

## IA Series ISO 7241-1 A Interchange



The IA Series meets ISO 7241-1 A Standard requirements and has a push-pull design, which allows the socket to be bulkhead-mounted. This configuration provides automatic connection or disconnection via a simple push or pull of the plug. Our IA Series is available in 1/2", with female or male end connections such as BSP or metric threads. It is widely used in agriculture and forestry applications.

### Product Features

- ISO size: 12.5 mm (1/2")
- Standard body material: Zinc trivalent plated steel
- Wide offering of end connections, among which metric threads designed in accordance with ISO Standard 8434/1
- Standard seal material: NBR
- Optional PVC dust caps and plugs
- Designed and manufactured in accordance with Article 3.3 of the European Pressure Equipment Directive PED 201468/EU
- Meets dimensional requirements of ISO Standard 7241/1 Series A
- Push-to-connect: the push-pull sleeve on the bulkhead-mounted socket provides automatic connection or disconnection via a simple push or pull of the plug. In the event of pull on the hose, the double-action sleeve gives immediate and automatic disconnection

### Physical Characteristics

Body Size (in)	ISO Size*	Nominal Flow Diameter (mm)	Max. Operating Pressure		Rated Flow**		Fluid Loss ml-cc.
			bar	(psi)	L/min	(gpm)	
1/2	12.5	6	250	3,625	45	11.9	2.6
		8					
		10					
		10.3					

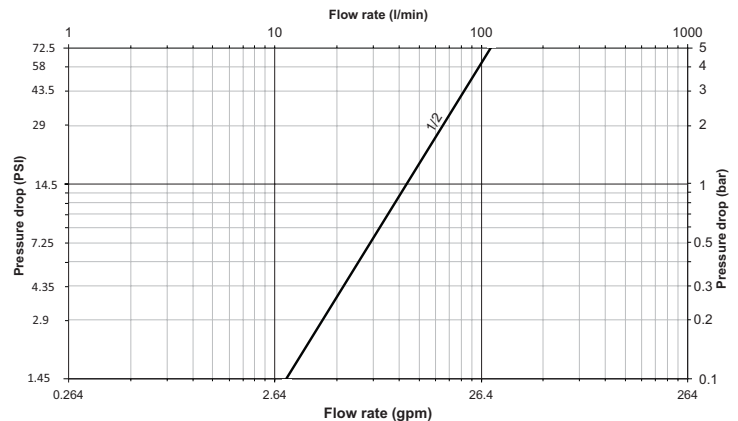
\* The ISO size corresponds to the internal diameter of the hose or the external diameter of the rigid tube (as defined in ISO 4397 Standard).

\*\* Indicated values refer to a 1 bar/14.5 psi pressure drop.

### Applications & Markets

- Agriculture
- Forestry Machinery

### Flow Data



Test Fluid: Oil viscosity 30 cSt at 40°C / 104°F



Powering Business Worldwide

### Seal Elastomer Data\*

Seal Elastomer	Max. Operation Temperature Range
NBR (Nitrile)	-10°C +120°C/14°F +248°F

\*For reference only, based on Eaton recommended temperatures. Contact Eaton technical support for further information on fluid compatibility.

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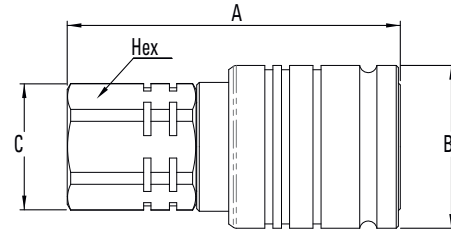


Figure 1

## Sockets (Female) with Internal Thread

Part Number	Body Size	ISO Size	Nominal Flow Diameter	Thread Size (Female)	Fig.	Dimensions							Weight		
						A (in)	B (in)	C (in)	Hex (in)	A (mm)	B (mm)	C (mm)	Hex (mm)	lbs	grams
12IAS37BS	½	12.5	10.3	¾-19	1	2.95	1.50	1.20	1.06	75	38	29.5	27	0.72	327
12IAS50BS				½-14	1	3.07	1.50	1.20	1.06	78	38	29.5	27	0.66	300

To obtain connected length of coupling add dimensions A (Fig. 1) and K (Fig. 3) or P (Fig. 4) together.

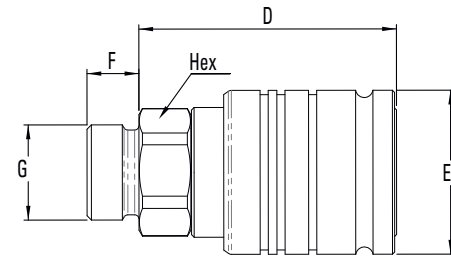
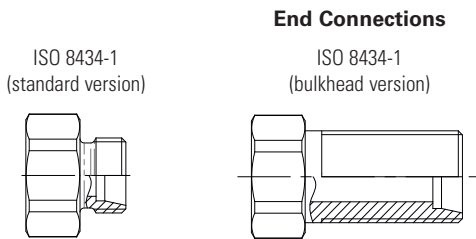


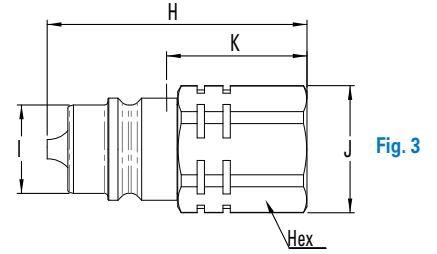
Figure 2

## Sockets (Female) with External Thread

Part Number	Body Size	ISO Size	Nominal Flow Diameter	Thread Size (Male)	Fig.	Dimensions							Weight				
						D (in)	E (in)	F (in)	G (in)	Hex (in)	D (mm)	E (mm)	F (mm)	G (mm)	Hex (mm)	lbs	grams
12IAS8L	½	12.5	6	8L - M14x1.5	2	2.44	1.50	0.39	0.55	1.06	62	38	10	14	27	0.61	275
12IAS10L			8	10L - M16x1.5	2	2.20	1.50	0.43	0.63	1.06	56.5	38	11	16	27	0.56	255
12IAS10LBH			8	10L - M16x1.5 Bulkhead	2	2.44	1.50	1.38	0.63	1.06	62	38	35	16	27	0.68	310
12IAS12L			10	12L - M18x1.5	2	2.20	1.50	0.43	0.71	1.06	56.5	38	11	18	27	0.56	255
12IAS12LBH			10	12L - M18x1.5 Bulkhead	2	2.28	1.50	1.22	0.71	1.06	58.5	38	31	18	27	0.66	300
12IAS15L			10.3	15L - M22x1.5	2	2.20	1.50	0.47	0.87	1.06	56.5	38	12	22	27	0.58	261
12IAS15LBH			10.3	15L - M22x1.5 Bulkhead	2	2.28	1.50	1.22	0.87	1.06	58.5	38	31	22	27	0.72	326
12IAS16S			10.3	16S - M24x1.5	2	2.36	1.50	0.55	0.94	1.06	60	38	14	24	27	0.62	280

To obtain connected length of coupling add dimensions D (Fig. 2) and K (Fig. 3) or P (Fig. 4) together.

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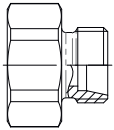
## Plugs (Male) with Internal Thread

Part Number	Body Size	ISO Size	Nominal Flow Diameter	BSPP	Fig.	Dimensions											Weight	
						H (in)	I (in)	J (in)	K (in)	Hex (in)	H (mm)	I (mm)	J (mm)	K (mm)	Hex (mm)	lbs	grams	
12IAP37BS	½	12.5	10.3	¾-19	3	2.24	0.84	1.20	1.22	1.06	57	20.5	29.5	31	27	0.32	146	

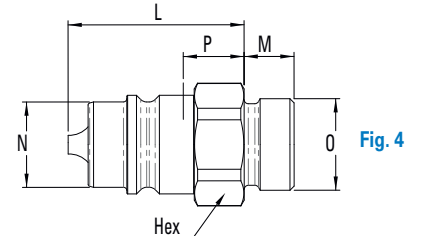
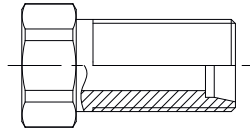
To obtain connected length of coupling add dimensions K (Fig. 3) and A (Fig. 1) or D (Fig. 2) together.

## End Connections

ISO 8434-1  
(standard version)



ISO 8434-1  
(bulkhead version)



## Plugs (Male) with External Thread

Part Number	Body Size	ISO Size	Nominal Flow Diameter	Thread Size	ISO 8434-1	Fig.	Dimensions											Weight	
							L (in)	M (in)	N (in)	O (in)	P (in)	Hex (in)	L (mm)	M (mm)	N (mm)	O (mm)	P (mm)	Hex (mm)	lbs
12IAP8L	½	12.5	6	8L - M14x1.5	4	1.81	0.39	0.84	0.55	0.71	1.06	46	10	20.5	14	18	27	0.21	97
12IAP10L			8	10L - M16x1.5	4	1.81	0.43	0.84	0.63	0.67	1.06	46	11	20.5	16	17	27	0.21	99
12IAP10LBH			8	10L - M16x1.5 Bulkhead	4	1.75	1.38	0.84	0.63	0.71	1.06	44.5	35	20.5	16	18	27	0.30	135
12IAP12L			10	12L - M18x1.5	4	1.71	0.43	0.84	0.71	0.67	1.06	43.5	11	20.5	18	24	27	0.21	100
12IAP12LBH			10	12L - M18x1.5 Bulkhead	4	1.81	1.30	0.84	0.71	0.67	1.06	46	33	20.5	18	17	27	0.32	146
12IAP15L			10.3	15L - M22x1.5	4	1.81	0.47	0.84	0.87	0.63	1.06	46	12	20.5	22	16	27	0.24	108
12IAP15LBH			10.3	15L - M22x1.5 Bulkhead	4	1.81	1.30	0.84	0.87	0.67	1.06	46	33	20.5	22	17	27	0.39	178
12IAP16S			10.3	16S - M24x1.5	4	1.67	0.55	0.84	0.94	0.63	1.06	42.5	14	20.5	24	16	27	0.22	100

To obtain connected length of coupling add dimensions P (Fig. 4) and A (Fig. 1) or D (Fig. 2) together.

## Dust Plugs and Dust Caps

Body Size	Socket Dust Plug Part Number	Plug Dust Cap Part Number
(in)	Plastic	Plastic
½	HP1513100	HP1513200



Eaton  
Hydraulics Group USA  
14615 Lone Oak Road  
Eden Prairie, MN 55344  
USA  
Tel: 952-937-9800  
Fax: 952-294-7722  
[www.eaton.com/hydraulics](http://www.eaton.com/hydraulics)

Eaton  
Hydraulics Group Europe  
Route de la Longeraie 7  
1110 Morges  
Switzerland  
Tel: +41 (0) 21 811 4600  
Fax: +41 (0) 21 811 4601

Eaton  
Hydraulics Group Asia Pacific  
Eaton Building  
4th Floor, No. 3 Lane 280 Linhong Rd.  
Changning District  
Shanghai 200335  
China  
Tel: (+86 21) 5200 0099  
Fax: (+86 21) 5200 0400