POWER TRANSMISSION PRODUCTS

ACCESSORIES



PASSION TO PERFORM





A WORLDWIDE LEADER IN THE FIELD OF HYDRAULIC FILTRATION EQUIPMENT.

Our company started life in 1964, when Bruno Pasotto decided to attempt to cater for the requests of a market still to be fully explored, with the study, design, development, production and marketing of a vast range of filters for hydraulic equipment, capable of satisfying the needs of manufacturers in all sectors. The quality of our products, our extreme competitiveness compared with major international producers and our constant activities of research, design and development has made us a worldwide leader in the field of hydraulic circuit filtering. Present for over 50 years in the market, we have played a truly decisive role in defining our sector, and by now we are a group capable of controlling our entire chain of production, monitoring all manufacturing processes to guarantee superior quality standards and to provide concrete solutions for the rapidly evolving needs of customers and the market.





WORLDWIDE PRESENCE

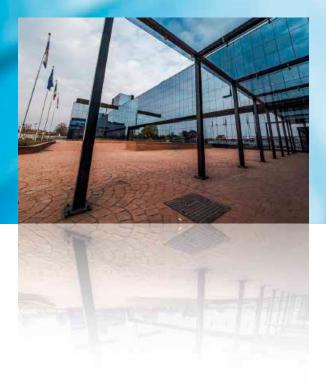
Our foreign Branches enable us to offer a diversified range of products that allow us to successfully face the aggressive challenge of international competition, and also to maintain a stable presence at a local level.

The Group boasts **8** business branches



TECHNOLOGY

Our constant quest for excellence in quality and technological innovation allows us to offer only the best solutions and services for applications in many fields, including general industry, test rigs, lubrication, heavy engineering, renewable energies, naval engineering, offshore engineering, aviation systems, emerging technologies and mobile plant (i.e. tractors, excavators, concrete pumps, platforms).





AND PRODUCTION

Our high level of technological expertise means we can rely entirely on our own resources, without resorting to external providers. This in turn enables us to satisfy a growing number of customer requests, also exploiting our constantly updated range of machines and equipment, featuring fully-automated workstations capable of 24-hour production.

















SUCTION **FILTERS**

Flow rates up to 875 l/min

Mounting:

- Tank immersed
- In-Line
- In tank with shut off valve
- In tank with flooded suction

RETURN FILTERS

Flow rates up to 3000 l/min

Pressure

up to 20 bar

Mounting:

- In-Line
- Tank top
- In single and duplex designs

RETURN / SUCTION **FILTERS**

Flow rates up to 300 l/min

Pressure

up to 80 bar

Mounting:

- In-Line
- Tank top

SPIN-ON **FILTERS**

Flow rates up to 365 l/min

Pressure up to 35 bar

Mounting:

- In-Line
- Tank top

LOW & MEDIUM PRESSURE **FILTERS**

Flow rates up to 3000 I/min

Pressure up to 80 bar

Mounting:

- In-Line
- Parallel manifold version
- In single and duplex designs

HIGH **PRESSURE FILTERS**

Flow rates up to 750 l/min

Pressure from 110 bar up to 560 bar

Mounting:

- In-Line
- Manifold
- In single
- and duplex designs



PRODUCT RANGE

MP Filtri can offer a vast and articulated range of products for the global market, suitable for all industrial sectors using hydraulic equipment.

This includes filters (suction, return, return/suction, spin-on, pressure, stainless steel pressure) and structural components (motor/pump bell-housings, transmission couplings, damping rings, foot brackets, aluminium tanks, cleaning covers).

We can provide all the skills and solutions required by the modern hydraulics industry to monitor contamination levels and other fluid conditions.

Mobile filtration units and a full range of accessories allow us to supply everything necessary for a complete service in the hydraulic circuits.









STAINLESS STEEL HIGH PRESSURE FILTERS

Flow rates up to 150 I/min Pressure from 320 bar up to 1000 bar

Mounting:

- In-Line
- Manifold
- In single and duplex designs

CONTAMINATION MONITORING PRODUCTS

- Online, in-line particle counters
- Off-line Bottle sampling products
- Fully calibrated using relevant ISO standards
- A wide range of variants to support fluid types and communication protocols

MOBILE FILTRATION UNITS

Flow rates from 15 l/min up to 200 l/min

POWER TRANSMISSION PRODUCTS

- Aluminium bell-housings for motors from 0.12 kW to 400 kW
- Couplings in Aluminium Cast Iron - Steel
- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers

ACCESSORIES

- Oil filler and air breather plugs
- Optical and electrical level gauges
- Pressure gauge valve selectors
- Pipe fixing brackets
- Pressure gauges

POWER TRANSMISSION PRODUCTS







1 page	INTRODUCTION
1	COMPANY
6	PRODUCT RANGE
10	BELL-HOUSING & COUPLING SIZING
12	SELECTION SOFTWARE

15 page		COUPLINGS
16		General Information
21	SGEA - SGEG - SGES - EGE	Flexible half-couplings
39	SGDR - EGR	Gear couplings

45 page		BELL-HOUSING
46		General Information
51	LMG	Bell-housing with rectangular flange
63	LMC - LDC	Bell-housing for piston, screw and vane pumps
71	LMS - LDS	Bell-housing - Low Noise
79	MULTI-COMPONENTS	Bell-housing - Multi-components 2 - 3

101) page		ACCESSORIES
102	PDM A	Foot brackets
103	ANM A	Damping rings
104	MPDR PDMA - MPDR	Damping rods
105	OB	Cleaning covers
111	SE10	Aluminium tanks

A GUIDE TO SELECT THE CORRECT BELL-HOUSING AND DRIVE COUPLING

DATA REQUIRED

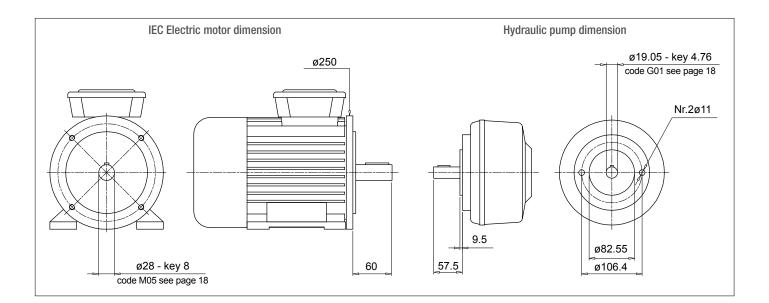
- Electric motor power/motor size
- Manufacturer and pump type

TO VERIFY:

- 1 Pump and motor shaft dimensions (see electric motor data sheet)
- 2 Shaft and flange pump (see pump data sheet)

Example:

- Electric motor 2.2 kW size 100-112
- Atos pump code PFE31 Shaft 1



Bell-Housing's length calculation

- H = 60 + 18 + 57.5 = 135.5 mm (18 = Sp spider see page 31)
- Choose type of bell-housing (LMC LMS):
 For monobloc bell-housing LMC/LDC series see pages 63 ÷ 69
 For Low noise bell-housing LMS/LDS series see pages 71 ÷ 77
 For Multi-components 2-3 bell housing series see pages 79 ÷ 99

Note:

The length of bell-housing must be ≥ than the length calculated (135.5 mm)

Case A

Solution with monobloc bell-housing series LMC/LDC

Pages 63 ÷ 69 for IEC Electric motor size 100-112 - LMC250

LMC 250 bell-housing with height ≥ 135.5 - LMC250AFSQ

The bell-housing code must be completed with pump drilling code (see pages 48-49). For the specific case:

Spigot hole 82.55 - PCD 106.4 - Nr.2 holes M10 : Drilling code 060 $\,$

Definitive bell-housing code LMC250AFSQ060

Case B

Solution with low noise bell-housing series LMS/LDS

Pages 71 ÷ 77 for IEC Electric motor size 100-112 - LMS250

LMS 250 bell-housing with height \geq 135.5 - LMS250AFSA

The bell-housing code must be completed with pump drilling code (see pages 48-49). For the specific case:

Spigot hole 82.55 - PCD 106.4 - Nr.2 holes M10 : Drilling code 060

Definitive bell-housing code LMS250AFSA060



A GUIDE TO SELECT THE CORRECT BELL-HOUSING AND DRIVE COUPLING

Coupling selection

Motor half-coupling (see page 26)

For IEC Electric motor size 100/112, the half-coupling is SGEA21M05060FG

Spider (see page 31)

For SGEA21, EGE2 - EGE2RR

(choose spider material on the base of the application, oil, temperature and cycle machine, etc.)

Pump half-coupling

Choose the drilling code - see pages 18-19 for shaft 19.05 - key 4.76 - code: G01

Pump half-coupling length = BH length - THK Spider - THK Spigot LMC = 138 mm - 60 - 18 - 9.5 = 50.5 mm LMS = 148 mm - 60 - 18 - 9.5 = 60.5 mm

LMC - Choose the half-coupling's length at page $26 \le 50.5$ mm.

LMS - Choose the half-coupling's length at page $26 \le 60.5$ mm.

LMC - Available length for SGEA21 = 50 mm

LMS - Available length for SGEA21 = 60 mm

Half coupling for LMC: **SGEA21G01050FG** Half coupling for LMS: **SGEA21G01050FG**

SOFTWARE FOR AUTOMATIC CALCULATION

available on the web site www.mpfiltri.com



Note: for multi pumps we recommend to use a specific support on the base of the pump's dimensions and weight.



Step (1) Select "BELL-HOUSING & COUPLING"

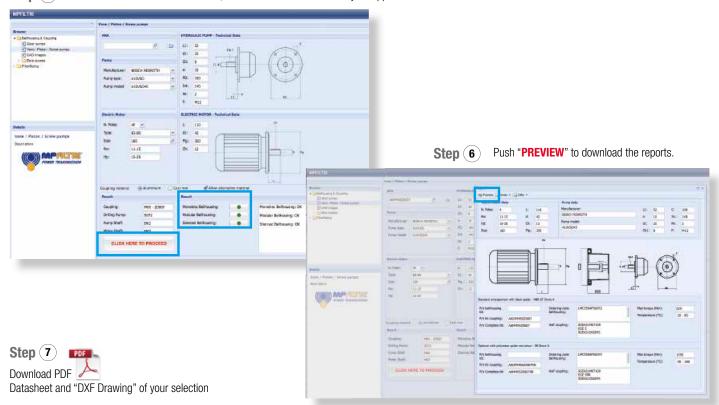


Choose nr° of poles of "Electric motors": Step (3) select "Electric motors type" and "Electric motors size"

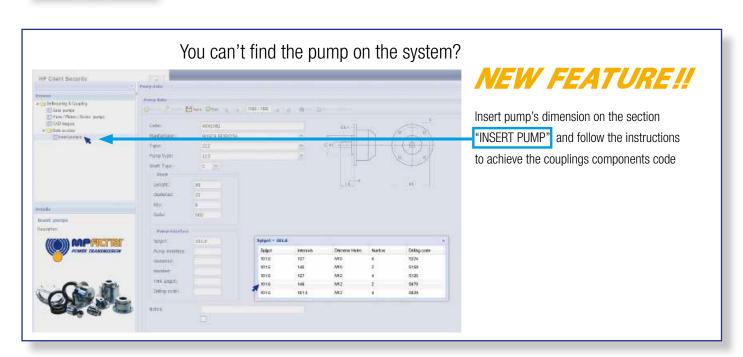


(12)

Step (5) Push "CLICK HERE TO PROCEED", then choose best solution for your application.







The range of products is completed by a number of accessories, including:

FOOT BRACKETS, which serve to support the motor pump unit in the event that the selected electric motor does not have mounting feet.

DAMPING RINGS, intended mainly for use with motor-pump units positioned vertically and with the pump submerged in the oil tank.

DAMPING RODS, to be mounted under the electric motor feet or under the foot brackets.

CLEANING COVERS, facilitating the maintenance of oil tanks in hydraulic power units, without necessarily having to dismantle the unit.

ALUMINIUM TANKS of 10 litres capacity, allowing the assembly of a compact hydraulic power unit.



Accessories



PDM A	Foot brackets	page 102
ANM A	Damping rings	103
MPDR PDMA - MPDR	Damping rods	104
ОВ	Cleaning covers	105
SE10	Aluminium tanks	111



Technical data

The foot brackets are proportioned to support IEC Electric motors with B5 flange without feet.

The range is available from size 71 to size 180.

Compatibility with fluids

- Mineral oils types HH-LL-HM-HR-HV-HC, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

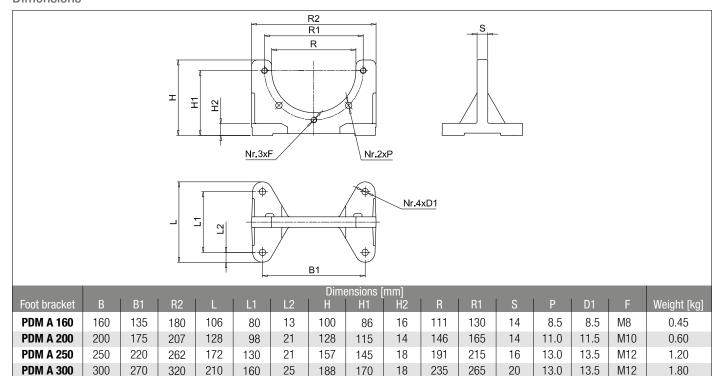
Materials

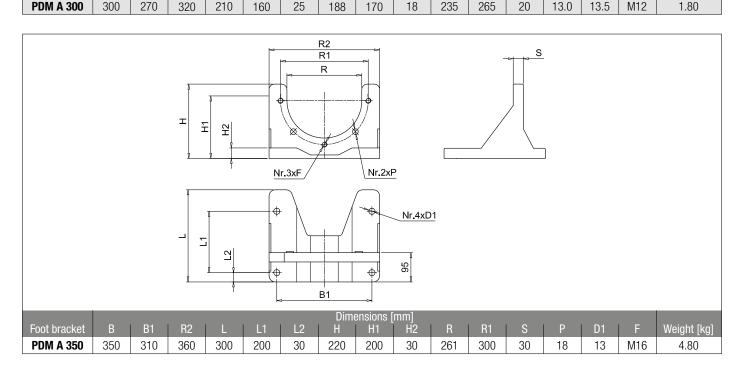
Foot bracket: pressure die-cast aluminium alloy

Temperature

From -30 °C to +80 °C

Dimensions





Technical data

Positioned between the bell-housing motor flange and lid of the tank, they help to reduce the transmission of the vibrations and emission of noise generated by the system.

Damping rings provide a perfect hydraulic sealing actions by virtue of their special profile; damping rings are available for IEC electric motors from size 80 to size 180.

Compatibility with fluids

- Mineral oils types HH-LL-HM-HR-HV-HC, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

Materials

Internal ring: pressure die-cast aluminium alloy External body: NBR 75 Shore A

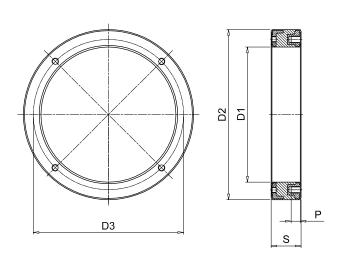
Temperature

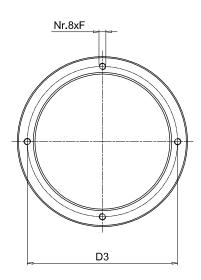
From -30 °C to +80 °C

Special Applications

Any applications not covered by the normal indications contained in this catalogue must be evaluated and approved by MP Filtri Technical and Sales Department

Dimensions





Code	D1	D2	D3	S	F	P	Weight [kg]
ANM A 200	144	200	165	43	M10	16	1.70
ANM A 250	191	250	215	48	M12	16	2.53
ANM A 300	238	300	265	53	M12	16	2.15
ANM A 350	260	350	300	62	M16	20	3.95

Note: For dimensions other than those indicated in the table, contact MP Filtri Technical and Sales Department



Technical data

Damping rods are element to reduce the transmission of the vibrations and emission of noise generated of the system.

Damping rods are available for IEC Electric motors from size 71 to size 315L and for MP FILTRI foot bracket

Compatibility with fluids

- Mineral oils types HH-LL-HM-HR-HV-HC, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

Materials

Plate: steel black colour

Damping element: NBR 60 Shore A

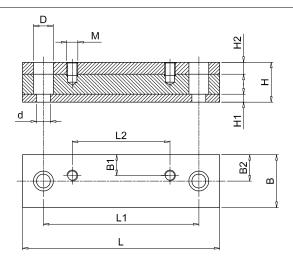
Temperature

From -20 °C to +80 °C

Special Applications

Any applications not covered by the normal indications contained in this catalogue must be evaluated and approved by the MP Filtri Technical and Sales Department

Dimensions



Damping rods for foot brackets PDMA series.

For foot brackets see page 102

	Dimensions [mm]												
Code	L	L1	L2	В	B1	B2	H	H1	H2	D	d	M	Weight [kg]
MPDR PDMA160	196	156	80	50	21	25	40	8	12	20	14	M8	1.5
MPDR PDMA200	196	156	98	50	21	25	40	8	12	20	14	M10	1.5
MPDR PDMA250	240	205	130	50	24	25	40	8	12	20	14	M12	2.0
MPDR PDMA300	280	245	160	50	20	25	45	8	12	20	14	M12	2.5
MPDR PDMA350	446	400	200	70	35	35	60	15	15	26	14	M12	8.0

Damping rods for electrical motors UNEL-MEC

Code	L	L1	L2	В	B1	B2	Н	H1	H2	D	d	M	Weight [kg]
MPDR 71	196	156	90	50	21	25	40	8	12	20	14	M6	1.5
MPDR 80	176	146	100	50	22	25	40	8	12	20	14	M8	1.7
MPDR 90S	196	156	100	50	24.5	25	40	8	12	20	14	M8	1.7
MPDR 90L	240	205	125	50	24	25	40	8	12	20	14	M8	2.0
MPDR 100L	240	205	140	50	22	25	40	8	12	20	14	M10	2.0
MPDR 132S	280	245	140	50	20	25	45	8	12	20	14	M10	2.5
MPDR 132M	280	245	178	50	20	25	45	8	12	20	14	M10	2.5
MPDR 160M	340	300	210	70	28	35	60	15	15	26	18	M12	6.0
MPDR 160L	416	370	254	70	28	35	60	15	15	26	18	M12	7.5
MPDR 180M	416	370	241	70	35	35	60	15	15	26	18	M12	7.5
MPDR 180L	446	400	279	70	35	35	60	15	15	26	18	M12	8.0
MPDR 200L	492	430	305	70	35	35	60	15	15	33	22	M16	8.9
MPDR 225S	492	430	286	70	35	35	60	15	15	33	22	M16	8.9
MPDR 225M	492	445	311	70	35	35	60	15	15	33	22	M16	8.9
MPDR 250M	492	445	349	100	50	50	60	15	15	33	22	M20	12.5
MPDR 280S	614	570	368	100	50	50	60	15	15	33	22	M20	15.1
MPDR 280M	614	570	419	100	50	50	60	15	15	33	22	M20	15.1
MPDR 315S	614	570	406	120	60	60	60	15	15	33	22	M24	26.5
MPDR 315M	614	570	457	120	60	60	60	15	15	33	22	M24	26.5
MPDR 315L	704	660	508	120	60	60	60	15	15	33	22	M24	29.2

(104)

Technical data

These pressure die-cast aluminium alloy doors offer superior mechanical strength and are manufactured to DIN 24339 standard. They provide easy access to the inside of the oil tank for inspection and cleaning purposes.

On request and for small quantities, to be agreed with MP Filtri Technical and Sales Department, inspection doors can be supplied with:

- Customer logo.
- Hole cut for visual level indicator.
- Hole cut for visual and electrical level indicator.
- Oil sample plug

Compatibility with fluids

- Mineral oils types HH-LL-HM-HR-HV-HC, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

Materials

Cleaning covers: pressure die-cast aluminium alloy / cast iron Seal: NBR 70 Shore A $\,$

Temperature

From -30 °C to +80 °C

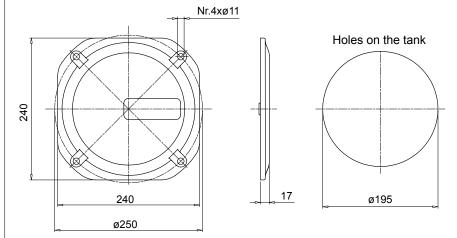
Special Applications

Any applications not covered by the normal indications contained in this catalogue must be evaluated and approved by MP Filtri Technical and Sales Department

Dimensions

Cleaning cover according to DIN 24339

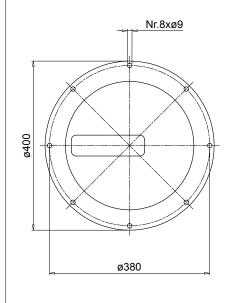


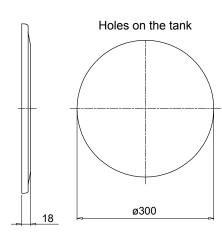


Code	Description	Seal	Weigh [kg]
OB275P01GN	Door with MP Logo	NBR	2.06
OB275P02GN	Blank cover	NBR	2.06
OB275P01GV	Door with MP Logo	FPM	2.06
OB275P02GV	Blank cover	FPM	2.06

Code	Description	Weight [kg]
OB275P01	Door with MP Logo	1.76
0B275P02	Blank cover	1.76
GU0275NBR	Seal	1.76
GU0275VTN	Seal	1.76

0B400



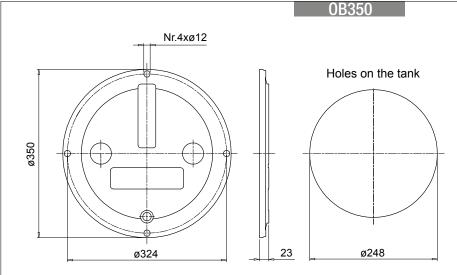


Code	Description	Seal	Weight [kg]
OB400P01GN	Door with MP Logo	NBR	3.20
OB400P02GN	Blank cover	NBR	3.20
OB400P01GV	Door with MP Logo	FPM	3.20
OB400P02GV	Blank cover	FPM	3.20

Code	Description	Weight [kg]
OB400P01	Door with MP Logo	2.90
OB400P02	Blank cover	2.90
GU0400DINNBR	Seal	2.90
GU0400DINVTN	Seal	2.90



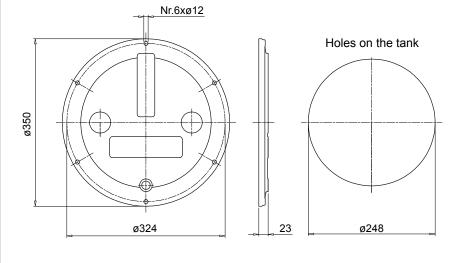
Dimensions



Code	Description	Seal	Weight [kg]
OB350P01GN	Door with MP Logo	NBR	2.10
OB350P02GN	Blank cover	NBR	2.10
OB350P01GV	Door with MP Logo	FPM	2.10
OB350P02GV	Blank cover	FPM	2.10

Code	Description	Weight [kg]
OB350DIN000	Door	1.80
GU0350DINNBR	Seal	1.80
GU0350DINVTN	Seal	1.80

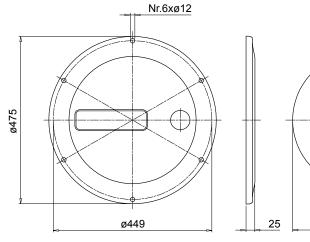
OB356

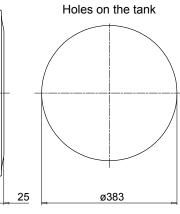


Code	Description	Seal	Weight [kg]
OB356P01GN	Door with MP Logo	NBR	2.10
OB356P02GN	Blank cover	NBR	2.10
OB356P01GV	Door with MP Logo	FPM	2.10
OB356P02GV	Blank cover	FPM	2.10

Code	Description	Weight [kg]
OB356DIN000	Door	1.80
GU0350DINNBR	Seal	1.80
GU0350DINVTN	Seal	1.80

0B475





Code	Description	Seal	Weight [kg]
OB475P01GN	Door with MP Logo	NBR	3.70
OB475P02GN	Blank cover	NBR	3.70
OB475P01GV	Door with MP Logo	FPM	3.70
OB475P02GV	Blank cover	FPM	3.70

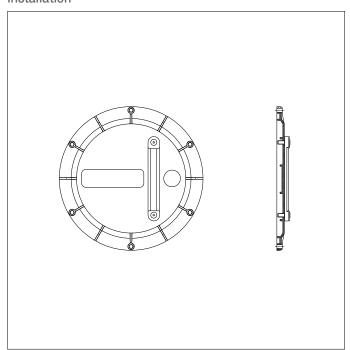
Code	Description	Weight [kg]
0B475P01	Door with MP Logo	3.40
0B475P02	Blank cover	3.40
GU0475DINNBR	Seal	3.40
GU0475DINVTN	Seal	3.40

Visual level indicators LVA series

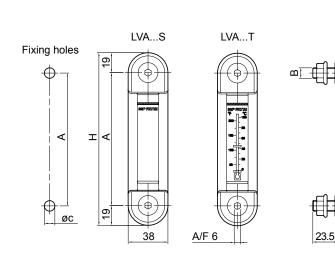
Technical data

Materials Transparent amorphous polyamide lens Nylon guard Seal: Series A-NBR - Series V-FPM Operating pressure Max 1 bar at +80°C Operating temperature From -25 °C to +80 °C Tightening torque 10 N·m max. Mineral oils Synthetic oils Water base emulsions Phosphoric esters

Installation



Dimensions



Size	A [mm]	H [mm]
LVA 10	76	114
LVA 20	127	165
LVA 30	254	292

Туре	B [mm]	C [mm]
LVAM10	M10	10.5
LVAM12	M12	12.5
LVAU38	3/8" UNC	10.0
LVAU12	1/2"UNC	13.5

Packaging

Туре	Nr. pieces per pack
LVA	10

Preparing for to fit the level on request

Indicator code	OB275**	OB350**	OB356**	OB400**	OB475**
LVA 10**	•	•	•	•	•
LVA 20**		•	•	•	•
LVA 30**				•	•

Electrical float level indicators LEG series

Technical data

LEG series electrical level indicators are supplied with a 3-hole fixing flange and a reed switch having NC-NO contacts.

Designed typically for installation on the vertical walls of oil tanks, these instruments can also be mounted to inspection doors of the OB475 series as indicators of minimum and maximum oil levels in the tank.

Warning

To operate correctly, the float must be positioned vertically and at a minimum distance of 35 mm from walls made of ferrous metal.

To change the contact from NC to NO, simply turn the float upside down.

The electrical properties indicated are referred to resistive loads; for capacitive and inductive loads and incandescent lamps, use protection circuits.

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR V= FPM

Temperature

From -15 °C to +80 °C

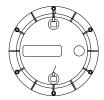
For temperatures outside this range, contact MP Filtri Technical and Sales Department

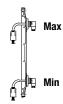
Installation

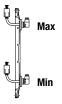


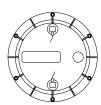




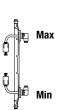




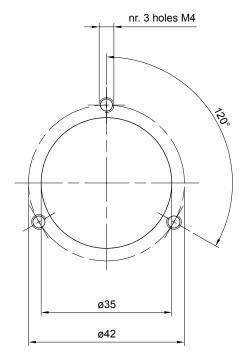








Layout of fixing holes for LEG level indicator



Note: Arrange the holes according to the position of the level indicator

Prepared for visual indicator - on request

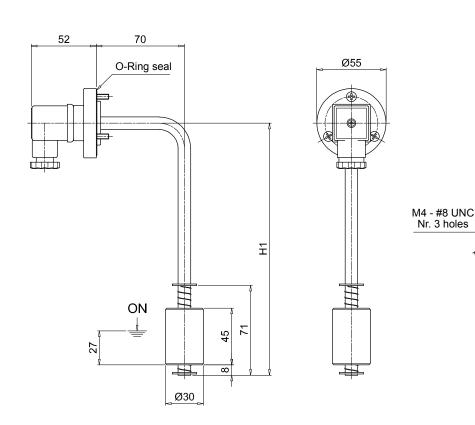


Dimensions

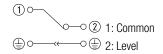
Size	H 1 [mm]	Weight [kg]
LEG 102	103	0.19
LEG 200	200	0.22

Holes on the tank

*6*0°



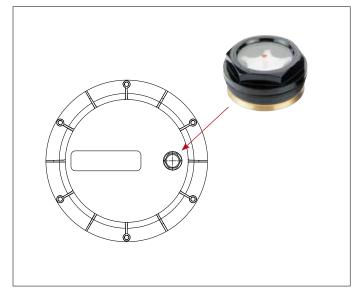
LEG 1 Float



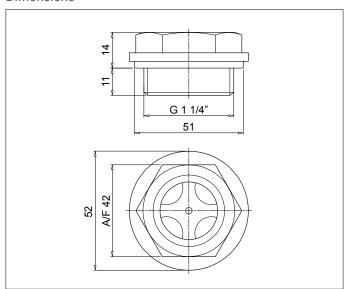
To invert the contact status from NO to NC and vice versa, simply invert the float.

Visual level indicators code LCPG42N...S

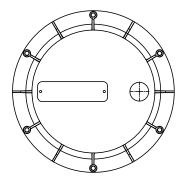
Installation



Dimensions



Available customization



Nameplate with customer logo Ordering information: **0B475L0G0P05**

The nameplates applied to the new inspection door are identical to those applied to the old door. The difference with the new door is that nameplates are fixed with rivets.

For ordering information codes, minimum order quantities, fixing hole positions and other details not indicated in this publication, contact MP Filtri Technical and Sales Department.

Technical data

Made of pressure die-cast aluminium alloy, these tanks feature superior strength and optimum design and are ideal for compact hydraulic power units.

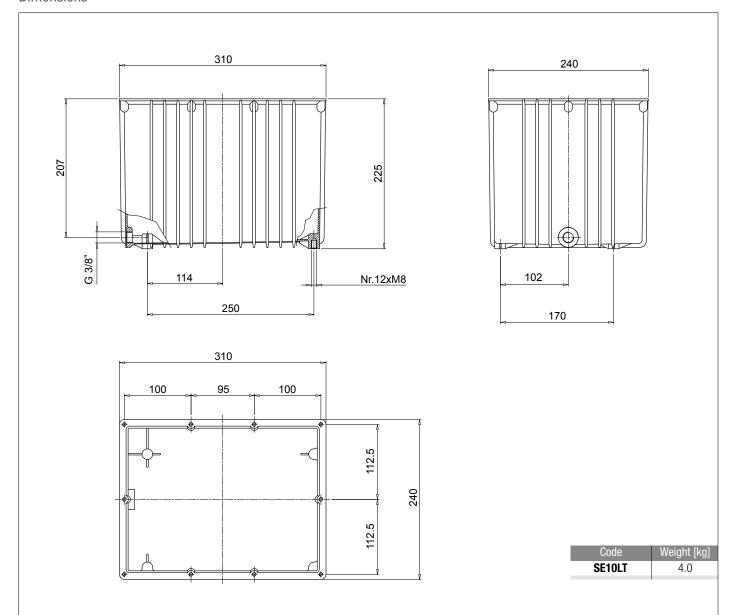
Generously proportioned fins ensure efficient cooling.

The tank is supplied with:

- M6 threaded fixing holes for lid
- feet with M8 threaded fixing holes
- G 3/8" threaded drain hole

The lid is sealed by a gasket made of special paper, which must be ordered separately indicating code "GUS 10.0".

Dimensions





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