

Permanently Attached Couplings - Holedall® System

Holedall® - Permanently Attached Coupling System



Based upon the already highly successful Holedall®/Mulconroy Coupling System, which has been manufactured and marketed by our parent company - Dixon Valve & Coupling since 1940 in the United States. This comprehensive range has been specifically designed and developed to service the needs of both industrial and the Offshore Oil & Gas markets.

Holedall couplings conform to all European specifications and quality requirements, including: EN1765 and EN14421.

IX Couplings are specified for use in Type Approved Hose Assemblies by Det Norsk Veritas, Lloyds Register of Shipping etc., and are in service with most of the World's major oil drilling companies on Offshore and hand rig applications.

The Holedall® Coupling System provides a safe and cost effective method of outstanding strength and durability of attaching couplings to hose. Ease of operation, flexibility and economy make the Holedall method an unequalled hose assembly system.

With both Internal Expansion and External Swage Couplings, the Holedall system utilises a cold worked, draw type progressive swage method which gives a full 360° uninterrupted expansion or compression band around the hose, giving superb coupling retention and end load characteristics.

The Holedall range of External Crimp Couplings which includes an interlocking groove and collar offers an alternative safe and secure method of producing hose assemblies to 8" nominal bore.

Only quality assured, materials are used in the production of Holedall Couplings, with materials used for swaging having been selected to establish the proof/yield stress to ensure that brittle fracture does not occur. Certification in accordance with EN10204 3.1. is available with all couplings.

The Holedall system does not stop at couplings. We also manufacture and supply a range of machines for hose assembly including, Internal Expansion Machines, External Swaging Machines, Dual Swaging Machines, External Crimping Machines and Coupling Inserting Machines and Hydrostatic Test Pumps.

Definitions

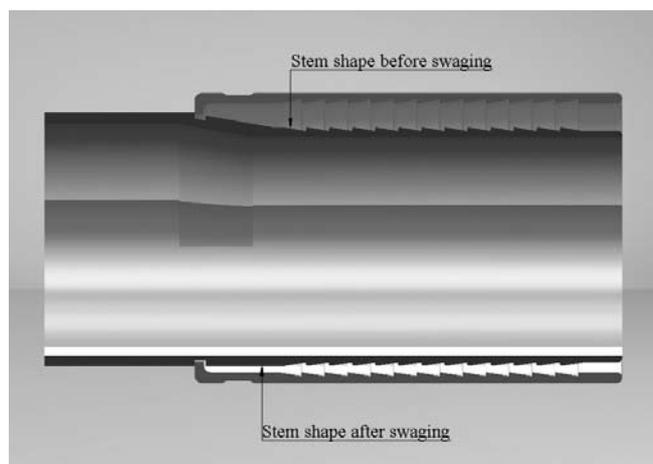
- "Stem", Nipple, Tail is an externally serrated coupling which fits inside the bore of the hose.
- "Ferrule" is an internally serrated steel cylinder which fits over the outside of the hose or pipe and interlocks with the stem.

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What's the difference?

Internal Expansion (IX)

Internal expansion or swaging, is the process by which the stem is internally expanded to compress the hose material against the serrated internal ferrule wall to provide retention. Internal expansion also provides full flow through the bore of the stem significantly reducing turbulence and the possibility of bacteria becoming trapped between the end of the stem and the hose. This is particularly important for food grade hose assemblies and CIP applications.



Internal expansion is achieved by pulling a hardened tool of the same size as the hose bore, called a dolly or plug down the inside of the stem in order to expand it. The compressive force exerted on the hose wall by the stem causes the hose material to flow into the serrated cavities of both stem and ferrule, providing a permanently attached secure mechanical bond.

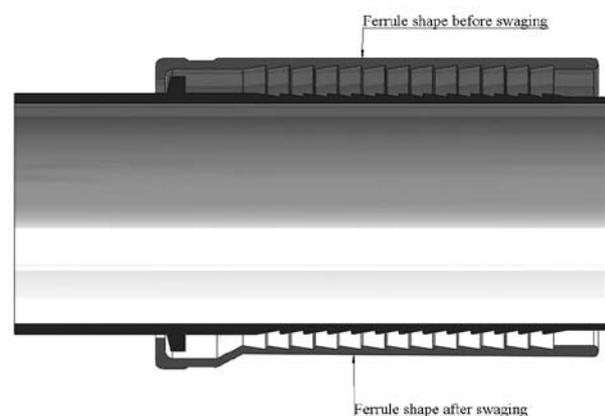


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External Swaging (ES)

External Swaging is the opposite process to internal expansion, in that it is the process of reducing the ferrule onto the hose outside diameter and subsequently compressing the hose material into the serrated cavities of both the stem and ferrule, providing a safe and secure method of attachment.

External swaging is achieved by pushing the hose and end coupling assembly through a hardened steel split-die.



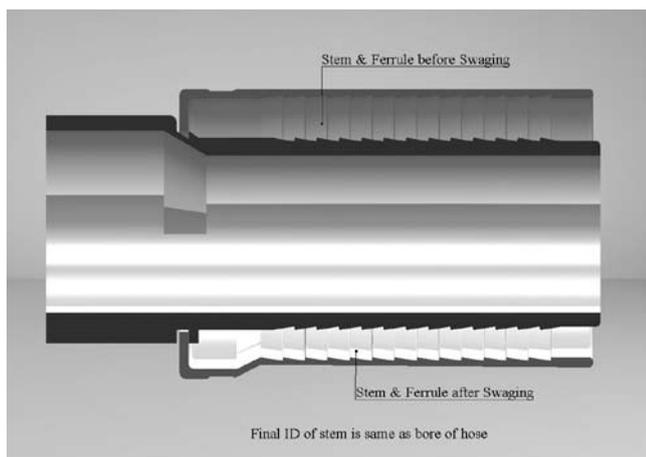
The internal diameter of the die is smaller than the external diameter of the ferrule. Similar in process to internal expansion, the external diameter of the ferrule is permanently reduced which results in compressive force exerted onto the hose wall causing it to flow into the serrated cavities of both stem and ferrule, providing a permanently attached secure mechanical bond.



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Dual Swaging (DS)

Dual swaging is mainly used to attach couplings to high pressure hose or hose with very thick wall section. This is accomplished by compressing both the stem and the ferrule onto the hose material in order to provide a secure method of attachment. Internal expansion and external swaging by themselves are perfectly adequate for low to medium pressure applications, however for higher pressure applications, it may be necessary to dual swage.



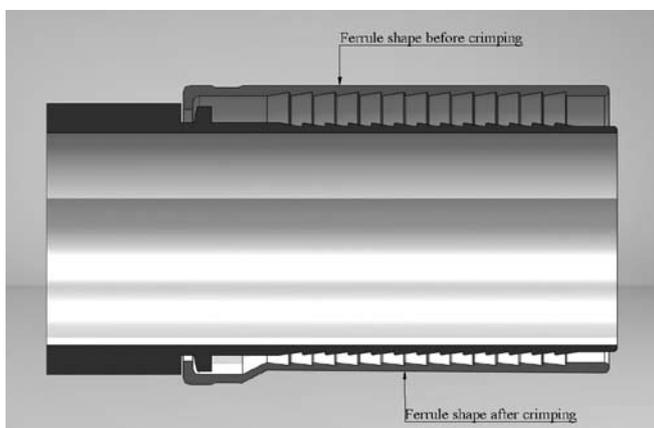
Dual swaging is effectively internal expansion and external swaging or crimping combined. The aim is to compress both stem and the ferrule onto the hose in order to provide the necessary grip. It is essential when dual swaging to compress both the inside and outside diameters of the hose by similar amounts in order to minimise any damage to the reinforcing layers. In some instances it may be necessary to skive the hose down to the wires/cables.



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External Crimping (EC)

External crimping is a similar method of attaching couplings as external swage. All Holedall® External crimp couplings have an interlocking groove in which the ferrule is located/secured. External Crimp is the process of compressing the serrated ferrule onto the hose outside diameter and subsequently compressing the hose material into the serrated cavities of both the stem and ferrule, providing a safe and secure method of attachment.



Similar in principle to external swaging. The external diameter of the ferrule is permanently reduced radially by segmented Dies resulting in a compressive force being applied to the hose causing it to flow into the serrated cavities of both stem and ferrule thus providing a secure mechanical bond. At the same time, the retaining ring of the ferrule is secured in the groove of the stem.



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Coupling Inserter for Large Hose

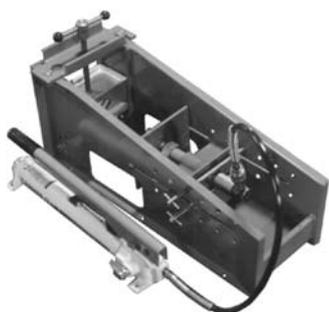


PART NO.

2500HB0000

- highly portable
- inserts 4", 5", 6", 8", 10" and 12" couplings
- includes CI96AH pump (shown below)

Coupling Inserters



coupling inserter with hand pump

- for insertion of hose shanks into hose with a 2¾" to 7¼" OD

PART NO.	SIZE
CI96 CI96AH CI9311SML	Supplied with a 10,000 PSI hand pump and 5 ton ram Supplied with a 10,000 PSI air/hydraulic pump and 5 ton ram Small jaws for 1" to 3" OD hose



air/hydraulic foot pump

Hand Hydrottest Pump



- stainless steel piston, aluminum body
- designed for use in testing pipe lines, pressure tanks and pressure vessels
- uses efficient and long lasting check valves
- cylinder displacement: 1.37 cubic inches
- 0-1000 PSI pressure gauge, 10' pressure hose and quick disconnect coupler included
- piston: 7/8" with 2" stroke

PART NO.	INLET NPT	OUTLET NPT	WORKING PRESSURE PSI
HHTP	½"	½"	1000



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Hydrostatic Test Pumps

A safe, cost effective pump to test hose before putting it into service.



- 1.3 GPM fill rate
- test pressure: 200 to 2000 PSI
- suction strainer keeps dirt out of pump
- high pressure test gauge
- 115v motor
- 2 ft. power cord
- easy to use, portable

ELECTRIC	
PART NO.	DESCRIPTION
ETP	Electric test pump

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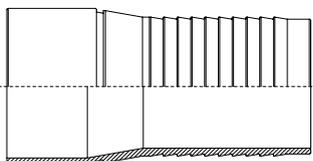


- 5.5 GPM fill rate
- test pressure: 0 to 1500 PSI
- stainless interior
- air gauge for quick, easy adjustment of maximum test pressure
- high pressure test gauge
- filter/regulator for clean, dry air to ensure long life of unit
- on - off valve for air input
- 15 ft. of hose included
- easy to use, portable
- Use of coalescing filter and water filter recommended for prolonged life.

PNEUMATIC	
PART NO.	DESCRIPTION
PTP	Pneumatic test pump

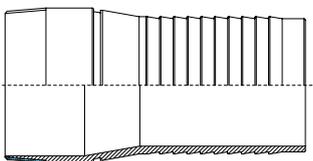
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Holedall® IX Internal Expansion



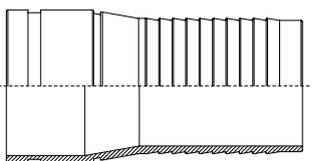
PLAIN END STEM FOR WELDING - NATURAL FINISH		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0050	HA1050	2"
HA0037	HA1037	2 1/2"
HA0032	HA1032	3"
HA0029	HA1029	4"
HA0054	HA1054	5"
HA0058	HA1058	6"
HA0099	HA1099	8"
HA0369	-	10"
HA0370	-	12"

Plain End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11. * Couplings are also available for metric sized hose bores.



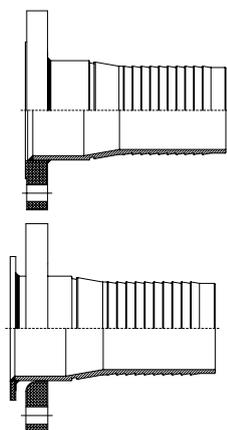
MALE THREAD STEM - YELLOW ZINC PLATED						
CARBON STEEL PART NO.S			STAINLESS STEEL PART NO.S			NOMINAL BORE*
BSP	BSPT	API/NPT	BSP	BSPT	API/NPT	
HA0051ZP	HA0051TZP	HA0052ZP	HA1051	HA1051T	HA1052	2"
HA0038ZP	HA0038TZP	HA0039ZP	HA1038	HA1038T	HA1039	2 1/2"
HA0033ZP	HA0033TZP	HA0034ZP	HA1033	HA1033T	HA1034	3"
HA0031ZP	HA0031TZP	HA0026ZP	HA1031	HA1031T	HA1026	4"
HA0055ZP	HA0055TZP	HA0056ZP	HA1055	HA1055T	HA1056	5"
HA0059ZP	HA0059TZP	HA0060ZP	HA1059	HA1059T	HA1060	6"
HA0144ZP	HA0144TZP	HA0145ZP	HA1144	HA1144T	HA1145	8"
-	HA0371TZP	-	-	-	-	10"
-	HA0372TZP	-	-	-	-	12"

Threaded End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11. * Couplings are also available for metric sized hose bores.



GROOVED STEM - YELLOW ZINC PLATED		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0053ZP	HA1053	2"
HA0040ZP	HA1040	2 1/2"
HA0035ZP	HA1035	3"
HA0030ZP	HA1030	4"
HA0057ZP	HA1057	5"
HA0061ZP	HA1061	6"
HA0148ZP	HA1148	8"

Grooved Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11. * Couplings are also available for metric sized hose bores.



FLANGED STEM - FIXED & SWIVEL - YELLOW ZINC PLATED				
CARBON STEEL PART NO.S		STAINLESS STEEL PART NO.S		NOMINAL BORE*
FIXED	SWIVEL	FIXED	SWIVEL	
HA0134ZP	HA0150ZP	HA1134	HA1150	2"
HA0135ZP	HA0151ZP	HA1135	HA1151	2 1/2"
HA0136ZP	HA0152ZP	HA1136	HA1152	3"
HA0137ZP	HA0153ZP	HA1137	HA1153	4"
HA0138ZP	HA0154ZP	HA1138	HA1154	5"
HA0139ZP	HA0155ZP	HA1139	HA1155	6"
HA0140ZP	HA0156ZP	HA1140	HA1156	8"
HA0924ZP	HA0397ZP	-	-	10"
HA0925ZP	HA0926ZP	-	-	12"

Flanged Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970:1983 Grade 316 S11. *Couplings are also available for metric sized hose bores



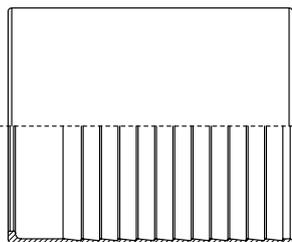
Permanently Attached Couplings - Holedall® System

Ferrules - Yellow Zinc

Ferrule Selection Chart (Standard 20 Bar Hose)

INTERNAL EXPANSION FERRULE SELECTION GUIDE												
PART NO. PREFIX WALL THK. (MM)	HOSE BORE SIZE (STANDARD INCH SIZING)											
	1IN	1.25IN	1.5IN	2IN	2.5IN	3IN	4IN	5IN	6IN	8IN	10IN	12IN
4.0	40.5-2.5	47-2.5										
4.5	41.5-2.5	48-2.5										
5.0	42.5-2.5	49-2.5	56-3									
5.5	43.5-2.5	50-2.5	57-3									
6.0	44.5-2.5	51-2.5	58-3	71-3	84-3	97-3						
6.5	45.5-2.5	52-2.5	59-3	72-3	85-3	98-3						
7.0	46.5-2.5	53-2.5	60-3	73-3	86-3	99-3	125-3	152-4				
7.5		54-2.5	61-3	74-3	87-3	100-3	126-3	153-4				
8.0		55-2.5	62-3	75-3	88-3	101-3	127-3	154-4				
8.5		56-2.5	63-3	76-3	89-3	102-3	128-3	155-4				
9.0		57-2.5	64-3	77-3	90-3	103-3	129-3	156-4	182-4.5			
9.5		58-2.5	65-3	78-3	91-3	104-3	130-3	157-4	183-4.5			
10.0		59-2.5	66-3	79-3	92-3	105-3	131-3	158-4	184-4.5	236-5		
10.5				80-3	93-3	106-3	132-3	159-4	185-4.5	237-5		
11.0				81-3	94-3	107-3	133-3	160-4	186-4.5	238-5		
11.5				82-3	94-3	108-3	134-3	161-4	187-4.5	239-5		
12.0				83-3	95-3	109-3	135-3	162-4	188-4.5	240-5		
12.5				84-3	96-3	110-3	136-3	163-4	189-4.5	241-5		
13.0							137-3	164-4	190-4.5	242-5	295-6	
13.5							138-3	165-4	191-4.5	243-5	296-6	
14.0							139-3	166-4	192-4.5	244-5	297-6	
14.5							140-3	167-4	193-4.5	245-5	298-6	349-6
15.0							141-3	168-4	194-4.5	246-5	299-6	350-6
15.5								169-4	195-4.5	247-5	300-6	351-6
16.0								170-4	196-4.5	248-5	301-6	352-6
16.5								171-4	197-4.5	249-5	302-6	353-6
17.0									198-4.5	250-5	303-6	354-6
17.5										251-5	304-6	355-6
18.0										252-5	305-6	356-6
18.5										253-5	306-6	357-6
19.0										254-5	307-6	358-6
19.5										255-5	308-6	359-6
20.0										256-5	309-6	360-6

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Carbon Steel Ferrules are supplied Yellow Zinc Plated and Passivated in accordance with BS1706:1990 or alternatively Powder Painted in accordance with the Oil & Gas UK Colour Coding Scheme which can be found on Page XX of this catalogue Please specify Ferrule Finish on your purchase

Order Stainless Steel Ferrules are supplied in Grade 304/304L and are natural finish.

Ferrule Coding example: 4" Hose x 10mm wall thickness, for conveying Base Oil. The prefix is HA0065 from table 2. The Ferrule Coding for a 10mm wall thickness hose is 131-3 from table 1. The colour coding is from the Oil & Gas UK Colour Coding Scheme which can be found on Page 259 of this catalogue = RED. The complete part number is HA0065-131-3RED

CARBON STEEL	
PART NO. PREFIX	SIZE
HA0350	1.0in
HA0789	1.25in
HA0332	1.5in
HA0062	2.0in
HA0063	2.5in
HA0064	3.0in
HA0065	4.0in
HA0066	5.0in
HA0167	6.0in
HA0187	8.0in
HA0367	10.0in
HA0368	12.0in

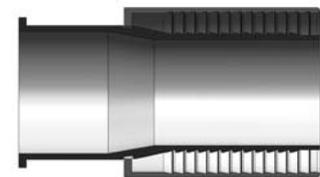
STAINLESS STEEL	
PART NO. PREFIX	SIZE
HA1350	1.0in
HA1789	1.25in
HA1332	1.5in
HA1062	2.0in
HA1063	2.5in
HA1064	3.0in
HA1065	4.0in
HA1066	5.0in
HA1067	6.0in
HA1187	8.0in
HA1367	10.0in
HA1368	12.0in



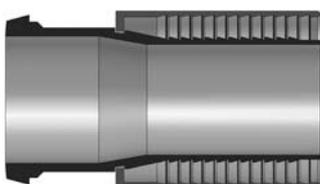
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Holedall® Hygienic Stem & Ferrule

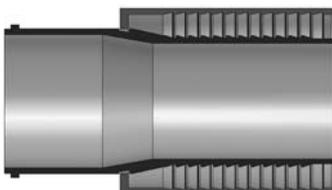
For the food, brewing, chemical and pharmaceutical industry.
Stems are manufactured from AISI 316L Stainless Steel.



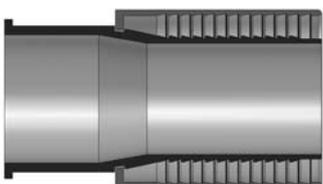
BS 4825: PART 5: TYPE RJT		
INTERNAL EXPANSION STEM PART NO.		NOMINAL BORE / DN*
MALE	FEMALE	
-	HA0229	1" / 25
-	HA0231	2" / 50
-	HA0232	2 1/2" / 65



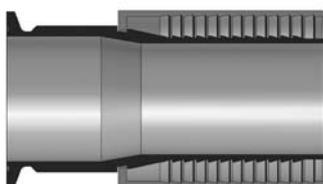
DIN 11887 / DIN 11851		
INTERNAL EXPANSION STEM PART NO.		NOMINAL BORE / DN*
MALE	FEMALE	
HA0274	HA0244	1" / 25
HA0275	HA0245	1 1/2" / 40
HA0276	HA0246	2" / 50
HA0277	HA0247	2 1/2" / 65
HA0278	HA0248	3" / 80
HA0299	HA0300	4" / 100



BS 4825: PART 4: TYPE IDF		
INTERNAL EXPANSION STEM PART NO.		NOMINAL BORE / DN*
MALE	FEMALE	
-	HA0650	2 1/2" / 65
-	HA0652	4" / 100



SMS		
INTERNAL EXPANSION STEM PART NO.		NOMINAL BORE / DN*
MALE	FEMALE	
-	HA0608	1 1/2" / 40
-	HA0609	2" / 50
-	HA0610	2 1/2" / 65
-	HA0611	3" / 80
-	HA0612	4" / 80



BS 4825: PART 3: CLAMP TYPE		
INTERNAL EXPANSION STEM PART NO.	NOMINAL BORE / DN*	
HA0665	1" / 25	
HA0666	1 1/2" / 40	
HA0667	2" / 50	
HA0668	2 1/2" / 65	
HA0669	3" / 80	
HA0670	4" / 80	

* Couplings are also available for metric sized hose bores.



Permanently Attached Couplings - Holedall® System

INTERNAL EXPANSION STAINLESS STEEL HYGIENIC FERRULES



PART NO. INTERNAL	NOMINAL BORE / DN	HOSE RANGE	
		FROM	TO
HA0259-44-3	1" / 25	35.7	36.5
HA0259-45-3	1" / 25	36.9	37.7
HA0259-46-3	1" / 25	38.1	38.9
HA0259-48-3	1" / 25	39.3	40.1
HA0259-49-3	1" / 25	40.5	41.3
HA0260-57-3	1 1/2" / 40	48.4	49.6
HA0260-58-3	1 1/2" / 40	50	51.2
HA0260-60-3	1 1/2" / 40	51.6	52.8
HA0260-62-3	1 1/2" / 40	53.2	54.4
HA0261-71-3	2" / 50	62.7	63.9
HA0261-73-3	2" / 50	64.3	65.5
HA0261-74-3	2" / 50	65.9	67.1
HA0261-76-3	2" / 50	67.4	68.7
HA0262-85-3	2 1/2" / 65	76.1	78.1
HA0263-100-3	3" / 80	91.7	92.9
HA0263-101-3	3" / 80	92.1	93.3
HA0263-102-3	3" / 80	93.6	94.9
HA0263-104-3	3" / 80	95.2	96.5
HA0263-105-3	3" / 80	96.8	98.0
HA0263-107-3	3" / 80	98.4	99.6
HA0303-127-3	4" / 100	117.5	118.7
HA0303-129-3	4" / 100	119.0	120.3
HA0303-130-3	4" / 100	120.6	121.9
HA0303-132-3	4" / 100	122.2	123.5
HA0303-134-3	4" / 100	123.8	125.0

Ferrules are manufactured from grade 304 S15 (1.4301) When ordering Ferrules, please state hose dimensions.

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INTERNAL EXPANSION HYGIENIC ENGINEERING POLYMER FERRULES



Please note: These fittings are available to suit RJT, IDF, SMS, DIN. Please advise your requirement.

PART NO.	SIZE	HOSE OD RANGE (MM)	
		TO	FROM
HA0259-46-4BLU	1"	35.7	36.5
HA0259-47-4BLU	1"	36.9	37.7
HA0259-48-4BLU	1"	38.1	38.9
HA0259-50-4BLU	1"	39.3	40.1
HA0259-51-4BLU	1"	40.5	41.3
HA0260-59-4BLU	1 1/2"	48.4	49.6
HA0260-60-4BLU	1 1/2"	50	51.2
HA0260-62-4BLU	1 1/2"	51.6	52.8
HA0260-64-4BLU	1 1/2"	53.2	54.4
HA0261-73-4BLU	2"	62.7	63.9
HA0261-75-4BLU	2"	64.3	65.5
HA0261-76-4BLU	2"	65.9	67.1
HA0261-78-4BLU	2"	67.4	68.7
HA0262-89-5BLU	2 1/2"	76.1	78.1
HA0263-104-5BLU	3"	91.7	92.9
HA0263-105-5BLU	3"	92.1	93.3
HA0263-106-5BLU	3"	93.6	94.9
HA0263-108-5BLU	3"	95.2	96.5
HA0263-109-5BLU	3"	96.8	98
HA0263-111-5BLU	3"	98.4	99.6

Holedall Engineering Polymer Ferrules are also available in sizes 1" thru 3" for Industrial Hose applications, with a maximum working pressure of 20 Bar/300 psi.

Permanently Attached Couplings - Holedall® System

Internally Expanded Permanent Couplings - Scovill Style

Brass internally expanded permanent couplings are recommended for discharge and suction service. Commonly used in the transfer of fuel to homes, airplanes, ships, etc. The working pressure of the 520-H fitting varies with the size of the fitting, the size and construction of the hose and the media being conveyed. Dixon Holedall stems and ferrules are specifically designed to be used together as a coupling system.

Both the male and female have octagonal facets for tightening with a wrench. The female in 1½" and larger sizes has lugs for tightening. The stem is expanded to nominal ID of hose for a rigid, uniform, full-flow area.



- Male and female stems are machined from bar stock or solid brass forgings; ferrules are available in brass and stainless steel.
- Couplings are compact, light and streamlined to eliminate catching on curbs and shrubs.
- The H520 fittings are designed for internal expansion only
- Couplings are pre-lubricated for assembly.
- Hand and electrically operated installation equipment is available. Consult factory for pricing and availability.

INTERNALLY EXPANDED PERMANENT COUPLINGS - SCOVILL STYLE - BRASS

MALE NPT PART NO.	MALE NST PART NO.	FEMALE NPSH PART NO.	FEMALE NST PART NO.	VICTAULIC GROOVE PART NO.	HOSE ID
H5192	-	H5191-BU	-	-	¾"
H5212-A	H5212NST	H5211-A-BU	H5211NST	G5212	1"
H5222-A	-	H5221-A-BU	-	-	1-1¼"
H5272 ¹	-	H5271-BU ¹	-	-	1-1⅜"
H5232-A	H5232NST	H5231-A-BU	H5231NST ²	G5232	1-1½"
H5242	-	H5241-BU	-	G5242	2"
H5252	-	H5251 ³	-	-	2-2½"
H5262	-	H5261 ³	-	-	3"

1. 1⅜" stem has 1½" thread

2. 1½" NST requires special adapter, part # H5231NSTADT

3. 2½" and 3" parts have female NPSM thread

Note: The fittings on this page are intended for fuel delivery service.

H


Permanently Attached Couplings - Holedall® System

520-H Ferrules

A wide range of 520-H ferrules permits a perfect assembly of a coupling to a corresponding size of hose within commercial tolerances regardless of wall thickness. Eliminates need for large stock of coupling bodies. Consult Dixon for other hose OD's



520-H FERRULES - BRASS

PART NO.	HOSE ID	HOSE OD		PART NO.	HOSE ID	HOSE OD		PART NO.	HOSE ID	HOSE OD	
		FROM	TO			FROM	TO			FROM	TO
R75AAS	3/4"	28.58	28.58	R1375BS	1 3/8"	44.05	45.24	R2AAS	2"	61.52	62.71
R75AS	3/4"	30.16	30.16	R1375CS	1 3/8"	45.64	46.83	R2AS	2"	63.10	62.39
R75BS	3/4"	31.35	31.35	R1375DS	1 3/8"	47.23	48.42	R2BS	2"	64.69	65.88
R75CS	3/4"	32.54	32.54	R1375ES	1 3/8"	48.82	50.01	R2CS	2"	66.28	67.47
R1AAAS-A	1"	34.93	35.72	R15AAAS-A	1 1/2"	46.83	48.02	R2DS	2"	67.87	69.06
R1AAS-A	1"	36.12	36.91	R15AAS-A	1 1/2"	48.42	50.01	R2ES	2"	69.45	70.64
R1AS-A	1"	37.31	38.10	R15AS-A	1 1/2"	50.40	51.59	R2FS	2"	71.04	72.23
R1BS-A	1"	38.50	39.29	R15BS-A	1 1/2"	51.99	53.18	R25AS	2 1/2"	75.41	76.60
R1CS-A	1"	39.69	40.48	R15CS-A	1 1/2"	53.58	55.17	R25BS	2 1/2"	76.99	78.58
R1DS-A	1"	40.88	41.67	R15DS-A	1 1/2"	55.56	56.36	R25CS	2 1/2"	78.98	80.57
R1ES-A	1"	42.07	42.86	R15ES-A	1 1/2"	56.75	58.34	R25DS	2 1/2"	80.96	82.55
R125AAS-A	1 1/4"	40.88	42.07	R15FS	1 1/2"	58.74	60.33	R25ES	2 1/2"	82.95	84.53
R125AS-A	1 1/4"	42.47	43.66	R15GS	1 1/2"	60.72	61.91	R25FS	2 1/2"	84.93	86.52
R125BS-A	1 1/4"	44.05	45.24					R3AAAS	3"	88.11	89.69
R125CS-A	1 1/4"	45.64	46.83					R3AAS	3"	90.09	91.68
R125DS-A	1 1/4"	47.23	48.42					R3AS	3"	92.08	94.06
ZTTR125ES	1 1/4"	48.82	50.01					R3BS	3"	94.46	96.04
								R3CS	3"	96.44	97.63

H

Permanently Attached Couplings - Holedall® System

API Certified Permanently Attached Petroleum Couplings

The following fittings have been tested and are compliant with API 1529 6th edition.

Coupling procedures, ferrule recommendations and API test data are available upon request.



520-H SERIES MALE THREAD			
BRASS PART NO.	ALUMINIUM PART NO.	HOSE SIZE	THREAD TYPE
H5212-A	-	1"	NPT
H5222-A	-	1¼"	NPT
H5232-A	-	1½"	NPT
H5242L-A	A5242L-A ¹	2"	NPT
H5252L-A	A5252L-A ¹	2½"	NPT
H5262L-A	A5262L-A ¹	3"	NPT
H5282L-A	-	4"	NPT

¹ requires a special thrust plate

2" 25000HTL24 2½" 25000HTL25 3" 25000HTL26



520-H SERIES FEMALE THREAD		
BRASS PART NO.	HOSE SIZE	THREAD TYPE
H5211-A-BU	1"	NPSH
H5221-A-BU	1¼"	NPSH
H5231-A-BU	1½"	NPSH
H5241L-A-BU	2"	NPSH
H5251L-A-BU	2½"	NPSM
H5261L-A-BU	3"	NPSM
H5281L-A-BU	4"	NPSM



Permanently Attached Couplings - Holedall® System

API 520-H Series Ferrules



API 520-H SERIES FERRULES

BRASS PART NO.	HOSE ID	HOSE OD		304 STAINLESS STEEL PART NO.	ALUMINIUM PART NO.	HOSE ID	HOSE OD	
		FROM	TO				FROM	TO
R1AAAS-A	1"	34.93	35.72	R2ASS-A	R2AAL-A	2"	63.10	64.29
R1AAS-A	1"	36.12	36.91	R2BSS-A	R2BAL-A	2"	64.69	65.88
R1AS-A	1"	37.31	38.10	R2CSS-A	R2CAL-A	2"	66.28	67.47
R1BS-A	1"	38.50	39.29	R2DSS-A	R2DAL-A	2"	67.87	69.06
R1CS-A	1"	39.69	40.48	R2ESS-A	R2EAL-A	2"	69.45	70.64
R1DS-A	1"	40.88	41.67	R25ASS-A	R25AAL-A	2 1/2"	75.41	76.60
R1ES-A	1"	42.07	42.86	R25BSS-A	R25BAL-A	2 1/2"	76.99	78.58
R125AAS-A	1 1/4"	40.88	42.07	R25CSS-A	R25CAL-A	2 1/2"	78.98	80.57
R125AS-A	1 1/4"	42.47	43.66	R25DSS-A	R25DAL-A	2 1/2"	76.99	82.55
R125BS-A	1 1/4"	44.05	45.24	R25ESS-A	R25EAL-A	2 1/2"	82.95	84.53
R125CS-A	1 1/4"	45.64	46.83	R3AASS-A	R3AAAL-A	3"	90.09	91.68
R125DS-A	1 1/4"	47.23	48.42	R3ASS-A	R3AAL-A	3"	92.08	94.06
R125ES-A	1 1/4"	48.82	50.01	R3BSS-A	R3BAL-A	3"	94.46	96.04
R15AAAS-A	1 1/2"	46.83	48.02	R3CSS-A	R3CAL-A	3"	96.44	97.63
R15AAS-A	1 1/2"	48.42	50.01	R3DSS-A	R3DAL-A	3"	98.03	99.62
R15AS-A	1 1/2"	50.40	51.59	R4ESS-A	-	4"	119.86	120.65
R15BS-A	1 1/2"	51.99	53.18	R4FSS-A	-	4"	121.05	121.84
R15CS-A	1 1/2"	53.58	55.17	R4GSS-A	-	4"	122.24	123.03
R15DS-A	1 1/2"	55.56	56.36	R4HSS-A	-	4"	123.43	124.22
R15ES-A	1 1/2"	56.75	58.34	R4KSS-A	-	4"	124.62	125.02
				R4LSS-A	-	4"	125.41	126.21
				R4MSS-A	-	4"	126.60	127.00

Replacement Washers



REPLACEMENT WASHERS

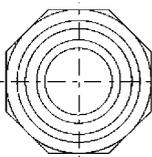
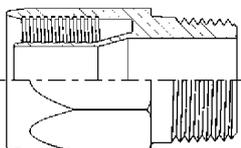
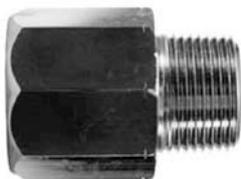
PART NO.	SIZE
H5071-BU	3/4"
H5072-BU	1"
H5073-BU	1 1/4"
H5074-BU	1 1/2"
H5075-BU	2"
H5076-BU	2 1/2"
H5077-BU	3"
H5078-BU	4"

Permanently Attached Couplings - Holedall® System

Permanent Couplings for Pump Hose

The most economical and trouble-free couplings for gas pump hose. Serrations on the stem become imbedded in the hose eliminating wicking and leakage. The shell extends beyond the stem to prevent cutting of interior walls. Tapered ends of stem and shell protect hose when flexed.

- Couplings provide tamper-proof static connection which cannot be broken without completely damaging coupling and hose
- internal expansion of stem to nominal ID of hose provides full flow
- Broad, firm grip of coupling extends hose life by making it possible for hose to withstand more flexings
- Hand and electrically operated installation equipment are available
- Caution: Reattach static wire if required

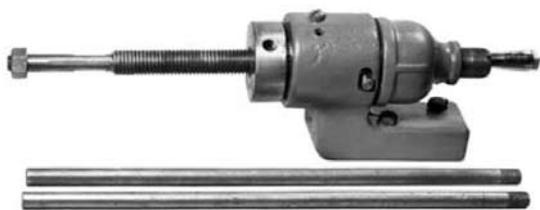


PERMANENT COUPLINGS FOR PUMP HOSE - CHROME BRASS PLATED			
PART NO.	HOSE ID	MALE NPT	HOSE OD
H5741	5/8"	3/4"	25.40
H5742	5/8"	3/4"	26.19
H5751	3/4"	3/4"	28.97
H5752	3/4"	3/4"	29.77
H5753	3/4"	3/4"	30.56
H5754	3/4"	3/4"	30.96
H5755 ¹	3/4"	3/4"	32.15
H5771	1"	1"	35.32
H5772	1"	1"	36.91
H5773	1"	1"	38.10
H5774	1"	1"	39.69

1. thrust plate required 25000HTL15



HB Coupling Expander Machine



PART NO.
2500HB0000

- hand operated, pull-through type expander
- for use in a fixed location for small production runs or as a portable repair type expander
- attaches sizes 3/4" through 2" of the 520-H Series couplings, and all sizes of 570-H and 580-H Series couplings
- expander tooling sold separately

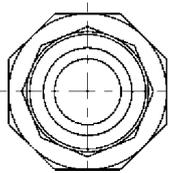
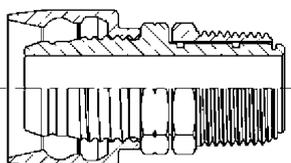


Permanently Attached Couplings - Holedall® System

Dubl-Grip® Re-attachable Couplings for Curb Pump Hose

Two-piece re-attachable coupling made of chrome-plated brass for pump hose. Streamlined design prevents damage to hose and fits smartly on new pump equipment. Wide, flat surfaces of body threads protect inside of hose from breaking. Tapered surfaces of sleeve and body cradle hose, prevent one-point strain from flexing. Hose is gripped on its full circumference in two places, insuring a rigid leakproof connection.

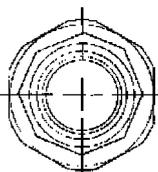
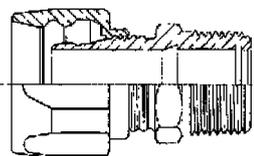
- couplings have standard male NPT threads
- worn portion of hose can be removed and Dubl-Grip® can be reapplied
- easy assembly:
Hose is held in position by sleeve as body is threaded home
Only a wrench is required to assemble the Dubl-Grip®
- Caution: Reattach static wire if required



H

H-600 SERIES DUBL-GRIP® SWIVEL REATTACHABLES - CHROME PLATED BRASS			
PART NO.	HOSE ID	MALE NPT	HOSE OD
H600 ¹	5/8"	3/4"	26.99
H601 ¹	5/8"	3/4"	25.40
H602 ¹	5/8"	3/4"	26.19
H603	3/4"	3/4"	28.58
H604	3/4"	3/4"	30.56
H605	3/4"	3/4"	31.75
H609 ²	1"	1"	34.93
H610 ²	1"	1"	36.51
H611 ²	1"	1"	38.10

1. items will be discontinued when stock is depleted
2. octagonal shape

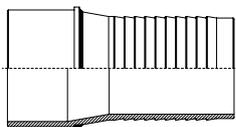


DUBL-GRIP® REATTACHABLES - CHROME PLATED BRASS			
PART NO.	HOSE ID	MALE NPT	HOSE OD
850212	5/8"	3/4"	25.40
850213	5/8"	3/4"	26.19
850214	5/8"	3/4"	26.99
850451	3/4"	3/4"	28.58
850455	3/4"	3/4"	30.56
850453	3/4"	3/4"	31.75
850841 ¹	1"	1"	34.93
850801 ¹	1"	1"	36.51
850811 ¹	1"	1"	38.10

1. octagonal shape

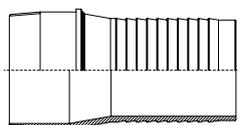
Permanently Attached Couplings - Holedall® System

Holedall® ES External Swage Couplings



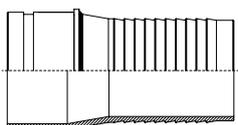
PLAIN END STEM FOR WELDING - NATURAL FINISH		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0074	HA1074	2"
HA0075	HA1075	2 1/2"
HA0076	HA1076	3"
HA0077	HA1077	4"
HA0078	HA1078	5"
HA0079	HA1079	6"
HA0100	HA1100	8"

Plain End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



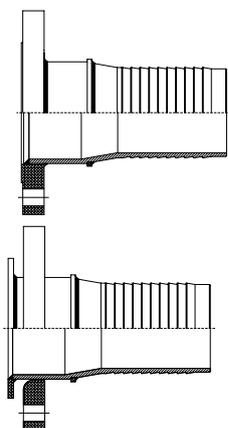
MALE THREAD STEM - YELLOW ZINC PLATED						
CARBON STEEL PART NO.S			STAINLESS STEEL PART NO.S			NOMINAL BORE*
BSP	BSPT	API/NPT	BSP	BSPT	API/NPT	
HA0081ZP	HA0081TZP	HA0082ZP	HA1081	HA1081T	HA1082	2"
HA0084ZP	HA0084TZP	HA0085ZP	HA1084	HA1084T	HA1085	2 1/2"
HA0087ZP	HA0087TZP	HA0088ZP	HA1087	HA1087T	HA1088	3"
HA0090ZP	HA0090TZP	HA0091ZP	HA1090	HA1090T	HA1091	4"
HA0093ZP	HA0093TZP	HA0094ZP	HA1093	HA1093T	HA1094	5"
HA0096ZP	HA0096TZP	HA0097ZP	HA1096	HA1096T	HA1097	6"
HA0146ZP	HA0146TZP	HA0147ZP	HA1146	HA1146T	HA1147	8"

Threaded End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



GROOVED STEM - YELLOW ZINC PLATED		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0083ZP	HA1083	2"
HA0086ZP	HA1086	2 1/2"
HA0089ZP	HA1089	3"
HA0092ZP	HA1092	4"
HA0095ZP	HA1095	5"
HA0098ZP	HA1098	6"
HA0149ZP	HA1149	8"

Grooved Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



FLANGED STEM - FIXED & SWIVEL - YELLOW ZINC PLATED				
CARBON STEEL PART NO.S		STAINLESS STEEL PART NO.S		NOMINAL BORE*
FIXED	SWIVEL	FIXED	SWIVEL	
HA0172ZP	HA0157ZP	HA1172	HA1157	2"
HA0173ZP	HA0158ZP	HA1173	HA1158	2 1/2"
HA0174ZP	HA0159ZP	HA1174	HA1159	3"
HA0175ZP	HA0160ZP	HA1175	HA1160	4"
HA0176ZP	HA0161ZP	HA1176	HA1161	5"
HA0177ZP	HA0162ZP	HA1177	HA1162	6"
HA0178ZP	HA0163ZP	HA1178	HA1163	8"

* Couplings are also available for metric sized hose bores



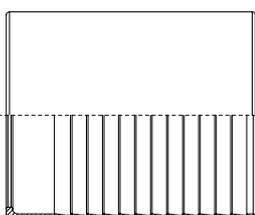
Permanently Attached Couplings - Holedall® System

Ferrules - Yellow Zinc Plated.

Ferrule Selection Chart (Standard 20 Bar Hose)

EXTERNAL SWAGE FERRULE SELECTION GUIDE										
PART NO. PREFIX WALL THK. (MM)	HOSE BORE SIZE (STANDARD INCH SIZING)									
	1IN	1.25IN	1.5IN	2IN	2.5IN	3IN	4IN	5IN	6IN	8IN
4.0										
4.5										
5.0										
5.5										
6.0	44.5-2.5	51-2.5	58-3	71-3	84-3	97-3				
6.5	45.5-2.5	52-2.5	59-3	72-3	85-3	98-3				
7.0	46.5-2.5	53-2.5	60-3	73-3	86-3	99-3	125-3	152-4		
7.5		54-2.5	61-3	74-3	87-3	100-3	126-3	153-4		
8.0		55-2.5	62-3	75-3	88-3	101-3	127-3	154-4		
8.5		56-2.5	63-3	76-3	89-3	102-3	128-3	155-4		
9.0		57-2.5	64-3	77-3	90-3	103-3	129-3	156-4	182-4.5	
9.5		58-2.5	65-3	78-3	91-3	104-3	130-3	157-4	183-4.5	
10.0		59-2.5	66-3	79-3	92-3	105-3	131-3	158-4	184-4.5	236-5
10.5				80-3	93-3	106-3	132-3	159-4	185-4.5	237-5
11.0				81-3	94-3	107-3	133-3	160-4	186-4.5	238-5
11.5				82-3	94-3	108-3	134-3	161-4	187-4.5	239-5
12.0				83-3	95-3	109-3	135-3	162-4	188-4.5	240-5
12.5				84-3	96-3	110-3	136-3	163-4	189-4.5	241-5
13.0							137-3	164-4	190-4.5	242-5
13.5							138-3	165-4	191-4.5	243-5
14.0							139-3	166-4	192-4.5	244-5
14.5							140-3	167-4	193-4.5	245-5
15.0							141-3	168-4	194-4.5	246-5
15.5								169-4	195-4.5	247-5
16.0								170-4	196-4.5	248-5
16.5								171-4	197-4.5	249-5
17.0									198-4.5	250-5
17.5										251-5
18.0										252-5
18.5										253-5
19.0										254-5
19.5										255-5
20.0										256-5

H



Carbon Steel Ferrules are supplied Yellow Zinc Plated and Passivated in accordance with BS1706:1990 or alternatively All Ferrule Part Numbers end in ZP Stainless Steel Ferrules are supplied in Grade 304/304L and are natural finish.

Ferrule Coding example:

4" Hose x 10mm wall thickness. The prefix is HA0071 from the CARBON STEEL' table. The Ferrule Coding for a 10mm wall thickness hose is 131-3 from the table above. The complete part number is HA0072-131-3ZP.

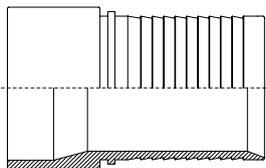
CARBON STEEL	
PART NO. PREFIX	SIZE
HA0068	2.0in
HA0069	2.5in
HA0070	3.0in
HA0071	4.0in
HA0072	5.0in
HA0073	6.0in
HA0188	8.0in

STAINLESS STEEL	
PART NO. PREFIX	SIZE
HA1068	2.0in
HA1069	2.5in
HA1070	3.0in
HA1071	4.0in
HA1072	5.0in
HA1073	6.0in
HA1188	8.0in



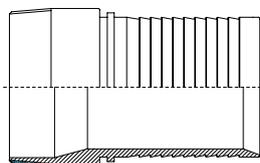
Permanently Attached Couplings - Holedall® System

Holedall® EC External Crimp Couplings



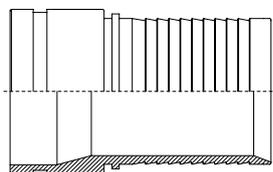
PLAIN END STEM FOR WELDING - NATURAL FINISH		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0101	HA1101	3/4"
HA0102	HA1102	1"
HA0103	HA1103	1 1/4"
HA0104	HA1104	1 1/2"
HA0105	HA1105	2"
HA0106	HA1106	2 1/2"
HA0107	HA1107	3"
HA0108	HA1108	4"

Plain End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



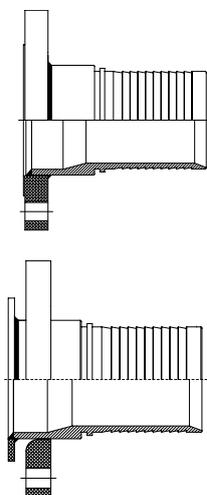
MALE THREAD STEM - YELLOW ZINC PLATED						
CARBON STEEL PART NO.S			STAINLESS STEEL PART NO.S			NOMINAL BORE*
BSP	BSPT	API/NPT	BSP	BSPT	API/NPT	
HA0109ZP	HA0109TZP	HA0117ZP	HA1109	HA1109T	HA1117	3/4"
HA0110ZP	HA0110TZP	HA0118ZP	HA1110	HA1110T	HA1118	1"
HA0111ZP	HA0111TZP	HA0119ZP	HA1111	HA1111T	HA1119	1 1/4"
HA0112ZP	HA0112TZP	HA0120ZP	HA1112	HA1112T	HA1120	1 1/2"
HA0113ZP	HA0113TZP	HA0121ZP	HA1113	HA1113T	HA1121	2"
HA0114ZP	HA0114TZP	HA0122ZP	HA1114	HA1114T	HA1122	2 1/2"
HA0116ZP	HA0115TZP	HA0123ZP	HA1115	HA1115T	HA1123	3"
HA0116ZP	HA0116TZP	HA0124ZP	HA1116	HA1116T	HA1124	4"

Threaded End Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



GROOVED STEM - YELLOW ZINC PLATED		
CARBON STEEL PART NO.	STAINLESS STEEL PART NO.	NOMINAL BORE*
HA0125ZP	HA1125	3/4"
HA0126ZP	HA1126	1"
HA0127ZP	HA1127	1 1/4"
HA0128ZP	HA1128	1 1/2"
HA0129ZP	HA1129	2"
HA0130ZP	HA1130	2 1/2"
HA0131ZP	HA1131	3"
HA0132ZP	HA1132	4"

Grooved Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970: 1983 Grade 316 S11.



FLANGED STEM - FIXED & SWIVEL - YELLOW ZINC PLATED				
CARBON STEEL PART NO.S		STAINLESS STEEL PART NO.S		NOMINAL BORE*
FIXED	SWIVEL	FIXED	SWIVEL	
HA0179ZP	HA0164ZP	HA1179	HA1164	3/4"
HA0180ZP	HA0165ZP	HA1180	HA1165	1"
HA0181ZP	HA0166ZP	HA1181	HA1166	1 1/4"
HA0182ZP	HA0167ZP	HA1182	HA1167	1 1/2"
HA0183ZP	HA0168ZP	HA1183	HA1168	2"
HA0184ZP	HA0169ZP	HA1184	HA1169	2 1/2"
HA0185ZP	HA0170ZP	HA1185	HA1170	3"
HA0186ZP	HA0171ZP	HA1186	HA1171	4"

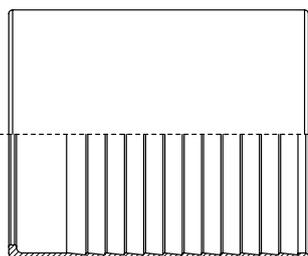
Flanged Stems are usually manufactured in Carbon Steel: ASTM A106 Grade A/B or API 5L Grade A/B, and Stainless Steel: BS970:1983 Grade 316 S11. Flange materials:- Carbon Steel - ASTM A105N; Stainless Steel - ASTM A182 Grade 316L. Both fixed (Slip-on-Weld) and Loose (Swivel) Flanged Stems are available with Flanges in accordance with ASME/ANSI B16.5 class 150/300 lb, BS4504 PN10/16, BS10 Tables D-H. Please specify Flange type and Flange Facing with Order.

For information regarding Ferrules, please refer to page 258.
*Couplings are also available for metric sized hose bores

Permanently Attached Couplings - Holedall® System

Ferrules - Yellow Zinc Plated.

Ferrule Selection Chart (Standard 20 Bar Hose)



EXTERNAL CRIMP FERRULE SELECTION GUIDE									
PART NO. PREFIX WALL THK. (MM)	HOSE BORE SIZE (STANDARD INCH SIZING)								
	1IN	1.25IN	1.50IN	2IN	2.50IN	3IN	4IN	5IN	6IN
4.0	40.5-2.5	47-2.5							
4.5	41.5-2.5	48-2.5							
5.0	42.5-2.5	49-2.5	56-3						
5.5	43.5-2.5	50-2.5	57-3						
6.0	44.5-2.5	51-2.5	58-3	71-3	84-3	97-3			
6.5	45.5-2.5	52-2.5	59-3	72-3	85-3	98-3			
7.0	46.5-2.5	53-2.5	60-3	73-3	86-3	99-3	125-3	152-4	
7.5		54-2.5	61-3	74-3	87-3	100-3	126-3	153-4	
8.0		55-2.5	62-3	75-3	88-3	101-3	127-3	154-4	
8.5		56-2.5	63-3	76-3	89-3	102-3	128-3	155-4	
9.0		57-2.5	64-3	77-3	90-3	103-3	129-3	156-4	182-4.5
9.5		58-2.5	65-3	78-3	91-3	104-3	130-3	157-4	183-4.5
10.0		59-2.5	66-3	79-3	92-3	105-3	131-3	158-4	184-4.5
10.5				80-3	93-3	106-3	132-3	159-4	185-4.5
11.0				81-3	94-3	107-3	133-3	160-4	186-4.5
11.5				82-3	94-3	108-3	134-3	161-4	187-4.5
12.0				83-3	95-3	109-3	135-3	162-4	188-4.5
12.5				84-3	96-3	110-3	136-3	163-4	189-4.5
13.0							137-3	164-4	190-4.5
13.5							138-3	165-4	191-4.5
14.0							139-3	166-4	192-4.5
14.5							140-3	167-4	193-4.5
15.0							141-3	168-4	194-4.5
15.5								169-4	195-4.5
16.0								170-4	196-4.5
16.5								171-4	197-4.5
17.0									198-4.5

Carbon Steel Ferrules are supplied Yellow Zinc Plated and Passivated in accordance with BS1706:1990 with the part number ending in ZP Stainless Steel Ferrules are supplied in Grade 304/304L and are natural finish.

Ferrule Coding example:

4" Hose x 10mm wall thickness. The prefix is HA0196 from 'CARBON STEEL' table. The Ferrule Coding for a 10mm wall thickness hose is 131-3 from the table above. The colour coding is from Oil & Gas UK Colour Coding Scheme which can be found on Page 259 of this catalogue = Red. The complete part number is HA0196-131-3ZP

CARBON STEEL	
PART NO. PREFIX	SIZE
HA0190	1.0in
HA0191	1.25in
HA0192	1.5in
HA0193	2.0in
HA0194	2.5in
HA0195	3.0in
HA0196	4.0in
HA0417	5.0in
HA0418	6.0in

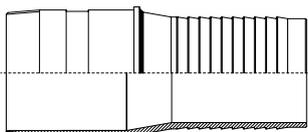
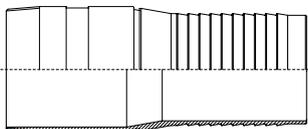
STAINLESS STEEL	
PART NO. PREFIX	SIZE
HA1190	1.0in
HA1191	1.25in
HA1192	1.5in
HA1193	2.0in
HA1194	2.5in
HA1195	3.0in
HA1196	4.0in
HA1417	5.0in
HA1418	6.0in

Permanently Attached Couplings - Holedall® System

Holedall® Hookie – Hook Stem & Ferrules

Hookie – Hook Stems & Ferrules are predominantly used for Bulk Loading/Rig Supply Hose operations on Offshore applications.

Stems are supplied Yellow Zinc Plated in accordance with BS1706: 1990 as standard, with threads to API Standard 5B: 1988. (NPT)



HOOKIE HOOK STEM		
INTERNAL EXPANSION STEM CARBON STEEL - PART NO.	EXTERNAL SWAGE STEM CARBON STEEL - PART NO.	NOMINAL BORE / DN
HA0141ZP	HA0197ZP	3" / 80
HA0142ZP	HA0198ZP	4" / 100
HA0143ZP	HA0199ZP	5" / 125

Internal Swage Ferrules can be supplied in either, natural, Yellow Zinc Plated or Powder Coat Painted finishes in accordance with Oil & Gas UK colour coding scheme or to suit specific requirements.

Ferrule Colour Coding

FERRULE COLOUR CODING	
FERRULE COLOUR CODE	HOSE APPLICATION
Yellow	Dry Cement
Orange	Dry Baryte
Blue	Potable Water
Brown	Diesel Oil / Fuel
Red	Base Oil / Brine
Green	Drill Water
Black	Oil Based Mud
Purple	Glycol
Pink (Black/ Brown Strip)	Base Oil / Fuel Oil
No Colour	Scale Inhibitor



External Swage or Crimp Ferrules are usually supplied in Yellow Zinc Plated finish.

Hookie - Hook Hose Lifter



Dixon are able to supply hose lifters specifically designed for use with Bulk Loading Hose/ Hookie Hook Stems.

Manufactured in forged carbon steel. All Hoselifters are supplied with proof load test and material (3.1) certificates and are available in bore sizes 3", 4" and 5". Safe working load is 4 Tons, with a proof load test of 8 Tons. Hose Lifters are supplied complete with retaining clamp.

HOOKIE - HOOK HOSE LIFTER	
PART NO.	SIZE
HA0900-3	3"
HA0900-4	4"
HA0900-5	5"



Permanently Attached Couplings - Holedall® System

Holedall® Swaging Machines

This latest range of Holedall Internal Expansion & External Swage Machines have been specifically designed and developed to provide a fast, effective, economic and safe method of attaching couplings to hose.



HOLEDALL SWAGING MACHINES

Benefits of Internal Expansion:

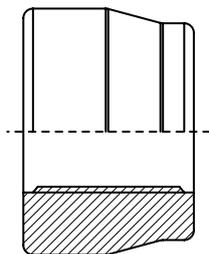
- Easy safe & consistent assembly.
- Virtual full - flow bore
- Full 360° uninterrupted internal expansion.
- Secure - out performs clamps & bands.
- Excellent sealing & retention between coupling & hose
- Reduced turbulence through the hose
- Fully complies with BSEN 1765/ BS:EN 1435/ EN: 14421
- Reduced risk of bacteria traps in hygienic hose assemblies

MACHINE RANGES	SWAGING CAPACITY	HYDRAULIC RAM	HYDRAULIC UNIT	OIL RESERVOIR	PRESSURE INDICATION	ELECTRICAL POWER	OPERATION	SIZE MM	SAFETY FEATURES
 T-20 IX	1" - 3" Nominal Bore, Threaded, Grooved End Fittings, Flanged, Hygienic Couplings etc.. Internal Swage	160mm Stroke x20 ton pull @10,000 psi (700bar)	Power Team 2 Stage 300ccu./min	4.5 litre capacity with sight glass	100mm diameter gauge 0-700 bar	100mm diameter gauge 0-700 bar	Power Supply : 230 v, 1ph, 50Hz	345 x 200 x 205	CE Marked in accordance with European Legislation
 T-50 IX	1" - 6" Nominal Bore, Threaded, Grooved End Fittings, Flanged, Hygienic Couplings etc.. Internal Swage	400mm Stroke x52 ton pull @5,000 (350bar)	Submerged 3/16L/min Gear/Piston Pump Assembly	70 litre capacity with sight glass	100mm diameter gauge 0-350 bar	100mm diameter gauge 0-350 bar	Main Motor 3Kw, Power Supply : 380/415 v, 3ph, 50Hz	1000 x 550 x 785	CE Marked in accordance with European Legislation
 T-100 IX	1" - 12" Nominal Bore, Threaded, Grooved End Fittings, Flanged, Hygienic Couplings etc.. Internal Swage	550mm Stroke x75 ton pull, @10,000psi (700bar)	Submerged 18L/min Gear/Piston Pump Assembly	70 litre capacity with sight glass	100mm diameter gauge 0-700 bar	100mm diameter gauge 0-700 bar	Main Motor 4Kw, Power Supply : 380/415 v, 3ph, 50Hz	1000 x 650 x 700	CE Marked in accordance with European Legislation
 T-350	2" - 14" Nominal Bore, Specially developed for, Swaging Rotary Drilling Hose Dual Swage	915mm Stroke x188 ton pull and 2 Galls/min 354 ton push	4 Galls/min @3,500 psi sight glass @10,000 psi	100 litre capacity with sight glass	100mm diameter gauge 0-1000 bar Digital Chart Recorder Available	100mm diameter gauge 0-1000 bar Digital Chart Recorder Available	Main Motor 11Kw, Power Supply : 380/415 v, 3ph, 50/60Hz	3600 x 2554 x 1016	CE Marked in accordance with European Legislation



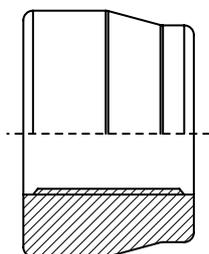
Permanently Attached Couplings - Holedall® System

Holedall® Internal Expansion Machine Tooling

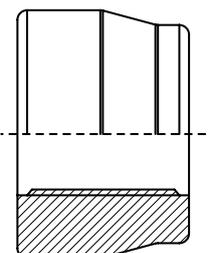


MODEL T-20 OPTIONAL TOOLING LIST	
PART NO.	DESCRIPTION
HA0812	Master Adapter Swaging Plate
HA0844	Draw-Bar for 2", 2.5", 3" IX Dolly
HA0829	Draw-Bar for 1", 1.25", 1.5" IX Dolly
HA0307	1" Internal Expansion Dolly
HA0308	1.5" Internal Expansion Dolly
HA0012	2" Internal Expansion Dolly
HA0013	2.5" Internal Expansion Dolly
HA0014	3" Internal Expansion Dolly

Swaging Plates are available to suit various end terminations.



MODEL T - 50 OPTIONAL TOOLING LIST	
PART NO.	DESCRIPTION
HA0019	Adapter Kit for 2", 2 1/2", 3" Unflanged Couplings Consisting of: Spool Piece (HA0019A): 2", 2 1/2", 3" Swaging Plates (HA0019B/C/D): Adapter for 2", 2 1/2", 3" Dolly's (HA0019E)
HA0012	2" Internal Expansion Dolly
HA0013	2 1/2" Internal Expansion Dolly
HA0014	3" Internal Expansion Dolly
HA0020	4" Internal Expansion Dolly



MODEL T - 100 OPTIONAL TOOLING LIST	
PART NO.	DESCRIPTION
HA0011	Adapter Kit for 2", 2 1/2", 3" Unflanged Couplings Consisting of: Spool Piece (HA0011A): 2", 2 1/2", 3" Swaging Plates (HA0011B/C/D): Adapter for 2", 2 1/2", 3" Dolly's (HA0011E): Ram Sleeve and Extension (HA0011F).
HA0012	2" Internal Expansion Dolly
HA0013	2 1/2" Internal Expansion Dolly
HA0014	3" Internal Expansion Dolly
HA0015	4" Internal Expansion Dolly
HA0016	5" Internal Expansion Dolly
HA0017	6" Internal Expansion Dolly
HA0018	8" Internal Expansion Dolly
HA0005	10" Internal Expansion Dolly
HA0365	12" Internal Expansion Dolly (T100 Only)

Additional Adapter Kits and Dolly's are available for all machines to internally Expand couplings below 2" nominal bore.

Dixon Group Europe Ltd are able to supply external swaging dies, Internal Expansion Dolly's and tooling to suit Mulcorams, Shand UK and other manufacturers Swaging machines. Contact Dixon for details.

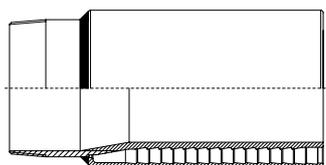
NOTE: Internal Expansion Dollies are also available for metric bore hose



Permanently Attached Couplings - Holedall® System

Holedall® High Pressure & Custom Made Couplings

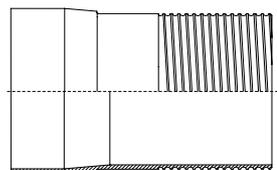
Dixon Group Europe Ltd, whilst being the manufacturer and distributor of the standard range of HOLEDALL High Performance Hose Couplings are also able to supply a variety of custom designed couplings with a wide range of end configurations and service applications. Design variables of coupling length, materials, wall thickness and serration detail provide for installations ranging from lightweight industrial hose to high pressure hoses used in hazardous environments offshore.



Holedall® High Pressure Coupling Assembly

The Holedall High Pressure Coupling Assembly can be supplied for either Internal Expansion or External Swage for working pressures of up to 2,500 psi (170 bar) in size 2" through 10". The assembly is supplied as a one-piece unit with the ferrule being welded to the stem. The assembly can be supplied in various materials including: Stainless Steel and Carbon Steels with Charpy Impact Testing conforming to NACE STD MR-01-75 for both Sour and Non-Sour services.

End terminations include: Welding Neck Flange, API/NPT Thread and Hammer Lug Union.



Holedall® Composite Hose Scroll Tails

Composite Hose Tails are produced for leading Composite Hose Manufacturers in both Carbon and Stainless Steels with fixed and swivel flanged, grooved and threaded end terminations for External Crimping and Swaging in nominal bore sizes up to 10".



Holedall® Hammer Lug Union End Termination

Holedall IX stem with integral 4" fig 206 hammer lug union end termination. Holedall EC stem with integral 4" fig 206 hammer lug union end termination for UHMWPE, XLPE and chemical hose.

- Male sub and Dixon branded nut
- Female sub



Whatever your application, the Holedall brand of high integrity hose couplings are engineered for the exacting service that is demanded by industry today.

Leak-free sealing, coupling retention and maximum end-load capability is achieved with this permanently attached interlocking coupling system.

The Holedall design is simple...the performance impressive.

Permanently Attached Couplings - Holedall® System

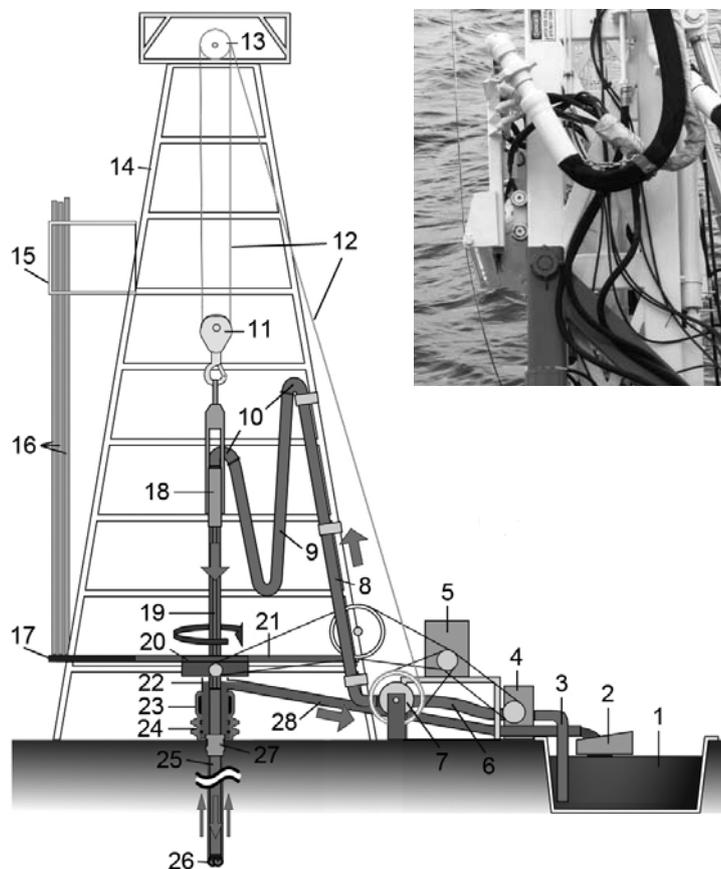
Holedall® Swaged Rotary Drilling Hose Coupling System

In conjunction with the World's leading Rotary/Vibrator Drilling Hose manufacturers, Dixon have developed the Holedall Swaged Rotary Hose Coupling Assembly System. This technology enables both Hose manufacturers and distributors alike to produce safe and secure High Pressure Mud/Rotary Hose Assemblies, in a fraction of the time it traditionally takes using built-in couplings.

These couplings are used for both land-based and offshore drilling operations involving down linking, directional drilling, negative pressure pulses etc. which occur in today's advanced drilling technologies

Typical Drilling Rig Components.

- | | | |
|---------------------------|--|---|
| 1 Mud tank | 11 Traveling block | 21 Drill floor |
| 2 Shale shakers | 12 Drill line | 22 Bell nipple |
| 3 Suction line (mud pump) | 13 Crown block | 23 Blowout preventer (BOP) Annular |
| 4 Mud pump | 14 Derrick | 24 Blowout preventers (BOPs) pipe ram & shear ram |
| 5 Motor or power source | 15 Monkey board | 25 Drill string |
| 6 Vibrating hose | 16 Stand (of drill pipe) | 26 Drill bit |
| 7 Draw-works (winch) | 17 Pipe rack (floor) | 27 Casing head |
| 8 Standpipe | 18 Swivel (On modern rigs this may be replaced by a top drive) | 28 Flow lin |
| 9 Rotary/Kelly hose | 19 Kelly drive | |
| 10 Goose-neck | 20 Rotary table | |



H



Permanently Attached Couplings - Holedall® System

Testing

Dixon Holedall Rotary Couplings have been fully tested and certified by DNV in Hose Assemblies which comply with API 7K fifth edition (June 2010). Couplings are suitable for FSL1 and FSL2 service. Qualification testing and additional testing includes:

- Deformation Test under Pressure
- Ambient Temperature Bending Test
- Low Temperature Bending Test
- Low frequency pulsation test
- Hydrostatic Test
- Burst test



Rotary Couplings

Dixon Holedall Rotary Hose Couplings are available in API Line Pipe Thread and Butt Weld end terminations in nominal bore sizes 2½", 3", 3½" & 4" grades C, D & E, and are available to suit most Rotary Hose manufacture's hose.

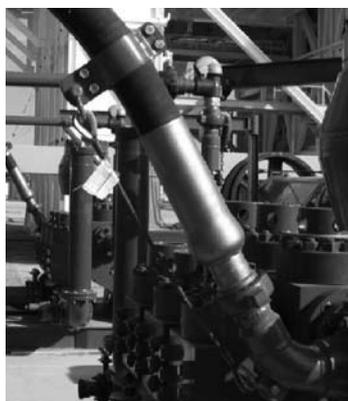
Other end terminations are available; e.g. Hammer Lug Unions, Flanges, Hubs etc. A selection Two different classes of coupling are available: 'API 7K' and 'Standard' All 'API 7K' couplings, have a identified by a unique serial number, low stress stamped on the coupling and are supplied with a full certification dossier which includes Material, NDE and Welding Certification in accordance with ASME IX. 'Standard' Couplings are supplied with material certification only. Couplings are also available to suit Russian Gost 25676 Standard.

H

Dixon-Holedall T-350 Swaging Machine

To complement the Dixon-Holedall Rotary Coupling we have designed and developed a Swaging machine specifically for assembling Rotary Hose. 350 tons of swaging force and 190 tons of pulling force permit swaging in one pass, eliminating the need to use multiple dies. The machines are available with a number of options, Digital Chart Recorder, Overhead Gantry, Electric Hoists etc.

The machine is also suitable for both External and Internal Swaging of general industrial hose up to 14" nominal bore with a ASA 150lb Flange, and is available to suit all International electrical power requirements. Machines supplied into the EC carry the CE Mark .



Permanently Attached Couplings - Holedall® System

Dixon Hammer Unions - Standard Service



100 Series

Note: Buttweld and socket weld configurations and other materials are available.

- Used on low pressure manifolds and lines and in applications running air, water, oil or gas up to 1,000 psi NSCWP (non-shock cold working pressure)

100 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU100200	2"	2" Hammer Union - 100 series, yellow, black nut	1000
HU100250	2 1/2"	2 1/2" Hammer Union - 100 series, yellow, black nut	1000
HU100300	3"	3" Hammer Union - 100 series, yellow, black nut	1000
HU100400	4"	4" Hammer Union - 100 series, yellow, black nut	1000
HU100600	6"	6" Hammer Union - 100 series, yellow, black nut	1000
HU100800	8"	6" Hammer Union - 100 series, yellow, black nut	1000



Example of Buttweld and Socket Weld configuration.

- Used in general service applications running air, water, oil or gas up to 2,000 psi NSCWP (non-shock cold working pressure)



200 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU200100	1"	1" Hammer Union - 200 series, grey sub, blue nut	2000
HU200150	1 1/2"	1 1/2" Hammer Union - 200 series, grey sub, blue nut	2000
HU200200	2"	2" Hammer Union - 200 series, grey sub, blue nut	2000
HU200250	2 1/2"	2 1/2" Hammer Union - 200 series, grey sub, blue nut	2000
HU200300	3"	3" Hammer Union - 200 series, grey sub, blue nut	2000
HU200400	4"	4" Hammer Union - 200 series, grey sub, blue nut	2000
HU200600	6"	6" Hammer Union - 200 series, grey sub, blue nut	2000



- O-ring mounted sub provides excellent sealing properties
- Runs air, water, oil or gas up to 2,000 psi NSCWP (non-shock cold working pressure)



206 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU206100	1"	1" Hammer Union - 206 series, grey sub, blue nut	2000
HU206150	1 1/2"	1 1/2" Hammer Union - 206 series, grey sub, blue nut	2000
HU206200	2"	2" Hammer Union - 206 series, grey sub, blue nut	2000
HU206250	2 1/2"	2 1/2" Hammer Union - 206 series, grey sub, blue nut	2000
HU206300	3"	3" Hammer Union - 206 series, grey sub, blue nut	2000
HU206400	4"	4" Hammer Union - 206 series, grey sub, blue nut	2000
HU206600	6"	6" Hammer Union - 206 series, grey sub, blue nut	2000



Permanently Attached Couplings - Holedall® System

- Lip type seal ring minimises fluid flow turbulence while creating a pressure seal
- For use in mud, manifold service and truck mounting applications running air, water, oil, gas or mud up to 6,000 psi NSCWP (non-shock cold working pressure)



602 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU602100	1"	1" Hammer Union - 602 series, orange sub, black nut	6000
HU602200	2"	2" Hammer Union - 602 series, orange sub, black nut	6000

- Lip type seal ring minimises fluid flow turbulence while creating a pressure seal
- For use in high pressure systems and truck mounting applications running air, water, oil, gas or mud up to 10,000 psi NSCWP (non-shock cold working pressure)



H

1002 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU1002100	1"	1" Hammer Union - 1002 series, blue sub, red nut	1000
HU1002200	2"	2" Hammer Union - 1002 series, blue sub, red nut	1000
HU1002400	4"	4" Hammer Union - 1002 series, blue sub, red nut	1000

- Lip type seal ring minimises fluid flow turbulence while creating a pressure seal
- For use in extreme high pressure applications running air, water, oil, gas or mud up to 15,000 psi NSCWP (non-shock cold working pressure)



1502 SERIES			
PART NO.	SIZE	DESCRIPTION	NSCWP
HU1502200	2"	2" hammer union - 1502 series, red sub, blue nut	15000