

FIRG / ISO.A COUPLING ADAPTORS

INTRODUCTION

Many major OEMs have recognized the benefits offered by flat face couplings and now fit them as standard (see paragraph "Advantages of Flat Face Couplings"). In some cases this can cause compatibility problems because plant owners have machines and attachments fitted with older style ISO.A couplings and these do not connect with flat face couplings. If mismatched couplings have to be changed, it can cause considerable inconvenience, delay and expense. To solve this problem, Holmbury has developed a range of FIRG/ISO.A Coupling Adaptors. These adaptors are quick and easy to use, solve the compatibility problem and represent yet another Holmbury design innovation.

APPLICATIONS

Holmbury Coupling Adaptors are suitable for use in a wide range of industries where flat face and ISO.A couplings need to be connected. Such industries typically include: construction plant, agricultural equipment and general industrial machinery.

ADVANTAGES OF ADAPTORS

- ★ Provides compatibility between old and new plant and equipment.
- ★ Avoids changing mismatched couplings.
- ★ Easy to use - fits in seconds.
- ★ Conventional coupling techniques retained for the flat face and ISO connections.
- ★ Bi-directional flow.
- ★ Flat face female has sleeve and locking ball.

ADVANTAGES OF FLAT FACE COUPLINGS

For those engineers without experience of using flat face couplings, here are the main advantages:

- ★ Flat faces can easily be wiped clean before connection to prevent the ingress of contaminants into the hydraulic circuit.
- ★ Streamlined flow path minimizes pressure drop.
- ★ Clean disconnection - non-spill design.
- ★ No air intrusion during connection.
- ★ Locking sleeve prevents accidental disconnection.
- ★ Bi-directional flow

OPERATION

It is recommended that whenever possible, connections and disconnections be made with the flat face couplings. This eliminates oil loss on disconnection and retains the benefit of clean connection.



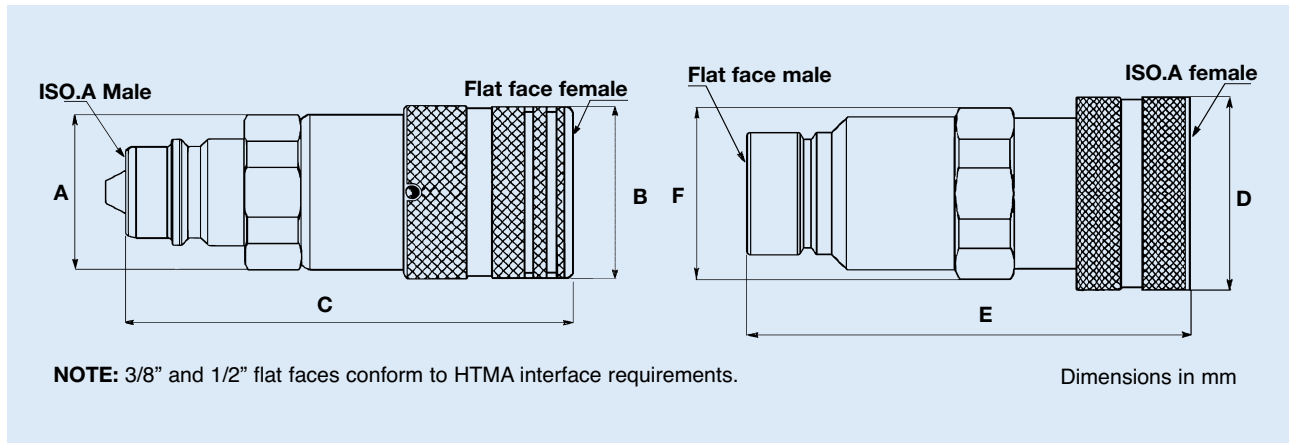
IMPORTANT - as with all hydraulic installations, it is good practice to relieve any residual pressure before disconnecting the couplings or adaptors.

CONSTRUCTION

Heat treated carbon steel protected by a zinc-gold passivation process. Nitrile 'O' ring seals with PTFE backing rings.

ISO couplings fitted with poppet valves. Adaptor sizes 3/8" and 1/2" have 12 locking balls. The 3/4" size adaptors have 15 locking balls to minimize Brinelling. (Brinelling - indentation of the locking balls into the locking groove)

FIRG / ISO.A COUPLING ADAPTORS



DIMENSIONS AND PRESSURE RATINGS

Size	Max Working Pressure	A	B	C	D	E	F	Weight
3/8" FIRG / 3/8" ISO.A	300 bar (4500 psi)	29	32	80	31	88.5	26	0.4kg (14oz)
1/2" FIRG / 3/8" ISO.A	300 bar (4500 psi)	(1.14")	(1.26")	(3.15")	(1.22")	(3.48")	(1.02")	
3/8" FIRG / 1/2" ISO.A	250 bar (3750 psi)	29	32	87	38	92.7	27	0.4kg (14oz)
1/2" FIRG / 1/2" ISO.A	250 bar (3750 psi)	(1.14")	(1.26")	(3.43")	(1.5")	(3.65")	(1.06")	
3/4" FIRG / 3/8" ISO.A	300 bar (4500 psi)	33.8	38	94.8	38	98.4	32	0.78kg (27oz)
3/4" FIRG / 1/2" ISO.A	250 bar (3750 psi)	(1.33")	(1.5")	(3.73")	(1.5")	(3.87")	(1.26")	

ORDER CODES

Code	Description	Code	Description
AD800	3/8" FIRG male / 3/8" ISO.A female	AD801	3/8" FIRG female / 3/8" ISO.A male
AD802	3/8" FIRG male / 1/2" ISO.A female	AD803	3/8" FIRG female / 1/2" ISO.A male
AD804	1/2" FIRG male / 3/8" ISO.A female	AD805	1/2" FIRG female / 3/8" ISO.A male
AD806	1/2" FIRG male / 1/2" ISO.A female	AD807	1/2" FIRG female / 1/2" ISO.A male
AD808	3/4" FIRG male / 3/8" ISO.A female	AD809	3/4" FIRG female / 3/8" ISO.A male
AD810	3/4" FIRG male / 1/2" ISO.A female	AD811	3/4" FIRG female / 1/2" ISO.A male