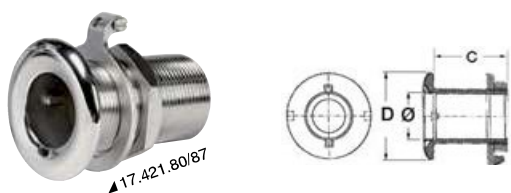




316 stainless steel fittings, skin fittings and valves

OSCULATI



All-thread skin fitting

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	C mm	D mm	Ø mm
17.421.80	3/8"	53	35	11
17.421.81	1/2"	59	39	15
17.421.82	3/4"	68	49	19
17.421.83	1"	73	55	25
17.421.84	1" 1/4	77	65	34
17.421.85	1" 1/2	80	71	38
17.421.86	2"	95	84	50
17.421.87	2" 1/2	124	110	65

OSCULATI



All-thread skin fittings - Short thread

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	C mm	D mm	Ø mm
17.421.73	1"	60	48	25

OSCULATI

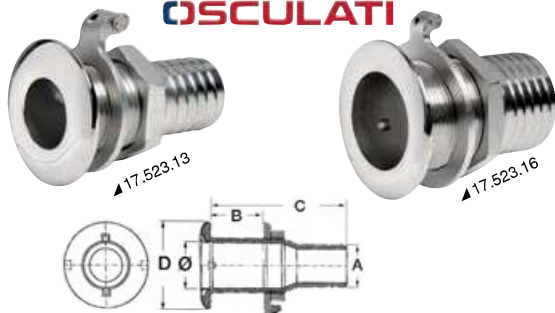


All-thread skin fitting - Long thread

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	C mm	D mm	Ø mm
17.422.83	1"	107	55	25
17.422.84	1" 1/4	112	64	35
17.422.85	1" 1/2	112	71	38

OSCULATI

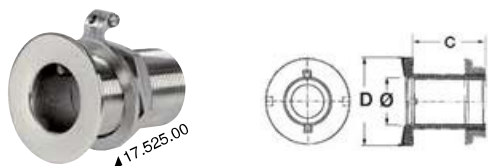


Skin fitting with hose adaptor

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	A mm	C mm	B mm	D mm	Ø mm
17.523.10	3/8"	15	53	21	35	11
17.523.11	1/2"	18	59	26	39	15
17.523.12	3/4"	24	68	32	49	19
17.523.13	1"	30	73	33	55	25
17.523.14	1" 1/4	39	77	34	65	34
17.523.15	1" 1/2	44	80	38	71	38
17.523.16	2"	56	95	45	84	50

OSCULATI

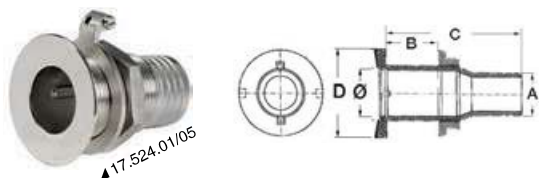


Flush-mount skin fitting

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	C mm	D mm	Ø mm
17.525.00	3/8"	53	25	11
17.525.01	1/2"	60	38	15
17.525.02	3/4"	68	50	19
17.525.03	1"	72	55	25
17.525.04	1" 1/4	77	65	34
17.525.05	1" 1/2	78	72	38

OSCULATI



Flush-mount skin fitting with hose adapter

AISI 316 Supplied with mirror polished ground connections.

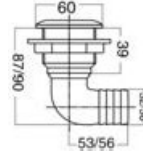
Code	Thread	Ø mm	A mm	B mm	C mm	D mm
17.524.01	1/2"	19	18	28	60	38
17.524.02	3/4"	24	24	36	68	50
17.524.03	1"	31	30	33	72	55
17.524.04	1" 1/4	39	38	39	77	65
17.524.05	1" 1/2	44	44	40	78	72

90° skin fitting

AISI 316 Supplied with mirror polished ground connections.

Code	Thread	For hose Ø mm	Max hull thickness mm
17.526.04	1" 1/2	32	25
17.526.05	1" 1/2	38	25
17.526.06	1" 1/2	51	25

OSCOLATI



Skin fitting with check valve

AISI 316 Made of mirror polished AISI 316 stainless steel, fitted with rubber check valve and ground connection.

Code	Thread	Length under the head mm	Net passage Ø mm
17.319.30	1" 1/2	78	35
17.319.31	2"	100	42

OSCOLATI



Thru-hull scoop strainer

AISI 316 Fitted with ground connection.

Code	Size	Code	Size
17.414.00	3/8"	17.414.05	1" 1/2
17.414.01	1/2"	17.414.06	2"
17.414.02	3/4"	17.414.07	2" 1/2
17.414.03	1"	17.414.08	3"
17.414.04	1" 1/4		

OSCOLATI



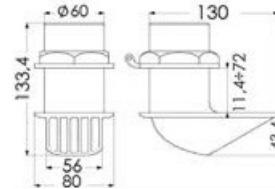
BHF (Buzzi - Hi - Flow) thru-hull scoop strainer

AISI 316 DESIGN BY BUZZI

Section being equal, the special profile of this thru-hull scoop strainer allows for a water inlet volume 2.5 times as large as a traditional one. The stainless steel monoblock casting can stand the pressure of a possible lifting belt. Equipped with ground connection.

Code	Section
17.415.06	2"

OSCOLATI



Shut-off full flow ball valve female/female

AISI 316 Made-ready for bracket mounting, made of AISI 316 stainless steel.

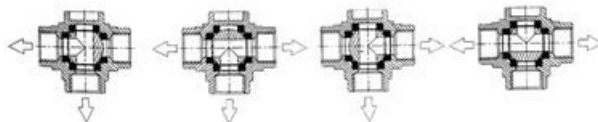
Code	Size	Code	Size
17.721.01	3/8"	17.721.06	1" 1/2
17.721.02	1/2"	17.721.07	2"
17.721.03	3/4"	17.721.08	2" 1/2
17.721.04	1"	17.721.09	3"
17.721.05	1" 1/4		



3-way ball valve female/female/female

AISI 316 Made of AISI 316 stainless steel, deviation; fitted with handle lock. "T" maneuvering.

Code	Size	Code	Size
17.722.01	3/8"	17.722.05	1" 1/4
17.722.02	1/2"	17.722.06	1" 1/2
17.722.03	3/4"	17.722.07	2"
17.722.04	1"		



Male hose adaptor

Code	Size	Code	Size
17.306.00	3/8" x 12	17.306.08	1" 1/4 x 35
17.306.01	3/8" x 15	17.306.15	1" 1/4 x 38
17.306.21	3/8" x 16	17.306.09	1" 1/4 x 40
17.306.02	1/2" x 15	17.306.28	1" 1/2 x 38
17.306.22	1/2" x 16	17.306.19	1" 1/2 x 40
17.306.03	1/2" x 20	17.306.10	1" 1/2 x 45
17.306.04	3/4" x 20	17.306.11	2" x 50
17.306.05	3/4" x 25	17.306.12	2" x 60
17.306.06	1" x 25	17.306.13	2" 1/2 x 70
17.306.07	1" x 30	17.306.14	3" x 78
17.306.27	1" x 38		



**90° male hose adaptor**

Code	Size	Code	Size
17.196.02	3/8" x 15	17.196.08	1" x 30
17.196.04	1/2" x 20	17.196.10	1 1/4" x 38
17.196.06	3/4" x 25		

**90° female hose adaptor**

Draw pipes near hull sides, avoiding pipes sharp curves.

Code	Size	Code	Size
17.194.01	1/2" x 18	17.194.04	1 1/4" x 38
17.194.02	3/4" x 25	17.194.06	2" x 56
17.194.03	1" x 30		

**Female hose adaptor**

Code	Size	Code	Size	Code	Size
17.210.01	3/8" x 15	17.210.05	3/4" x 25	17.210.09	1" 1/4 x 40
17.210.02	1/2" x 15	17.210.06	1" x 25	17.210.10	1" 1/2 x 45
17.210.03	1/2" x 20	17.210.07	1" x 30	17.210.11	2" x 50
17.210.04	3/4" x 20	17.210.08	1" 1/4 x 35		

**90° female/female elbows**

Code	Size	Code	Size	Code	Size
17.326.01	3/8"	17.326.04	1"	17.326.07	2"
17.326.02	1/2"	17.326.05	1" 1/4		
17.326.03	3/4"	17.326.06	1" 1/2		

**90° male/female elbows**

Code	Size	Code	Size	Code	Size
17.124.01	3/8"	17.124.04	1"	17.124.07	2"
17.124.02	1/2"	17.124.05	1" 1/4		
17.124.03	3/4"	17.124.06	1" 1/2		

**45° female/female elbows**

Code	Size	Code	Size	Code	Size
17.220.01	3/8"	17.220.04	1"	17.220.07	2"
17.220.02	1/2"	17.220.05	1" 1/4		
17.220.03	3/4"	17.220.06	1" 1/2		

**Female/female/female T joint**

Code	Size	Code	Size	Code	Size
17.318.01	3/8"	17.318.04	1"	17.318.07	2"
17.318.02	1/2"	17.318.05	1" 1/4		
17.318.03	3/4"	17.318.06	1" 1/2		

**Double pipe nipples**

Code	Size	Code	Size	Code	Size
17.125.01	3/8"	17.125.04	1"	17.125.07	2"
17.125.02	1/2"	17.125.05	1" 1/4		
17.125.03	3/4"	17.125.06	1" 1/2		

**Male female reducer**

Code	Size	Code	Size	Code	Size
17.321.01	3/8" x 1/4"	17.321.04	1" x 3/4"	17.321.07	2" x 1" 1/2
17.321.02	1/2" x 3/8"	17.321.05	1" 1/4 x 1"	17.321.08	2" 1/2 x 2"
17.321.03	3/4" x 1/2"	17.321.06	1" 1/2 x 1" 1/4	17.321.09	3x2" 1/2

**Pipe sleeve**

Code	Thread	Length mm	External Ø mm	Code	Thread	Length mm	External Ø mm
17.370.01	3/8"	27	21	17.370.05	1" 1/4	45	48
17.370.02	1/2"	35	28	17.370.06	1" 1/2	47	54
17.370.03	3/4"	35	33	17.370.07	2"	53	67
17.370.04	1"	42	40				

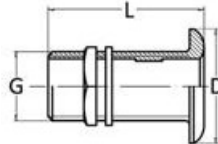
**Pipe male cap**

Code	Size	Code	Size	Code	Size
17.123.01	3/8"	17.123.04	1"	17.123.07	2"
17.123.02	1/2"	17.123.05	1" 1/4		
17.123.03	3/4"	17.123.06	1" 1/2		

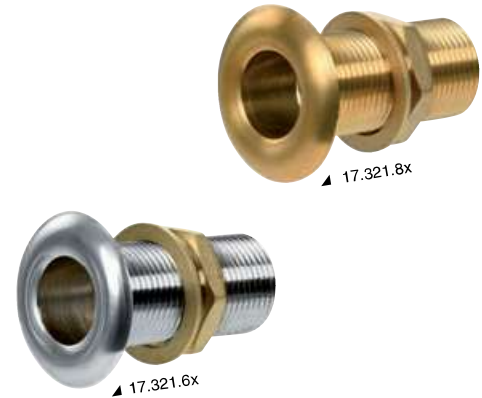
Brass fittings, skin fittings and valves

All-thread skin fitting, rounded head

Thread	Chromed brass	Yellow brass	L mm	Ø D mm	Ø G mm
3/8"	17.321.60	17.321.80	55	35	17
1/2"	17.321.61	17.321.81	65	40	21
3/4"	17.321.62	17.321.82	70	48	26
1"	17.321.63	17.321.83	75	55	33
1" 1/4	17.321.64	17.321.84	85	65	42
1" 1/2	17.321.65	17.321.85	85	70	48
2"	17.321.66	17.321.86	100	83	60
2" 1/2	17.321.67	17.321.87	130	110	75
3"	17.321.68	17.321.88	155	121	88
4"	17.321.69	17.321.89	210	150	113

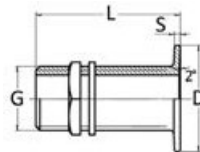


OSCOLATI



All-thread skin fitting, flat head

Thread	Chromed brass	Yellow brass	L mm	Ø D mm	Ø G mm	S mm
3/8"	17.324.10	17.324.00	55	35	17	5
1/2"	17.324.11	17.324.01	65	40	21	5
3/4"	17.324.12	17.324.02	70	48	26	5
1"	17.324.13	17.324.03	75	55	33	5
1" 1/4	17.324.14	17.324.04	85	65	42	6
1" 1/2	17.324.15	17.324.05	85	70	48	5
2"	17.324.16	17.324.06	100	83	60	8

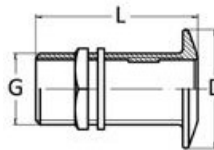


OSCOLATI

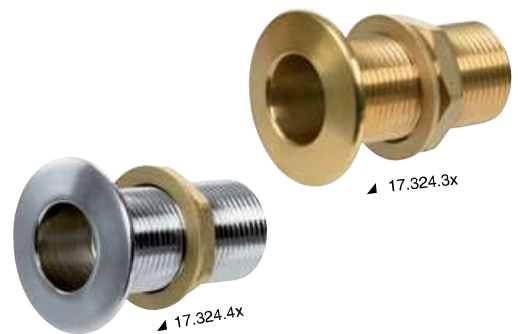


All-thread skin fitting, flared head

Thread	Chromed brass	Yellow brass	L mm	Ø D mm	Ø G mm
3/8"	17.324.40	17.324.30	55	35	17
1/2"	17.324.41	17.324.31	65	40	21
3/4"	17.324.42	17.324.32	70	48	26
1"	17.324.43	17.324.33	75	55	33
1" 1/4	17.324.44	17.324.34	85	65	42
1" 1/2	17.324.45	17.324.35	85	70	48
2"	17.324.46	17.324.36	100	83	60

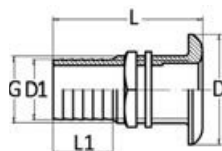


OSCOLATI



Skin fitting with rounded head and hose connector

Thread	Chromed brass	Yellow brass	L mm	L1 mm	Ø D mm	Ø G mm
3/8" x 15	17.423.00	17.323.00	55	20	35	17
1/2" x 19	17.423.01	17.323.01	65	25	40	21
3/4" x 25	17.423.02	17.323.02	65	30	48	26
1" x 30	17.423.03	17.323.03	70	31	55	33
1" 1/4 x 38	17.423.04	17.323.04	80	31	65	42
1" 1/2 x 45	17.423.05	17.323.05	80	31	70	48
2" x 55	17.423.06	17.323.06	92	31	83	60



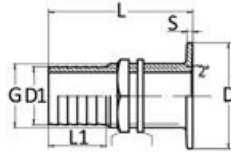
OSCOLATI





Skin fitting with flat head and hose connector

Thread	Chromed brass	L mm	L1 mm	Ø D mm	Ø G mm	S mm
3/8" x 15	17.424.00	55	20	35	17	5
1/2" x 19	17.424.01	65	20	40	21	5
3/4" x 25	17.424.02	70	25	48	26	5
1" x 30	17.424.03	75	25	55	33	5
1" 1/4 x 38	17.424.04	85	30	65	42	6
1" 1/2 x 45	17.424.05	85	30	70	48	5
2" x 55	17.424.06	100	31	83	60	8



Brass washer with ground wire fitting.

For use with any brass thru-hull fitting.

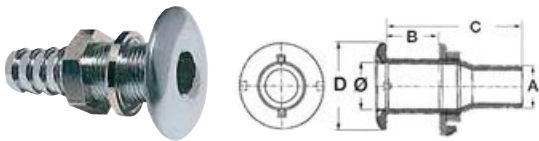
Code	For thru-hull fittings
17.342.04	1"
17.342.05	1" 1/4
17.342.06	1" 1/2
17.342.07	2"



Check valve

Made of **plastic**, adaptable to **brass and stainless steel** skin fittings.

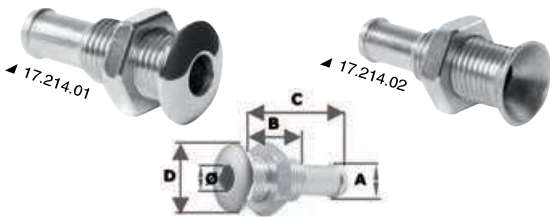
Code	coupled with drain	
	size	type
17.511.03	1"	17.323.03; 17.423.03; 17.321.83; 17.321.63; 17.421.83; 17.422.83
17.511.04	1" 1/2	17.323.05; 17.423.05; 17.321.85; 17.321.65; 17.421.85; 17.422.85



Skin fitting for all types of bilge pumps

Made of **chromed brass**; hose adaptor size 15 mm.

Code	A mm	B mm	C mm	D mm
17.203.80	16	28	70	38



Mini skin fitting

AISI 316 Made of **polished AISI 316 stainless steel**.

Code	Type of head	Size	A mm	B mm	C mm	D mm	Ø mm	Material
17.214.01	convex	1/4" x 13	10	15	38	19,8	7	stainless steel
17.214.02	flush mount	1/4" x 13	10	18,5	42	18	7	stainless steel



Cast brass thru-hull scoop strainer

Code	Size	Code	Size
17.314.00	3/8"	17.314.05	1" 1/2
17.314.01	1/2"	17.314.06	2"
17.314.02	3/4"	17.314.07	2" 1/2
17.314.03	1"	17.314.08	3"
17.314.04	1" 1/4	17.314.09	4"



Galvanized steel tool for quick mounting of brass or stainless steel skin fittings

Code	For drains		
	size	stainless steel	brass
17.421.01	1/2"	17.421../523../524../525../319,30/31	17.323../423../321../324../424..
17.421.02	3/4"	17.421../523../524../525../319,30/31	17.323../423../321../324../424..
17.421.03	1"	17.421../523../524../525../319,30/31	17.323../423../321../324../424..
17.421.04	1" 1/4	17.421../523../524../525../319,30/31	17.323../423../321../324../424..
17.421.05	1" 1/2	17.421../523../524../525../319,30/31	17.323../423../321../324../424..
17.421.06	2"	17.421../523../524../525../319,30/31	17.323../423../321../324../424..

Ball valve full port made of nickel-plated brass, PN25 shut-off full flow

STAINLESS STEEL HANDLE

Long threads as per ISO9093 regulations. Stainless steel handle.

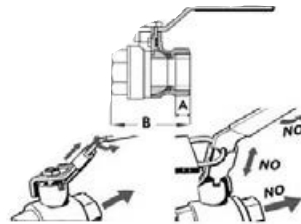
Code	size	A mm	B mm	Code	size	A mm	B mm
17.228.01	3/8"	11	41	17.228.06	1" 1/2	20	90
17.228.02	1/2"	12	50	17.228.07	2"	23	105
17.228.03	3/4"	13	56	17.228.08	2" 1/2	23	130
17.228.04	1"	14	65	17.228.09	3"	28	150
17.228.05	1" 1/4	18	80	17.228.10	4"	30	180



Full passage locking gate valve

Made of chromed brass; **stainless steel handle** with pierced detention for padlocks; comply with waste water drainage ISO 8099 standards.

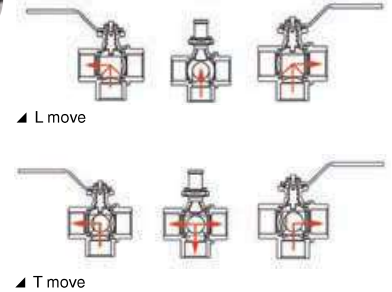
Code	Thread	A mm	B mm
17.228.55	1" 1/4	18	80
17.228.56	1" 1/2	20	90



Brass ball valves

Nickel-plated brass diverting valve. Red coated steel control lever. Operating temperature from -10° to +100°. For water systems, petrol, heating and non-corrosive fluids.

Code	Type	With passage	Operation type	Thread
17.229.00	3-way, deviator	Total	L	3/8"
17.229.01	3-way, deviator	Total	L	1/2"
17.229.02	3-way, deviator	Total	L	3/4"
17.229.03	3-way, deviator	Total	L	1"
17.229.04	3-way, deviator	Total	L	1" 1/4
17.229.05	3-way, deviator	Total	L	1" 1/2
17.229.20	3-way	Reduced	T	3/8"
17.229.21	3-way	Reduced	T	1/2"
17.229.22	3-way	Reduced	T	3/4"
17.229.23	3-way	Reduced	T	1"
17.229.24	3-way	Reduced	T	1" 1/4
17.229.25	3-way	Reduced	T	1" 1/2



Remote electrocontrolled ball valves PN40

Made of nickel-plated brass, full flow with reversible electric servomotor. Revolution time: 14 seconds. Emergency manual control in compliance with ISO228. ON-OFF remote control panel with safety fuse, control of up to 10 valves at the same time.

Valve with control panel	Valve, only	Panel, only	Thread	V	Ø mm	S mm	P mm	H mm	L mm	D mm	Consumption W	Protection degree	Control panel mm
17.240.02	17.241.02	17.242.00	1/2"	24	15	56	125	162	100	62	4	IP42	75x60
17.240.03	17.241.03	17.242.00	3/4"	24	20	66	125	165	100	62	4	IP42	75x60
17.240.04	17.241.04	17.242.00	1"	24	25	75	125	171	100	62	4	IP42	75x60
17.240.05	17.241.05	17.242.00	1" 1/4	24	32	85	195	181	137	92	15	IP65	75x60
17.240.06	17.241.06	17.242.00	1" 1/2	24	39	97	195	187	137	92	15	IP65	75x60
17.240.07	17.241.07	17.242.00	2"	24	48	109	195	195	137	92	15	IP65	75x60



Cast brass male hose connectors



Code	Thread	Hose adaptor Ø mm	Code	Thread	Hose adaptor Ø mm
17.198.01	1/4"	8	17.198.12	3/4"	25
17.198.02	1/4"	10	17.198.47	3/4"	30
17.198.38	1/4"	12	17.198.13	1"	20
17.198.03	1/4"	13	17.198.14	1"	25
17.198.04	3/8"	10	17.198.15	1"	30
17.198.40	3/8"	12	17.198.31	1"	32
17.198.05	3/8"	13	17.198.16	1" 1/4	30
17.198.06	3/8"	15	17.198.17	1" 1/4	35
17.198.39	3/8"	16	17.198.18	1" 1/4	39
17.198.41	3/8"	20	17.198.33	1" 1/4	40
17.198.42	1/2"	12	17.198.19	1" 1/2	38
17.198.07	1/2"	13	17.198.29	1" 1/2	40
17.198.43	1/2"	15	17.198.20	1" 1/2	45
17.198.08	1/2"	16	17.198.30	1" 1/2	50
17.198.49	1/2"	18	17.198.21	2"	50
17.198.09	1/2"	20	17.198.22	2"	60
17.198.45	1/2"	25	17.198.23	2" 1/2	60
17.198.32	3/4"	13	17.198.24	2" 1/2	70
17.198.10	3/4"	16	17.198.34	3"	76
17.198.48	3/4"	18	17.198.25	3"	80
17.198.11	3/4"	20	17.198.26	4"	100

Melt brass female hose connectors



Code	Thread	Hose adaptor Ø mm	Code	Thread	Hose adaptor Ø mm
17.199.01	1/4"	8	17.199.12	1"	25
17.199.02	1/4"	10	17.199.13	1"	30
17.199.03	1/4"	13	17.199.21	1" 1/4	30
17.199.04	3/8"	10	17.199.14	1" 1/4	35
17.199.29	3/8"	12	17.199.22	1" 1/4	38
17.199.05	3/8"	13	17.199.37	1" 1/2	38
17.199.06	3/8"	15	17.199.16	1" 1/2	40
17.199.07	1/2"	13	17.199.17	1" 1/2	45
17.199.08	1/2"	15	17.199.38	1" 1/2	50
17.199.09	1/2"	20	17.199.18	2"	50
17.199.34	3/4"	16	17.199.19	2" 1/2	70
17.199.10	3/4"	20	17.199.20	3"	80
17.199.11	3/4"	25			

Brass hose connector, 90° male version



Code	Thread	Ø hose adaptor mm	Code	Thread	Ø hose adaptor mm
17.197.00	1/4"	8	17.197.07	1"	25
17.197.01	1/4"	10	17.197.08	1"	30
17.197.02	3/8"	15	17.197.09	1" 1/4	38
17.197.03	1/2"	16	17.197.10	1" 1/4	40
17.197.04	1/2"	20	17.197.11	1" 1/2	38
17.197.05	3/4"	20	17.197.13	1" 1/2	45
17.197.06	3/4"	25			

Cross T brass joint (all female outlets)



Code	Size
17.231.00	3/8"
17.231.01	1/2"
17.231.02	3/4"
17.231.03	1"
17.231.04	1" 1/4
17.231.05	1" 1/2

Brass "T" connectors



Code	Thread	Code	Thread	Code	Thread
T-shape version		17.317.03	1"	17.317.08	3"
17.317.09	1/4"	17.317.04	1" 1/4	17.317.10	4"
17.317.00	3/8"	17.317.05	1" 1/2	Reduced T-shape version	
17.317.01	1/2"	17.317.06	2"	17.317.22	3/4" x 1/2" x 3/4"
17.317.02	3/4"	17.317.07	2" 1/2	17.317.23	1" x 3/4" x 1"

3-way brass joint

Code	Thread
17.275.02	1/2"
17.275.03	3/4"

**Brass joint sleeves**

Code	Thread	Code	Thread
17.270.00	3/8"	17.270.05	1" 1/2
17.270.01	1/2"	17.270.06	2"
17.270.02	3/4"	17.270.07	2" 1/2
17.270.03	1"	17.270.09	1/4"
17.270.04	1" 1/4		

**Double brass nipples**

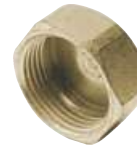
Code	Size	Code	Size	Code	Size
17.225.09	1/4"	17.225.03	1"	17.225.07	2" 1/2
17.225.00	3/8"	17.225.04	1" 1/4	17.225.08	3"
17.225.01	1/2"	17.225.05	1" 1/2	17.225.10	4"
17.225.02	3/4"	17.225.06	2"		

**Double brass nipples (reduced)**

Code	Size	Min. order quantity	Code	Size	Min. order quantity	Code	Size	Min. order quantity
17.227.00	1/4" x 3/8"	5	17.227.03	3/4" x 1"	5	17.227.06	1" 1/2 x 2"	-
17.227.01	3/8" x 1/2"	5	17.227.04	1" x 1" 1/4"	-	17.227.07	2" x 2" 1/2"	-
17.227.02	1/2" x 3/4"	5	17.227.05	1" 1/4 x 1" 1/2"	-	17.227.08	2" 1/2 x 3"	-

**Thread plugs, female thread**

Code	Size	Code	Size
17.222.00	1/4"	17.222.04	1"
17.222.01	3/8"	17.222.05	1" 1/4
17.222.02	1/2"	17.222.06	1" 1/2
17.222.03	3/4"	17.222.07	2"

**Thread plugs, male thread**

Code	Size	Code	Size	Code	Size
17.223.00	1/4"	17.223.03	3/4"	17.223.06	1" 1/2
17.223.01	3/8"	17.223.04	1"	17.223.07	2"
17.223.02	1/2"	17.223.05	1" 1/4		

**Brass reducing couplings male/female**

Code	Thread	Code	Thread	Code	Thread
17.221.00	3/8" male x 1/4" female	17.221.06	2" male x 1" 1/2 female	17.221.16*	1" 1/4 male x 3/4" female
17.221.01	1/2" male x 3/8" female	17.221.07	2" 1/2 male x 2" female	17.221.17*	1" 1/2 male x 1" female
17.221.02	3/4" male x 1/2" female	17.221.08	3" male x 2" 1/2 female	17.221.18*	2" male x 1" 1/4 female
17.221.03	1" male x 3/4" female	17.221.13*	1/2" male x 1/4" female	17.221.19*	2" 1/2 male x 1" 1/2 female
17.221.04	1" 1/4 male x 1" female	17.221.14*	3/4" male x 3/8" female		
17.221.05	1" 1/2 male x 1" 1/4 female	17.221.15*	1" male x 1/2" female		

* Difference of two sizes

**Male/female sleeve**

Code	Male	Female	Code	Male	Female	Code	Male	Female
17.272.00	3/8"	1/2"	17.272.03	3/4"	1/2"	17.272.07	1" 1/4	1" 1/2
17.272.01	1/2"	3/8"	17.272.04	3/4"	1"	17.272.08	1" 1/2	2"
17.272.02	1/2"	3/4"	17.272.06	1"	1" 1/4			

**Reduced pipe sleeves female/female**

Code	Size	Code	Size
17.271.00	3/8" x 1/2"	17.271.03	1 x 1" 1/4
17.271.01	1/2" x 3/4"	17.271.04	1" 1/4 x 1" 1/2
17.271.02	3/4" x 1"	17.271.05	1" 1/2 x 2"





3 piece connector 90° male/female fitted with sphero-conical seal and o-ring

Code	Size	Code	Size
17.274.00	3/8"	17.274.03	1"
17.274.01	1/2"	17.274.04	1" 1/4
17.274.02	3/4"		



3-piece straight connectors fitted with sleeve, sphero-conical seal and o-ring

Code	Size	Code	Size
17.273.00	3/8"	17.273.03	1"
17.273.01	1/2"	17.273.04	1" 1/4
17.273.02	3/4"	17.273.05	1" 1/2



Brass elbows 45° female/female

Code	Size	Code	Size
17.120.01	1/2"	17.120.04	1" 1/4
17.120.02	3/4"	17.120.05	1" 1/2
17.120.03	1"		



Brass elbows 90° male/female

Code	Size	Code	Size	Code	Size
17.224.09	1/4"	17.224.03	1"	17.224.07	2" 1/2
17.224.00	3/8"	17.224.04	1" 1/4	17.224.08	3"
17.224.01	1/2"	17.224.05	1" 1/2	17.224.10	4"
17.224.02	3/4"	17.224.06	2"		



Brass elbows 90° female/female

Code	Size	Code	Size
17.226.09	1/4"	17.226.03	1"
17.226.00	3/8"	17.226.04	1" 1/4
17.226.01	1/2"	17.226.05	1" 1/2
17.226.02	3/4"	17.226.06	2"



Brass elbows and reducing couplings female/female

Code	Size	Code	Size
17.230.01	3/8" x 1/2"	17.230.03	3/4 x 1"
17.230.02	1/2" x 3/4"	17.230.04	1" x 1" 1/4



Male/male brass extension sleeve

Code	Thread	Length mm	Code	Thread	Length mm
17.276.02	3/8"	100	17.276.24	1"	60
17.276.04	3/8"	150	17.276.26	1"	100
17.276.06	3/8"	200	17.276.28	1"	150
17.276.08	1/2"	60	17.276.30	1"	200
17.276.10	1/2"	100	17.276.32	1" 1/4	60
17.276.12	1/2"	150	17.276.34	1" 1/4	100
17.276.14	1/2"	200	17.276.36	1" 1/4	150
17.276.16	3/4"	60	17.276.40	1" 1/2	100
17.276.18	3/4"	100	17.276.42	1" 1/2	150
17.276.20	3/4"	150	17.276.44	1" 1/2	200
17.276.22	3/4"	200			



Brass extension male/female

Code	Size	Length mm	Code	Size	Length mm
17.278.04	3/8"	20	17.278.20	3/4"	20
17.278.08	3/8"	40	17.278.24	3/4"	40
17.278.12	1/2"	20	17.278.28	1"	20
17.278.16	1/2"	40	17.278.32	1"	40



Linear distribution manifolds

Made of brass, centre-to-centre distance of 50 mm

Code	Section		N. exit	←→ cm	Code	Section		N. exit	←→ cm
	main line	derivation				main line	derivation		
17.316.03	1"	1/2"	3	15	17.316.22	1" 1/4	1/2"	2	10.5
17.316.04	1"	1/2"	4	20	17.316.23	1" 1/4	1/2"	3	15.5
17.316.05	1"	1/2"	5	25	17.316.24	1" 1/4	1/2"	4	20.5
17.316.06	1"	1/2"	6	30					

Brass compression joints for copper pipe with Biconical Brass seal

90° male	straigh female	straight male	Thread	for pipe Ø mm
17.409.01	17.412.01	17.408.01	1/4"	8
17.409.02	17.412.02	17.408.02	1/4"	10
17.409.04	17.412.04	17.408.04	3/8"	10
17.409.05	17.412.05	17.408.05	3/8"	12



Brass compression joints for cooper pipe with "O" Ring seal

Compression type on all connections.

T-shape	90° degrees	for pipe Ø mm
17.410.02	17.410.20	10



Plastic fittings, skin fittings and valves

Skin fitting with polypropylene hose adaptor

Made of white plastic, fitted with hose adaptor (in compliance with CE standards only for usage above the waterline)

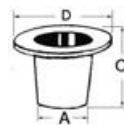
Code	A mm	B mm (hose adaptor)	C mm	D mm	Size
17.322.01	22	15	75	43	1/2"
17.322.02	26	19	83	51	3/4"
17.322.03	32	25	94	62	1"
17.322.04	48	38	104	78	1" 1/2
17.322.05	41	30	94	67	1" 1/4
17.322.06	56	51	116	74	2"



White plastic threaded skin fittings

Fully threaded

Code	A mm	C mm	D mm	Size	ORDER BY BOX
17.394.01	21	70	43	1/2"	10
17.394.02	26	80	51	3/4"	10
17.394.03	33	90	62	1"	10
17.394.04	48	110	78	1" 1/2	10
17.394.05	41	100	67	1" 1/4	10



OSCULATI



90° elbow skin fitting

Made of white plastic, fitted with 90° hose adapter, complies with EC standards only for usage above waterline

Code	Type	Thread Ø mm	Length mm	barbed mm
17.395.01	1"	33	36	19
17.395.00	1"	33	36	25
17.395.20	1" 1/2	47	40	38



90° elbow skin fitting

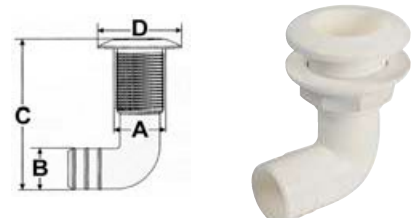
Made of nylon, equipped with fastening ring.

Code	Type	A* mm	A** mm	B mm	C mm	D mm
17.396.02	3/4"	26	27/30	20	84	50
17.396.03	1"	32	33/35	25	93	60
17.396.04	1" 1/2	48	50/51	38	114	72

* Ø threaded element

** Bore Ø on the bulkhead. It depends on the fibreglass thickness

OSCULATI





90° elbow skin fitting

Made of nylon, with mirror-polished **stainless steel** front visible ledge and 90° hose connector.

Code	Type	A mm	B mm	C mm	D mm	E mm
17.328.34	3/4"	20	38,5	53	45	79
17.328.35	1"	25	40,5	55	51	86
17.328.36	1" 1/2	38	44,5	70	70	107,5



Skin fitting

Made of **white plastic**, fitted with 90° hose adaptor.

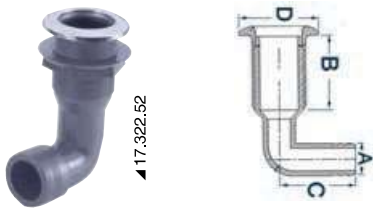
Code	Type	Thread Ø mm	Length mm	barbed mm
17.354.81	1"	33	42	19
17.354.80	1"	33	42	25



Black nylon skin fitting

With mirror polished stainless steel visible front ledge.

Code	Thread E Ø		Hose adapter A		B mm	C mm	D mm
	mm	inches	mm	inches			
17.327.01	22	7/8"	13	1/2"	32	82,5	38
17.327.02	22	7/8"	16	5/8"	32	82,5	38
17.327.03	33	1"1/4	20	3/4"	32	82,5	51
17.327.04	33	1"1/4	25	1"	32	82,5	51
17.327.05	33	1"1/4	29/32	1"1/4	32	85,5	57,5
17.327.06	57	2"1/4	38	1"1/2	48	111	75
17.327.07	57	2"1/4	51	2"	48	111	75



Skin fitting

White nylon through hull drains with mirror polished stainless steel front visible ledge and 90° hose adaptor

Nylon with stainless steel head	All nylon	Thread	Ø A mm	B mm	C mm	D mm
17.328.02	17.322.52	1/2"	16	45	42	37
17.328.03	17.322.53	1"	20	44	47	49
17.328.33	-	1"	20	28	53	52
17.328.04	17.322.54	1"	25	46	47	49
17.328.05	17.322.55	1"	29/32	40	70	56
17.328.06	17.322.56	2"	38	61	70	74
17.328.07	17.322.57	2"	50	61	90	74



Skin fitting

Long model made of nylon/fiberglass.

Code	Version	Ø A mm	Thread B	Ø B mm	C mm	D mm	E mm	With check valve
17.319.17	With hose connector	19/20	1" 3/8	35	54	86	144	No
17.319.18	With hose connector	29/32	1" 3/8	35	54	86	152	No
17.319.19	With hose connector	38	2" 1/4	57	73	95	165	No
17.319.22	With hose connector	38	2" 1/4	57	73	95	166	Yes
17.319.23	With hose connector	52	2" 1/4	57	73	45	122	Yes
17.327.14	SS head with hose connector	19/20	1" 3/8	34	58	86	148	No
17.327.15	SS head with hose connector	29/32	1" 3/8	34	58	86	157	No
17.327.16	SS head with hose connector	38	2" 1/4	57	77	95	172	No
17.327.18	SS head with hose connector	38	2" 1/4	57	77	95	172	Yes
17.327.19	SS head with hose connector	53	2" 1/4	57	77	46	126	Yes
17.319.20	SS head with hose connector	38	1" 1/2	48	78	70	135	Yes
17.395.45	SS head, all threaded	-	1" 1/2 - 11BSP	48	78	117	135	Yes



Skin fitting and scupper

Made of **plastic**, fitted with **check valve**.

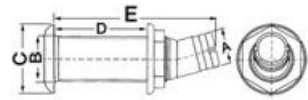
Code	Thread	A mm	B mm	C mm	D mm
17.319.00	1" 1/2	38	27	112	81
17.319.11	1" 1/2	-	89	127	81



Skin fitting

Fitted with **mirror polished stainless steel** front visible ledge and **polished stainless steel** head.

Code	Ø A mm	Thread B mm	Ø B mm	Ø C mm	D mm	E mm	Check valve
17.331.06	38	2" 1/4	57	76	94	170	yes
17.331.07	50	2" 1/4	57	76	94	170	yes
17.329.06	38	2" 1/4	57	76	94	170	-
17.329.07	50	2" 1/4	57	76	94	170	-

**Female/female ball valve**

Made of **polypropylene**, fitted with **nylon** internal sphere; sturdy and safe.

Code	Size	Code	Size
17.233.02	1/2"	17.233.05	1" 1/4
17.233.03	3/4"	17.233.06	1" 1/2
17.233.04	1"		

**Polypropylene hose connector with swivel nut and gasket**

Code	Version	Thread	Hose connector Ø mm
17.235.00	at 90°	1/2"	12
17.235.01	at 90°	3/4"	16
17.235.02	at 90°	3/4"	19
17.235.03	at 90°	1"	25
17.235.04	at 90°	1" 1/4	30
17.235.05	at 90°	1" 1/2	38
17.235.99	Straight	3/8"	12
17.236.00	Straight	1/2"	13
17.236.01	Straight	1/2"	16
17.236.21	Straight	3/4"	16
17.236.02	Straight	3/4"	19
17.236.22	Straight	1"	20
17.236.03	Straight	1"	25
17.236.04	Straight	1" 1/4	30
17.236.23	Straight	1" 1/4	32
17.236.05	Straight	1" 1/2	38

**90° polypropylene male hose connector**

Code	Thread	Hose adaptor Ø mm
17.238.01	3/8"	12
17.238.02	1/2"	16
17.238.03	3/4"	20
17.238.04	3/4"	25
17.238.05	1"	25
17.238.06	1"	30
17.238.07	1" 1/4	32
17.238.08	1" 1/2	38

**Black polycarbonate hose adaptors**

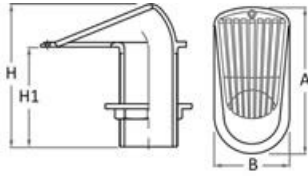
Code	Thread	Ø Hose adaptor mm	ORDER BY BOX
17.206.40	1/2"	18	10
17.206.41	3/4"	23	10
17.206.42	1"	30	10
17.206.43	1" 1/4	38	10
17.206.44	1" 1/2	46	10

**Polypropylene hose adaptors**

Code	Thread	Hose connector Ø mm	ORDER BY BOX	Code	Thread	Hose connector Ø mm	ORDER BY BOX
17.234.00	3/8"	12	20	17.234.23	1"	20	10
17.234.01	3/8"	16	20	17.234.06	1"	25	10
17.234.21	1/2"	13	20	17.234.07	1"	30	10
17.234.02	1/2"	16	20	17.234.08	1" 1/4	30	10
17.234.03	1/2"	20	20	17.234.09	1" 1/4	35	10
17.234.22	3/4"	16	20	17.234.24	1" 1/4	38	10
17.234.04	3/4"	20	20	17.234.10	1" 1/2	38	5
17.234.05	3/4"	25	20	17.234.11	1" 1/2	50	5



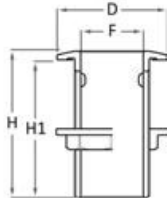
Bronze fittings, skin fittings and valves



GUIDI series 2000 bronze thru-hull scoop strainer

BRONZE / BRONZO

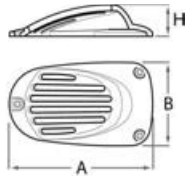
Code	Thread	H mm	H1 mm	A mm	B mm
17.550.01	1/2"	95	75	74	37
17.550.02	3/4"	103	80	81	40
17.550.03	1"	111	85	104	55
17.550.04	1" 1/4"	118	90	118	64
17.550.05	1" 1/2"	129	100	130	71
17.550.06	2"	142	110	154	84



GUIDI bronze skin fitting

BRONZE / BRONZO

Code	Thread	H mm	H1 mm	D mm	F mm
17.551.01	3/8"	64	60	28	11
17.551.02	1/2"	70	65	40	13
17.551.03	3/4"	75	70	47	19
17.551.04	1"	85	80	57	25
17.551.05	1" 1/4"	91	85	67	32
17.551.06	1" 1/2"	96	90	75	38
17.551.07	2"	107	100	88	50

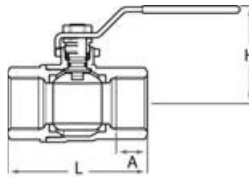


GUIDI series Manta bronze cap

BRONZE / BRONZO

Code	Thread	A mm	B mm	H mm	Code	Thread	A mm	B mm	H mm
17.552.01	1/2"	84	49	20	17.552.04	1" 1/4"	136	79	30
17.552.02	3/4"	102	57	23	17.552.05	1" 1/2"	154	88	34
17.552.03	1"	118	68	26	17.552.06	2"	180	102	39

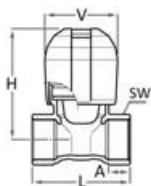
17.551.xx Matching skin fitting



GUIDI bronze F-F ball valve with lever-handle full flow

BRONZE / BRONZO

Code	Thread	A mm	L mm	H mm	Flow 1 bar (l/h)
17.557.01	3/8"	11,4	54	48	9000
17.557.02	1/2"	15	65	49	18000
17.557.03	3/4"	16,3	72	56	39000
17.557.04	1"	19,1	86	60	71000
17.557.05	1" 1/4"	21,4	99	72	119000
17.557.06	1" 1/2"	21,4	107	77	196000
17.557.07	2"	25,7	128	88	300000



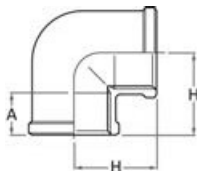
GUIDI bronze non-stick valve, series Alex with full flow

BRONZE / BRONZO

PATENT

NON - STICK

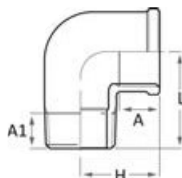
Code	Thread	A mm	L mm	H mm	V mm	SW mm	Flow 1 bar (l/h)
17.558.03	3/4"	16,3	73	85	58	31	39000
17.558.04	1"	19,1	84	94	63	38	65000
17.558.05	1" 1/4"	21,4	97	110	72	47	110000
17.558.06	1" 1/2"	21,4	103	118	78	54	189000
17.558.07	2"	25,7	124	139	90	67	280000



GUIDI bronze F-F 90° elbow

BRONZE / BRONZO

Code	Thread	A mm	H mm	Code	Thread	A mm	H mm
17.560.01	1/4"	11	19	17.560.05	1"	19,1	37,5
17.560.02	3/8"	11,4	21	17.560.06	1" 1/4"	21,4	45
17.560.03	1/2"	15	27	17.560.07	1" 1/2"	21,4	48
17.560.04	3/4"	16,3	31,5	17.560.08	2"	25,7	59



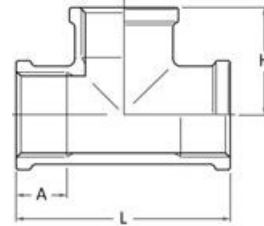
GUIDI bronze M-F 90° elbow

BRONZE / BRONZO

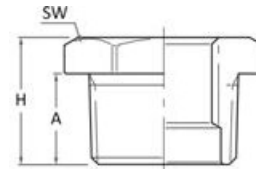
Code	Thread	A1 mm	A mm	H mm	L mm
17.561.01	1/4"	13	11	28	35
17.561.02	3/8"	10,1	11,4	21	28,5
17.561.03	1/2"	13,2	15	27	35
17.561.04	3/4"	14,5	16,3	31,5	39,5
17.561.05	1"	16,8	19,1	37,5	46
17.561.06	1" 1/4"	19,1	21,4	45	54
17.561.07	1" 1/2"	19,1	21,4	48	59
17.561.08	2"	23,4	25,7	59	69

GUIDI bronze F-F-F T-fitting**BRONZE / BRONZO**

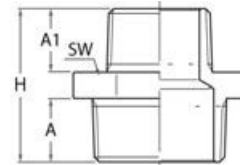
Code	Thread	A mm	H mm	L mm
17.562.01	3/8"	13,5	21	42
17.562.02	1/2"	15	27	54
17.562.03	3/4"	16,3	31,5	63
17.562.04	1"	19,1	37,5	75
17.562.05	1" 1/4"	21,4	45	90
17.562.06	1" 1/2"	21,4	48	96
17.562.07	2"	25,7	59	118

**GUIDI bronze M-F reducer****BRONZE / BRONZO**

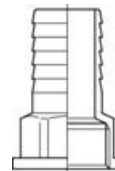
Code	Thread	A mm	H mm	SW mm
17.563.01	3/8" x 1/4"	11,5	17,5	19
17.563.03	1/2" x 3/8"	15	21,5	22
17.563.05	3/4" x 1/2"	16,5	23,5	28
17.563.07	1" x 3/4"	19	26,5	35
17.563.09	1" 1/4" x 1"	21,5	30,5	46
17.563.12	1" 1/2" x 1" 1/4"	21,5	52	52
17.563.13	2" x 1" 1/2"	25,5	52	52

**GUIDI bronze M-M reduced double nipple****BRONZE / BRONZO**

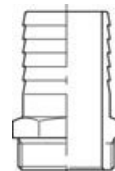
Code	Thread	A mm	A1 mm	H mm	SW mm
17.564.01	3/8" x 1/4"	11,5	11	28,5	19
17.564.02	1/2" x 3/8"	15	11,5	33	22
17.564.03	3/4" x 1/2"	16,5	15	38,5	28
17.564.05	1" 3/4"	19	16,5	43	35
17.564.06	1" 1/4" x 1"	21,5	19	49,5	46
17.564.07	1" 1/2" x 1" 1/4"	21,5	21,5	53	52

**GUIDI bronze female hose connector****BRONZE / BRONZO**

Code	Thread	Hose fitting Ø mm
17.569.02	1/2"	20
17.569.03	3/4"	25
17.569.04	1"	25
17.569.07	1" 1/2"	38

**GUIDI bronze male hose connector****BRONZE / BRONZO**

Code	Thread	Hose fitting Ø mm	Code	Thread	Hose fitting Ø mm
17.568.01	1/4"	10	17.568.15	3/4"	25
17.568.02	3/8"	10	17.568.17	1"	25
17.568.03	3/8"	13	17.568.18	1"	30
17.568.07	1/2"	13	17.568.22	1" 1/4"	35
17.568.09	1/2"	16	17.568.23	1" 1/4"	38
17.568.11	1/2"	20	17.568.25	1" 1/2"	38
17.568.12	3/4"	16	17.568.28	1" 1/2"	50
17.568.14	3/4"	20	17.568.29	2"	50

**Hydraulic accessories****Waterproof tape**

Waterproof non-toxic P.T.F.E. (Teflon) tape used to seal threads of hydraulic connectors.

Code	Roll	
	length	width
17.100.00	12 m	12 mm



Scuppers and cockpit drains made of stainless steel and chromed brass



Protection tabs for skin fittings, petrol vents, water etc

Made of stainless steel.

Code	AxBxC mm
17.213.60	41x44x12 h
17.213.70	57x54x16 h
17.213.75	93x87x25 h

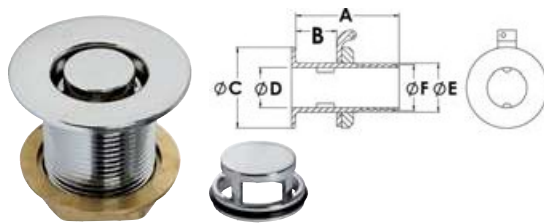


Cockpit drain

AISI 316

Made of mirror-polished AISI316 stainless steel. Snap upper grid for mounting and hiding the fastening screws.

Code	A mm	B x C mm	E mm	D - Inside thread
17.118.49	58	50 x 38	5.3	1"
17.118.50	80	52 x 51	5.5	1" 1/2



Cockpit flush drain

Made of two chromed brass parts. Body and insert that works as a removable filter.

Code	Version	A mm	B mm	Ø C mm	Ø D mm	Ø E	Ø F mm
17.119.32	All thread	80	67	65	33	1" 1/4	-
17.119.33	All thread	80	67	70	39	1" 1/2	-
17.119.42	With hose connector	78	36	65	33	1" 1/4	38
17.119.43	With hose connector	75	33	70	39	1" 1/2	45



45° cockpit drain with check valve

AISI 316

Made of AISI316 stainless steel. Fitted with check system: an inner ball prevents any backflow. Removable grid for cleaning.

Code	Ø mm	Hose adapter size mm
17.118.01	92	40

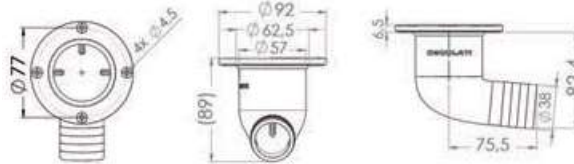


90° cockpit drain with check valve

AISI 316

316 stainless steel, fitted with check valve: an internal ball prevents backflows. Hidden screws.

Code	Ø mm	Hose connector mm
17.118.03	92	38

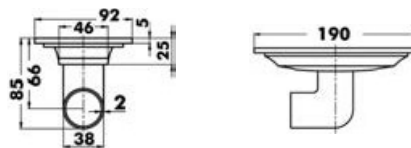


Oval cockpit drain

AISI 316

Made of 316 stainless steel, fitted with removable grid.

Code	mm	Hose adapter mm
17.118.05	92 x 190	38



Cockpit drain

AISI 316

Made of AISI316 stainless steel. The upper part is screwed thus allowing mounting on different gauges.

Code	Fixing hole mm	Hose connector mm	Deck thickness mm	Head Ø mm
17.118.02	32	20	3/11	42

90° cockpit drain with check valve

Body made of reinforced acetyl fibre. Head of AISI316 stainless steel and check flap.

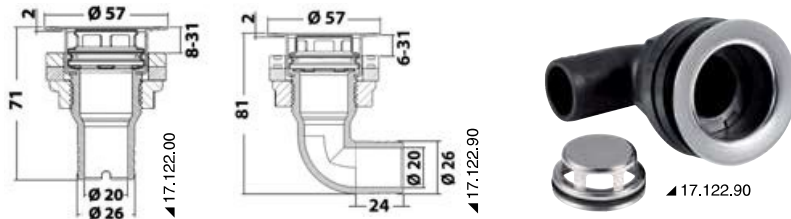
Code	Head Ø mm	Hose fitting mm
17.126.01	87	38
17.126.02	87	51



Flush cockpit drain with stainless steel head

Body made of reinforced acetyl fibre. Head of AISI316 stainless steel and removable filter.

Code	Version	Tube Ø mm
17.122.00	straight	26
17.122.90	90°	26



Faired scupper vent

Made of chromed brass. Fully threaded.

Code	Thread	Length of threaded neck mm	↔ mm
17.333.01	1/2"	65	38x38x18
17.333.02	3/4"	65	44x44x20
17.333.03	1"	75	50x50x23
17.333.04	1" 1/4	79	57x57x27
17.333.05	1" 1/2	83	65x65x31
17.333.06	2"	90	80x80x44



Stainless steel faired scupper vent

AISI 316

Made of precision-cast mirror-polished AISI 316 stainless steel. Fully threaded.

Code	Thread	Length of thread collar	↔ mm
17.119.01	1/2"	65	38x38x18
17.119.02	3/4"	65	44x44x20
17.119.03	1"	75	50x50x23
17.119.04	1" 1/4	79	57x57x27
17.119.05	1" 1/2	83	65x65x31
17.119.06	2"	90	80x80x44



Plastic scuppers and cockpit drains

Flush head cockpit drain fitted with strainer net

Made of white nylon.

Code	Size	Thread Ø mm	Hose adaptor mm	Length mm
17.395.50	1"1/2	47	32/38	117

OSCULATI

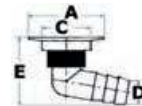


Shower/cockpit nylon drainers

Made of white nylon, fitted with filter and 100° elbow

Code	flange Ø (A) mm	Ø application hole (C) mm	Ø Hose adaptor (D) mm	Size max (E) mm
17.399.90	45	25	19	60
17.632.20	70	50	29	80
17.411.80	68	50	38	90

OSCULATI



Skin fitting

Fitted with **check valve** made of **white nylon**, large passage flow..

Code	Fits thickness	Net passage	Mounting	Required hole
17.320.50	from mm 30 up to 139	Ø mm 50 equal to 1960 mm ²	pressure mounting	Ø mm 66



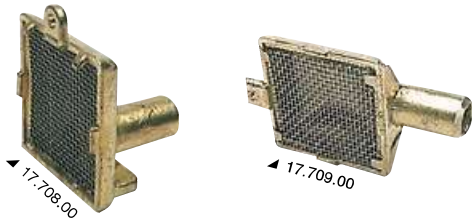
Universal adapter for piping

Made of **plastic**, it connects 1" 1/2, 1" and 3/4" piping. 20/25/38-mm hose connector. It can be modified by previously cutting the SLEEVE adapter to connect 1" 1/2 fittings.

Code	Description
17.238.50	Adapter
17.238.51	Sleeve



Suction strainers and drain pipes



Suction strainer

Made of **marine brass**, designed for bilge pumps, fitted dirt-proof **stainless steel** screen; suitable for all self-priming pumps with outlet size 1/2 or 16/19 mm.

Code	Version	Height mm	Out	←→ mm
17.709.00	Thickening to remain in position without screws	25	horizontal	56x56x96
17.708.00	Transom mounting	-	vertical	base 55x55



Jumbo size suction strainer

Made of brass.

Code	Size mm	Hose adaptor Ø mm
17.709.01	158x71	18



AISI316 suction strainer

Made of **AISI 316 stainless steel**, designed for bilge pump pipes. Fitted with stainless steel dirt-proof screen. Suitable for all bilge pumps with 1/2" (mm 16/18) hose adaptor.

Code	Height mm	←→ mm
17.706.00	21	57x58



Black plastic suction strainer WHALE

Size 147x56x104 mm, for installation on a vertical descending position from the pipe; fits all hand pumps with mouthpiece size 25/38 mm, fitted with non-return foot valve.

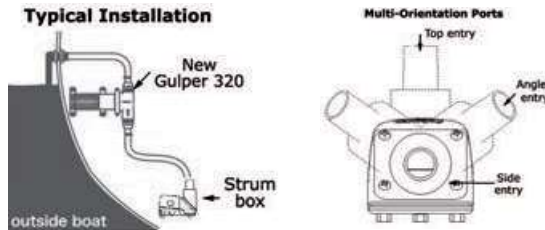
Code	Model	Check valve	←→ mm
17.711.01	vertical	Included	147x56x104
17.710.01	horizontal	Included	170x120x58



Whale strainer with new adjustable joint

Fitted with check valve; can be used with hand pumps or electric pumps; ideal for the Gulper 320.

Code	Hose connector mm	Adjustable hose connector	←→ mm
17.710.19	19	In 4 positions	145x60x52



Semirigid elbow WHALE



For 90° outlets with Henderson MKV intake or delivery pumps 15.268.01/03/270.00.

Code	Ø mm
17.712.00	38

Y Connection WHALE



Code	Description
17.714.00	Narrow "Y" joints for 2 connections to one outlet (skin fitting) two water output pipes Ø size 38 mm



AISI 316 stainless steel strainer

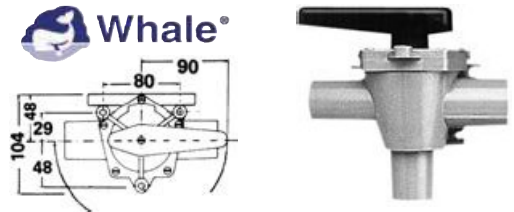
Fitted with back vent and filtering screen. Heavy precision-cast version.

Code	For pipe Ø mm	Pipe version	Base mm	Check valve
17.715.25	25	horizontal	115x100	Included
17.715.38	38	horizontal	115x100	Included
17.716.25	25	vertical	150x70	Included
17.716.38	38	vertical	150x70	Included

3-way WHALE “Henderson” valve

Capable of opening two separate bilges with just one pump (series MKV), even if one of the bilges is dry. It is also suitable for loading water into two separate tanks with just one intake; can be mounted onto the wall or behind the bulkhead.

Code	Hose adaptor Ø mm
17.713.00	38
17.713.01	25



Flush mount filter for bilge pumps and showers

Prevents clogging from hair debris; fitted with clear plastic case for easy inspection; specially suitable for link rod pumps models Par, Fiamma, Flojet, Shurflo ecc.

Code	Hose adaptor size
17.179.12	5/8" (15,8 mm)
17.179.13	3/4" (19 mm)



Nylon cylindrical water hose joints

To get different diameter sizes, see combinations.

Code	Ø mm	Matching couplings*	Code	Ø mm	Matching couplings*
17.205.12	12	A	17.205.22	22	C
17.205.14	14	A	17.205.25	25	C
17.205.16	16	A	17.205.30	30	D
17.205.18	18	B	17.205.35	35	E
17.205.20	20	B			

* Ex. of combination A: 17.205.12; 17.205.14; 17.205.16



"T" nylon joints for water hoses

Code	Ø mm	Code	Ø mm
17.204.10	10	17.204.18	18
17.204.12	12	17.204.20	20
17.204.14	14	17.204.22	22
17.204.16	16	17.204.25	25



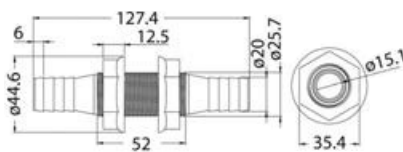
"Y" nylon joints for water hoses

Code	Ø mm
17.203.08	8
17.203.10	10
17.203.12	12
17.203.14	14
17.203.16	16



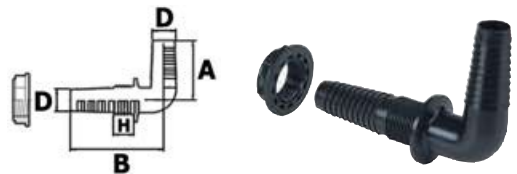
Nylon thru-hull fitting

Code	Hose adaptor Ø mm	Colour
17.237.10	19/20	White



High strength thermopolymer bulkhead

Code	A mm	B mm	H mm	Thread	Hose adaptor D mm
17.237.01	45	77	22	1/2"	11/13
17.237.02	49	84	22	1/2"	15/17
17.237.03	69	107	23	3/4"	20/22
17.237.04	69	107	23	1"	26/29



Universal adapter with hose adapter

Code	Ø mm
17.175.38	13/16/19/22/25/28,5/32/38
17.175.60	31/39/45/50/58



T joints made of high strength thermopolymer

Recommended to drain 2 outlets with a sole skin fitting.

Code	Thread F1	Thread F
17.237.50	1/2"	1/2"
17.237.51	3/4"	1/2"
17.237.52	3/4"	3/4"
17.237.53	1"	1"



Check valves



Check valve for mounting along the fuel piping

Code	For pipe Ø mm
17.731.90	8
17.731.91	10
17.731.92	12



Check valve

Made of polypropylene with internal rubber flapper; hose adapter; multipurpose valve, use to let water flow in just one direction.

Code	Multiple hose adapter mm
17.176.53	13/20/26
17.176.54	25/32/38



Multiple hose connector with check valve

With quick connection system.

Code	Barber mm
17.176.56	13/20/26
17.176.57	25/32/38



WHALE in-line check valve

Polypropylene body and nitrile valve. Duckbill valve.

Code	Hose adaptor mm	Version
17.121.50	25/38	Universal
17.121.90	19/25	Universal



Check valves

Made of **brass**, designed for mounting along pipework, prevents the backflow of fluids.



Code	Thread
17.232.02	1/2"
17.232.03	3/4"
17.232.04	1"
17.232.05	1" 1/4
17.232.06	1" 1/2

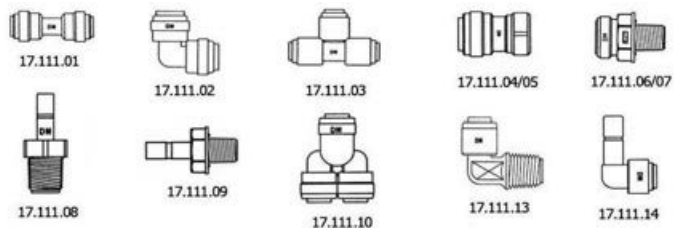
Quick couplings for hydraulic systems



KP 12-mm Ø quick couplings for plumbing



Instant snap-in mounting. It requires a simple pressure of the tube and a fastening clip to connect the coupling. Fully re-usable joints made of non-toxic high-resistance food plastic and semi-rigid polyethylene pipe.

Product description	12-mm Ø	ORDER BY BOX
Female/female connecting sleeve	17.111.01	10
90° female/female elbow	17.111.02	10
90° female tee	17.111.03	10
3/8" female + female fitting	17.111.04	10
1/2" female + female fitting	17.111.05	10
3/8" female + male fitting	17.111.06	10
1/2" female + male fitting	17.111.07	10
Cylinder joint + 3/8" male joint	17.111.08	10
Cylinder joint + 1/2" male joint	17.111.09	10
Female Y joint	17.111.10	10
In-line joint	17.111.12	10
90° female joint with fitting	17.111.14	10
90° female joint with 3/8" male joint	17.111.13	10
Intermediate lever tap	17.111.19	1
Safety clips	17.111.35	10



Polyethylene pipe

Very high impact resistance. Excellent resistance to chemical. Outstanding flexibility.

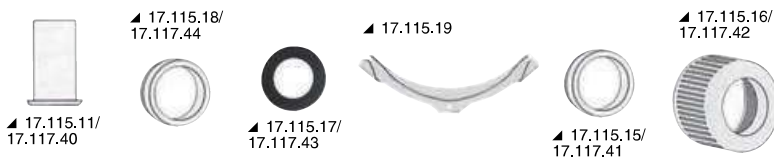
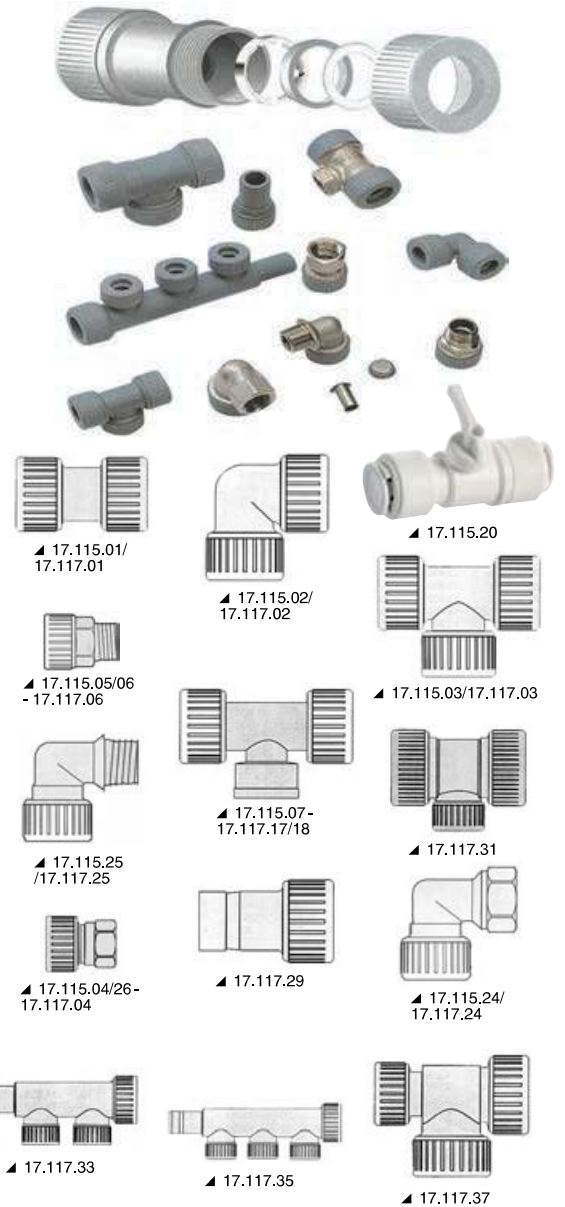
Code	Ø mm	Colour	For water	Pressure bar	Roll m
17.112.25	12	 Red	hot	7	100
17.112.26	12	 Blue	cold	7	100



Hydrofix plumbing connections, suitable for 70° max temperature

Immediate snap installation. A simple pressure of the hose on the fitting is enough to install it. The fitting is re-usable with replacement of the check ring. Polyamide fittings and polyethylene hoses. RINA type-tested fittings with MAC/119897/1TO/98 certificate.

Product description	15-mm Ø	22-mm Ø
Female/female sleeve	17.115.01	17.117.01
90° female/female elbow	17.115.02	17.117.02
90° female T	17.115.03	17.117.03
1/2" female/female brass joint	17.115.04	-
3/8" female/female brass joint	17.115.26	-
3/4" female/female brass joint	-	17.117.04
3/8" female/male brass joint	17.115.05	-
1/2" female/male brass joint	17.115.06	-
3/4" female/male brass joint	-	17.117.06
1/2" T brass joint for connection to accumulator tanks, boilers, etc.	17.115.07	17.117.17
3/4" T brass joint for connection to accumulator tanks, boilers, etc.	-	17.117.18
1/2" female/female brass elbow	17.115.24	-
3/4" female/female brass elbow	-	17.117.24
1/2" female/male brass elbow	17.115.25	-
3/4" female/male brass elbow	-	17.117.25
22x15-mm male/female reduction	-	17.117.29
22x15x22-mm reduced T	-	17.117.31
Male/female manifold with two 22x15x15x22 derivations, openable at the end	-	17.117.33
Male/female manifold with three 22x15x15x22 derivations, openable at the end	-	17.117.35
22x22x15-mm reduced T	-	17.117.37
Bush to fit into the tube, NECESSARY to censure seal (Ø15 = technopolymer; Ø22 = stainless steel)	17.115.11	17.117.40
Stainless steel check ring, to be replaced in case the joint is re-used	17.115.15	17.117.41
Spare threaded ring nut	17.115.16	17.117.42
Spare silicone O-ring	17.115.17	17.117.43
Spare plastic washer	17.115.18	17.117.44
150-mm Ø curve with fastening screw	17.115.19	-
Shut-off valve	17.115.20	-



Polyethylene tube

Very high impact resistance. Excellent resistance to chemical. Outstanding flexibility. Bend radius min. 120 mm.

Blue	Red	Ø mm	Pressure bar	Roll m
17.115.09	17.115.10	15	7	100
17.117.09	17.117.10	22	7.5	50



Pipe cutter

Suitable for semirigid pipes size 12/15/22 mm.

Code	For pipes
17.117.50	17.112.25; 17.112.26; 17.115.09; 17.115.10; 17.117.09; 17.117.10; 17.815.52; 17.815.54



15-mm Ø quick-release couplings for WHALE hydraulic systems

Main features: exclusive "double seam" design that ensures a secure coupling even under sudden pressure changes, fitted with coupling close to the pipe elbows; does not require a safety clip, thus saving costs and installation time; pipe control marking to ensure a correct coupling; easy to use, does not require expert users for the installation; can be fixed and released without tools or replacement parts; maximum pressure at 20° 12 BAR / maximum pressure at 65° 6 BAR. **Suitable for 15-mm Ø pipes.**

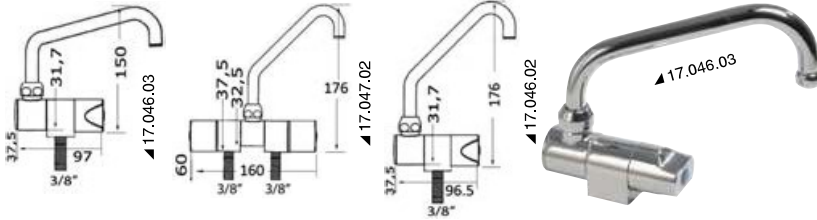
<p>WHALE T-joint</p>  <p>17.815.02</p>	<p>WHALE elbow</p>  <p>17.815.03</p>	<p>WHALE straight fitting</p>  <p>17.815.04</p>																			
<p>WHALE BSP 1/2" male adapter</p>  <p>17.815.14</p>	<p>WHALE T-fitting</p>  <p>17.815.21 This joint coupled together can turn into a clarinet with adjustable outflow.</p>		<p>WHALE fused elbow</p>  <p>17.815.22</p>																		
<p>WHALE BSP 1/2" female adapter</p>  <p>17.815.32</p>	<p>WHALE BSP 1/2" female adapter (brass)</p>  <p>17.815.33</p>	<p>WHALE shut-off valve (brass)</p>  <p>17.815.75</p>																			
<p>WHALE 3/8" BSP male adapter</p>  <p>17.815.83</p>	<p>WHALE adaptor size 3/8 BSP female (plastic)</p>  <p>17.815.39</p>	<p>WHALE adaptor size 3/4" BSP female</p>  <p>17.815.40</p>																			
<p>WHALE cylindrical joint + male 1/2 BSP</p>  <p>17.815.87</p>	<p>WHALE Cylindrical joint for 12-mm hose</p>  <p>17.815.84</p>	<p>WHALE cylindrical joint for flexible pipe size 16 mm</p>  <p>17.815.97</p>																			
<p>WHALE cylindrical joint for flexible pipe size 20 mm</p>  <p>17.815.93</p>	<p>WHALE cylindrical elbow joint for flexible pipe size 20 mm</p>  <p>17.815.92</p>	<p>WHALE shut-off valve</p>  <p>17.815.74</p>																			
<p>WHALE elbow with thread size 1/2 BSP female</p>  <p>17.815.31</p>	<p>WHALE brass plug</p>  <p>17.815.08</p>	<p>WHALE plug</p>  <p>17.815.46</p>																			
<p>WHALE check valve</p>  <p>17.815.82</p>		<p>WHALE cold water pipe</p>  <table border="1" data-bbox="826 1854 1528 1910"> <thead> <tr> <th>Code</th> <th>Pipe size mm</th> <th>Color</th> <th>Reels of m</th> </tr> </thead> <tbody> <tr> <td>17.815.52</td> <td>15</td> <td>Blue</td> <td>50</td> </tr> </tbody> </table>		Code	Pipe size mm	Color	Reels of m	17.815.52	15	Blue	50										
Code	Pipe size mm	Color	Reels of m																		
17.815.52	15	Blue	50																		
<p>WHALE hot water pipe</p>  <table border="1" data-bbox="92 2056 794 2112"> <thead> <tr> <th>Code</th> <th>Pipe size mm</th> <th>Color</th> <th>Reels of m</th> </tr> </thead> <tbody> <tr> <td>17.815.54</td> <td>15</td> <td>Red</td> <td>50</td> </tr> </tbody> </table>		Code	Pipe size mm	Color	Reels of m	17.815.54	15	Red	50	<p>Stainless steel braided pipe suitable for water heating connections</p>  <table border="1" data-bbox="826 2045 1528 2112"> <thead> <tr> <th rowspan="2">Code</th> <th rowspan="2">Length cm</th> <th colspan="2">Thread</th> </tr> <tr> <th>number/version</th> <th>treads</th> </tr> </thead> <tbody> <tr> <td>50.289.56</td> <td>45</td> <td>1 (male) + 1 (female)</td> <td>1/2"</td> </tr> </tbody> </table>		Code	Length cm	Thread		number/version	treads	50.289.56	45	1 (male) + 1 (female)	1/2"
Code	Pipe size mm	Color	Reels of m																		
17.815.54	15	Red	50																		
Code	Length cm	Thread																			
		number/version	treads																		
50.289.56	45	1 (male) + 1 (female)	1/2"																		

Swivelling and foldable taps

Slide series

Made of chromed brass. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Hose connector
17.046.02	Cold water	Italy	3/8" male
17.046.03	Cold water	Italy	3/8" male
17.047.02	Hot + cold water	Italy	2 x 3/8" male



OSCOLATI



Folding spout with flow restrictor

Rotating and folding chromed brass spout. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Hose adaptor
17.046.40	Cold water	No	3/8" male

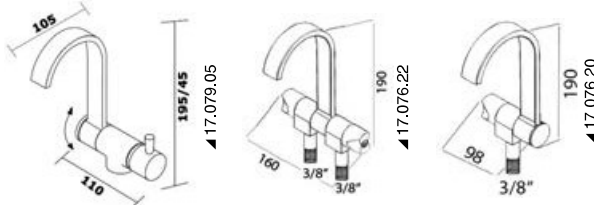


OSCOLATI

New Style tap, Black series

Black finish. It can be mounted inside the sink so the countertop is perfectly clear.

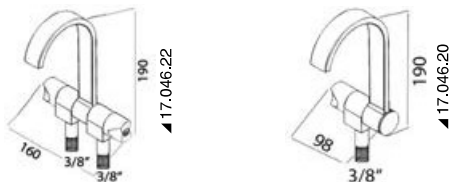
Code	Function	Cartridge
17.076.20	Cold water	Ceramic
17.076.22	Hot+cold water	Ceramic
17.079.05	Hot+cold water	Ceramic



Style series

Made of chromed brass. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Hose connector
17.046.20	Cold water	Italy	3/8" male
17.046.22	Hot + cold water	Italy	2 x 3/8" male



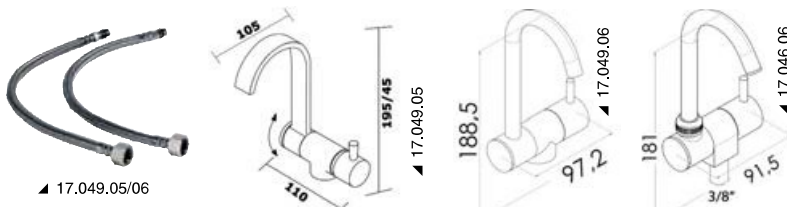
OSCOLATI



Slim series

Made of chromed brass. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Mixer	Hose connector
17.046.06	Cold water	Slim	-	3/8" male
17.049.06	Hot/cold water mixer	Slim	Ceramic	-
17.049.05	Hot/cold water mixer	Slim	Ceramic	-



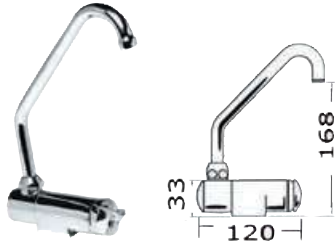
OSCOLATI



OSCULATI**Wheel double-connection series**

Made of chromed brass. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Mixer
17.049.10	Hot/cold water mixer	Slim	Ceramic

OSCULATI**Star series tap**

Made of chromed brass. It can be mounted inside the sink for a flat design countertop.

Code	Function	Knob	Mixer
17.049.00	Hot/cold water mixer	Star	Ceramic

**Shower series**

Ideal for indoor/outdoor showers, fitted with 3 x lower connection hoses made of stainless steel sheath.

Code	Function	Handle	Base Ø mm	Overhang mm	Mounting neck
17.048.00 New	Hot/cold water mixer	Round	42	45	32-mm Ø + 37-mm long
17.051.00	Hot/cold water mixer	T	42	45	32-mm Ø + 37-mm long
17.051.01	Hot/cold water mixer	Oval	42	45	32-mm Ø + 37-mm long
17.052.01	Cold water only	Oval	42	45	32-mm Ø + 37-mm long
17.051.06	Hot/cold water mixer	Slim	42	45	32-mm Ø + 37-mm long

Taps and showers**Swivelling spout taps made in chromed brass**

Code	Type	Height mm	3/8" hose adaptor OPTIONAL
17.935.00	cold/hot	210	17.199.XX
17.940.00	cold	210	17.199.XX

**Spout for sinks**

Code	Description
17.288.80	Telescopic spout made of aluminium and nylon for sinks, etc.

Whale®**WHALE Elegance shower taps**

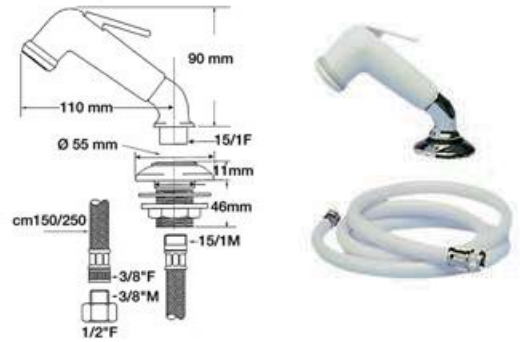
For installation in narrow spaces, 1/2" inlet. These 1,7-m hose pull-out taps allow the installation of a functional and nice shower even in narrow spaces. Easy installation. 1/2" couplings.

Code	Type	Version	Base mm	Wall bracket OPTIONAL	Spare shower head	White upgrade kit for sink and shower taps.
17.030.03	long pull-out neck	cold	115x55	17.030.12	17.030.99	17.030.98
17.030.04	long pull-out neck	hot/cold	171x62	17.030.12	17.030.99	17.030.98
17.030.00	short neck	cold	113x55	-	-	17.030.98
17.030.01	short neck	hot/cold	164x55	-	-	17.030.98

Shower taps

Made of **white ABS**, fitted with **chromed brass 45° bend**, **chromed brass and nylon** base sunk bracket and white **polyester** reinforced hose. The water comes out by pushing the spring button; continuous jet flow by lifting the button without holding down the button. Ideal for **small boats** or for **external sinks**.

Code	With pipe m	Terminal
17.258.01	1.50	3/8" F
17.258.02	2.50	3/8" F



Mixer tap "hot/cold water" with shower tap

Made of **chromed brass**, fitted with **removable shower**, swivelling with variable jet; stylish modern line with white shower; fine finish.

Code	Overhang mm	Height mm	Shower hose size m
17.336.00	180	150	1.50



Single-outlet mixer

Made of chromed brass. Fitted with swivelling spout and hot/cold water mixer.

Code	Vertical size mm	Arm mm
17.335.00	200	160



Shower heads, shower rails and accessories

Made of chromed brass. It comes with all the accessories needed for installation.

Code	Model	Rail height cm	Hose length cm	Finish	Soap holder	Shower head Ø mm
17.669.00	WASH	60	150	chromed	yes	83
17.669.05	YUMA	60	150	chromed	yes	-



Wall swivelling support

Code	For shower	Material
17.019.02	17.019.00	ABS chromed

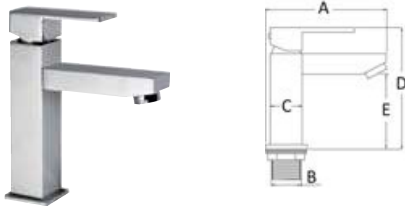


3/8" to 1/2" adaptors for shower hoses

Code	For shower
15.252.00	da 3/8" a 1/2" 15.242.00; 15.242.01; 15.244.00; 15.244.01; 15.254.01; 15.256.00; 15.256.01; 15.251.00; 15.240.01; 15.240.02; 15.240.20; 15.240.21; 15.240.30; 15.240.31; 15.240.33; 15.240.34



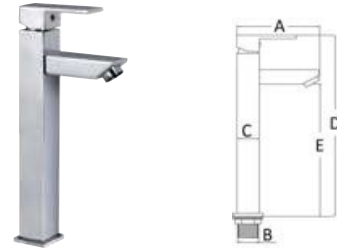
Square short mixer for toilet sink



Square series ceramic mixer. Made of chromed brass with ceramic cartridge.

Code	A mm	B mm	C mm	D mm	E mm
17.004.01	122	M32x1,5	35	168	110

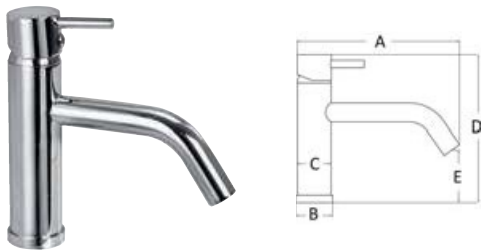
Square tall mixer for toilet sink (for projecting sinks)



Square series ceramic mixer. Made of chromed brass and fit with ceramic cartridge.

Code	A mm	B mm	C mm	D mm	E mm
17.004.02	126	M32x1,5	35	278	200

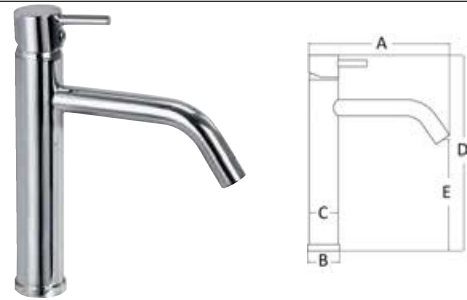
Jessy mixer with ceramic cartridge for washbasins



Chromed brass mixer.

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.003.00	140	35	32	140	50

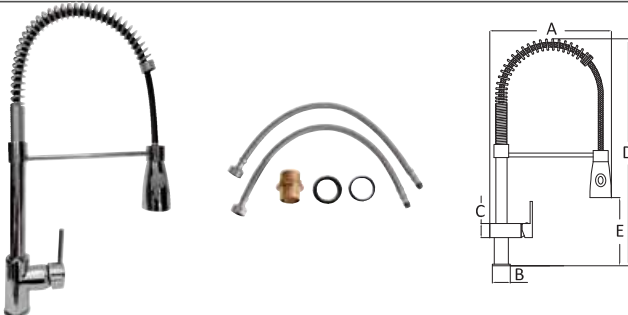
Jessy mixer with ceramic cartridge for washbasins, tall version



Chromed brass mixer for application on top-mount washbasins.

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.003.01	140	35	32	215	122

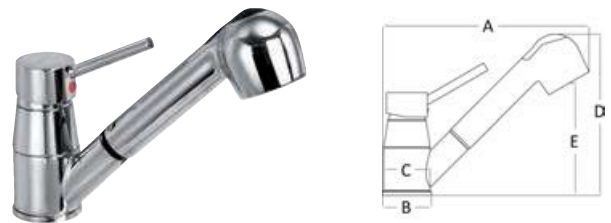
Jessy kitchen tap with spray nozzle



Tap of the Square series with ceramic mixer. Made of chromed brass, with ceramic cartridge.

Code	A mm	B mm	C mm	D mm	E mm
17.003.02	250	47	32,5	560	170

Diana swivelling mixer with ceramic cartridge and removable two-jet shower

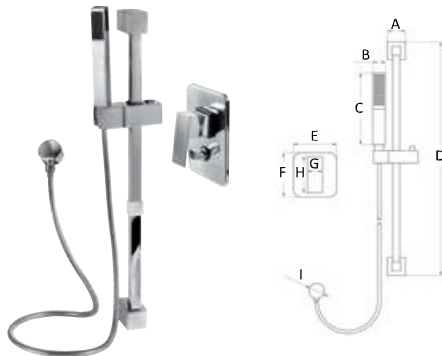


Chromed brass mixer. With 150-cm hose.

Code	A mm	B mm	C mm	D mm	E mm
17.006.00	220	52	50	180	120

Square shower rail (single-control rail)

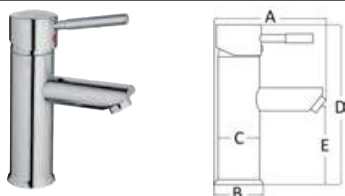
Square series ceramic mixer. Made of chromed brass and fit with ceramic cartridge.



Code	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ø I mm
17.004.06	50	35	200	650	120	120	42	98	35

Diana mixer with ceramic cartridge for toilet sinks.

Chromed brass mixer.



Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.009.01	145	55	45	190	85

Diana mixer with ceramic cartridge



For toilet sinks. Chromed brass mixer.

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.007.00	165	55	45	180	90

Diana sink mixer with ceramic cartridge for high column toilet sinks



Chromed brass mixer. Suitable for projecting sinks on flat surfaces.

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.009.00	145	52	45	300	205

Diana swivelling mixer with ceramic cartridge



Chromed brass mixer. Adjustable jet and long neck, suitable for kitchen sinks

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.005.00	225	55	45	180	125

Ceramic Swivelling mixer unit for kitchen sinks



Taps in chromed brass.

Code	A mm	Ø B mm	Ø C mm	D mm	E mm
17.008.00	205	47	41	300	250

Olivia mixer

Single-control mixer with ceramic valve and swivelling spout.

Code	A mm	B mm	C mm	Suitable for
17.017.00	120	220	40	kitchen sinks
17.018.00	80	170	40	bath roomd



Olivia single-control combined mixer + removable shower

Fitted with flexible hose size 120 cm; **double jet**: shower tap.

Code	A mm	C mm	Suitable for
17.019.00	120	40	kitchen/bathrooms



Olivia single-control chromed mixer + removable chromed shower

Flexible **chromed brass** hose size 1,2 metres; shower fitted with double jet for sink/shower use.

Code	Mixer Ø mm	Total height mm	Shower mm	Size mm
17.016.00	40	110	160	175





Olivia built-in mixer

Made of chromed brass, designed for bulkhead mounting.

Code	Neck Ø mm	Suitable for	Treads	Inner size mm
17.014.00	42	shower	1/2" F	72



Olivia single-control mixer

Code	Material	Suitable for	Ø mm	Height mm
17.015.00	chromed brass	showers	45	110



Push button tap

Made of brass.

Code	Thread
17.400.03	3/8"

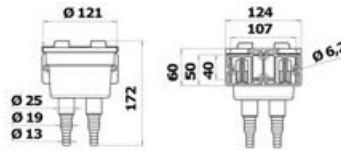
Engine raw water strainers



Aquanet cooling water filter

Technopolymer case with transparent screw cap. **Stainless steel** pull-out filtering unit. With snap support for easy removal.

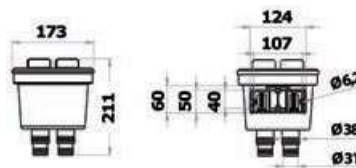
Code	Flow l/min	Hose connector	mm
17.652.08	150	13 mm (1/2") - 19 mm (3/4") - 25 mm (1")	Ø 121 x 172 h



Aquanet XL cooling water strainer

Technopolymer body with transparent screw cap. Removable stainless steel filtering element. The filter is fit with a snap support for easy removal.

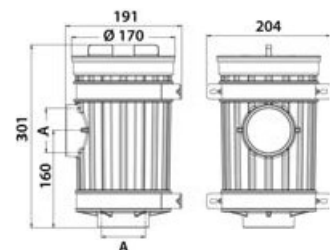
Code	Flow l/min	Hose connector	mm
17.652.10	300	1 1/4 - 1 1/2 (31/38 mm)	173 Ø x 211 h



PLUS Aquanet cooling water strainer

Technopolymer body and clear polycarbonate screw plug. **Stainless steel** pull-out filtering element. Rotating stainless steel brackets for bulkhead mounting.

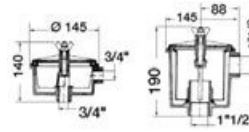
Code	Max flow l/min	Hose adaptor A	mm
17.647.01	200	1" 1/2	301x191
17.647.02	350	2"	301x191
17.647.03	550	2" 1/2	301x191



Utility water filter

Air filter water separator, made of **black Moplen** with Makralon transparent cover and nylon capillary filter; for mounting on engine intakes, made in accordance with **RINA** standards; easy inspection.

Code	Passage l/min	thread
17.652.01	150	3/4"
17.652.02	300	1"1/2



Chromed brass water filters for engine cooling

Made of **chromed brass**, fitted with **stainless steel** washable internal net and cover with clear **polycarbonate** glass; swivelling **stainless steel** bearing band; specially suited for power generators, cover with octagonal winch key.

Code	Body Ø mm	Height mm	Threaded holes size
17.649.02	75	100	1/2"
17.649.03	75	100	3/4"

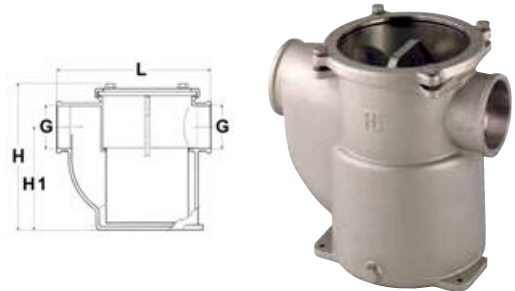


Special water cooling filters

Made of **nickel plated brass** and polycarbonate disc. To be fitted onto the motor water intake. Easy to inspect. Made in compliance with **RINA** standards, 11/447/88 DIP certification.



Code	Ø opening G mm	mm			Flow l/h		mm
		L	H	H1	0.1 bar	1 bar	
17.654.00	3/8"	122	117	82	1400	4300	140 h. x 110 Ø
17.654.01	1/2"	122	117	82	2400	7500	140 h. x 110 Ø
17.654.02	3/4"	169	151	106	3800	12000	160 h. x 146 Ø
17.654.03	1"	169	151	106	5700	17900	160 h. x 146 Ø
17.654.04	1" 1/4	184	176	122	8800	27700	215 h. x 170 Ø
17.654.05	1" 1/2	202	193	135	12800	40600	215 h. x 170 Ø
17.654.06	2"	242	216	149	19900	63000	235 h. x 188 Ø
17.654.07	2" 1/2	260	284	210	33900	107300	280 h. x 230 Ø
17.654.08	3"	309	292	205	50000	166730	315 h. x 230 Ø
17.654.09	4"	340	355	256	103000	326000	410 h. x 220 Ø

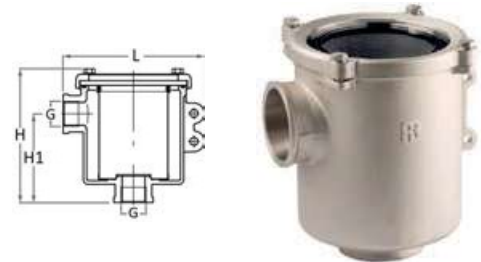


GUIDI series Ionio water strainer

Made of nickel-plated bronze with polycarbonate cover. Cup model fitted with side outlet and one on the bottom. Strainer made of **AISI316** stainless steel and neoprene seals.



Code	Outlet Ø G	L mm	H mm	H1 mm	Flow l/h	
					0.1 bar	1 bar
17.648.01	3/4"	151	145	94	4650	14900
17.648.02	1"	151	145	94	7950	25500
17.648.03	1" 1/4"	167	168	106	12100	38200
17.648.04	1" 1/2"	180	178	111	19100	61250
17.648.05	2"	213	215	135	30000	96200

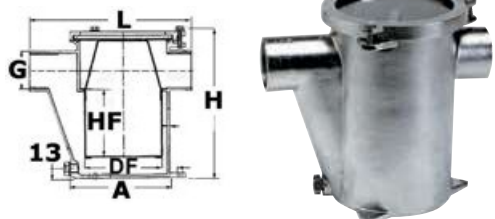


Water cooling engine filters



AISI 316 Made of **AISI316** stainless steel. Inspection cover made of **clear material**.

Code	Ø opening G	mm					H
		L	A	DF	HF	H	
17.653.02	3/4"	180	123	86	70	142	
17.653.03	1"	180	123	86	70	142	
17.653.04	1" 1/4	200	143	105	100	200	
17.653.05	1" 1/2	200	143	105	100	200	
17.653.06	2"	200	160	125	115	220	



Taps, deviators and bulkhead pass-through for fuel



Fuel connection

It enables the fuel to flow through the tank-cockpit bulkhead.

Code	Hose connector mm	Material
17.301.01	10	Brass



Hose-to-hose fuel tap

Ball bearing mechanism with nylon lever.

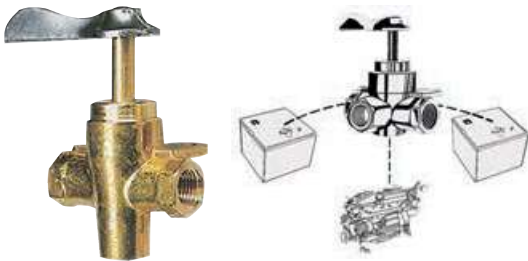
Code	Material	Nett flow mm	Included
17.404.00	chromed brass	8	2 brass barber 1/4"x10 mm



Fuel tap

Sphere movement, **RINA** type-approved; **remote control** bracket. Supplied with wall supports and two hose adaptors size 1/4"x10 mm, the bracket can be mounted along the piping or without a bracket it can be mounted directly onto the tank.

Code	Material	Internal flow mm	Included	OPTIONAL Control cable
17.405.00	chromed brass	8	2 brass barber 1/4"x10 mm	17.450.90



3-way fuel valve

Fitted with **two-hole flange** for mounting, suitable for connecting two tanks into a single pipe.

Code	Material	Thread	Hose adaptor
17.302.03	casted brass	1/4" NPT	17.198.02 10
17.305.03	casted brass	3/8" NPT	17.305.04 12/15



Fuel shut-off valve, fitted with 180° spring swivelling lever

Code	works with	Material	Tread
17.400.00	17.450.90 cable	brass	3/8"
17.400.01	17.450.90 cable	brass	1/2"

OSCULATI



Fuel tap with housing

3-way tap to connect 2 tanks to one engine. Three positions: tank 1 / tank 2 / closed. With upgraded closure.

Code	Housing type	Thread	External Ø mm	Bore Ø mm	Rear overhang mm
17.303.51	Classic EVO	1/4"	95x95	69	95
17.303.52	Classic EVO	3/8"	95x95	69	95



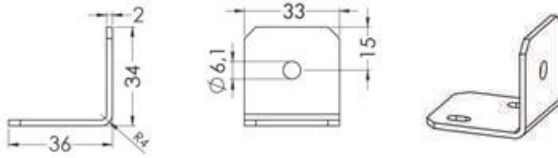
Remote flexible control

Designed to control the starter, to close the petrol taps and operate the fire extinguishers. Eltex sheath, 316 stainless steel 5.5-mm internal thread, 1.5-mm Ø, brass terminals. Equipped with a special self-tapping terminal that enables to cut the flexible pipe as required and then join it with the terminal.

Code	Length m
17.450.90	6
17.450.91	10

Bracket for flexible remote control 17.450.90/91

17.450.30 Made of stainless steel, with oval bores.



White ABS compartment

Suitable for housing flexible controls 17.450.90/91 or similar types for emergency cutouts or for activating fire extinguishers.

Code	Housing type	Version	external Ø mm	hole Ø mm
17.452.93	New Edge	With Fire Extinguisher graphic	87x94	69
17.452.94	New Edge	Fuel Stop printed on cover	87x94	69
17.452.55	Classic EVO (w/improved closing system)	With Fire Extinguisher graphic	95	69
17.452.56	Classic EVO (w/improved closing system)	Fuel Stop printed on cover	95	69



Flush-mount compartment

To house flexible control 17.450.90. To intercept the emergency control.

Code	Version	Material	To be matched to cable	External Ø mm	Hole Ø mm
17.450.95	Fuel Stop writing	white ABS	17.450.90	89	65
17.450.96	Fire Extinguisher writing	white ABS	17.450.90	89	65



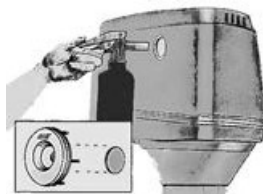
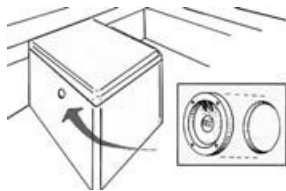
Fire ports



Fire Ports

Made in accordance with Directive 2013/53/UE in compliance with ISO 9094-2 standards. Designed to access the engine box with an extinguisher without opening the box. Hole closed with watertight PVC breakable flap.

Code	External Ø mm	Hole mm	Mounting nut
17.680.00	68	45	white plastic
17.680.01	68	45	polished stainless steel



17.680.01

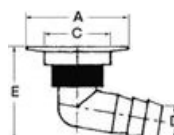


17.680.00

Fire Port with hose adaptor

For wall or floor mounting. It can be connected to the engine box or tank room with a pipe. It activates by applying pressure to the PVC diaphragm; it can be refitted without spare parts after use.

Code	Version	←→ mm			
		A	C	D Ø hose adaptor	E
17.681.01	elbow 90°	70	50	38	80
17.681.02	straight	70	50	32/38	120 (pipe 32 mm) - 90 (pipe 38 mm)



17.681.02



17.681.01

Electrovalves

OSCULATI



Electrovalve

Made in compliance with Directive EMC 2014/30/EU (EN 6100-6-3:2007+A1:2011).

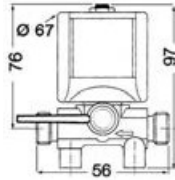
It enables the electrically-operated control to intercept fuel delivery from a remote position. Also fitted with manual control.

Supplied with nipples for 8/10-mm rubber hose, 10-mm fitting for copper hose and mounting plate with bolts. IP65.

Code	Material	Power V	Max Flow l/h	Constant flow l/h
17.403.00	brass	12	200	100
17.403.01	brass	24	200	100



OSCULATI



Electrovalve for fuel

For remote intercepting of fuel distribution with electric controls, equipped with emergency manual control.

Code	Material	Power V	Max flow litre/hour	At constant pressure l/h	Hose connector	Weight
17.401.12	brass	12	800	400	1/2"	570
17.401.24	brass	24	800	400	1/2"	570

OSCULATI



CE

PAOMAR electro-valve

Made according to directive 2013/53/EU (ISO 8846 MARINE - EN 28846) for fuel shut-off PAOMAR, patented.

Technical specifications:

- 1) Remote electric control with emergency manual handle.
- 2) Actual capacity of **600/hour** at 0.2 bar, suitable for any type of engine (even low displacement engines during acceleration require 3 or 4 times as much fuel of what is normally required for standard operation).
- 3) Control mechanism **not in contact** with fuel. 100% watertight, even after many years of operation (no O-rings, no sliding parts).
- 4) Fitted with new universal 12-24 volt connector with current saving electronic circuit.
- 5) LED operation indicator.
- 6) Protection against polarity inversion.
- 7) Electronic circuit with buffer impulse which ensures activation in case of the electro-valve unwanted release.
- 8) Suitable for many type of connectors, stainless steel mounting bracket included for installation in several positions.

Code	Volt	Copper tube fittings 8x10 mm	Copper tube fittings 10x12 mm	Rubber tube fittings 10x21 mm
17.402.12	12	17.408.04	17.402.51	17.402.60
17.402.24	24	17.408.04	17.402.51	17.402.60

Petrol and diesel fuel filters



Plastic transparent filters

Suitable for petrol or diesel fuel

Code	Type	Max Flow litre/h	Hose Adaptor mm
17.658.00	small	50	6 - 8
17.658.01	big	150	8 - 10



Petrol filter for flush mounting on pipeworks

Body made of **chromed zamak and clear shatter-proof glass**; the user can see the fuel and any possible filter saturations; removable, fitted with replaceable refill filter; includes 3 hose adaptors sizes 6/8/10, designed to fit into any type of piping.

Code	mm	3 spare refill
17.665.00	28x85	17.665.01

Purifying filter for diesel fuel with clear tray

Made of die-cast aluminium, with clear polycarbonate tray and bottom drain screw.

Code	Flow l/h		Washable SS mesh filtering unit	Protrusion mm	MB hose connector	Hoce connector	Spare cartridge
	max	optimum					
17.639.00	400	130	200 micron	150x80	65	14	17.660.02; 17.660.03; 17.638.02; 17.638.03



Fuel filter with clear glass tray

Fitted with removable tray, easy for replacing cartridge filters; specially suited for outboard engines.

Code	Version	Hose adaptors OPTIONAL	Flow lt/h		mm	Spare cartridge
			optimal	max		
17.656.00	With 200-micron S.S. filtering cartridge, washable	17.660.02; 17.660.03; 17.638.02; 17.638.03	50	250	110x75x60 (compact)	17.656.01 SS
17.656.05	With 12-micron paper filtering cartridge	17.660.02; 17.660.03; 17.638.02; 17.638.03	20	150	110x75x60 (compact)	17.656.07 paper



Purifying filter for diesel fuel, made of die-cast aluminium

Fitted with interchangeable cartridge, maximum capacity of 65 l/hour, lower unblocking, filtering level of 12 micron.

Code	Flow l/h	Max outer dimensions mm	MB thread	Spare cartridge	Lower bell	OPTIONAL fittings
17.661.15	65	160x100x92	14	17.666.10	Glass to see possible residues of water or other materials	17.660.02; 17.660.03; 17.638.02; 17.638.03



Purifying filter for diesel fuel

Made of die-cast aluminium; fitted with hand pump for filling the circuit (5 threaded holes + 3 plugs).

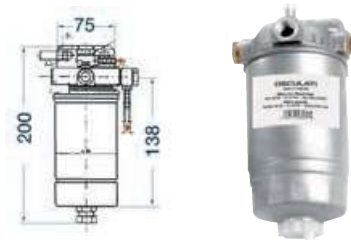
Code	Flow l/h	Max outer dimensions mm	Thread MB	OPTIONAL fittings	Spare cartridge
17.842.10	65	160x100x92	14	17.660.02; 17.660.03; 17.638.02; 17.638.03	17.666.10



12-micron paper filter for diesel fuel

Made of die-cast aluminium; fitted with separator cartridge (screwed in); bottom drain screw.

Code	Max capacity lt/h	Filtering degree	Threads mb	Max external size mm	Fittings OPTIONAL	Spare cartridge
17.638.00	80	12 micron	14	200x113x91	17.660.02; 17.660.03; 17.638.02; 17.638.03	17.638.01



Water-fuel filter/separator

Made of anodized aluminium, with transparent container that can be taken off to clean it or to replace the filtering cartridge.

Code	Filter	Filtering degree	Water drain screw	Flow l/h at pressure			Height mm	Cartridge Ø mm	11/16" UN Chose connectors included	Spare cartridge
				0.49 PSI	1.5 PSI	2.45 PSI				
17.661.40	Petrol	10-micron	yes	205	333	420	190	110	2 x 10 mm	17.661.50
17.661.60	Gasoil	25-micron	yes	205	333	420	190	110	2 x 10 mm	17.661.70





▲ 17.666.00



▲ 17.666.01

Diesel filter type CAV with water drain

Water-fuel filter separator. Made in compliance with the ISO 10088 standard. Aluminium head and water drain container.

Code	Type	Flow l/h		MB thread mm	mm	Spare cartridge	OPTIONAL fittings
		optimum	max				
17.666.00	296	50	100	14	175x100	17.666.10*	17.660.02/03; 17.638.02/03
17.666.01	396	60	130	14	220x100	17.666.11	17.660.02/03; 17.638.02/03

* Equivalent Volvo 858201-3581078



▲ 17.666.10



▲ 17.666.11



Strainer + water/fuel separator

Compound technopolymer head, clear tray with fast drain, 10-micron cartridge. Fitted with hose connectors (2x 10mm, 2x8mm). For outboard engines.

Code	Flow l/h at pressure			Overall height mm	Overhang mm	Ø mm	10-micron spare cartridge
	0.49 PSI	1.47 PSI	2.45 PSI				
17.661.33	200	316	406	190	85	68	17.661.34

Universal water/fuel separating filter



With aluminium support and standard cartridge. Fitted with conical, self-locking and self-sealing hose adaptors.

Code	Cartridge micron	Recommended for	Water collection tray		Drain plug	Total height mm	Ø mm	Overhang mm	Flow l/hour at pressure			Cartridge thread	Fittings included	Spare cartridge
			Material	Spare					0.49 PSI	1.47 PSI	2.45 PSI			
17.664.00	10	Diesel	Clear polyamide	17.664.12	Black plastic	220	93	100	192	324	410	11/ 16"	2 x 10-mm Ø hose adaptors	17.664.10
17.664.03	30	Diesel	Aluminium	-	Chromed brass	220	93	100	192	324	410	11/ 16"	2 x 10-mm Ø hose adaptors	17.664.11



17.664.10 Spare part RACOR S3213/Mercury/Mercuriser/Volvo/Yamaha/Suzuki/Sierra.



▲ 17.664.00 - Black plastic drain plug.



▲ 17.664.03 - Chromed brass drain plug



▲ 17.664.10



▲ 17.664.12



RACOR equivalent spare cartridge

Code	Thread	Micron	Equivalence	Spare tray
17.664.10	11"/16"-16	10	RACOR S 3213 (Volvo/Mercury 35-809097/ Yamaha MAR-24563-00-00/Suzuki)	17.664.12
17.664.21	1"-14	10	RACOR S 3227 (Honda 17670-ZW1-801AH/ Mercury 35-886638/Suzuki 99105-20005)	17.664.12

10-micron gasoline/diesel filter with disposable cartridge

Fitted with conical, self-locking and self-sealing hose adaptor.

Code	Head support	Height mm	Overhang mm	Cartridge Ø mm	Cartridge thread	Capacity l/h with pressure			10-mm fittings mm	Spare cartridge
						0.49 PSI	1.47 PSI	2.45 PSI		
17.660.40	Plastic	145	110	92	11/16"	182	315	404	INCLUDED	17.660.45
17.660.41	Aluminium	145	110	92	11/16"	182	315	404	INCLUDED	17.660.45

Equivalent Mercury 35-60494A4, 35-802893Q, 35-807172



▲ 17.660.45



Petrol filter + water/fuel separator

Aluminium head, transparent tank, rapid drain system. Recommended for engines up to 200 HP - Equivalent to Yamaha 2W-114-00-00. Fitted with 8-mm hose adapter.

Code	Flow l/h with pressure			Total height mm	Protrusion mm	Ø mm	Spare water tray	Cartridge thread	Hose connector Ø mm INCLUDED	10-micron spare cartridge
	0.49 PSI	1.47 PSI	2.45 PSI							
17.661.30	200	316	406	230	90	75	17.661.32	13/16"	2 x 8	17.661.31

Equivalent Yamaha MAR - MINIF - IL - TR



▲ 17.661.32



Water/fuel filter/separator

Fitted with 10-micron high-capacity cartridge. Aluminium head. Universal size to fit any type of engine. Fitted with conical, self-locking and self-sealing hose adaptors, caps to close unused passages, and stainless steel clamps.

Code	Flow l/h at pressure			Cartridge micron	Recommended for	Water collection tray		Drain plug	Total height mm	Ø mm	Overhang mm	Cartridge thread	Fittings Included	Spare cartridge
	0.49 PSI	1.47 PSI	2.45 PSI			Material	Spare							
17.661.35*	206	331	414	10	Petrol/Diesel	Aluminium	-	Chromed brass	280	92	110	11/16"	2 x 10-mm Ø hose connectors	17.661.26
17.661.24	206	331	414	10	Petrol/Diesel	Clear polyamide	17.664.12	Plastic	290	92	110	11/16"	2 x 10-mm Ø hose connectors	17.661.26
17.661.37	206	331	414	30	Diesel	Aluminium	-	Chromed brass	280	92	110	11/16"	2 x 10-mm Ø hose connectors	17.661.28

* Equivalent Yamaha MAR - FUELF - IL - TR



▲ 17.664.12



▲ 17.661.24 - Black plastic drain plug



▲ 17.661.35 - Chromed brass drain plug



Purifying filter fitted with stainless steel 120 micro filtering element

Suitable for mid power motors; made in accordance with RINA standards, suitable for diesel or petrol.

Code	Joists	Max Flow l/h (while accelerating)	Optimum flow l/h	mm	Spare filter
17.020.00	3/8"	460	240	100x100x235	17.020.01





Centrifugal water/fuel separator filter (diesel or petrol), 150 micron

Stainless steel filtering element. The centrifugal inflow separates the smallest particles providing an excellent filtration; universal size fits all motors; made with **RINA** type approved materials.

Code	Treads	Flow l/h		Version	↔ mm	Spare cartridge
		constant	max			
17.021.00	3/8"	600	1200	Universale	180x140x320	17.021.01



Hose fitting

Universal for all Osculati's filters, thread 14 MB

Code	Material	For pipe Ø mm	Thread
17.660.02	brass	hose connector 8	M 14 x 1.5 (14 MB)
17.660.03	brass	hose connector 10	M 14 x 1.5 (14 MB)



Kit fitted with 2 swivelling brass joints + 2 hose adaptors + 4 cooper gaskets

Universal for all Osculati's filters, thread 14MB.

Code	Hose connector mm	Thread
17.638.02	8	M 14 x 1.5 (14 MB)
17.638.03	10	M 14 x 1.5 (14 MB)

GERTECH filter technology



GERTECH filter technology - Vortex series diesel filters

Water-diesel filters/separators. Aluminium body, technopolymer transparent part. Fitted with flame-retardant lower tray. Made in compliance with the ISO 10088 standard.

Code	Flow l/h		Hose connector thread	Hose connector	Filtering degree	Racor matching	↔ mm	30-micron spare cartridge
	max	continuous						
17.671.01	230	180	3/8"	Not included	30 micron	2010 (500)	330x152x152	17.668.05

RACOR filters



RACOR filters

Water/fuel separators for diesel only. Sold with 10-micron cartridge, also available with 30-micron cartridge.

Code	Model	Flow l/h	Hose connector	↔ mm	Spare cartridge	
					10 micron	30 micron
17.675.01	120 A	57	1/4"-18NPTF	81x81x165(h)	17.675.23 (R12T)	17.675.22 (R12P)
17.675.03	230 R	114	1/4"-18NPTF	99x102x230(h)	17.675.25 (R20T)	17.675.24 (R20P)
17.675.05	245 R	170	1/4"-18NPTF	99x102x267(h)	17.675.29 (R25T)	17.675.28 (R25P)




RACOR spare cartridges for fuel


Code	Original ref.	Micron
17.675.20	S 3213	10
17.675.21	S 3227	10
17.675.23	R 12T	10
17.675.25	R 20T	10
17.675.29	R 25T	10
17.675.22	R 12P	30
17.675.24	R 20P	30
17.675.26	R 24P	30
17.675.28	R 25P	30
17.675.30	R 26P	30

RACOR fuel diesel filter - Single version

Also suitable as water/diesel separator, 10-micron filtering degree.
Fitted with hose connector.

Code	Flow l/h		Type	Hose connectors INCLUDED	←→ mm	kg
	max	continuous				
17.667.01	227	180	500MA	3/8"	292x147x122	2
17.667.02	341	270	900VMA10	3/4"	432x220x202	4,9
17.667.03	680	540	1000VMA10	3/4"	557x220x202	5,6


 **17.667.17** Sensor for water alarm for 17.661.01 (Racor filter 500MA)


 For hose adaptors see series 17.198.xx



RACOR filters - Double version with selection valve

Code	Flow l/h		Type	Hose connector	←→ mm	kg
	max	continuous				
17.667.30	681	540	75900VMA10	3/4"	432x382x202	9,3
17.667.31	1363	1080	751000VMA0	3/4"	557x382x202	11,3

 For hose adaptors see code 17.198.07; 17.198.08; 17.198.09


 **17.667.40** Female-female fitting for hose adaptor. Order 2 pcs per filter.




RACOR 100% metal filter - Single version

For petrol and Diesel engines. It also works as water/fuel separator featuring 10-micron filtering degree. Marine UL type-tested.

Code	Flow l/h		Type	Hose adaptor INCLUDED	←→ mm	kg
	max	continuous				
17.667.11	227	180	500MAM	3/8"	292x147x122	1,8
17.667.12	341	270	900VMAM10	3/4"	422x220x202	5,4
17.667.13	680	540	1000VMAM10	3/4"	549x220x202	6,2


 **17.667.17** Water alarm sensor for 17.667.11 (Racor 500MAM filter).


 For hose connector see series 17.198.xx.



RACOR 100% metal filter - Dual version with selection valve

Code	Flow l/h		Type	Hose adaptor	←→ mm	kg
	max	continuous				
17.667.52	1363	1080	751000VMAM10	3/4"	549x382x200	12,4

 For hose adaptor see code 17.198.07; 17.198.08; 17.198.09.

 **17.667.40** Female-female fitting for hose adaptor. Order 2 pcs per filter.



RACOR genuine cartridges

	30 micron	10 micron	For strainers
	17.667.21	17.667.41	500MA
	17.667.22	17.667.42	900MA
	17.667.23	17.667.43	1000MA



Replacement diesel filter cartridges SOLAS

Mod. solas	Corresponding				Version	Micron
	Racor	Dahl	Separ	Volvo		
17.668.01	2010 (500) up to 2003	PF 598	20110	861014	short	20
17.668.02	2040 (900) up to 2003	PF 589	20410	3825027	medium	20
17.668.03	2020 (1000) up to 2003	PF 590	20210	-	long	20
17.668.05	2010 (500) since 2004	-	-	-	-	30
17.668.06	2040 (900) since 2004	-	-	-	-	30
17.668.07	2020 (1000) since 2004	-	-	-	-	30



Oil, air and fuel engine filters

VOLVO oil/fuel oil/petrol/air filters

ENGINE	VENT FILTER		OIL FILTER		FUEL FILTER		AIR FILTER		IMPELLER	
	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM
VOLVO DIESEL										
MD 1/2/5/11	-	-	17.501.01	834337; 22057107	17.502.12; 17.502.01	829913; 3581078	-	-	16.194.02	3586496
MD 6/7	-	-	17.501.01	834337; 22057107	17.502.15	3825133; 21492771	-	-	16.194.02	3586496
MD 3/17	-	-	17.501.01	834337; 22057107	17.502.12; 17.502.13 with draining	829913	-	-	16.194.04	3593659
MD 21A/B; AQD 21A/B	-	-	17.501.04	3581621; 21549544	17.502.01	3581078	-	-	16.194.09	875575
MD/TMD/TAMD 22B/C	-	-	17.501.06	3517857	17.502.05	3840335; 21624740;	-	-	16.194.05	3862281; 877400
MD 30 A/B/D/AQ; TAMD 30A/B/D/AQ; TMD 30A/B/D/AQ; AQAD30A	17.503.00	876069	17.501.06	3517857	17.502.15	3825133; 21492771	-	-	16.194.06	3841697
AQAD 31A; AD31A/B/D/XD/P/L-A; MD 31A; TMD 31A/B/D/L-A; TAMD 31A/B/D/ P/L/M/S-A; KAD32A	17.503.00	876069	17.501.06	3517857	17.502.15	3825133; 21492771	17.498.02	21646645; 3582358	16.194.06	3841697
MD 40A; TMD 40A/B/C; TAMD 40A/B; AQD4 0A; AQAD 40A/B	17.503.00	876069	17.501.05	471034	17.502.05	3840335; 21624740	-	-	16.194.06	3841697
TMD 41/TAMD 41/AQD 41/AQAD 41	17.503.00	876069	17.501.05	471034	17.502.05	3840335; 21624740	17.498.01; 17.498.02; (new 41)	858488; 21646645; 3582358	16.194.06	3841697
KAD/KAMD 42/43/44/300	-	-	17.501.09	4785974; 423135	17.502.05	3840335; 21624740	17.498.03	876185	16.194.06	3841697
2001; 2002; 2003; 2003T	-	-	17.501.01	834337; 22057107	17.502.12; 17.502.01	829913; 3581078	-	-	16.194.02; 16.194.05 (20 0 3T)	3586496; 3562281
MD 2010/2020/2030/2040	-	-	17.501.24; 17.501.25	861473; 3840525	17.502.02; 17.502.01	861477; 3581078	-	-	16.194.01***; 16.194.04***; 16.194.57	3586494; 3593659; 3593573
D1-13; D1-20	-	-	17.501.24	861473	17.502.02	861477	-	-	16.194.04	35.936.59
D1-30; D2-40	-	-	17.501.25	3840525	17.502.02	861477	-	-	16.194.04	35.936.59
D2-50/55/60/75	-	-	17.501.25	3840525	17.502.02	861477	-	-	16.194.05	877400; 3862281
D3 YEAR 2009	-	-	17.501.20	8692305	17.502.13	8683212; 31261191; 860874	17.498.02	3582358; 21646645	16.194.27	21951352; 21213664
D3 YEAR 2010	-	-	17.501.26	30788490	17.502.17	2139810	-	-	16.194.27	21951352; 21213664
D4; D6	-	-	17.501.22; 17.501.23 (By Pass)	22030848; 3582733/ 22030852	17.502.04; 17.502.07 New	3583443; 21718912	17.498.04	3118541; 21702999	17.194.26 (D4); 17.194.57 (D6)	3588475; 3593573
TAMD 61A / 62A / 63L-A / 63P-A; TAMD 71A/B; TAMD 73P-A / 73WJ-A; TAMD 72P-A / 72WJ-A / 72A; TAMD 74A/ A-A/ A-B/ C-A/ C-B/ L-A/ L-B; TAMD 74P-A/ P- B; TAMD 75P-A	17.503.00	876069	17.501.17	21549542; 3827069	17.502.15	3825133; 21492771	17.498.03	876185	16.194.08; 16.194.07; 16.194.24	875814; 21730344; 877066
TAMD 72P-A / 72WJA; TAMD 73L-A / 63P-A; TAMD 74A/ A-A/ A-B/ C-A/ C-B/ L- A/ L-B; TAMD 74P-A/ P-B; TAMD 75P-A; TAMD 71A/B/ 73P-A/ 73WJ-A; TMD 121C/ 102A/ 122A; TAMD 121C/D/ 122C/ D; TAMD 103A-A/ A-A-AUX; TAMD 61A/ 62A /122A / 122P-A/ 122P-B	17.503.00	876069	17.501.18	847741	17.502.15	3825133; 21492771	17.498.03	876185	16.194.07; 16.194.08	21730344; 875736; 875814
VOLVO PETROL										
3.0 GLP-C/D/E/J	-	-	17.501.02	835440	-	-	-	-	16.194.27; 16.194.56	21213664; 21213660
3.0 GXI-J/XIC-J	-	-	17.501.02	835440	-	-	-	-	16.194.27	21213664
4.3 GL-J/JF; GXI-J/JF; OSI-J/JF	-	-	17.501.20	8692305	17.502.16; 17.502.18 (GXi,OSI)	3862228; 3847644	-	-	16.194.27	21213664
4.3 GXI-G/GF/OSI-G/GF	-	-	17.501.02	835440	17.502.16	3862228	-	-	16.194.27	21213664
4.3 GL-A/GL-B/GL-C/GL-D; AQ175A; AQ205A; 430A/B; 431A/B; 432A; 434A	-	-	17.501.03	841750	17.502.16	3862228	-	-	16.194.56	3862567; 21951348
5.0 GL-J/JF; GXI-J/JF; OSI-J/JF	-	-	17.501.20	8692305	17.502.16; 17.502.18 (GXi,OSI)	3862228; 3847644	-	-	16.194.27	21213664
5.0 GXI-G/GXI-GF/OSI-G/OSI-GF	-	-	17.501.02	835440	17.502.16	3862228	-	-	16.194.27	21213664
5.7 GI300-J/JF; 5.7 OSI-J/JF; 5.7GXJ- J/JF; 5.7OSXI-J/JF	-	-	17.501.20	8692305	17.502.16	3862228	-	-	16.194.27	21213664
5.7 GI-H/GI-FF/GXI-G/GXI-GF; 5.7 OSI-E/ OSI-EF	-	-	17.501.02	835440	17.502.16	3862228	-	-	16.194.27	21213664
7.4 GI/GSI; DPX385	-	-	17.501.27	3850559	17.502.16	3862228	-	-	16.194.05	3862281
7.4 GL	-	-	17.501.27	3850559	17.502.16	3862228	-	-	16.194.17; 16.194.05	3854286****; 3862281*****
8.1 GI-J/JF/GXI-J/JF/OSI-J/JF	-	-	17.501.20	8692305	17.502.16	3862228	-	-	16.194.27	21213664
8.1 GI-H/HF/GXI-G/GF/OSI-D/DF	-	-	17.501.02	835440	17.502.18	3847644	-	-	16.194.27	21213664
8.2 GL	-	-	17.501.27	3850559	17.502.16	3862228	-	-	16.194.17	3854286
8.2 GSI; DPX415	-	-	17.501.27	3850559	17.502.16	3862228	-	-	16.194.56	21213660
500 A/B; 501 A/B	-	-	17.501.02	835440	17.502.06	855686	-	-	16.194.05	3862281

ENGINE	VENT FILTER		OIL FILTER		FUEL FILTER		AIR FILTER		IMPELLER	
	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM	Osculati ref.	OEM
570 A; 571 A; 572 A	-	-	17.501.02	835440	17.502.06	855686	-	-	16.194.67	876120
740 A/B	-	-	17.501.02	835440	17.502.06	855686	-	-	16.194.67	876120
AQ 95/100/110/115/120A/130	-	-	17.501.06	3517857	17.502.01	3581078	-	-	16.194.04	3593659
AQ 120B/140/145A/165/171	-	-	17.501.06	3517857	17.502.01	3581078	-	-	16.194.84	875575
AQ 120B/125A/B; AQ131A/B/C/D; 230A/B; BB140A; AQ140A; BB145A; AQ145A/B; AQ151A/B/C; 250B; BB145A; AQ 170A/B/C	-	-	17.501.06	3517857	17.502.01	3581078	-	-	16.194.84	875575
AQ 225B/C/D/E/F	-	-	17.501.02	835440	17.502.01	3581078	-	-	16.194.67	876120
AQ 231 A/B; BB231A	-	-	17.501.02	835440	17.502.01	3581078	-	-	16.194.05; 16.194.67 (H50)	3862281; 876120
AQ 255 A/B; AQ 260 A/B; BB 260 A/B/C	-	-	17.501.02	835440	17.502.01	3581078	-	-	16.194.05*; 16.194.67* (H50)	3862281; 876120
AQ 271/B/C/D; BB261/A	-	-	17.501.02	835440	17.502.06; 17.502.01	855686; 3581078	-	-	16.194.05; 16.194.67 (H50)	3862281; 876120
AQ 280A; AQ 290A	-	-	17.501.02	835440	17.502.01	3581078	-	-	16.194.05; 16.194.67 (H50)	3862281; 876120
AQ 311A/B	-	-	17.501.02	835440	17.502.06; 17.502.01	855686; 3581078	-	-	16.194.05; 16.194.67 (H50)	3862281; 876120
BB 115A/B/C; AQ 115A/B; AQ 130A/B/C/D	-	-	17.501.06	3517857	-	-	-	-	16.194.01	3586494
BB 225A/B/C	-	-	17.501.02	835440	17.502.06; 17.502.01	855686; 3581078	-	-	16.194.05; 16.194.67	3862281; 876120

* Except AQ255A; ** MD2010 SN 5101203008 / MD2020 SN 5101309052; *** MD 2010 SN 5101203009 / MD 2020 SN 5101309053; **** MD; ***** HU/NC/LK

VOLVO Penta Diesel engine oil filters					VOLVO Penta Diesel engine naphtha filters				VOLVO Penta Petrol engine fuel filters					VOLVO Penta Petrol engine fuel filters					
Code	OEM No	body Ø A mm	H mm	outside Ø D mm	Code	OEM No.	body Ø A mm	H mm	outside Ø D mm	Code	OEM No.	body Ø A mm	H mm	outside Ø D mm	Code	OEM N.	body Ø A mm	H mm	outside Ø D mm
17.501.01	834337; 22057107	76	58	77.3	17.502.04	3583443; 21718912	94	130	95.5	17.501.06	3517857	94	83	96	17.502.16	3862228	76	85	77.3
17.501.04	3581621; 21549544	76	97.5	77.3	17.502.05	3825133; 21492771 ;466987	79.5	119	82	17.501.02	835440	90	96	91	17.502.06	855686	94	101	95.5
17.501.06	3517857	94	83	96	17.502.12	829913	-	-	-	17.501.03	841750	76	100	77.3	17.502.18	3847644	-	-	-
17.501.17	3827069; 21549542	76	88	77.3	17.502.13	31261191 ;8683212; 860874	71	155	85	-	-	-	-	-	-	-	94	150	-
17.501.05	471034	108	130	110	17.502.01	3581078	85	72	87.5	-	-	-	-	-	-	-	-	-	-
17.501.09	4785974; 423135	94	168	96	17.502.02	861477	76	89	78	-	-	-	-	-	-	-	-	-	-
17.501.18	847741	108	180	110	17.638.01	21624740	83	133.5	85	-	-	-	-	-	-	-	-	-	-
17.501.20	8692305	64	126	64	17.502.15	3825133; 21492771 ;466987	76	118	77.6	-	-	-	-	-	-	-	-	-	-
17.501.22	3582732; 22030848	94	202	96	17.502.17	21139810	94	120.5	96	-	-	-	-	-	-	-	-	-	-
17.501.23	3582733/ 22030852 (by pass)	94	202	96	17.502.07 New	21718912	30	147	-	-	-	-	-	-	-	-	-	-	-
17.501.24	861473	68	84	69.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.501.25	3840525	76	88	77.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.501.26	38788490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.501.27	3850559	94	130	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



▲ 17.501.01/03/04;
17.502.05



▲ 17.501.02/06/17;
17.502.02/06/15/16



▲ 17.501.05/18/22/23



▲ 17.502.01



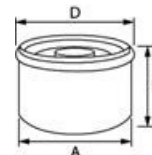
▲ 17.502.04



▲ 17.501.09



▲ 17.501.20 ▲ 17.501.26





New

Maintenance kit for VOLVO Diesel engines

Including: oil filter, fuel filter + water pump impeller

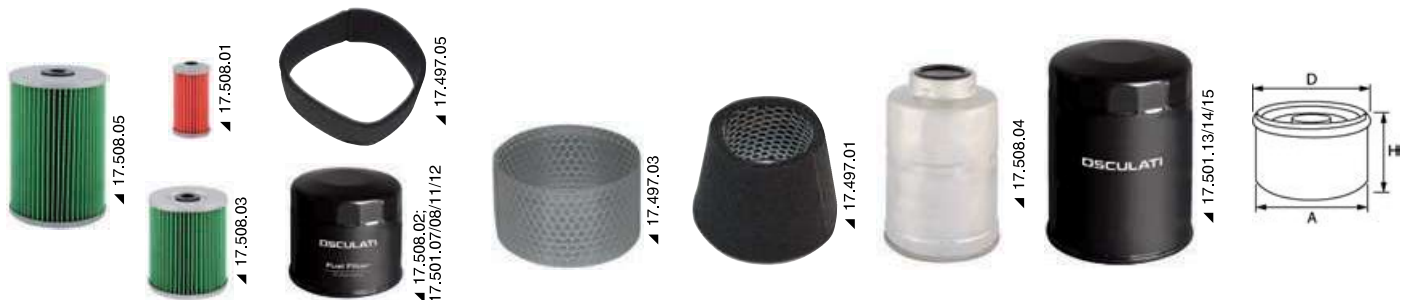
Code	OEM N.	Engines
17.600.01	877194	2001 / 2002 / 2003
17.600.02	21189380	MD2010C / 2020C / 2030A / 2030B / MD2030C / 2040A / 2040B / 2040C
17.600.03	877201	D30 / D31 / KAD32
17.600.04	877202	D40 / D41
17.600.05	877203	KAD / KADM 42,43,44,300
17.600.06	21189380	D1-13 / D1-20
17.600.07	21189422	D1-30 / D2-40
17.600.08	21189426	D250/55/60/75
17.600.09	21105842	D3 A-C (2009)
17.600.10	21759184	D3 D-H (2010)
17.600.11	21704968	D4/B6 A/F; D4 A/D transmission AQ/IPS



YANMAR oil/diesel/air filters

ENGINE	OIL FILTER		FUEL FILTER		AIR FILTER		IMPELLER	
	Ref. Osculati	OEM	Ref. Osculati	OEM	Ref. Osculati	OEM	Ref. Osculati	OEM
1 GM / GM10	17.504.10	119305-35151/35170	17.508.01	104500-55710	-	-	16.194.16	128176-42071
2GM20	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	16.194.01	104211-42070
2GM20F	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	16.194.13	128296-42070
2GM20YEU/FYEU	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	-	128397-42200
QM20/30	17.501.08	124085-35111	17.508.01	104500-55710	-	-	16.194.13	124223-42092
3GM30	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	16.194.01	104211-42070
3GM30YEU	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	-	128397-42200
3GM30F	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	16.194.13	128296-42070
3GM30FYEU	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	-	128397-42200
3JH2E	17.504.10	119305-35151/35170	17.508.01	104500-55710	-	-	16.194.05	129470-42532
3JH2TE	17.504.10	119305-35151/35170	17.508.02	129470-55703	17.497.03	129470-12330	16.194.05	129470-42532
4JH SM3 BG3	17.501.11	129150-35150	17.508.02	129470-55703	-	-	16.194.05	129670-42531
4JHE/2E/2TE; 4JH2HTE; 2DTE-4JHDT	17.501.12	129150-35153/35170	17.508.02	129470-55703	17.497.03	129470-12330	16.194.05	129470-42532
4JH2UTE	17.501.12	129150-35153/35170	-	129574-55711	17.497.03	129470-12330	16.194.05	129470-42532
3JH3E/EYEU	17.504.10	119305-35151/35170	17.508.02	129470-55703	-	-	16.194.05	129670-42531
4JH3E	17.501.12	129150-35153/35170	17.508.02	129470-55703	-	-	16.194.05	129670-42531
4JH3TE; 4JH3HTE/DTE	17.501.12	129150-35153/35170	-	129574-55711	17.497.03	129470-12330	16.194.05	129670-42531
4LHDT/STE	17.501.13	127695-35150/35160	17.508.03	41650-502320	-	XN199611	16.194.06	120650-42310
4LHAHTE	17.501.13	127695-35150/35160	-	121857-55710	-	119195-18880	16.194.06	120650-42310
4LHADTE; 4LHASTE	17.501.13	127695-35150/35160	17.508.03	41650-502320	-	119195-18880	16.194.06	120650-42310
6LPDTE/STE	-	119770-90620A	17.508.04	119773-55510	17.497.05	119593-18880	16.194.23	119773-42600
6LYUTE	-	11959335400	17.508.05	41650-502330	17.497.05	119593-18880	16.194.45	119593-42200
6LYSTE	-	119593-35100	17.508.05	41650-502330	17.497.05	119593-18880	16.194.45	119593-42200
6LYAUTE/ASTE	-	119593-35100	17.508.05	41650-502330	17.497.05	119593-18880	16.194.62	119574-42550/52
6LY2STE/3ETP	-	11959335400	17.508.05	41650-502330	17.497.05	119593-18880	16.194.62	119574-42550/52
6CXETE	17.501.13	127695-35150/35160	-	127695-55630	17.497.05	119593-18880	-	128620-42200
6CX530	17.501.13	127695-35150/35160	-	127677-55136	-	127692-18880	-	128628-42202
3JH4E/5E	17.504.10	119305-35151/35170	17.508.02	129470-55703	-	-	16.194.05	129670-42531
4JH5E/4AE	17.501.12	129150-35153/35170	-	119802-55801	-	-	16.194.05	129670-42531
4JH4E	17.501.12	129150-35153/35170	17.508.02	129470-55703	-	-	16.194.05	129670-42531
4JH4TE-HTE	17.501.12	129150-35153/35170	-	129757-55711	-	-	16.194.05	129670-42531
3YN30/N20/N15	17.504.10	119305-35151/35170	17.508.01	104500-55710	17.497.01	128270-12540	-	128397-42200

YANMAR engine oil filters					YANMAR engine fuel filters					YANMAR engine air filters				
Code	OEM N.	body Ø A mm	H mm	outside Ø D mm	Code	OEM N.	body Ø A mm	H mm	outside Ø D mm	Code	OEM N.	body Ø A mm	H mm	outside Ø D mm
17.504.10	119305-35151/35170	65	63	70	17.508.01	104500-55710	31	68	31	17.497.01	128270-12540	-	-	-
17.501.12	129150-35153/35170	80	73	82.6	17.508.02	129470-55703-55810	80	75	82	17.497.03	129470-12330	-	-	-
17.501.13	127695-35150/35160	94	175	96	17.508.03	41650-502320	72	90	72	17.497.05	119593-18880	-	-	-
17.501.11	129150-35150	90	80	91	17.508.05	41650-502330	91	140	91	-	-	-	-	-
17.501.08	124085-35111	80	100	82.6	-	-	-	-	-	-	-	-	-	-



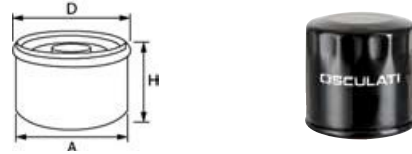
HONDA oil filters for 4-stroke outboards

Code	Engine	Engine / Orig. Ref.	HP	←→		
				body Ø A mm	H mm	outside Ø D mm
17.504.10	Honda	15400-PFB-014/004	8/60	68	65	70
17.504.12	Honda	15400-RBA-F01	75/225	76	85	79
17.504.15	Honda	15400-PLM-A01PE	75/225	68	86	70
17.504.07	Honda	15400-PFB-007 15400-ZW4-003	25/50	65	65	67



YAMAHA and SELVA oil filters for 4-stroke outboards

Code	Engine	Engine / Orig. Ref.	HP	←→		
				case Ø A mm	H mm	outside Ø D mm
17.504.03	Yamaha and Selva	5GH-13440-30-00 5GH-13440-30-00	30/115	66	73	67



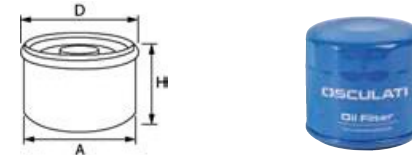
YAMAHA oil filters for 4-stroke outboards

Code	Engine	Engine / Orig. Ref.	HP	←→		
				case Ø A mm	H mm	outside Ø D mm
17.504.05	Yamaha	5GH-13440-01-00 5GH-13440-03-00	150/250	74	85	77
17.504.07	Yamaha	5GH-13440-20-00 5GH-13440-50-00	9,9/70	65	65	67
17.504.09	Yamaha	N26-13440-00-00 N26-13440-02-00	225/350	74	97	77



TOHATSU oil filters for 4-stroke outboards

Codice	Engine	Engine / Orig. Ref.	HP	←→		
				case Ø A mm	H mm	outside Ø D mm
17.504.10	Tohatsu	3R-07615-0	-	68	65	70



MERCURY oil filters for 4-stroke outboards

Code	Engine	Engine / Orig. Ref.	HP	←→		
				case Ø A mm	H mm	outside Ø D mm
17.504.05	Mercury	35-822626-Q15	225	74	85	77
17.504.10	Mercury	35-822626Q1,Q03	8/30	68	65	70
17.504.15	Mercury	35-822626Q1,Q03	25/30-40/60-75/115	68	86	70
17.504.17	Mercury	EFI 80/90/115 35-877761-Q01	80/115	94	85	95
17.504.19	Mercury	Verado 4 cyl. 35-877767-Q01	150/200	76	98	77
17.504.21	Mercury	Verado 6 cyl. 35-877769-Q01	225/350	76	116	77
17.504.20	Mercury	Fourstroke 35-8MO-123025	175/400	75	86	77



SUZUKI oil filters for 4-stroke outboards

Code	Engine	Engine / Orig. Ref.	HP	←→		
				case Ø A mm	H mm	outside Ø D mm
17.504.01	Suzuki	DF 4-5-6-6A 16510B16H11N000	4/5/6	35	43	37
17.504.30*	Suzuki	DF 8/9,9/15/20 16510-05240/45H10	8/20	44	40	44
17.504.36	Suzuki	40-50-60 A; DF 40-50-60-70; 25-35; 20-25 V2; ORIG 16510-87J00/J01	20/70	68	54	70
17.504.31	Suzuki	DF 140 16510-92J00-000	140	68	65	70
17.504.33*	Suzuki	DF 90/115; DF80A/DF140A; 16510-61A-31-000	90/140	68	86	70
17.504.35	Suzuki	DF 150/200/225/250/300 1650-96J00-000; 1650-96J00-000	150/300	68	86	70



* Also fit for 4-stroke Johnson/Evinrude engines, same power

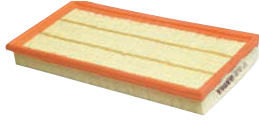
New VOLVO IPS leg oil filters

Code	Engine	Engine / Orig. Ref.	Leg	←→
				Ø x H mm
17.501.40	Volvo	22057107	IPS1	240x60
17.501.41	Volvo	23005191	IPS 15/2/20/3/30	310x115



**Oil outlet filter**

17.503.00 Oil outlet filter, suitable for **all Volvo** models from MD30 to TAMD103P-A (ref. orig.876069-6).

**Volvo panel air filter**

17.498.03 Original ref. 876185

**VOLVO air filter**

17.498.04 Volvo D4/D6/D9 air filter (it replaces orig. 3818541/2170299).

**Air filters for "Volvo" engines**

Code	D1 mm	D2 mm	H2 mm	H1 mm	Orig. Ref.
17.498.01	206	98	100	90	858488-0
17.498.02	155	90	98	85	3582358/21646645

Inboard filters

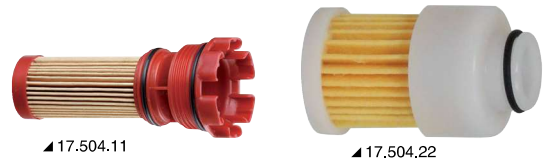
For engines	Oil filter		Fuel filter		Initials
	Code	Original ref.	Code	Original ref.	
GENERIC	17.501.02	201104	17.502.06	98041	CRUSADER
GENERIC	17.501.02	32716 14957 52731 54111 35866340Q03/K01 35-802885Q GM engine Short filter	17.502.06	32716 35-60494-1 35807172 35-802885Q 35802893	MERCUISER
GENERIC	17.501.02	173232 502901	-	-	OMC 8 CYLINDERS
GENERIC	17.501.02	-	17.502.06	Aba-FueHIL-TR	YAMAHA V8 5.5 LT
GENERIC	17.501.03	35-802884Q 35-883702Q 41815 GM V-6 engine	-	-	MERCUISER
GENERIC	17.501.03	V6	-	-	GM
GENERIC	17.501.03	L319	-	-	CHRYSLER
GENERIC	17.501.03	173834-502903	-	-	OMC
GENERIC	17.501.06	-	17.502.06	Aba-FueHIL-TR	YAMAHA V6 4.3 LT
-	-	-	-	-	-
DIESEL YANMAR	17.504.10	119305-35151/35170	17.508.01	104500-55710	GM 2YM/3YM
DIESEL YANMAR	17.501.08	124085-35111	17.508.01	104500-55710	HM-QM 20-30
DIESEL YANMAR	17.504.10	119305-35151/35170	17.508.01	104500-55710	3JH2
DIESEL YANMAR	17.504.10	119305-35151/35170	17.508.02	1294705-55703-55810	3JH2TE
DIESEL YANMAR	-	11930535150	17.508.02	1294705-55703-55810	3JH3
DIESEL YANMAR	17.501.11	129150-35150	17.508.02	1294705-55703-55810	4JH
DIESEL YANMAR	17.501.33	119593-35400 (BYPASS)	-	-	6LYUTE; 6LY2STE(P); 6LY2A-STP; 6LY3ETP/STP/UTP
DIESEL YANMAR	17.501.12	12915035151 12915035153 (Ø 79mm)	17.508.02	1294705-55703-55810	4JH
DIESEL YANMAR	17.501.13	127695-35150/35160	17.508.03	41650-502320	4LH
DIESEL YANMAR	17.501.13	127695-35150/35160	-	-	6CX
DIESEL YANMAR	-	-	17.508.04	119773-55510	6LP
DIESEL YANMAR	-	-	17.508.05	41650-502330	6LYA; 6LY-UTE; 6LY-2-STE; 6LY-3-ETP
DIESEL YANMAR	-	-	17.508.09	129574-55711	4JH2-UTE; 4JH3TE/HTE/DTE; 4JH4TE/HTE; 4L4TE/HTE
DIESEL YANMAR	-	-	17.508.12	120650-55020	4BY; 4BY2; 6BY; 6BY2
DIESEL YANMAR	17.504.10	119305-35151/35170	-	-	D27



MERCURY outboard fuel filter

For Mercury VERADO 4/6 cylinder engines (Orig. 35-8M0020349 / 35-893318502).

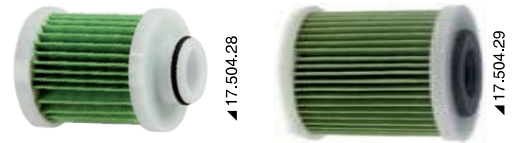
Code	↔ mm			Orig. ref.	Engines
	thread Ø mm	body Ø mm	height mm		
17.504.22 New	11	27	45	35-8M0168897	75/115 HP 4-stroke
17.504.11	45.5	35.5	126	-	4/6 cylinders Verado

**Yamaha outboard fuel strainer**

Code	Orig. ref.	Engines
17.504.40	6D8-WS 24A-00	F30/40/50/60/70/75/90/F115-LF115
17.504.41	6P3-WS 24A-01	F30/40/50/60/70/75/90/F115-LF115

**New Suzuki outboard fuel filter**

Code	Orig. ref.	Engines
17.504.28	15412-92J00	70/200 HP 4 strokes
17.504.29	15412-93J10	200/350 HP 4 strokes

**Universal key to screw/unscrew strainers**

17.640.00 It can be used with both fuel and oil strainers. It screw/unscrew the clear or light alloy trays of water/fuel separator strainers.

**Fuel and water pipes****Copper pipe designed for fuel or liquid gas inflow**

Meets with Directive ISO7840/10088/16147DIS for fuel and 10239 liquid gas.

Code	↔ mm	Roll m
45.028.11*	6 x 8	50
45.028.10	8 x 10	50
45.028.12	10 x 12	50

* Especially recommended for gas

**Smooth pipe for fuel**Made in compliance with EC standards, RINA ISO 7840/2013 type-tested under class A1 (the lower class A2, is **not** allowed for petrol, but only for diesel fuel), Synthetic fabric reinforcement. Smooth fabric-like surface.

Code	Section mm	Internal Ø mm	External Ø mm	Approximate weight g/m	Bend radius mm	Roll m
17.751.08	8 x 17	8	17	0.27	50	40
17.751.10	10 x 19	10	19	0.30	60	40
17.751.12	12 x 21	12	22	0.43	75	40
17.751.16	16 x 26	16	26	0.50	100	40
17.751.19	19 x 29	19	30	0.64	115	40
17.751.25	25 x 35.5	25	37	0.87	250	20
17.751.38	38 x 52	38	52	1.55	380	10
17.751.40	40 x 54	40	54	1.60	400	10
17.751.50	50 x 64	51	65	1.95	500	10
17.751.60	60 x 71.5	-	-	-	-	10



17.751.08/10/12/16/19



17.751.25/38/40/50/60

Metal spiral pipe for fuel

Made in compliance with EC standards, RINA ISO 7840/2013 type-tested under class A1, flexible version also for large diameters. Double metal spiral reinforcement. Ondulated surface.

Code	Section mm	Bend minimum radius mm	Internal Ø mm	Approximate weight g/m	Roll m
17.752.38	38 x 50	60	38	1.05	10
17.752.50	50 x 63	75	51	1.35	10

**Hot Water pipe made of special salt water- and heat-resistant rubber (-40°/+120°)**

Designed for cooling systems, heat exchange systems and boilers. Synthetic fabric reinforcements. Smooth surface.

Code	Section mm	Approximate weight kg/m	Roll m
17.740.13	12,8 x 20	0.36	40
17.740.16	15,8 x 23	0.42	40
17.740.19	19 x 27	0.48	40
17.740.26	25 x 34	0.62	40
17.740.30	30 x 42	0.80	20
17.740.35	35 x 49	1.10	20
17.740.40	40 x 54	1.33	10
17.740.50	51 x 66	1.80	10

