

SEISMIC



 **DUNLOP HIFLEX**

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// SYMBOLS



Electrical resistance
 $\leq 10^6 \Omega/\text{length}$



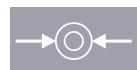
Internal Diameter



Maximum
Working Pressure



Vacuum



Outside Diameter



Minimum
Brust Pressure



Weight



Minimum
Bend Radius



// THE FIRST HOSES

Belfast, 1887.

John Boyd, a Scottish born inventive veterinarian observes his son as he's cycling down a bumpy road. The bike has hard solid rubber tyres and the ride is rough and shaky. The ride is neither fast nor particularly comfortable.

He then comes up with an idea of wrapping an air filled rubber hose around the rim.

In 1888 he patented the idea and the rest as we say, is history.



// A PRODUCT THAT CHANGES THE WORLD

John Dunlop's idea of an air-filled rubber hose was the beginning of the industrial manufacturing process and later came the development of Hydraulic and Industrial hoses.

Since 1969 Dunlop Hiflex has specialised in the manufacturing of high and low pressure hoses, with continual research and development within our headquarters at Halmstad, we are leading the development in the next generation of hoses. Today, we are part of the ALFAGOMMA GROUP, one of the leading global manufacturers of hydraulic and industrial hose. However, it's with great pride that we still carry the name that originated from an innovative Scot and a bicycle.

// ALFAGOMMA GROUP

In 2005 Dunlop Hiflex was acquired by the internationally respected ALFAGOMMA GROUP. Established in 1956, the Group is a leading manufacturer of Hydraulic and Industrial fluid handling systems, specializing in highly engineered, technically demanding hydraulic and industrial products, produced with a commitment to excellence in quality and innovation.

// RESEARCH AND DEVELOPMENT

ALFAGOMMA is focused on continuous improvement, in the engineering of product, processes and production. Which in turn has made it possible to quickly respond to evolving international regulations, developing product performance, safety and efficiency.

The company's distinguishing feature is its ability to innovate, by investing heavily in research and development of products and materials and designing solutions that meet customer's requirements, in compliance with global standards.

ALFAGOMMA GROUP



21

MANUFACTURING PLANTS

82

SUBSIDIARIES AND ASSEMBLY PLANTS

ISO

QUALITY CERTIFICATION
ISO 9001 - ISO 14001

3550

EMPLOYEES

 //  //  // 

// 3D SEISMIC OPERATION

In this method, a specific area or block is chosen with the help of preliminary 2D survey data. Such area for 3D operation is finalised after carefully analysing the previous data. The objective of this operation is to locate precisely the position of wells with hydrocarbons (oil or gas). No company wants to invest millions of dollars on drilling an empty well. Time is a major factor for such operations, because during rough weather, seismic acquisition is highly impossible. Taking into account, the complex nature of the operation and limited time, detailed planning of boundaries, total area to be covered, the direction of track lines are scheduled before setting the course.

3D acquisition can be explained in as the acquisition from several 2D lines running in parallel. The distance between these acquisition lines depends on the number of cables used (It can be close up to 50 meters).

When all the equipment and systems of the seismic vessel are in place, the course is set to follow the track or survey line. The vessel then arrives at the starting point, which is pre-determined by the navigators in consultation with the captain and party chief. The air guns that are being towed along with cables are filled with high pressure air and have a mechanism to release them as air bullets (with high pressure).

These air bullets that hit the sea surface causing seismic reaction, which is picked by pressure sensitive hydro phones inside the streamer cables. The hydro phones then convert pressures signals in to electrical energy and transmits them to the recording system on board, thus providing with the necessary data.

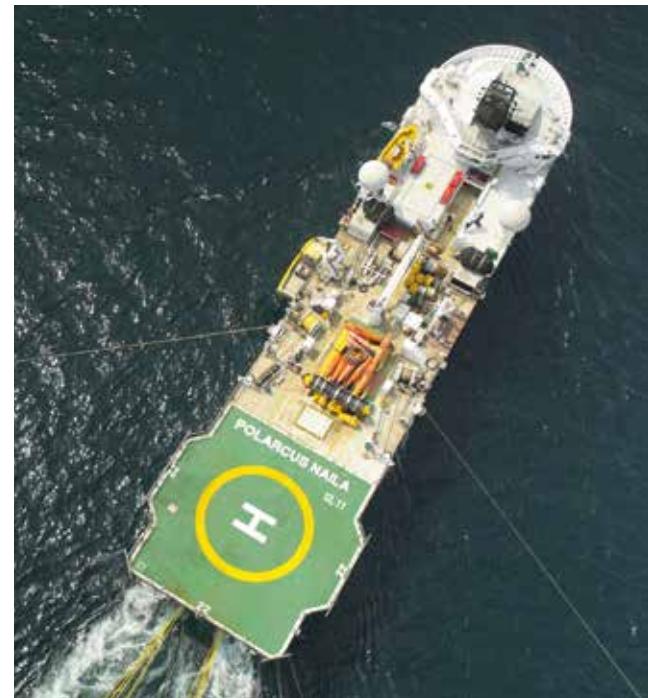


Seismic vessels have special compressors for feeding the air guns with pressure capacity of up to 2000 psi. These compressors are capable of supplying high pressure air to the air guns continuously over a very long period of time. Once the line is completed, the vessel will maneuver to a new starting point as advised by the navigators and the whole process repeats. The ideal speed of the vessel while acquiring data is kept between 2 and 5 knots.

For quality data, the vessel is maintained on a track line. Too much deviation from the track line results in change of feather angle between the cable and vessel, which results in noisy or faulty data. Other factors that affect the quality of acquisitions are rough weather, heavy rain and other vessels passing by close to the survey vessels.

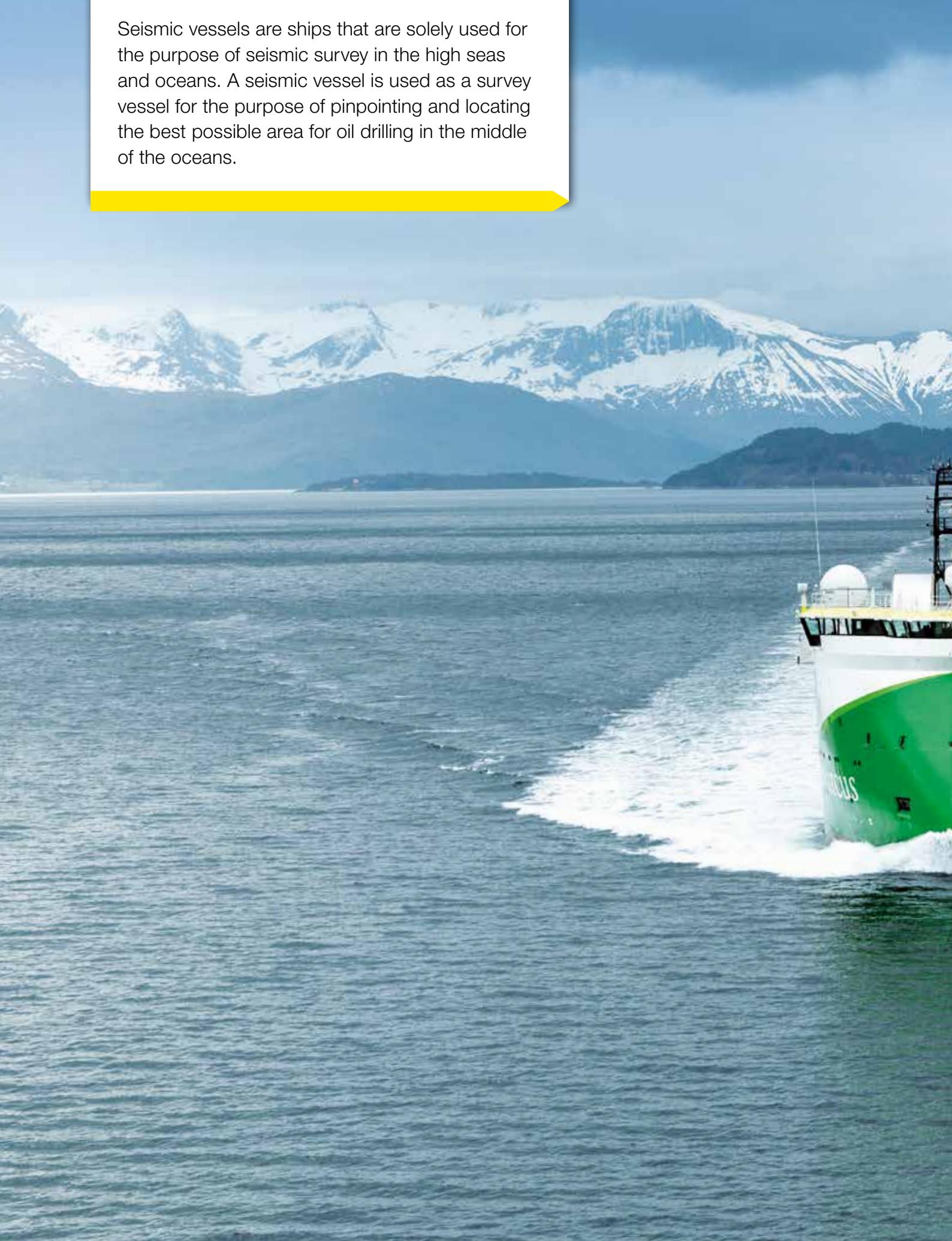
For efficient survey operation, all seismic equipment and tools are checked thoroughly before deployment as even a minor problem on seismic cable or any other connected device requires pulling the whole length of tow inside the ship and deploying it back after fixing the issue. This is a time consuming process which will stop the production for quite a long time. Moreover, traffic density and fishing activity can also cancel the whole track line.

The length and depth of streamers are as per the operator's requirement. The length of streamer can vary from 1 nautical mile to 7 nautical miles. The depth of streamers can be between 4 to 6 meters for shallow waters and between 8 to 10 meters on deep sea acquisition.



Dunlop Hiflex and ALFAGOMMA has been supplying the largest players within the seismic acquisition market for over 30 years. With our knowledge and experience within the segment, we will solve your challenges and exceed your expectations.

Seismic vessels are ships that are solely used for the purpose of seismic survey in the high seas and oceans. A seismic vessel is used as a survey vessel for the purpose of pinpointing and locating the best possible area for oil drilling in the middle of the oceans.







// SEISMIC HOSE

// RUBBER HOSE	13
// THERMOPLASTIC HOSE	15

Dimensions shown may be changed without prior notice

// RUBBER HOSE

// 250AK



Layflat seismic 5 bar (75 psi)

Tube: Black EPDM.

Reinforcement: High tensile textile cords.

Cover: Yellow EPDM with reflecting silver stripes - abrasion and ozone resistant.

Application: Flotation buoy in seismic monitoring operations.

Safety factor: 3:1

Temperature: -30 °C +80 °C (-22 °F +176 °F)

Part number									% kg/m lb/ft
	mm	in	mm	in	bar	psi	mm	in	
2013835	305	12"	317	12,5	5	75			8,1900 5,50
2011015	457	18"	477	19,0	5	75			16,220 10,9

// 25SAH



Seismic extra 10 bar (150 psi)

Tube: Black EPDM.

Reinforcement: High tensile textile cords.

Cover: Red EPDM - abrasion and sea-water resistant.

Application: Cable protection in seismic operations.

Safety factor: 3:1

Temperature: -30 °C +80 °C (-22 °F +176 °F)

Part number									% kg/m lb/ft
	mm	in	mm	in	bar	psi	mm	in	
2003490	102		136	5,35	10	150			6,750 4,54
2003492	127		161	6,34	10	150			8,390 5,64
2003494	152		188	7,40	10	150			11,240 7,555

// 641AA



Oil & Mud cargo hose

15 bar (225 psi) end load resistance 5.000 kg

Tube: Black conductive NBR.

Reinforcement: High tensile textile fabric - boot straps.

Cover: Black conductive NBR/PVC - abrasion, ozone, hydrocarbon and fire resistant.

Application: Fuel and oil barite liquid transfer. Particulary suitable for drag chain application where low elongation is required. Also suitable for electrical cables and hydraulic hose protection.

Safety factor: 3:1

Temperature: -30 °C +70 °C (-22 °F +158 °F)

Part number									% kg/m lb/ft
	mm	in	mm	in	bar	psi	mm	in	
2003604	102	4"	122	4,80	15	225			90 4,260 2,86
2004366	127	5"	147	5,12	15	225			90 5,090 3,42
2003606	152	6"	172	6,77	15	225			90 6,100 4,10

// 155AK

**Compressed air 20 bar (300 psi) - Heavy Duty****Tube:** Black SBR/NBR - oil mist resistant.**Reinforcement:** High tensile textile cords.**Cover:** Yellow SBR - abrasion and ozone resistant.**Application:** Compressed air designed for heavy duty applications.**Safety factor:** ≤ 51 mm 3:1 ≥ 63 mm 2,5:1**Temperature:** -30 °C +80 °C (-22 °F +176 °F)

Part number										kg/m	lb/ft
	mm	in	mm	in	bar	psi	mm	in			
2003426	13,0	1/2"	21,00	0,83	20	300				0,320	0,215
2003427	19,0	3/4"	29,00	1,14	20	300				0,560	0,38
2003428	25,0	1"	35,00	1,38	20	300				0,700	0,475
2003429	32,0	1 1/4"	44,00	1,73	20	300				0,890	0,60
2003430	38,0	1 1/2"	50,00	1,97	20	300				1,040	0,70
2003431	51,0	2"	65,00	2,56	20	300				1,660	1,12
2003432	63,0	2 1/2"	79,00	3,11	20	300				2,300	1,55
2003433	76,0	3"	92,00	3,62	20	300				2,810	1,89
2003434	102,0	4"	118,00	4,65	20	300				3,670	2,47

Dimensions shown may be changed without prior notice

// THERMOPLASTIC HOSE

// 3R80



SAE 100 R8

Tube: Oil and biodegradable hydraulic fluid resistant polyamide 11 methanol washed.

Reinforcement: High tensile aramid reinforcement.

Cover: Pinpricked Black oil, water and ozone resistant polyurethane.

Application: HP air supply for seismic gun system. Can also be used for hydraulics etc.

Safety factor: 4:1

Part number	Fitting number												
		Dash	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m
1001478	A	-06	9,5	3/8"	19,5	0,76	276	4000	1103	16000	64	2,51	0,220
1001479	B	-08	12,7	1/2"	22,7	0,89	241	3500	965	14000	102	4,01	0,283
1001480	C	-12	19,1	3/4"	28,9	1,13	155	2250	620	9000	165	6,49	0,381
1001481	D	-16	25,4	1"	37,4	1,47	138	2000	552	8000	254	10,0	0,573

A = 1225089 - 1225090 - 1225091 - 1225092 - (1227692 on request)

B = 1225530

C = 1225094 - 1225095 - 1225096

D = 1225098

// 37LV



SAE J343

Tube: Oil and biodegradable hydraulic fluid resistant polyamide 11 methanol washed.

Reinforcement: High tensile aramid reinforcement.

Cover: Pinpricked Black oil, water and ozone resistant polyurethane.

Application: HP air supply for seismic gun system. Can also be used for hydraulics etc.

Safety factor: 4:1

Part number	Fitting number											
		Dash	mm	in	mm	in	bar	psi	bar	psi	kg/m	
1001485	1225098	-16	25,9	1"	37,3	1,468	207	3000	827	12000	0,581	

// 38LV



SAE J343

Tube: Oil and biodegradable hydraulic fluid resistant polyamide 11 methanol washed.

Reinforcement: High tensile aramid reinforcement.

Cover: Black oil, water and ozone resistant polyurethane.

Application: HP air supply for seismic gun system. Can also be used for hydraulics etc.

Safety factor: 4:1

Part number	Fitting number											
		Dash	mm	in	mm	in	bar	psi	bar	psi	kg/m	
1001505	1225098	-16	25,9	1	37,3	1,468	350	5000	1379	20000	0,587	

// ROV OPERATION 5K

**Marine high pressure hydraulic
350 bar (5000 psi)**

Tube: Oil and biodegradable hydraulic fluid resistant polyamide 11 methanol washed.

Reinforcement: High tensile aramid reinforcement

Cover: Oil, water and ozone resistant polyurethane, non-pin-pricked.

Application: Marine and off-shore equipment, ROVs (remotely operated vehicles), BOP valves. Suitable for off-shore seismic monitoring operations.

Manufactured according to API 17E / ISO 13628-5.

Safety factor: 4:1

Temperature: -40 °C to +100 °C (-40 °F to +212 °F) limited to +70 °C (+158 °F) for air and water based fluids

-			→○←		○↑		○←		○↓		■	
Dash	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lb/ft
-3	5	3/16	9,6	0,378	350	5000	1400	20000	30	1,18	0,06	0,045
-4	6,5	1/4	12,1	0,476	350	5000	1400	20000	50	1,97	0,09	0,065
-6	9,7	3/8	17,1	0,673	350	5000	1400	20000	60	2,36	0,17	0,115
-8	13	1/2	21,9	0,862	350	5000	1400	20000	80	3,15	0,25	0,170
-12	19,5	3/4	29,6	1,165	350	5000	1400	20000	150	5,91	0,40	0,270
-16	25,9	1	38,9	1,531	350	5000	1400	20000	200	7,87	0,63	0,425

// R8 MARINE

**Marine high pressure hydraulic
from 140 to 420 bar (2000 to 5000 psi)**

Tube: Oil and biodegradable hydraulic fluid resistant polyester.

Reinforcement: High tensile aramid reinforcement.

Cover: Oil, water and ozone resistant polyurethane, pin-pricked.

Application: Marine and off-shore equipment, cranes, marine, transport systems. Off-shore seismic monitoring operations. Also recommended for general on-shore equipment, in high humidity environment. Meets or exceeds SAE 100R8.

Safety factor: 4:1

Temperature: -40 °C to +100 °C (-40 °F to +212 °F) limited to +70 °C (+158 °F) for air and water based fluids

Recommended fittings:

AISI 316 SS: NPTF male, JIC female and male

-			→○←		○↑		○←		○↓		■	
Dash	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lb/ft
-3	5	3/16	8,9	0,35	350	5000	1400	20000	30	1,18	0,05	0,035
-4	6,5	1/4	11,5	0,453	350	5000	1400	20000	50	1,97	0,08	0,055
-5	8,1	5/16	13,4	0,528	300	4300	1200	17200	55	2,17	0,105	0,075
-6	9,7	3/8	15,5	0,61	280	4000	1120	16000	60	2,36	0,13	0,09
-8	13	1/2	19,9	0,783	245	3500	980	14000	80	3,15	0,195	0,135
-10	16,3	5/8	23,4	0,921	200	2900	800	11600	125	4,92	0,245	0,165
-12	19,5	3/4	26,9	1,059	165	2300	660	9200	150	5,91	0,31	0,21
-16	25,9	1	34,2	1,346	140	2000	560	8000	200	7,87	0,425	0,29

Other hose types and sizes available on request.

Dimensions shown may be changed without prior notice

// INT COUPLINGS

// ONE-PIECE STAINLESS STEEL COUPLINGS FOR HP HOSES

NPT Male
For hose SAE 100 R8
AISI 316



Item Number	Part Number	Hose ID inch	Hose ID mm	F Thread NPT	Die Number	Die Part Number	Pusher Number	Part Number
INT8-06106	1225089	3/8	9,5	3/8-18	H06	7000115	INT8-0638	7000130
INT8-06108	1225090	3/8	9,5	1/2-14	H06	7000115	INT8-0612	7000129
INT8-12112	1225095	3/4	19,0	3/4-14	H12	7000113	INT8-1234	7000132

NPT Male with extended hex
For hose SAE 100 R8
AISI 316



Item Number	Part Number	Hose ID inch	Hose ID mm	F Thread NPT	Die Number	Die Part Number	Pusher Number	Part Number
INT9-06106	1225100	3/8	9,5	3/8-18	H06	7000115	INT9-0638	7000136
INT9-06108	1225101	3/8	9,5	1/2-14	H06	7000115	INT9-0612	7000135

JIC 37° Female swivel
For hose SAE 100 R8
AISI 316



Item Number	Part Number	Hose ID inch	Hose ID mm	F Thread JIC	Die Number	Die Part Number	Pusher Number	Part Number
INT8-06548	1225091	3/8	9,5	3/4-16	H06	7000115	INT8-0634	7000133
INT8-06546	1225092	3/8	9,5	9/16-18	H06	7000115	INT8-6916F	7000134
INT8-08548	1225530	1/2	12,7	3/4-16	H08	7000096	INT8-0634	7000133
INT8-12552	1225096	3/4	19,0	1 1/16-12	H12	7000113	INT8-12116	7000131
INT9-16556	1225098	1	25,4	1 5/16-12	H16	7000094	INT8-16116	7000137

JIC 37° Female swivel
For hose 37LV and 38LV
AISI 316



Item Number	Part Number	Hose ID inch	Hose ID mm	F Thread JIC	Die Number	Die Part Number	Pusher Number	Part Number
INT9-16556	1225098	1	25,4	1 5/16-12	H16	7000094	INT9-16116	7000137

Other sizes/thread available on request.



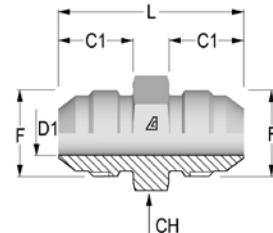
// JIC 37° ADAPTERS

// MALE UNION	19
// MALE / FEMALE UNION	20
// BSPP	21
// SAE UNF	22
// NPTF	24
// PLUG	25

Dimensions shown may be changed without prior notice

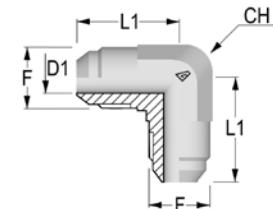
// MALE UNION

Straight union JIC - JIC Male - AISI 316



Part number	Head 1 / Head 2	OD1	F1	C1	CH	L
	Dash	in		mm	mm	mm
312010	-0404	1/4"	7/16-20	14,0	12,0	35,0
312015	-0505	5/16"	1/2-20	14,0	14,0	35,0
312020	-0606	3/8"	9/16-18	14,0	17,0	36,0
312025	-0808	1/2"	3/4-16	16,5	22,0	41,0
312030	-1010	5/8"	7/8-14	19,5	24,0	48,0
312035	-1212	3/4"	1 1/16-12	22,0	30,0	55,0
312040	-1616	1"	1 5/16-12	23,0	36,0	57,0

90° union JIC - JIC Male - AISI 316

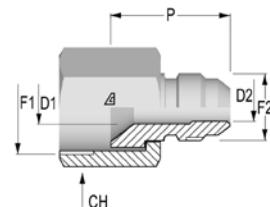


Part number	Head 1 / Head 2	OD1	F	L1	CH
	Dash	in		mm	mm
312110	-0404	1/4"	7/16-20	22,5	12,0
312115	-0505	5/16"	1/2-20	24,0	14,0
312120	-0606	3/8"	9/16-18	27,0	14,0
312125	-0808	1/2"	3/4-16	32,0	19,0
312130	-1010	5/8"	7/8-14	37,0	22,0
312135	-1212	3/4"	1 1/16-12	42,0	27,0
312140	-1616	1"	1 5/16-12	46,0	33,0

Other sizes/thread available on request.

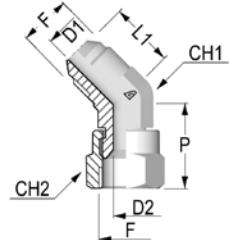
// MALE / FEMALE UNION

Straight reducing JIC Female - JIC Male - AISI 316



Part number	OD mm	OD inch	F1 thread UNF	F2 thread UNF	P mm	CH mm
312310	10-6	3/8-1/4	9/16-18	7/16-20	25	19
312320	12-10	1/2-3/8	3/4-16	9/16-18	25,5	22
312321	16-10	5/8-3/8	7/8-14	9/16-18	26,5	27
312322	16-12	5/8-1/2	7/8-14	3/4-16	29	27
312325	20-12	3/4-1/2	1 1/16-12	3/4-16	30,5	32
312326	20-12	3/4-1/2	1 1/16-12	7/8-14	34,5	32
312330	25-20	1-3/4	1 5/16-12	1 1/16-12	37,5	41
312336	32-20	1 1/4-3/4	1 5/8-12	1 1/16-12	39,1	50
312337	32-25	1 1/4-1	1 5/8-12	1 5/16-12	40	50
312340	32-25	1 1/4-1	1 5/8-12	1 5/16-12	40	50

45° union JIC Male - JIC Female - AISI 316

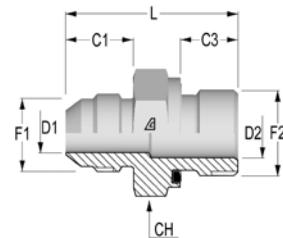


Part number	OD mm	OD inch	F thread UNF	L1 mm	P mm	CH1 mm	CH mm
315910	6	1/4	7/16-20	18,5	23,7	12	16
315915	8	5/16	1/2-20	19,5	25,5	14	17
315920	10	3/8	9/16-18	21,5	28,5	14	19
315925	12	1/2	3/4-16	24,5	32,7	19	25
315930	14-16	5/8	7/8-14	28	36,7	22	27
315935	18-20	3/4	1 1/16-12	32,5	38,3	27	32
315940	25	1	1 5/16-12	36,5	44,6	33	38

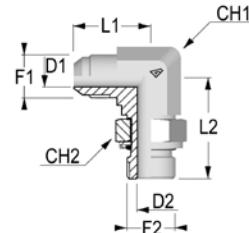
Other sizes/threads available on request.

Dimensions shown may be changed without prior notice

// BSPP

Straight connector JIC Male - BSPP cylindric Male with elastomer - AISI 316

Part number	OD mm	OD inch	thread UNF	thread BSPP	L mm	C1 mm	C3 mm	CH mm
311612	6	1/4	7/16-20	3/8-19	35,5	14	12	22
311613	6	1/4	7/16-20	1/2-14	39	14	14	27
311615	8	5/16	1/2-20	1/4-19	35	14	12	19
311616	8	5/16	1/2-20	3/8-19	35,5	14	12	22
311620	10	3/8	9/16-18	1/8-28	35	14	12	14
311621	10	3/8	9/16-18	1/4-19	35	14	12	19
311622	10	3/8	9/16-18	3/8-19	36	14	12	22
311623	10	3/8	9/16-18	1/2-14	39,5	14	14	27
1220661	12	1/2	3/4-16	1/4-19	37	17	10	22
311626	12	1/2	3/4-16	3/8-19	38,5	16,5	12	22
311627	12	1/2	3/4-16	1/2-14	42	16,5	14	27
311628	12	1/2	3/4-16	3/4-14	45,5	16,5	17	32
311631	14-16	5/8	7/8-14	3/8-19	42,5	19,5	12	24
311632	14-16	5/8	7/8-14	1/2-14	44,5	19,5	14	27
311635	18-20	5/8	1 1/16-12	3/8-19	48	22	12	24
311636	18-20	3/4	1 1/16-12	1/2-14	49	22	14	32
311637	18-20	3/4	1 1/16-12	3/4-14	51	22	17	32
311638	18-20	3/4	1 1/16-12	1-11	53,5	22	18	41
311640	25	1	1 5/16-12	3/4-14	51,5	23	17	36
311641	25	1	1 5/16-12	1-11	54,5	23	18	41
311642	25	1	1 5/16-12	1 1/4-11	58,4	23	20	50

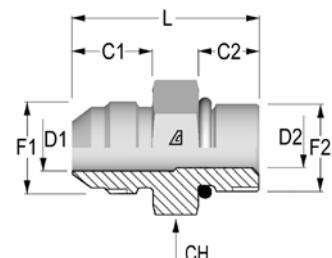
90° adjustable long elbow connector JIC Male - BSPP cylindric Male with O-Ring and retaining ring - AISI 316

Part number	OD mm	OD inch	1 thread UNF	2 thread BSPP	L1 mm	L2 mm	CH1 mm	CH2 mm
311711	6	1/4	7/16-20	1/4-19	27	31,1	14	19
311715	8	5/16	1/2-20	1/4-19	27	31,5	14	19
311720	10	3/8	9/16-18	1/4-19	27	31,5	14	19
311721	10	3/8	9/16-18	3/8-19	28,5	36,5	17	22
311722	10	3/8	9/16-18	1/2-14	31	43	22	27
311726	12	1/2	3/4-16	3/8-19	28,5	36,5	17	22
311727	12	1/2	3/4-16	1/2-14	34	43	22	27
311730	14-16	5/8	7/8-14	1/2-14	36,5	39,5	22	22
311736	18-20	3/4	1 1/16-12	3/4-14	44	50,5	33	36
311740	25	1	1 5/16-12	3/4-14	46	52	33	36
311741	25	1	1 5/16-12	1-11	46	52	33	41

Other sizes/threads available on request.

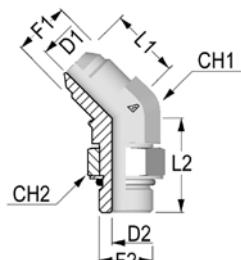
// SAE UNF

**Straight connector JIC Male - SAE UNF/UN Male with O-Ring -
AISI 316**



Part number	OD mm	OD inch	F1 thread UNF	F2 thread UNF	L mm	C1 mm	C2 mm	CH mm
312510	6	1/4	7/16-20	7/16-20	31	8,3	9	14
312511	6	1/4	7/16-20	1/2-20	31	8,3	9	16
312512	6	1/4	7/16-20	9/16-18	32,5	8,3	10	17
312515	8	5/16	1/2-20	1/2-20	31	9	9	17
312520	10	3/8	9/16-18	9/16-18	33	9	10	17
312521	10	3/8	9/16-18	3/4-16	35	9	11	22
312525	12	1/2	3/4-16	3/4-16	38	11,5	11	22
312526	12	1/2	3/4-16	7/8-14	40,5	11,5	12,5	27
312527	12	1/2	3/4-16	1 1/16-12	44,5	11,5	15	32
312530	14-16	5/8	7/8-14	3/4-16	41,5	12,5	11	27
312531	14-16	5/8	7/8-14	7/8-14	43	12,5	12,5	27
312532	14-16	5/8	7/8-14	1 1/16-12	47	12,5	15	32
312535	18-20	3/4	1 1/16-12	7/8-14	47,5	13	12,5	27
312536	18-20	3/4	1 1/16-12	1 1/16-12	50	13	15	32
312537	18-20	3/4	1 1/16-12	1 5/16-12	50,5	13	15	38
312540	25	1	1 5/16-12	1 1/16-12	50,5	14,5	15	36
312541	25	1	1 5/16-12	1 5/16-12	52	14,5	15	38

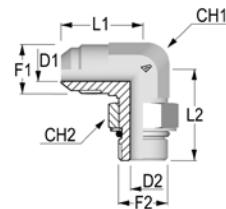
**45° adjustable elbow connector JIC Male - SAE UNF/UN Male
with O-Ring - AISI 316**



Part number	OD mm	OD inch	F1 thread UNF	F2 thread UNF	L1 mm	L2 mm	CH1 mm	CH2 mm
312610	6	1/4	7/16-20	7/16-20	18,5	26,5	12	16
312615	8	5/16	1/2-20	1/2-20	21	26,5	14	17
312620	10	3/8	9/16-18	9/16-18	19,5	26,5	14	19
312625	12	1/2	3/4-16	3/4-16	25	33	19	24
312630	14-16	5/8	7/8-14	7/8-14	28	38,5	22	27
312635	18-20	3/4	1 1/16-12	1 1/16-12	32,5	44	27	32
312640	25	1	1 5/16-12	1 5/16-12	37,5	47	33	41

Dimensions shown may be changed without prior notice

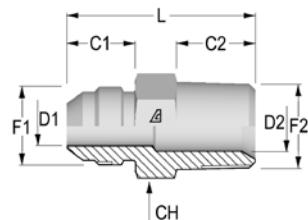
**90° adjustable elbow connector JIC Male - SAE UNF/UN Male
with O-Ring - AISI 316**



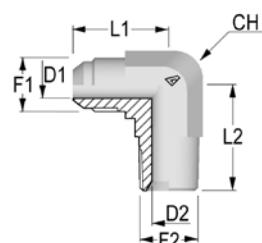
Part number	OD mm	OD inch	F1 thread UNF	F2 thread UNF	L1 mm	L2 mm	CH1 mm	CH2 mm
312710	6	1/4	7/16-20	7/16-20	22,5	26	12	16
312715	8	5/16	1/2-20	1/2-20	24	27,5	14	17
312720	10	3/8	9/16-18	9/16-18	27	31,5	14	19
312721	10	3/8	9/16-18	3/4-16	28,5	36,5	19	24
312725	12	1/2	3/4-16	3/4-16	31,5	36,5	19	24
312726	12	1/2	3/4-16	7/8-14	34	43	22	27
312730	14-16	5/8	7/8-14	7/8-14	36,5	43	22	27
312735	18-20	3/4	1 1/16-12	7/8-14	42	45,5	27	27
312736	18-20	3/4	1 1/16-12	1 1/16-12	42	49	27	32
312741	25	1	1 5/16-12	1 1/16-12	46	52	33	32
312740	25	1	1 5/16-12	1 5/16-12	46	54,6	33	41

Other sizes/threads available on request.

// NPTF

Straight connector JIC - NPTF Male - AISI 316

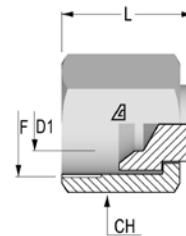
Part number	OD mm	OD inch	F1 thred UNF	F2 thread NPTF	L mm	C1 mm	C2 mm	CH mm
312820	10	3/8	9/16-18	3/8-18	36,5	14	14,5	19
312821	10	3/8	9/16-18	1/2-14	43	14	19	22
312822	12	1/2	3/4-16	3/8-18	39	17	14,5	19
312825	12	1/2	3/4-16	1/2-14	44,5	17	19	22
312826	12	1/2	3/4-16	3/4-14	47	17	19	27
312827	14-16	5/8	7/8-14	3/8-18	43,5	19,5	14,5	24
312828	14-16	5/8	7/8-14	1/2-14	47	19,5	19	24
312835	14-16	5/8	7/8-14	3/4-14	49,5	19,5	19	27
312836	18-20	3/4	1 1/16-12	1/2-14	51,5	22	19	27
312837	18-20	3/4	1 1/16-12	3/4-14	52,5	22	19	27
312839	18-20	3/4	1 1/16-12	1-11	57	22	24	36
312840	25	1	1 5/16-12	3/4-14	53,5	23	19	36
312841	25	1	1 5/16-12	1-11	58,5	23	24	36

90° elbow connector JIC - NPTF Male - AISI 316

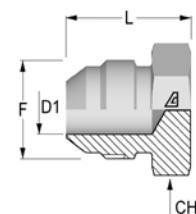
Part number	OD mm	OD inch	F1 thread UNF	F2 thread NPTF	L1 mm	L2 mm	CH mm
313020	10	3/8	9/16-18	3/8-18	28,5	31	19
313021	10	3/8	9/16-18	1/2-14	31	37	22
313022	12	1/2	3/4-16	3/8-18	31,5	31	19
313025	12	1/2	3/4-16	1/2-14	34	37	22
313026	14-16	5/8	7/8-14	3/8-18	36,5	32	22
313027	14-16	5/8	7/8-14	1/2-14	36,5	37	22
313035	18-20	3/4	1 1/16-12	3/4-14	42	40,5	27
313038	25	1	1 5/16-12	3/4-14	46	45	33
313040	25	1	1 5/16-12	1-11	46	50	33

Other sizes/threads available on request.

Dimensions shown may be changed without prior notice

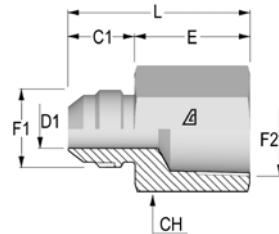
// PLUG**Cap JIC Female - AISI 316**

Part number	OD mm	OD inch	F thread UNF	L mm	CH mm
315110	6	1/4	7/16-20	17	14
315115	8	5/16	1/2-20	19,5	17
315120	10	3/8	9/16-18	20,5	19
315125	12	1/2	3/4-16	24	22
315130	14-16	5/8	7/8-14	27	27
315135	18-20	3/4	1 1/16-12	31,5	32
315140	25	1	1 5/16-12	32,5	41

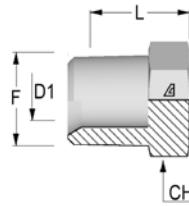
Plug JIC Male - AISI 316

Part number	OD mm	OD tum	F thread UNF	L mm	CH mm
315010	6	1/4	7/16-20	20,5	12
315015	8	5/16	1/2-20	20,5	14
315020	10	3/8	9/16-18	21,5	14
315025	12	1/2	3/4-16	24	22
315030	14-16	5/8	7/8-14	28	24
315035	18-20	3/4	1 1/16-12	32,5	30
315040	25	1	1 5/16-12	34	36

Other sizes/threads available on request.

Straight Reducing - JIC Male – NPTF Female - AISI 316

Part number	OD mm	OD inch	F1 thread UNF	F2 thread NPTF	L mm	C1 mm	E mm	CH mm
313220	10	3/8	9/16-18	3/8-18	36,5	14	22,5	22
313221	12	1/2	3/4-16	3/8-18	39	16,5	22,5	22
313225	12	1/2	3/4-16	1/2-14	45	16,5	28,5	27
313226	14-16	5/8	7/8-14	1/2-14	48	19,5	28,5	27
3132XX	18-20	3/4	1 1/16-12	1/2-14	50,5	22	28,5	30
313225	18-20	3/4	1 1/16-12	3/4-14	52,5	22	30,5	30
313240	25	1	1 5/16-12	1-11	59,5	23	36,5	41

Plugg - NPT Male - AISI 316

Part number	OD mm	OD inch	F thread NPT	L mm	CH mm
317300	6	1/4	1/8-27	20,5	12
317310	8	5/16	1/4-20	20,5	14
317320	10	3/8	3/8-18	21,5	14
317325	14-16	5/8	1/2-14	28	24
317335	18-20	3/4	3/4-14	32,5	30
317340	25	1	1-11	34	36

Other sizes/threads available on request.

Dimensions shown may be changed without prior notice

// ACCESSORIES

// RUBBER KINK PROTECTION



Bend restrictor

Protection / brace between the coupling and hose.
For hand-held use, keeps hose from kinking at fitting.
Color: Black

Part number	Description	ID Inch	OD mm	Length mm
1901553	Rubber kink protection	3/8"		148

// POWER CLAMP AISI 316



A sturdy hose clamp for use on heavy duty hoses in PVC and rubber. Always use two hose clamps in each end at high pressures.

Material: Stainless Steel

Part number	Clamp type	Clamping range mm	Band width mm	Bolt dimension mm	Packing size
2304125	140	140 - 130	25 x 1	M8 x 60 x 2	20
2304343	165	155 - 165	25 x 1	M8 x 60 x 2	20
2304130	170	160 - 170	25 x 1	M8 x 60 x 2	16
2304344	195	180 - 195	25 x 1	M8 x 60 x 2	8
2304772	200	190 - 200	25 x 1	M8 x 60 x 2	12
2304345	480	465 - 489	25 x 1	M8 x 60 x 2	8

Other sizes available on request.

// HOSE GUARD



ALFAGOMMA Hose Guard is a high quality plastic spiral specifically designed for hose protection in almost every environment. Flexible, elastic, smooth and with a wide temperature range, it ensures an optimal solution against abrasion and shocks.

Made of High Density PolyEthylene by means of an extrusion process, ALFAGOMMA Hose Guard has got rounded edges to avoid any damage to the hose cover. It is easy to mount on hydraulic and industrial hoses to be or already assembled.

Material: HDPE (halogen-free, recyclable)

Temperature range: -40 °C +100 °C

Pack quantity: 25 or 50 m

Colour: black or yellow

UV/ozone resistance: very good

Oil/water resistance: very good

Use: protection of hoses, cables and bundles

Black

Item Code	Part nr.	ID mm	OD mm	Thickness T mm	Pitch P mm	Recommended hose OD range mm	Weight kg/m	Pack q.ty m
1902552	RJS1AG0-0100000	10	12	1,2	10	8 – 12	0,04	25
1902554	RJS1AG0-0130000	13	16	1,3	12	11 – 15	0,06	25
1902555	RJS1AG0-0160000	16	20	2,0	20	14 – 19	0,10	25
1902556	RJS1AG0-0200000	20	24	2,2	21	18 – 26	0,15	50
1901067	RJS1AG0-0270000	27	32	2,5	22	25 – 34	0,20	50
1902051	RJS1AG0-0350000	35	40	2,7	24	33 – 42	0,30	25
1901076	RJS1AG0-0430000	43	50	3,4	30	41 – 54	0,40	25
1902520	RJS1AG0-0550000	55	62	3,7	37	53 – 65	0,65	25
1901142	RJS1AG0-0660000	66	75	4,4	42	64 – 79	0,75	25
1901089	RJS1AG0-0800000	80	90	4,9	45	78 – 99	1,20	25
1902560	RJS1AG0-0990000	100	111	5,5	50	98 – 120	1,75	25
1902521	RJS1AG0-1270000	127	140	6,5	55	120 – 150	2,50	25

Yellow

Item Code	Part nr.	ID mm	OD mm	Thickness T mm	Pitch P mm	Recommended hose OD range mm	Weight kg/m	Pack q.ty m
1902551	RJS1KG0-0100000	10	12	1,2	10	8 – 12	0,04	25
1902553	RJS1KG0-0130000	13	16	1,3	12	11 – 15	0,06	25
1901057	RJS1KG0-0160000	16	20	2,0	20	14 – 19	0,10	25
1901060	RJS1KG0-0200000	20	24	2,2	21	18 – 26	0,15	50
1902557	RJS1KG0-0270000	27	32	2,5	22	25 – 34	0,20	50
1903210	RJS1KG0-0350000	35	40	2,7	24	33 – 42	0,30	25
1901077	RJS1KG0-0430000	43	50	3,4	30	41 – 54	0,40	25
1903212	RJS1KG0-0550000	55	62	3,7	37	53 – 65	0,65	25
1901141	RJS1KG0-0660000	66	75	4,4	42	64 – 79	0,75	25
1902558	RJS1KG0-0800000	80	90	4,9	45	78 – 99	1,20	25
1902559	RJS1KG0-0990000	100	111	5,5	50	98 – 120	1,75	25
o.r.	o.r.	127	140	6,5	55	120 – 150	2,50	25

Other versions (e.g. MSHA and FRAS) available on request.

// CLEANING EQUIPMENT

// UC-EL-8-DP KIT



UC-EL8-DP kit includes:

- UC-EL1.25 Launcher
- 8 Hose Nozzles
- UC-CC Carrying Case
- UC-PC Projectile Catcher Bucket
- Ultra Clean Projectiles 7mm through 40mm (1/4" through 1 1/4")

// UC-CAP KIT



UC-CAP kit includes:

- UC-HL2 2" Launcher
- UC-AR1 Adaptor Ring
- 20 Nozzles for Cleaning Hose, Hose Assemblies, Tubing and Pipe
- UC-CC Carrying Case
- UC-PC Projectile Catcher Bucket
- Ultra Clean Projectiles 7mm through 60mm (1/4" through 2")
- UC-S Launcher Stand

// UC-HL-25-2 KIT



2" Launcher kit with 25 Nozzles for cleaning Hose, Tube and Pipe applications

Kit Contents:

- UC-HL2 Launcher
- UC-AR1 Adaptor Ring
- UC-CC Carrying Case
- 10 Hose nozzles (1/4" through 2")
- 14 JIC/TUBE nozzles (1/4" through 2")
- one special -4 FFORX nozzle

Other equipment available on request.

// CLEANING PROJECTILES FOR HOSE



Part number	Dimension Inch.	Dimension mm	Pc pr. pckg
7000166	1/8	2,5-4,0	100
7000168	3/16	3,5-5,0	100
7000170	1/4	4,5-7,0	100
7000172	5/16	6,0-9,0	100
7000162	3/8	7,0-11,0	100
7000145	1/2	9,0-14,0	100
7000167	5/8	11,0-17,0	50
7000161	3/4	13,0-19,0	50
7000142	1	16,5-25,0	50
7000144	1 1/4	20,0-31,0	20
7000143	1 1/2	25,0-40,0	20
7000155	2	32,0-55,0	20

// CLEANING PROJECTILES WITH ABRASIVE EFFECT FOR PIPING



Part nr.	Description	Qty/pckg.	MOQ
UC-GR06	GRINDING 6mm	100	1
UC-GR07	GRINDING 7mm	100	1
UC-GR10	GRINDING 10mm	100	1
UC-GR12	GRINDING 12mm	100	1
UC-GR14	GRINDING 14mm	100	1
UC-GR16	GRINDING 16mm	100	1
UC-GR18	GRINDING 18mm	100	1
UC-GR20	GRINDING 20mm	50	1
UC-GR22	GRINDING 22mm	50	1
UC-GR24	GRINDING 24mm	50	1
UC-GR26	GRINDING 26mm	50	1
UC-GR28	GRINDING 28mm	40	1
UC-GR30	GRINDING 30mm	40	1
UC-GR33	GRINDING 33mm	40	1
UC-GR36	GRINDING 36mm	30	1
UC-GR40	GRINDING 40mm	30	1
UC-GR45	GRINDING 45mm	20	1
UC-GR50	GRINDING 50mm	20	1
UC-GR55	GRINDING 55mm	15	1
UC-GR60	GRINDING 60mm	15	1
UC-GR65	GRINDING 65mm	10	1

Dimensions shown may be changed without prior notice

// SWAGING MACHINES

// FINNPOWER P16 AP - AIR OPERATED



Part number	Capacity inch	Die type	Operation	Dimensions mm	Weight kg
7000093	1/4 - 1	16	Pneumatic	337 x 402 x 271	28

// FINNPOWER 20 MS - ELECTRICAL OPERATED



Max crimping power (KN) 1370

Part nr: 7000461 (Table, incl. quickshifter)

Part nr: 7000454 (Die holder incl. quickshifter tool).

Part number	Capacity inch	Die type	Operation	Dimensions mm	Weight kg
7000081	1/4 - 1 1/2	20	Electrical	800 x 630 x 627	157

// FINNPOWER 32 MS - ELECTRICAL OPERATED



Max crimping power (KN) 2000

Part nr: 7000460 (Table, incl. quickshifter)

Part nr: 7000459 (Die holder incl. quickshifter tool)

Part number	Capacity inch	Die type	Operation	Dimensions mm	Weight kg
7000082	01/04/02	32	Electrical	800 x 630 x 637	205

Equipment like hose cutting and skiving machines, stocking equipment, Voss pre-assembly machine, etc. available on request.
We also have Finnpower air-driven and manual crimping machines available.

// SWAGING DIES

// DIE SETS 16



Part number	Capacity MM	Die type
7000100	10	16
7000101	12	16
7000102	14	16
7000103	16	16
7000105	19	16
7000107	23	16
7000109	27	16
7000116	31	16

// DIE SETS 20



Part number	Capacity MM	Die type
7000468	10	20
7000469	12	20
7000104	16	20
7000106	19	20
7000108	23	20
7000110	27	20
7000117	31	20
7000118	36	20
7000119	41	20
7000120	47	20
7000121	54	20

// DIE SETS 32



Part number	Capacity MM	Die type
7002207	10	32
7002208	12	32
7002209	14	32
7000473	16	32
7000474	19	32
7000475	22	32
7000476	26	32
7000477	30	32
7000478	34	32
7000479	39	32
7000480	45	32
7000481	51	32
7000482	57	32
7000483	63	32
7000484	69	32

Dimensions shown may be changed without prior notice

// CRIMP MEASURE

HOSE TYPE	INCH	DASH	1/4"	- 04	3/8"	- 06	1/2"	- 08	3/4"	- 12	1"	- 16
3R80					INT8 & INT9		INT8		INT8 & INT9			
					CRIMP 20,1	CRIMP L 28,6	CRIMP 23,2	CRIMP L 32,0	CRIMP 29,3	CRIMP L 34,9		
37LV											INT9-16556	
											CRIMP 37,3	CRIMP L 44,0
38LV											INT9-16556	
											CRIMP 37,3	CRIMP L 44,0

// MEASURE INSTRUCTIONS



// NOTES

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NOTES

// DUNLOP HIFLEX IN NORDIC AND BALTIc COUNTRIES

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