



# **EXALTO WIPER RANGE SPECS**

WINDOW HEIG	HT				up	to 1100 mm					up to 1600mm	Up	to 2100 m	m
		LD				_N	1D1				MD2	HD1	HI	D2
Nm range		15				2.	3-35				40	55	80-	110
motors		215BD	223BD.o	223BD.c ex2338D	223BDS	223BS	223KG.o	223KG.c ex235KG	232BD	232XP	240BS	255BS	280	2110
arms series		LD	MD1	MD1	MD1	MD1	MD1	MD1	MD1	MD1	MD2	HD1	HD2	HD2
		(LD)	(PU)	(PU)	(PU)	(PU)	(PU)	(PU)	(PU)	(PU)	(PF)	(P10)	(P12)	(P12)
oltage	V	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	24	24
orque	Nm	15	23	23	23	23	23	23	32	32	40	55	80	110
ower consumption	w	15	36	36	36	36	36	36	40	40	36/48	84/96	55/77	84/110
nsulated Earth Return		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
ousing arrangement		closed, IP66	open	closed	open	open	open	closed	closed	open	open	open	open	open
ulkhead mount		yes	yes	yes	yes	yes	no	no	yes	yes	yes	yes	yes	yes
lass mount tandard bulkhead		yes	no	no 20-35-55-75-	no	no	yes	yes	no 20-35-55-75-	no	no	no	no	no
hickness	mm	15/35/60	20-35-55-75	100-125	20-35-55-75	20-35-55-75	glass mount	glass mount	100-125	25-50	30	30-65	25	25
max. arm length	mm	600	750	750	750	750	450	450	750	750	900	1000	1500	1500
nax blade length	mm	600	750	800	750	750	500	500	800	800	900	1200	1500	1500
wo speeds		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
self-parking		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
wiping arc 40-110		10 increments	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
viping arc 40-90		NA	5 increments	5 increments	5 increments	stepless	5 increments	5 increments	5 increments	20 increments	stepless	stepless	stepless	stepless
frive shaft sleeve	mm	16	20	20	20	20	20	11	20	20	20	20	27	27
		external mounting plate (supplied with pantograph												
dler spindel/sleeve	mm	arms)	8	8	NA	8	8	8	8	8	20	20	27	27
entre distance	mm	45 (external pantograph plate)	50	50	NA	50	50	50	50	50	60	60	60	60
driven shaft(s)		single	single	single	single	single	single	single	single	single	dual	dual	dual	dual
over available		NA	yes	no	yes	no	yes	no	no	no	no	no	no	no



#### **EXALTO DESIGN AND DEVELOPMENT ENGINEERING SUPPORT**

Exalto designs its own equipment. Experience, the drive to innovate, bench and field tests plus field feedback from over 30 years are the ingredients for our current and future designs. Designs that have been transformed into products that are used all over the world, resulting in thousands of varieties for all kinds of environment.

Our engineers are continuously striving to improve our products and are available to support you in getting the best solution for your application. With modern 3D software, which enables us to use simulated examples and/or proto type test projects, we are able to give you a complete new view.

Let us support you with our knowledge!

#### **EXALTO PERMANENT TEST ROOM FOR ENDURANCE AND DEVELOPMENT TESTING**

Exalto does type test all standard products prior to introduction to the market. With growing demands for the increase of window sizes and therefore the requirement of extended arm- and blade lengths, we feel the need for endurance tests. On our Dutch premises we do have such a permanent test facility and there we undertake a variety of tests on complete systems and on individual parts. External bench tests are used to generate substantial product proof testimonials prior to market use.







### **LD Wiper motors 215BD**

This self parking Heavy Duty wiper is suitable for either bulkhead or through glass mounting. The 215BD is a pendulum or single spindle unit. It can easily be converted to a pantograph system with the external pantograph plate that comes with the pantograph wiper arm. The wiper motor unit is fully enclosed in a waterproof housing. The housing is rated at IP66, so the 215BD is suitable for both open and covered boats.

Max. bladelength : 600 mm Ø driveshaft : 16 mm

Voltage	Wall thickness	Shaft length	Torque	Power	Art.Code
12 V	0-15 mm	25 mm	15 Nm	15 W	2151225IER
12 V	15-40 mm	50 mm	15 Nm	15 W	2151250IER
12 V	40-65 mm	75 mm	15 Nm	15 W	2151275IER
24 V	0-15 mm	25 mm	15 Nm	15 W	2152425IER
24 V	15-40 mm	50 mm	15 Nm	15 W	2152450IER
24 V	40-65 mm	75 mm	15 Nm	15 W	2152475IER



# LD Wiper arms SS 304

Position	Wiper arm length	Description	Nr. of springs	Max. bladelength	Art.Code
1	330-450 mm	Single arm adjustable	1	280-600 mm	21581118
1	450-600 mm	Single arm adjustable	1	280-600 mm	21581124
2	330-450 mm	Single arm adjustable + adjustable clip	1	280-600 mm	21581218
2	330-450 mm	Single arm adjustable, polished + adjustable clip	1	280-600 mm	21581218P
2	450-600 mm	Single arm adjustable, adjustable clip	1	280-600 mm	21581224
2	450-600 mm	Single arm adjustable, polished + adjustable clip	1	280-600 mm	21581224P
3	330-450 mm	Pantograph arm adjustable	1	280-600 mm	21581318
3	330-450 mm	Pantograph arm adjustable, polished	1	280-600 mm	21581318P
3	450-600 mm	Pantograph arm adjustable	1	280-600 mm	21581324
3	450-600 mm	Pantograph arm adjustable, polished	1	280-600 mm	21581324P



# LD Washing jets for SS 304 arms

Washingjet with 4 nozzles for LD wiper motors 215BD. To install the washingjet on the arm you also need the clip (2154.clip). Suitable for all LD wiperarms only.

Position	Art.Code
2	21000.326
1	2154.CLIP



# Up to 1100mm window height

**LD Wiper systems** 





# **LD Wiper blades SS 304**

Blade length	Art.Code
280 mm	21582011
300 mm	21582012
350 mm	21582014
400 mm	21582016
450 mm	21582018
500 mm	21582020
550 mm	21582022
600 mm	21582024



# LD Wiper arms SS 316

Position	Wiper arm length	Description	Nr. of springs	Max. bladelength	Art.Code
1	270-640 mm	Single arm black SS 316	1	280-600 mm	2107
2	270-640 mm	Pantograph arm black SS 316	1	280-600 mm	2108
-		ldler shaft Kit for SS 316 LD pantograph arm 2108		280-600 mm	2112
-		Outside shaft cover plate for use with kit 2112		280-600 mm	2113



## LD Washing jets for SS 316 arms

Washingjet with 4 nozzles for LD wiper motors 215BD. To install the washingjet on the arm you also need the clip (2154.clip). Suitable for all LD wiperarms only.

Position	Description	Art.Code
1		2154.CLIP
2		21000.326
3	Washing jet, 2 nozzles MD1 PU	2184
4	Washing jet, 6 nozzles for MD1 PU arms	2110.cpl







### **LD Wiper blades SS 316**

All Exalto wiper blades are manufactured of stainless steel 316. To prevent reflection, a black coating is applied on all metal parts. The Heavy Duty blades have a lower profile than the standard blades and a reduced lift. This makes them perfect for applications where a little more pressure is required. The Heavy Duty blades are also more screen friendly due to the use of plastic lower bridges. In case of damaged rubber, these plastic bridges will not damage the screen. The Exalto H.D. blades are also available in a polished version. So you can choose the look that fits your vessel. Keep in mind that every motor has a maximum blade length when choosing your wiperblade.



Description	Blade length	Art.Code
Exalto wiper blade 250 mm	250 mm	2170
Exalto wiper blade 300 mm	300 mm	2171
Exalto wiper blade 350 mm	350 mm	2172
Exalto wiper blade 400 mm	400 mm	2173
Exalto wiper blade 450 mm	450 mm	2174
Exalto wiper blade 500 mm	500 mm	2175
Exalto wiper blade 550 mm	550 mm	2176
Exalto wiper blade 600 mm	600 mm	2177

### **LD Wiper controls for 1 wiper**

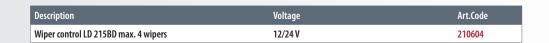
To complete your wiper system, we advise you to use our switch for LD wiper motors which offers 2-speeds and self parking.

Description	Voltage	Art.Code
Wiper control LD 215BD	12/24 V	70906425.SET



# LD Wiper controls for max. 4 wipers

Dual voltage electronic wiper control for up to four L.D. wipers. Wipers can be switched in two groups: group I and group II. These groups can be controlled individually but also together. The wiper control with flush mount panel offers one continuous speed, selfparking, three step intermittent wipe and a wipe / wash feature (for the parts see chapter H.D. Wipers). In the intermittent modes, all wipers run synchronised.







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