

INTRODUCTION

We thank you for your interest in our range of products and services and hope that you find this catalogue helpful.

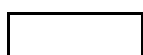
We have tried to list as much relevant information as possible, but should you find that your particular requirements are not listed, then please contact our sales office who will be pleased to help.

This catalogue is one of a set and should you require others in the series, please do not hesitate to call.

Whilst every effort is made to ensure that the information is accurate and correct, the conditions under which Portmere Rubber products are used are beyond our control and therefore our recommendations are made without warranty or guarantee. Portmere Rubber reserve the right to change specifications without prior notice.

We shall be pleased to accept your enquiry or order, whether large or small. Orders over any distance will be met from our two factories in the south of England.

Key to items listed.



Normally stock items.



Non-stock items M.O.Q. may apply.

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catalogue 2.

CLIPS and CLAMPS

SECTION 1

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HI - GRIP HOSE CLIPS

2-1-1

Product Code	Size	Diameter MM	Old Hose Clip Size	Box Size
VA21/22 12	12	9.5 - 12	OOO	10
VA21/22 16	16	11 - 16	MOO	10
VA21/22 20	20	13 - 20	OO	10
VA21/22 22	22	14 - 22	O	10
VA21/22 25	25	17 - 25	OX	10
VA21/22 30	30	22 - 30	1A	10
VA21/22 35	35	25 - 35	1	10
VA21/22 40	40	30 - 40	1X	10
VA21/22 45	45	35 - 45	-	10
VA21/22 50	50	35 - 50	2A	10
VA21/22 55	55	40 - 55	2	10
VA21/22 60	60	45 - 60	2X	10
VA21/22 70	70	55 - 70	3	10
VA21/22 80	80	60 - 80	3X	100
VA21/22 90	90	70 - 90	4	100
VA21/22 100	100	90 - 100	4X	100
VA21/22 120	120	110 - 120	5	75
VA21/22 140	140	130 - 140	6+6X	75
VA21/22 160	160	150 - 160	7	75
VA21/22 180	180	170 - 180	-	75
VA21/22 200	200	190 - 200	-	75
VA21/22 220	220	210 - 220	-	75
VA21/22 240	240	240 - 240	-	75
VA21/22 260	260	230 - 260	-	75
VA21/22 280	280	250 - 280	-	75
VA21/22 300	300	270 - 300	-	75
VA21/22 320	320	290 - 320	-	50
VA21/22 340	340	310 - 340	-	50
VA21/22 360	360	330 - 360	-	50
VA21/22 380	380	350 - 380	-	50
VA21/22 400	400	370 - 400	-	50

Mild steel



Stainless steel.



2-1-2

HI - GRIP MILD STEEL

HI - GRIP general purpose worm drive hose clips are regarded universally as being the highest quality clip available in the market today.

Their tough construction will stand a great deal of abuse.

They are manufactured to BS5315 and have BSI KITEMARK and N.A.T.O approvals. The standard version of HI - GRIP is made from heavily zinc plated mild steel and is used for a wide variety of domestic, automotive and industrial applications.

HI - GRIP STAINLESS

HI - GRIP STAINLESS hose clips are made entirely from 18/8 marine quality stainless steel and therefore are ideal for salt water and many other highly corrosive environments.

They have Lloyd's Register type Approval for marine, offshore and industrial use. HI - GRIP STAINLESS hose clips have fast become the industry standard for marine applications throughout the world due to their high quality and performance.

HI - GRIP WING SCREW

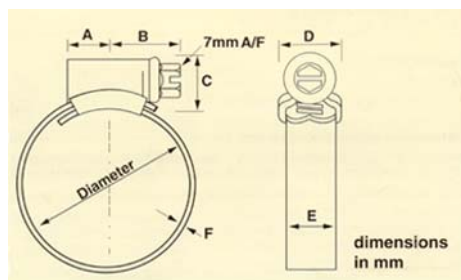
2-1-3

Product Code	Size	Diameter MM	Old Hose Clip Size	Box Size
VA23/ 12	12	9.5 - 12	OOO	
VA23/ 16	16	11 - 16	MOO	
VA23/ 20	20	13 - 20	OO	
VA23/ 22	22	14 - 22	O	
VA23/ 25	25	17 - 25	OX	
VA23/ 30	30	22 - 30	1A	
VA23/ 35	35	25 - 35	1	
VA23/ 40	40	30 - 40	1X	
VA23/ 45	45	35 - 45	-	
VA23/ 50	50	35 - 50	2A	
VA23/ 55	55	40 - 55	2	
VA23/ 60	60	45 - 60	2X	



HI - GRIP WING SCREW

The HI-GRIP wing screw hose clip was specifically designed to answer the problem of frequently removed hoses such as found in the garden, home, laboratory and industry. The unique dovetail locking and side lugs of the wing plate guarantee a firm fixture that outlasts those of other designs. A plastic wing plate cover is supplied as standard which enables a greater tightness to be obtained and is kinder to unprotected fingers. The super free - running and high efficiency worm drive gives excellent sealing.



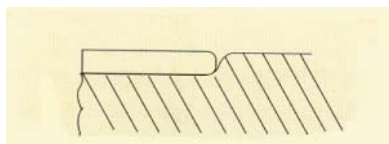
Size	A mm	B mm	C mm	D mm	E mm	F mm	Recommended Setting torque	
							NM	lb-in
12-20	7	14	10	13	10	0.7	3.0	26
22-45	8	15	12	16	13	0.9	5.0	45
50 & larger	13	20	12	16	13	0.9	6.0	54

Material Specification

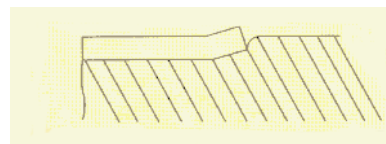
HI-GRIP All parts - Mild Steel, Bright Zinc Plated and Passivated.

HI-GRIP STAINLESS All parts BS304 -En58 -DIN 1.4301

HI-GRIP Band Edges



HI-GRIP Band Edges



Typical Hose Clip with Turned Up Edges.

All HI-GRIP and HI-GRIP STAINLESS hose clips have full rounded edges to give the best possible protection to the hose.

HI-GRIP FLEXIBLE SCREWDRIVER

This purpose made screwdriver will not slip off the screwhead whilst turning and together with the flexible shaft makes fitting easier in awkward places.

HI-GRIP CARTON & CLIP DISPENSERS

HI-GRIP carton and clip dispensers are available for either wall or counter location to promote the sales of HI-GRIP hose clips. The wall mounted unit holds 900 clips in retail packs. The counter unit holds 135 clips and it is available for both zinc plated and stainless HI-GRIP.

HI - TORQUE HEAVY DUTY CLIPS

2-1-5

Product Code	Size	Diameter MM	Old Hose Clip Size	Box Size
VA41/ 27	27	20 - 27		100
VA41/ 30	30	20 - 30		100
VA41/ 35	35	20 - 35		100
VA41/ 40	40	25 - 40		100
VA41/ 50	50	30 - 50		100
VA41/ 60	60	40 - 60		100
VA41/ 70	70	50 - 70		100
VA41/ 80	80	60 - 80		100
VA41/ 90	90	70 - 90		100
VA41/ 100	100	80 - 100		100
VA41/ 120	120	90 - 120		50
VA41/ 140	140	110 - 140		50
VA41/ 160	160	130 - 160		50
VA41/ 180	180	150 - 180		50
VA41/ 200	200	170 - 200		25
VA41/ 220	220	190 - 220		25
VA41/ 240	240	210 - 240		25
VA41/ 260	260	230 - 260		25
VA41/ 280	280	250 - 280		25
VA41/ 300	300	270 - 300		25
VA41/ 320	320	290 - 320		25
VA41/ 340	340	310 - 340		25
VA41/ 360	360	330 - 360		25
VA41/ 380	380	350 - 380		25
VA41/ 400	400	370 - 400		25
VA41/ 420	420	390 - 420		25
VA41/ 440	440	410 - 440		25
VA41/ 460	460	430 - 460		25
VA41/ 480	480	450 - 480		25
VA41/ 500	500	470 - 500		25



2-1-6

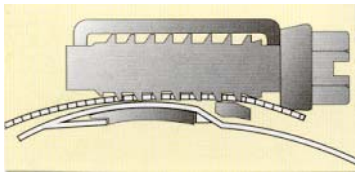
HI - TORQUE STAINLESS

HI - TORQUE Heavy duty Stainless Steel Hose Clamps have been specifically designed for tough and wire reinforced hoses and for when an extra margin of safety and reliability is required. HI - TORQUE clamps out perform nut and bolt type clamps due to their more uniform tightening which gives higher sealing pressure. They are quicker to fit, have no loose parts to lose in awkward places and require less space than any other heavy duty hose clamp.

HI - TORQUE clamps also offer a larger adjustment for each size than nut and bolt clamps thus reducing inventory requirements.

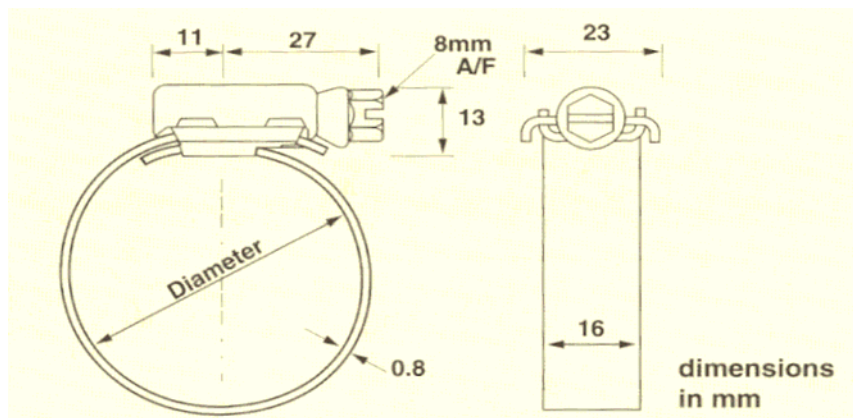
LLOYD'S REGISTER APPROVAL

JCS HI - TORQUE heavy duty hose clamps hold Lloyd's Register Type Approval for applications in the marine, offshore and industrial markets. They are specifically approved by Lloyd's Register for the critical application of sealing wet diesel exhaust hoses on small craft. Further details can be supplied on request.



STRAIGHT LINE HOUSING

The HI - TORQUE design has a unique 'straight line' housing, which ensures that every thread of the screw is fully engaged with the band. This special feature together with a high tensile band and hardened rolled thread screw means that HI - TORQUE clamps produce more than twice the strength of ordinary worm drive hose clips.



Material Specification

Band BS304 - En58DIN 1.4301
Tensile strength = 1150 N/mm^2 Approx. (75 tons/in²)

Housing BS304 - En58 - DIN1.4301

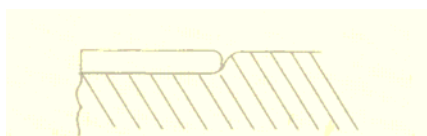
Screw BS410 - En56 - DIN 1.4006 -
Heat treated to 1220 N/mm^2 Approx. (80 tons/in²)
(or BS304 - En58 - DIN 1.4301 to special order)

Recommended setting torque - 15Nm (130ib.in)

Important - For *immersion in salt water*

HI-TORQUE must be ordered with BS304 En58 screws

HI-TORQUE Band Edges



HI-TORQUE Band Edges

Typical Hose Clip with Turned Up Edges

All HI-TORQUE Stainless hose clips have fully rounded edges to give the best possible protection to the hose.

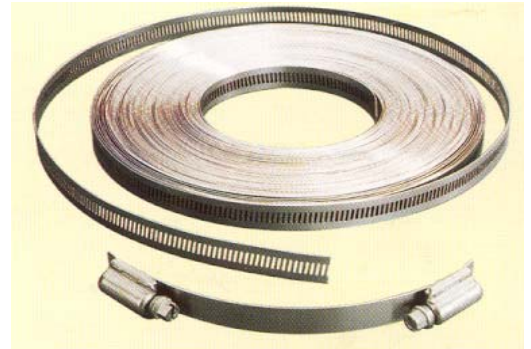
TOOLS

For the HI-TORQUE range ratchet spanners and pre-set torque slippe spanners are available.

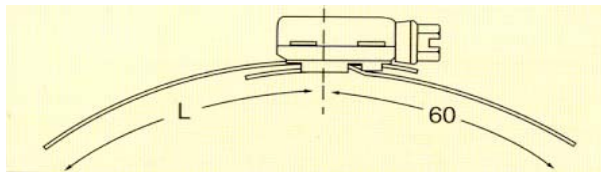
MULTI-TORQUE KITS

JCS HI-TORQUE have coupled the strength of HI-TORQUE hose clamps with the convenience of being able to produce instant hose clamps to any desired diameter from a kit. Ideal for all maintenance applications, MULTI-TORQUE kits are manufactured to the same high quality standards as HI-TORQUE clamps. This means that all parts are 100% stainless steel (18/8 marine quality) and are significantly stronger than other adjustable banding products.

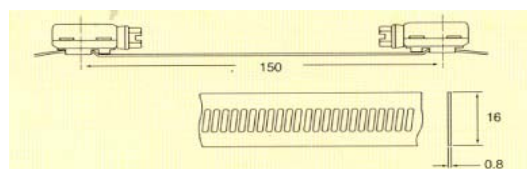
By simply cutting off the required length from a continuous banding roll and engaging one end of the band into each housing of the MULTI-TORQUE connector a hose clamp is made. What is more the hose clamp is re-usable just like the standard HI-TORQUE clamps!

**HI-TORQUE Straps****HI-TORQUE STRAPS**

The strength of HI-TORQUE clamps is utilised in our straps which are used for scores of applications.



Strap Size	Linear Adjustment	Dia. Adj.	Length L
0	62	20	100
1	94	30	136
2	125	40	164

MULTI-TORQUE

MULTI-TORQUE Banding is supplied in 10m and 30m lengths. Other lengths of connectors are available to special order.

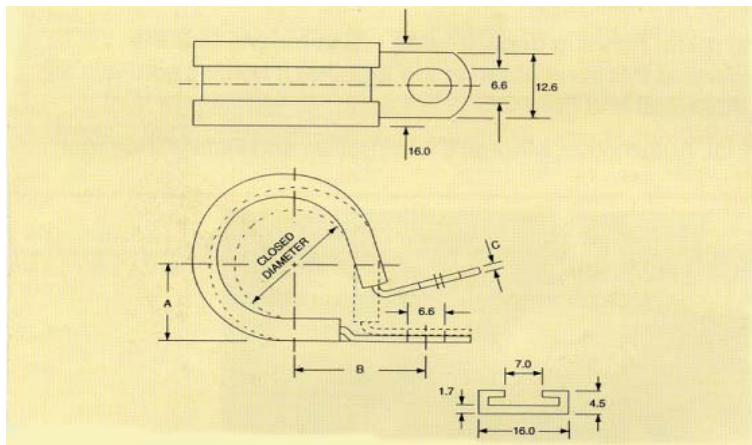
"P" CLIPS

2-1-9

Product Code	Size No	Closed Diameter	A	B	Zinc Plated C	Stainless Steel C
VA42 05	5	5	6	15	0.9	0.7
VA42 06	6	6	7	16	0.9	0.7
VA42 08	8	8	8	17	0.9	0.7
VA42 10	10	10	9	18	0.9	0.7
VA42 13	13	13	11	20	0.9	0.9
VA42 16	16	16	13	21	0.9	0.9
VA42 21	21	21	15	24	1.2	0.9
VA42 25	25	25	16	26	1.2	0.9
VA42 29	29	29	19	28	1.2	0.9
VA42 35	35	35	22	31	1.2	0.9



BOX SIZE - ZINC PLATED 50 OFF
STAINLESS STEEL 25 OFF



MATERIAL SPECIFICATION

Zinc Plated P - Clip	Mild steel - bright plated and passivated
Stainless P - Clip	BS304-DIN-1.4301-18/8 stainless steel
Liner	EPDM rubber (black) - 70 IRHD hardness (Alternative liners to special order)

2-1-10

P - CLIP APPLICATIONS

JCS P - Clips are used in many industries for fixing pipes, hoses, cables and groups of cables. Their rubber covers enable them to clamp the pipes or cables firmly without any possibility of chafing or damaging the surface of the item being clamped.

JCS DESIGN FEATURES

- Snug fitting EPDM rubber liner absorbs vibration and prevents chafing of pipe or cables, and water penetration into the clamping area.
- The P - Clip band has a special strengthening rib which keeps the clips flush with the surface it is bolted to.
- The zinc plated version is heavily electro zinc plated on all surfaces including the edges for the very best corrosion resistance.
- The stainless version is made from marine quality 18/8 Stainless Steel.
- The upper hole is elongated to allow for any adjustments that maybe necessary and to helpline up the fitting bolt when fitting.

OPTIONS

- The facility to produce special non-standard sizes in high volume batches exists. Quotations available on request.
- Alternative Silicone and Nitrile Rubber Liners are available for use on specific applications. (available to special order)
- Fixing nuts and bolts not supplied.

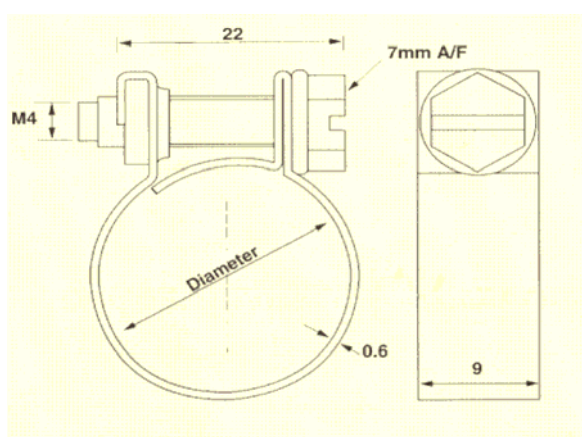
Product Code	Size	Diameter MM	Bag Size
VA47/ 09	9	7 - 9	50
VA47/ 10	10	8 - 10	50
VA47/ 11	11	9 - 11	50
VA47/ 12	12	10 - 12	50
VA47/ 13	13	11 - 13	50
VA47/ 14	14	12 - 14	50
VA47/ 15	15	13 - 15	50
VA47/ 16	16	14 - 16	50
VA47/ 17	17	15 - 17	50
VA47/ 18	18	16 - 18	50



JCS MINI - CLIPS are formed from a one piece band and therefore have no welded parts which can damage the hose. The band is folded over a nut which ensures it remains firmly in place when the screw is removed. The screw head is formed to a 7mm Hexagon head so that the JCS flexible shaft screwdriver can be used making fitting quicker and easier especially in awkward places. The screw head is also slotted for ordinary screwdriver use.

JCS MINI - CLIPS are an economical solution for many low pressure applications where a larger adjustment range is not required. They are especially suitable for petrol and LPG gas hoses and are available in 10 sizes ranging from 9mm O.D 18 mm I.D.

TECHNICAL SPECIFICATION



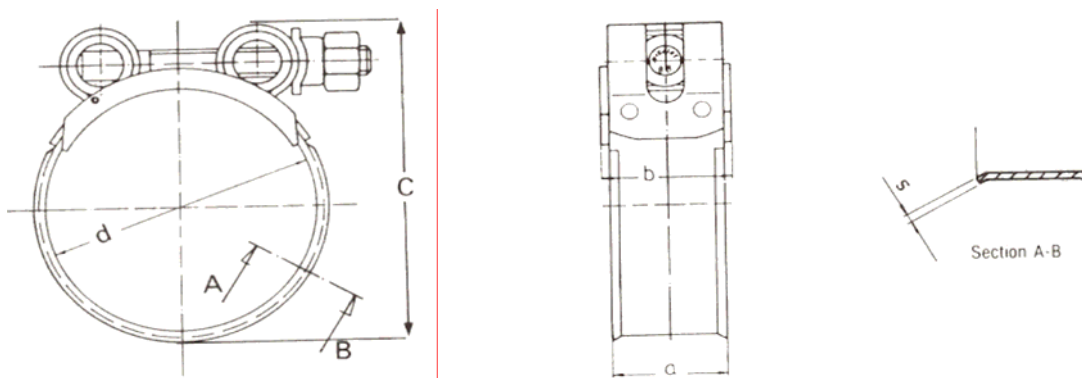
Material Specification

All parts - mild steel, bright zinc plated and passivated



Product Code	Size Range	c		a	s	b	Box Size
		Min	Max				
VF21/ 17	17 - 19	29	31	18	0.6	19.8	50
VF21/ 20	20 - 22	32	34	18	0.6	19.8	50
VF21/ 23	23 - 25	35	37	18	0.6	19.8	50
VF21/ 26	26 - 28	38	40	18	0.6	19.8	50
VF21/ 29	29 - 31	42	44	20	0.8	22	50
VF21/ 32	32 - 35	45	48	20	0.8	22	50
VF21/ 36	36 - 39	49	52	20	0.8	22	50
VF21/ 40	40 - 43	53	56	20	0.8	22	50
VF21/ 44	44 - 47	60	63	22	1.2	24.5	50
VF21/ 48	48 - 51	64	67	22	1.2	24.5	50
VF21/ 52	52 - 55	68	71	22	1.2	24.5	25
VF21/ 56	56 - 59	72	75	22	1.2	24.5	25
VF21/ 60	60 - 63	76	79	22	1.2	24.5	25
VF21/ 64	64 - 67	80	83	22	1.2	24.5	25
VF21/ 68	68 - 73	86	91	24	1.5	26.5	25
VF21/ 74	74 - 79	92	97	24	1.5	26.5	25
VF21/ 80	80 - 85	98	103	25	1.5	26.5	25
VF21/ 86	86 - 91	104	109	24	1.5	26.5	25
VF21/ 92	92 - 97	110	115	24	1.5	26.5	25
VF21/ 98	98 - 103	116	121	24	1.5	26.5	25
VF21/ 104	104 - 112	122	130	24	1.5	26.5	25
VF21/ 113	113 - 121	131	139	24	1.5	26.5	25
VF21/ 122	122 - 130	140	148	24	1.5	26.5	25
VF21/ 131	131 - 139	152	160	26	1.7	29	10
VF21/ 140	140 - 148	161	169	26	1.7	29	10
VF21/ 149	149 - 161	170	182	26	1.7	29	10
VF21/ 162	162 - 174	183	195	26	1.7	29	10
VF21/ 175	175 - 187	196	208	26	1.7	29	10
VF21/ 188	188 - 200	209	221	26	1.7	29	10
VF21/ 201	201 - 231	222	234	26	1.7	29	10
VF21/ 214	214 - 226	235	247	26	1.7	29	10
VF21/ 227	227 - 239	248	260	26	1.7	29	10
VF21/ 240	240 - 252	261	273	26	1.7	29	10

ALSO AVAILABLE IN STAINLESS STEEL - OUR CODE VF22

**STANDARD MATERIAL**

BAND : LOW CARBON STEEL CK 15 (DIN 1.1141)
 BOLT : ISO STRENGTH GRADE 8.8
 NUT : ISO STRENGTH GRADE 8
 FINISH : ZINC PLATE - GOLD PASSIATE

NEW MATERIAL

BAND : 18/8 STAINLESS STEEL
 BOLT : 18/8 STAINLESS STEEL
 NUT : 18/8 STAINLESS STEEL

Range of Adjustment		Recommended Tightening torque		Recommended Working pressure		Maximum Application torque		Maximum Working pressure	
from	to	Nm	lb/ft	Bar	psi	Nm	lb/ft	Bar	psi
17	28	3.5	2.58	34	493	4.5	3.32	45	653
29	43	6	4.42	30	435	8	5.9	40	580
44	55	12	8.85	35	508	16	11.8	45	653
56	67			29	421			38	551
68	85	19	14.01	22	319	25	18.44	28	406
86	103			16	232			20	290
104	130			10	145			12	174
131	161	37.5	27.66	7	101	50	36.88	9	131
162	200			5	73			6	87
201	252			2	36			3	43



Product Code	Size Clamping Range	Width
VC11/ 03141	3.10 - 4.10	3.5
VC11/ 03545	3.50 - 4.50	3.5
VC11/ 0305	3.00 - 5.00	5
VC11/ 0507	5.00 - 7.00	6
VC11/ 0709	7.00 - 9.00	7
VC11/ 0811	8.00 - 11.0	7
VC11/ 0911	9.00 - 11.0	7
VC11/ 1113	11.0 - 13.0	7
VC11/ 1315	13.0 - 15.0	7.5
VC11/ 1517	15.0 - 17.0	8
VC11/ 1518	15.0 - 18.0	8
VC11/ 1619	16.0 - 19.0	8
VC11/ 1720	17.0 - 20.0	9
VC11/ 1922	19.0 - 22.0	9
VC11/ 2023	20.0 - 23.0	10
VC11/ 2225	22.0 - 25.0	10
VC11/ 2327	23.0 - 27.0	10
VC11/ 2528	25.0 - 28.0	10
VC11/ 2731	27.0 - 31.0	10
VC11/ 2831	28.0 - 31.0	10
VC11/ 3134	31.0 - 34.0	10
VC11/ 3437	34.0 - 37.0	10
VC11/ 3740	37.0 - 40.0	10
VC11/ 4043	40.0 - 43.0	10
VC11/ 4346	43.0 - 46.0	10

APPLICATION - Hose fastening at low and medium pressure - Also suitable for metal to metal connectors.

MATERIAL - Zinc plated mild steel
Stainless Steel 18/9 or 18/10 available to order.

TIGHTENING PINCERS AVAILABLE

BRASS COUPLINGS

SECTION 2

	cat	sect	pge
Cap & Lining Female - 360 & 362.	2.	2.	1.
Plain Coupling Male - 360 & 362.	2.	2.	2
Blanking Dust Caps - 363.	2.	2.	2.
Double Male Nipple - Flat Seated - 365.	2.	2.	3.
Double Male Nipple - 60° Coned - 365.	2.	2.	3.
Cap & Lining - 90° Bend - 368.	2.	2.	4.
Hose to Fixed Male BSP Nut - 369.	2.	2.	4.
Nut & Flat Lining - 375.	2.	2.	5.
Nut & Coned Lining - 375.	2.	2.	5.
Oxy-Acetylene - 376.	2.	2.	6.
Oxy-Acetylene Anti-Blowback - 376.	2.	2.	6.
H. D. Nozzle - 403.	2.	2.	7.
Midget Nozzle - 404.	2.	2.	7.
Medium Weight Nozzle - 404.	2.	2.	7.
H. D. Agricultural Nozzle - 410.	2.	2.	8.
Hercules Claw Hose Repairers - 420.	2.	2.	8.
Ferrule Hose Joiners - 422.	2.	2.	8.

CAP & LINING (FEMALE)

TYPE 360 & TYPE 362

2-2-1

Product Code	Hose Bore Inches	Thread Size
WE12B 1212	1/2	1/2
WE12B 1212S	1/2	1/2
WE12B 1216S	1/2	5/8
WE12B 1616S	5/8	5/8
WE12B 1219S	1/2	3/4
WE12B 1619	5/8	3/4
WE12B 1919	3/4	3/4
WE12B 1222	1/2	7/8
WE12B 1922	3/4	7/8
WE12B 1225	1/2	1
WE12B 1925	3/4	1
WE12B 2525	1	1

Material : Brass

* Type 360

*

*

*



* SPIGOT LINING

THE FOLLOWING CAP & LININGS HAVE LUG TYPE MALES

Product Code	Hose Bore Inches	Thread Size
WE12 1232	1/2	1.1/4
WE12 1932	3/4	1.1/4
WE12 2532	1	1.1/4
WE12 3232	1.1/4	1.1/4
WE12 2538	1	1.1/2
WE12 3238	1.1/4	1.1/2
WE12 3838	1.1/2	1.1/2
WE12 5151	2	2
WE12 6363	2.1/2	2.1/2
WE12 7676	3	3
WE12 102102	4	4
WE12 152152	6	6

Type 362



2-2-2

PLAIN COUPLING MALE TYPE 360 & TYPE 362

Material: Brass
Type 360



Product Code	Hose Bore Inches	Thread Size
WE11 1212	1/2	1/2
WE11 1216	1/2	5/8
WE11 1616	5/8	5/8
WE11 1219	1/2	3/4
WE11 1919	3/4	3/4
WE11 1925	3/4	1
WE11 2525	1	1

Type 362



Product Code	Hose Bore Inches	Thread Size
WE11 3232	1.1/4	1.1/4
WE11 3838	1.1/2	1.1/2
WE11 5151	2	2
WE11 6363	2.1/2	2.1/2
WE11 7676	3	3
WE11 102102	4	4
WE11 152152	6	6

BLANKING DUST CAPS WITHOUT KNOBS OR CHAINS TYPE 363

Material : Brass



Product Code		Thread Size
WE14 12	N/A	1/2
WE14 19	N/A	3/4
WE14 25	N/A	1
WE14 32	N/A	1.1/4
WE14 38	N/A	1.1/2
WE14 51	N/A	2
WE14 63	N/A	2.1/2
WE14 76	N/A	3
WE14 102	N/A	4

KNOBS TO FIT 1 - 1.1/4

CHAINS TO SUIT ABOVE

DOUBLE MALE NIPPLE - FLAT SEATED PARALLEL OR TAPERED THREAD - TYPE 365

2-2-3

Product Code	Hose Bore Inches	Thread Size
WF41 0303	1/8	1/8
WF41 0306	1/8	1/4
WF41 0606	1/4	1/4
WF41 1006	3/8	1/4
WF41 1010	3/8	3/8
WF41 0612	1/4	1/2
WF41 1012	3/8	1/2
WF41 1212	1/2	1/2
WF41 1219	1/2	3/4
WF41 1919	3/4	3/4
WF41 1225	1/2	1
WF41 1925	3/4	1
WF41 2525	1	1
WF41 3232	1.1/4	1.1/4
WF41 3838	1.1/2	1.1/2
WF41 5151	2	2
WF41 6363	2.1/2	2.1/2
WF41 7676	3	3
WF41 102102	4	4

Material : Brass



DOUBLE MALE NIPPLE - 60° CONED TYPE 365

Product Code	Hose Bore Inches	Thread Size
WF14 0303	1/8	1/8
WF14 0306	1/8	1/4
WF14 0606	1/4	1/4
WF14 1006	3/8	1/4
WF14 1010	3/8	3/8
WF14 0612	1/4	1/2
WF14 1012	3/8	1/2
WF14 1212	1/2	1/2
WF14 1219	1/2	3/4
WF14 1919	3/4	3/4
WF14 1925	3/4	1
WF14 2525	1	1
WF14 3232	1.1/4	1.1/4
WF14 3838	1.1/2	1.1/2
WF14 5151	2	3/4

Material : Brass



2-2-4

CAP & LINING 90° BEND
HOSE TO FEMALE (TYPE 368)

Material : Brass



Product Code	Hose Bore Inches	Thread Size
WE13 1212	1/2	1/2
WE13 1919	3/4	3/4
WE13 1219	1/2	3/4

HOSE TO FIXED MALE BSP NUT -
PARALLEL OR TAPERED THREAD

TYPE 369

Material : Brass



Product Code	Hose Bore Inches	Thread Size
WB11 0303	1/8	1/8
WB11 0603	1/4	1/8
WB11 1003	3/8	1/8
WB11 0306	1/8	1/4
WB11 0506	3/16	1/4
WB11 0606	1/4	1/4
WB11 0806	5/16	1/4
WB11 1006	3/8	1/4
WB11 1206	1/2	1/4
WB11 0610	1/4	3/8
WB11 1010	3/8	3/8
WB11 0810	5/16	3/8
WB11 1210	1/2	3/8
WB11 0612	1/4	1/2
WB11 1012	3/8	1/2
WB11 1212	1/2	1/2
WB11 1612	5/8	1/2
WB11 1912	3/4	1/2
WB11 2512	1	1/2
WB11 1019	3/8	3/4
WB11 1219	1/2	3/4
WB11 1919	3/4	3/4
WB11 2519	1	3/4
WB11 1925	3/4	1
WB11 2525	1	1
WB11 3225	1.1/4	1
WB11 2532	1	1.1/4
WB11 3232	1.1/4	1.1/4
WB11 3838	1.1/2	1.1/2
WB11 5151	2	2

NUT & FLAT LINING BRASS

TYPE 375

2-2-5

Product Code	Hose Bore Inches	Thread Size
WB13 0606	1/4	1/4
WB13 0808	5/16	1/4
WB13 0610	1/4	3/8
WB13 1010	3/8	3/8
WB13 1012	3/8	1/2
WB13 1212	1/2	1/2
WB13 1919	3/4	3/4
WB13 2525	1	1
WB13 3232	1.1/4	1.1/4
WB13 3838	1.1/2	1.1/2
WB13 5151	2	2

Material : Brass



NUT & CONED LINING

TYPE 375

Product Code	Hose Bore Inches	Thread Size
WB14 0606	1/4	1/4
WB14 0806	5/16	1/4
WB14 0610	1/4	3/8
WB14 0810	5/16	3/8
WB14 1010	3/8	3/8
WB14 1212	1/2	1/2
WB14 1012	3/8	1/2
WB14 1919	3/4	3/4
WB14 2525	1	1
WB14 3232	1.1/4	1.1/4
WB14 3838	1.1/2	1.1/2
WB14 5151	2	2

Material : Brass



2-2-6

OXY ACETYLENE COUPLINGS

TYPE 376

Material : Brass



Product Code	Hose Bore Inches	Thread Size
WA11/12 0606	1/4	1/4
WA11/12 0610	1/4	3/8
WA11/12 0810	5/16	3/8
WA11/12 1010	3/8	3/8

LEFT or RIGHT HAND THREAD

OXY - ACETYLENE COUPLINGS ANTI-BLOWBACK

TYPE 376

Material : Brass



Product Code	Hose Bore Inches	Thread Size
WA21/22 0606	1/4	1/4
WA21/22 0610	1/4	3/8
WA21/22 1010	3/8	3/8
WA21/22 0810	5/16	3/8

LEFT or RIGHT HAND THREAD

HEAVY DUTY NOZZLE, JET SPRAY & SHUT OFF WITH REMOVABLE HOSE UNION TYPE 403

2-2-7

Product Code	Hose Size Inches
WI12 12	1/2
WI12 16	5/8
WI12 19	3/4
WI12 25	1

Material : Brass



MIDGET NOZZLE JET, SPRAY & SHUT OFF TYPE 400

Product Code	Hose Size Inches
WI10 12	1/4

Material : Brass



MEDIUM WEIGHT NOZZLE, JET, SPRAY & SHUT OFF TYPE 404

Product Code	Hose Size Inches
WI11 12	1/2
WI11 19	3/4

Material : Brass



2-2-8 HEAVY DUTY AGRICULTURAL NOZZLES - JET ONLY

TYPE 410

Material : Brass



Product Code	Hose Size Inches
WI13 12	1/2
WI13 19	3/4
WI13 25	1
WI13 32	1.1/4
WI13 38	1.1/2
WI13 51	2

HERCULES CLAW KNOCKDOWN HIGH PRESSURE HOSE REPAIRERS

TYPE 420

Material : Brass



Product Code	Hose Size Inches
WF20 10	3/8
WF20 12	1/2
WF20 16	5/8
WF20 19	3/4
WF20 25	1

FERRULE HOSE JOINERS

TYPE 422

Material : Brass



Product Code	Hose Size Inches
WF11 06	1/4
WF11 10	3/8
WF11 12	1/2
WF11 19	3/4
WF11 25	1

STAINLESS STEEL COUPLINGS

SECTION 3

		cat	sect	pge
Nut & Lining Female - 374.		2.	3.	1
Hose to Fixed Male - 389.		2.	3.	1
Double Male Nipple - 395.		2.	3.	1

NUT & LINING FEMALE

2-3-1

TYPE 374

Product Code	Hose Bore Inches	Thread Size
WB34 1212	1/2	1/2
WB34 1919	3/4	3/4
WB34 2525	1	1
WB34 3838	1.1/2	1.1/2
WB34 5151	2	2

Material : Stainless Steel



HOSE TO FIXED MALE CONNECTOR

PARALLEL OR TAPERED THREAD - TYPE 389

Product Code	Hose Bore Inches	Thread Size
WB22 1210	1/2	3/8
WB22 1012	3/8	1/2
WB22 1212	1/2	1/2
WB22 1919	3/4	3/4
WB22 1925	3/4	1
WB22 2525	1	1
WB22 3838	1.1/2	1.1/2
WB22 5151	2	2

Material : Stainless Steel



DOUBLE MALE NIPPLE - FLAT SEATED

TYPE 395

Product Code	Hose Bore Inches	Thread Size
WF45 1212	1/2	1/2
WF45 1919	3/4	3/4
WF45 2525	1	1
WF45 3838	1.1/2	1.1/2
WF45 5151	2	2

Material : Stainless Steel



STEEL COUPLINGS

SECTION 4

	cat	sect	pge
Strainers - 328	2.	4.	1
Pneumatic Flat Seated Nipple - 366.	2.	4.	1
H. P. Swivel Claw Type Nut & Lining - 377.	2.	4.	2
H. P. Plain Nut & Lining - 378.	2.	4.	2
Hose Tail - Plain Nut & Coned Lining - 378.	2.	4.	2
Hose Tail to Fixed Male BSP - 379.	2.	4.	3
Finger Type Interlocking Safety Clamps.	2.	4.	3
Claw Clamps - 381.	2.	4.	4
Plain Clamps - 382.	2.	4.	4
Ferrule Hose Joiners - 422.	2.	4.	4
Quicklock Couplings (Macdonald Type).	2.	4.	5
Cap & Lining Female - 426.	2.	4.	6
BSP Male with Lugs - 426.	2.	4.	6
Foot Valve & Strainers with Female BSP - 428.	2.	4.	7
Foot Valves & Strainers with Hose Spigot - 428.	2.	4.	7
Double Lock Quick Release Claw Couplings - 523.	2.	4.	8
Double Lock Quick Release Claw Couplings - 524.	2.	4.	8
Double Lock Quick Release Claw Couplings - 525.	2.	4.	8

STRAINERS

2-4-1

TYPE 328

Product Code	Hose Size Inches
WH10 25	1
WH10 32	1.1/4
WH10 38	1.1/2
WH10 51	2
WH10 76	3
WH10 102	4
WH10 152	6

Material : Galvanised Steel



PNEUMATIC FLAT SEATED NIPPLE

TYPE 366

Product Code	Hose Bore Inches	Thread Size
WF44 0606	1/4	1/4
WF44 1006	3/8	1/4
WF44 1010	3/8	3/8
WF44 0612	1/4	1/2
WF44 1012	3/8	1/2
WF44 1212	1/2	1/2
WF44 1219	1/2	3/4
WF44 1919	3/4	3/4
WF44 1925	3/4	1
WF44 2525	1	1
WF44 3232	1.1/4	1.1/4
WF44 3838	1.1/2	1.1/2
WF44 5151	2	2

Material : Zinc Plated Steel



2-4-2 HIGH PRESSURE SWIVEL CLAW TYPE NUT (CAPTIVE) PLUS LINING COMPLETE TYPE 377

Material :Zinc Plated Steel

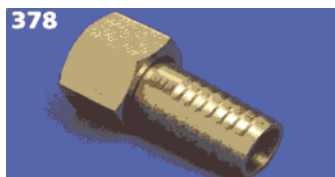


Product Code	Hose Bore Inches	Thread Size
WB31 1212	1/2	1/2
WB31 1919	3/4	3/4
WB31 2525	1	1
WB31 3838	1.1/2	1.1/2
WB31 5151	2	2

(USE TYPE 381 CLAW CLAMPS)

HIGH PRESSURE PLAIN NUT & FLAT LINING TYPE 378

Material : Zinc Plated Steel

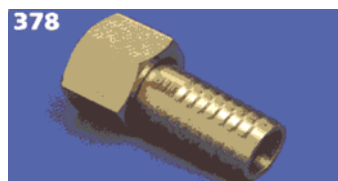


Product Code	Hose Bore Inches	Thread Size
WB32 1212	1/2	1/2
WB32 1919	3/4	3/4
WB32 2525	1	1
WB32 3232	1.1/4	1.1/4
WB32 3838	1.1/2	1.1/2
WB32 5151	2	2

(USE TYPE 382 PLAIN CLAMPS)

HOSE TAIL - PLAIN NUT & CONED LINING TYPE 378

Material :Zinc Plated Steel



Product Code	Hose Bore Inches	Thread Size
WB33 1212	1/2	1/2
WB33 1919	3/4	3/4
WB33 2525	1	1
WB33 3232	1.1/4	1.1/4

HOSE TAIL TO FIXED MALE BSP TYPE 379

2-4-3

Product Code	Hose Bore Inches	Thread Size
WB21 1212	1/2	1/2
WB21 1919	3/4	3/4
WB21 1919T	3/4	3/4
WB21 2525T	1	1
WB21 2525	1	1

Material : Zinc Plated Steel

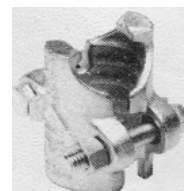


* TAPERED THREAD

FINGER TYPE INTERLOCKING SAFETY CLAMPS HIGH PRESSURE SERIES

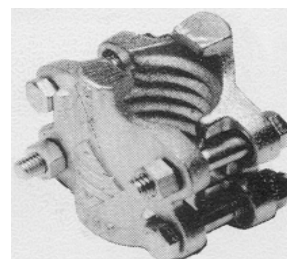
Product Code	Hose Size O.D. MM
WE10 2125	21 - 25
WE10 2529	25 - 29
WE10 2931	29 - 31
WE10 3134	31 - 34
WE10 3437	34 - 37
WE10 3740	37 - 40
WE10 3942	39 - 42
WE10 4245	42 - 45
WE10 4852	48 - 52*
WE10 4852L	48 - 52**
WE10 5156	51 - 56
WE10 5257	56 - 57

Material : Zinc plated
Malleable Iron



* To fit 1" fittings.

** to fit 1.1/4" fittings.



2-4-4**CLAW CLAMPS FOR TYPE 377 FITTINGS****TYPE 381**

Material :Zinc Plated
Malleable Iron



Product Code	Hose Bore Inches	Hose O.D. MM
WC12 122127	1/2	21 - 27
WC12 192832	3/4	28 - 32
WC12 253542	1	35 - 42
WC12 384553	1.1/2	45 - 53
WC12 515560	2	55 - 60
WC12 516073	2	60 - 73

PLAIN CLAMPS FOR TYPE 378 & 525**QUICK RELEASE COUPLINGS****TYPE 382**

Material :Zinc plated
Malleable Iron



Product Code	Hose Bore Ins	Size O.D. MM
WC11 121722	1/2	17 - 22
WC11 122229	1/2	22 - 29
WC11 192732	3/4	27 - 32
WC11 192934	3/4	29 - 34
WC11 253337	1	33 - 37
WC11 253440	1	34 - 40
WC11 323949	1.1/4	39 - 49
WC11 384860	1.1/2	48 - 60
WC11 515672	2	56 - 72
WC11 516076	2	60 - 76
WC11 637794	2.1/2	77 - 94
WC11 7694115	3	94 - 115

FERRULE HOSE JOINER**TYPE 422**

Material : Steel



Product Code	Hose Size Inches
WF12 12	1/2
WF12 19	3/4
WF12 25	1

"QUICKLOCK" POSITIVE LOCKING QUICK ACTION COUPLINGS - (MACDONALD TYPE) 2-4-5

Size		HM	IM	OM	HF	IF	OF
INS	MM						
3/8	10	HM037	IM037	OM037	HF037	IF037	OF037
1/2	13	HM050	IM050	OM050	HF050	IF050	OF050
3/4	19	HM075	IM075	OM075	HF075	IF075	OF075
1	25	HM100	IM100	OM100	HF100	IF100	OF100

Material : Steel as standard,
Brass and stainless
steel to order.

Working Pressure : Hose Ends - 250 PSI (17.6 bars)
Thread Ends - 1000 PSI (14.2 bars)

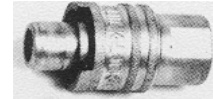
Threads : BSP - Standard
NPT - to order.

Clamps : Use High Pressure Finger Type
Interlocking Safety Clamps.

Male Hose End (HM)



Male Inside Thread (IM)



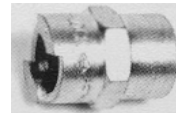
Male Outside Thread (OM)



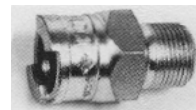
Female Hose End (HF)



Female Inside Thread (IF)



Female Outside Thread (OF)



2-4-6

CAP AND LINING FEMALE

TYPE 426

Material : Zinc Plated
Malleable Iron



Product Code	Hose Bore Inches	Thread Size
WE30 3838	1.1/2	1.1/2
WE30 5151	2	2
WE30 6363	2.1/2	2.1/2
WE30 7676	3	3
WE30 102102	4	4

BSP MALE WITH LUGS

TYPE 426

Material :Zinc Plated
Malleable Iron



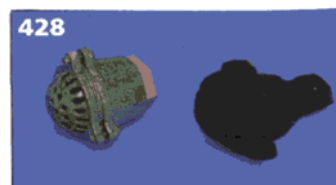
Product Code	Hose Bore Inches	Thread Size
WE31 3838	1.1/2	1.1/2
WE31 5151	2	2
WE31 6363	2.1/2	2.1/2
WE31 7676	3	3
WE31 102102	4	4

FOOT VALVE & STRAINER WITH FEMALE BSP THREAD 2-4-7

TYPE 428

Product Code	Hose Size Inches
WH12 38	1.1/2
WH12 51	2
WH12 76	3
WH12 102	4
WH12 152	6

Material : Steel

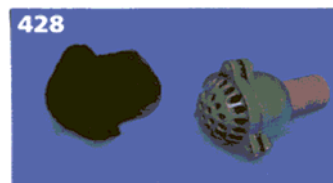


FOOT VALVES & STRAINERS WITH HOSE SPIGOT

TYPE 428

Product Code	Size Inches
WH13 38	1.1/2
WH13 51	2
WH13 76	3
WH13 102	4
WH13 152	6

Material : Steel



2-4-8 DOUBLE LOCK UNIVERSAL QUICK RELEASE CLAW COUPLINGS TO BSP MALE TYPE 523

Material : Zinc Plated
Malleable Iron



Product Code	Hose Bore Inches	Thread Size
WD12 10	N/A	3/8
WD12 12	N/A	1/2
WD12 19	N/A	3/4
WD12 25	N/A	1

DOUBLE LOCK UNIVERSAL QUICK RELEASE CLAW COUPLINGS TO BSP FEMALE TYPE 524

Material : Zinc Plated
Malleable Iron



Product Code	Hose Bore Inches	Thread Size
WD13 10	N/A	3/8
WD13 12	N/A	1/2
WD13 19	N/A	3/4
WD13 25	N/A	1

DOUBLE LOCK UNIVERSAL QUICK RELEASE CLAW COUPLINGS HOSE SPIGOT TYPE 525

Material : Zinc Plated
Malleable Iron



Product Code	Hose Bore Inches	Thread Size
WD11 10	3/8	N/A
WD11 12	1/2	N/A
WD11 19	3/4	N/A
WD11 25	1	N/A
WD11 SW	Spare Washers (Universal)	
WD11 BP	Blank Plugs (Universal)	

ALUMINIUM COUPLINGS

SECTION 5

	cat	sect	pge
Blanking Dust Caps - 364.	2.	5.	1
Ferrule Hose Joiners - 422.	2.	5.	1
Cap & Linings - 430.	2.	5.	1
BSP Male with Lugs - 430.	2.	5.	2
Cap & Lining URT Thread - 431.	2.	5.	2
Male URT Thread - 431.	2.	5.	2

BLANKING DUST CAPS BSP or URT THREAD

2-5-1

TYPE 364

Product Code	Thread Size
WE15 25	1 BSP
WE15 51	2 BSP
WE15 63	2.1/2 BSP
WE15 76	3 BSP
WE15 102	4 BSP
WE15 76U	3" URT
WE15 102U	4" URT

Material : Aluminium



CHAINS TO SUIT ABOVE

FERRULE HOSE JOINERS

TYPE 422

Product Code	Size Inches
WF13 32	1.1/4
WF13 38	1.1/2
WF13 51	2
WF13 63	2.1/2
WF13 76	3
WF13 102	4

Material : Aluminium



CAP & LINING

TYPE 430

Product Code	Hose Bore Inches	Thread Size
WE20 3838	1.1/2	1.1/2
WE20 5151	2	2
WE20 6363	2.1/2	2.1/2
WE20 7676	3	3
WE20 102102	4	4
WE20 152152	6	6

Material : Aluminium



2-5-2

BSP MALE WITH LUGS

TYPE 430

Material : Aluminium



Product Code	Hose Bore Inches	Thread Size
WE21 3838	1.1/2	1.1/2
WE21 5151	2	2
WE21 6363	2.1/2	2.1/2
WE21 7676	3	3
WE21 102102	4	4
WE21 152152	6	6

CAP & LINING URT THREAD

TYPE 431

Material : Aluminium



Product Code	Hose Bore Inches	Thread Size
WE22 7676	3	3
WE22 102102	4	4

MALE URT THREAD

TYPE 431

Material : Aluminium



Product Code	Hose Bore Inches	Thread Size
WE23 7676	3	3
WE23 102102	4	4

PLASTIC COUPLINGS

SECTION 6

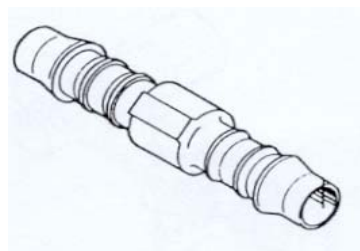
	cat	sect	pge
Push On Connectors Straight - GS.	2.	6.	1
Push On Connectors Reducing Straight - GRS.	2.	6.	1
Push On 90° Elbows - WS.	2.	6.	2
Push On Equal Ended "T" Connectors -TS.	2.	6.	2
Push On "T" Reducing Connectors - TRS.	2.	6.	3
Push On "Y" Connectors - YS.	2.	6.	3
Push On "Y" Reducing Connectors - YRS.	2.	6.	4
Push On Cross Connectors - KS.	2.	6.	4
Straight - BSP Thread Connectors - GES.	2.	6.	4
90° Elbow - BSP Thread Connectors -WES.	2.	6.	5
Push On Threaded "T" Connectors - TES.	2.	6.	5
Cap & Lining Female URT Thread - 433.	2.	6.	5
Male URT Thread - 433.	2.	6.	6
Cap & Lining BSP Thread Female - 435.	2.	6.	6
BSP Male with Lugs - 435.	2.	6.	6

PLASTIC "PUSH ON" CONNECTORS STRAIGHT SOCKETS 2-6-1

TYPE GS

Product Code	Hose Bore Inches	Thread Size
WN20 03	3	N/A
WN20 04	4	N/A
WN20 05	5	N/A
WN20 06	6	N/A
WN20 08	8	N/A
WN20 10	10	N/A
WN20 12	12	N/A
WN20 13	13	N/A
WN20 14	14	N/A
WN20 16	16	N/A
WN20 19	19	N/A
WN20 25	25	N/A

Material : Acetyl

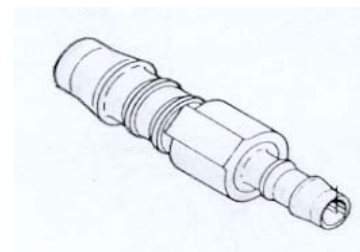


PLASTIC "PUSH ON" CONNECTORS HOSE - HOSE REDUCING STRAIGHT SOCKETS

TYPE GRS

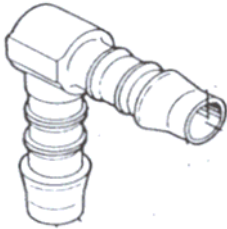
Product Code	Hose Bore MM	Hose Bore MM
WN21 0403	4	3
WN21 0604	6	4
WN21 0804	8	4
WN21 0806	8	6
WN21 1006	10	6
WN21 1008	10	8
WN21 1208	12	8
WN21 1210	12	10

Material : Acetyl



2-6-2 PLASTIC "PUSH ON" 90° ELBOW CONNECTORS

TYPE WS

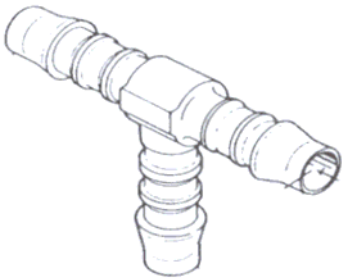


Material : Acetyl

Product Code	Hose Bore MM	Thread Size
WN24 03	3	N/A
WN24 04	4	N/A
WN24 05	5	N/A
WN24 06	6	N/A
WN24 08	8	N/A
WN24 10	10	N/A
WN24 12	12	N/A
WN24 13	13	N/A
WN24 14	14	N/A
WN24 15	15	N/A
WN24 16	16	N/A
WN24 19	19	N/A
WN24 25	25	N/A

PLASTIC EQUAL ENDED "PUSH ON" T CONNECTORS

TYPE TS



Material : Acetyl

Product Code	Hose Bore MM	Thread Size
WN27 03	3	N/A
WN27 04	4	N/A
WN27 05	5	N/A
WN27 06	6	N/A
WN27 08	8	N/A
WN27 10	10	N/A
WN27 12	12	N/A
WN27 13	13	N/A
WN27 14	14	N/A
WN27 15	15	N/A
WN27 16	16	N/A
WN27 19	19	N/A
WN27 25	25	N/A

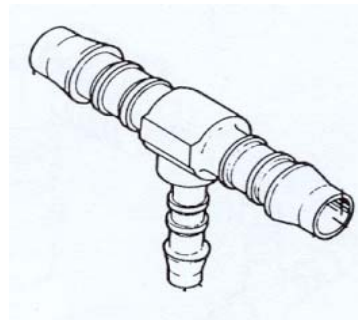
PLASTIC "T" PUSH ON REDUCING CONNECTORS

2-6-3

TYPE TRS

Product Code	HOSE BORE IN MM'S		
	A	B	C
WN28 030403	3	4	3
WN28 040604	4	6	4
WN28 060406	6	4	6
WN28 080408	8	4	8
WN28 080508	8	6	8
WN28 081208	8	12	8
WN28 100610	10	6	10
WN28 100810	10	8	10
WN28 101310	10	13	10
WN28 120612	12	6	12
WN28 120812	12	8	12
WN28 121012	12	10	12
WN28 150615	15	6	15
WN28 150815	15	8	15
WN28 181018	18	10	18
WN28 181518	18	15	18

Material : Acetyl

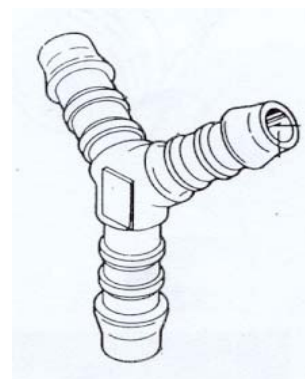


PLASTIC "Y" CONNECTORS

TYPE YS

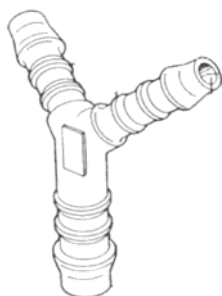
Product Code	Hose Bore MM	Thread Size
WN29 03	3	N/A
WN29 04	4	N/A
WN29 05	5	N/A
WN29 06	6	N/A
WN29 08	8	N/A
WN29 10	10	N/A
WN29 12	12	N/A
WN29 13	13	N/A
WN29 14	14	N/A
WN29 16	16	N/A
WN29 19	19	N/A

Material : Acetyl



2-6-4 PLASTIC "Y" PUSH ON REDUCING CONNECTORS

TYPE YRS

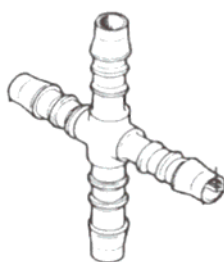


Material : Acetyl

Product Code	HOSE BORE IN MM'S		
	A	B	C
WN30 040604	4	6	4
WN30 060406	6	4	6

PLASTIC "PUSH ON" CROSS HOSE CONNECTORS

TYPE KS

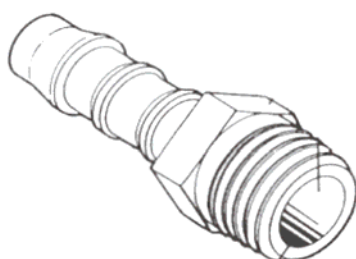


Material : Acetyl

Product Code	Hose Bore MM	Thread Size
WN26 04	4	N/A
WN26 05	5	N/A
WN26 06	6	N/A
WN26 12	12	N/A

PLASTIC HOSE CONNECTOR STRAIGHT - BSP THREAD

TYPE GES



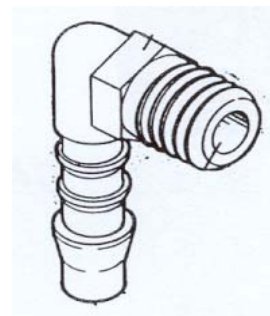
Material : Polyamide

Product Code	Hose Bore MM	Thread Size Ins
WN22 0506	5	1/4
WN22 0603	6	1/8
WN22 0606	6	1/4
WN22 0610	6	3/8
WN22 0803	8	1/8
WN22 0806	8	1/4
WN22 0810	8	3/8
WN22 0812	8	1/2
WN22 1006	10	1/4
WN22 1010	10	3/8
WN22 1210	12	3/8
WN22 1212	12	1/2
WN22 1612	16	1/2
WN22 1619	16	3/4
WN22 1919	19	3/4
WN22 2525	25	1

PLASTIC 90° ELBOW CONNECTORS HOSE - BSP THREAD 2-6-5 TYPE WES

Product Code	Hose Bore MM	Thread Size
WN25 0603	6	1/8
WN25 0606	6	1/4
WN25 0610	6	3/8
WN25 0803	8	1/8
WN25 0806	8	1/4
WN25 0810	8	3/8
WN25 0812	8	1/2
WN25 1006	10	1/4
WN25 1010	10	3/8
WN25 1210	12	3/8
WN25 1212	12	1/2
WN25 1919	19	3/4
WN25 2525	25	1

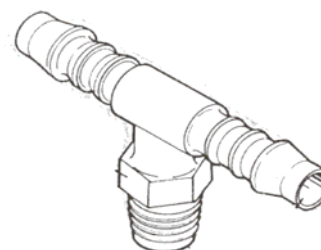
Material : Polyamide



PLASTIC "PUSH ON" THREADED "T" CONNECTORS TYPE TES

Product Code	Hose Bore MM	Thread Size Ins
WN23 0603	6	1/8
WN23 0606	6	1/4
WN23 0806	8	1/4
WN23 1010	10	3/8

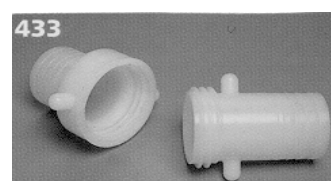
Material : Polyamide



CAP & LINING FEMALE URT THREAD TYPE 433

Product Code	Hose Bore Ins	Thread Size
WE42 7676	3	3
WE42 102102	4	4

Material : Polyamide

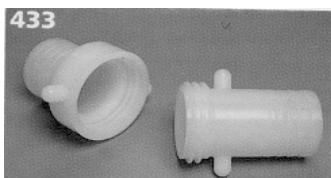


2-6-6

MALE URT THREAD

TYPE 433

Material : Polypropylene

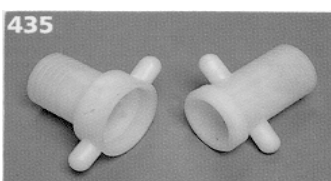


Product Code	Hose Bore Ins	Thread Size Ins
WE43 7676	3	3
WE43 102102	4	4

CAP & LINING BSP THREAD FEMALE

TYPE 435

Material : Polypropylene

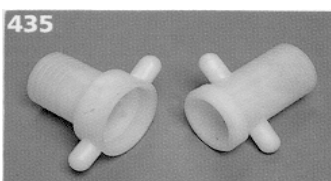


Product Code	Hose Bore Ins	Thread Size
WE40 3838	1.1/2	1.1/2
WE40 5151	2	2
WE40 6363	2.1/2	2.1/2
WE40 7676	3	3
WE40 102102	4	4

BSP MALE WITH LUGS

TYPE 435

Material : Polypropylene



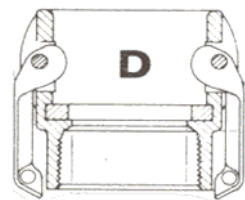
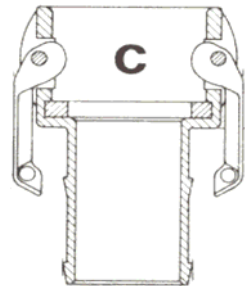
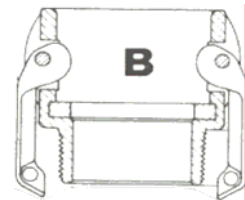
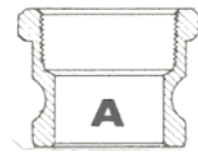
Product Code	Hose Bore Ins	Thread Size Ins
WE41 3838	1.1/2	1.1/2
WE41 5151	2	2
WE41 6363	2.1/2	2.1/2
WE41 7676	3	3
WE41 102102	4	4

MISCELLANEOUS

SECTION 7

	cat	sect	pge
Snaplock Cam Action Quick Couplings.	2.	7.	1
Snaplock Cam Action Quick Couplings.	2.	7.	2
Bauer Hose Connections.	2.	7.	3
Bauer Hose Connections.	2.	7.	4
Bauer Hose Connections.	2.	7.	5
Rijac Nozzle.	2.	7.	6
Trigger Nozzles.	2.	7.	6

Product code	Size		Part A	Part B	Part C	Part D
	INS	MM				
WJ2 13	1/2	13	A - 50	B - 50	C - 50	D - 50
WJ2 19	3/4	19	A - 75	B - 75	C - 75	D - 75
WJ2 25	1	25	A - 100	B - 100	C - 100	D - 100
WJ2 30	1.1/4	30	A - 125	B - 125	C - 125	D - 125
WJ2 40	1.1/2	40	A - 150	B - 150	C - 150	D - 150
WJ2 50	2	50	A - 200	B - 200	C - 200	D - 200
WJ2 65	2.1/2	65	A - 250	B - 250	C - 250	D - 250
WJ2 75	3	75	A - 300	B - 300	C - 300	D - 300
WJ2 100	4	100	A - 400	B - 400	C - 400	D - 400
WJ2 125	5	125	A - 500	B - 500	C - 500	D - 500
WJ2 150	6	150	A - 600	B - 600	C - 600	D - 600
WJ2 200	8	200	A - 800	B - 800	C - 800	D - 800



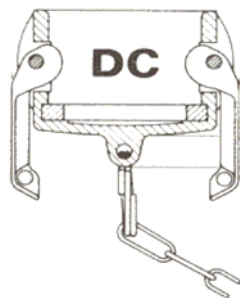
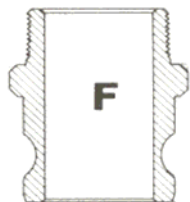
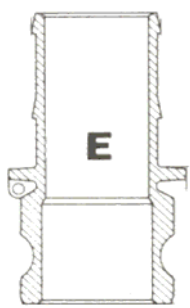
Materials Available:

Aluminium
Stainless Steel
Bronze/Gunmetal
Polypropylene
Nyglass

Thread Types:

BSP
NPT

2-7-2 SNAPLOCK CAM ACTION QUICK COUPLINGS



Product code	Size INS MM	Part E	Part F	Part DC	Part DP
WJ2 13	1/2 13	E - 50	F - 50	DC - 50	DP - 50
WJ2 19	3/4 19	E - 75	F - 75	DC - 75	DP - 75
WJ2 25	1 25	E - 100	F - 100	DC - 100	DP - 100
WJ2 30	1.1/4 30	E - 125	F - 125	DC - 125	DP - 125
WJ2 40	1.1/2 40	E - 150	F - 150	DC - 150	DP - 150
WJ2 50	2 50	E - 200	F - 200	DC - 200	DP - 200
WJ2 65	2.1/2 65	E - 250	F - 250	DC - 250	DP - 250
WJ2 75	3 75	E - 300	F - 300	DC - 300	DP - 300
WJ2 100	4 100	E - 400	F - 400	DC - 400	DP - 400
WJ2 125	5 125	E - 500	F - 500	DC - 500	DP - 500
WJ2 150	6 150	E - 600	F - 600	DC - 600	DP - 600
WJ2 200	8 200	E - 800	F - 800	DC - 800	DP - 800

Gasket Types :

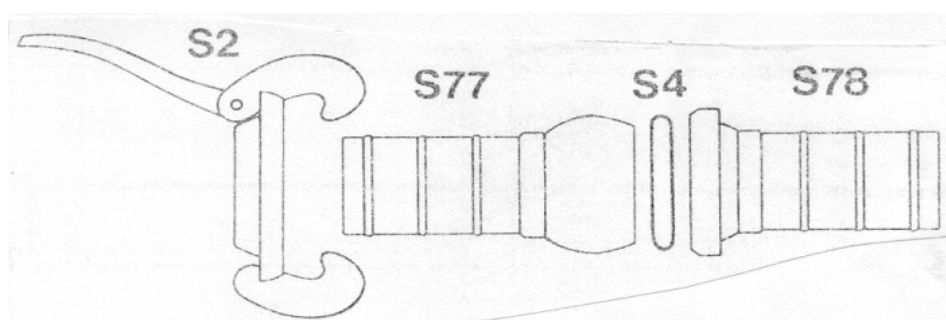
- Buna N (Fitted as standard)
- Viton
- Teflon with Buna Filler
- Teflon with Viton Filler
- Butyl
- EPDM
- Neoprene
- Silicone
- Hypalon

BAUER HOSE CONNECTIONS

2-7-3

Product code	Size		S2 Lever Closure Ring	S77 Hose Connection Male	S4 Rubber Seal	S78 Hose Connection Female
	INS	MM				
WJ1 50	2	50	S2/ 50	S77/ 50/S	S4/ 50	S78/ 50/S
WJ1 76	3	76	S2/ 76	S77/ 76/S	S4/ 76	S78/ 76/S
WJ1 89	3.1/2	89	S2/ 89	S77/ 89-76/S	S4/ 89	S78/ 89-76/S
WJ1 108	4	108	S2/ 108	S77/ 108/S	S4/ 108	S78/ 108/S
WJ1 133	5	133	S2/ 133N	S77/ 133N/S	S4/ 133N	S78/ 133N/S
WJ1 159	6	159	S2/ 159	S77/ 159/S	S4/ 159	S78/ 159/S
WJ1 194	8	194	S2/ 194	S77/ 194/S	S4/ 194	S78/ 194/S

Material: Hot dipped
Galvanised Steel



Complete set Comprises: S77 Hose Connector Male
S2 Lever Closure Ring
S78 Hose Connector Female
S4 Natural Rubber Seal Ring

Suitable for

All heavy duty suction hose - 2" to 8" n.b.(Wire reinforced rubber & PVC)
All delivery hose -
Rubber/PVC/Reinforced types/lay-flat and Poly-tube delivery pipe.
High working pressures
2"/3"/3"-3.1/2" - Maximum Recommended Working Pressure 20bar
Test Pressure 30bar
4"/5"/6"/8" - Maximum Recommended Working Pressure 12bar
Test Pressure 18bar

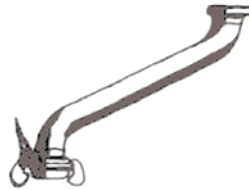
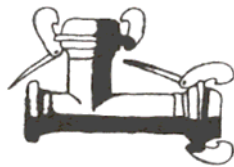


Product code	Size		S70 Flange Connector Male	S73 Flange Connector Female	S7 End Plug Male	S8 End Plug Female
	INS	MM				
WJ1 50	2	50	S70/ 50	S73/ 50	S7/ 50	S8/ 50
WJ1 76	3	76	S70/ 76	S73/ 76	S7/ 76	S8/ 76
WJ1 89	3.1/2	89	S70/ 89	S73/ 89	S7/ 89	S8/ 89
WJ1 108	4	108	S70/ 108	S73/ 108	S7/ 108	S8/ 108
WJ1 133	5	133	S70/ 133	S73/ 133	S7/ 133	S8/ 133
WJ1 159	6	159	S70/ 159	S73/ 159	S7/ 159	S8/ 159
WJ1 194	8	194	S70/ 194	S73/ 194	S7/ 194	S8/ 194

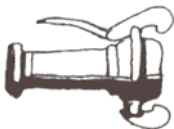


Product code	Size		S74 Male Coupling to Male BSP	S75 Female Coupling to Female BSP	S11 90° Bend	S27 Inlet Tee
	INS	MM				
WJ1 50	2	50	S74/ 50	S75/ 50	S11/ 50	S27/ 50
WJ1 76	3	76	S74/ 76	S75/ 76	S11/ 76	S27/ 76
WJ1 89	3.1/2	89	S74/ 89	S75/ 89	S11/ 89	S27/ 89
WJ1 108	4	108	S74/ 108	S75/ 108	S11/ 108	S27/ 108
WJ1 133	5	133	S74/ 133	S75/ 133	S11/ 133	S27/ 133
WJ1 159	6	159	S74/ 159	S75/ 159	S11/ 159	S27/ 159
WJ1 194	8	194	-	-	S11/ 194	-

Product code	Size		S12	S21	S18	S63
	INS	MM	60° Bend	Tee	Step Bow for Pumping units	Brass Gate Valve
WJ1 50	2	50	S12/ 50	S21/ 50	-	S63/ 50
WJ1 76	3	76	S12/ 76	S21/ 76	S18/ 76	S63/ 76
WJ1 89	3.1/2	89	S12/ 89	S21/ 89	S18/ 89	S63/ 89
WJ1 108	4	108	S12/ 108	S21/ 108	S18/ 108	S63/ 108
WJ1 133	5	133	S12/ 133	S21/ 133	S18/ 133	S63/ 133
WJ1 159	6	159	S12/ 159	S21/ 159	S18/ 159	S63/ 159
WJ1 194	8	194	S12/ 194	S21/ 194	S18/ 194	-

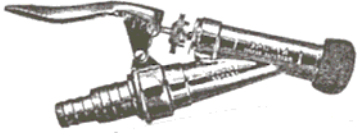


Product code	Size		S82	S81
	INS	MM	Enlarger	Reducer
WJ1			S82/ 50-76	S81 76-50
WJ1			S82/ 50-89	S81 89-50
WJ1			S82/ 76-89	-
WJ1			S82/ 89-108	S81 108-89
WJ1			S82/ 108-133	S81 133-108
WJ1			S82/ 108-159	S81 159-108
WJ1			S82/ 133N-159	S81 159-133
WJ1			S82/ 159-194	S81 194-159



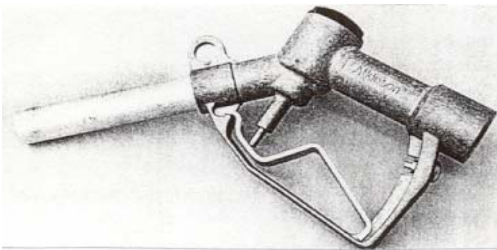
2-7-6

RIJAC NOZZLE



Product Code	Hose Size Inches
WI 141219	1/2 & 3/4

TRIGGER NOZZLES WITH CATCH FOR DISPENSING DEISEL FUEL



Product Code	Hose Size Inches
WI 1525	1

TECHNICAL

SECTION 8

	cat	sect	pge
Hose Fittings, Standards and Information.	2.	8.	1
Conversion Tables.	2.	8.	2
Conversion Tables.	2.	8.	3
Conversion Tables.	2.	8.	4
Corrosion Resistance of Coupling Materials.	2.	8.	5
Corrosion Resistance of Coupling Materials.	2.	8.	6
Corrosion Resistance of Coupling Materials.	2.	8.	7
Corrosion Resistance of Coupling Materials.	2.	8.	8

B.S 2464	British Standard for hose couplings for petrol oil and lubricants.
B.S. 1389	British Standard for dimensions of hose connections for welding and cutting equipment.
B.S. 6158	British Standard for oxy/acetylene check valves.
B.S. 336	British Standard for fire hose couplings.
B.S. 10	British Standard for flanges and bolting for pipes valves and fittings.
B.S. 1906	British Standard for hose couplings. (air & water 1/8 to 1.1/4).
B.S. 1782	British Standard for hose couplings other than fire hose couplings 1 1/2 to 8.
Din 3483	German Standard for compressed air couplings.
B.S. 4504	British Standard for flanges and boltings for pipes, valves and fittings metric series.
URT	Urban Round Thread used mainly on coupling for effluent disposal.
ABS, Acetal, Polypropylene, Nyglass, Glass reinforced Nylon, Delrin.	All types of plastic used to make couplings but with different properties of strength and resistance to chemicals.
Bosslock, Andrews, Kamlok, Snaplock, Evertite, Rite.	Different makes of cam action couplings should all be interchangeable if made to American specification MIL C - 27487.
Bauer	Quick action lever operated water coupling.
Pressure	1 Bar = 14.504 p.s.i.
BSP	Thread used on most fittings in U.K. sometimes referred to as GAS thread.
API/NPT	American threads not interchangeable with BSP.
PCL & Schrader Ftgs	Snap non return air fittings not interchangeable.
Swift/Velox/Renus/Geeka	Interchangeable brass quick release water couplings.

LENGTH

		inches	feet	yards	metres	mm's
1 inch	=	-	0.0833	0.0277	0.0254	25.4
1 foot	=	12	-	0.3333	0.3048	304.8
1 yard	=	36	3	-	0.9144	914.4
1 metre	=	39.37	3.2808	1.0936	-	1000
1 mm	=	0.0394	0.0033	0.0011	0.0010	-

VOLUME

		U.K. gall	U.S. gall	cu. ft.	litre	c.m.
1 UK gallon	=	-	1.200	0.160	4.546	0.0045
1 US gallon	=	0.833	-	0.134	3.785	0.0036
1 cu. ft.	=	6.229	7.480	-	28.316	0.0283
1 litre	=	0.220	0.264	0.353	-	0.0010
1 c.m.	=	219.969	264.172	35.315	1000	-

PRESSURE

		bars	atmos- phere	mm/Hg	metres head of water	lbf/in ²	in/Hg	feet head of water
1 Bar	=	1	0.9700	750	10.2	14.5	29.53	33.4
1 Atmosphere	=	1.0100	1	760	10.33	14.7	29.92	33.9
1mm Hg	=	0.0013	0.0013	1	0.0136	0.0193	0.0394	0.0446
1 m head of water	=	0.9078	0.0968	73.560	1	1.4220	2.8960	3.2810
1 lbf/in ²	=	0.0690	0.0680	51.710	0.7031	1	2.0360	2.0370
1 in Hg	=	0.0340	0.0334	25.400	0.3453	0.4911	1	1.1330
1 ft. head of water	=	0.0300	0.0295	22.420	0.3048	0.4325	0.8827	1
METRIC UNITS								
1 kPa (Kilopascal)	=		0.154 psi		=	0.01 bars		
1 MPa (Megapascal)	=		145.04 psi		=	10 bars		
1 kp/cm ²	=		14.20 psi		=	0.98 bars		
1 kgf/cm ²	=		14.20 psi		=	0.98 bars		

CONVERSION TABLES.

VACUUM

ATM	PSI	<u>water</u>		<u>mercury</u>		%
		metre	feet	mm	inches	
0.1	1.4	1	3' 3.3/8"	73.6	2.9	10
0.2	2.8	2	6' 6.3/4"	147.1	5.8	20
0.3	4.2	3	9' 10.1/8"	220.7	8.7	30
0.4	5.7	4	13' 1.1/2"	294.2	11.6	40
0.5	7.1	5	16' 4.13/16"	367.8	14.5	50
0.6	8.5	6	19' 8.3/16"	441.3	17.4	60
0.7	10.0	7	22' 11.9/16"	514.9	20.3	70
0.8	11.4	8	26' 2.15/16"	588.4	23.2	80
0.9	12.8	9	29' 6.3/8"	662.0	26.0	90
1.0	14.2	10	32' 9.11/16"	735.5	29.0	100

2-8-3

TEMPERATURE CONVERSION CHART.
Fahrenheit - Celcius (Centigrade).

°C		°F	°C		°F	°C		°F
-46	-50	-58	21	70	158	138	280	536
-43	-45	-49	24	75	167	143	290	554
-40	-40	-40	27	80	176	149	300	572
-35	-30	-22	29	85	185	154	310	590
-32	-25	-13	32	90	194	160	320	608
-29	-20	-4	35	95	203	166	330	626
-26	-15	+5	38	100	212	171	340	644
-23	-10	14	43	110	230	177	350	662
-21	-5	23	49	120	248	182	360	680
-18	0	32	54	130	266	188	370	698
-15	+5	41	60	140	284	193	380	716
-12	10	50	66	150	302	199	390	735
-10	15	59	71	160	320	204	400	752
-7	20	68	77	170	338	210	410	770
-4	25	77	82	180	356	216	420	788
-1	30	86	88	190	374	221	430	806
0	32	90	99	210	410	227	440	824
+2	35	95	100	212	414	232	450	842
5	40	104	104	220	428	238	460	860
7	45	113	110	230	446	243	470	878
10	50	122	116	240	464	249	480	896
13	55	131	121	250	482	254	490	914
16	60	140	127	260	500	260	500	932
18	65	149	132	270	518			

How to use the table.

Locate the temperature in bold type and read the equivalent °F in the right hand column and the equivalent °C in the left hand column.

Example:

- 1 °C to °F. You wish to convert 40°C to °F. Locate 40 in the bold typeface column and read the appropriate temperature in the °F column to the right.
The answer is 104°F.
- 2 °F to °C. To convert 40°F to °C, locate 40 in the bold typeface column, and the °C to the left will show that the answer is 5°C.

CORROSION RESISTANCE OF COUPLING MATERIALS

2-8-5

(Reprinted from RMA Hose Handbook IP-2 Fourth Edition)

RATINGS:

1. EXCELLENT
2. GOOD
3. FAIR OR CONDITIONAL
- X. NOT SATISFACTORY
- NO RATING INDICATES NO DATA AVAILABLE

AGENT	Mall. Iron, Steel	Brass	Bronze	Aluminium	Glass	Stainless 410, 416, 430	Stainless 302, 303, 304, 308	Stainless 316	Monel
Acetate, Solvents Crude		3				2	1	1	2
Acetate, Solvents, Pure		1	1	1		1	1	1	1
Acetic Acid	X	X	X	2	1	X	2	2	2
Acetic Acid Vapours	X	X		3		X	2	2	3
Acetic Anhydride	X	X		2		X	2	2	2
Acetone	1	1	1	1	1	1	1	1	1
Acetylene	1	2		1		1	1	1	2
Alcohols	1	2		1		1	1	1	1
Aluminium Sulphate	X	3	3	3	1	X	3	2	2
Alums	X	3	2	3	1	X	3	2	2
Ammonia gas	1	X	3	1	3	1	1	1	X
Ammonium Chloride	1	3		1*		3	3	1	1
Ammonium Hydroxide	2	X		2		1	1	1	3
Ammonium Nitrate	1	X		2		1	1	1	3
Ammonium Phosphate (Ammoniacal)		X				1	1	1	2
Ammonium Phosphate (Neutral)		3				1	1	1	2
Ammonium Phosphate (Acid)		3				3	2	1	2
Ammonium Sulphate	1	3				2	1	1	2
Asphalt	1	2				2	1	1	1
Beer	2	2	1	1		X	1	1	1
Beet Sugar Liquors	1	2		1		2	1	1	1
Benzine, Benzol	1	1	1	1	1	1	1	1	1
Benzine (petroleum - naphtha)	1	1		1		1	1	1	1
Borax	2	2				1	1	1	1
Boric Acid	X	3		1		3	2	1	1
Butane, Butylene	1	1	1	1		1	1	1	1
Butadiene		1				1	1	1	1
Calcium Bisulphate		X				X	2	1	X
Calcium Hypochlorite	3	3	3	X	3	X	3	2	3
Cane Sugar Liquors	1	2		1		2	1	1	1
Carbon Dioxide (Dry)	1	1		1		1	1	1	1
Carbon Dioxide (Wet & Aqueous Sol)	2	3		2		2	1	1	2
Carbon Disulphide	2	3		2		2	1	1	3
Carbon Terachloride	3	1	2	3	1	1	1	1	1
Chlorine (Dry)	2	2	2	1	2	2	2	2	1
Chlorine (Wet)	X	X	3	X	2	X	X	3	3

* 3 to X at high temperatures.

2-8-6 CORROSION RESISTANCE OF COUPLING MATERIALS

AGENT	Mall. Iron, Steel	Brass	Bronze	Aluminium	Glass	Stainless 410,416, 430	Stainless 302,303, 304, 308	Stainless 316
Chromic Acid		X	X	X	1	3	2	2
Citric Acid	X	3		1		3	X	1
Coke Oven Gas	1	3		2		1	1	1
Copper Sulphate	X	X		X		1	1	1
Core Oils		1	1			1	1	1
Cottonseed Oil	1	1	1	1		1	1	1
Creosote	2	3		1		1	1	1
Ethers	2	1		1		1	1	1
Ethylene Glycol	2	2				1	1	1
Ferric Chloride	X	X	X	X	1	X	X	X
Ferric Sulphate	X	X		X		1	1	1
Formaldehyde	2	2		2		1	1	1
Formic Acid	X	2		X		X	2	1
Freon	3	1	1	1		1	1	1
Furfural	1	2		1		1	1	1
Gasoline (Sour)	3	3		3		3	1	1
Gasoline Refined	1	1	1	1		1	1	1
Gelatin	1	3		1		1	1	1
Glucose	1	1		1		1	1	1
Glue	1	3		1		1	1	1
Glycerine or Glycerol	1	2		1		1	1	1
Hydrochloric Acid	X	X	X	X	1	X	X	X
Hydrocyanic Acid	3	X		1		3	1	1
Hydrofluoric Acid	X	3	3	X	X	X	X	X
Hydrogen Fluoride		3				X	X	3
Hydrogen	1	1		1		1	1	1
Hydrogen Peroxide	X	X		1		1	2	1
Hydrogen Sulphide (Dry)	3	3		2		3	2	1
Hydrogen Sulphide (Wet)	3	3		2		3	2	1
Lacquers and Lacquer Solvents	3	2		1		1	1	1
Lactic Acid	X			3			3	2
Lime-Sulphur	2	X				2	1	1
Linseed Oil	1	1		1			1	1
Magnesium Chloride	3	3		X		3	2	1
Magnesium Hydroxide	1	2		X		1	1	1
Magnesium Sulphate	2	2		3		1	1	1
Mercuric Chloride	3	X		X		X	X	3
Mercury	1	X		X		1	1	1
Milk	3	3		1		2	1	1
Molasses	2	X		2		2	1	1
Natural Gas	1	2		1		1	1	1
Nickel Chloride		X		X		X	3	2
Nickel Sulphate		3		X		3	2	1
Nitric Acid	X	X	X	3	1	2	2	2
Oleic Acid	2	3		1		2	2	1
Oxalic Acid	3	3		2		3	2	1
Oxygen	1	1	1	1		1	1	1

Monel
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CORROSION RESISTANCE OF COUPLING MATERIALS

AGENT	Mall. Iron, Steel	Brass	Bronze	Aluminium	Glass	Stainless 410,416, 430	Stainless 302,303, 304, 308	Stainless 316
Palmitic Acid	1	3		1		2	2	1
Petroleum Oils (Sour)		3				3	1	1
Petroleum Oils (Refined)	1	1	1	1		1	1	1
Phosphoric Acid - 25%	3	X		3	3	X	3	1
Phosphoric Acid - 25%-50%	X	X		X	3	X	X	2
Phosphoric Acid - 50%-85%	X	X		X	X	X	X	2
Picric Acid	3	X		3		2	1	1
Potassium Chloride	2	3		3		3	2	1
Potassium Hydroxide	3	X		X		1	1	1
Potassium Sulphate	2	2		1		1	1	1
Propane	1	1				1	1	1
Rosin (Dark)	1	2		1		1	1	1
Rosin (Light)		X		1		1	1	1
Shellac		2		2		1	1	1
Sludge Acid		X				X	X	3
Soda Ash (Sodium Carbonate)	1	2		X		1	1	1
Sodium Bicarbonate	3	1		X		1	1	1
Sodium Bisulphate	X	3		3		X	1	1
Sodium Chloride	2	3	2	X	1	3	2	1
Sodium Cyanide	2	X		X		1	1	1
Sodium Hydroxide	3	X	3	X	X	2	2	2
Sodium Hypochlorite	X	X		X		X	3	2
Sodium Metaphosphate	X	3		1		2	1	1
Sodium Nitrate	1	3		1		1	1	1
Sodium Perborate	3	3		1		1	1	1
Sodium Peroxide	3	3		1		1	1	1
Sodium Phosphate								
(Alkaline)		3				1	1	1
(Neutral)		2				1	1	1
(Acid)		2				X	2	1
Sodium Silicate	1	3		X		1	1	1
Sodium Sulphate	1	2		3		1	1	1
Sodium Sulphide	1	X				1	1	1
Sodium Thiosulphate (hypo)	3	X		X		1	1	1
Stearic Acid	3	3		3		2	2	1
Sulphate Liquors		X				1	1	1
Sulphur	2	X		2		2	2	1
Sulphur Chloride	X	X				X	3	2
Sulphur Dioxide (Dry)	2	1		1		1	1	1
Sulphur Dioxide (Wet)		X				X	2	1
Sulphuric Acid 10%	X	X	3	3		X	X	2
Sulphuric Acid 10-75%	X	X	X	X		X	X	X
Sulphuric Acid 75-95%	3	X	X	X		3	3	2
Sulphuric Acid 95%	2	X	X			2	2	2
Sulfurous Acid	X	X		X		X	3	2

2-8-7

Monel
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X
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X
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X
X

2-8-8 CORROSION RESISTANCE OF COUPLING MATERIALS

AGENT	Mall. Iron, Steel	Brass	Bronze	Aluminium	Glass	Stainless 410,416, 430	Stainless 302,303, 304, 308	Stainless 316
Tannic Acid	3	3	1	X			1	1
Tar	1	2		1		2	1	1
Toluene, Toluol	1	1		1		1	1	1
Trichlorethylene	3	1		3		1	1	1
Turpentine		3		1		3	1	1
Varnish	2	2				1	1	1
Vegetable Oils	1	2		1		1	1	1
Vinegar	3	3		3		3	2	1
Water (Acid Mine Water)	3	X		3		2	1	1
Water (Fresh)	3	1		1		1	1	1
Water (Salt)	3	3	2	X		3	2	2
Whisky	X	2				3	1	1
Wines	X	2				3	1	1
Xylene, Xylol	2	1		1		1	1	1
Zinc Chloride	X	X		X		3	2	1
Zinc Sulphate	3	3		3		3	2	1

S

Monel
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