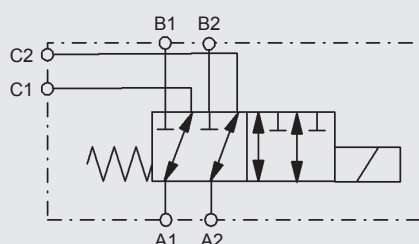




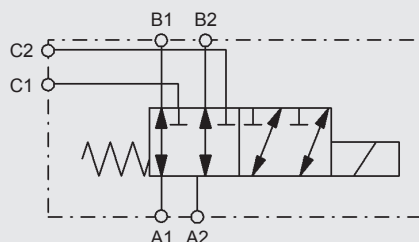
6/2 Directional Valve MWV 6/2-12

Circuit symbols

Version 01



Version 02



Applications

The valve works as a selector valve between a supply and two hydraulic actuators. It enables for example two different hydraulic cylinders to be controlled via a main control valve.

Typical application fields are front loaders, telescopic handlers and attachment devices.

General

- The magnetic actuation can be screw-mounted on any side, to the right or the left of the valve housing. The switching position in de-energised condition is therefore freely selectable.
- The standard solenoid coil with AMP male connector is protected against high switch-off peaks by a bidirectional freewheeling diode.
- The valve can be switched under load.
- The valve can be retrofitted.
- Emergency manual operation is possible by means of a pin tool.

Technical data

General data	
Weight	5.1 kg
Housing material	EN-GJL-300 (GG 30) Primed
Design/operation	Electrically operated
MTTF _d	150 years (see brochure D5.300 "Conditions and Instructions for Valves")
Hydraulic specifications	
Max. pressure	p _{max} = 250 bar
Max. flow rate	Q _{max} = 120 l/min
Max. pressure drop	See graphs 1 and 2
Switching capacity	See graph 3
Connections	Screw-in thread DIN ISO 6149 M22 x 1.5 Screw-in thread SAE J 514-3/4-16UNF Without drain point at 250 bar
Sealing material	NBR
Operating medium	Mineral oil to DIN 51524 Part 1 and Part 2
Viscosity range	2.8 to 380 mm ² /s
Ambient temperature range	-20 to +60 °C
Oil temperature range	-20 to +80 °C
Oil cleanliness	Permitted operating fluid contamination level acc. to ISO 4406 Class 20/18/15 or better
Electrical specifications	
Coil design	Connection plug to EN 175301-803 without bidirectional freewheeling diode Deutsch plug (2-pin, axial) with bidirectional freewheeling diode AMP Junior-Power-Timer (2-pin, radial) with bidirectional freewheeling diode
Coil power	35 W
Rated voltage	12 V with ±10 % voltage tolerance 24 V with ±10 % voltage tolerance
Rated resistance R20	4.1 Ω at 12 V 16.5 Ω at 24 V
Duty cycle	100 %
Protection class	IP65 to DIN 40050 if connector fitted correctly

Model code

(Also order example)

MWV 6/2-12 – M22 – NBR – 12 – DG – 01 – X

Mobile directional valve

Ports/switching positions

Nominal size NG

Connections

M22 x 1.5

3/4-16 UNF

Sealing material

NBR

Rated voltage

12 = 12 V DC

24 = 24 V DC

Connection code, electrical

DG = Contact box to EN 175301-803

DN = Deutsch plug, 2-pin, axial

DT = AMP Junior Timer, 2-pin, radial

Version

01 = Flow de-energised from A to C

02 = Flow de-energised from A to B

Series of valve

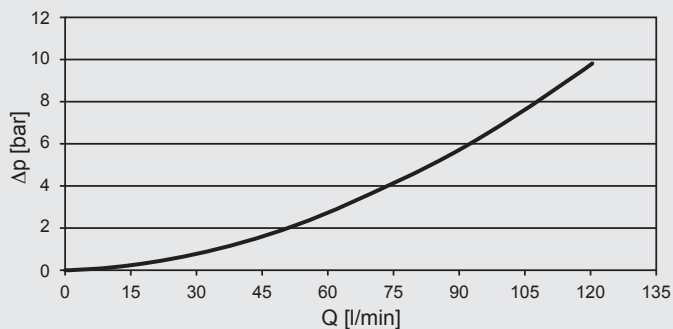
(Determined by manufacturer)

Other versions on request!

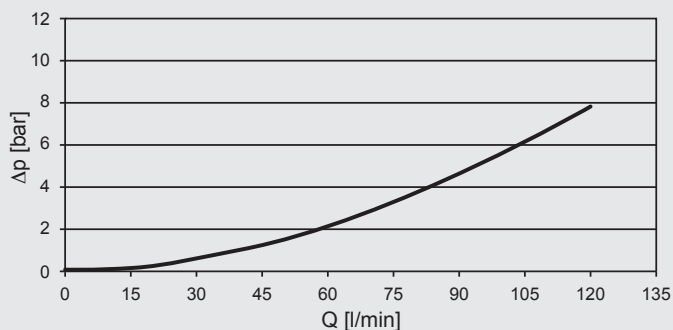
Performance

All tests were measured with oil ISO VG46 at +46 °C.

Pressure difference across applied flow rate

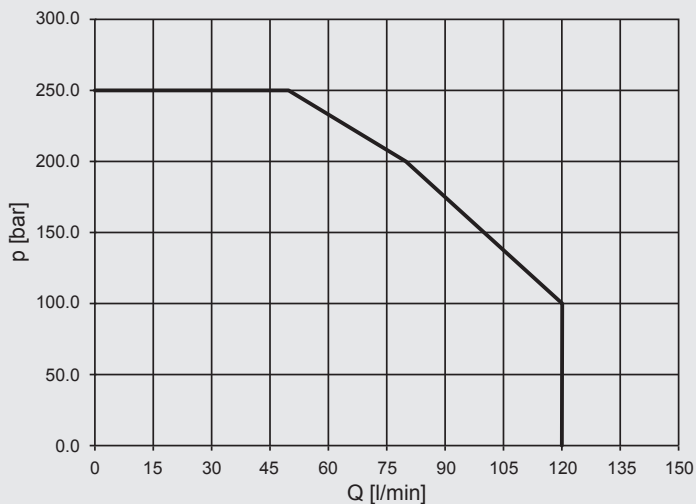


Graph 1: Pressure difference from port A to B in relation to the flow rate



Graph 2: Pressure difference from port A to C in relation to the flow rate

Switching capacity

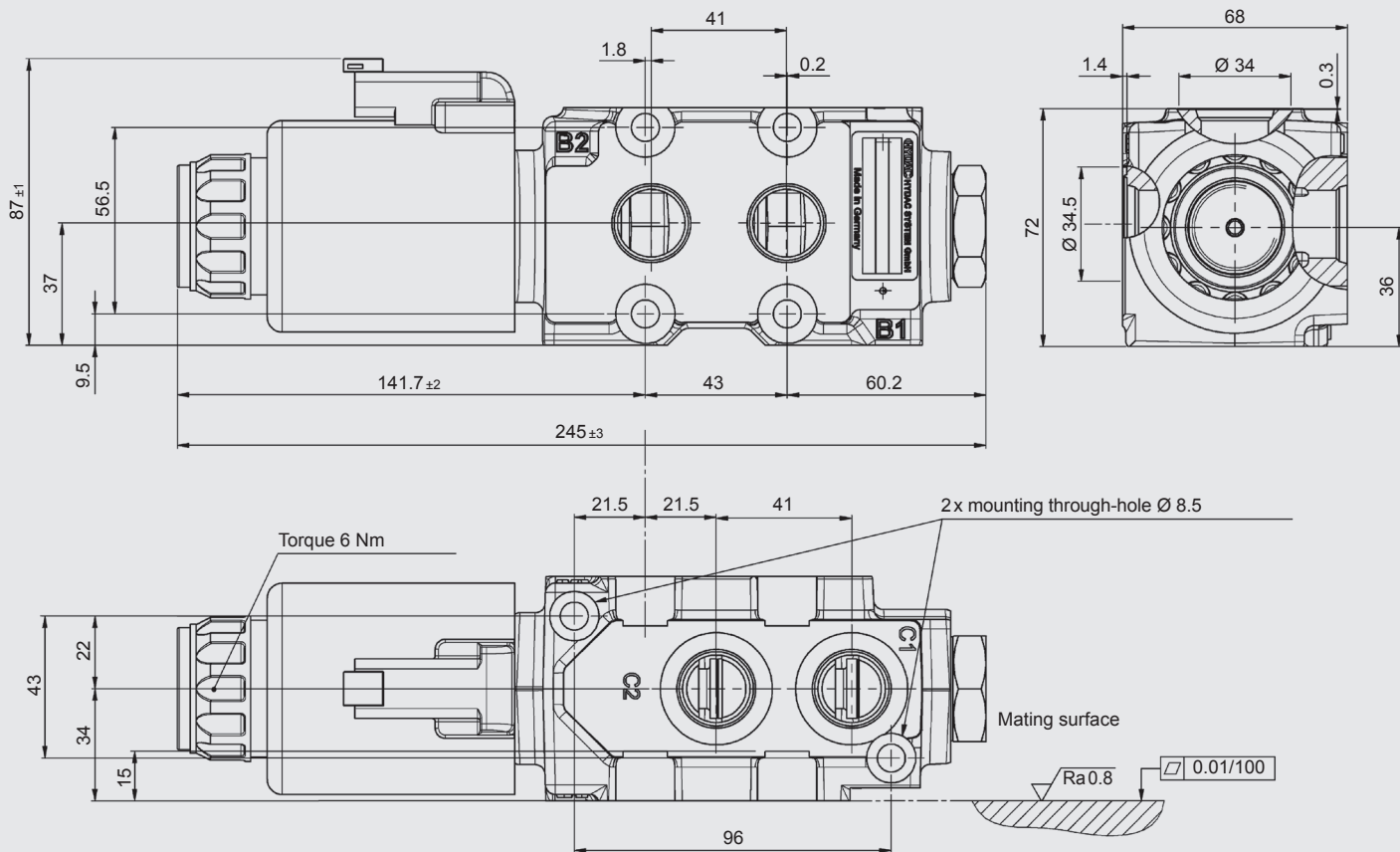


Graph 3: Switching capacity of valve (35-watt solenoid with 100 % duty cycle)

Dimensions

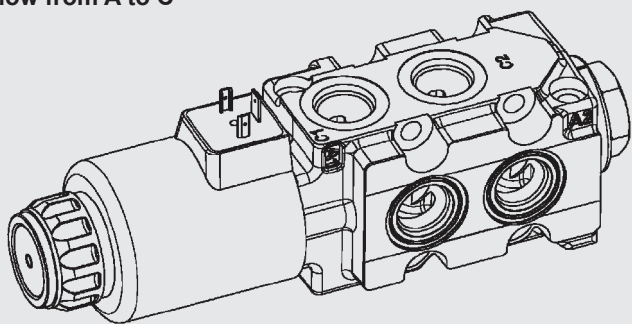
MWV 6/2-12-M22x1.5-NBR-12-DN-02-1

Flow from A to B



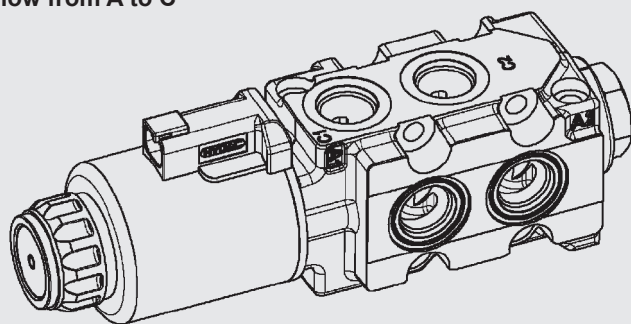
MWV 6/2-12-M22x1.5-NBR-12-DG-01-1

Flow from A to C



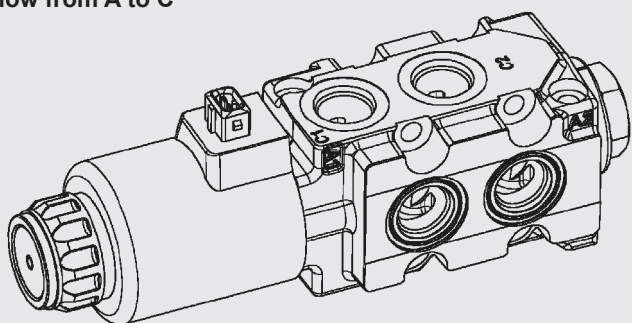
MWV 6/2-12-M22x1.5-NBR-24-DN-01-1

Flow from A to C



MWV 6/2-12-M22x1.5-NBR-12-DT-01-1

Flow from A to C



Preferred materials

Contact box to EN 175301-803

3157531	MWV 6/2-12-M22x1.5-NBR-12-DG-01-1
3192376	MWV 6/2-12-M22x1.5-NBR-12-DG-02-1
3245425	MWV 6/2-12-M22x1.5-NBR-24-DG-01-1
3245430	MWV 6/2-12-M22x1.5-NBR-24-DG-02-1
3358222	MWV 6/2-12-3/4-16UNF-NBR-12-DG-01-1
3271593	MWV 6/2-12-3/4-16UNF-NBR-12-DG-02-1
3358221	MWV 6/2-12-3/4-16UNF-NBR-24-DG-01-1
4318645	MWV 6/2-12-3/4-16UNF-NBR-24-DG-02-1

Deutsch plug DT04 with bidirectional freewheeling diode

4318647	MWV 6/2-12-M22x1.5-NBR-12-DN-01-1
3597529	MWV 6/2-12-M22x1.5-NBR-12-DN-02-1
4040270	MWV 6/2-12-M22x1.5-NBR-24-DN-01-1
4318648	MWV 6/2-12-M22x1.5-NBR-24-DN-02-1
3579640	MWV 6/2-12-3/4-16UNF-NBR-12-DN-01-1
3579644	MWV 6/2-12-3/4-16UNF-NBR-12-DN-02-1
4318649	MWV 6/2-12-3/4-16UNF-NBR-24-DN-01-1
4318650	MWV 6/2-12-3/4-16UNF-NBR-24-DN-02-1

AMP Junior Timer plug with bidirectional freewheeling diode

4084242	MWV 6/2-12-M22x1.5-NBR-12-DT-01-1
4318651	MWV 6/2-12-M22x1.5-NBR-12-DT-02-1
4318652	MWV 6/2-12-M22x1.5-NBR-24-DT-01-1
4318653	MWV 6/2-12-M22x1.5-NBR-24-DT-02-1
4318654	MWV 6/2-12-3/4-16UNF-NBR-12-DT-01-1
3370484	MWV 6/2-12-3/4-16UNF-NBR-12-DT-02-1
4318665	MWV 6/2-12-3/4-16UNF-NBR-24-DT-01-1
4318666	MWV 6/2-12-3/4-16UNF-NBR-24-DT-02-1

Note

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications and corrections.

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