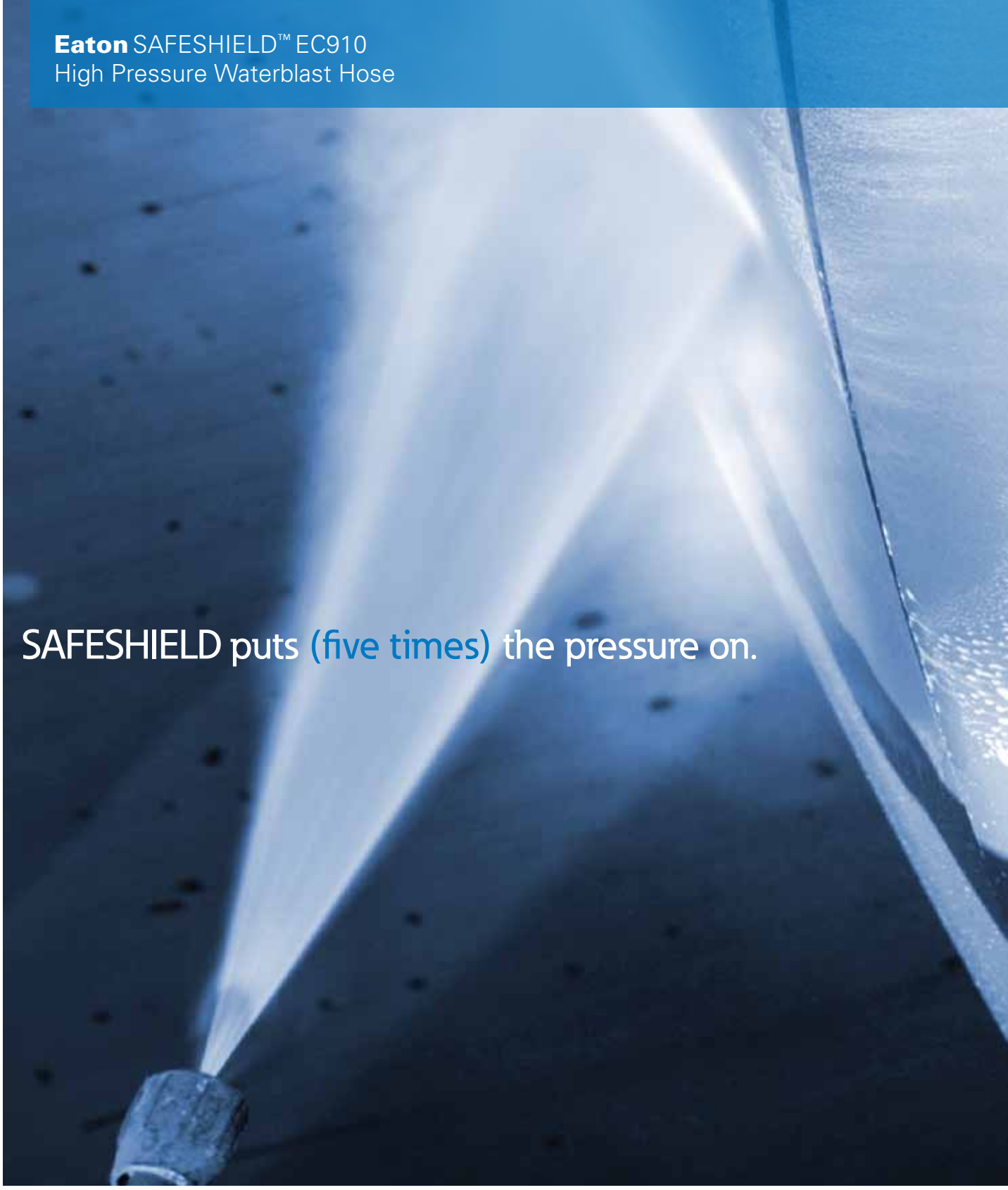
Eaton SAFESHIELD™ EC910
High Pressure Waterblast Hose



Powering Business Worldwide

Choose the natural, eco-safe alternative and get the highest performance waterblast hose.

High pressure waterblasting is gaining popularity as a non-polluting safe method for industrial cleaning, stripping and removal of corrosion, paint, chemical and organic residues. Due to the extremely high pressures found in water-blast applications, safety is key and Eaton's new SAFESHIELD waterblast hose is designed for ultimate protection while providing the best performance in the industry.

Eaton's new SAFESHIELD EC910 hose assemblies offer pressures capable of meeting the most stringent of these applications. Eaton has supplied reliable high quality waterblast hose assemblies for decades. The SAFESHIELD EC910 is designed as the next generation of high pressure waterblast hose with a higher level of reliability and safety.

Eaton's new EC910 hose, internal skive fittings and/or hose assemblies are available in sizes, -08, -12, -16, and are approved for pressures from 1100 bar (16,000 psi) to 700 bar (10,000 psi) in order to withstand the higher pressure requirements for waterblast applications. EC910 has a special steel wire reinforcement construction and an excellent abrasion resistant cover resulting in increased strength while providing good flexibility for long service life and ease of handling in the field.

Applications:

- Stripe removal
- Water treatment facilities
- Marine surfaces
- Stucco removal
- Runway cleaning
- Swimming pool cleaning
- Paint removal
- Bridge renovation

Features:

- Sizes -08, -12 and -16
- Four heavy spiral wire construction
- Eaton's highly abrasion resistant DURA-TUFF hose cover
- 2.5:1 hose safety factor
- Sold in 50 foot hose lengths
- Exceeds ISO 7751 performance
- Meets global specifications EN1829-2 (impulse) and AS/NZ4233.2

Benefits:

- Eaton manufactured and assembled 50 foot hose assemblies provide customer security, knowing that the assemblies were made by professionally trained Eaton personnel
- Superior hose flexibility provides ease of use in the field
- Pre-cut 50 foot lengths of hose reduces scrap created during the assembly process

Part Number	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Min. Burst Pressure		Min. Bend Radius		Approx. Weight	
		mm	(in)	mm	(in)	bar	(psi)	bar	(psi)	mm	(in)	kg/m	(lb/ft)
EC910-08C50*	12	12.7	[0.50]	24.6	[0.97]	1100	[16000]	2750	[40000]	228,6	[9.00]	1,12	[0.75]
EC910-12C50*	19	19.0	[0.75]	32.8	[1.29]	1000	[14500]	2500	[36250]	279,4	[11.00]	1,75	[1.18]
EC910-16C50*	25	25.4	[1.00]	39.9	[1.59]	690	[10000]	1725	[25000]	304,0	[12.00]	2,25	[1.51]

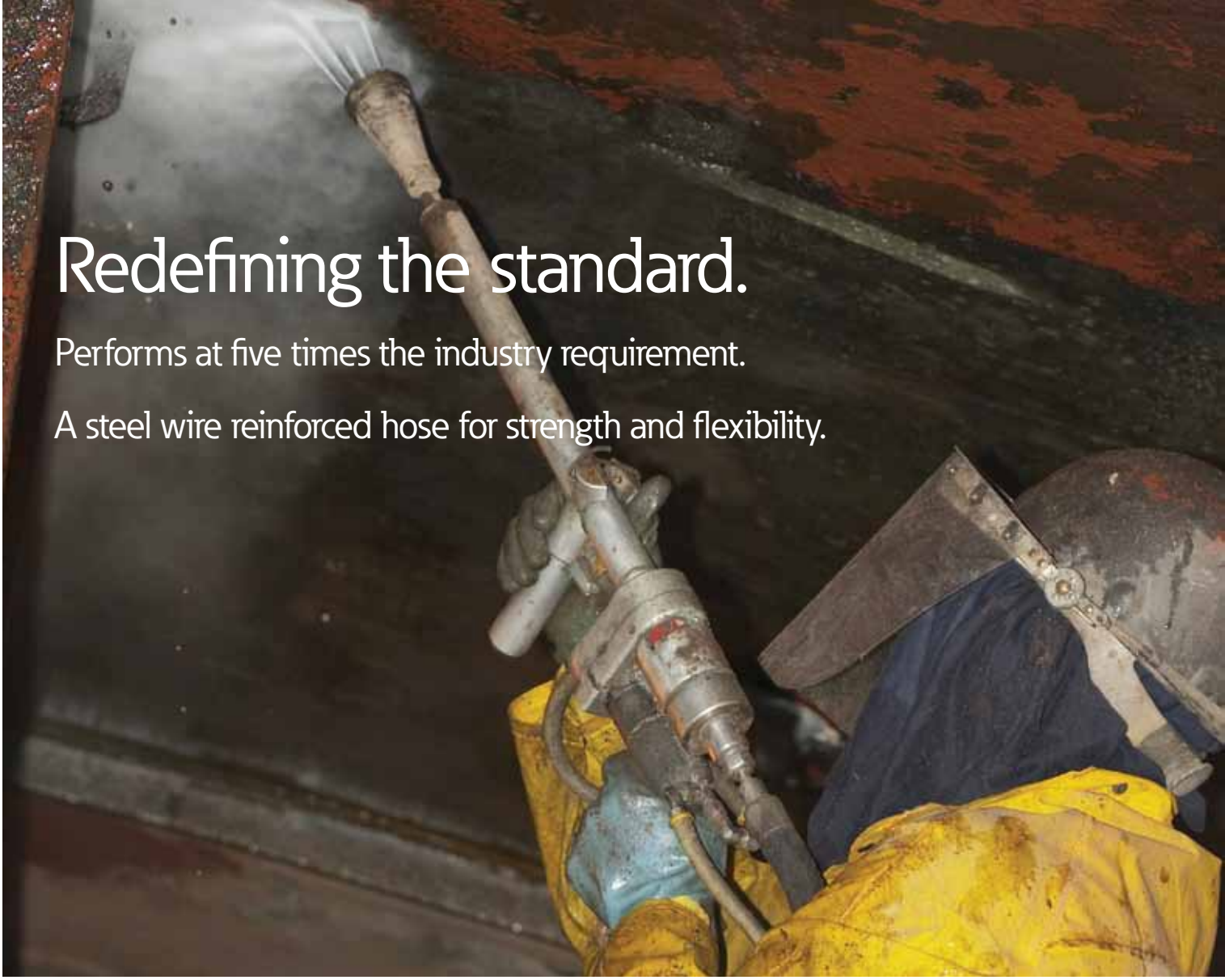
* 50 foot cut lengths. Orders must be placed in 50 foot increments.

Construction
Synthetic rubber inner tube, 4 heavy spiral wire reinforcement and highly abrasion resistant DURA-TUFF synthetic rubber cover

Approved Applications
Waterblast service with water, water-soap emulsion exceeds ISO 7751 requirements

Operating Temperature Range
Max Operating Temperature: -40°C to +93°C [-40°F to +200°F]

Continuous Service Temperature
-10°C to +80°C [-14°F to +176°F]



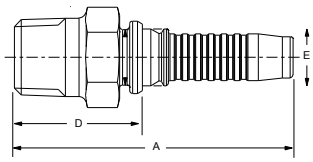
Redefining the standard.

Performs at five times the industry requirement.

A steel wire reinforced hose for strength and flexibility.

Only Eaton Approved Internal Skive Hose Fittings

Male NPTF



Nipple Part #	Socket Part #	Thread	DN	Hose Size	A		Hose Cut Off Factor (D)		Eø	
					mm	(in)	mm	(in)	mm	(in)
FW1889-0808S	FW1890-08S	1/2-14	12	-08	77,1	(3.04)	35,4	(1.39)	9,0	(.36)
1W12MP12	1WA12	3/4-14	19	-12	92,1	(3.63)	40,1	(1.58)	15,1	(.59)
1W16MP16	1WA16	1-11 1/2	25	-16	114,5	(4.51)	47,8	(1.88)	19,6	(.77)

Crimp Specifications, Skive Dimensions and Associated Tooling Can Be Accessed and Downloaded at Eaton.com (Product Advisor)

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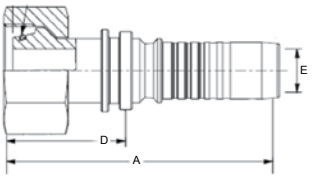

Nipple Part #	Socket Part #	Thread	DN	Hose Size	A		Hose Cut Off Factor (D)		Eø	
					mm	(in)	mm	(in)	mm	(in)
GH10235-8W	FW1890-08S	M24x1.5	12	-08	74,0	(2.91)	32,4	(1.28)	9,0	(0.36)
1W20DS12	1WA12	M36x2.0	19	-12	103,2	(4.06)	51,2	(2.02)	15,1	(0.59)
1W25DS16	1WA16	M42x2.0	25	-16	120,6	(4.75)	54,0	(2.13)	19,6	(0.77)

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Eaton Waterblast Hose Assembly Program

Eaton manufactured hose assemblies are designed and assembled for the most demanding waterblast applications. "Made by Eaton" means your customers know they are using the highest quality products available in the market place assembled by professionally trained Eaton personnel. Whether it's paint stripping, vessel cleaning or boat hull debris remediation, safety and quality will never be compromised.

Eaton waterblast hose assemblies are available in 50 foot lengths with qualified NPTF hose fittings from our world class manufacturing facilities.

All Eaton manufactured assemblies are tagged and labeled for easy identification and traceability. All three available hose sizes are color coded and labeled according to WJTA (Water Jet Technology Association) pressure rating requirements.

50 Foot Assemblies (NPTF Male Pipe Straight Hose Fittings)

Hose Assembly Part No.	DN	Hose Size	Hose ID		Overall Assembly Length	Hose Fitting Connection
			mm	(in)		
FB5944-01	12	-08	12,7	(0.50)	50 Feet	Male NPTF
1C001282-01	19	-12	19,0	(0.75)	50 Feet	Male NPTF
1C001282-02	25	-16	25,4	(1.000)	50 Feet	Male NPTF

FB5944-01 (50 Feet -08 Size)

1C001282-01 (50 Feet -12 Size)

1C001282-02 (50 Feet -16 Size)

Eaton's Guardian™ Sleeve offers a higher level of safety in addition to providing longer hose life.

To protect your operators and nearby personnel while operating waterblast equipment, we recommend the use of Eaton's burst suppression Guardian sleeve. Eaton's Guardian sleeve will deflect a hose burst up to 1100 bar (16000 psi) providing peace of mind when using high pressure products.

The Guardian sleeve also has excellent abrasion resistance so it provides longer hose life – it adds an extra layer of protection for the hose assembly from excessive cover wear.

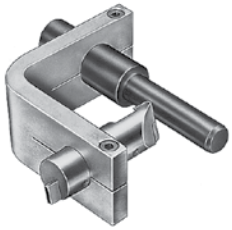
Eaton's Guardian Sleeve - Hose Burst Suppression Sleeve

Properties	Specification	Description
Burst Pressure	1100 bar (16,000 psi)	Capable of containing hose burst up to 16,000 psi
Pin Hole Leak Pressure	280 bar (4000 psi)	Sustained 4,000 psi pin hole deflection from focused 1mm pin hole
Abrasion Cycles	250,000	Survives up to 250,000 Abrasion cycles ISO 6945

Sleeve Part#	Hose Size DN	Hose Size Dash Size	Layline Color	Minimum PKG QTY (ft.)	Galvanized Steel Clamp Part #	Max. ID of Clamp (in)
FF90754-157	12	EC910-08	White	300	FF9217-0630S	1.88
FF90754-209	19	EC910-12	White	300	FF9217-0648S	2.88
FF90754-238	25	EC910-16	White	300	FF9217-0648S	2.88

Optional color-coded laylines available (WJTA Guidelines) upon request. Minimum order quantities apply.

Eaton Qualified Skive Tooling and Accessories



Internal Skive Tooling Part Numbers

Part Number	Hose Size		Internal Skive Length	
	DN	Dash Size	mm	(in)
FT1240-150-8* 121502755-8	12	-08	6,9	(0.27)
FT1240-150-12* 12150506-12	19	-12	9,9	(0.39)
FT1240-150-16* 12150506-16	25	-16	13,5	(0.53)

External Skive Tooling Part Numbers

Part Number	Hose Size		Internal Skive Length	
	DN	Dash Size	mm	(in)
FT1231-8* GT2282-8	12	-08	36,1	(1.42)
FT1231-12* GT2282-12	19	-12	36,3	(1.43)
FT1231-16* GT2282-16	25	-16	47,0	(1.85)

*Tooling only available in North America. Use other P/N outside NA. Follow Eaton assembly procedures for internal and external skiving.

Eaton FD69 Waterblast Coupling 690 bar (10,000 psi)

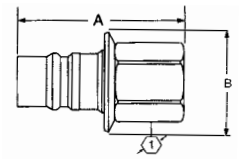


Figure 1

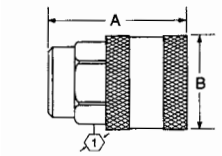


Figure 2

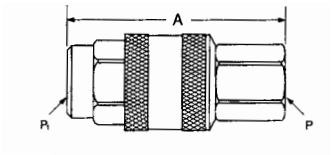


Figure 3

Dimensions (Female NPT)

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Port Thread	Type	Fig.	Dimensions A		B		Hex	①
Steel									mm	(in)	mm	(in)	mm	(in)
FD69-1002-06-08	FD69-1002-06-08	FD69-1002-06-08	Male*	1/2	3/8	3/8-18	Female NPT	1	47.0	(1.85)	41.7	(1.64)	25.4	(1.00)
FD69-1001-06-08	FD69-1026-06-08	FD69-1028-06-08	Female	1/2	3/8	3/8-18	Female NPT	2	54.1	(2.13)	41.1	(1.62)	31.8	(1.25)
FD69-1002-08-08	FD69-1002-08-08	FD69-1002-08-08	Male*	1/2	1/2	1/2-14	Female NPT	1	59.4	(2.34)	41.7	(1.64)	28.4	(1.12)
FD69-1001-08-08	FD69-1026-08-08	FD69-1026-08-08	Female	1/2	1/2	1/2-14	Female NPT	2	54.1	(2.13)	41.1	(1.62)	31.8	(1.25)
Stainless Steel														
FD69-1012-08-08	FD69-1012-08-08	FD69-1012-08-08	Male*	1/2	1/2	1/2-14	Female NPT	1	59.4	(2.34)	41.7	(1.64)	28.4	(1.12)
FD69-1011-08-08			Female	1/2	1/2	1/2-14	Female NPT	2	54.1	(2.13)	41.1	(1.62)	33.3	(1.31)

*Male halves contain no seals.

Complete Coupling Assemblies

Part Number Buna-N	Viton	EPR	Coupling Type	Body Size	Port Size	Thread (P)	Thread (P1)	Type	Fig.	Dimensions A	
Steel										mm	(in)
FD69-1000-080808	FD69-1027-080808	FD69-1029-080808	Complete	1/2	1/2	1/2-14	1/2-14	Female NPT	3	87.1	(3.43)
FD69-1000-080806	FD69-1027-080806	FD69-1029-080806	Complete	1/2	1/2 & 3/8	1/2-14	3/8-18	Female NPT	3	87.1	(3.43)
FD69-1000-060808	FD69-1027-060806	FD69-1029-080808	Complete	1/2	3/8 & 1/2	3/8-18	1/2-14	Female NPT	3	74.7	(2.94)
FD69-1000-060806	FD69-1027-060806	FD69-1029-080806	Complete	1/2	3/8	3/8-18	3/8-18	Female NPT	3	74.7	(2.94)
Stainless Steel											
FD69-1010-080808			Complete	1/2	1/2	1/2-14	1/2-14	Female NPT	3	87.1	(3.43)

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Printed in USA
Document No. E-HOHP-MS003-E
October 2012

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