

## EXTERNAL CAGE

### Liquid Displacer Level Switches

#### DESCRIPTION

External cage type level switches are completely self-contained units designed for side mounting to a tank or vessel with threaded or flanged pipe connections. These switches are engineered to customer specifications.

#### FEATURES

- Carbon or stainless steel welded float cages (other materials available at request)
- Process temperature up to 260 °C (500 °F)
- Single switch level
- Standard anti corrosive protection

##### Flanged cages:

- Removable sensing unit from cage allows easy maintenance
- Specific gravity as low as 0,40
- Process pressure up to 345 bar (5000 psi)

##### Sealed cages:

- Sensing unit and cage are self-containing
- Specific gravity as low as 0,40
- Process pressure up to 345 bar (5000 psi)

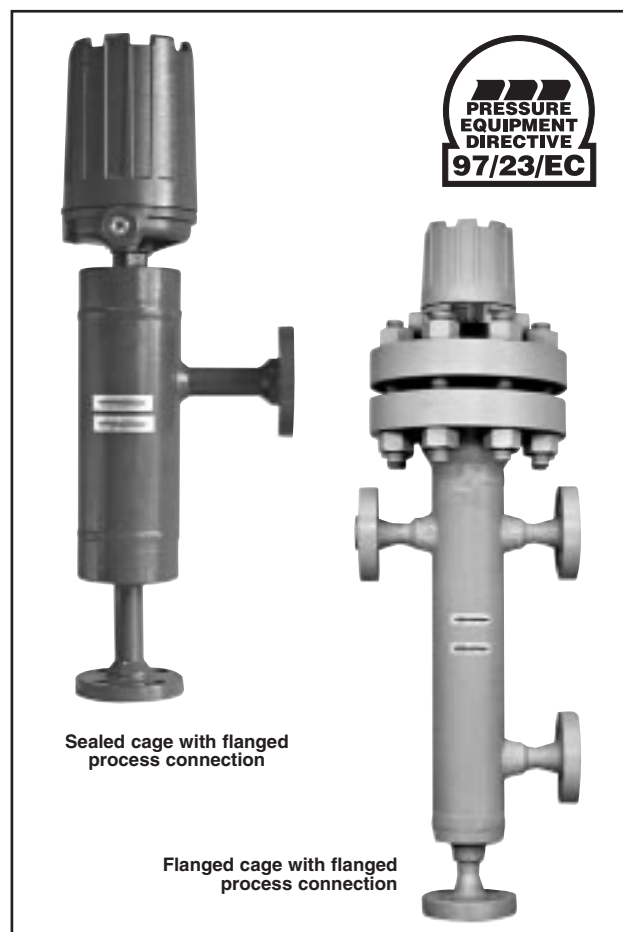
##### Optional:

- NACE construction (MR-01-75)
- Interface calibration
- Customized installation dimensions
- Special actuating levels
- Code compliance construction
- Special tank connections
- Class 1, Group B explosion proof electrical enclosure
- Special exterior surface preparation and finish

#### APPLICATIONS

- Foaming or surging liquids
- Agitated fluids
- Sewage handling
- Dirty liquids
- Paints
- Varnishes
- Heavy oils
- Liquids with solids

#### Standard & tailor made designs



#### AGENCY APPROVALS

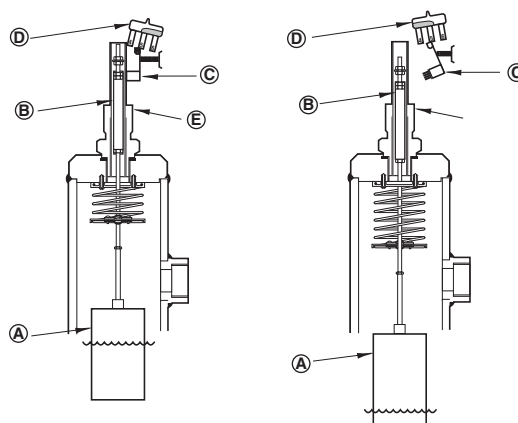
Agency	Approval
ATEX	II 2G EEx d II C T6, explosion proof II 1G EEx ia II C T6, intrinsically safe
CENELEC	EEx d II C T6, explosion proof
CCE <sup>①</sup>	R1 (1) 136/MI/433, explosion proof
FM	Class I, Div. 1, Groups C & D Class II, Div. 1, Groups E, F & G, Type NEMA 7/9
FM/CSA <sup>②</sup>	Non-Hazardous area Explosion proof area – Groups B, C, D, E, F & G Type NEMA 4X/7/9
SAA <sup>②</sup>	Explosion proof area
LRS	Lloyds Register of Shipment (marine applications)
GOST/ GOSGORTSEKHADZOR <sup>②</sup>	Russian Authorisation Standards
Other approvals are available, consult factory for more details	

<sup>①</sup> For CCE approved units, use the ATEX explosion proof model numbers.

<sup>②</sup> Consult factory for proper model numbers.

## PRINCIPLE OF OPERATION

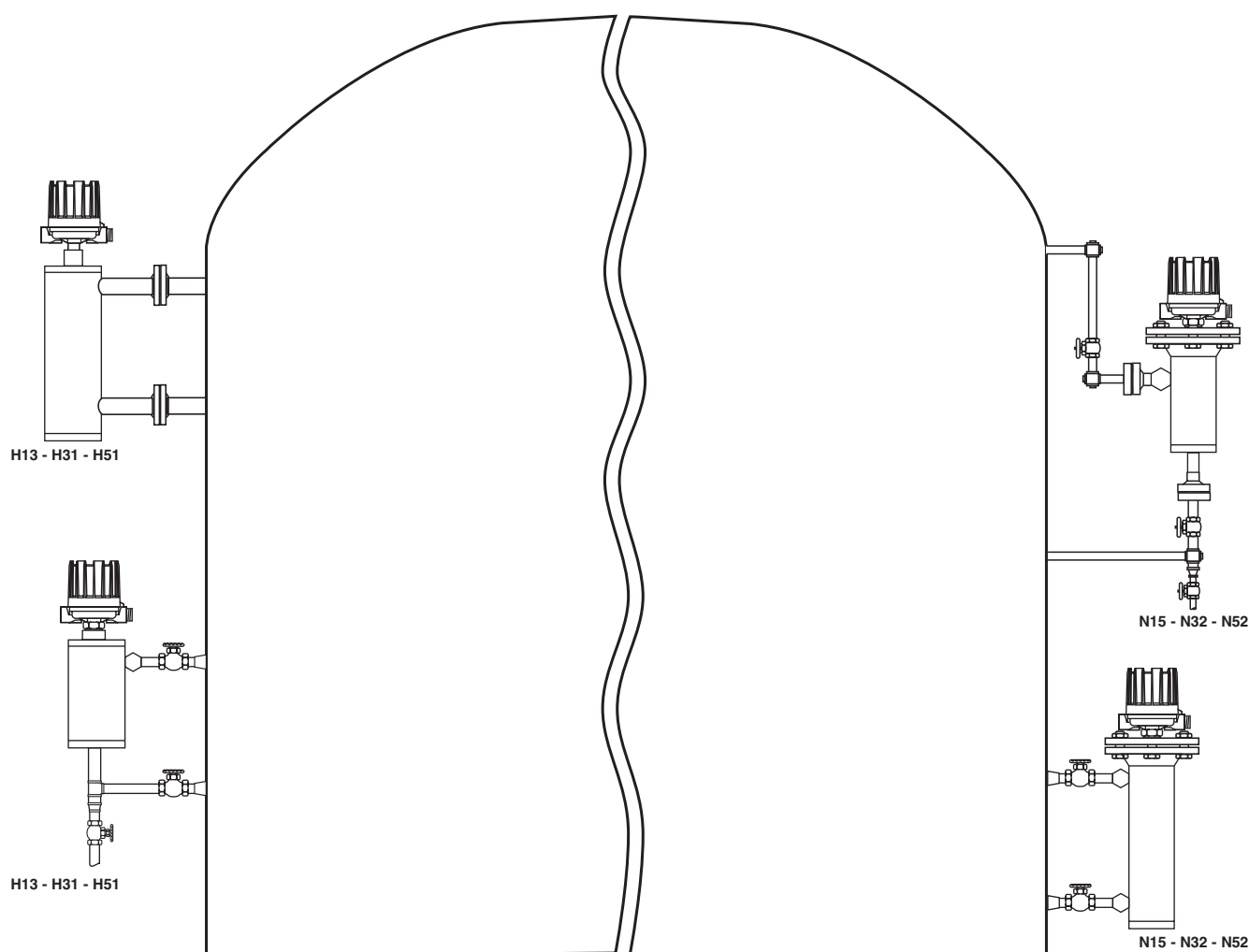
The displacer (A), which is heavier than the liquid, rests its weight on a spring. Rising liquid level imparts buoyancy to the displacer allowing the spring to move upward. The attraction sleeve (B), attached to the spring, moves upward into the field of a permanent magnet (C). Magnet motion tilts the switch (D) for actuation. A non-magnetic barrier tube (E) provides a static seal between the switch mechanism and the displacer assembly.



## MOUNTING

Sealed Cages

Flanged Cages



## EXPEDITE SHIP PLAN (ESP)

Several mechanical switches are available for quick shipment, within max. 3 weeks after factory receipt of purchase order, through the Expedite Ship Plan (ESP).

Models covered by ESP service are conveniently grey coded in the selection data charts.

To take advantage of ESP, simply match the grey coded model number codes (standard dimensions apply).

ESP service may not apply to orders of ten units or more. Contact your local representative for lead times on larger volume orders, as well as other products and options.

## AVAILABLE SWITCH MECHANISMS

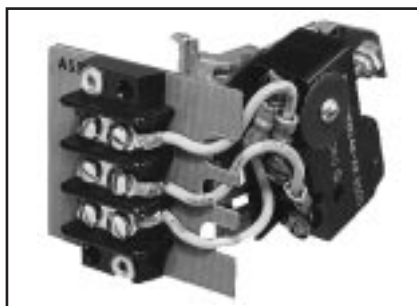
Type of switch module <sup>①</sup>	Max. Process Temp. <sup>②</sup>	Switch ratings – A res. <sup>③</sup>			Code
		24 V DC	240 V AC	120 V AC	
Micro switch	max 120 °C (250 °F)	6	15	15	B
Micro switch	max 230 °C (450 °F)	10	15	15	C
Micro switch - DC current	max 120 °C (250 °F)	10	–	10	D
Micro switch with gold alloy contacts	max 120 °C (250 °F)	1	–	1	U
Hermetically sealed micro switch	max 260 °C (500 °F)	5	5	5	HS <sup>④</sup>
Hermetically sealed micro switch with silver plated contacts	max 230 °C (450 °F)	3	1	1	W
Hermetically sealed micro switch with gold plated contacts	max 230 °C (450 °F)	0,5	0,5	0,5	X
Proximity switch - type SJ 3.5 SN	max 100 °C (210 °F)	NA	NA	NA	V
Mercury switch	max 260 °C (500 °F)	10	6,5	13	A
Pneumatic bleed type (open air)	max 200 °C (400 °F)	NA	NA	NA	J
Pneumatic non bleed type (closed circuit)	max 200 °C (400 °F)	NA	NA	NA	K

<sup>①</sup> For applications with heavy vibration, consult factory for suited switch modules.

<sup>②</sup> Max process temperature is specified at 40 °C (100 °F) ambient temperature and for non condensing applications.

<sup>③</sup> For more details - see bulletin BE 42-120.

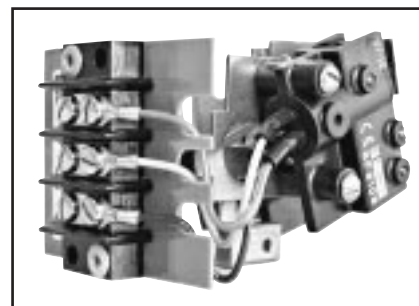
<sup>④</sup> For condensing applications, max process temperature is down-rated to 200 °C (400 °F) @ 40 °C (100 °F) ambient.



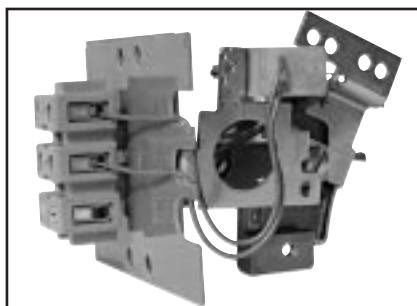
Type B, C, D & U



Type HS



Type W & X



Type V



Type A



Type J & K

## AVAILABLE HOUSINGS



- For Non Ex use
- IP 66
- Die cast Aluminium
- 2 Entries (one plugged)
- Standard blue anti corrosive coating
- Housing heater/drain available, consult factory



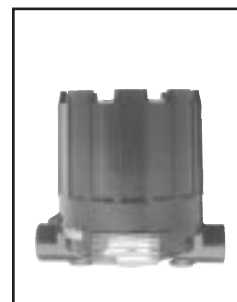
- For Exd/Exi use
- IP 66
- Die cast Aluminium
- 2 Entries (one plugged)
- Standard blue anti corrosive coating
- ATEX II 2G EEx d II C T6
- ATEX II 1G EEx ia II C T6



- For Exd use
- IP 66
- Cast Iron
- One entry (2 entries at request)
- Standard blue anti corrosive coating
- CENELEC EEx d II C T6



- For pneumatic switches
- IP 53 (NEMA 3R)
- IP 55 optional at request
- Alu base / cold rolled steel cover
- Standard blue anti corrosive coating



- For Exd use
- IP 66 (NEMA 7/9)
- Die cast Aluminium
- 2 Entries (one plugged)
- Standard blue anti corrosive coating
- FM, Class I, Div. 1, Groups C & D
- FM, Class II, Div. 1, Groups E, F & G

## SELECTION DATA

### Specific gravity and pressure limits – as per selected material of construction (see right page)

Sealed Cages		Carbon steel cages		Stainless steel cages	
Model Number	Process Temp °C (°F)	Min. S.G.	Pressure bar (psi)	Min. S.G.	Pressure bar (psi)
		Material code A & B		Material code D	
H13	40 (100)	0,40	103 (1500)	0,40	103 (1500)
	150 (300)		96,5 (1400)		96,5 (1400)
	260 (500)		82,7 (1200)		82,7 (1200)
-	-	-	-	-	-
	-		-		-
	-		-		-
-	-	-	-	-	-
	-		-		-
	-		-		-
H31	40 (100)	0,40	207 (3000)	0,40	207 (3000)
	150 (300)		196 (2848)		196 (2848)
	200 (400)		193 (2800)		193 (2800)
H51	40 (100)	0,40	345 (5000)	0,40	345 (5000)
	150 (300)		345 (5000)		345 (5000)
	200 (400)		310 (4500)		310 (4500)

Flanged Cages		Carbon steel cages		Stainless steel cages	
Model Number	Process Temp °C (°F)	Min. S.G.	Pressure bar (psi)	Min. S.G.	Pressure bar (psi)
		Material code A & B		Material code D	
N15 150 lbs rating	40 (100)	0,40	19,6 (285)	0,40	19,0 (275)
	150 (300)		15,9 (230)		14,8 (215)
	260 (500)		11,7 (170)		11,7 (170)
N15 300 lbs rating	40 (100)	0,40	51,0 (740)	0,40	49,6 (720)
	150 (300)		45,2 (655)		38,6 (560)
	260 (500)		41,4 (600)		33,1 (480)
N15 600 lbs rating	40 (100)	0,40	102 (1480)	0,40	99,3 (1440)
	150 (300)		90,6 (1315)		77,2 (1120)
	260 (500)		82,7 (1200)		65,8 (955)
N32	40 (100)	0,40	207 (3000)	0,40	207 (3000)
	150 (300)		196 (2848)		192 (2795)
	200 (400)		193 (2800)		177 (2570)
N52	40 (100)	0,40	345 (5000)	0,40	345 (5000)
	150 (300)		345 (5000)		321 (4660)
	200 (400)		310 (4500)		295 (4280)

### A complete measuring system consists of:

1. Order code for **caged** models (each unit can be factory calibrated when specific level differentials are specified separately).
2. Order code for **modified** models or adders: put an "X" in front of the closest matching order code and specify the modifications/adders separately  
eg. XN15-AB20-AAQ      X = with material certification EN 10204 / DIN 50049-3.1.B

### Select pneumatic switch mechanism & enclosure

Pneumatic switch type	Max supply pressure bar (psi)	Max liquid temperature °C (°F)	Bleed orifice Ø mm (inches)	NEMA 3R (IP 53)	
				material code A <sup>①</sup>	material codes B & D <sup>②</sup>
Series J (open air)	6,9 (100)	200 (400)	1,60 (0.063)	JDE	JKE
	4,1 (60)	200 (400)	2,39 (0.094)	JEE	JLE
Series K (closed circuit)	6,9 (100)	200 (400)	–	KOE	KPE

### Select electric switch mechanism & enclosure: see page 3 for switch ratings

qty and switch type		Weather proof (IP 66)		ATEX (IP 66)				CENELEC (IP 66)		FM (IP 66)
				II 2G EEx d II C T6		II 1G EEx ia II C T6		EEx d II C T6		NEMA 7/9
		cast Aluminium		cast Aluminium		cast Aluminium		cast Iron		cast Alu.
		M20 x 1,5	1" NPT	M20 x 1,5	1" NPT	M20 x 1,5	1" NPT	M20 x 1,5	3/4" NPT	1" NPT
A	1 x SPDT	A2Q	AAQ	AH9	AA9	–	–	AK5	AU5	AKQ
	1 x DPDT	A8Q	ADQ	AJ9	AB9	–	–	AD5	AW5	ANQ
B	1 x SPDT	B2Q	BAQ	BH9	BA9	–	–	BK5	BU5	BKQ
	1 x DPDT	B8Q	BDQ	BJ9	BB9	–	–	BD5	BW5	BNQ
C	1 x SPDT	C2Q	CAQ	CH9	CA9	C2S	CAS	CK5	CU5	CKQ
	1 x DPDT	C8Q	CDQ	CJ9	CB9	C8S	CDS	CD5	CW5	CNQ
D	1 x SPDT	D2Q	DAQ	DH9	DA9	–	–	DK5	DU5	DKQ
	1 x DPDT	D8Q	DDQ	DJ9	DB9	–	–	DD5	DW5	DNQ
HS <sup>① ③</sup>	1 x SPDT	H7A	HM2	HFC	HA9	–	–	HB3	HB4	HM3
	1 x DPDT	H7C	HM6	HGC	HB9	–	–	HB7	HB8	HM7
U	1 x SPDT	U2Q	UAQ	UH9	UA9	U2S	UAS	UK5	UU5	UKQ
	1 x DPDT	U8Q	UDQ	UJ9	UB9	U8S	UDS	UD5	UW5	UNQ
V	–	–	–	–	–	V5S	VBS	–	–	–
W	1 x SPDT	W2Q	WAQ	WH9	WA9	W2S	WAS	WK5	WU5	WKQ
	1 x DPDT	W8Q	WDQ	WJ9	WB9	W8S	WDS	WD5	WW5	WNQ
X	1 x SPDT	X2Q	XAQ	XH9	XA9	X2S	XAS	XK5	XU5	XKQ
	1 x DPDT	X8Q	XDQ	XJ9	XB9	X8S	XDS	XD5	XW5	XNQ

<sup>①</sup> For all models except H51/N52

<sup>②</sup> For all models incl. H51/N52 with material code A

<sup>③</sup> Only in combination with material code A

## SELECTION DATA

1. Order code for liquid float level switches in an external cage

BASIC MODEL NUMBER

– Sealed cages

H 1 3	down to S.G. 0,4	up to 103 bar (1500 psi)	max pressure varies per material of construction and temperature - select as per table on left page -
H 3 1	down to S.G. 0,4	up to 207 bar (3000 psi)	
H 5 1	down to S.G. 0,4	up to 345 bar (5000 psi)	

– Flanged cages

N 1 5	down to S.G. 0,4	up to 102 bar (1480 psi)	max pressure varies per material of construction and temperature - select as per table on left page -
N 3 2	down to S.G. 0,4	up to 207 bar (3000 psi)	
N 5 2	down to S.G. 0,4	up to 345 bar (5000 psi)	

### MATERIALS OF CONSTRUCTION

Code	Cage & process connection material	Displacer and trim	Magnetic sleeve
A	Carbon steel	316 SST (1.4401)	400 series SST
B			316 SST (1.4401)
D	316/316L (1.4401/1.4404)		

### PROCESS CONNECTION

	Threaded NPT connection							
	upper side / bottom				side / side			
	For models N15			All models except N15	For models N15			All models except N15
	150 lbs	300 lbs	600 lbs	≤ 2500 lbs	150 lbs	300 lbs	600 lbs	≤ 2500 lbs
1"	B21	B23	B20	B20	B41	B43	B40	B40
1½"	C21	C23	C20	C20	C41	C43	C40	C40
2"	D21	D23	D20	D20	D41	D43	D40	D40
	Socket weld connection							
	upper side / bottom				side / side			
	For models N15			All models except N15	For models N15			All models except N15
	150 lbs	300 lbs	600 lbs	≤ 2500 lbs	150 lbs	300 lbs	600 lbs	≤ 2500 lbs
1"	B31	B33	B30	B30	B51	B53	B50	B50
1½"	C31	C33	C30	C30	C51	C53	C50	C50
2"	D31	D33	D30	D30	D51	D53	D50	D50
	ANSI Flanges							
	upper side / bottom				side / side			
	For models H13/N15				For models H13/N15			
	150 lbs RF	300 lbs RF	600 lbs RF	600 lbs RJ	150 lbs RF	300 lbs RF	600 lbs RF	600 lbs RJ
1"	N30	N40	N50	N60	S30	S40	S50	S60
1½"	P30	P40	P50	P60	T30	T40	T50	T60
2"	Q30	Q40	Q50	Q60	V30	V40	V50	V60
	For models H31/N32	For models H31/N32 & H51/N52	For models H51/N52	For models H31/N32	For models H31/N32 & H51/N52	For models H51/N52		
	900 lbs RJ	1500 lbs RJ	2500 lbs RJ	900 lbs RJ	1500 lbs RJ	2500 lbs RJ		
	1"	N70	N80	N90	S70	S80	S90	
	1½"	P70	P80	P90	T70	T80	T90	
2"	Q70	Q80	Q90	V70	V80	V90		
	DIN Flanges - Form to DIN 2526							
	upper side / bottom				side / side			
	For models H13/N15				For models H13/N15			
	PN 16 (DIN 2633) Form C	PN 25/40 (DIN 2635) Form C	PN 64 (DIN 2636) Form E	PN 100 (DIN 2637) Form E	PN 16 (DIN 2633) Form C	PN 25/40 (DIN 2635) Form C	PN 64 (DIN 2636) Form E	PN 100 (DIN 2637) Form E
DN 25	1FA	1HA	1JA	1KA	1FB	1HB	1JB	1KB
DN 40	2FA	2HA	2JA	2KA	2FB	2HB	2JB	2KB
DN 50	3FA	3HA	3JA	3KA	3FB	3HB	3JB	3KB

SWITCH MECHANISM & ENCLOSURE (see left page)



complete order code for *caged* models

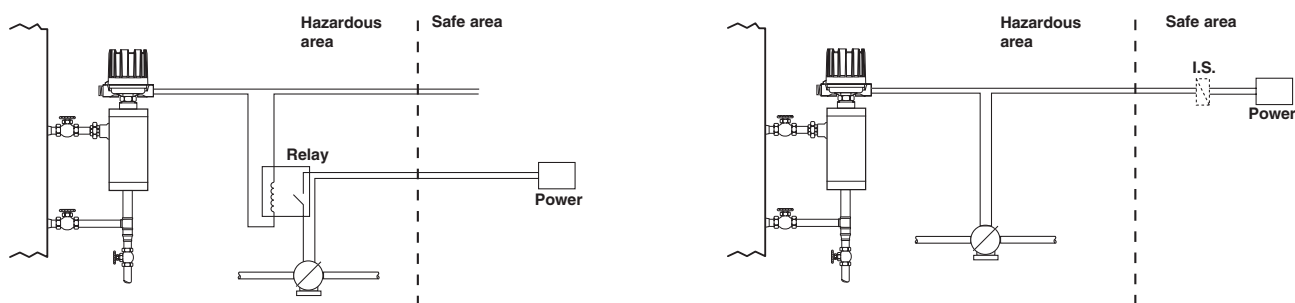
## PHYSICAL SPECIFICATIONS

Description		Specification
Measured variable		Liquid level / interface level
Physical range		Standard models: min S.G. 0,40
Process temperature Process pressure (for higher ratings consult factory)		Up to 345 bar (5000 psi) @ 40 °C (100 °F) Up to 260 °C (500 °F) @ 82,7 bar (1200 psi)
Cage and process connection material		Carbon steel or stainless steel (others at request)
Wetted materials	Displacer and trim	316 SST (1.4401)
	Magnetic sleeve	316 SST (1.4401), or 400 series SST
	Spring	Inconel

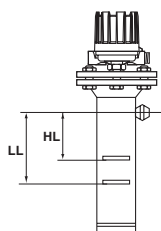
## ELECTRICAL SPECIFICATIONS

Description		Specification
Switch ratings		Up to 15 A @ 240 V AC (depending on switch mechanism) Up to 10 A @ 120 V DC (depending on switch mechanism)
Signal Output		Single SPDT or DPDT contacts or single pneumatic
Switch Types (see table on page 3)		Dry contact with standard or gold alloy contacts, Mercury, Hermetically sealed, Hermetically sealed with gold or silver plated contacts, Proximity switch, or single pneumatic bleed and non bleed
Approvals (see table on page 1)		ATEX II 2G EEx d II C T6, explosion proof ATEX II 1G EEx ia II C T6, intrinsically safe CENELEC EEx d II C T6, explosion proof FM/CSA/SAA, explosion proof LRS, Lloyds Register of Shipment (marine applications) GOST/GOSGORTTECHNADZOR, Russian Authorisation standards Other approvals are available, consult factory.
Cable entries		M20 x 1,5 ISO, 1" NPT and 3/4" NPT (or others at request)

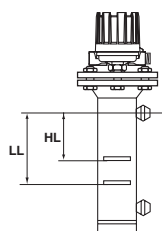
## ELECTRICAL CONNECTION



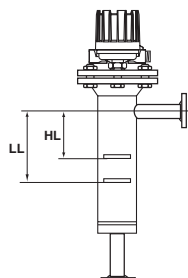
## ACTUATING LEVELS



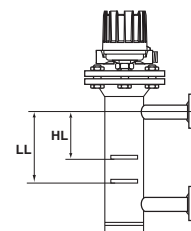
Upper side / bottom  
NPT & Socket weld



Side / Side  
NPT & Socket weld



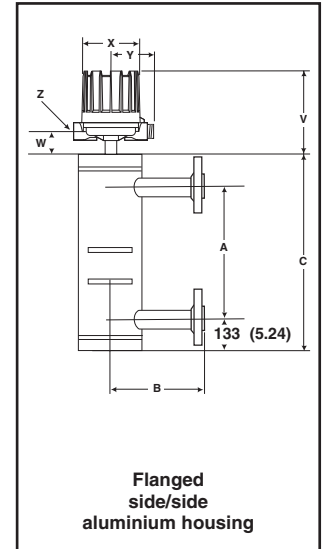
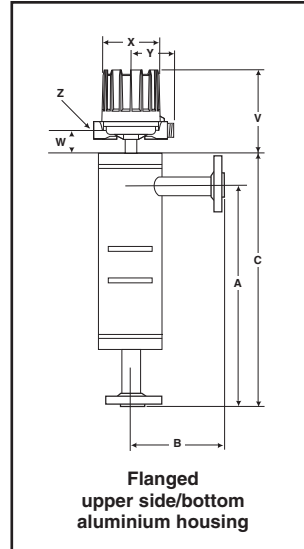
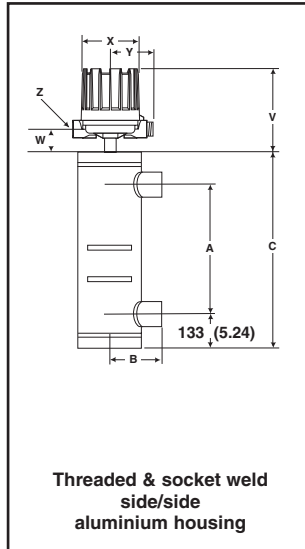
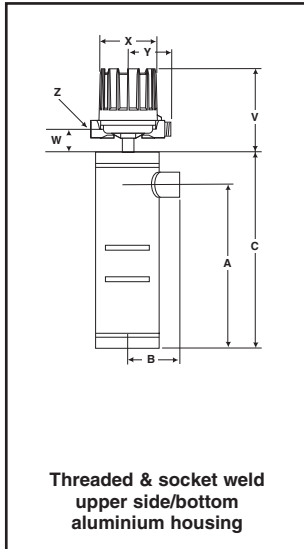
Upper side / bottom  
Flanged



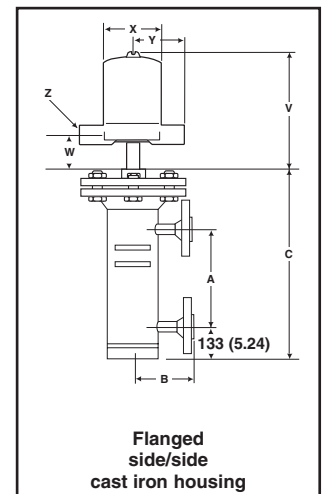
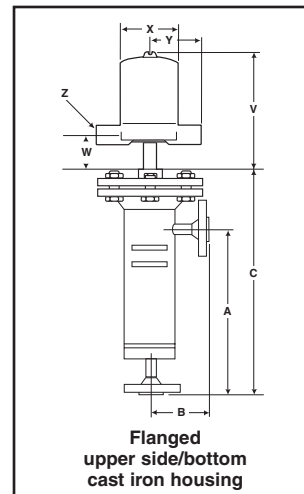
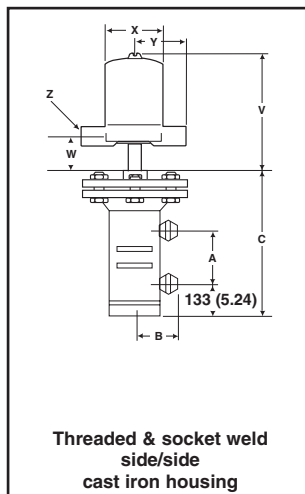
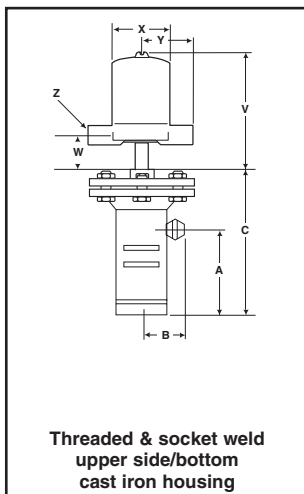
Side / Side  
Flanged

# SEALED CAGE MODEL - dimensional specifications in mm (inches)

## – H13 / H31 / H51 Models –



## – N15 / N32 / N52 Models –



Housing type	Models	V		W		Ø X		Y		Z
		mm	inches	mm	inches	mm	inches	mm	inches	
Weatherproof-FM (NEMA 7/9) - ATEX (Cast Alu)	Models with HS-switch	257	10.12	42	1.66	151	5.93	109	4.29	M20 x 1,5 (*) or 1" NPT (2 entries - 1 plugged) (*) not for FM (NEMA 7/9)
	Models excl. HS-switch	202	7.94							
CENELEC (Cast Iron)	All	249	9.80	45	1.77	143	5.63	110	4.33	M20 x 1,5 or 3/4" NPT (single entry - 2 entries at request)
Pneumatics Switch Module J	All	165	6.50	39	1.54	118	4.65	110	4.33	1/4" NPT
Pneumatics Switch Module K								130	5.12	

Allow 200 mm (7.87") overhead clearance / All housings are 360 ° rotatable

## ACTUATING LEVELS IN mm (inches) FOR DIFFERENT SPECIFIC GRAVITIES

S.G.	0,4	0,5	0,6	0,7	0,8	0,9	1,0	1,1
High Level (HL)	96 (3.78)	126 (4.96)	147 (5.79)	161 (6.34)	172 (6.77)	181 (7.13)	187 (7.36)	193 (7.60)
Low Level (LL)	198 (7.80)	211 (8.31)	219 (8.62)	225 (8.86)	229 (9.02)	233 (9.17)	236 (9.29)	238 (9.37)



## DIMENSIONS in mm (inches)

Process connection size	Mounting configuration	Model	Dimensions						Model	Dimensions					
			A		B		C			A		B		C	
			mm	inches	mm	inches	mm	inches		mm	inches	mm	inches	mm	inches
1" - DN 25	threaded/socket welded upper side/bottom	H13	425	16.73	69	2.72	623	24.53	N15 (*)	425	16.73	69	2.72	630	24.80
	threaded/socket welded side/side		292	11.50	69	2.72	623	24.53		292	11.50	69	2.72	630	24.80
	flanged upper side/bottom		550	21.65	170	6.69	748	29.45		550	21.65	170	6.69	755	29.72
	flanged side/side		292	11.50	170	6.69	623	24.53		292	11.50	170	6.69	630	24.80
1 1/2" - DN 40	threaded/socket welded upper side/bottom		425	16.73	81	3.19	623	24.53		425	16.73	81	3.19	630	24.80
	threaded/socket welded side/side		292	11.50	81	3.19	623	24.53		292	11.50	81	3.19	630	24.80
	flanged upper side/bottom		560	22.05	180	7.09	758	29.84		560	22.05	180	7.09	765	30.12
	flanged side/side		292	11.50	180	7.09	623	24.53		292	11.50	180	7.09	630	24.80
2" - DN 50	threaded/socket welded upper side/bottom		425	16.73	84	3.31	623	24.53		425	16.73	84	3.31	630	24.80
	threaded/socket welded side/side		292	11.50	84	3.31	623	24.53		292	11.50	84	3.31	630	24.80
	flanged upper side/bottom		565	22.24	185	7.28	763	30.04		565	22.24	185	7.28	770	30.31
	flanged side/side		292	11.50	185	7.28	623	24.53		292	11.50	185	7.28	630	24.80

1" - DN 25	threaded upper side/bottom	H31	425	16.73	92	3.62	630	24.80	N32 (**)	425	16.73	92	3.62	735	28.94
	threaded side/side		292	11.50	92	3.62	630	24.80		292	11.50	92	3.62	735	28.94
	socket welded upper side/bottom		425	16.73	99	3.90	630	24.80		425	16.73	99	3.90	735	28.94
	socket welded side/side		292	11.50	99	3.90	630	24.80		292	11.50	99	3.90	735	28.94
1 1/2" - DN 40	flanged upper side/bottom		565	22.24	195	7.68	770	30.31		565	22.24	195	7.68	875	34.45
	flanged side/side		292	11.50	195	7.68	630	24.80		292	11.50	195	7.68	735	28.94
	threaded upper side/bottom		425	16.73	94	3.70	630	24.80		425	16.73	94	3.70	735	28.94
	threaded side/side		292	11.50	94	3.70	630	24.80		292	11.50	94	3.70	735	28.94
2" - DN 50	socket welded upper side/bottom		425	16.73	102	4.02	630	24.80		425	16.73	102	4.02	735	28.94
	socket welded side/side		292	11.50	102	4.02	630	24.80		292	11.50	102	4.02	735	28.94
	flanged upper side/bottom		575	22.64	205	8.07	780	30.71		575	22.64	205	8.07	885	34.84
	flanged side/side		292	11.50	205	8.07	630	24.80		292	11.50	205	8.07	735	28.94
	threaded upper side/bottom		425	16.73	97	3.82	630	24.80		425	16.73	97	3.82	735	28.94
	threaded side/side		292	11.50	97	3.82	630	24.80		292	11.50	97	3.82	735	28.94
	socket welded upper side/bottom		425	16.73	112	4.41	630	24.80		425	16.73	112	4.41	735	28.94
	socket welded side/side		292	11.50	112	4.41	630	24.80		292	11.50	112	4.41	735	28.94
	flanged upper side/bottom		595	23.43	225	8.86	800	31.50		595	23.43	225	8.86	905	35.63
	flanged side/side		292	11.50	225	8.86	630	24.80		292	11.50	225	8.86	735	28.94

1" - DN 25	threaded/socket welded upper side/bottom	H51	425	16.73	99	3.90	630	24.80	N52 (**)	425	16.73	99	3.90	835	32.87
	threaded/socket welded side/side		292	11.50	99	3.90	630	24.80		292	11.50	99	3.90	835	32.87
	flanged 1500 lbs RJ upper side/bottom		565	22.24	195	7.68	770	30.31		565	22.24	195	7.68	975	38.39
	flanged 1500 lbs RJ side/side		292	11.50	195	7.68	630	24.80		292	11.50	195	7.68	835	32.87
1 1/2" - DN 40	flanged 2500 lbs RJ upper side/bottom		580	22.83	211	8.31	785	30.91		580	22.83	211	8.31	990	38.98
	flanged 2500 lbs RJ side/side		292	11.50	211	8.31	630	24.80		292	11.50	211	8.31	835	32.87
	threaded/socket welded upper side/bottom		425	16.73	102	4.02	630	24.80		425	16.73	102	4.02	835	32.87
	threaded/socket welded side/side		292	11.50	102	4.02	630	24.80		292	11.50	102	4.02	835	32.87
2" - DN 50	flanged 1500 lbs RJ upper side/bottom		575	22.64	205	8.07	780	30.71		575	22.64	205	8.07	985	38.78
	flanged 1500 lbs RJ side/side		292	11.50	205	8.07	630	24.80		292	11.50	205	8.07	835	32.87
	flanged 2500 lbs RJ upper side/bottom		605	23.82	235	9.25	810	31.89		605	23.82	235	9.25	1015	39.96
	flanged 2500 lbs RJ side/side		292	11.50	235	9.25	630	24.80		292	11.50	235	9.25	835	32.87
	threaded/socket welded upper side/bottom		425	16.73	112	4.41	630	24.80		425	16.73	112	4.41	835	32.87
	threaded/socket welded side/side		292	11.50	112	4.41	630	24.80		292	11.50	112	4.41	835	32.87
	flanged 1500 lbs RJ upper side/bottom		595	23.43	225	8.86	800	31.50		595	23.43	225	8.86	1005	39.57
	flanged 1500 lbs RJ side/side		292	11.50	225	8.86	630	24.80		292	11.50	225	8.86	835	32.87
	flanged 2500 lbs RJ upper side/bottom		620	24.41	250	9.84	825	32.48		620	24.41	250	9.84	1030	40.55
	flanged 2500 lbs RJ side/side		292	11.50	250	9.84	630	24.80		292	11.50	250	9.84	835	32.87

(\*) Add 33 mm (1.3") to 'C'-dimension for cast iron EEx d II C T6 housings

(\*\*) Add 51 mm (2") to 'C'-dimension for cast iron EEx d II C T6 housings



**ISO-9001 REGISTERED FIRM**  
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