



SERIES: IP

INTERCHANGE: ISO 7241-1 SERIES "A"

MAIN APPLICATIONS

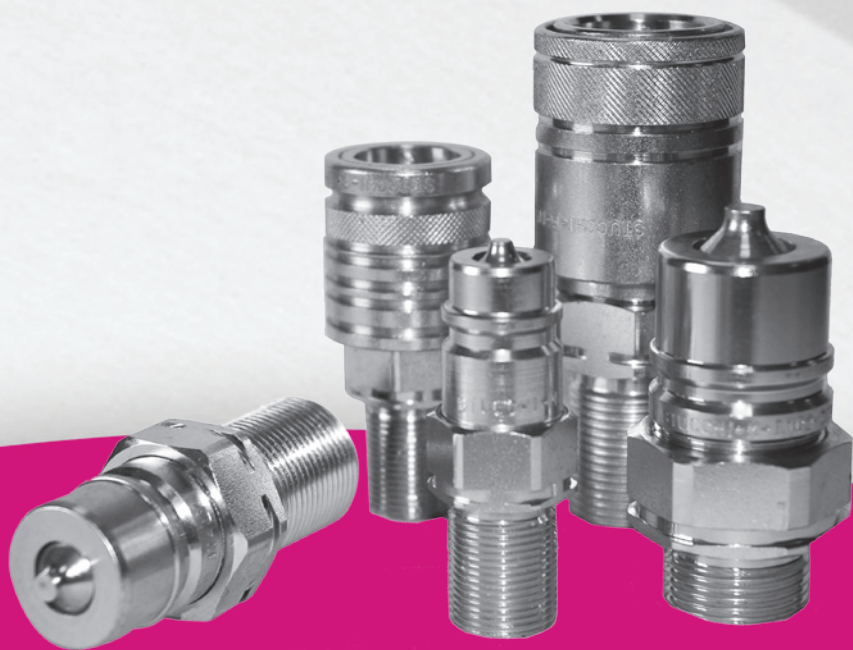
- Agricultural equipment
- Industrial equipment

"IP" is the poppet valve female coupling, with modular design and with panel mounting double action sleeve that allows connection and disconnection operation with a push-pull action that acts as a breakaway function. They are mainly used in agricultural tractor applications where the breakaway function is requested to avoid breakage of the hydraulic connections during unintended disconnection.

Built in carbon steel with CRIII zinc plating, they are developed in modular design with metric DIN threads (DIN 2353 / ISO 8434-1), Bulkhead (DIN 2353 / ISO 8434-1), BSP (DIN 3852) or other on request.

They are available with sizes 1/4 , 3/8, 1/2, 3/4 and 1"

IP SERIES are ISO 7241-1 A interchangeable
Single action sleeve also available with size 1/2.



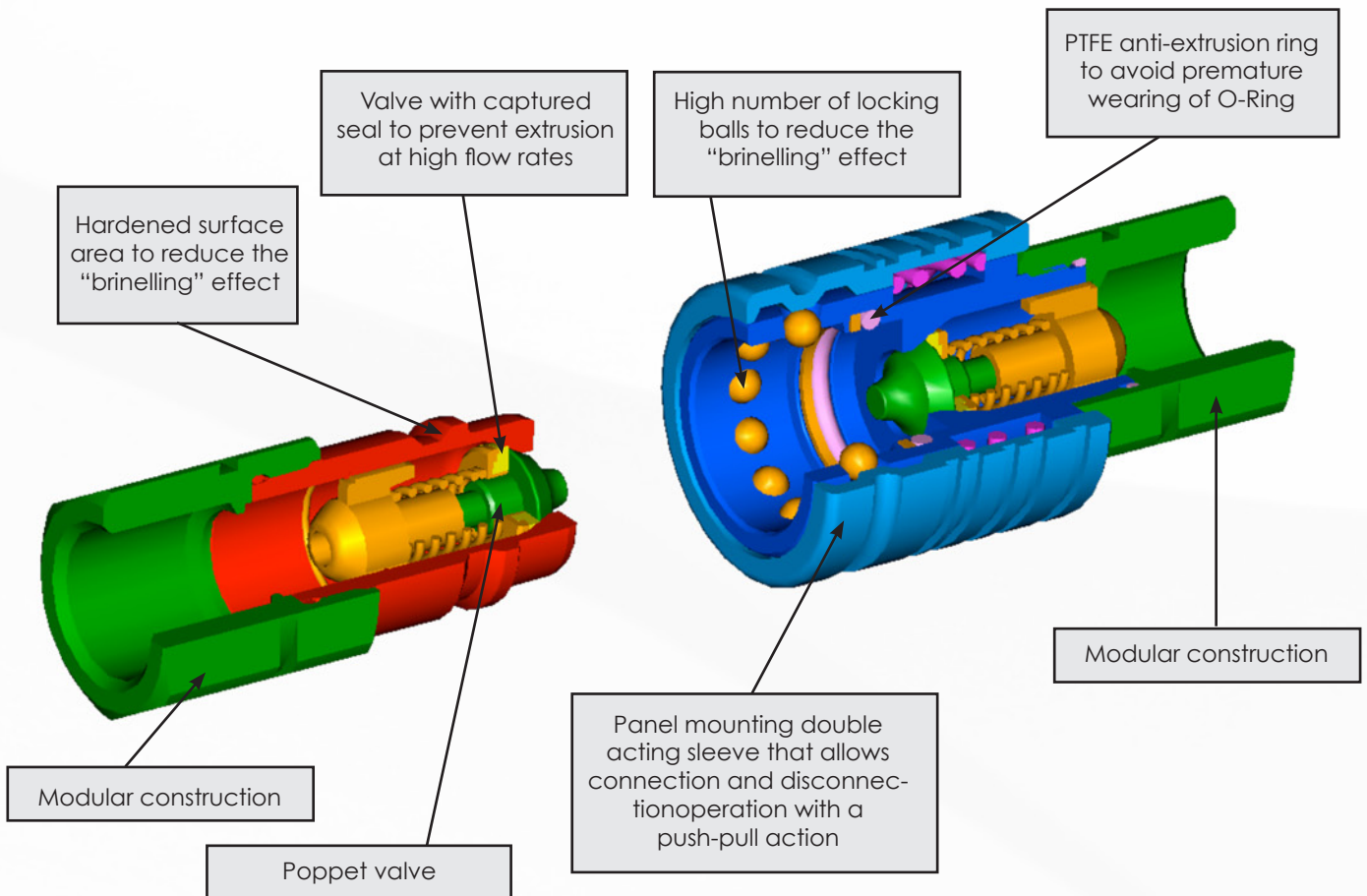
Stucchi®

A CONSTANT FLOW OF SOLUTIONS

TECHNICAL FEATURES AND OPTIONS

- Interchangeability: ISO 7241-1 series "A"
- Valve system: Poppet valve
- Mechanical connection: Locking balls
- Connection with Push-pull system : possible with panel mounting female option
- Connection system: Pushing the male coupling (push)
- Disconnection system: Pulling the male coupling (pull)
- Connection with residual pressure: Not allowed
- Disconnection with residual pressure: Not allowed
- Threads available: BSP (DIN 3852), metric (DIN 3852 and DIN 2353 / ISO 8434-1).

- Construction material: Carbon steel
- Surface treatment: CrIII zinc plated
- Springs: C72 steel
- Balls: Hard steel 100 C6
- Internal valve guidance with mechanical stop in brass
- Seals: standard in NBR (Nitrile)
- Seals on request: VITON
- Anti-extrusion: PTFE



BENEFITS

- Breakaway function to avoid breakage of the hydraulic connections in case of strong axial force.
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- The modular design allows for broad range of port configurations.
- Compact design.
- Simple to use.

HOW TO USE

- For the breakaway function, the female coupling must be mounted in a panel, locking the sleeve using seeger/ snap rings.
- Provide the IP female with a flexible hose, in order to permit the movements of the internal body during connection and disconnection of the couplings.
- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To couple push the male coupling into the female coupling.
- To uncouple pull the male coupling.

WARNING!

- Please read carefully General instructions for selection and use of the products in our master catalogues.
- Do not couple-uncouple with flow and/or pressure in the circuit.
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
- When the couplings are disconnected, it is suggested to use the protection caps ISO A - BIR series.
- I-IP 14 type "D" couplings are not ISO7241-1/A interchangeable.(**)
- Check the maximum allowable working pressure of the port in use: L or S type (DIN 2353 / ISO 8434-1) etc.



PERFORMANCE

Description	Size	ISO Size	Rated Flow		Max. flow suggested		Connect force		Disconnect force		Spillage*
			l/min	GPM	l/min	GPM	N	lbf	N	lbf	
IP14D**	1/4	6,3	12	3,18	24	6,36	27	6,08	17	3,83	0,30
IP38	3/8	10,0	23	6,10	46	12,19	75	16,88	30	6,75	1,20
IP12	1/2	12,5	45	11,93	90	23,85	90	20,25	80	18,00	1,80
IP34	3/4	20,0	74	19,61	148	39,22	130	29,25	70	15,75	5,20
IP100	1	25,0	100	26,50	200	53,00	300	67,50	70	15,75	13,00

Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
IP14D**	35	5075	35	5075	35	5075	110	15950	126	18270	126	18270
IP38	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500
IP12	25	3625	25	3625	25	3625	90	13050	100	14500	100	14500
IP34	25	3625	25	3625	25	3625	90	13050	100	14500	100	14500
IP100	25	3625	25	3625	25	3625	80	11600	100	14500	100	14500

* Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

** I-IP 14 type "D" couplings are not ISO7241-1/A interchangeable.

Temperature range:

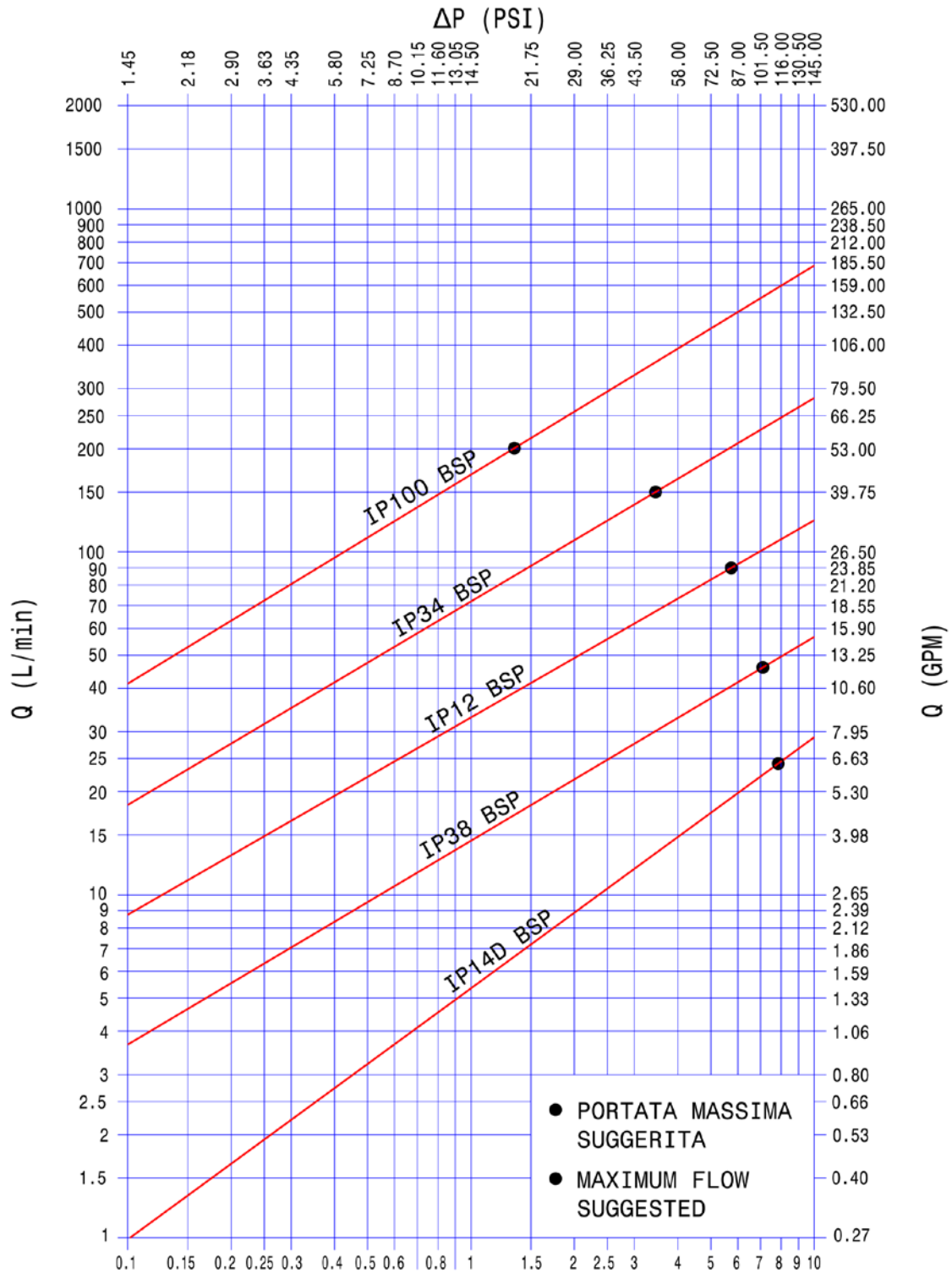
- Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Tests performed:

The coupling have been tested at maximum operating pressure for 200,000 impulse according to ISO 7241-2 test Method

PRESSURE DROP

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 TEST IN ACCORDANCE WITH ISO 7241-2

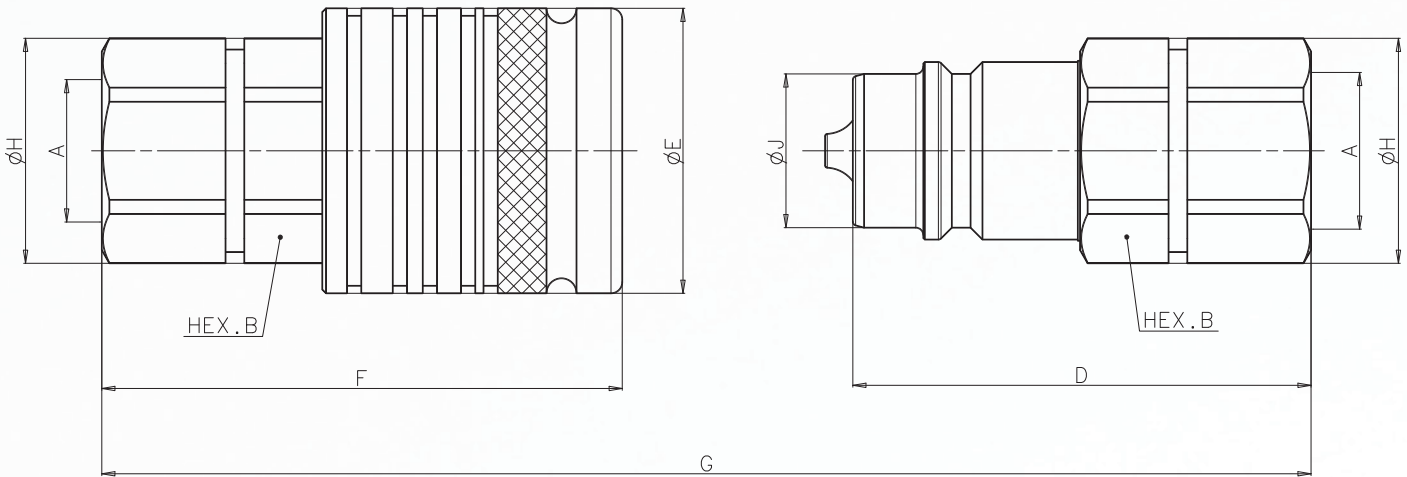


FLUIDO: OLIO ISO VG32
 TEMPERATURA: 40°C
 VISCOSITA': 28,8-35,2 mm²/s

ΔP (Bar)

FLUID: OLIO ISO VG32
 TEMPERATURE: 40°C
 VISCOSITY: 28,8-35,2 mm²/s

OVERALL DIMENSIONS



Panel mounting: Please contact your local STUCCHI sales engineer to get detailed dimensions.

FEMALE THREAD BSPP (DIN 3852-2 form X)

Description	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	Part Number	
IP38 1/4 BSP	3/8'	2	10	1/4'	mm	22	49,3	32	67,5	99,2	24	17,25	Female	809400008
					inch	0,87	1,94	1,26	2,66	3,91	0,94	0,68	Male	809400009
IP38 3/8 BSP	3/8'	2	10	3/8'	mm	22	52,3	32	70,5	105,2	24	17,25	Female	809400010
					inch	0,87	2,06	1,26	2,78	4,14	0,94	0,68	Male	809400011
IP12 3/8 BSP	1/2'	3	12,5	3/8'	mm	27	57,3	38	65,6	101	30	20,5	Female	809400004
					inch	1,06	2,26	1,50	2,58	3,98	1,18	0,81	Male	809400005
IP12 1/2 BSP	1/2'	3	12,5	1/2'	mm	27	61,1	38	69,4	108,6	30	20,5	Female	809400000
					inch	1,06	2,41	1,50	2,73	4,28	1,18	0,81	Male	809400001
IP34 3/4 BSP	3/4'	4	20	3/4'	mm	36	64,4	46	91,5	129,3	40	29	Female	809400014
					inch	1,42	2,54	1,81	3,60	5,09	1,57	1,14	Male	809400015
IP100 3/4 BSP	1'	6	25	3/4'	mm	41	69,5	54	103,5	139,6	45	34,3	Female	809400016
					inch	1,61	2,74	2,13	4,07	5,50	1,77	1,35	Male	809400017
IP100 1' BSP	1'	6	25	1'	mm	41	75	54	109	150,6	45	34,3	Female	809400018
					inch	1,61	2,95	2,13	4,29	5,93	1,77	1,35	Male	809400019

FEMALE THREAD NPT (ANSI B.1.20.1)

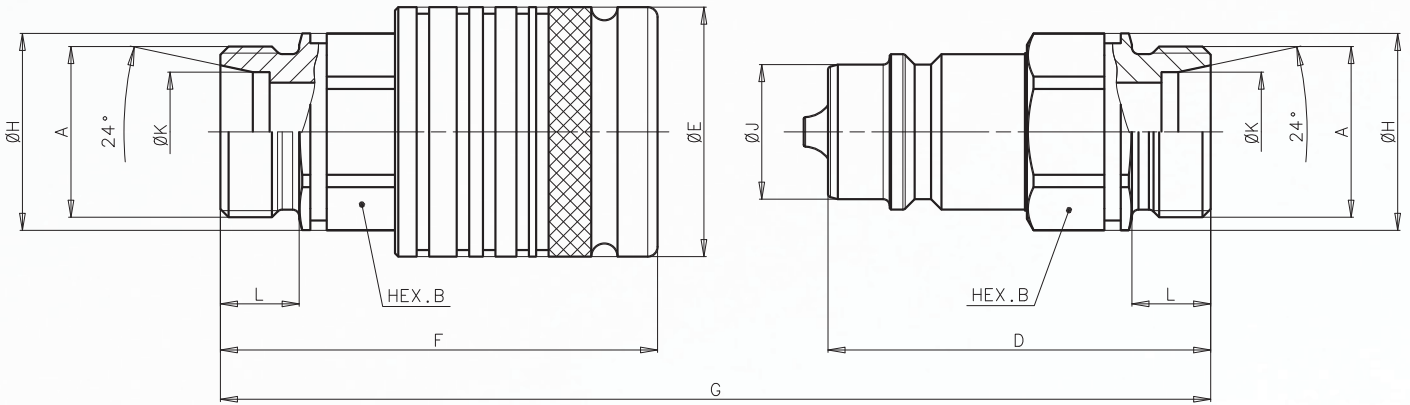
Description	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	Part Number	
IP12 1/2 NPT	1/2'	3	12,5	1/2 NPT	mm	27	59,8	38	68,1	106	30	20,5	Female	809401000
					inch	1,06	2,35	1,50	2,68	4,17	1,18	0,81	Male	809401001

FEMALE THREAD METRIC (DIN 3852-1 form Y)

Description	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	Part Number	
IP 38 M16X 1.5	3/8'	2	10	M16 X 1.5	mm	22	48,3	32	66,5	97,2	24	17,25	Female	809412008
					inch	0,87	1,90	1,26	2,62	3,83	0,94	0,68	Male	809412009
IP12 M16x1.5	1/2'	3	12,5	M16 X 1.5	mm	27	60,5	38	68,8	107,4	30	20,5	Female	809412000
					inch	1,06	2,38	1,50	2,71	4,23	1,18	0,81	Male	809412001
IP12 M18x1.5	1/2'	3	12,5	M18x1,5	mm	27	59,6	38	67,9	105,6	30	20,5	Female	809412002
					inch	1,06	2,35	1,50	2,67	4,16	1,18	0,81	Male	809412003
IP12 M20x1.5	1/2'	3	12,5	M20x1,5	mm	27	-	38	68,2	-	30	-	Female	809412004
					inch	1,06	-	1,50	2,69	-	1,18	-	Male	*
IP12 M22x1.5	1/2'	3	12,5	M22x1,5	mm	27	-	38	70,9	-	30	-	Female	809412006
					inch	1,06	-	1,50	2,79	-	1,18	-	Male	*

* Available in one piece design version

OVERALL DIMENSIONS



Panel mounting: Please contact your local STUCCHI sales engineer to get detailed dimensions.

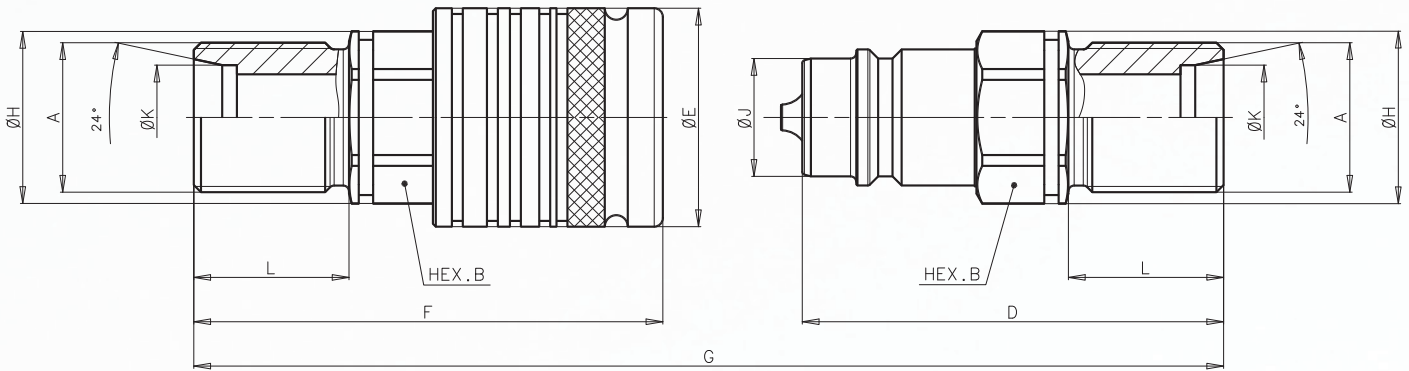
MALE THREAD METRIC L SERIES – 24 ° CONE (DIN 2353 / ISO 8434-1)

Description	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	K	L	Part Number	
IP14D L8	1/4'	1	6,3	M14 X 1,5	mm	19	45	26	62,9	90,5	21	11,9	8,2	10	Female	809408010
					Inch	0,75	1,77	1,02	2,48	3,56	0,83	0,47	0,32	0,39	Male	809408011
IP38 L8	3/8'	2	10	M14X 1,5	mm	22	46,3	32	64,5	93,2	24	17,25	8,2	10	Female	809408012
					inch	0,87	1,82	1,26	2,54	3,67	0,94	0,68	0,32	0,39	Male	809408013
IP38 L10	3/8'	2	10	M16 X 1,5	mm	22	47,3	32	65,5	95,2	24	17,25	10,2	11	Female	809408014
					inch	0,87	1,86	1,26	2,58	3,75	0,94	0,68	0,40	0,43	Male	809408015
IP12 L8	1/2'	3	12,5	M14 X 1,5	mm	27	57,3	38	65,6	101	30	20,5	8,2	10	Female	809408002
					inch	1,06	2,26	1,50	2,58	3,98	1,18	0,81	0,32	0,39	Male	809408003
IP12 L10	1/2'	3	12,5	M16 X 1,5	mm	27	57,3	38	65,6	101	30	20,5	10,2	11	Female	809408006
					inch	1,06	2,26	1,50	2,58	3,98	1,18	0,81	0,40	0,43	Male	809408007
IP12 L12	1/2'	3	12,5	M18x1,5	mm	27	57,3	38	84,6	120	30	20,5	12,2	30	Female	809408000
					inch	1,06	2,26	1,50	3,33	4,72	1,18	0,81	0,48	1,18	Male	809408001
IP12 L15	1/2'	3	12,5	M22x1,5	mm	27	58,3	38	66,6	103	30	20,5	15,2	12	Female	809408004
					inch	1,06	2,30	1,50	2,62	4,06	1,18	0,81	0,60	0,47	Male	809408005
IP12 L18	1/2'	3	12,5	M26x1,5	mm	27	58,3	38	66,6	103	30	20,5	18,2	12	Female	809408008
					inch	1,06	2,30	1,50	2,62	4,06	1,18	0,81	0,72	0,47	Male	809408009
IP34 L15	3/4'	4	20	M22x1,5	mm	36	-	46	86,1	-	40	-	15,2	12	Female	809408024
					inch	1,42	-	1,81	3,39	-	1,57	-	0,60	0,47	Male	-
IP34 L18	3/4'	4	20	M26x1,5	mm	36	60	46	87,1	120,5	40	29	18,2	12	Female	809408026
					inch	1,42	2,36	1,81	3,43	4,74	1,57	1,14	0,72	0,47	Male	809408027
IP34 L22	3/4'	4	20	M30x2	mm	36	61	46	88	122,4	40	29	22	14	Female	809408028
					inch	1,42	2,40	1,81	3,46	4,82	1,57	1,14	0,87	0,55	Male	809408029
IP100 L15	1'	6	25	M22x1,5	mm	41	69	54	103	138,6	45	34,3	15,2	12	Female	809408030
					inch	1,61	2,72	2,13	4,06	5,46	1,77	1,35	0,60	0,47	Male	809408031
IP100 L18	1'	6	25	M26x1,5	mm	41	69	54	103	138,6	45	34,3	18,2	12	Female	809408032
					inch	1,61	2,72	2,13	4,06	5,46	1,77	1,35	0,72	0,47	Male	809408033
IP100 L22	1'	6	25	M30x2	mm	41	71	54	105	142,6	45	34,3	22,2	14	Female	809408034
					inch	1,61	2,80	2,13	4,13	5,61	1,77	1,35	0,87	0,55	Male	809408035
IP100 L28	1'	6	25	M36x2	mm	41	71	54	105	142,6	45	34,3	28,2	14	Female	809408036
					inch	1,61	2,80	2,13	4,13	5,61	1,77	1,35	1,11	0,55	Male	809408037

MALE THREAD METRIC S SERIES - 24° CONE (DIN 2353 / ISO 8434-1)

Description	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	K	L	Part Number	
IP38 S8	3/8'	2	10	M16x1.5	mm	22	-	32	66,5	-	24	-	8,2	12	Female	809409010
					inch	0,87	-	1,26	2,62	-	0,94	-	0,32	0,47	Male	-
IP38 S10	3/8'	2	10	M18x1.5	mm	22	48,3	32	66,5	97,2	24	17,25	10,2	12	Female	809409006
					inch	0,87	1,90	1,26	2,62	3,83	0,94	0,68	0,00	0,47	Male	809409007
IP38 S12	3/8'	2	10	M20x1,5	mm	22	-	32	66,5	-	24	-	12,2	12	Female	809409008
					inch	0,87	-	1,26	2,62	-	0,94	-	0,48	0,47	Male	-
IP12 S10	1/2'	3	12,5	M18x1,5	mm	27	58,3	38	66,6	103	30	20,5	10,2	12	Female	809409000
					inch	1,06	2,30	1,50	2,62	4,06	1,18	0,81	0,40	0,47	Male	809409001
IP12 S12	1/2'	3	12,5	M20x1,5	mm	27	58,3	38	66,6	103	30	20,5	12,2	12	Female	809409002
					inch	1,06	2,30	1,50	2,62	4,06	1,18	0,81	0,48	0,47	Male	809409003
IP12 S14	1/2'	3	12,5	M22x1,5	mm	27	60,3	38	68,6	107	30	20,5	14,2	14	Female	809409004
					inch	1,06	2,37	1,50	2,70	4,21	1,18	0,81	0,56	0,55	Male	809409005
IP100 S20	1'	6	25	M30x2	mm	41	73	54	107	146,6	45	34,3	20,2	16	Female	809409014
					inch	1,61	2,87	2,13	4,21	5,77	1,77	1,35	0,80	0,63	Male	809409015
IP100 S25	1'	6	25	M36x2	mm	41	75	54	109	150,6	45	34,3	25,2	18	Female	809409016
					inch	1,61	2,95	2,13	4,29	5,93	1,77	1,35	0,99	0,71	Male	809409017

OVERALL DIMENSIONS



Panel mounting: Please contact your local STUCCHI sales engineer to get detailed dimensions.

MALE THREAD METRIC L SCHOTT – BULKHEAD SERIES - 24°CONE (DIN 2353 /ISO 8434-1)

	Body Size	BG	ISO DN	A	Unit	HEX B	D	E	F	G	H	J	K	L	Part Number	
IP14D L8 SCHOTT	1/4'	1	6,3	M14x1,5	mm inch	19 0,75	60 2,36	26 1,02	77,9 3,07	120,5 4,74	21 0,83	11,9 0,47	8,2 0,32	25 0,98	Female Male	809410010 809410011
IP38 L8 SCHOTT	3/8'	2	10	M14x1,5	mm inch	22 0,87	61,3 2,41	32 1,26	79,5 3,13	123,2 4,85	24 0,94	17,25 0,68	8,2 0,32	25 0,98	Female Male	809410012 809410013
IP38 L10 SCHOTT	3/8'	2	10	M16x1,5	mm inch	22 0,87	62,3 2,45	32 1,26	80,5 3,17	125,2 4,93	24 0,94	17,25 0,68	10,2 0,40	26 1,02	Female Male	809410014 809410015
IP12 L8 SCHOTT	1/2'	3	12,5	M14x1,5	mm inch	27 1,06	73,3 2,89	38 1,50	81,6 3,21	133 5,24	30 1,18	20,5 0,81	8,2 0,32	26 1,02	Female Male	809410002 809410003
IP12 L10 SCHOTT	1/2'	3	12,5	M16x1,5	mm inch	27 1,06	72,3 2,85	38 1,50	80,6 3,17	131 5,16	30 1,18	20,5 0,81	10,2 0,40	26 1,02	Female Male	809410006 809410007
IP12 L12 SCHOTT 30	1/2'	3	12,5	M18x1,5	mm inch	27 1,06	76,3 3,00	38 1,50	84,6 3,33	139 5,47	30 1,18	20,5 0,81	12,2 0,48	30 1,18	Female Male	809410000 809410001
IP12 L15 SCHOTT	1/2'	3	12,5	M22x1,5	mm inch	27 1,06	73,3 2,89	38 1,50	81,6 3,21	133 5,24	30 1,18	20,5 0,81	15,2 0,60	27 1,06	Female Male	809410004 809410005
IP12 L18 SCHOTT	1/2'	3	12,5	M26x1,5	mm inch	27 1,06	73,3 2,89	38 1,50	81,6 3,21	133 5,24	30 1,18	20,5 0,81	18,2 0,72	27 1,06	Female Male	809410008 809410009
IP34 L15 SCHOTT	3/4'	4	20	M22x1,5	mm inch	36 1,42	74 2,91	46 1,81	101,1 3,98	148,5 5,85	40 1,57	29 1,14	15,2 0,60	27 1,06	Female Male	809410024 809410025
IP34 L22 SCHOTT 36	3/4'	4	20	M30x2	mm inch	36 1,42	83 3,27	46 1,81	110,1 4,33	166,5 6,56	40 1,57	29 1,14	22 0,87	36 1,42	Female Male	809410028 809410029
IP100 L18 SCHOTT	1'	6	25	M26x1,5	mm inch	41 1,61	-	54 2,13	123 4,84	-	45 1,77	34,3 1,35	18,2 0,72	32 1,26	Female Male	809410032 -
IP100 L22 SCHOTT	1'	6	25	M30x2	mm inch	41 1,61	-	54 2,13	125 4,92	-	45 1,77	34,3 1,35	22,2 0,87	34 1,34	Female Male	809410034 -
IP100 L28 SCHOTT	1'	6	25	M36x2	mm inch	41 1,61	-	54 2,13	125 4,92	-	45 1,77	34,3 1,35	28,2 1,11	34 1,34	Female Male	809410036 -

MALE THREAD METRIC S SCHOTT– BULKHEAD SERIES - 24°CONE (DIN 2353 /ISO 8434-1)

Description	Body Size	BG	ISO DN	A	Unit	B	D	E	F	G	H	J	K	L	Part Number	
IP12 S10 SCHOTT	1/2'	3	12,5	M18x1,5	mm inch	27 1,06	73,3 2,89	38 1,50	81,6 3,21	133 5,24	30 1,18	20,5 0,81	10,2 0,40	27 1,06	Female Male	809411000 809411001
IP12 S12 SCHOTT	1/2'	3	12,5	M20x1,5	mm inch	27 1,06	73,3 2,89	38 1,50	81,6 3,21	133 5,24	30 1,18	20,5 0,81	12,2 0,48	27 1,06	Female Male	809411002 809411003
IP12 S16 SCHOTT	1/2'	3	12,5	M24x1,5	mm inch	27 1,06	75,3 2,96	38 1,50	83,6 3,29	137 5,39	30 1,18	20,5 0,81	16,2 0,64	29 1,14	Female Male	809411006 809411007
IP34 S16 SCHOTT	3/4'	4	20	M24x1,5	mm inch	36 1,42	76 2,99	46 1,81	103,1 4,06	152,5 6,00	40 1,57	29 1,14	16,2 0,64	29 1,14	Female Male	809411010 809411011
IP34 S20 SCHOTT	3/4'	4	20	M30x2	mm inch	36 1,42	83 3,27	46 1,81	110,1 4,33	166,5 6,56	40 1,57	29 1,14	20 0,79	36 1,42	Female Male	809411012 809411013
IP100 S20 SCHOTT 38	1'	6	25	M30x2	mm inch	41 1,61	95 3,74	54 2,13	129 5,08	190,6 7,50	45 1,77	34,3 1,35	20,2 0,80	38 1,50	Female Male	809411014 809411015
IP100 S25 SCHOTT	1'	6	25	M36x2	mm inch	41 1,61	95 3,74	54 2,13	129 5,08	190,6 7,50	45 1,77	34,3 1,35	25,2 0,99	38 1,50	Female Male	809411016 809411017

PROTECTION CAPS FOR IP SERIES

Protective caps are always recommended to protect the couplings from damage or dirt inclusion, and increase the product life. This is particularly important in mobile applications where contamination can enter the coupling and compromise the function. The caps for "IP" SERIES are manufactured in soft PVC and they are available in several colors.

A flip cap version is also available for the size 1/2"

PVC CAPS

- Standard: soft PVC, red color.
- Also available in following colors: yellow, blue, black, green, white and orange.
- Temperature range: from -20 °C to +100 °C (from -4 °F to +212 °F).



SIZE	Plug for Female	Cap for Male
IP38	815000014	815000015
IP12	815000004	815000005
IP34	815000016	815000017
IP100	815000018	815000019

NYLON CAPS

- Standard: Plastic material, red color.
- Also available in following colors: yellow, blue, black and green.
- Temperature range: from -20 °C to +100 °C (from -4 °F to +212 °F).



SIZE	Flip cap for female:
IP12	815200004

The texts, data and illustrations indicated in this catalogue, may be changed by Stucchi S.p.A at any time without notice. (CAT. I-IP-EN REV.0)