



## Poppet: Interchange Coupling

Series: IR | IRV | IRS

**Interchange:** Agriculture/ISO 5675

The series IR, IR/V hydraulic quick couplings equipped with ball or poppet sealing valve are mostly applied in agricultural equipment; interchangeable according to ISO 5675. Size 12.5 is in accordance with ISO 7241-1 series "A".

- IR: ball seal valve
- IRV: poppet seal valve
- IRS: push pull coupling
- IRS PC: push pull sleeve connectable under residual pressure

### Overview

Stucchi Agriculture Series are offered with a choice of either ball or poppet valve mechanisms for automatic shut-off during disconnection. The ball mechanism is the IR series, the poppet mechanism is the IRV series. The IR series are mainly for applications where interchangeability with existing equipment is necessary. For new applications poppet valves or flat face are recommended.

### Technical Characteristics & Options

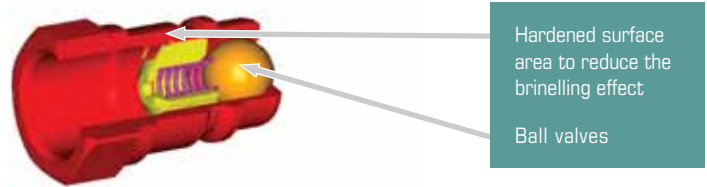
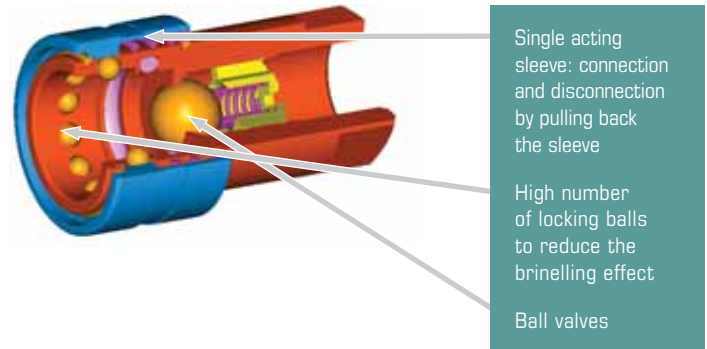
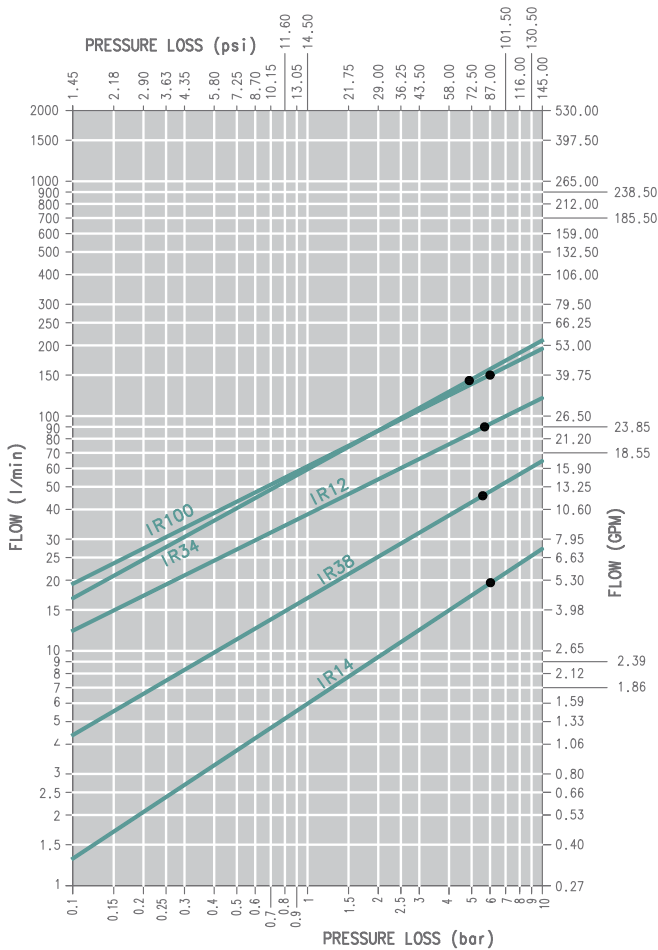
- Coupling constructed in carbon steel with zinc plating
- Nipple made with hardened steel
- Standard seals are Nitrile
- NPT standard threads
- On request SAE, BSP threads
- Anti-dust plastic caps
- Clip provided Nylon caps for IR12 female part



# Agriculture Interchange Coupling

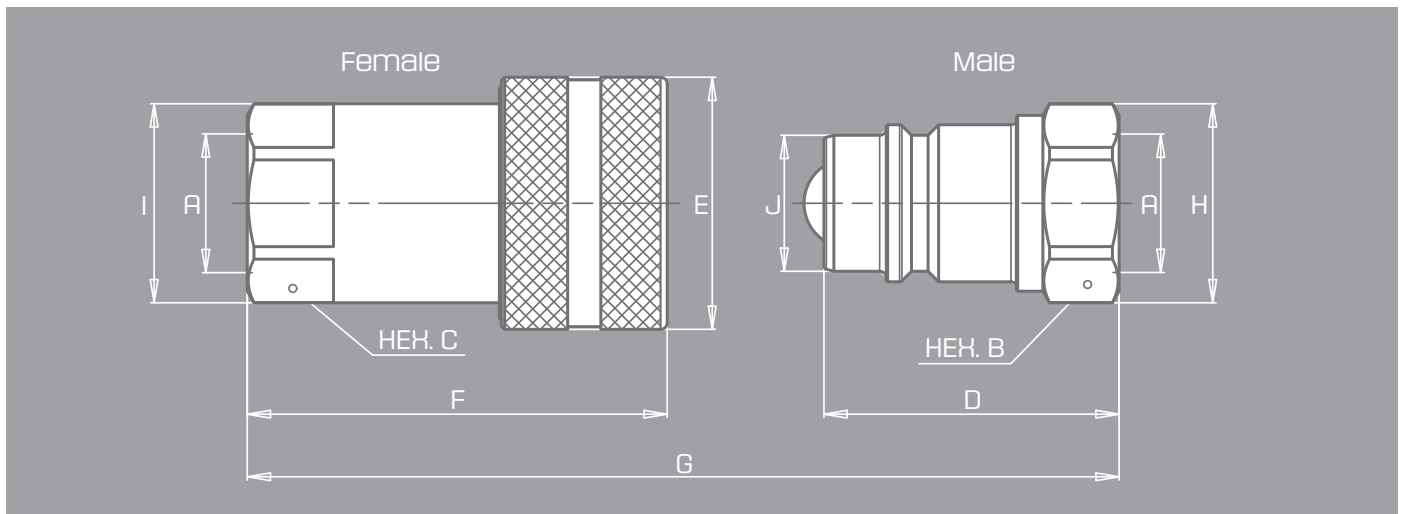
DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		BURST PRESSURE						SPILLAGE*
					COUPLED		MALE		FEMALE		
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
IR14	1/4	-	30	4350	100	14500	100	14500	100	14500	0.13
IR38	3/8	-	30	4350	100	14500	100	14500	90	13050	0.45
IR12	1/2	12.5	25	3625	80	11600	55	7975	55	7975	2.30
IR34	3/4	-	25	3625	100	14500	60	8700	90	13050	4.50
IR100	1	-	20	2900	80	11600	60	8700	80	11600	6.00

\* SPILLAGE IS AN INDICATIVE VALUE OF THE FLUID LOSS PER COUPLE-UNCUPLE CYCLE.





## Poppet: Interchange Coupling Size Diagram

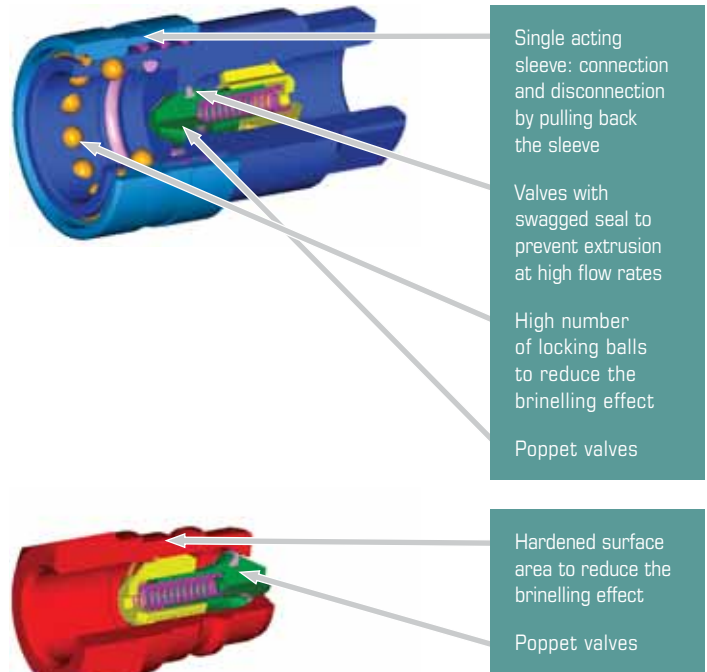
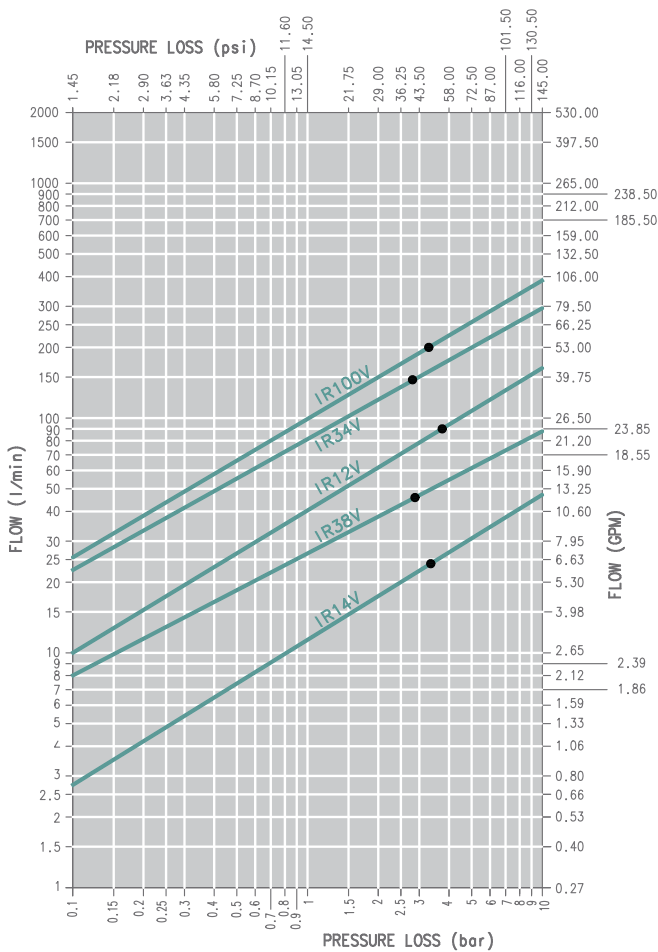


DESCRIPTION	BODY SIZE	A	UNIT	B	C	D	E	F	G	H	I	J	UNIT	WEIGHT	
														MALE	FEMALE
IR14	1/4	1/4	mm	19.0	19.0	32.5	27.0	48.9	64.4	22.0	21.0	14.2	Kg	0.040	0.125
			inch	0.75	0.75	1.28	1.06	1.93	2.54	0.87	0.83	0.56	lb	0.09	0.28
IR38	3/8	3/8	mm	24.0	24.0	38.0	34.0	58.3	76.3	27.7	26.5	19.0	Kg	0.080	0.222
			inch	0.94	0.94	1.50	1.34	2.30	3.00	1.09	1.04	0.75	lb	0.18	0.49
IR12	1/2	1/2	mm	27.0	27.0	44.5	38.0	63.3	86.3	30.0	30.0	20.5	Kg	0.090	0.277
			inch	1.06	1.06	1.75	1.50	2.49	3.40	1.18	1.18	0.81	lb	0.20	0.61
IR34	3/4	3/4	mm	36.0	38.0	59.0	48.0	90.3	118.3	38.5	43.0	26.9	Kg	0.211	0.699
			inch	1.42	1.50	2.32	1.89	3.56	4.66	1.52	1.69	1.06	lb	0.47	1.54
IR100	1	1	mm	41.0	45.0	66.1	54.0	99.6	132.8	44.8	52.0	31.4	Kg	0.301	0.894
			inch	1.61	1.77	2.60	2.13	3.92	5.23	1.76	2.05	1.24	lb	0.66	1.97

# Agriculture Interchange Coupling

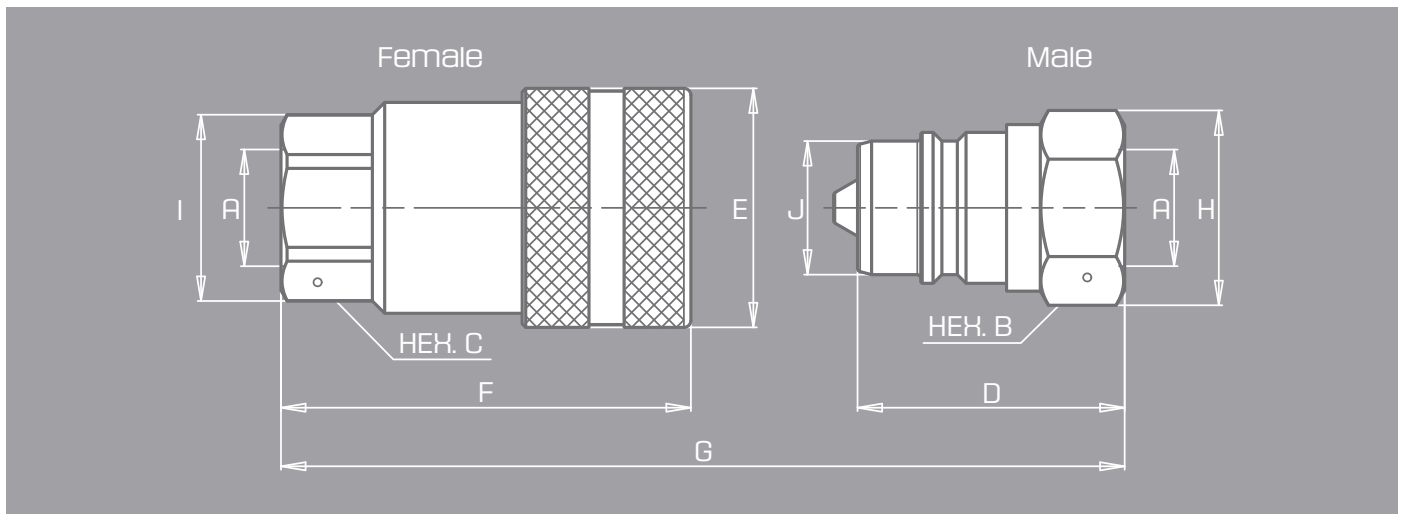
DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		BURST PRESSURE						SPILLAGE*
					COUPLED		MALE		FEMALE		
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
IR14V	1/4	-	30	4350	100	14500	100	14500	100	14500	0.33
IR38V	3/8	-	30	4350	100	14500	100	14500	100	14500	1.30
BIR12	1/2	12.5	25	3625	80	11600	80	11600	100	14500	2.10
IR34V	3/4	-	25	3625	100	14500	90	13050	100	14500	4.20
IR100V	1	-	20	2900	80	11600	80	11600	80	11600	5.50

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## Poppet: Interchange Coupling Size Diagram



DESCRIPTION	BODY SIZE	A	UNIT	B	C	D	E	F	G	H	I	J	UNIT	WEIGHT	
														MALE	FEMALE
IR14V	1/4	1/4	mm	19.0	19.0	32.5	27.0	50.4	65.9	22.0	21.0	14.2	Kg	0.040	0.125
			inch	0.75	0.75	1.28	1.06	1.98	2.59	0.87	0.83	0.56	lb	0.09	0.28
IR38V	3/8	3/8	mm	24.0	24.0	38.0	34.0	58.3	76.3	27.7	26.5	19.0	Kg	0.080	0.222
			inch	0.94	0.94	1.50	1.34	2.30	3.00	1.09	1.04	0.75	lb	0.18	0.49
BIR12	1/2	1/2	mm	27.0	27.0	44.5	38.0	63.3	86.3	29.0	30.0	20.5	Kg	0.084	0.245
			inch	1.06	1.06	1.75	1.50	2.49	3.40	1.14	1.18	0.81	lb	0.19	0.54
IR34V	3/4	3/4	mm	36.0	38.0	59.0	48.0	90.3	118.3	38.5	43.0	26.9	Kg	0.187	0.663
			inch	1.42	1.50	2.32	1.89	3.56	4.66	1.52	1.69	1.06	lb	0.41	1.46
IR100V	1	1	mm	41.0	45.0	64.1	54.0	97.6	128.8	44.8	52.0	31.4	Kg	0.276	0.860
			inch	1.61	1.77	2.52	2.13	3.84	5.07	1.76	2.05	1.24	lb	0.61	1.90

# Agriculture Interchange Coupling



COUPLER



NIPPLE

## IRV NPT and SAE Thread\_Poppet Style Interchange Coupling

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IRV NPT THREAD</b>					
COUPLER	1/4	1/4	NPT	800101000	F. IR 14V NPT
NIPPLE	1/4	1/4	NPT	800101001	M. IR 14V NPT
COUPLER	3/8	3/8	NPT	800101002	F. IR 38V NPT
NIPPLE	3/8	3/8	NPT	800101003	M. IR 38V NPT
COUPLER	1/2	1/2	NPT	800501004	F. BIR 12 NPT
NIPPLE	1/2	1/2	NPT	800501005	M. BIR 12 NPT
COUPLER	3/4	3/4	NPT	800101004	F. IR 34V NPT
NIPPLE	3/4	3/4	NPT	800101005	M. IR 34V NPT
COUPLER	1	1	NPT	800101006	F. IR 100V NPT
NIPPLE	1	1	NPT	800101007	M. IR 100V NPT
COUPLER	3/4	3/4	NPT	820001022	F. IR 34V FA NPT*
NIPPLE	3/4	3/4	NPT	820001023	M. IR 34V FA NPT*
<b>IRV SAE THREAD</b>					
COUPLER	1/4	3/8	SAE	800104000	F. IR 14V 38 SAE
NIPPLE	1/4	3/8	SAE	800104001	M. IR 14V 38 SAE

\* FASTER INTERCHANGE ONLY



COUPLER

## IRS V\_Poppet Valve | Agricultural Push/Pull Sleeve

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IRS V NPT AND SAE THREAD</b>					
COUPLER	1/2	1/2	NPT	800401002	F. IRS 12VA NPT
COUPLER	1/2	1/2	SAE	804304004	F. I 12VA SAE

## IRS PC\_Poppet Valve | Agricultural Push/Pull Sleeve | Connect Under Pressure

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IRS PC NPT AND SAE THREAD</b>					
COUPLER	1/2	1/2	NPT	800401004	F. IRS 12VA PC NPT
COUPLER	1/2	1/2	SAE	804304002	F. I 12VA PC SAE



### IR Ball Valve NPT Thread\_Poppet Style Interchange Coupling

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IR BALL VALVE NPT THREAD</b>					
COUPLER	1/4	1/4	NPT	800001000	F. IR 14 NPT
NIPPLE	1/4	1/4	NPT	800001001	M. IR 14 NPT
COUPLER	3/8	3/8	NPT	800001002	F. IR 38 NPT
NIPPLE	3/8	3/8	NPT	800001003	M. IR 38 NPT
COUPLER	1/2	1/2	NPT	800001004	F. IR 12 NPT
NIPPLE	1/2	1/2	NPT	800001005	M. IR 12 NPT
COUPLER	3/4	3/4	NPT	800001006	F. IR 34 NPT
NIPPLE	3/4	3/4	NPT	800001007	M. IR 34 NPT
COUPLER	1	1	NPT	800001008	F. IR 100 NPT
NIPPLE	1	1	NPT	800001009	M. IR 100 NPT
COUPLER	3/4	3/4	NPT	820001020	F. IR 34 FA NPT*
NIPPLE	3/4	3/4	NPT	820001021	M. IR 34 FA NPT*

\* FASTER INTERCHANGE ONLY



COUPLER



NIPPLE

### IR TIC Ball Valve NPT Thread\_Agricultural Nipple with Seal Retainer

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IR TIC BALL VALVE NPT THREAD</b>					
NIPPLE	1/2	1/2	NPT	800001011	M. IR 12 TIC NPT



NIPPLE

### IRS Ball Valve NPT Thread\_Agricultural Push/Pull Sleeve

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
<b>IRS BALL VALVE NPT THREAD</b>					
COUPLER	1/2	1/2	NPT	800301002	F. IRS 12A NPT



COUPLER