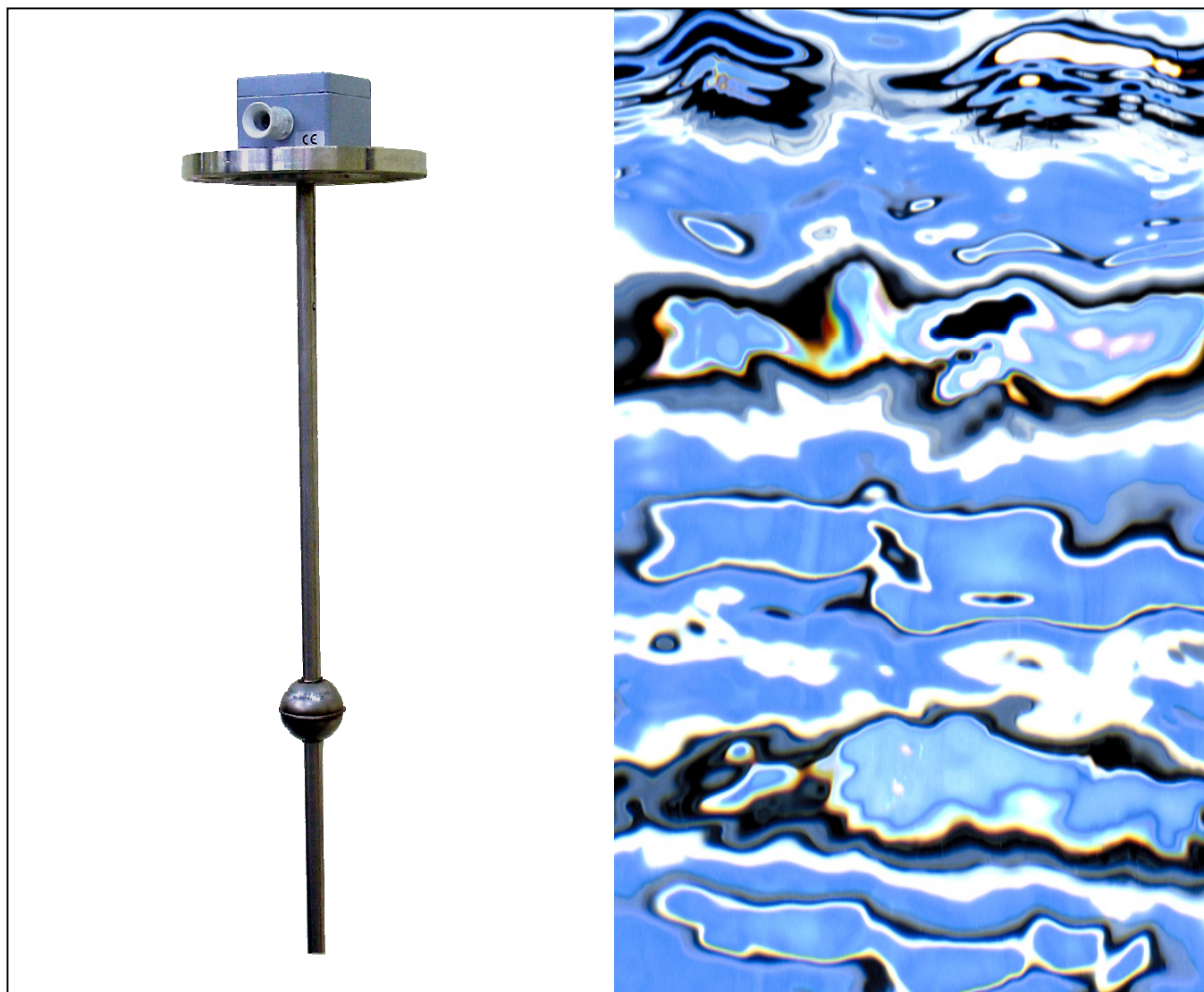


Type MR 783

Magnetic level switch



Magnetic level switch

Technical data sheet

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Type MR 783 Operation

A float fitted with a magnet slides along a guide tube and follows variations of fluid level. The float unit consist of a magnet-carrying float mounted around a stainless steel tube. As the float passes up the tube, a magnetic contact is actuated inside the guide tube. The float unit can be directly mounted on a tank through a screwed or flanged connection.

A second application is available as a magnetic switch indicator while fitted on the side of a magnetic level gauge for example. In this case, the MR783 float should be removed. The internal float of the gauge will directly activate the contacts into the tube.

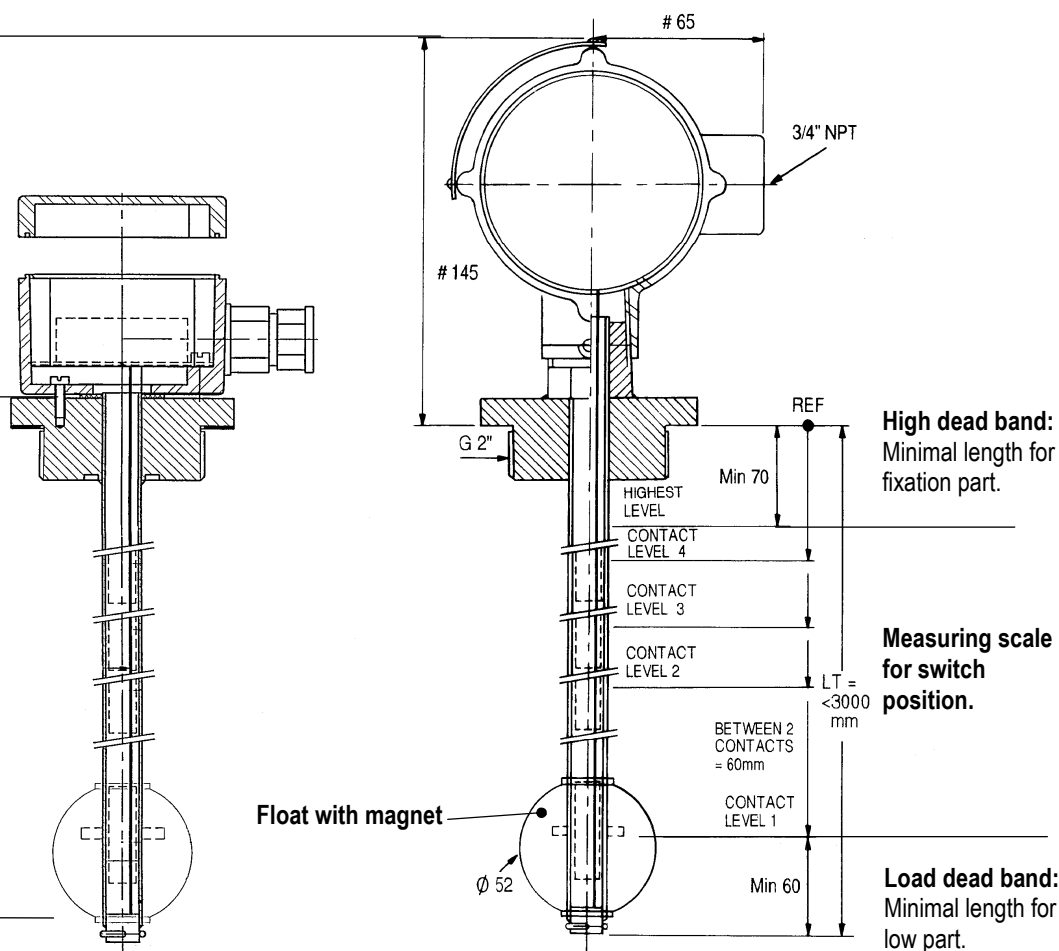
Description

Top of the instrument:
Housing for connection screw terminal. Delivered with packing gland. Assemblage by screw or threaded.

Body of the instrument:
Stainless steel connection part (flange or screwed plug), with a stainless steel pipe immersed in the liquid.

TIG welding

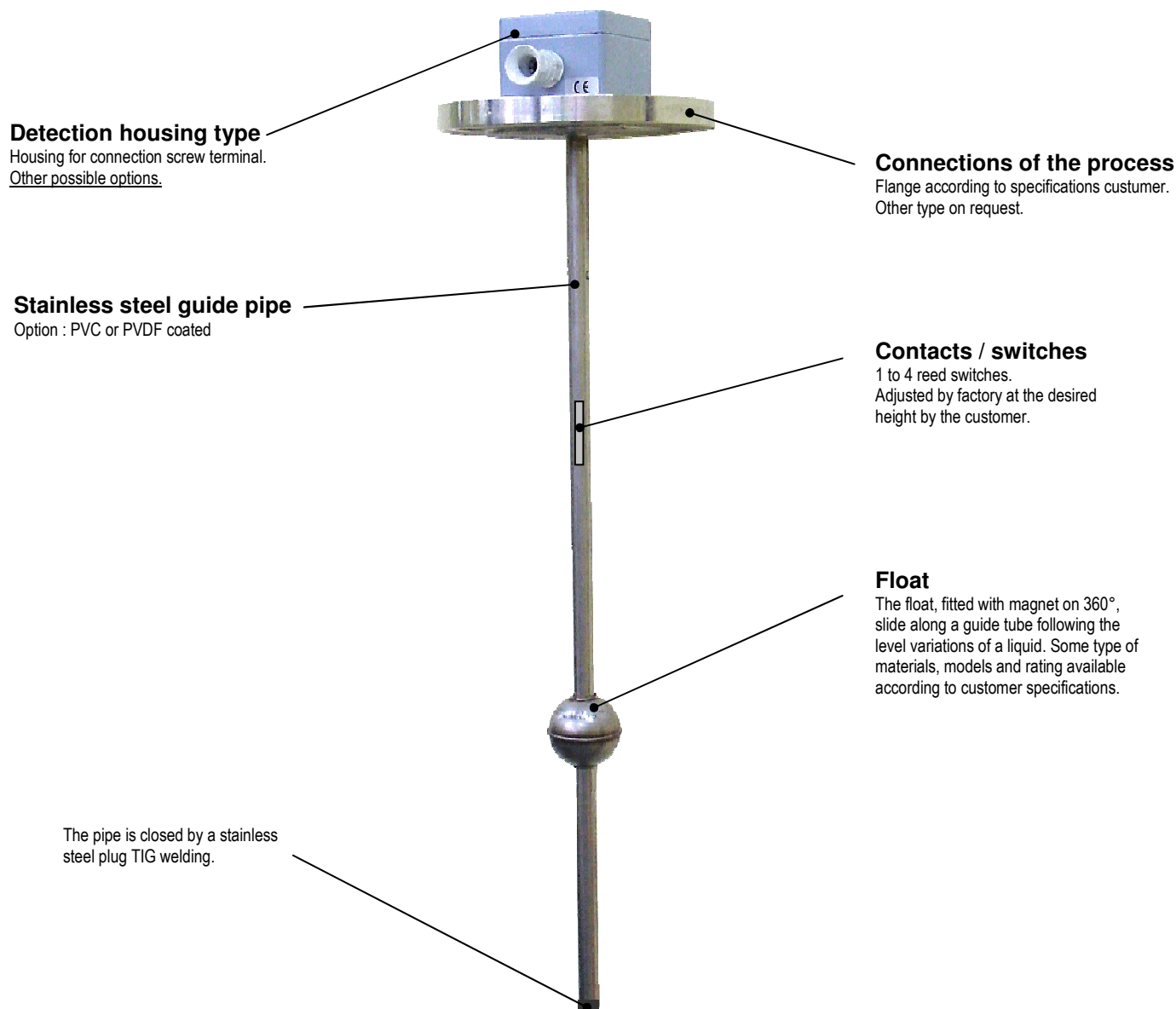
Closing of the tube by welded stainless steel plug.



Magnetic level switch

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Type MR 783 Instrument ordering



Example:

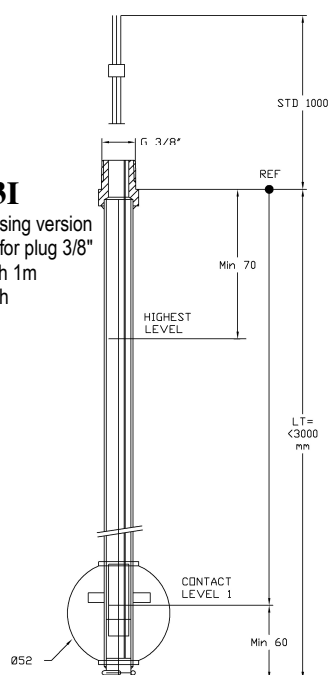
MR783	I	3"	M1	C2	H3	S4	Z9
Instrument type	Material	Dimension of connection	Float type	Connection type	Housing type	Contact quantity	Options

Type MR 783

Dimensions

MR783I

Without housing version
Connection for plug 3/8"
Wiring length 1m
1 reed switch

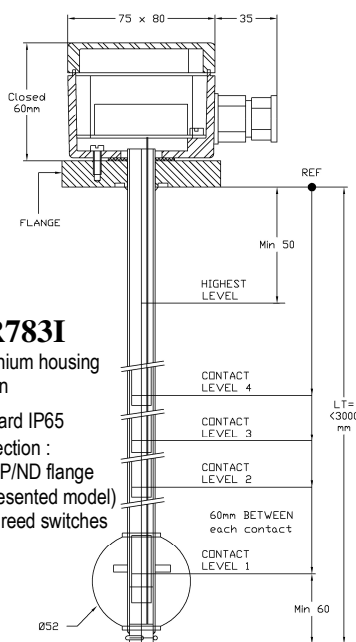


MR783I

Aluminium housing version

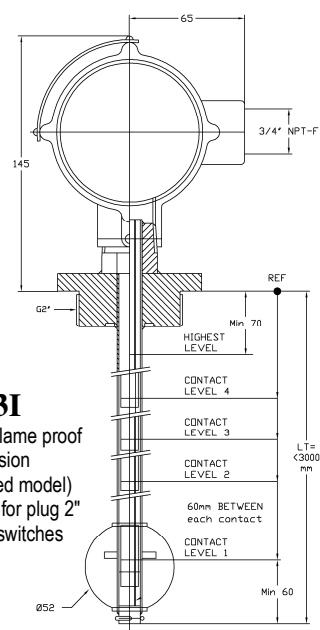
Standard IP65

Connection :
ISO NP/ND flange
(Represented model)
1 to 4 reed switches



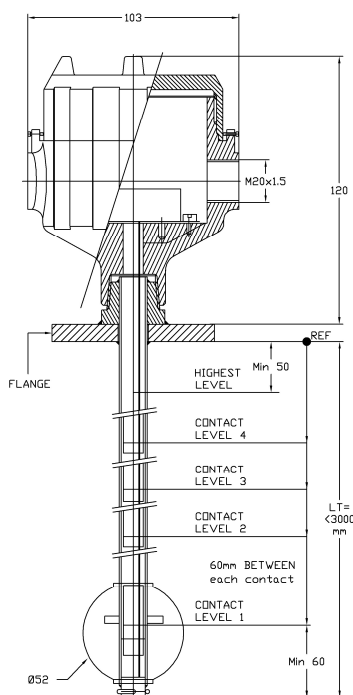
MR783I

Aluminium flame proof housing version
(Represented model)
Connection for plug 2"
1 to 4 reed switches



MR783I

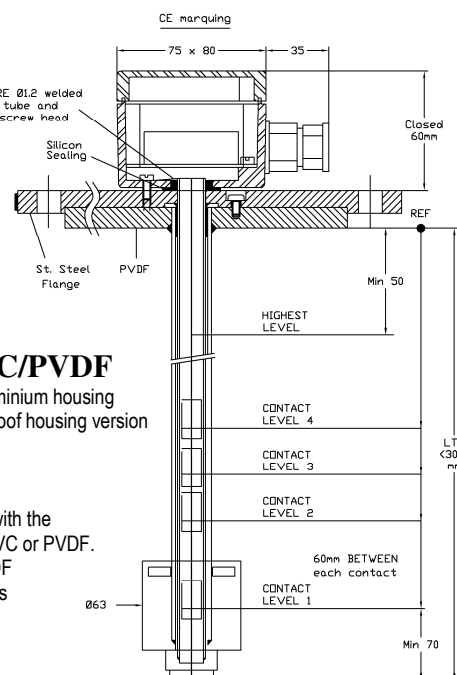
Stainless steel 316L housing version
(Represented model)
Connection :
ISO NP/ND flange
1 to 4 reed switches



MR783PVC/PVDF

Standard IP65 aluminium housing version or flame proof housing version
Connection :
ISO NP/ND flange

All part in contact with the fluid coated with PVC or PVDF.
1 float PVC or PVDF
1 to 4 reed switches



Magnetic level switch

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Type MR 783 Technical specifications

Connections of the process:

- Threaded plug 2" BSPP or 2" NPT or on request
- Flange NP16 / ANSI 150# / ANSI 300# (according to EN1759 or EN1092 or ANSI B16.5)
- Connection 3/8" BSPP (wiring length 1m)
- Other type of connections or dimensions on request

Detection housing type:

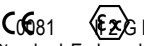
Standard type Aluminium

Code : H3

- Aluminium housing
- Class of protection : IP 65 (80x75x60)
- Packing gland : Polycarbonate material, fitted with retaining ring and shearing shield (wiring from 5 mm to 10mm)
- Electrical connection on screw electrical terminals (suitable for 1,5mm² electrical wires)

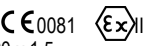
Flame proof version Aluminium (ATEX – IECEx approved)

Code : H2

- Detection housing made of light aluminium alloy IP66 (110x80)
- ATEX / IECEx / Flame proof certified : LCIE01ATEX 6060X
IECEX LCI09 0017X
- Marking :  Exd II C T6 Gb
- Packing gland : Standard Exd made of nickel brass or other according to Ex on request, suitable for armoured cables from 6,1mm to 12mm diameter size.
- Electrical connection on screw electrical terminals (suitable for 1,5mm² electrical wires)

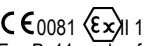
Flame proof version Stainless steel 316L (ATEX – IECEx approved)

Code : H5

- Detection housing made of stainless steel 316L IP66
- ATEX / IECEx / Flame proof certified : LCIE01ATEX 6060X
IECEX LCI09 0017X
- Marking :  Ex II 2 G Exd II C T6-T5 Gb
- Cable entry : M20 x 1,5
- Packing gland : on request
- Electrical connection on screw electrical terminals (suitable for 1,5mm² electrical wires)

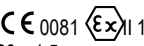
Intrinsic safety type Aluminium (ATEX – IECEx approved)

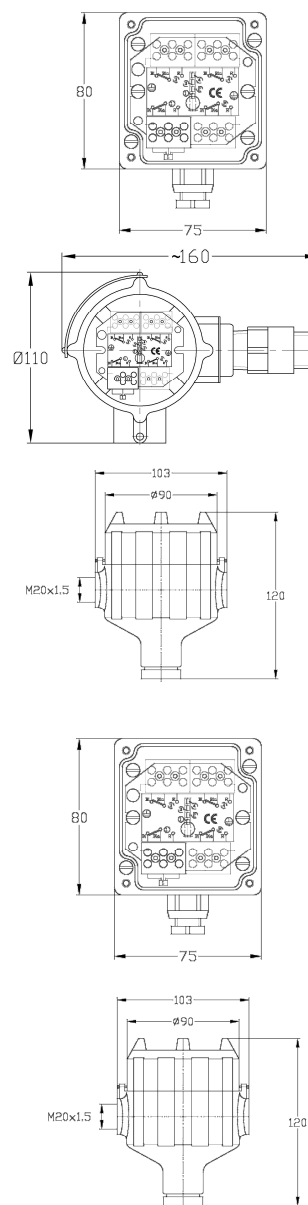
Code : H4

- Aluminium housing IP65 (80x75x60)
- ATEX / IECEx / Intrinsic Safety certified : LCIE05ATEX 6034X
IECEX LCI08 0048X
- Marking :  Ex II 1/2 G Exia II C T6-T5-T4 Ga
- Packing gland : Exe Pg11 made of blue polyamide (d = 6 to 10 mm)
- Electrical connection on screw electrical terminals (suitable for 1,5mm² electrical wires)
- Electrical settings :
Ui ≤ 30V ; Ii = 50mA ; Pi = 0,4W ;
Ci = 0nF ; Li=0mH

Intrinsic safety version Stainless steel 316L (ATEX – IECEx approved)

Code : H6

- Detection housing made of stainless steel 316L IP66
- ATEX / IECEx / Intrinsic Safety certified : LCIE05ATEX 6034X
IECEX LCI08 0048X
- Marking :  Ex II 1/2 G Exia II C T6-T5-T4 Ga
- Cable entry : M20 x 1,5
- Packing gland : on request
- Electrical connection on screw electrical terminals (suitable for 1,5mm² electrical wires)
- Electrical settings :
Ui ≤ 30V ; Ii = 50mA ; Pi = 0,4W ;
Ci = 0nF ; Li=0mH



Contacts / Switches

Standard contacts

- ILS / change over reed switches types
- Max. current : 1 A
- Max. voltage : 250V DC or AC
- Max. power : 60VA/ 30W (resistive charge)
- Quantity : MR783 : 1 to 4

Type MR 783

Operating conditions (Respect the applications of zones)

Type	MR 783 I (ST-Steel)	MR783 PVC	MR 783 PVDF
Min. Specific gravity	0,75	0,8	0,8
Max. temperature	100°C	40°C	70°C
Max. Pressure	30 bar	3 bar	3 bar

For flanged instrument version, the nominal pressure of the flange should be in accordance with the operating pressures.



For all enquiries or order placements, it is essential, in order to ensure that the equipment offered corresponds precisely to the user's requirements, that the followings information are specified.

- Specific gravity
- Max/min Temperature
- Max operating pressure
- Viscosity
- Material type (stainless steel / pvc / pvdf)
- Connection type
- Contact quantity
- Alarm level (from the REF)

Installation and maintenance

The only precaution to be taken is to ensure that the instrument is positioned as near as possible to the vertical axis.
The instrument is practically maintenance-free although it should be kept in suitable clean condition.

Spares

Float (as serial number)

Magnetic level switch

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Ordering

CODE		INSTRUMENT TYPE - MATERIAL				
MR783 I MR783 PVC MR783 PVDF		Stainless steel 316L + float 316Ti				
		Wetted parts material : PVC				
		Wetted parts material : PVDF				
	CODE	DIMENSION OF CONNECTIONS				
	3/8"	BSPP thread – stainless steel				
	2"	BSPP or NPT thread – stainless steel				
	2"1/2	BSPP thread – PVC, PVDF				
	65	ISO NP16 ND65 – stainless steel, PVC, PVDF				
	80	ISO NP16 ND80 – stainless steel, PVC, PVDF				
	100	ISO NP16 ND100 – stainless steel, PVC, PVDF				
	125	ISO NP16 ND125 – stainless steel, PVDF				
	150	ISO NP16 ND150 – stainless steel, PVDF				
	2"1/2	ANSI B.16-5 ND 2 "1/2 flange – stainless steel, PVC, PVDF				
	3"	ANSI B.16-5 ND 3 " flange – stainless steel, PVC, PVDF				
	4"	ANSI B.16-5 ND 4 " flange – stainless steel, PVC, PVDF				
	5"	ANSI B.16-5 ND 5 " flange – stainless steel, PVDF				
	6"	ANSI B.16-5 ND 6 " flange – stainless steel, PVDF				
	CODE	FLOAT TYPE				
	M1	Stainless steel 316Ti	0,75 < d < 1,6	p < 30b	T < 100°C	
PVC		0,8 < d < 1,6	p < 3b	T < 40°C		
PVDF		0,8 < d < 1,6	p < 3b	T < 70°C		
	MX	Special float on request				
	CODE	CONNECTION TYPE				
	C1	Threaded	BSPP			
	C2	Flange	ISO NP16 ND...	according to EN1092		
	C3	Flange ANSI 150#	according to ANSI B16.5		
	C4	Flange ANSI 300#	according to ANSI B16.5		
	CX	Special design on request				
	CODE	HOUSING TYPE				
	H0	Without housing (wiring length 1m – 1 contact)				
	H2	ATEX / IECEx Exd IIC T6 Gb aluminium housing				
	H3	Standard IP65 aluminium housing				
	H4	IP65 ATEX / IECEx Exia IIC T6-T5-T4 Ga aluminium housing (only for MR783I)				
	H5	IP66 ATEX / IECEx Exd IIC T6-T5 Gb stainless steel 316L housing				
	H6	IP66 ATEX / IECEx Exia IIC T6-T5-T4 Ga stainless steel 316L housing (only for MR783I)				
	CODE	CONTACT QUANTITY				
	S1	1 reed switch contact				
	S2	2 reed switch contacts				
	S3	3 reed switch contacts				
	S4	4 reed switch contacts				
	CODE	OPTIONS				
	Z1	ATEX flame proof nickel brass packing gland for housing H2 cable 6.1/12				
	Z2	1 float per each contact				
	Z3	Extra cable length for housing H0				
	Z9	Epoxy paint for aluminium housing				
	Z11	ADE4F nickel brass packing gland for housing H2 cable 8,5 / 16				
	Z12	ADE1F stainless steel packing gland for housing H5 cable 8,5 / 16				
	ZX	Electric comb welding control				
MR783I	3"	M1	C2	H3	S4	Z9

Houdec Innovation S.A.S.

Z.A. de la Tour– ABREST– France

Tel: +33 (0)4.70.59.81.81.

Fax: +33 (0)4.70.59.96.37.

Email : contact@houdec.com

www.houdec.com

