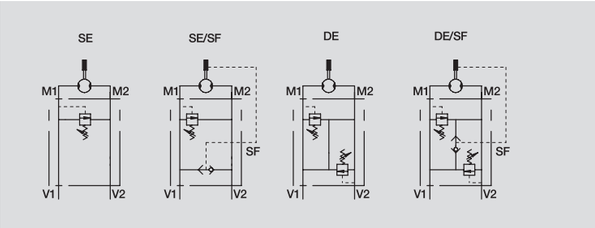
Original pages	Compiled pages	Relevant content
1	2	Original matching SE/DE/SF circuit row, spring and adjustment legends, port table and interface drawing

VALVOLE ANTIURTO FLANGIABILI SU MOTORI DANFOSS SERIE OMS

DUAL CROSS LINE RELIEF VALVES FLANGEABLE ON DANFOSS MOTORS OMS

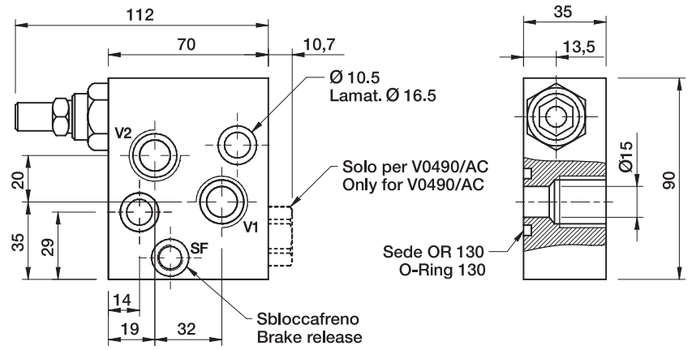


SCHEMA IDRAULICO
HYDRAULIC DIAGRAM

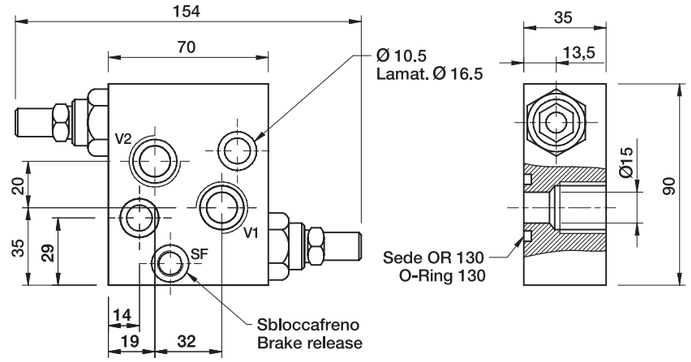


CODICE CODE	SIGLA TYPE	PORTATA MAX MAX FLOW l/min	PRESSIONE MAX MAX PRESSURE Bar
V0489	VAU 1/2" SE OMS	50	350
V0489/SF	VAU 1/2" SE OMS SF	50	350
V0490	VAU 1/2" DE OMS	50	350
V0490/SF	VAU 1/2" DE OMS SF	50	350
V0490/AC	VAU 1/2" OMS AC	50	350

V0489
V0489/SF
V0490/AC



V0490
V0490/SF



IMPIEGO:
Costituite da due valvole di massima pressione con scarico incrociato, sono utilizzate per limitare la pressione in uno (SE) o entrambi i rami di un motore (DE). La flangiatura diretta, adatta per motori Danfoss della serie OMS, garantisce la massima sicurezza, minime perdite di carico e compattezza d'installazione.

MATERIALI E CARATTERISTICHE:
Corpo: acciaio zincato.
Componenti interni: acciaio temprato termicamente e rettificato.
Guarnizioni: BUNA N standard.
Tenuta: a cono guidato. Trafilamento trascurabile.

MONTAGGIO:
Flangiare M1 e M2 al motore e collegare le bocche V1 e V2 all'alimentazione.

A RICHIESTA
- molle per diversi campi di taratura (vedi tabella)
- pressione di taratura diversa da quella standard (CODICE/T000 specificando il valore di taratura)

PRESSIONE / PORTATA
PRESSURE / FLOW

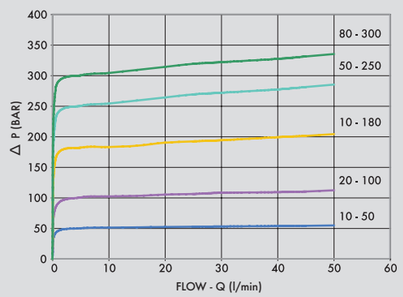
USE AND OPERATION:
Made up by two cross port relief valves, these valves are used to limit the pressure in the both (DE) or one (SE) ports of a hydraulic motor to a certain setting.
Direct flange mounting for Danfoss motors type OMS provides maximum safety, very low pressure drop and a robust installation.

MATERIALS AND FEATURES:
Body: zinc-plated steel.
Internal parts: hardened and ground steel.
Seals: BUNA N standard.
Leakage: Guided poppet - negligible leakage.

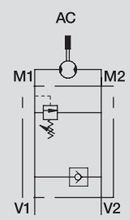
CONNECTIONS:
Flange M1 and M2 directly to the motor and connect ports V1 and V2 to the supply.

ON REQUEST
- different setting range (see the table)
- other setting available (CODE/T000 please specify the desired setting)

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



SCHEMA IDRAULICO (con anticavitazione - AC)
HYDRAULIC DIAGRAM (with anticavitation - AC)



CODICE CODE	SIGLA TYPE	V1 - V2 GAS	SF GAS	PESO/ WEIGHT Kg
V0489	VAU 1/2" SE OMS	G 1/2"	-	1,462
V0489/SF	VAU 1/2" SE OMS SF	G 1/2"	G 1/8"	1,389
V0490	VAU 1/2" DE OMS	G 1/2"	-	1,326
V0490/SF	VAU 1/2" DE OMS SF	G 1/2"	G 1/8"	1,326
V0490/AC	VAU 1/2" OMS AC	G 1/2"	-	1,417

MOLLE - SPRINGS

Campo di taratura Setting range (bar)	Incremento bar per giro Pressure increase (bar/turn) Q= 4l/min	Taratura standard Standard setting (bar)
10-50*	5	30
20-100	15	75
10-180 standard	30	90
50-250	45	130
80-300	60	150

*Per tarature inferiori a 70 Bar: Q = 12 l/min *For setting less than 70 Bar: Q = 12 l/min

REGOLAZIONE - ADJUSTEMENT

CODICE/V • CODE/V	Volantino	• Handknob
CODICE/PP • CODE/PP	Predisposizione alla piombatura	• Arranged for sealing cap
CODICE/P • CODE/P	Piombatura	• Sealing cap