

## Hose Clamps ABA NORMA

### ABA ORIGINAL screw hose clamps

High tightening force, high breaking force, extra strong one-piece pressed housing.  
Aluzinc corrosion protection which is much better than galvanized steel.  
Smooth band underside and rolled up band edges to protect the hose.  
Width of the band is 12mm except the sizes marked with \*



Article No.	Size	Package	IMPA
200101	8-14 mm *	50 pcs	61 40 51
200102	11-17 mm *	50 pcs	61 40 52
200103	13-20 mm *	50 pcs	61 40 53
200104	15-24 mm	50 pcs	61 40 54
200105	19-28 mm	50 pcs	-
200106	22-32 mm	50 pcs	61 40 55
200107	26-38 mm	50 pcs	-
200108	32-44 mm	50 pcs	61 40 56
200109	38-50 mm	50 pcs	-
200110	44-56 mm	50 pcs	61 40 57
200111	50-65 mm	50 pcs	-
200112	58-75 mm	50 pcs	61 40 58

Article No.	Size	Package	IMPA
200113	68-85 mm	50 pcs	61 40 59
200114	77-95 mm	50 pcs	61 40 60
200115	87-112 mm	50 pcs	61 40 61
200116	104-138 mm	50 pcs	-
200117	130-165 mm	50 pcs	-
200118	150-180 mm	50 pcs	-
200119	175-205 mm	50 pcs	-
200120	200-231 mm	50 pcs	-
200121	226-256 mm	50 pcs	-
200122	251-282 mm	50 pcs	-
200123	277-307 mm	50 pcs	-

ABA ORIGINAL



### ABA MINI screw hose clamps

A durable solution for quick and safe clamping of small and thin-walled hoses.  
Provide excellent clamping force well over screwless clamps. Rolled up band edges and a band tongue that fits under the hose is profiled for added strength.  
Hexagonal socket can be tightened with a flexible socket. Nut is retained even if the screw is removed.  
Aluzinc corrosion protection which is much better than galvanized steel.

Article No.	Size	Package
200124	Mini 8 7,0-8,5mm	50 pcs
200125	Mini 9 8,5-9,5mm	50 pcs
200126	Mini 10 9,5-11,0mm	50 pcs
200127	Mini 11 10,5-12,0mm	50 pcs
200128	Mini 12 11,5-13,0mm	50 pcs

Article No.	Size	Package
200129	Mini 13 12,5-14,0mm	50 pcs
200130	Mini 14 13,5-15,0mm	50 pcs
200131	Mini 15 14,5-16,0mm	50 pcs
200132	Mini 16 15,0-17,0mm	50 pcs
200133	Mini 17 16,0-18,0mm	50 pcs

ABA MINI



### ABA MINI screw hose clamps STAINLESS STEEL

A durable solution for quick and safe clamping of small and thin-walled hoses.  
Provide excellent clamping force well over screwless clamps. Rolled up band edges and a band tongue that fits under the hose is profiled for added strength.  
Hexagonal socket can be tightened with a flexible socket. Nut is retained even if the screw is removed.  
Full Stainless steel AISI304

Article No.	Size	Package
200140	Mini 8 7,0-8,5mm	50 pcs
200141	Mini 9 8,5-9,5mm	50 pcs
200142	Mini 10 9,5-11,0mm	50 pcs
200143	Mini 11 10,5-12,0mm	50 pcs
200144	Mini 12 11,5-13,0mm	50 pcs

Article No.	Size	Package
200145	Mini 13 12,5-14,0mm	50 pcs
200146	Mini 14 13,5-15,0mm	50 pcs
200147	Mini 15 14,5-16,0mm	50 pcs
200148	Mini 16 15,0-17,0mm	50 pcs
200149	Mini 17 16,0-18,0mm	50 pcs

ABA MINI



### ABA SAFE screw hose clamp

Extra strong one-piece pressed housing. Smooth inner band. Spring insert.  
The ABA SAFE utilizes the flexibility of the hose (rubber) and protects soft hoses against damage. The profile beads increase the clamp pressure locally, which means the clamp can also be used for plastic piping that is relatively resistant to deformation. SAFE clamp provides the clamping force needed for an effective joint.

Article No.	Size	Package
200600	Safe 32-44 mm	400 pcs
200601	Safe 38-50 mm	400 pcs
200602	Safe 44-56 mm	200 pcs
200603	Safe 50-65 mm	200 pcs

Article No.	Size	Package
200604	Safe 58-75 mm	200 pcs
200605	Safe 68-85 mm	100 pcs
200606	Safe 77-95 mm	100 pcs
200607	Safe 87-112 mm	100 pcs

ABA SAFE™



## Hose Clamps ABA NORMA

### ABA ORIGINAL screw hose clamps Stainless Steel

High tightening force, high breaking force, extra strong one-piece pressed housing.  
Smooth band underside and rolled up band edges to protect the hose.  
Full Stainless steel AISI304



Article No.	Size	Package	IMPA
200200	8-14 mm	50 pcs	61 40 65
200201	11-17 mm	50 pcs	61 40 66
200202	13-20 mm	50 pcs	61 40 67
200203	15-24 mm	50 pcs	61 40 68
200204	19-28 mm	50 pcs	-
200205	22-32 mm	50 pcs	61 40 69
200206	26-38 mm	50 pcs	-
200207	32-44 mm	50 pcs	61 40 70
200208	38-50 mm	50 pcs	-
200209	44-56 mm	50 pcs	61 40 71
200210	50-65 mm	50 pcs	-
200211	58-75 mm	50 pcs	61 40 72

Article No.	Size	Package	IMPA
200212	68-85 mm	50 pcs	61 40 73
200213	77-95 mm	50 pcs	61 40 74
200214	87-112 mm	50 pcs	61 40 75
200215	104-138 mm	50 pcs	-
200216	130-165 mm	50 pcs	61 40 76
200217	150-180 mm	50 pcs	-
200218	175-205 mm	50 pcs	-
200219	200-231 mm	50 pcs	-
200220	226-256 mm	50 pcs	-
200221	251-282 mm	50 pcs	-
200222	277-307 mm	50 pcs	-



### ABA ORIGINAL SMO 254

Produced without any screw driver slot in the screw to make it easy to separate from other Worn drive hose clamps.  
Tracability Code. High break torque. Smooth band underside.  
For the most extreme environments  
Produced in SMO 254 material for extreme environments where lower case stainless steel or acid proof material is not enough. SMO 254 is an austenitic stainless steel designed for maximum resistance to pitting and crevice corrosion and has a very good resistance to various types of stress corrosion.

### ABA ORIGINAL SMO

Article No.	Size	Package
200350	15-24 mm	50 pcs
200351	19-28 mm	50 pcs
200352	22-32 mm	50 pcs
200353	26-38 mm	50 pcs
200354	32-44 mm	50 pcs
200355	38-50 mm	50 pcs
200356	44-56 mm	50 pcs
200357	50-65 mm	50 pcs
200358	58-75 mm	50 pcs
200359	68-85 mm	50 pcs

Article No.	Size	Package
200360	77-95 mm	50 pcs
200361	87-112 mm	50 pcs
200362	104-138 mm	50 pcs
200363	130-165 mm	50 pcs
200364	150-180 mm	50 pcs
200365	175-205 mm	50 pcs
200366	200-231 mm	50 pcs
200367	226-256 mm	50 pcs
200368	251-282 mm	50 pcs
200369	277-307 mm	50 pcs



### ABA ORIGINAL Assortment 244C

Dispenser wall rack with 244 pieces ABA ORIGINAL hose clamps with flexible screw driver.  
Sizes ABA ORIGINAL from 8-14 up to 50-65mm  
Sizes ABA MINI from 8 up to 17

Article No.	Description
200500	ABA Assortment 244C AluZinc S20
200501	ABA Assortment 244C Stainless Steel S40 AISI304



### ABA ORIGINAL Assortment 335C

Dispenser wall rack with 335 pieces ABA ORIGINAL hose clamps in AluZinc and flexible screw driver.  
Sizes ABA ORIGINAL from 8-14 up to 50-65mm  
Sizes ABA MINI from 8 up to 17

Article No.	Description
200503	ABA Assortment 335C AluZinc S20



### ABA ORIGINAL Assortment 270C

Carry box with 270 pieces ABA ORIGINAL hose clamps with flexible screw driver.  
Sizes ABA ORIGINAL from 8-14 up to 44-56mm

Article No.	Description
200550	ABA Assortment 270C AluZinc S20
200554	ABA Assortment 270C Stainless Steel S40 AISI304



## Hose Clamps ABA NORMA

### ABA ORIGINAL Assortment 135C

Carry box with 135 pieces ABA ORIGINAL hose clamps with flexible screw driver.  
 Sizes ABA NOVA from 11-17 up to 32-44 mm  
 Sizes ABA MINI from 8 up to 17.

Article No.	Description
200551	ABA Assortment 135C AluZinc S20

### ABA ORIGINAL Assortment 500

Drawer box with 500 pieces ABA ORIGINAL hose clamps with flexible screw driver.  
 Sizes ABA ORIGINAL from 8-14 up to 44-56 mm

Article No.	Description
200552	ABA Assortment 500 AluZinc S20

### ABA MINI Assortment 120

Carry case with 120 pieces ABA MINI hose clamps with flexible screw driver.  
 Sizes ABA MINI from 8 up to 15

Article No.	Description
200553	ABA Assortment 120 AluZinc S20



### NORMA Two-ear hose clips

Two ears for higher clamping range. Smooth inner band. Round edges to prevent damage. Fast and easy to install, ideal in narrow spaces, suitable for definitive fixation of connection pipes. To be assembled with simple ear clip pliers. Extended clamping range. For hoses that convey compressed air or fluid. Aluzinc corrosion protection which is much better than galvanized steel.

Article No.	Size	Package
200400	5-7 mm	50 pcs
200401	7-9 mm	50 pcs
200402	9-11 mm	50 pcs
200403	11-13 mm	50 pcs
200404	13-15 mm	50 pcs
200405	14-17 mm	50 pcs
200406	15-18 mm	50 pcs
200407	17-20 mm	50 pcs
200408	18-21 mm	50 pcs

Article No.	Size	Package
200409	20-23 mm	50 pcs
200410	22-25 mm	50 pcs
200411	23-27 mm	50 pcs
200412	25-28 mm	50 pcs
200413	28-31 mm	50 pcs
200414	31-34 mm	50 pcs
200415	34-37 mm	50 pcs
200416	37-40 mm	50 pcs
200417	40-43 mm	50 pcs



### NORMA One-ear hose clips

Same as above but than with one ear for low and medium pressure applications.

Article No.	Size	Package
200419	8-10 mm	50 pcs
200420	9-11 mm	50 pcs
200421	10-12 mm	50 pcs
200422	11-13 mm	50 pcs

Article No.	Size	Package
200423	12-14 mm	50 pcs
200423B	13-15 mm	50 pcs
200424	14-16 mm	50 pcs
200425	16-18 mm	50 pcs



### ABA NORMA Assortment 600 Ear Clips

Carry box with 600 pieces ear clips and plier.  
 Sizes 5-7 mm up to 23-25 mm. Finish S20 Aluzinc

Article No.	Description
200555	ABA Assortment 600 AluZinc S20

### Flexible Screw Driver

The ultimate tool for screw hose clamps. Prevent against over tightening. 7 mm connection which fits perfect at the screw.

Article No.	Description
200300	Flexible screw driver 7mm



## Hose Clamps ABA NORMA

### ABA BREEZE MAKE-A-CLAMP

Make-A-Clamp gives you a reusable total maintenance clamp system in a kit, consisting of a continuous roll of stainless steel banding and all stainless steel adjustable worm-gear assembly fasteners. It's a must for anyone who's likely to encounter requirements for varying sized large clamps. Simply cutting a piece of banding from the roll, you can make any size 100% stainless steel worm-gear clamp from 3" diameter up to 10" or 10 foot diameter. S40 AISI316 stainless steel band with safety edge.



Article No.	Description
200560	ABA BREEZE MAKE-A-CLAMP S40

### ABA ROBUST HOSE CLAMPS

A big strong clamp producing secure and careful grip around powerful hoses. The robust acid resistant clamp is used where great tightening forces are needed - for instance large and reinforced hoses within agriculture, irrigation, sludge suction etc.

Gentle on the hose when the tightening force becomes high. Withstands hard tightening, repeated mounting and dismounting. Safe functionality in severe conditions.

Hexagon bolt for use with an universal spanner.

Aluzinc corrosion protection which is much better than galvanized steel.

Article No.	Size	Bolt
201200	29-31 mm 1"	M6
201201	32-35 mm	M6
201202	36-39 mm 1.1/4"	M6
201203	40-43 mm 1.1/2"	M6
201204	44-47 mm	M6
201205	48-51 mm	M6
201206	52-55 mm	M6
201207	56-59 mm 2"	M6
201208	60-63 mm	M6
201209	64-67 mm	M6
201210	68-73 mm	M6
201211	74-79 mm	M6
201212	80-85 mm 3"	M8
201213	86-91 mm	M8
201214	92-97 mm	M8

Article No.	Size	Bolt
201215	98-103 mm	M8
201216	104-112 mm 4"	M8
201217	113-121 mm	M10
201218	122-130 mm	M10
201219	131-139 mm	M10
201220	140-148 mm	M10
201221	149-161 mm	M10
201222	162-174 mm	M10
201223	175-187 mm	M10
201224	188-200 mm	M10
201225	201-213 mm	M10
201226	214-226 mm	M10
201227	227-239 mm	M10
201228	240-252 mm	M10



## CLASS Approved pipe couplings NORMA FGR RFP Flame Protector Upgrade Kit

### NORMA FGR RFP Retrofittable flame protector.

**A retrofittable flame protector housing that has specially designed for use with all NORMACONNECT Flex and GRP pipe couplings.**

Its low weight and straightforward design allows quick, easy assembly without tools.

The built-in flame resistant mineral fiber mat provides a premium level of flame protection.

The Retrofit Flame Protector (RFP) housing has been extensively tested and is approved by international classification societies.

Meets the IACS requirements.

Metal housing made from stainless steel AISI316Ti.

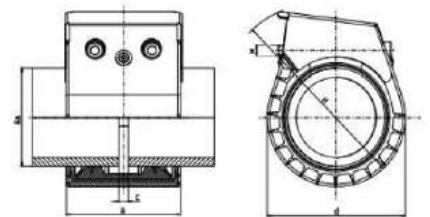
Environmentally-friendly, no use of chemicals.

Shoulders of the coupling are flame protected.

Double locked safeguards prevent accidental dismantling.

Sizes available from 26.9 up to 406.4 mm.

\*Dimensions of the housing are give as assembled on a NORMACONNECT GRIP/GRIP E/FLEX/FLEX E Pipe coupling.



Article No.	Size pipe OD Ø	A x D x H mm
43NRFP0269	26,9 mm	69x60x110
43NRFP0280	28,0 mm	69x60x110
43NRFP0300	30,0 mm	69x60x110
43NRFP0337	33,7 mm	69x65x115
43NRFP0380	38,0 mm	75x70x120
43NRFP0424	42,4 mm	75x75x125
43NRFP0445	44,5 mm	75x75x125
43NRFP0483	48,3 mm	75x80x130
43NRFP0540	54,0 mm	90x90x135
43NRFP0570	57,0 mm	90x90x140
43NRFP0603	50,3 mm	90x95x145
43NRFP0761	76,1 mm	110x110x160

Article No.	Size pipe OD Ø	A x D x H mm
43NRFP0889	88,9 mm	110x120x170
43NRFP1016	101,6 mm	110x135x185
43NRFP1040	104,0 mm	110x135x185
43NRFP1080	108,0 mm	110x140x190
43NRFP1143	114,3 mm	110x145x195
43NRFP1330	133,0 mm	125x175x220
43NRFP1397	139,7 mm	125x175x225
43NRFP1540	154,0 mm	125x190x240
43NRFP1590	159,0 mm	125x195x245
43NRFP1683	168,3 mm	125x205x255
43NRFP2191	219,0 mm	155x260x310
43NRFP2730	273,0 mm	155x315x365



## CLASS Approved pipe couplings NORMA REP - E

### NORMA CONNECT Pipe Repair Coupling REP-E W5 AISI 316 Ti

Non-restraint repair coupling for damaged metal and plastic pipes.

Used to connect and/or seal damaged pipes. They also enable repairs to be carried out easily, quickly and safely without the need to dismantle the pipes. Standard with a strip insert.

#### Features:

For repair of all kind of pipes. Sleeve of NBR or EPDM. With a **double lip sealing system**.

Standard with a strip insert. Heavy duty quality locking bolts. Anchoring ring with conically stamped teeth. Strong protection ring protects sleeve from UV Rays, fire etc. and increases the flexural strength of the coupling.

Material housing RVS 1.4301, strip insert 1.4571, massive lock bar 1.4404, hollow lock bar 1.471, locking bolts and nuts RVS A4-80

Maximum pressure 16 Bar.

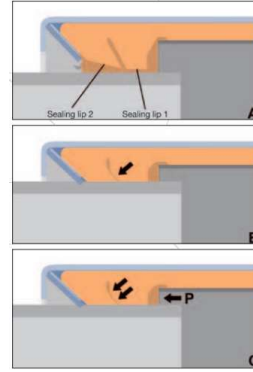
\*PN Nominal pressure is max. admissible working pressure in shipbuilding, based on a safety factor of  $\geq 4$  WP is the max. working pressure in industrial applications, based on a safety factor as per Norma specifications and is higher than the working pressure in shipbuilding.

**Dimensions up to 1219.2 mm on request available.**

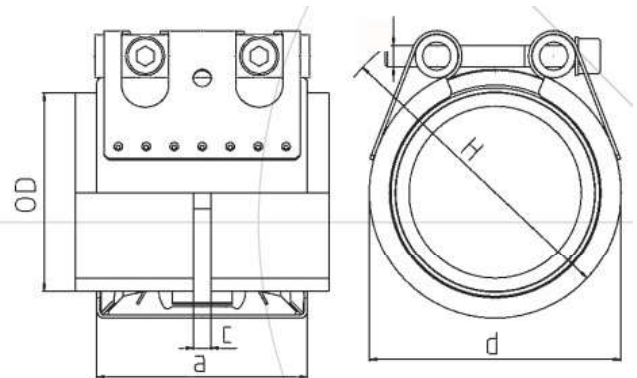
**Approved by DNV, Lloyd's Register, ABS, BV, GL, Rina, NSF, NK etc.**

Temperatures with EPDM sleeve sizes 26.9 to 168.3: -30°C up to +125°C for water, waste water, air, solids and chemical products. Sizes >180.0mm: -20°C up to +80°C.

Temperatures with NBR sleeve: -20°C up to +80°C for water, gas, oil, fuel and other hydrocarbons.



Article No.	OD mm	MIN-MAX OD mm	C max mm	A max mm	D max mm	H max mm	Sleeve material	Article No.	Sleeve material
43N8660035	35	34,5-35,6	8	63	55	75	NBR	43N9360035	EPDM
43N8660038	38	37,5-38,6	8	63	60	80	NBR	43N9360038	EPDM
43N8660042	42,4	41,7-43	8	63	65	85	NBR	43N9360042	EPDM
43N8660044	44,5	44-45,1	8	63	65	85	NBR	43N9360044	EPDM
43N8660048	48,3	47,6-50,5	8	63	70	90	NBR	43N9360048	EPDM
43N8660054	54	53,3-54,6	17	78	75	95	NBR	43N9360054	EPDM
43N8660057	57	56,3-57,7	17	78	80	100	NBR	43N9360057	EPDM
43N8660060	60,3	59,5-61	17	78	85	105	NBR	43N9360060	EPDM
43N8660063	63	62,2-63,9	17	78	85	105	NBR	43N9360063	EPDM
43N8660070	70	69-71	25	98	90	110	NBR	43N9360070	EPDM
43N8660073	73	72,1-73,8	25	98	95	115	NBR	43N9360073	EPDM
43N8660076	76,1	75,2-77	25	98	100	120	NBR	43N9360076	EPDM
43N8660080	80	79-80,8	25	98	100	120	NBR	43N9360080	EPDM
43N8660084	84	83-85	25	98	105	125	NBR	43N9360084	EPDM
43N8660088	88,9	87-89,9	25	98	110	130	NBR	43N9360088	EPDM
43N8660098	98	96,9-99	25	98	120	140	NBR	43N9360098	EPDM
43N8660101	101,6	100,4-102,8	25	98	125	145	NBR	43N9360101	EPDM
43N8660104	104	102,8-106,1	25	98	125	145	NBR	43N9360104	EPDM
43N8660108	108	106,8-109,2	25	98	130	150	NBR	43N9360108	EPDM
43N8660110	110	108,8-114,4	25	98	130	150	NBR	43N9360110	EPDM
43N8660114	114,3	113-115,5	25	98	135	155	NBR	43N9360114	EPDM
43N8660122	122	120,8-123,2	35	113	145	165	NBR	43N9360122	EPDM
43N8660129	129	127,6-131,1	35	113	155	185	NBR	43N9360129	EPDM
43N8660133	133	131,5-134,4	35	113	160	190	NBR	43N9360133	EPDM
43N8660139	139,7	138,1-141,6	35	113	165	195	NBR	43N9360139	EPDM
43N8660141	141,3	139,6-142,8	35	113	170	200	NBR	43N9360141	EPDM
43N8660154	154	152,3-156,1	35	113	180	210	NBR	43N9360154	EPDM
43N8660159	159	157,3-160,7	35	113	185	215	NBR	43N9360159	EPDM
43N8660168	168,3	166,5-170,1	35	113	195	225	NBR	43N9360168	EPDM



## CLASS Approved pipe couplings NORMA GRIP / GRIP-E

### NORMA CONNECT Pipe Coupling GRIP / GRIP-E W5 AISI 316 Ti

Axial restraint pipe couplings are used to **connect metal pipes**. The anchoring ring with conically stamped teeth indents into the pipe surface (steel, stainless steel or cast iron) and provides safe and strong axial restraint. Owing to the special design the coupling can withstand even high vibrations.

#### Features:

For connection of all kind of pipes. Sleeve of NBR or EPDM. With a **double lip sealing system**. Standard with a strip insert. Heavy duty quality locking bolts. Anchoring ring with conically stamped teeth. Strong protection ring protects sleeve from UV Rays, fire etc. and increases the flexural strength of the coupling. Material housing RVS 1.4301, strip insert 1.4571/PA-GF, massive lock bar 1.4404, hollow lock bar 1.471, anchoring ring for metal pipes 1.4310, locking bolts and nuts stainless steel A4-80

Also available in material specifications W2 and W4.

Maximum pressure 16 Bar.

\*PN Nominal pressure is max. admissible working pressure in shipbuilding, based on a safety factor of  $\geq 4$  WP is the max. working pressure in industrial applications, based on a safety factor as per Norma specifications and is higher than the working pressure in shipbuilding.

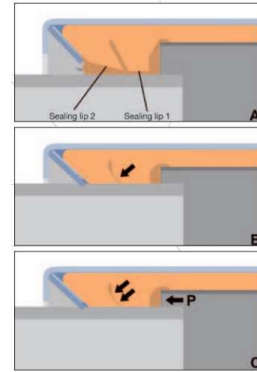
Dimensions up to 711,2 mm on request available.

Approved by DNV, Lloyd's Register, ABS, BV, GL, Rina, NSF, NK etc.

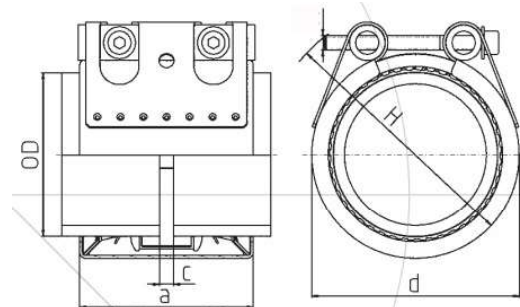
Temperatures with EPDM sleeve sizes 26.9 to 168.3: -30°C up to +125°C for water, waste water, air, solids and chemical products. Sizes >180.0mm: -20°C up to +80°C.

Temperatures with NBR sleeve: -20°C up to +80°C for water, gas, oil, fuel and other hydrocarbons.

On request with FKM sealing sleeve -10°C up to +150°C (in some cases higher temperatures possible).



Article No.	OD mm	MIN-MAX OD mm	C max mm	A max mm	D max mm	H max mm	Sleeve material	Article No.	Sleeve material
43N8600026	26,9	26,4-27,5	3	67	50	70	NBR	43N9300026	EPDM
43N8600028	28	27,5-28,5	3	67	50	70	NBR	43N9300028	EPDM
43N8600030	30	29,5-30,6	3	67	50	70	NBR	43N9300030	EPDM
43N8600033	33,7	33-34,3	3	67	55	75	NBR	43N9300033	EPDM
43N8600035	35	34,5-35,6	8	63	55	75	NBR	43N9300035	EPDM
43N8600038	38	37,5-38,6	8	63	60	80	NBR	43N9300038	EPDM
43N8600042	42,4	41,7-43	8	63	65	85	NBR	43N9300042	EPDM
43N8600044	44,5	44-45,1	8	63	65	85	NBR	43N9300044	EPDM
43N8600048	48,3	47,6-50,5	8	63	70	90	NBR	43N9300048	EPDM
43N8600054	54	53,3-54,6	17	78	75	95	NBR	43N9300054	EPDM
43N8600057	57	56,3-57,7	17	78	80	100	NBR	43N9300057	EPDM
43N8600060	60,3	59,5-61	17	78	85	105	NBR	43N9300060	EPDM
43N8600063	63	62,2-63,9	17	78	85	105	NBR	43N9300063	EPDM
43N8600070	70	69-71	25	98	90	110	NBR	43N9300070	EPDM
43N8600073	73	72,1-73,8	25	98	95	115	NBR	43N9300073	EPDM
43N8600076	76,1	75,2-77	25	98	100	120	NBR	43N9300076	EPDM
43N8600080	80	79,-80,8	25	98	100	120	NBR	43N9300080	EPDM
43N8600084	84	83-85	25	98	105	125	NBR	43N9300084	EPDM
43N8600088	88,9	87-89,9	25	98	110	130	NBR	43N9300088	EPDM
43N8600101	101,6	100,4-102,8	25	98	125	145	NBR	43N9300101	EPDM
43N8600104	104	102,8-106,1	25	98	125	145	NBR	43N9300104	EPDM
43N8600108	108	106,8-109,2	25	98	130	150	NBR	43N9300108	EPDM
43N8600110	110	108,8-111,4	25	98	130	150	NBR	43N9300110	EPDM
43N8600114	114,3	113-115,5	25	98	135	155	NBR	43N9300114	EPDM
43N8600122	122	120,8-123,2	35	113	145	165	NBR	43N9300122	EPDM
43N8600129	129	127,6-131,1	35	113	155	185	NBR	43N9300129	EPDM
43N8600133	133	131,5-134,4	35	113	160	190	NBR	43N9300133	EPDM
43N8600139	139,7	138,1-141,6	35	113	165	195	NBR	43N9300139	EPDM
43N8600141	141,3	139,6-142,8	35	113	170	200	NBR	43N9300141	EPDM
43N8600154	154	152,3-156,1	35	113	180	210	NBR	43N9300154	EPDM
43N8600159	159	157,3-160,7	35	113	185	215	NBR	43N9300159	EPDM
43N8600163	168,3	166,5-170,1	35	113	195	225	NBR	43N9300168	EPDM



# CLASS Approved pipe couplings NORMA FLEX - E

## NORMA CONNECT Pipe Coupling FLEX-E W5 AISI 316 Ti

Pipe couplings used for **connection of restrained pipes, metal pipes, stainless pipes, as well concrete and plastic pipes.**

The sealing reliability is also ensured when there are gaps between pipe ends which are compensated.

The Flex-E type is specifically for low pressure applications.

Compensation of pipe gaps allows thermal elongation of the pipes. Joining all kind of pipe materials is possible.

### Features:

For connection of all kind of pipes. Sleeve of NBR or EPDM. With a double lip sealing system.

Standard with a strip insert. Heavy duty quality locking bolts. Anchoring ring with conically stamped teeth.

Strong protection ring protects sleeve from UV Rays, fire etc. and increases the flexural strength of the coupling.

Material housing RVS 1.4301, strip insert 1.4571/PA-GF, massive lock bar 1.4404, hollow lock bar 1.471,

anchoring ring for metal pipes 1.4310, locking bolts and nuts stainless steel A4-80

Also available in material specifications W2 and W4.

Maximum pressure 16 Bar.

\*PN Nominal pressure is max. admissible working pressure in shipbuilding, based on a safety factor of  $\geq 4$  WP is the max. working pressure in industrial applications, based on a safety factor as per Norma specifications and is higher than the working pressure in shipbuilding.

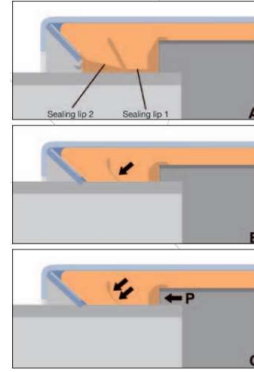
Dimensions up to 1219,2 mm on request available.

Approved by DNV, Lloyd's Register, ABS, BV, GL, Rina, NSF, NK etc.

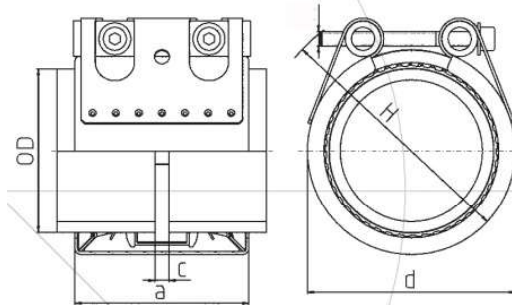
Temperatures with EPDM sleeve sizes 26.9 to 168.3: -30°C up to +125°C for water, waste water, air, solids and chemical products. Sizes >180.0mm: -20°C up to +80°C.

Temperatures with NBR sleeve: -20°C up to +80°C for water, gas, oil, fuel and other hydrocarbons.

On request with FKM sealing sleeve -10°C up to +150°C (in some cases higher temperatures possible).



Article No.	OD mm	MIN-MAX OD mm	C max mm	A max mm	D max mm	H max mm	Sleeve material	Article No.	Sleeve material
43NF8600026	26,9	26,4-27,5	3	67	50	70	NBR	43NF9300026	EPDM
43NF8600028	28	27,5-28,5	3	67	50	70	NBR	43NF9300028	EPDM
43NF8600030	30	29,5-30,6	3	67	50	70	NBR	43NF9300030	EPDM
43NF8600033	33,7	33-34,3	3	67	55	75	NBR	43NF9300033	EPDM
43NF8600035	35	34,5-35,6	8	63	55	75	NBR	43NF9300035	EPDM
43NF8600038	38	37,5-38,6	8	63	60	80	NBR	43NF9300038	EPDM
43NF8600042	42,4	41,7-43	8	63	65	85	NBR	43NF9300042	EPDM
43NF8600044	44,5	44-45,1	8	63	65	85	NBR	43NF9300044	EPDM
43NF8600048	48,3	47,6-50,5	8	63	70	90	NBR	43NF9300048	EPDM
43NF8600054	54	53,3-54,6	17	78	75	95	NBR	43NF9300054	EPDM
43NF8600057	57	56,3-57,7	17	78	80	100	NBR	43NF9300057	EPDM
43NF8600060	60,3	59,5-61	17	78	85	105	NBR	43NF9300060	EPDM
43NF8600063	63	62,2-63,9	17	78	85	105	NBR	43NF9300063	EPDM
43NF8600070	70	69-71	25	98	90	110	NBR	43NF9300070	EPDM
43NF8600073	73	72,1-73,8	25	98	95	115	NBR	43NF9300073	EPDM
43NF8600076	76,1	75,2-77	25	98	100	120	NBR	43NF9300076	EPDM
43NF8600080	80	79,-80,8	25	98	100	120	NBR	43NF9300080	EPDM
43NF8600084	84	83-85	25	98	105	125	NBR	43NF9300084	EPDM
43NF8600088	88,9	87-89,9	25	98	110	130	NBR	43NF9300088	EPDM
43NF8600101	101,6	100,4-102,8	25	98	125	145	NBR	43NF9300101	EPDM
43NF8600104	104	102,8-106,1	25	98	125	145	NBR	43NF9300104	EPDM
43NF8600108	108	106,8-109,2	25	98	130	150	NBR	43NF9300108	EPDM
43NF8600110	110	108,8-111,4	25	98	130	150	NBR	43NF9300110	EPDM
43NF8600114	114,3	113-115,5	25	98	135	155	NBR	43NF9300114	EPDM
43NF8600122	122	120,8-123,2	35	113	145	165	NBR	43NF9300122	EPDM
43NF8600129	129	127,6-131,1	35	113	155	185	NBR	43NF9300129	EPDM
43NF8600133	133	131,5-134,4	35	113	160	190	NBR	43NF9300133	EPDM
43NF8600139	139,7	138,1-141,6	35	113	165	195	NBR	43NF9300139	EPDM
43NF8600141	141,3	139,6-142,8	35	113	170	200	NBR	43NF9300141	EPDM
43NF8600154	154	152,3-156,1	35	113	180	210	NBR	43NF9300154	EPDM
43NF8600159	159	157,3-160,7	35	113	185	215	NBR	43NF9300159	EPDM
43NF8600168	168,3	166,5-170,1	35	113	195	225	NBR	43NF9300168	EPDM



## CLASS Approved pipe couplings NORMA GRIP E-FP (Flame Protected)

### NORMA CONNECT Pipe Coupling GRIP-E-FP (FLAME PROTECTED) W5 AISI 316 Ti

Pipe couplings with integrated flame protection used with applications in the marine sector (civil and military) as well in sprinkler systems. For this purpose the GRIP-E type has been equipped with an additional housing made from stainless steel plus a fire-resistant lining which can resist temperatures of up to +850°C. The pipe couplings meet the newest VdS directives, IACS P2.11 and ISO 19921/22.

Dampens absorbing vibrations, pressure surges. Weight savings, tension free and ready to install.

For connection of all kind of pipes. Sleeve of NBR or EPDM. With a double lip sealing system.

Standard with a strip insert. Heavy duty quality locking bolts. Anchoring ring with conically stamped teeth. Strong protection ring protects sleeve from UV Rays, fire etc. and increases the flexural strength of the coupling.

Material housing RVS 1.4301, strip insert 1.4571/PA-GF, massive lock bar 1.4404, hollow lock bar 1.471, anchoring ring for metal pipes 1.4310, locking bolts and nuts stainless steel A4-80

Also available in material specifications W2 and W4.

Maximum pressure 16 Bar. From size 193-219 10 Bar

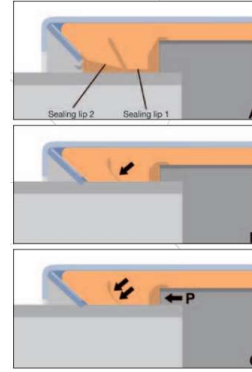
\*PN Nominal pressure is max. admissible working pressure in shipbuilding, based on a safety factor of  $\geq 4$  WP is the max. working pressure in industrial applications, based on a safety factor as per Norma specifications and is higher than the working pressure in shipbuilding.

Dimensions up to 419.0 mm on request available.

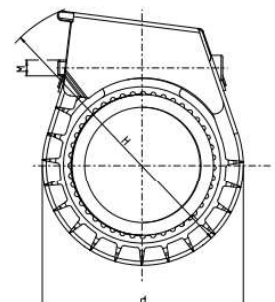
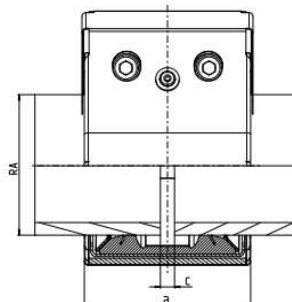
Approved by DNV, Lloyd's Register, ABS, BV, GL, Rina, NSF, NK etc.

Temperatures with EPDM sleeve sizes 26.9 to 168.3: -30°C up to +125°C for water, waste water, air, solids and chemical products. Sizes > 180.0mm: -20°C up to +80°C.

Temperatures with NBR sleeve: -20°C up to +80°C for water, gas, oil, fuel and other hydrocarbons.



Article No.	OD mm	MIN-MAX OD mm	C max mm	A max mm	D max mm	H max mm	Sleeve material	Article No.	Sleeve material
43N8670026	26,9	26,4-27,5	3	67	60	110	NBR	43N9370026	EPDM
43N8670028	28	27,5-28,5	3	67	60	110	NBR	43N9370028	EPDM
43N8670030	30	29,5-30,6	3	67	60	110	NBR	43N9370030	EPDM
43N8670033	33,7	33-34,3	3	67	65	115	NBR	43N9370033	EPDM
43N8670035	35	34,5-35,6	8	75	65	115	NBR	43N9370035	EPDM
43N8670038	38	37,5-38,6	8	75	70	120	NBR	43N9370038	EPDM
43N8670042	42,4	41,7-43	8	75	75	125	NBR	43N9370042	EPDM
43N8670044	44,5	44-45,1	8	75	75	125	NBR	43N9370044	EPDM
43N8670048	48,3	47,6-50,5	8	75	80	130	NBR	43N9370048	EPDM
43N8670054	54	53,3-54,6	17	90	85	135	NBR	43N9370054	EPDM
43N8670057	57	56,3-57,7	17	90	90	140	NBR	43N9370057	EPDM
43N8670060	60,3	59,5-61	17	90	95	145	NBR	43N9370060	EPDM
43N8670073	73	72,1-73,8	17	90	95	145	NBR	43N9370073	EPDM
43N8670076	76,1	75,2-77	25	110	105	155	NBR	43N9370076	EPDM
43N8670084	84	83-85	25	110	110	160	NBR	43N9370084	EPDM
43N8670088	88,9	87-89,9	25	110	115	165	NBR	43N9370088	EPDM
43N8670101	101,6	100,4-102,8	25	110	120	170	NBR	43N9370101	EPDM
43N8670104	104	102,8-106,1	25	110	135	185	NBR	43N9370104	EPDM
43N8670108	108	106,8-109,2	25	110	135	185	NBR	43N9370108	EPDM
43N8670110	110	108,8-111,4	25	110	140	190	NBR	43N9370110	EPDM
43N8670114	114,3	113-115,5	25	110	145	195	NBR	43N9370114	EPDM
43N8670129	129	127,6-131,1	35	125	165	215	NBR	43N9370129	EPDM
43N8670133	133	131,5-134,4	35	125	170	220	NBR	43N9370133	EPDM
43N8670139	139,7	138,1-141,6	35	125	175	225	NBR	43N9370139	EPDM
43N8670141	141,3	139,6-142,8	35	125	180	230	NBR	43N9370141	EPDM
43N8670154	154	152,3-156,1	35	125	190	240	NBR	43N9370154	EPDM
43N8670159	159	157,3-160,7	35	125	195	245	NBR	43N9370159	EPDM
43N8670168	168,3	166,5-170,1	35	125	205	255	NBR	43N9370168	EPDM
43N8670193	193,7	192-196	35	125	235	285	NBR	43N9370193	EPDM
43N8670206	206	202-208	35	125	250	300	NBR	43N9370206	EPDM
43N8670219	219,1	216-221	35	125	290	310	NBR	43N9370219	EPDM





## CLASS Approved pipe couplings NORMA PLAST GRIP / PLAST GRIP E

### NORMA CONNECT Pipe Coupling PLAST GRIP / PLAST GRIP E W5 AISI 316 Ti

Axial restraint pipe couplings are used to **connect plastic pipes**. The specially designed anchoring ring, features flat rows of teeth, engages into the pipe surface without damaging the plastic material. The force applied is distributed evenly across the pipe surface. Standard with a double-lip sealing system, a standard strip insert and anchoring ring. Sleeve of NBR or EPDM.

Also usable for weak plastic pipes, PP, PE. Also available with hollow trunnions for weight saving. Material housing RVS 1.4301, strip insert 1.4571/PA-GF, massive lock bar 1.4404, hollow lock bar 1.471, anchoring ring for metal pipes 1.4310, locking bolts and nuts stainless steel A4-80

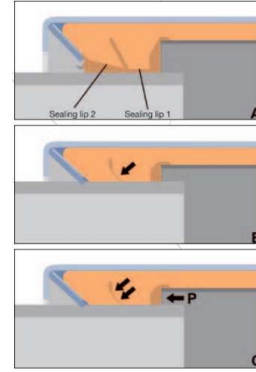
Also available in material specifications W2 and W4.

Maximum pressure 10 Bar.  
 \*PN Nominal pressure is max. admissible working pressure in shipbuilding, based on a safety factor of  $\geq 4$  WP is the max. working pressure in industrial applications, based on a safety factor as per Norma specifications and is higher than the working pressure in shipbuilding.

**Dimensions up to 406.0 mm on request available but for ship applications max. 168,3 mm**  
**Approved by DNV, Lloyd's Register, ABS, BV, GL, Rina, NSF, NK etc.**

Temperatures with EPDM sleeve sizes 26.9 to 168.3: -30°C up to +125°C for water, waste water, air, solids and chemical products. Sizes >180.0mm: -20°C up to +80°C.

Temperatures with NBR sleeve: -20°C up to +80°C for water, gas, oil, fuel and other hydrocarbons.



Article No.	OD mm	MIN-MAX OD mm	C max mm	A max mm	D max mm	H max mm	Sleeve material	Article No.	Sleeve material
43N18660040	40	39-40,5	8	62	60	80	NBR	43N19360040	EPDM
43N18660042	42,4	41,7-43	8	62	65	85	NBR	43N19360042	EPDM
43N18660044	44,5	42-46	8	62	70	90	NBR	43N19360044	EPDM
43N18660048	48,3	47,6-49,5	8	62	70	90	NBR	43N19360048	EPDM
43N18660050	50	49-50,5	8	62	70	90	NBR	43N19360050	EPDM
43N18660060	60,3	59,5-61	17	78	85	105	NBR	43N19360060	EPDM
43N18660063	63	62-63,5	17	78	85	105	NBR	43N19360063	EPDM
43N18660075	75	74-76	25	98	100	120	NBR	43N19360075	EPDM
43N18660076	76,1	75-77	25	98	100	120	NBR	43N19360076	EPDM
43N18660088	88,9	88-90	25	98	110	130	NBR	43N19360088	EPDM
43N18660090	90	89-91	25	98	110	130	NBR	43N19360090	EPDM
43N18660101	101,3	100,4-102,8	25	98	125	145	NBR	43N19360101	EPDM
43N18660104	104	102,8-106,1	25	98	125	145	NBR	43N19360104	EPDM
43N18660108	108	108,8-111,4	25	98	130	150	NBR	43N19360108	EPDM
43N18660110	110	109-111	25	98	130	150	NBR	43N19360110	EPDM
43N18660114	114,3	113-115,5	25	98	135	155	NBR	43N19360114	EPDM
43N18660125	125	124-126	35	115	140	160	NBR	43N19360125	EPDM
43N18660129	129	127,6-131,1	35	115	140	160	NBR	43N19360129	EPDM
43N18660133	133	131,5-134,4	35	115	150	170	NBR	43N19360133	EPDM
43N18660140	140	139-141	35	115	160	180	NBR	43N19360140	EPDM
43N18660154	154	152,3-156,1	35	115	170	190	NBR	43N19360154	EPDM
43N18660159	159	157,3-160,7	35	115	180	200	NBR	43N19360159	EPDM
43N18660160	160	159-162	35	115	180	200	NBR	43N19360160	EPDM
43N18660168	168,3	166,5-170,1	35	115	190	200	NBR	43N19360168	EPDM

