

# AG INTERCHANGE IR | IRV | IRS SERIES

POPPET INTERCHANGE COUPLERS Ag Style Interchange

The Agriculture IR Series Hydraulic Quick Couplings offer automatic shut-off during disconnection. The IR features a variety of connection mechanisms: ball (IR), poppet (IRV), push-pull (IRS), or push-pull sleeve connectable under residual pressure (IRS PC).

Protective Caps & Plugs – page 103



## FEATURES

**Size range:** 1/4" thru 1"

**Port options:** NPT

**Interchanges** with Agriculture/ISO 5675

**Working pressure:** 20-30 MPa/2900-4350 psi range

- Carbon steel with zinc plating
- Hardened steel nipple
- Ball or poppet sealing valve

## APPLICATIONS

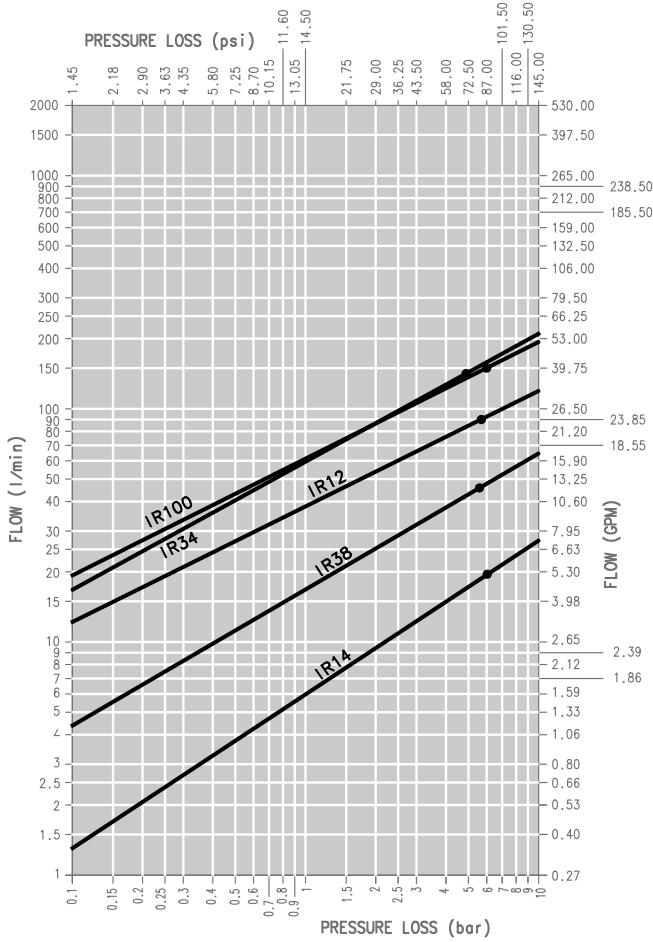
Anywhere automatic shut-off during disconnection is required

- Where interchangeability with existing equipment is necessary
- Agricultural equipment

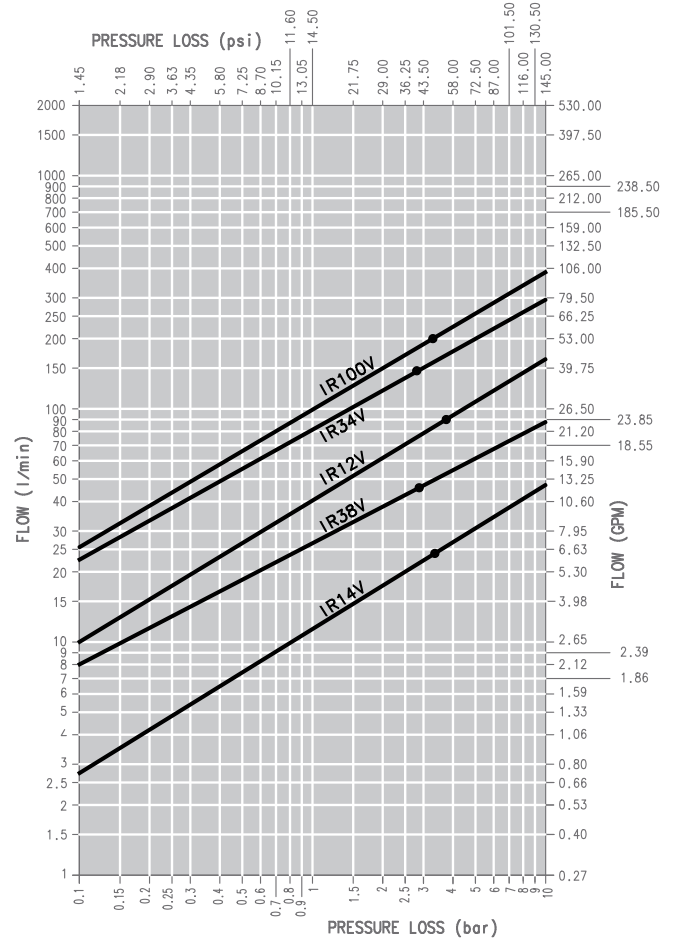




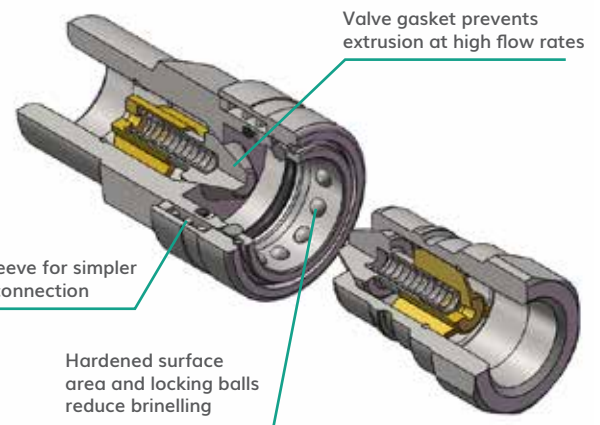
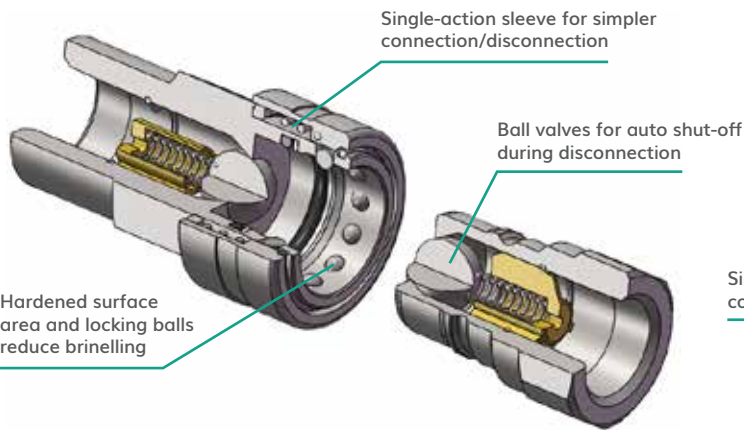
# PRESSURE DROP



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM<sup>2</sup>/S



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM<sup>2</sup>/S

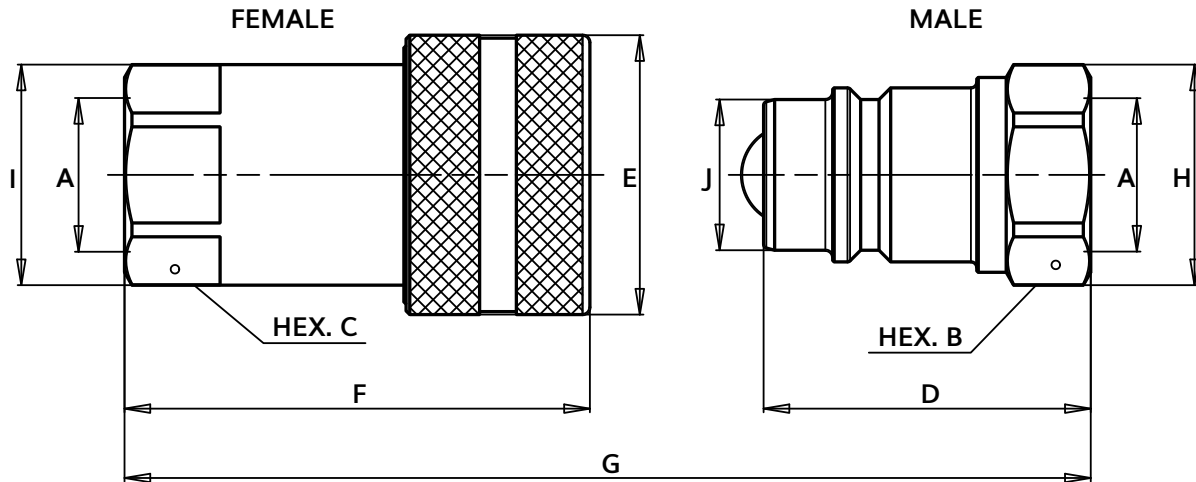


POPET INTERCHANGE COUPLERS

# AG INTERCHANGE IR | IRV | IRS SERIES

POPPET INTERCHANGE COUPLERS Ag Style Interchange

## 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

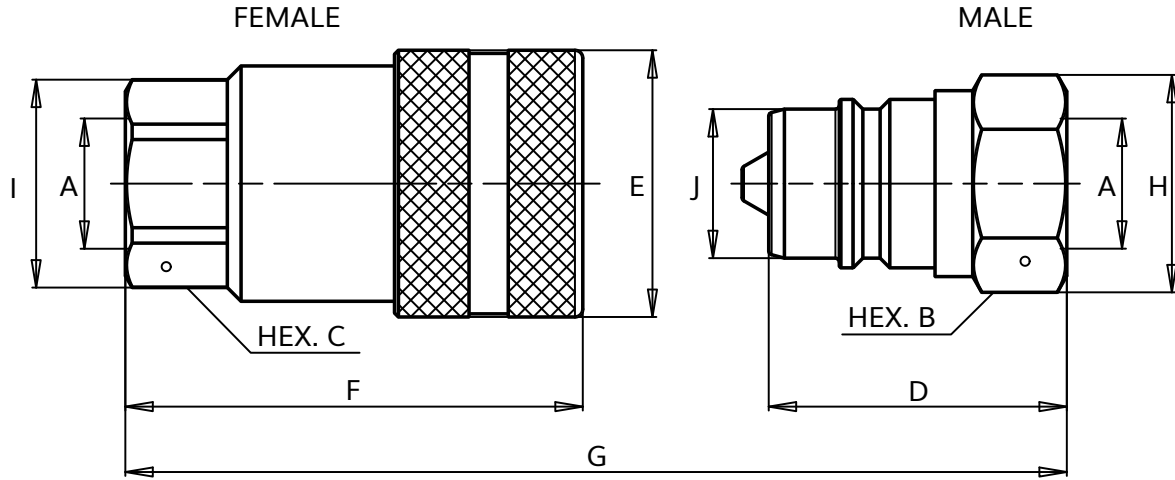
## PERFORMANCE

DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		COUPLED		BURST PRESSURE MALE		BURST PRESSURE FEMALE		SPILLAGE*
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
<b>IR SERIES</b>											
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-uncouple cycle.



## SIZE DIAGRAM



POPET INTERCHANGE  
COUPLERS

DESCRIPTION	BODY SIZE	A	UNIT	B	C	D	E	F	G	H	I	J	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
IR12V	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

## PERFORMANCE

DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		COUPLED		BURST PRESSURE MALE		BURST PRESSURE FEMALE		SPILLAGE*
			MPa	psi	MPa	psi	MPa	psi	MPa	psi	
<b>IRV SERIES</b>											
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
IR12V	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

\* Spillage is an indicative value of the fluid loss per couple-uncouple cycle.

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## POPPET INTERCHANGE COUPLERS Ag Style Interchange

### IRV NPT and SAE Thread Poppet Style Interchange Coupling

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	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. IR 12V NPT
NIPPLE	1/2	1/2	NPT	800501005	M. IR 12V 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



Nipple

### IRS V Poppet Valve | Agriculture Push / Pull Sleeve

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



Coupler

### IRS PC Poppet Valve | Agriculture Push / Pull Sleeve | Connect Under Pressure

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	DESCRIPTION
<b>VP NPT 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

### IRS TIC Ball Valve NPT Thread Agriculture Nipple with Seal Retainer

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



Nipple



### IR Ball Valve NPT Thread Poppet Style Interchange Coupling

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	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

POPPET INTERCHANGE  
COUPLERS

### IRS Ball Valve NPT Thread Poppet Valve | Agriculture Push/Pull Sleeve

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



Coupler

### IR and IRV Accessories Coupler Dust Plug | Nipple Dust Cap

PART	ORDER CODE	DESCRIPTION	ORDER CODE	DESCRIPTION
<b>IR &amp; IRV COUPLER DUST PLUGS</b>		<b>IR &amp; IRV COUPLER DUST CAPS</b>		
1/4	815000000	CAP F. IR14/IR14V	815000001	CAP M. IR14/IR14V
3/8	815000002	CAP F. IR38/IR38V	815000003	CAP M. IR38/IR38V
1/2	815000004	CAP F. IR12/IRS12/F. BIR12	815000005	CAP M. IR1/M. BIR12
3/4	815000006	CAP F. IR 34/IR34V	815000007	CAP M. IR34/IR34V
1	815000008	CAP F. IR 100/IR100V	815000009	CAP M. IR100/IR100V



Plug



Cap