

**CampbellCrimpnology™ offers hose assembly systems for your high-pressure steam and air applications**



## VITON SEAL GROUND JOINT COUPLINGS, AIR HAMMER COUPLINGS, AND MALE STEMS

### Features & Benefits

- Viton Seal Couplings pass 1000 hour MIL-H-29210 steam test.
- Eliminates leaks with nut hand tightened.
- Viton seal (formulated by DuPont for high pressure steam and air applications) is protected inside machined stem groove and by swivel nut, extending working life.
- Spud does not contain plastic seat, extending working life.
- Interchangeable with old-style domestic ground joint couplings.
- Machined hose ends with smooth end detail to reduce potential failure due to abrasion - grips, seals, and protects hose.
- Interlock groove locks ferrule into place for superior holding power.
- Crimped assemblies are low profile and eliminate sharp edges from bolts.
- Machined from carbon steel, cast ductile iron (meets ASTM A395 specification), and 316 stainless steel.

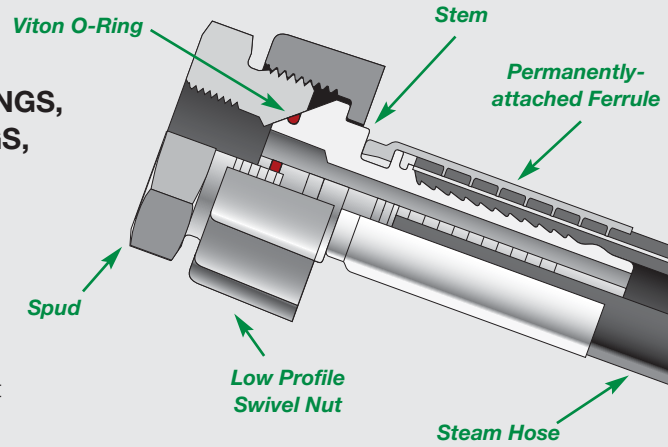
Smooth End Detail



Interlock Groove

### Recommended hose attachment

- Interlocking ferrules
- Interlocking U-bolt clamps (Page 21)



### Swivel Interlocking Male Stem

- Designed for use with steam.
- Available with staked ferrule for crimped steam applications.
- Allows end-user easy connection into plant facilities.

### Staked-On Ferrule for steam hose

Designed specifically for certain hose brands. Check with factory for information.

- Crimped steam assemblies eliminate the need for retightening bolts.
- Eliminates leaks, cuts costs caused by leaky clamps.
- Ferrule serrations bite to the wire achieving electrical continuity.
- Meets 250 PSI pressure rating for steam applications.

## INTERLOCKING U-BOLT CLAMPS

### Features & Benefits

- 360° design wraps completely around hose for superior retention.
- Clamps fit hoses tightly without cracking, eliminating costly rework.
- Bolts on “up side” allow easier tightening/re-tightening and improve “dragability”.
- Field repairable.

### MAX. SYSTEM WORKING PRESSURE (PSI @ 70°F) SEE NOTE 1

Hose System Components			Hose Size										
Fitting/Coupling	Attachment	Hose Type <sup>2</sup>	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8
Viton Ground Joint/Air Hammer Cplg Male Stem and Mender	U-Bolt Clamp	Rubber/Steam	1500	1250	1250	1250	1250	1250	800	500	500	-	-
	U-Bolt Clamp	Rubber/Steam	1500	1250	1250	1250	1250	1250	800	500	500	-	-
Viton Ground Joint Coupling	Staked Ferrule	Steam	1250	1250	1250	-	-	-	-	-	-	-	-
Viton Ground Joint/Air Hammer Cplg Male Stem	Long Ferrule	Rubber	1000	1000	1000	1000	1000	1000	650	400	400	-	-
	Long Ferrule	Rubber	1000	1000	1000	1000	1000	1000	650	400	400	-	-
	Staked Ferrule	Steam	1250	1250	1250	-	-	-	-	-	-	-	-

See footnotes 1 and 2 on Page 1

**FEMALE SPUD**



**Steel**

npt size	part number	list each
1/2	GFS-2	16.70
3/4	GFS-3	14.16
1	GFS-4	14.16

**Machined Ductile Iron**

1-1/4	GFS-5	31.11
1-1/2	GFS-6	27.50
2	GFS-8	32.91
2-1/2	GFS-10	88.84
3	GFS-12	72.74
4	GFS-16	168.78

**316 Stainless**

1/2	GFSS-2	81.50
3/4	GFSS-3	88.32
1	GFSS-4	90.00

**MALE SPUD**



**Steel**

npt size	part number	list each
1/2	GMS-2	23.59
3/4	GMS-3	22.28
1	GMS-4	23.43

**Machined Ductile Iron**

1-1/4	GMS-5	53.32
1-1/2	GMS-6	51.37
2	GMS-8	54.11
2-1/2	GMS-10	133.12
3	GMS-12	140.55

**DOUBLE SPUD**



**Steel**

size	part number	list each
1/2	GDS-2	38.77
3/4	GDS-3	36.14
1	GDS-3	36.14

**Machined Ductile Iron**

1-1/4	GDS-5	64.62
1-1/2	GDS-5	64.62
2	GDS-8	64.54
2-1/2	GDS-10	137.32
3	GDS-12	145.39

**SOCKET WELD SPUD**



**316 Stainless**

size	part number	list each
3/4	GWSS-	88.32
1	GWSS-4	90.00

All steel and machined ductile iron parts are zinc plated. DuPont Viton is the best O-ring material for couplings used in both air and steam applications. For special applications, O-rings of other materials are available upon request.

**LOW PROFILE NUT**



**Machined Ductile Iron**

size	part number	list each
1/2	RGN-2	5.41
3/4	RGN-3	8.82
1	RGN-3	8.82
1-1/4	RGN-5	13.73
1-1/2	RGN-5	13.73
2	RGN-8	15.34
2-1/2	RGN-10	68.64
3	RGN-12	59.79
4	RGN-16	169.62

**316 Stainless**

1/2	RGNSS-2	85.18
3/4	RGNSS-3	95.71
1	RGNSS-3	95.71

**WING NUT**



**Machined Ductile Iron**

size	part number	list each
1/2	GN-2	5.41
3/4	GN-3	8.82
1	GN-3	8.82
1-1/4	GN-5	13.73
1-1/2	GN-5	13.73
2	GN-8	15.34
2-1/2	GN-10	68.64
3	GN-12	59.79
4	GN-16	169.62

**INTERLOCKING HOSE MENDER**



**Steel**

hose size	part number	list each
1/2	IHM-2	22.71
3/4	IHM-3	23.90
1	IHM-4	35.14
1-1/4	IHM-5	50.66
1-1/2	IHM-6	68.63
2	IHM-8	42.49

**DEAD-END**



size	part number	list each
3/4	GDC-3	55.86
1	GDC-3	55.86

**VITON O-RING**



size	part number	list each
1/2	VO-2	1.02
3/4	VO-3	1.19
1	VO-3	1.19
1-1/4	VO-5	2.19
1-1/2	VO-5	2.19
2	VO-8	3.03
2-1/2	VO-10	4.63
3	VO-12	6.37
4	VO-16	7.04

**HEAVY DUTY VITON SEAL AIR HAMMER COUPLINGS**



**FEMALE SET (with low profile nut)**



**Steel/Ductile Iron**

hose size	part number	list each
3/4	RHJF-3	59.36
1	RHJF-4	54.44

**FEMALE SET (with wing nut)**



**Steel/Ductile Iron**

hose size	part number	list each
3/4	HJF-3	59.36
1	HJF-4	54.44

**HOSE STEM**



**Steel**

hose size	part number	list each
3/4	HJS-3	19.97
1	HJS-4	17.40

**FEMALE SPUD**



**Steel**

npt size	part number	list each
3/4	HFS-3	25.48
1	HFS-4	23.12

**MALE SPUD**



**Steel**

npt size	part number	list each
3/4	HMS-3	33.74
1	HMS-4	31.67

**LOW PROFILE SWIVEL NUT**



**Ductile Iron**

size	part number	list each
3/4	RHN-3	13.92
1	RHN-3	13.92



## WING NUT



### Ductile Iron

size	part number	list each
3/4	HN-3	13.92
1	HN-3	13.92

## DOUBLE SPUD



### Steel

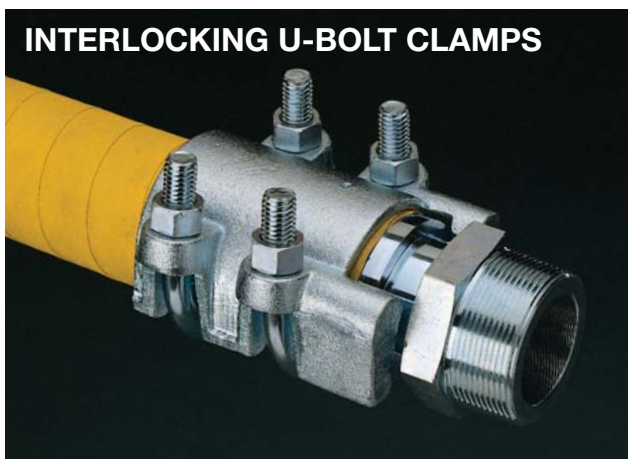
size	part number	list each
3/4	HDS-3	34.39
1	HDS-3	34.39

## DEAD END



### Steel

size	part number	list each
3/4	HDC-3	69.16
1	HDC-3	69.16

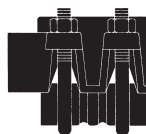


## SINGLE U-BOLT



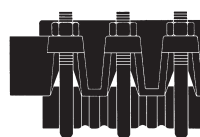
hose o.d. min	hose o.d. max	hose size	part number	list each
13/16	1-1/32	1/2	IC-2	8.09
1-1/16	1-1/4	3/4	IC-3S	10.47
1-3/32	1-3/8	3/4	IC-3	10.47

## DOUBLE U-BOLT



hose o.d. min	hose o.d. max	hose size	part number	list each
1-5/16	1-1/2	1	IC-4	18.67
1-1/2	1-11/16	1	IC-4L	18.94
1-9/16	2	1-1/4	IC-5	31.03
1-15/16	2-3/16	1-1/2	IC-6	26.25
2-3/16	2-3/8	1-1/2	IC-6L	28.62
2-11/32	2-11/16	2	IC-8	39.50
2-11/16	2-15/16	2	IC-8L	34.15
3	3-9/32	2-1/2	IC-10	50.17
3-9/32	3-9/16	2-1/2	IC-10L	67.49

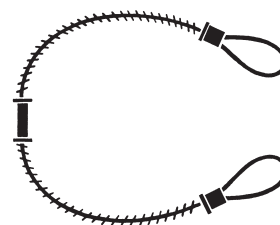
## TRIPLE U-BOLT



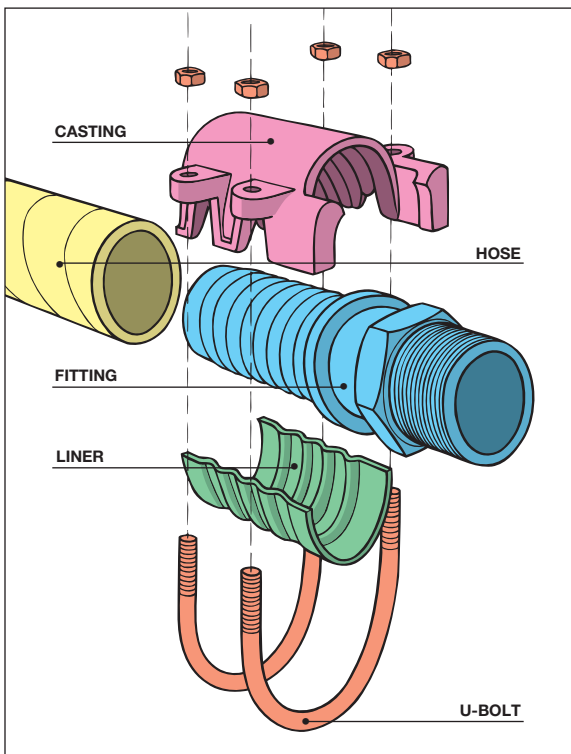
hose o.d. min	hose o.d. max	hose size	part number	list each
3-5/16	3-3/4	3	IC-12S	77.59
3-11/16	4-1/8	3	IC-12	83.63
4-1/16	4-1/2	3	IC-12L	116.67
4-5/16	4-3/4	4	IC-16S	221.87
4-11/16	5-1/8	4	IC-16	232.34
5-1/16	5-1/2	4	IC-16L	381.01

For your convenience, clamps are available bulk packed, upon request. Bulk pack price is the same as listed above. (IC-2 through IC-4L are packed 25 pieces per carton. IC-5 through IC-8L are packed 10 per carton.)

## WHIP CHECK SAFETY CABLE (hose to hose)



hose size	part number	list each
1/2	WC-1	26.08
3/4	WC-1	26.08
1	WC-1	26.08
1-1/4	WC-2	40.74
1-1/2	WC-2	40.74
2	WC-2	40.74



*This 2" 1000 psi rated hose exploded in a test at 5200 psi. The hose exceeded its minimum 4X safety factor. The fitting and clamp exceeded the capacity of the hose.*