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.



MARKET **LEADER**



Our work is based on a skillful interaction between advanced technology and fine workmanship, **customizing products according to specific market requests**, focusing strongly on innovation and quality, and following every step in the manufacturing of both standard and special products, fully respecting customer expectations.

Our customer-oriented philosophy, which enables us to satisfy all customer requests **rapidly** and **with personalized products**, makes us a **dynamic and flexible enterprise**. The possibility of constantly controlling and monitoring the entire production process is essential to allow us to guarantee the quality of our products.

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.





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

Pressure

Mounting:

- In-Line
- Parallel manifold version
- In single

LOW & MEDIUM PRESSURE **FILTERS**

Flow rates up to 3000 l/min

up to 80 bar

- 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 125 l/min Pressure from 320 bar up to 1000 bar

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



- Off-line, 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

TRANSMISSION PRODUCTS

- Aluminium bell-housings for motors from 0.12 kW to 400 kW

- Couplings in Aluminium
- Cast Iron Steel

POWER

- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers

TANK ACCESSORIES

- Oil filler and

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

POWER TRANSMISSION PRODUCTS



INDEX

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

(14) page		COUPLINGS
16		General Information
21	SGEG - SGEA - SGES - SGEK - EGE	Flexible half-coupling in aluminium, cast iron and steel
39	AKG	IEC electric motor range from size 63 up to size 225
47	SGDR - EGR	Curved-tooth steel gear coupling

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

108 page		ACCESSORIES
110	ANM A	Damping rings
112	PDM A	Foot brackets
113	MPDR PDMA - MPDR	Damping rods
114	OB	Cleaning covers
119	SE10	Aluminium tanks



-HOUSING & COUPLING SIZING

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

DATA REQUIRED

- Electric motor power/motor size

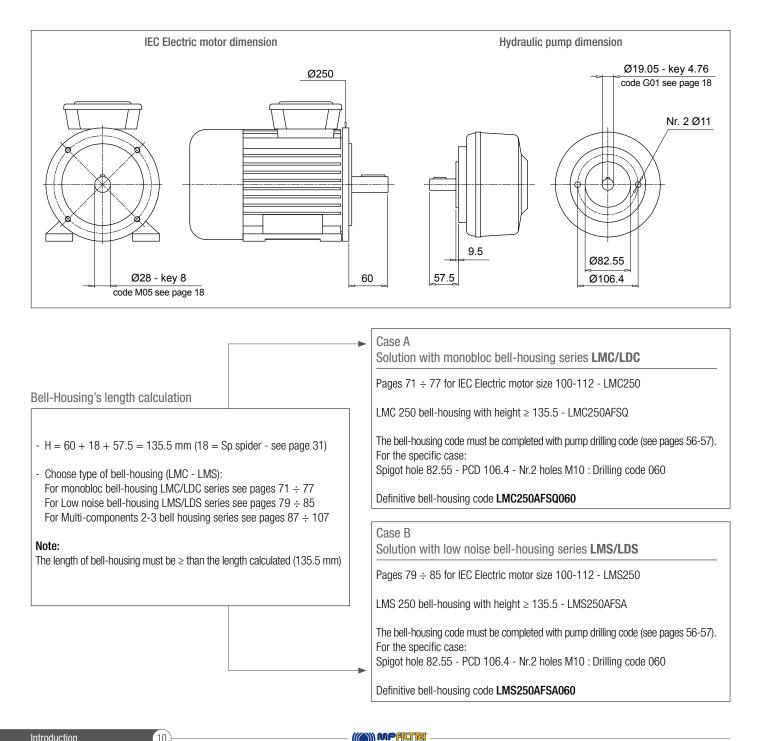
- Manufacturer and pump type

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



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: GO1

 $\begin{array}{l} \mbox{Pump half-coupling length} = \mbox{BH length} - \mbox{THK Spider} - \mbox{THK Spiget} \\ \mbox{LMC} = 138\mbox{ mm} - 60 - 18 - 9.5 = 50.5\mbox{ mm} \\ \mbox{LMS} = 148\mbox{ mm} - 60 - 18 - 9.5 = 60.5\mbox{ mm} \end{array}$

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

MANUFACTURER	SELECTION	DATAS	SELECTION V	NITH PUMP DATA ENTRY	SELECTION FROM KIT CODE	
Manufacturer: Select	~					
Pump type :	~					
Pump code:						
ELECTRIC MOTOR DATA						
N. Poles	L:		D:	Fig.:	Ch:	
Select	~					
Motor frame						
Select	~					
Size						

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



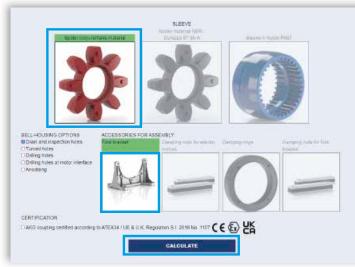
Step (1) Select "POWER TRANSMISSION SOFTWARE" after login



Step (2) Choose Manufacturer: select "Pump type" and "Pump code"

PRODUCT MELECTION POWER TRAUBULISION NOTIVALINE IN THE BEING NOTIVALINE	
SELECTION FROM FUND MARKACTURES DATA STORE	BELEKTYNIH FROM NIT CODE
Manufacturer Lt D; Ch ATOS v 58 10.65 4.78	Thickness
Punit type: Key: Int Nr PFE v 82.55 100 2	P
Pung code [PFE = - 31 1	Step (3)Choose N Poles of "Electric motors": select "Motor frame" and "Size"
	PRODUCT RELECTION POWERT RATION LOCK LICT MARE
	VELECTION THEN PLAN SELECTION FROM SHAFT / FLANGE DATA1 SELECTION WITH PLAN DATA ENTRY ELECTION HIM HID COLE
	Mensfacturer L1 0 Ch Tractmees ATOS V SS 19:05 4.76 I
ELECTRIC NOTOR DATA	Pump lype Kry Int Inr F PTE V 82.55 100 2 101
Activity Constraints of the second se	Pump code: PPE "31 "" /" " / 1
-Scient - v	
Power Kw	
Power Hp	
	ELECTRIC MOTOR DATA
	N. Polek L D: Fig. Ch 4P 28 250 8
	Motor frame 63-85 V Size
	Power Kor
	Power Hp
	4
Introduction (12)	

Step (4) Choose the insert and eventual Bell-Housings option and accessories for assembly: click on "CALCULATE"



Step (**5**) Select the option requested and download the report.





	Ň	You can't find	the pump on the	system?
PRODUCT SELECTION POWER TRANSM	INCH SOFTWARE FRITE NUMS SCETUMS	E SELECTION WITH FUNP DATA ENTRY	IS LICTOR PRIMARY CARE	NEW FEATURE!
Shaft Type : - Salect - Cylindrical shafts table Splined shafts table Drillings chart ELECTING MOTORI ANTA	Spigot	D Ch.	Thickness	Insert pump's dimension on the section "SELECTION WITH PUMP DATA ENTRY" and follow the instructions to achieve the couplings components code
N. Polas - Solart - Motor frame - Select - Size Power Ke Power Hp		0: Fig.	Ch.	



(13)

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

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

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

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



ANM A	Damping rings	page 110
PDM A	Foot brackets	112
MPDR PDMA - MPDR	Damping rods	113
OB	Cleaning covers	114
SE10	Aluminium tanks	119





ACCESSORIES

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 315.

Compatibility with fluids

- Mineral oils types HH-HL-HM-HR-HV, 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

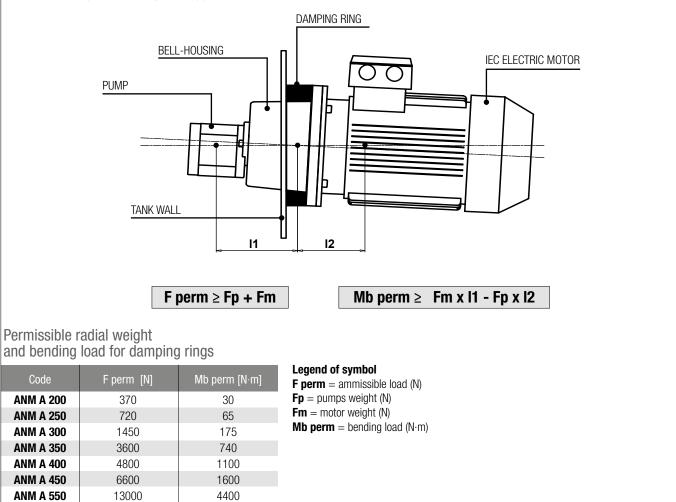
Special Applications

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

Example of assembly

In order to warranty the application, to proceed with the calculation of the max weight and moment with the following formulas.

Values higher than those in the table could damage the product and couldn't warranty the conformity of the application!



ANM A 660

9000



DAMPING RINGS

ANM A 300

ANM A 350

ANM A 400

132S / 132M

160L/160M, 180L/180M

200L

238

260

301

300

350

400

265

300

350

50

58

50

M12x16

M16x20

M16x25

4+4

ACCESSORIES

40

100

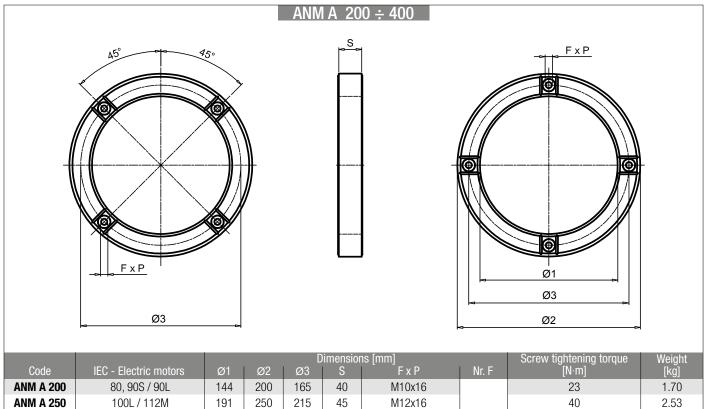
100

Dimensions

2.15

3.95

4.60



	450	*50	ANM A 4			22.5° 22.5°	
							-
Code	IEC - Electric motors	Ø1 Ø2	Dimensio Ø3 S	ns [mm] F x P	Nr. F	Screw tightening torque [N·m]	Weight [kg]

Code IEC - Electric motors Ø1 Ø2 Ø3 S F x P Nr. F [N·m] [kg] ANM A 450 225S / 225M 352 450 400 60 M16x25 100 6.20 ANM A 550 250M, 280M / 280S 452 550 500 60 M16x25 8+8 210 7.76 ANM A 660 315M / 315S 552 660 600 67 M20x25 410 11.25					_ D	imensior	Screw tightening torque	Weight		
ANM A 550 250M, 280M / 280S 452 550 500 60 M16x25 8+8 210 7.76	Code	IEC - Electric motors	Ø1	Ø2	Ø3	S	FxP	Nr. F	[N·m]	[kg]
	ANM A 450	225S / 225M	352	450	400	60	M16x25		100	6.20
ANM A 660 315M / 315S 552 660 600 67 M20x25 410 11.25	ANM A 550	250M, 280M / 280S	452	550	500	60	M16x25	8+8	210	7.76
	ANM A 660	315M / 315S	552	660	600	67	M20x25		410	11.25

ACCESSORIES

Technical data

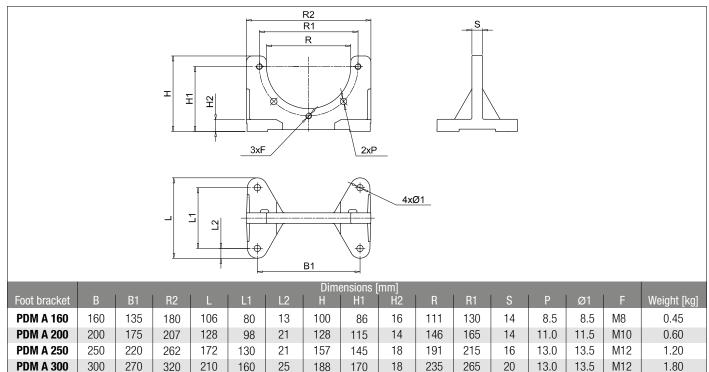
The foot brackets are proportioned to support IEC Electric motors with B5 flange without feet.

The range is available from size 71 to size 180.

Compatibility with fluids

- Mineral oils types HH-HL-HM-HR-HV, 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

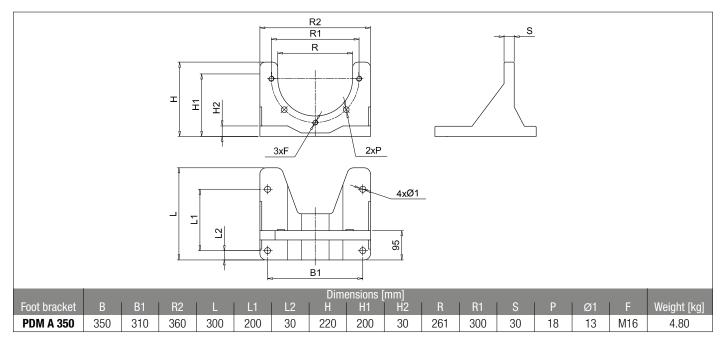
Dimensions



Materials

Temperature From -30 °C to +80 °C

Foot bracket: pressure die-cast aluminium alloy





DAMPING RODS

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-HL-HM-HR-HV, 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

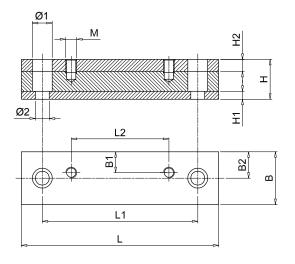
Materials Plate: steel black colour Damping element: NBR 60 Shore A

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

Damping rods for foot	Damping rods for foot brackets PDMA series. For foot brackets see page														
	Dimensions [mm]														
Code	L	L1	L2	В	B1	B2	H	H1	H2	Ø1	Ø2	M	Weight [kg]		
MPDR PDMA160P	196	156	80	50	21	25	40	8	12	20	14	M8	1.5		
MPDR PDMA200P	196	156	98	50	21	25	40	8	12	20	14	M10	1.5		
MPDR PDMA250P	240	205	130	50	24	25	40	8	12	20	14	M12	2.0		
MPDR PDMA300P	280	245	160	50	20	25	45	8	12	20	14	M12	2.5		
MPDR PDMA350P 446 400 200 70 35 35 60 15 15 26 14 M12 8.0															
Damping rode for aloc	Damping rods for electrical motors UNEL-MEC														

Code	L	L1	L2	В	B1	B2	Н	H1	H2	Ø1	Ø2	М	Weight [kg]
MPDR 71P	196	156	90	50	21	25	40	8	12	20	14	M6	1.5
MPDR 80P	176	146	100	50	22	25	40	8	12	20	14	M8	1.7
MPDR 90SP	196	156	100	50	24.5	25	40	8	12	20	14	M8	1.7
MPDR 90LP	240	205	125	50	24	25	40	8	12	20	14	M8	2.0
MPDR 100LP	240	205	140	50	22	25	40	8	12	20	14	M10	2.0
MPDR 132SP	280	245	140	50	20	25	45	8	12	20	14	M10	2.5
MPDR 132MP	280	245	178	50	20	25	45	8	12	20	14	M10	2.5
MPDR 160MP	340	300	210	70	28	35	60	15	15	26	18	M12	6.0
MPDR 160LP	416	370	254	70	28	35	60	15	15	26	18	M12	7.5
MPDR 180MP	416	370	241	70	35	35	60	15	15	26	18	M12	7.5
MPDR 180LP	446	400	279	70	35	35	60	15	15	26	18	M12	8.0
MPDR 200LP	492	430	305	70	35	35	60	15	15	33	22	M16	8.9
MPDR 225SP	492	430	286	70	35	35	60	15	15	33	22	M16	8.9
MPDR 225MP	492	445	311	70	35	35	60	15	15	33	22	M16	8.9
MPDR 250MP	492	445	349	100	50	50	60	15	15	33	22	M20	12.5
MPDR 280SP	614	570	368	100	50	50	60	15	15	33	22	M20	15.1
MPDR 280MP	614	570	419	100	50	50	60	15	15	33	22	M20	15.1
MPDR 315SP	614	570	406	120	60	60	60	15	15	33	22	M24	26.5
MPDR 315MP	614	570	457	120	60	60	60	15	15	33	22	M24	26.5
MPDR 315LP	704	660	508	120	60	60	60	15	15	33	22	M24	29.2



ACCESSORIES

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-HL-HM-HR-HV, 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

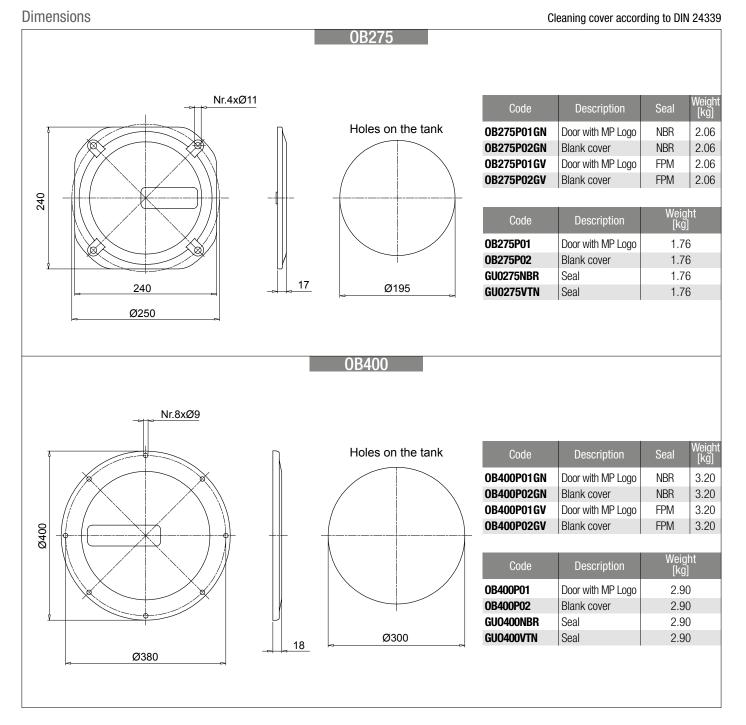
Materials

Cleaning covers: pressure die-cast aluminium alloy 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



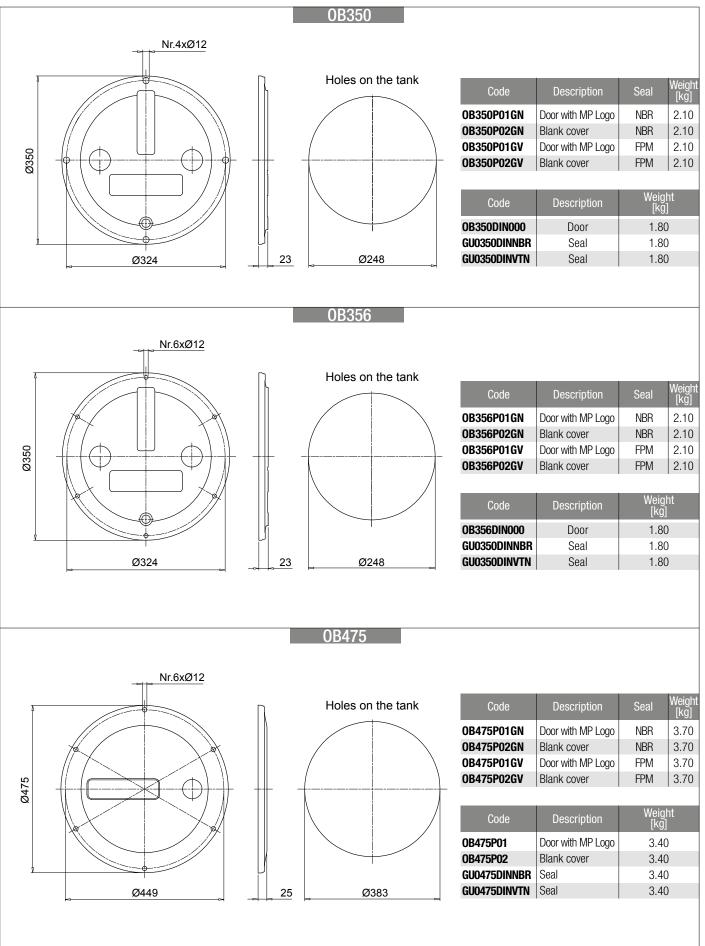
ccessories



CLEANING COVERS



Dimensions

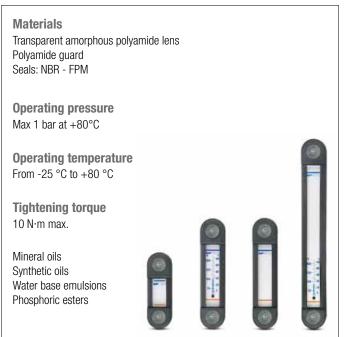


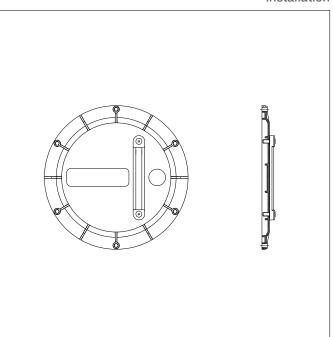


ACCESSORIES CLEANING COVERS OPTIONS

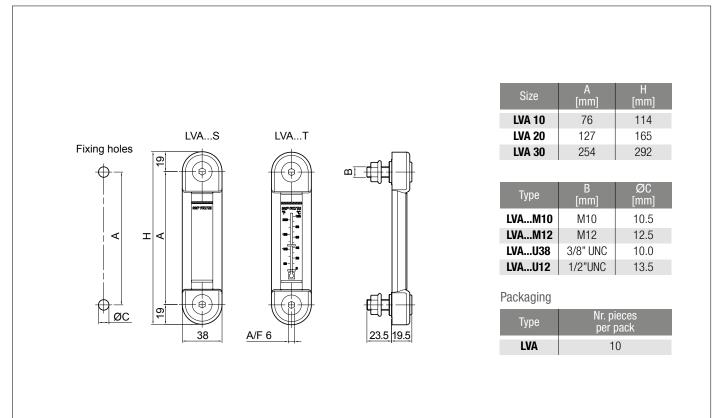
Oil level indicator **LVA** series - vertical shape

Technical data





Dimensions



Preparing for to fit the level on request

LVA 30**				•	•
LVA 20**		•	•	•	•
LVA 10**	•	•	•	•	•
Indicator code	OB275**	OB350**	OB356**	0B400**	OB475**

Installation

CLEANING COVERS OPTIONS

Electrical oil level indicators **LEG** series

Technical data

LEG series electrical oil 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.

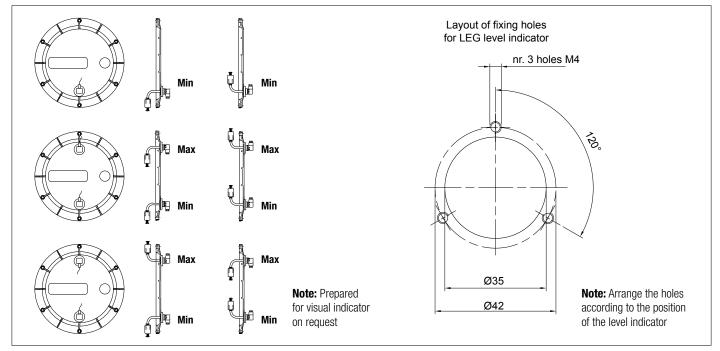
The electrical properties indicated are referred to resistive loads; for capacitive and inductive loads and incandescent lamps, use protection circuits.

Electrical symbol:

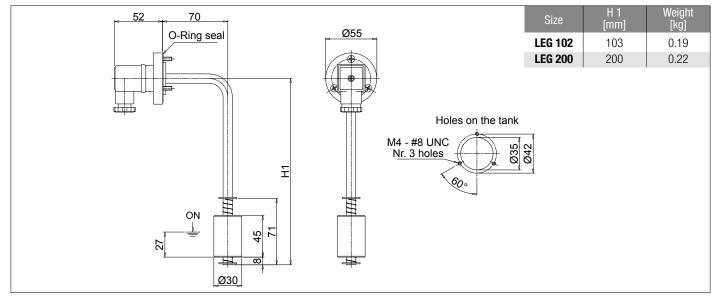
① ∽____⊙ ② 1: Common ⊕ ∽____⊙ ⊕ 2: Level

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

Installation



Dimensions

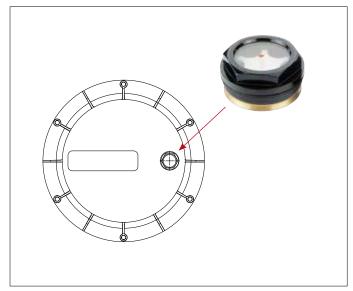




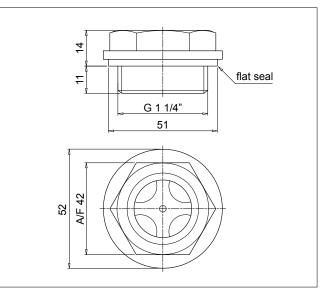
ACCESSORIES CLEANING COVERS OPTIONS

Visual level indicators code LCPG42N...S

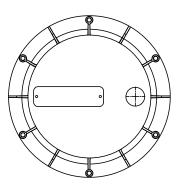
Installation



Dimensions



Available customization



Nameplate with customer logo Ordering information: **OB475LOGOP05**

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

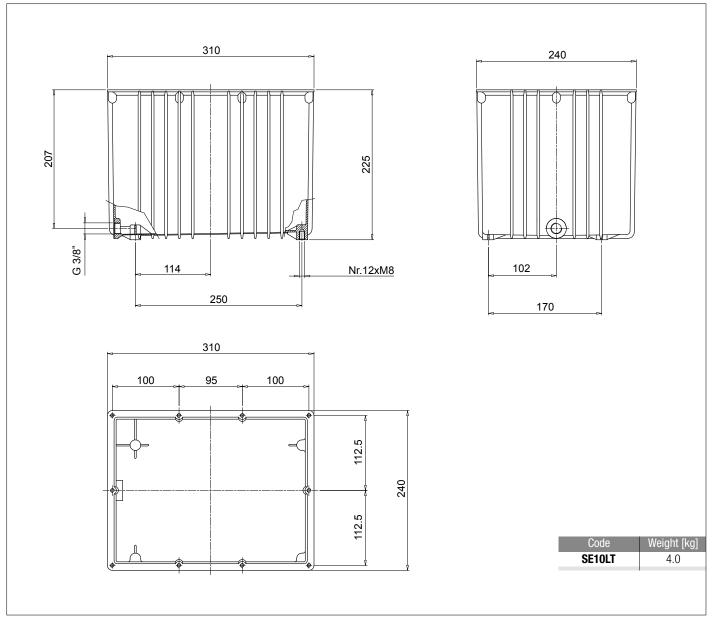
Made of pressure die-cast aluminium alloy, these tanks feature superior strength and optimum design and are ideal for compact hydraulic power units.

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".



()) MPALTRI

Dimensions

(119)

All data, details and words contained in this publication are provided for information purposes only. MP Filtri reserves the right to make modifications to the models and versions of the described products at any time for both technical and / or commercial reasons. The colors and the pictures of the products are purely indicative. Any reproduction, partial or total, of this document is strictly forbidden. All rights are strictly reserved.



WORLDWIDE NETWORK

HEADQUARTERS

MP Filtri S.p.A. Pessano con Bornago Milano Italy sales@mpfiltri.com ITALFILTRI LLC Moscow Russia mpfiltrirussia@yahoo.com

BRANCH OFFICES

MP Filtri Canada Inc. Concord, Ontario Canada sales@mpfiltricanada.com

MP Filtri France SAS Lyon AURA France sales@mpfiltrifrance.com

MP Filtri Germany GmbH St. Ingbert Germany sales@mpfiltri.de

MP Filtri India Pvt. Ltd. Bangalore India sales@mpfiltri.co.in

MP Filtri Middle East FZCO Dubai U.A.E. sales-me@mpfiltri.com

PASSION TO PERFORM



MP Filtri SEA PTE Ltd. Singapore sales-sea@mpfiltri.com

MP Filtri (Shanghai) Co., Ltd. Shanghai P.R. China sales@mpfiltrishanghai.com

MP Filtri U.K. Ltd. Vale Park Evesham United Kingdom sales@mpfiltri.co.uk

MP Filtri U.S.A. Inc. Quakertown, PA U.S.A. sales@mpfiltriusa.com



CMPEN001X EN - 03-2023