



SERIES: VD

INTERCHANGE: With similar couplings

MAIN APPLICATIONS

- Mobile construction equipment (including excavators and snow groomer)
- Vehicles
- Hydraulic equipment
- Drilling rigs

“VD ” series is a screw to connect coupling with poppet style valving.

Made in high strength steel with Cr III zinc plating and NBR sealing, they are interchangeable with similar couplings existing on the market.

They add the resistance of the particular design to the robustness of the screw connection.

This makes the VD series suitable for application with pressure impulses in the hydraulic circuit.

They are available in sizes $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 and 1-1/4.

Due to the flexible modular design, they are available in different thread configuration: Metric (DIN 3852 and DIN 2353/ISO 8434-1) BSP (DIN 3852) , Bulkhead (DIN 2353 / ISO 8434-1) or other on request.



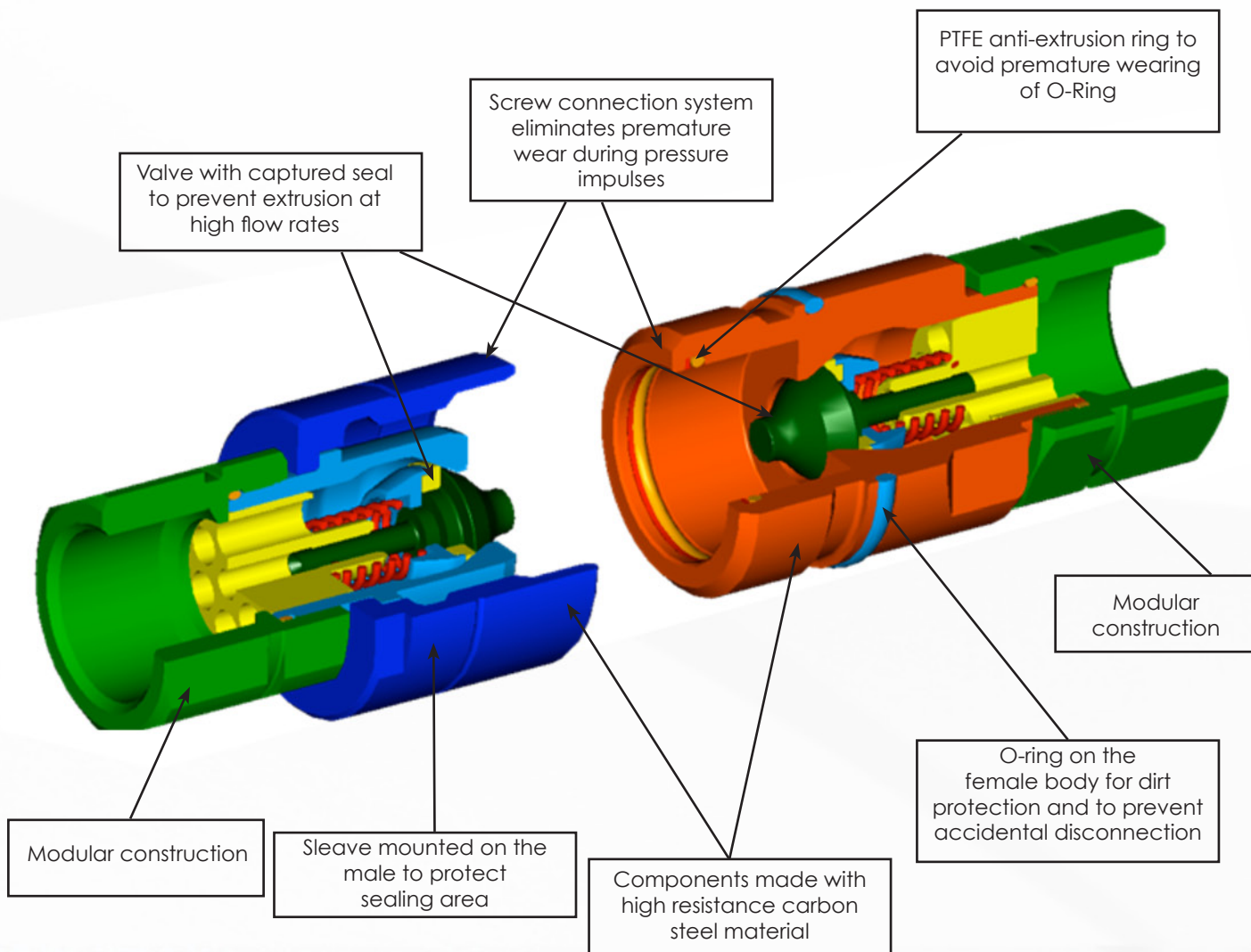
Stucchi[®]

A CONSTANT FLOW OF SOLUTIONS

TECHNICAL FEATURES AND OPTIONS

- Interchangeability: With similar couplings
- Valve system: Poppet valve
- Mechanical connection: Screw system
- Connection system: Screw to connect
- Disconnection system: Unscrew to disconnect
- Connection with residual pressure: Allowed in one half of the coupling up to 10 MPa
- Disconnection with residual pressure: allowed.
- Threads available: Metrics (DIN 2353 / ISO 8434-1), BSP female thread (DIN 3852) and male thread (DIN 3852).

- Other threads: Please contact Stucchi to check availability.
- Construction material: High strength steel
- Surface treatment: Cr III zinc plated
- Springs: C72 steel
- Seals: NBR (Nitrile)
- Anti-extrusion rings: PTFE



BENEFITS

- 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.
- O-ring on the female body as reference for full connection but also for dirt protection and to prevent accidental disconnection.
- Male body sealing surface protected by the threaded sleeve.
- High resistance with impulse pressures.
- Compact design.
- Simple to use.

HOW TO USE

- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To connect insert the male coupling in the female coupling, screw the sleeve till its positive stop.
- Check that the external O-ring is fully covered.
- To disconnect unscrew totally the sleeve from the female 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 dynamic pressure in the circuit.
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
- Do not connect with residual pressure in both half for safety reasons.
- When the couplings are disconnected, it is suggested to use the protection caps (plastic caps are available for VD series).
- Check the maximum allowable working pressure of the port in use (L or S type (DIN 2353 / ISO 8434-1) etc.).



PERFORMANCE

Description	Size	BG Size	Rated Flow		Max. flow suggested		Connect torque*		Disconnect torque*		Spillage **
			l/min	GPM	l/min	GPM	Nm	lbf ft	Nm	lbf ft	
VD14	1/4	1	12	3,18	24	6,36	0,8	0,59	0,5	0,37	0,7
VD38	3/8	2	23	6,10	46	12,19	1,0	0,74	0,5	0,37	1
VD12	1/2	3	45	11,93	90	23,85	1,5	1,11	1,2	0,88	3
VD34	3/4	4	74	19,61	148	39,22	2,5	1,84	2,2	1,62	5
VD100	1	6	100	26,50	200	53,00	2,7	1,99	2,2	1,62	14
VD114	1-1/4	8	189	50,09	378	100,17	5,0	3,69	5,0	3,69	51

Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
VD14	45	6525	45	6525	45	6525	160	23200	120	17400	140	20300
VD38	45	6525	45	6525	45	6525	140	20300	120	17400	180	26100
VD12	40	5800	40	5800	40	5800	150	21750	100	14500	130	18850
VD34	40	5800	40	5800	40	5800	130	18850	100	14500	120	17400
VD100	30	4350	30	4350	30	4350	110	15950	100	14500	140	20300
VD114	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500

* Connect torque and disconnect torque without residual pressure. The torque increase with increasing of internal residual pressure.

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

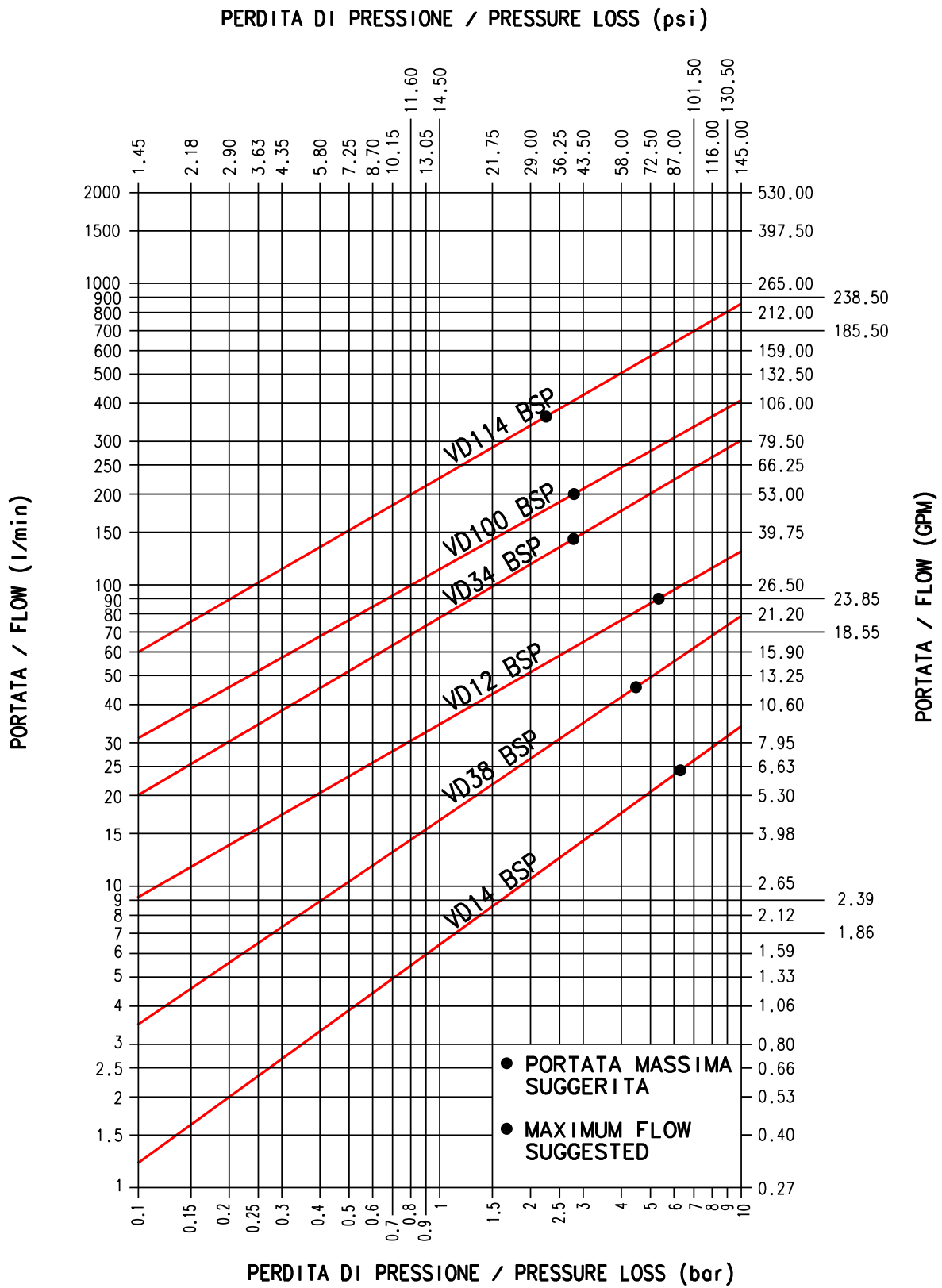
Temperature range:

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

Tests performed:

The couplings have been tested at maximum operating pressure for 1,000,000 impulses according to ISO 7241-2 test method.

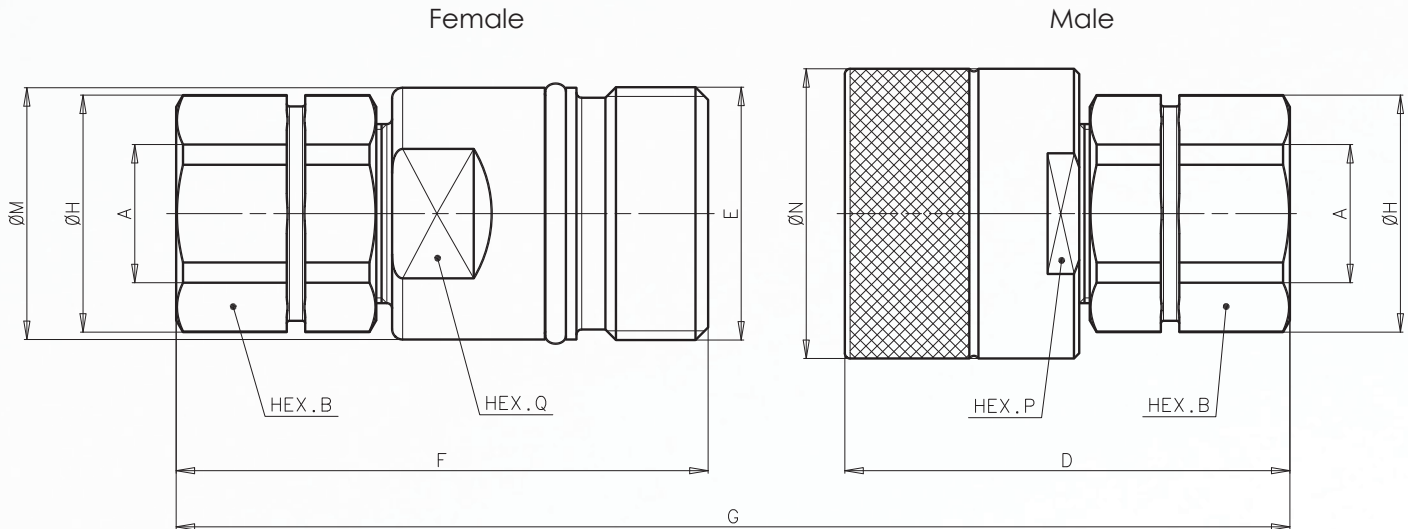
PRESSURE DROP



FLUIDO: OLIO ISO VG32
 TEMPERATURA: 40 °C
 VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
 TEMPERATURE: 40 °C
 VISCOSITY: 28.8-35.2 mm²/s

OVERALL DIMENSIONS



FEMALE THREAD BSPP (DIN 3852-2 form X)

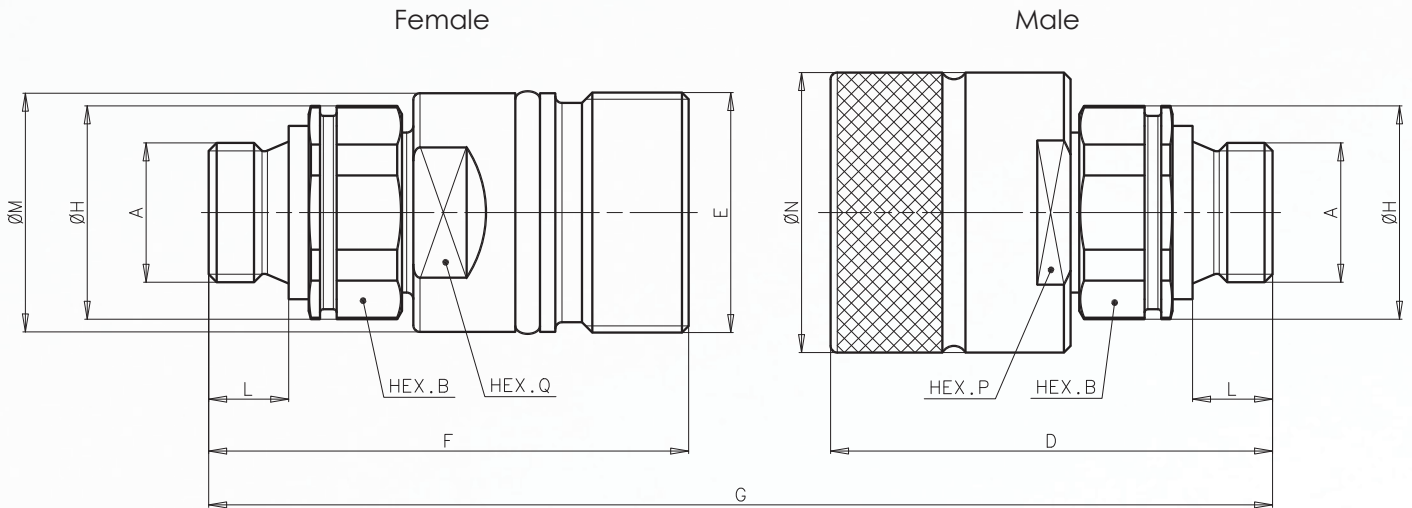
Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	M	N	HEX P	HEX Q	Part Number	
VD14	1/4"	1	6,3	G 1/4'	M24X2	mm	19	58,6	62	94,5	21	23,8	30	27	22	Female	809500006
1/4 BSP						inch	0,75	2,31	2,44	3,72	0,83	0,94	1,18	1,06	0,87	Male	809500007
VD38	3/8"	2	10	G 1/4'	M28X2	mm	22	61,7	64,3	99	24	27,8	34	30	24	Female	809500008
1/4 BSP						inch	0,87	2,43	2,53	3,90	0,94	1,09	1,34	1,18	0,94	Male	809500009
VD38	3/8"	2	10	G 3/8'	M28X2	mm	22	64,7	67,3	105	24	27,8	34	30	24	Female	809500010
3/8 BSP						inch	0,87	2,55	2,65	4,13	0,94	1,09	1,34	1,18	0,94	Male	809500011
VD12	1/2"	3	12,5	G 3/8'	M36X2	mm	30	62,3	68	102,6	32	35,8	42	36	30	Female	809500000
3/8 BSP						inch	1,18	2,45	2,68	4,04	1,26	1,41	1,65	1,42	1,18	Male	809500001
VD12	1/2"	3	12,5	G 1/2'	M36X2	mm	30	67,3	73	112,6	32	35,8	42	36	30	Female	809500002
1/2 BSP						inch	1,18	2,65	2,87	4,43	1,26	1,41	1,65	1,42	1,18	Male	809500003
VD34	3/4"	4	20	G 1/2'	M42X2	mm	36	70	79,5	117,5	40	41,8	48	41	36	Female	809500014
1/2 BSP						inch	1,42	2,76	3,13	4,63	1,57	1,65	1,89	1,61	1,42	Male	809500015
VD34	3/4"	4	20	G 3/4'	M42X2	mm	36	75,9	85,4	129,3	40	41,8	48	41	36	Female	809500016
3/4 BSP						inch	1,42	2,99	3,36	5,09	1,57	1,65	1,89	1,61	1,42	Male	809500017
VD100	1"	6	25	G 3/4'	48X3 SP *	mm	41	79	95,5	139,7	45	47,8	55	50	41	Female	809500018
3/4 BSP						inch	1,61	3,11	3,76	5,50	1,77	1,88	2,17	1,97	1,61	Male	809500019
VD100	1"	6	25	G 1'	48X3 SP *	mm	41	84,5	101	150,7	45	47,8	55	50	41	Female	809500020
1 BSP						inch	1,61	3,33	3,98	5,93	1,77	1,88	2,17	1,97	1,61	Male	809500021
VD114	1-1/4"	8	31,5	G 1-1/4'	70X3 SP *	mm	55	121	117,2	189	61	68,5	85 CH80 °	80	65	Female	809500022
1-1/4 BSP						inch	2,17	4,76	4,61	7,44	2,40	2,70	3,35 - CH3,15 °	3,15	2,56	Male	809500023
VD114	1-1/2"	8	31,5	G 1-1/2'	70X3 SP *	mm	55	127	123,2	201	61	68,5	85 CH80 °	80	65	Female	809500024
1-1/2 BSP						inch	2,17	5,00	4,85	7,91	2,40	2,70	3,35 - CH3,15 °	3,15	2,56	Male	809500025

°HEXAGON SLEEVE
*SP = SPECIAL THREAD

FEMALE THREAD METRIC (DIN 3852-1 form Y)

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	M	N	HEX P	HEX Q	Part Number	
VD 12	1/2"	3	12,5	M22x1.5	M36x2	mm	30	67,3	73	112,6	32	35,8	42	36	30	Female	809512000
M22x1.5						inch	1,18	2,65	2,87	4,43	1,26	1,41	1,65	1,42	1,18	Male	809512001
VD 34	3/4"	4	20	M22x1.5	M42x2	mm	36	72	81,5	121,5	40	41,8	48	41	36	Female	809512002
M22x1.5						inch	1,42	2,83	3,21	4,78	1,57	1,65	1,89	1,61	1,42	Male	809512003

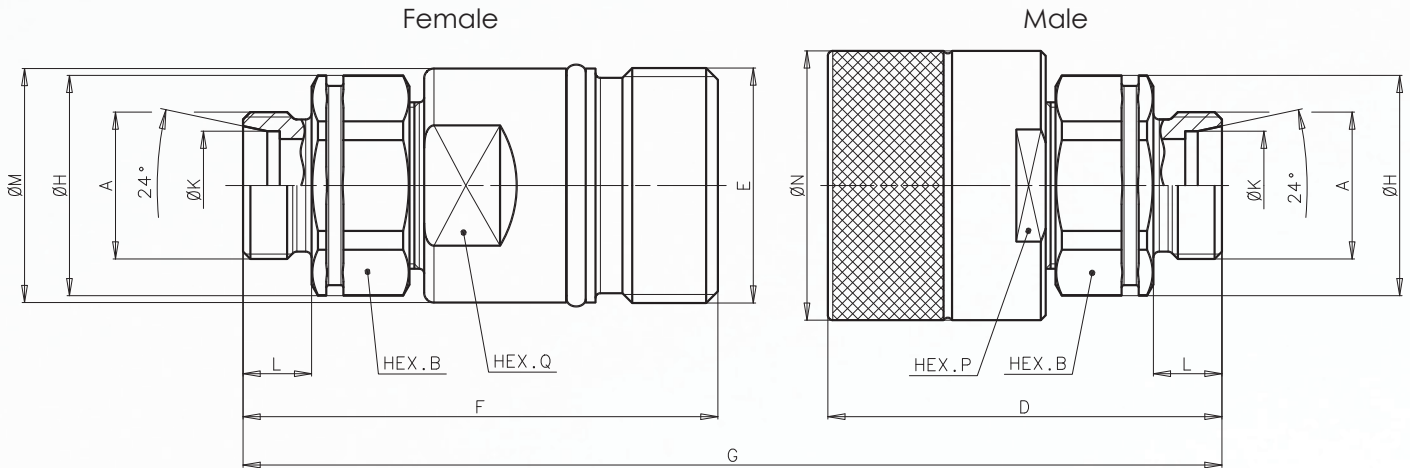
OVERALL DIMENSIONS



MALE THREAD BSP (DIN 3852-2 – FORM A)

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	M	F	G	H	N	HEX P	HEX Q	L	Part Number	
VD 38 BSP EST	3/8"	2	10	G 3/8'	M28X2	mm	22	63,2	27,8	65,8	102	24	34	30	24	12	Female	809500012
						inch	0,87	2,49	1,09	2,59	4,02	0,94	1,34	1,18	0,94	0,47	Male	809500013
VD12 BSP EST	1/2"	3	12,5	G 1/2'	M36X2	mm	30	72	35,8	72	116,3	32	42	36	30	12	Female	809500004
						inch	1,18	2,83	1,41	2,83	4,58	1,26	1,65	1,42	1,18	0,47	Male	809500005

OVERALL DIMENSIONS

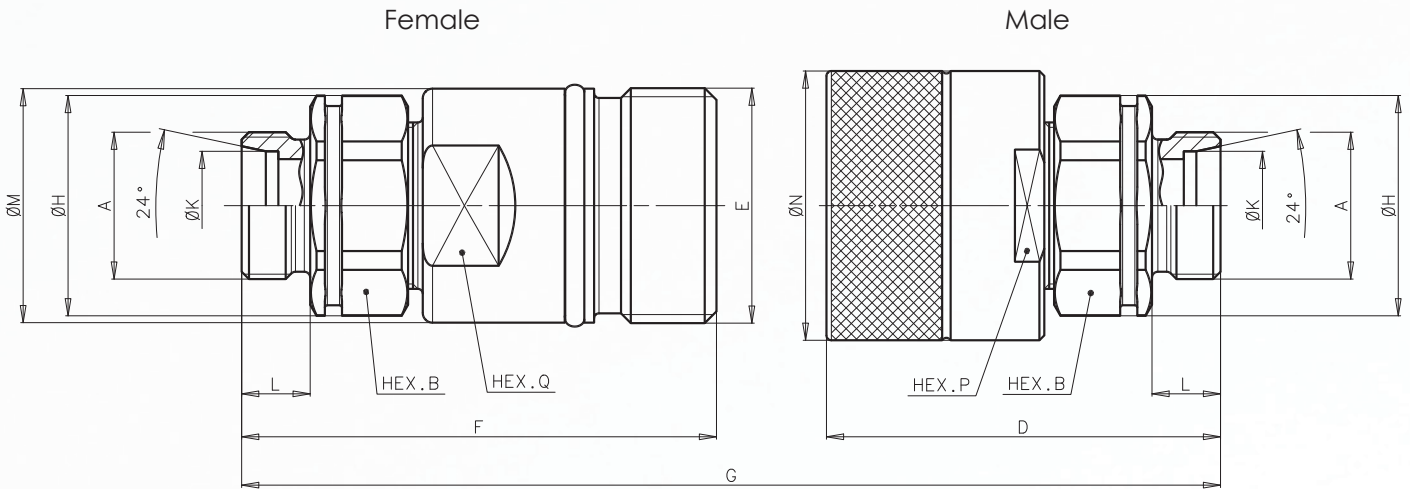


MALE THREAD METRIC L SERIES – 24 ° CONE (DIN 2353 / ISO 8434-1)

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	K	L	M	N	HEX P	HEX Q	Part Number	
VD14 L8	1/4"	1	6,3	M14X1	M24X2	mm	19	56,6	60	90,5	21	8,2	10	23,8	30	27	22	Female	809508012
						inch	0,75	2,23	2,36	3,56	0,83	0,32	0,39	0,94	1,18	1,06	0,87	Male	809508013
VD 38 L8	3/8"	2	10	M14X1.5	M28X2	mm	22	58,7	61,3	93	24	8,2	10	27,8	34	30	24	Female	809508014
						inch	0,87	2,31	2,41	3,66	0,94	0,32	0,39	1,09	1,34	1,18	0,94	Male	809508015
VD 38 L10	3/8"	2	10	M16X1.5	M28X2	mm	22	59,7	62,3	95	24	10,2	11	27,8	34	30	24	Female	809508016
						inch	0,87	2,35	2,45	3,74	0,94	0,40	0,43	1,09	1,34	1,18	0,94	Male	809508017
VD 38 L12	3/8"	2	10	M18X1.5	M28X2	mm	22	59,7	62,3	95	24	12,2	11	27,8	34	30	24	Female	809508018
						inch	0,87	2,35	2,45	3,74	0,94	0,48	0,43	1,09	1,34	1,18	0,94	Male	809508019
VD12 L8	1/2"	3	12,5	M14X1.5	M36X2	mm	30	61,3	67	100,6	32	8	10	35,8	42	36	30	Female	809508002
						inch	1,18	2,41	2,64	3,96	1,26	0,31	0,39	1,41	1,65	1,42	1,18	Male	809508003
VD12 L10	1/2"	3	12,5	M16X1.5	M36X2	mm	30	62,3	68	102,6	32	10,2	11	35,8	42	36	30	Female	809508006
						inch	1,18	2,45	2,68	4,04	1,26	0,40	0,43	1,41	1,65	1,42	1,18	Male	809508007
VD12 L12	1/2"	3	12,5	M18X1.5	M36X2	mm	30	62,3	68	102,6	32	12,2	11	35,8	42	36	30	Female	809508000
						inch	1,18	2,45	2,68	4,04	1,26	0,48	0,43	1,41	1,65	1,42	1,18	Male	809508001
VD12 L15	1/2"	3	12,5	M22X1.5	M36X2	mm	30	63,3	69	104,6	32	15,2	12	35,8	42	36	30	Female	809508004
						inch	1,18	2,49	2,72	4,12	1,26	0,60	0,47	1,41	1,65	1,42	1,18	Male	809508005
VD12 L18	1/2"	3	12,5	M26X1.5	M36X2	mm	30	63,3	69	104,6	32	18,2	12	35,8	42	36	30	Female	809508008
						inch	1,18	2,49	2,72	4,12	1,26	0,72	0,47	1,41	1,65	1,42	1,18	Male	809508009
VD34 L12	3/4"	4	20	M18X1.5	M42X2	mm	36	69,5	79	116,5	40	12,2	11	41,8	48	41	36	Female	809508022
						inch	1,42	2,74	3,11	4,59	1,57	0,48	0,43	1,65	1,89	1,61	1,42	Male	809508023
VD34 L15	3/4"	4	20	M22X1.5	M42X2	mm	36	70,5	80	118,5	40	15,2	12	41,8	48	41	36	Female	809508024
						inch	1,42	2,78	3,15	4,67	1,57	0,60	0,47	1,65	1,89	1,61	1,42	Male	809508025
VD34 L18	3/4"	4	20	M26X1.5	M42X2	mm	36	71,5	81	120,5	40	18,2	12	41,8	48	41	36	Female	809508026
						inch	1,42	2,81	3,19	4,74	1,57	0,72	0,47	1,65	1,89	1,61	1,42	Male	809508027
VD34 L22	3/4"	4	20	M30X2	M42X2	mm	36	72,5	82	122,5	40	22	14	41,8	48	41	36	Female	809508028
						inch	1,42	2,85	3,23	4,82	1,57	0,87	0,55	1,65	1,89	1,61	1,42	Male	809508029
VD100 L18	1"	6	25	M26X1,5	Rd 48X3 SP*	mm	41	78,5	95	138,7	45	18,2	12	47,8	55	50	41	Female	809508030
						inch	1,61	3,09	3,74	5,46	1,77	0,72	0,47	1,88	2,17	1,97	1,61	Male	809508031
VD100 L22	1"	6	25	M30X2	Rd 48X3 SP*	mm	41	80,5	97	142,7	45	22,2	14	47,8	55	50	41	Female	809508032
						inch	1,61	3,17	3,82	5,62	1,77	0,87	0,55	1,88	2,17	1,97	1,61	Male	809508033
V100 L28	1"	6	25	M36X2	Rd 48X3 SP*	mm	41	80,5	97	142,7	45	28,2	14	47,8	55	50	41	Female	809508034
						inch	1,61	3,17	3,82	5,62	1,77	1,11	0,55	1,88	2,17	1,97	1,61	Male	809508035
V100 L35	1"	6	25	M45X2	Rd 48X3 SP*	mm	46	82,5	99	146,7	50	35,3	16	47,8	55	50	41	Female	809508036
						inch	1,81	3,25	3,90	5,78	1,97	1,39	0,63	1,88	2,17	1,97	1,61	Male	809508037

*SP = SPECIAL THREAD

OVERALL DIMENSIONS

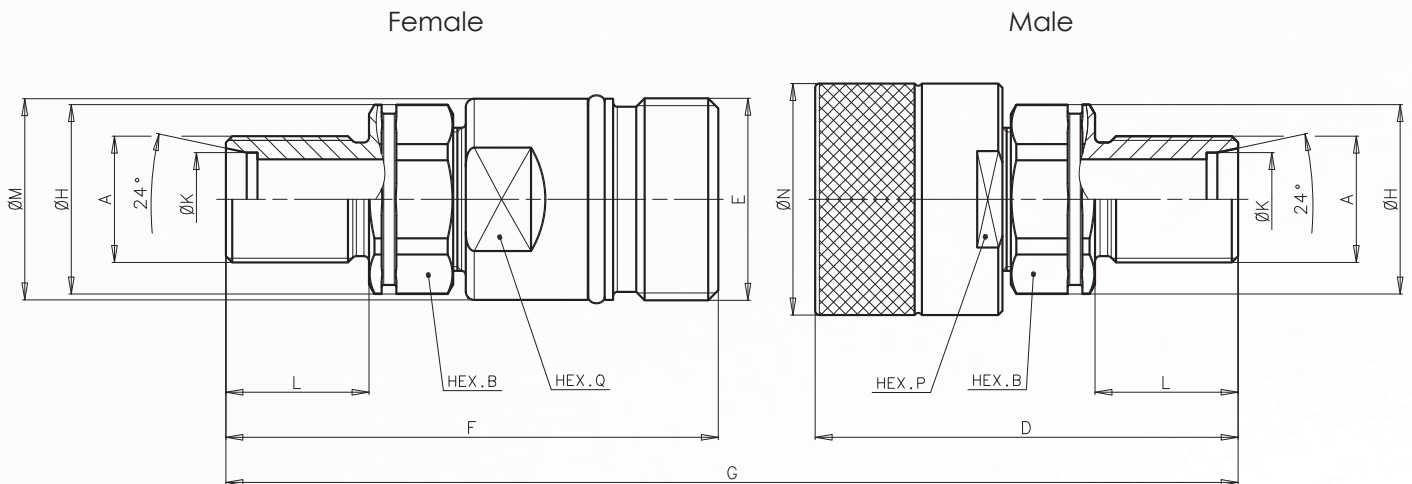


MALE THREAD METRIC S SERIES – 24 ° CONE (DIN 2353 / ISO 8434-1)

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	K	L	M	N	HEX P	HEX Q	Part Number	
VD 38 S8	3/8"	2	10	M16X1.5	M28X2	mm	22	60,7	-	-	24	8,2	12	-	34	30	-	Female	-
						inch	0,87	2,39	-	-	0,94	0,32	0,47	-	1,34	1,18	-	Male	809509013
VD 38 S10	1/2"	3	12,5	M18X1.5	M28X2	mm	22	60,7	63,3	97	24	10,2	12	27,8	34	30	24	Female	809509008
						inch	0,87	2,39	2,49	3,82	0,94	0,40	0,47	1,09	1,34	1,18	0,94	Male	809509009
VD12 S10	1/2"	3	12,5	M18X1.5	M36X2	mm	30	63,3	69	104,6	32	10,2	12	35,8	42	36	30	Female	809509000
						inch	1,18	2,49	2,72	4,12	1,26	0,40	0,47	1,41	1,65	1,42	1,18	Male	809509001
VD12 S12	1/2"	3	12,5	M20X1.5	M36X2	mm	30	62,3	69	103,6	32	12,2	12	35,8	42	36	30	Female	809509002
						inch	1,18	2,45	2,72	4,08	1,26	0,48	0,47	1,41	1,65	1,42	1,18	Male	809509003
VD12 S14	1/2"	3	12,5	M22X1.5	M36X2	mm	30	-	71	-	32	14,2	14	35,8	-	-	30	Female	809509004
						inch	1,18	-	2,80	-	1,26	0,56	0,55	1,41	-	-	1,18	Male	-
VD12 S16	1/2"	3	12,5	M24X1.5	M36X2	mm	30	65,3	71	108,6	32	16,2	14	35,8	42	36	30	Female	809509006
						inch	1,18	2,57	2,80	4,28	1,26	0,64	0,55	1,41	1,65	1,42	1,18	Male	809509007
VD34 S16	3/4"	4	20	M24X1,5	M42X2	mm	36	72,5	82	122,5	40	16,2	14	41,8	48	41	36	Female	809509014
						inch	1,42	2,85	3,23	4,82	1,57	0,64	0,55	1,65	1,89	1,61	1,42	Male	809509015
VD34 S20	3/4"	4	20	M30X2	M42X2	mm	36	74,5	84	126,5	40	20	16	41,8	48	41	36	Female	809509016
						inch	1,42	2,93	3,31	4,98	1,57	0,79	0,63	1,65	1,89	1,61	1,42	Male	809509017
VD100 S20	1"	6	25	M30X2	48X3 SP*	mm	41	82,5	-	-	45	20,2	16	-	55	50	-	Female	-
						inch	1,61	3,25	-	-	1,77	0,80	0,63	-	2,17	1,97	-	Male	809509019
VD100 S25	1"	6	25	M36X2	48X3 SP*	mm	41	84,5	101	150,7	45	25,2	18	47,8	55	50	41	Female	809509020
						inch	1,61	3,33	3,98	5,93	1,77	0,99	0,71	1,88	2,17	1,97	1,61	Male	809509021
VD100 S30	1"	6	25	M42X2	48X3 SP*	mm	46	86,5	103	154,7	50	30,2	20	47,8	55	50	41	Female	809509022
						inch	1,81	3,41	4,06	6,09	1,97	1,19	0,79	1,88	2,17	1,97	1,61	Male	809509023
VD114 S30	1-1/4"	8	31,5	M42X2	70X3 SP*	mm	55	118	114,2	183	61	30,2	20	68,5	85 CH80 °	80	65	Female	809509026
						inch	2,17	4,65	4,50	7,20	2,40	1,19	0,79	2,70	3,35 - CH3,15 °	3,15	2,56	Male	809509027
VD114 S38	1-1/4"	8	31,5	M52X2	70X3 SP*	mm	55	120	116,2	187	61	38,3	22	68,5	85 CH80 °	80	65	Female	809509028
						inch	2,17	4,72	4,57	7,36	2,40	1,51	0,87	2,70	3,35 - CH3,15 °	3,15	2,56	Male	809509029

°HEXAGON SLEEVE
*SP = SPECIAL THREAD

OVERALL DIMENSIONS

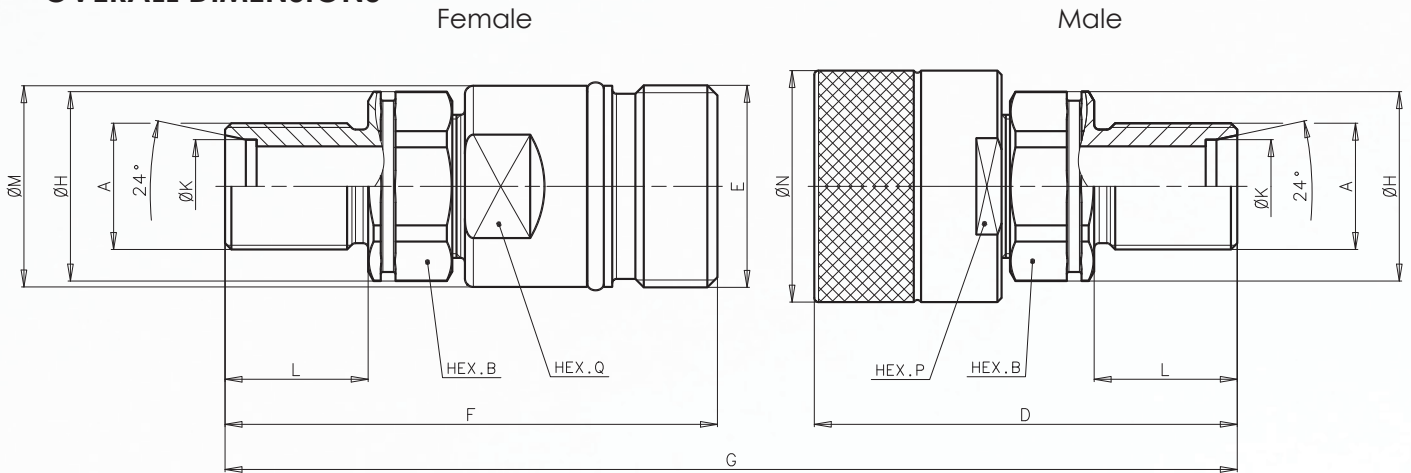


MALE THREAD METRIC L SERIES SCHOTT – 24 ° CONE BULKHEAD (DIN 2353 / ISO 8434-1)

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	K	L	M	N	HEX P	HEX Q	Part Number	
																		Female	Male
VD14 L8 SCHOTT	1/4"	1	6,3	M14X1.5	M24X2	mm inch	19 0,75	- -	75 2,95	- -	21 0,83	8,2 0,32	25 0,98	23,8 0,94	- -	- -	22 0,87	Female Male	809510012 -
VD 38 L8 SCHOTT	3/8"	2	10	M14X1.5	M28X2	mm inch	22 0,87	- -	76,3 3,00	- -	24 0,94	8,2 0,32	25 0,98	27,8 1,09	- -	- -	24 0,94	Female Male	809510014 -
VD38 L10 SCHOTT	3/8"	2	10	M16X1.5	M28X2	mm inch	22 0,87	74,7 2,94	77,3 3,04	125 4,92	24 0,94	10,2 0,40	26 1,02	27,8 1,09	34 1,34	30 1,18	24 0,94	Female Male	809510016 809510017
VD12 L10 SCHOTT	1/2"	3	12,5	M16X1.5	M36X2	mm inch	30 1,18	77,3 3,04	83 3,27	132,6 5,22	32 1,26	10,2 0,40	26 1,02	35,8 1,41	42 1,65	36 1,42	30 1,18	Female Male	80950006 80950007
VD12 L12 SCHOTT	1/2"	3	12,5	M18X1.5	M36X2	mm inch	30 1,18	81,3 3,20	87 3,43	140,6 5,54	32 1,26	12,2 0,48	30 1,18	35,8 1,41	42 1,65	36 1,42	30 1,18	Female Male	809510000 80950001
VD12 L15 SCHOTT	1/2"	3	12,5	M22X1.5	M36X2	mm inch	30 1,18	78,3 3,08	84 3,31	134,6 5,30	32 1,26	15,2 0,60	27 1,06	35,8 1,41	42 1,65	36 1,42	30 1,18	Female Male	80950004 80950005
VD12 L18 SCHOTT	1/2"	3	12,5	M26X1.5	M36X2	mm inch	30 1,18	78,3 3,08	84 3,31	134,6 5,30	32 1,26	18,2 0,72	27 1,06	35,8 1,41	42 1,65	36 1,42	30 1,18	Female Male	80950008 80950009
VD34 L15 SCHOTT	3/4"	4	20	M22X1.5	M42X2	mm inch	36 1,42	85,5 3,37	95 3,74	148,5 5,85	40 1,57	15,2 0,60	27 1,06	41,8 1,65	48 1,89	41 1,61	36 1,42	Female Male	809510024 809510025
VD34 L18 SCHOTT	3/4"	4	20	M26X1.5	M42X2	mm inch	36 1,42	86,5 3,41	96 3,78	150,5 5,93	40 1,57	18,2 0,72	27 1,06	41,8 1,65	48 1,89	41 1,61	36 1,42	Female Male	809510026 809510027
VD34 L22 SCHOTT 36	3/4"	4	20	M30X2	M42X2	mm inch	36 1,42	- -	104 4,09	- -	40 1,57	22 0,87	36 1,42	41,8 1,65	- -	- -	36 1,42	Female Male	809510028 -
VD100 L18 SCHOTT 32	1"	6	25	M26X1,5	48X3 SP*	mm inch	41 1,61	98,5 3,88	115 4,53	178,7 7,04	45 1,77	18,2 0,72	32 1,26	47,8 1,88	55 2,17	50 1,97	41 1,61	Female Male	809510030 809510031
VD100 L22 SCHOTT 32	1"	6	25	M30X2	48X3 SP*	mm inch	41 1,61	100,5 3,96	117 4,61	182,7 7,19	45 1,77	22,2 0,87	34 1,34	47,8 1,88	55 2,17	50 1,97	41 1,61	Female Male	809510032 809510033
VD100 L28 SCHOTT	1"	6	25	M36X2	48X3 SP*	mm inch	41 1,61	100,5 3,96	117 4,61	182,7 7,19	45 1,77	28,2 1,11	34 1,34	47,8 1,88	55 2,17	50 1,97	41 1,61	Female Male	809510034 809510035

*SP = SPECIAL THREAD

OVERALL DIMENSIONS



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

Description	BODY SIZE	BG	ISO DN	A	E	UNIT	HEX B	D	F	G	H	K	L	M	N	HEX P	HEX Q	Part Number	
VD38	3/8"	2	10	M20X1.5	M28X2	mm	22	75,7	-	-	24	12,2	27	-	34	30	-	Female	-
S12 SCHOTT	3/8"	2	10	M20X1.5	M28X2	inch	0,87	2,98	-	-	0,94	0,48	1,06	-	1,34	1,18	-	Male	809511011
VD12	1/2"	3	12,5	M18X1.5	M36X2	mm	30	78,3	84	134,6	32	10,2	27	35,8	42	36	30	Female	809511000
S10 SCHOTT	1/2"	3	12,5	M18X1.5	M36X2	inch	1,18	3,08	3,31	5,30	1,26	0,40	1,06	1,41	1,65	1,42	1,18	Male	809511001
VD12	1/2"	3	12,5	M20X1.5	M36X2	mm	30	78,3	84	134,6	32	12,2	27	35,8	42	36	30	Female	809511002
S12 SCHOTT	1/2"	3	12,5	M20X1.5	M36X2	inch	1,18	3,08	3,31	5,30	1,26	0,48	1,06	1,41	1,65	1,42	1,18	Male	809511003
VD12	1/2"	3	12,5	M24X1.5	M36X2	mm	30	80,3	86	138,6	32	16,2	29	35,8	42	36	30	Female	809511006
S16 SCHOTT	1/2"	3	12,5	M24X1.5	M36X2	inch	1,18	3,16	3,39	5,46	1,26	0,64	1,14	1,41	1,65	1,42	1,18	Male	809511007
VD34	3/4"	4	20	M24X1.5	M42X2	mm	36	-	97	-	40	16,2	29	41,8	-	-	36	Female	809511014
S16 SCHOTT	3/4"	4	20	M24X1.5	M42X2	inch	1,42	-	3,82	-	1,57	0,64	1,14	1,65	-	-	1,42	Male	-
VD34	3/4"	4	20	M30X2	M42X2	mm	36	94,5	104	166,5	40	20	36	41,8	48	41	36	Female	809511016
S20 SCHOTT	3/4"	4	20	M30X2	M42X2	inch	1,42	3,72	4,09	6,56	1,57	0,79	1,42	1,65	1,89	1,61	1,42	Male	809511017
VD100	1"	6	25	M30X2	48X3 SP*	mm	41	104,5	121	190,7	45	20,2	38	47,8	55	50	41	Female	809511018
S20 SCHOTT	1"	6	25	M30X2	48X3 SP*	inch	1,61	4,11	4,76	7,51	1,77	0,80	1,50	1,88	2,17	1,97	1,61	Male	809511019
VD100	1"	6	25	M36X2	48X3 SP*	mm	41	104,5	121	190,7	45	25,2	38	47,8	55	50	41	Female	809511020
S25 SCHOTT	1"	6	25	M36X2	48X3 SP*	inch	1,61	4,11	4,76	7,51	1,77	0,99	1,50	1,88	2,17	1,97	1,61	Male	809511021
VD100	1"	6	25	M42X2	48X3 SP*	mm	46	106,5	123	194,7	50	30,2	40	47,8	55	50	41	Female	809511022
S30 SCHOTT	1"	6	25	M42X2	48X3 SP*	inch	1,81	4,19	4,84	7,67	1,97	1,19	1,57	1,88	2,17	1,97	1,61	Male	809511023
VD100	1"	6	25	M52X2	48X3 SP*	mm	55	-	123	-	60	38,3	40	47,8	-	-	41	Female	809511024
S38 SCHOTT	1"	6	25	M52X2	48X3 SP*	inch	2,17	-	4,84	-	2,36	1,51	1,57	1,88	-	-	1,61	Male	-

*SP = SPECIAL THREAD

PROTECTION CAPS FOR VD SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

The protection caps for VD couplings are manufactured in plastic.



For VD series caps are available in plastic with connection strip.

- Available in following color: Red.
- Temperature range: from -20 °C to +100 °C (from -4 °F to +212 °F).

SIZE	Part Number	
	Cap for Female	Plug for Male
VD14	814900000	814900001
VD38	814900002	814900003
VD12	814900004	814900005
VD34	814900006	814900007
VD100	814900008	814900009
VD114	814900010	814900011

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



SERIES: VLS

INTERCHANGE: With similar couplings

MAIN APPLICATIONS

- Mobile construction equipment
- Drilling rigs
- Vehicle/Trailer
- Industrial plant

“VLS” series is the screw to connect coupling with poppet style valving, interchangeable with similar products existing on the market (designed for earth moving machine market). Made in high strength steel with CRIII zinc plating treatment, they have a robust design to withstand the frequent peak of high pressure of the heavy duty applications (typical of mobile construction equipment, drilling rig etc.). They are available in sizes ½" and 1" Available in different thread configuration Metric (DIN 3852), BSP (DIN 3852) or other on request.

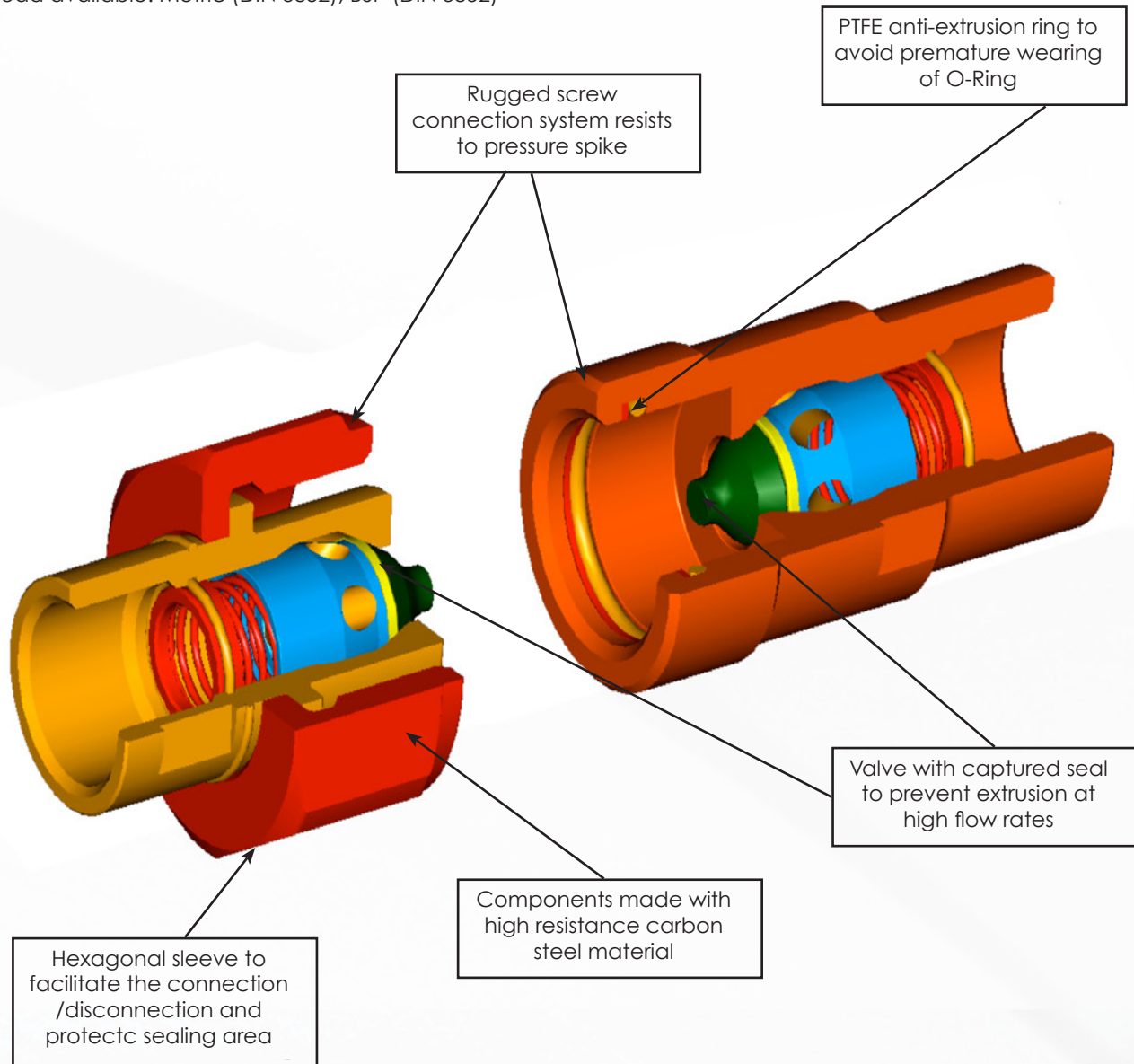


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TECHNICAL FEATURES AND OPTIONS

- Interchangeability: Similar coupling
- Valve system: Poppet valve
- Mechanical connection: Screw system
- Connection system: Screw to connect
- Disconnection: Unscrew to disconnect
- Connection with residual pressure: Allowed in one half of the coupling up to 10 MPa.
- Disconnection with residual pressure: allowed up to 10 MPa..
- Thread available: Metric (DIN 3852), BSP (DIN 3852)
- Thread on request: Please contact Stucchi to check availability
- Construction material: high strength steel.
- Surface treatment: CRIII zinc plated
- Spring: C72 steel.
- Seals: NBR (Nitrile)
- Anti-extrusion rings: PTFE



BENEFITS

- Robustness and ease of construction.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- The robust construction makes them suitable for heavy duty applications.
- Excellent resistance with impulse pressure
- Compact design.
- Simple to use

HOW TO USE

- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To connect insert the male coupling in the female coupling, screw the sleeve till its stop.
- To disconnect unscrew totally the sleeve from the female 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).
- Do not connect with residual pressure in both half for safety reasons.
- When the couplings are disconnected, it is suggested to use the protection caps (aluminum see below)



PERFORMANCE

Description	Size	Rated Flow		Max. flow suggested		Connect torque*		Disconnect torque*		Spillage**
		l/min	GPM	l/min	GPM	Nm	lbf ft	Nm	lbf ft	
VLS12	1/2	45	11,93	90	23,85	3,2	2,36	3,2	2,36	2,5
VLS100	1	100	26,50	200	53,00	1,3	0,96	0,6	0,44	15

Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
VLS12	46,5	6743	46,5	6743	46,5	6743	200	29000	130	18850	170	24650
VLS100	46,5	6743	46,5	6743	46,5	6743	140	20300	140	20300	140	20300

* Connect torque and disconnect torque without residual pressure. The torque increase to increasing of internal residual pressure.

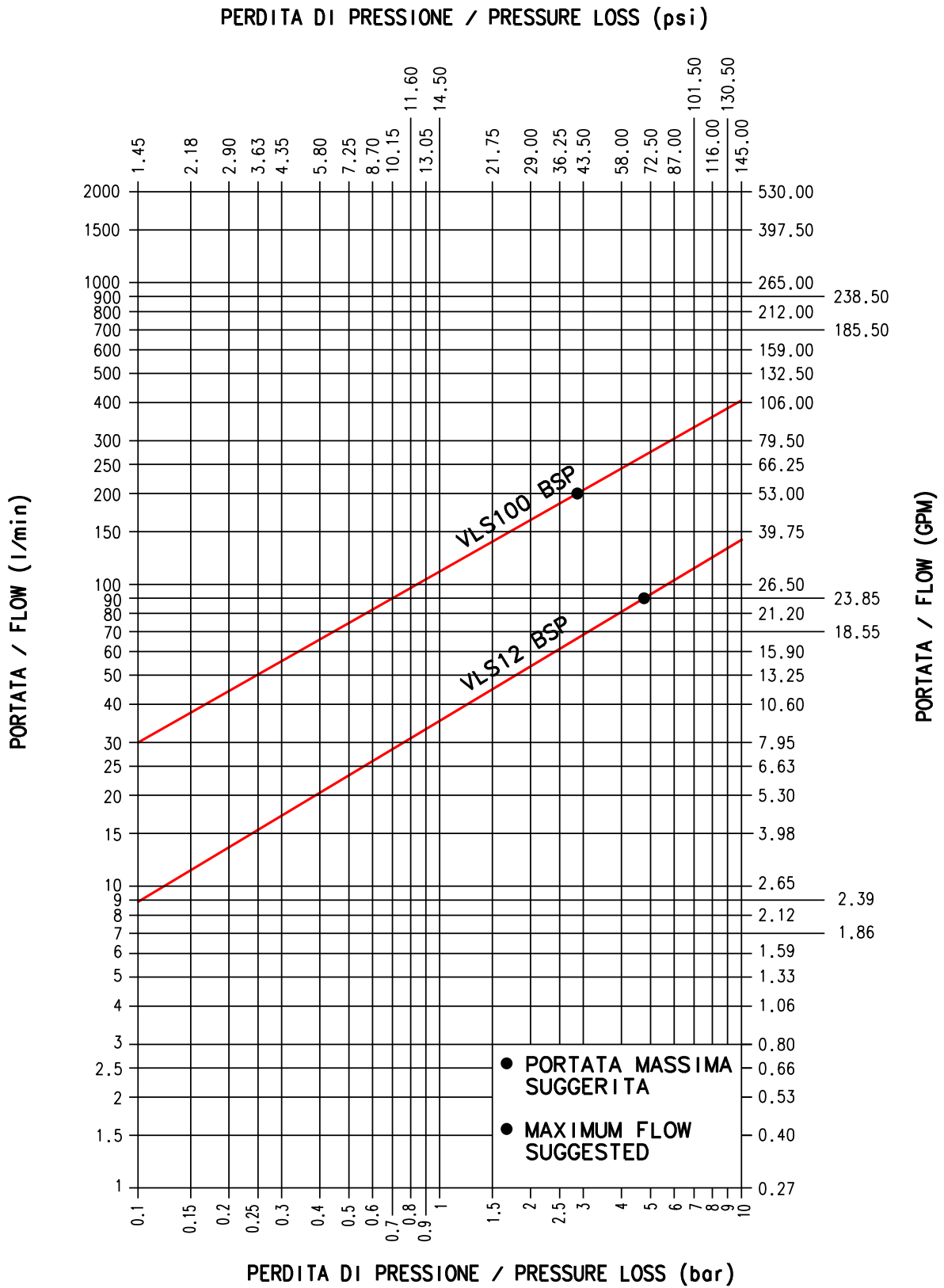
** Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

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

Tests performed:

The couplings have been tested at maximum operating pressure for 1.000.000 impulses according to ISO 7241-2 test method.

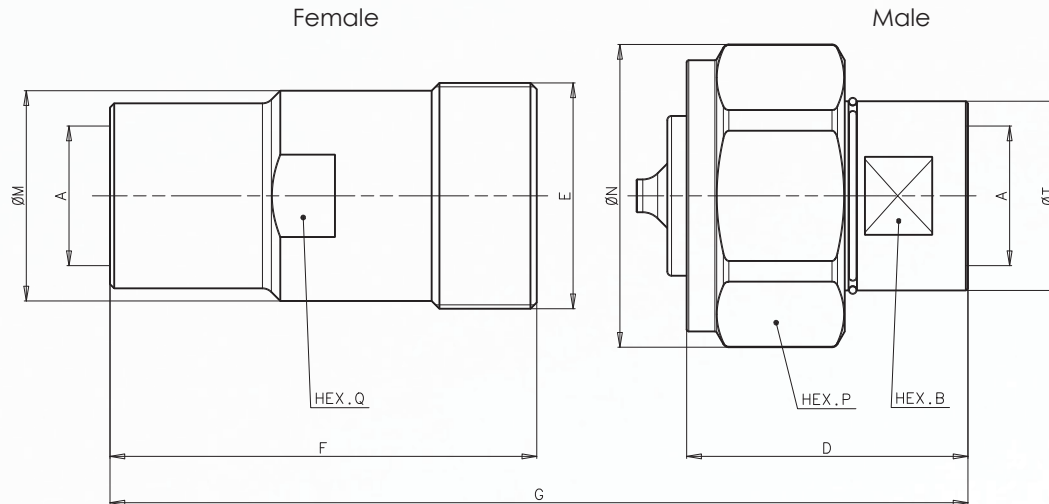
PRESSURE DROP



FLUIDO: OLIO ISO VG32
TEMPERATURA: 40°C
VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
TEMPERATURE: 40°C
VISCOSITY: 28.8-35.2 mm²/s

OVERALL DIMENSIONS



FEMALE THREAD BSP (DIN 3852-2 form X)

Description	BODY SIZE	ISO	A	E	UNIT	HEX B	D	F	G	M	N	HEX P	HEX Q	T	Part Number	
VLS 12 BSP	1/2"	12,5	G 1/2'	35X2 SP*	mm	27	50,3	62	92,6	35,5	45	41	32	29,8	Female	809900004
															Male	809900005
VLS 100 BSP	1"	25	G 1'	54X3 SP*	mm	41	66,9	101,5	143	50	72	65	46	54	Female	809900008
															Male	809900009

Description	Unit	Weight	
		Male Part	Female Part
VLS 12 BSP	Kg	0,245	0,315
	Lbs	0,111	0,143
VLS 100 BSP	Kg	0,92	0,88
	Lbs	0,417	0,399

* SP = SPECIAL THREAD

FEMALE THREAD METRIC (DIN 3852-1 form Y)

Description	BODY SIZE	ISO	A	E	UNIT	HEX B	D	F	G	M	N	HEX P	HEX Q	T	Part Number	
VLS 12 M22X1.5 ISO	1/2"	12,5	M22X1.5	35X2 SP*	mm	27	50,3	62	92,6	35,5	45	41	32	29,8	Female	809912004
															Male	809912005
VLS 100 M30X1.5 ISO	1"	25	M30X1.5	54X3 SP*	mm	41	66,9	101,5	143	50	72	65	46	54	Female	809912008
															Male	809912009

Description	Unit	Weight	
		Male Part	Female Part
VLS 12 M22X1.5 ISO	Kg	0,24	0,305
	Lbs	0,109	0,138
VLS 100 M30X1.5 ISO	Kg	0,94	0,9
	Lbs	0,426	0,408

* SP = SPECIAL THREAD

PROTECTION CAPS FOR VLS SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

The protection caps for VLS couplings are manufactured in aluminum.



Are available for the VLS series, aluminum screw caps complete with rope.

- Available in following colors: natural aluminum.

SIZE	Part Number	
	Cap for Female	Plug for Male
VLS12	814906022	814906023
VLS100	814906024	814906025



SERIES: VR

INTERCHANGE: Similar Coupling (type "Rohrleitung")

MAIN APPLICATIONS

- Vehicles
- Mobile construction equipment
- Industrial equipment

"VR" is the screw coupling series with a special sealing mechanism that minimizes the loss of oil during the disconnection.

This coupling is made of high strength steel with Cr III zinc plating and NBR sealing combines with the rugged design of a screw coupling.

These products are particularly well suited for the application of on-road vehicles in areas where limited spillage is mandatory. They are available in sizes 3/8, 1/2, 3/4, 1 and 1-1/4"

Available with metric threads (DIN 2353 / ISO 8434-1), BSP (DIN 3852) or other on request.

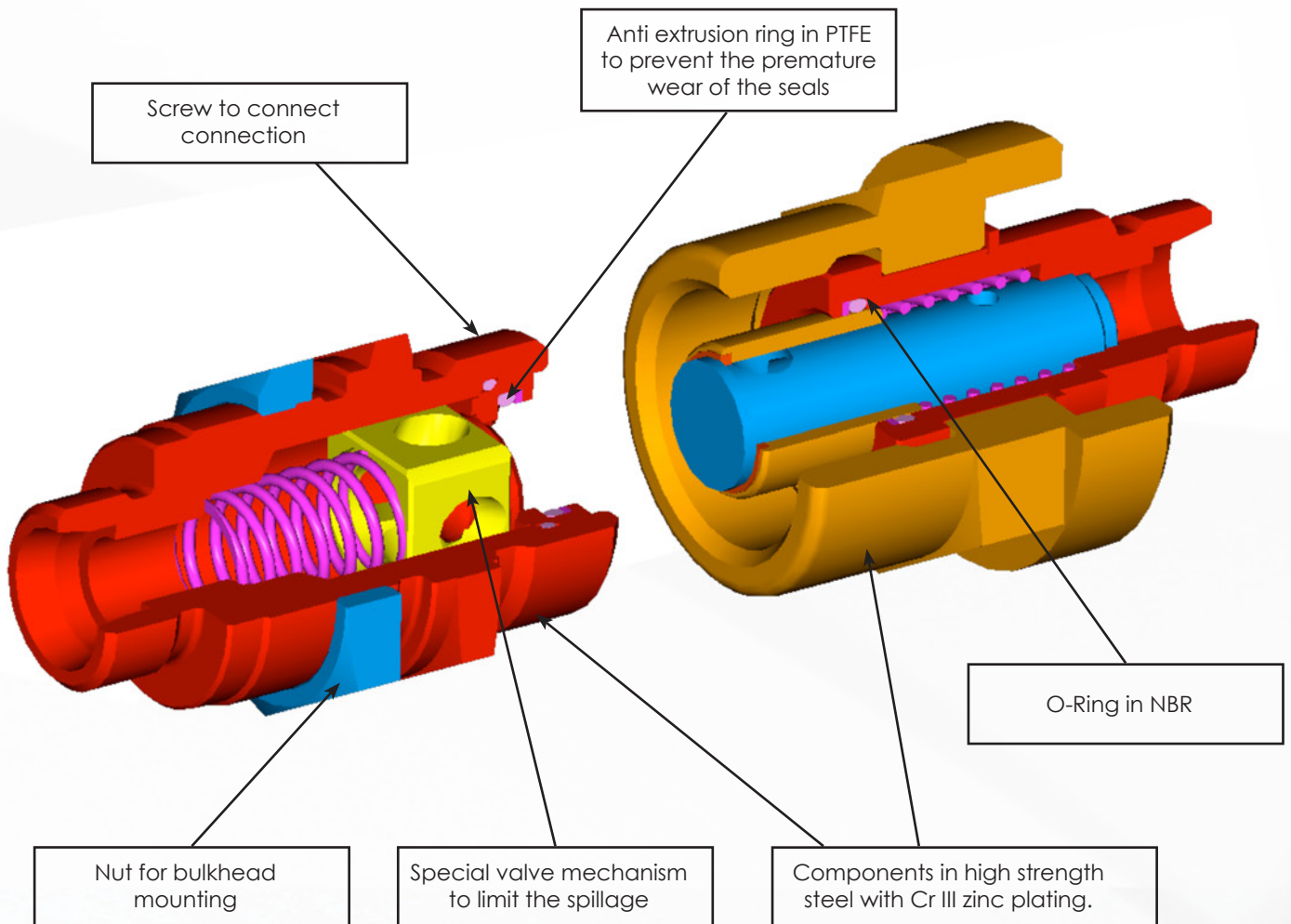


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TECHNICAL FEATURES AND OPTIONS

- Interchangeability: Similar coupling (type "Rohrleitung ").
- Valve system: Special valve system with limited spillage.
- Mechanical connection: Screw system
- Connection system: Screw to connect.
- Disconnection system: Unscrew to disconnect.
- Connection with residual pressure: Allowed in one half of the coupling up to 10 MPa (4 MPa for size 1-1/4)
- Disconnection with residual pressure: allowed.
- Thread available: Metric (DIN 2353 / ISO 8434-1), BSP (DIN 3852)
- Other threads: Please contact Stucchi to check availability.
- Construction material: High strength steel
- Surface treatment: Cr III zinc plated
- Spring: C72 steel
- Seals: NBR (Nitrile)
- Anti-extrusion rings: PTFE



BENEFITS

- Robustness and ease of construction.
- Special valves ensure a good seal of the coupling disconnected and minimize spillage of fluid.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Excellent mechanical resistance.
- Compact design.
- Simple to use.

HOW TO USE

- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To connect insert the male coupling in the female coupling, screw the sleeve till the stop.
- To disconnect unscrew totally the sleeve from the female coupling.

WARNING!

- Please read carefully General instructions for selection and use of the products in our master catalogues
- Do not use the female and male coupling disconnected as a cap with impulse pressure.
- Do not couple-uncouple with flow in the circuit and/or pressure in the circuit. Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
- Do not connect with residual pressure in both half for safety reasons.
- When the couplings are disconnected, it is suggested to use the protection caps (aluminum see below), this is important to limit contamination in the circuit to avoid compromising the function of the internal valves.
- Check the maximum allowable working pressure of the port in use (L or S type (DIN 2353 / ISO 8434-1) etc.).



PERFORMANCE

Description	Size	Rated Flow Portata nominale		Max. flow suggested		Connect torque*		Disconnect torque*		Spillage**
		l/min	GPM	l/min	GPM	Nm	lbf ft	Nm	lbf ft	
VR38	3/8	23	6,10	46	12,19	2	1,47	1,8	1,33	0,012
VR12	1/2	45	11,93	90	23,85	1,3	0,96	0,7	0,52	0,02
VR34	3/4	106	28,10	212	56,20	2,2	1,62	1,7	1,25	0,4
VR100	1	189	50,11	378	100,21	4,3	3,17	2,5	1,84	1
VR114	1-1/4	288	76,35	576	152,7	6,0	4,42	4,0	2,95	1

Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
VR38	40	5800	20	2900	40	5800	200	29000	70	10150	100	14500
VR12	30	4350	17	2465	30	4350	200	29000	70	10150	100	14500
VR34	35	5075	20	2900	35	5075	150	21750	80	11600	100	14500
VR100	30	4350	20	2900	30	4350	120	17400	80	11600	120	17400
VR114	42	6090	42	6090	42	6090	120	17400	90	13050	100	14500

* Connect torque and disconnect torque without residual pressure. The torque increases when the internal residual pressure increases.

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

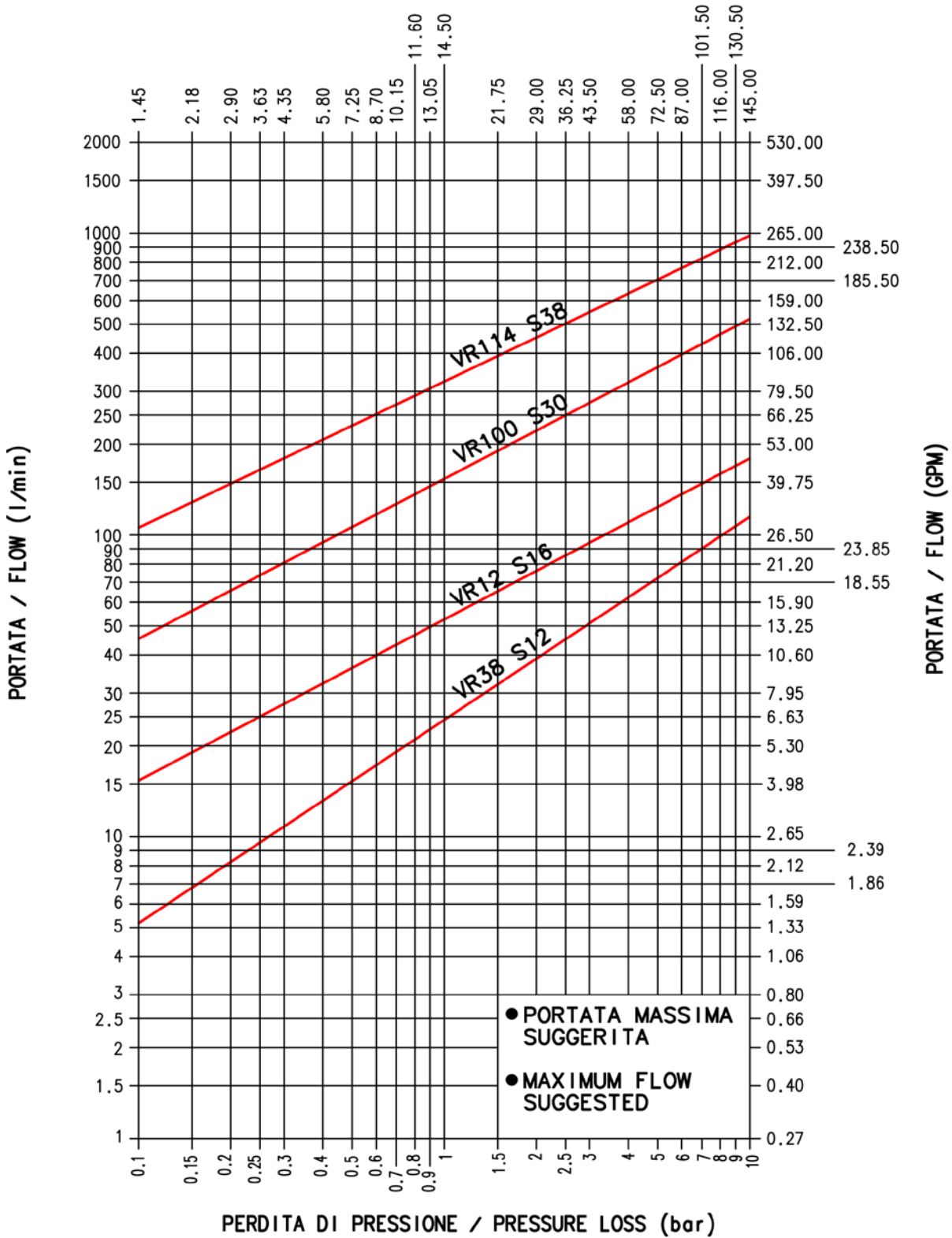
Temperature range: Standard seals NBR from -20 °C to +100 °C (from -4 °F to +212 °F).

Tests performed:

The couplings coupled have been tested at maximum operating pressure for 200.000 impulse according to ISO 7241-2 test method.

PRESSURE DROP

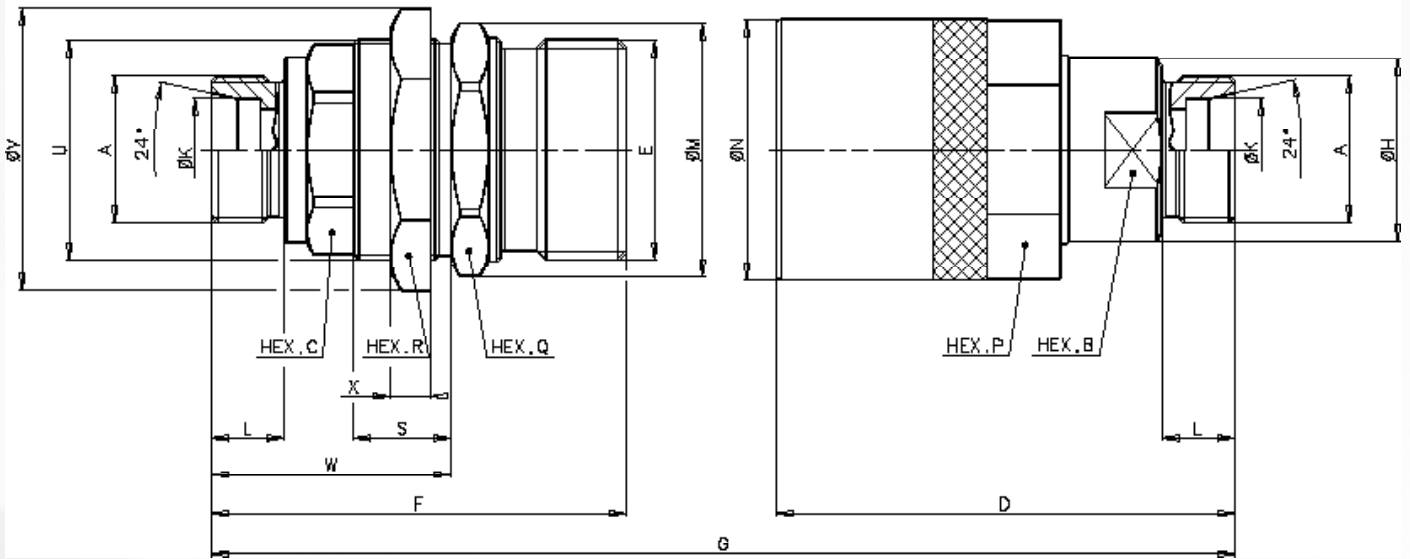
PERDITA DI PRESSIONE / PRESSURE LOSS (psi)



FLUIDO: OLIO ISO VG32
 TEMPERATURA: 40°C
 VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
 TEMPERATURE: 40°C
 VISCOSITY: 28.8-35.2 mm²/s

OVERALL DIMENSIONS



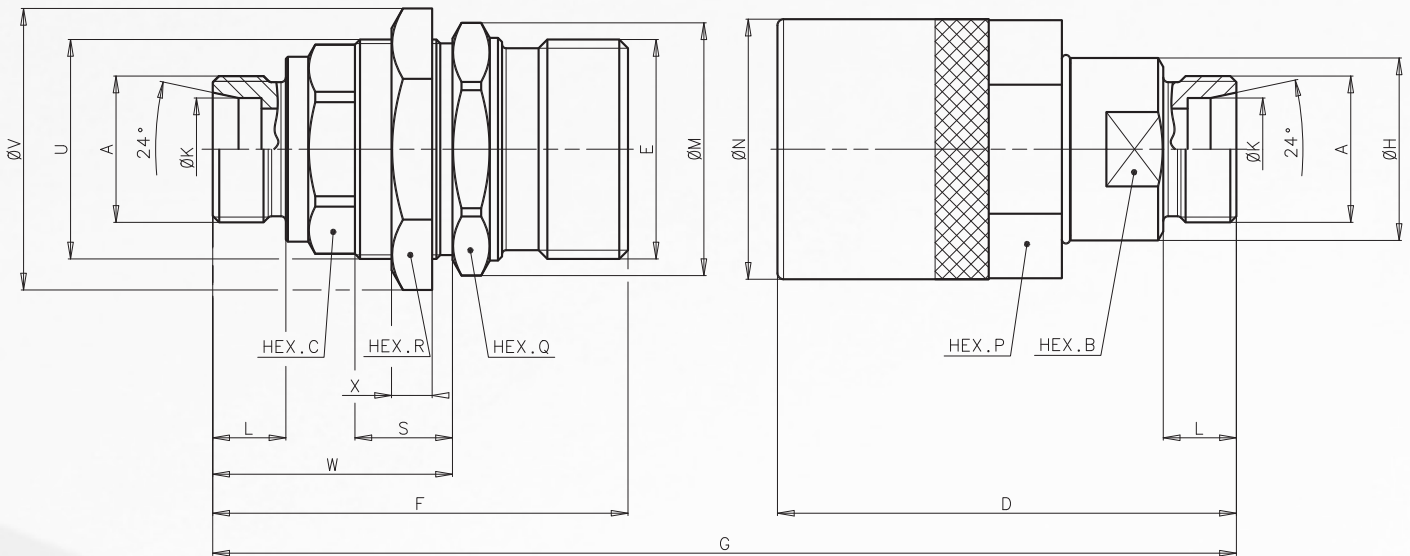
MALE THREAD METRIC L – 24 ° CONE (DIN 2353 / ISO 8434-1)

Description	BODY SIZE	BG	A	E	U	UNIT	HEX B	HEX C	D	F	G	H	K	L	M
VR38 L10	3/8"	2	M16X1.5	32X3 * SP	M30X1	mm inch	22 0,87	- -	61,6 2,43	60 2,36	107,5 4,23	25 0,98	10,2 0,40	11 0,43	41,4 1,63
VR38 L12	3/8"	2	M18X1.5	32X3 * SP	M30X1	mm inch	22 0,87	- -	61,6 2,43	60 2,36	107,5 4,23	25 0,98	12,2 0,48	11 0,43	41,4 1,63
VR38 L15	3/8"	2	M22X1.5	32X3 * SP	M30X1	mm inch	22 0,87	- -	62,6 2,46	61 2,40	109,5 4,31	25 0,98	15,2 0,60	12 0,47	41,4 1,63
VR12 L15	1/2"	3	M22X1.5	36X3 * SP	M36X1	mm inch	24 0,94	- -	71,6 2,82	69,7 2,74	123,8 4,87	28 1,10	15,2 0,60	12 0,47	47,2 1,86
VR100 L18	1"	6	M26X1.5	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	107 4,21	96,2 3,79	174,5 6,87	44,9 1,77	18,2 0,72	12 0,47	62,2 2,45
VR100 L22	1"	6	M30X2	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	109 4,29	98,2 3,87	178,5 7,03	44,9 1,77	22,2 0,87	14 0,55	62,2 2,45
VR100 L28	1"	6	M36X2	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	109 4,29	98,2 3,87	178,5 7,03	44,9 1,77	28,2 1,11	14 0,55	62,2 2,45

Description	BODY SIZE	BG	N	HEX P	HEX Q	HEX R	S	V	W	X	Part Number	
VR38 L10	3/8"	2	38.7	32	36	36	19	41.4	36	7	Female	809608002
			1.52	1.26	1.42	1.42	0.75	1.63	1.42	0.28	Male	809608003
VR38 L12	3/8"	2	38.7	32	36	36	19	41.4	36	7	Female	809608004
			1.52	1.26	1.42	1.42	0.75	1.63	1.42	0.28	Male	809608005
VR38 L15	3/8"	2	38.7	32	36	36	19	41.4	37	7	Female	809608006
			1.52	1.26	1.42	1.42	0.75	1.63	1.46	0.28	Male	809608007
VR12 L15	1/2"	3	54	46	41	41	22.4	47.15	40.1	8	Female	809608000
			2.13	1.81	1.61	1.61	0.88	1.86	1.58	0.31	Male	809608001
VR100 L18	1"	6	64	55	55	60	22.75	69	53	10	Female	809608008
			2.52	2.17	2.17	2.36	0.90	2.72	2.09	0.39	Male	809608009
VR100 L22	1"	6	64	55	55	60	22.75	69	55	10	Female	809608010
			2.52	2.17	2.17	2.36	0.90	2.72	2.17	0.39	Male	809608011
VR100 L28	1"	6	64	55	55	60	22.75	69	55	10	Female	809608012
			2.52	2.17	2.17	2.36	0.90	2.72	2.17	0.39	Male	809608013

* SP = SPECIAL THREAD

OVERALL DIMENSIONS



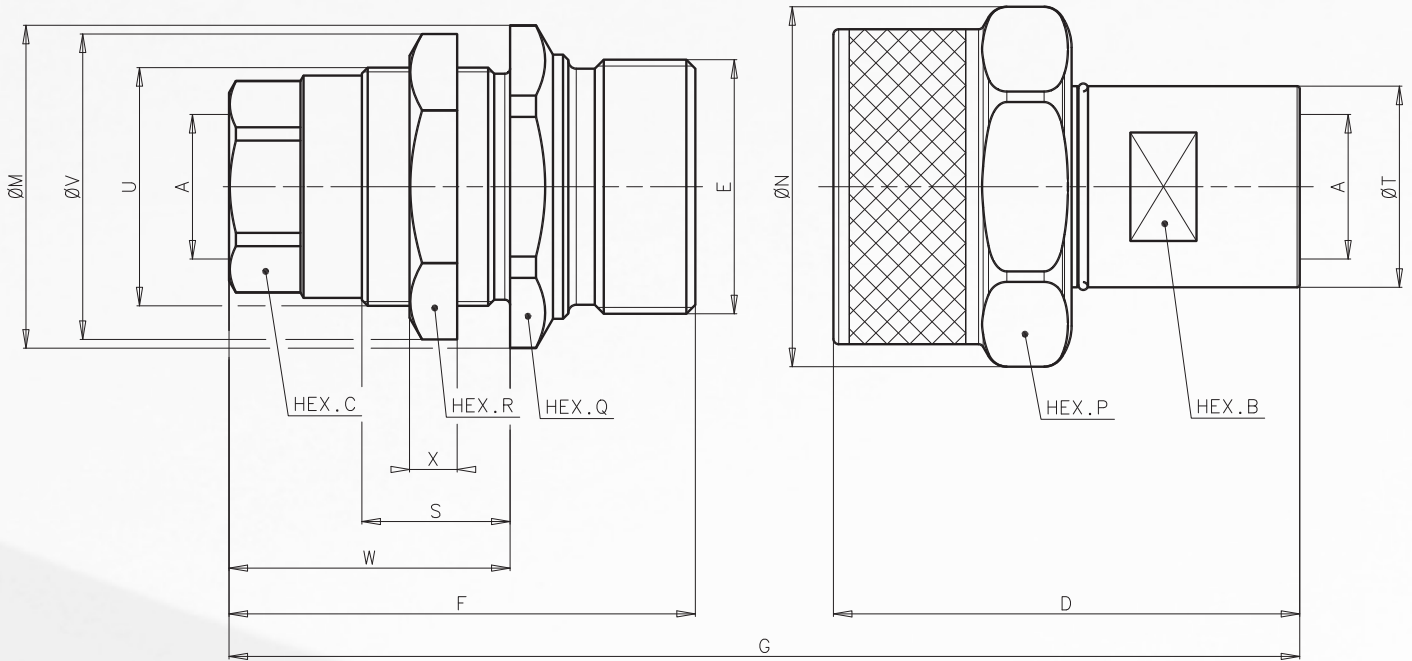
MALE THREAD METRIC S – 24 ° CONE (DIN 2353 / ISO 8434-1)

Description	BODY SIZE	BG	A	E	U	UNIT	HEX B	HEX C	D	F	G	H	L	M
VR38 S10	3/8"	2	M18X1.5	32X3 * SP	M30X1	mm inch	- -	- -	- -	61 2,40	- -	- -	12 0,47	41,4 1,63
VR38 S12	3/8"	2	M20X1.5	32X3 * SP	M30X1	mm inch	22 0,87	- -	62,6 2,46	61 2,40	109,5 4,31	25 0,98	12 0,47	41,4 1,63
VR38 S14	3/8"	2	M22X1.5	32X3 * SP	M30X1	mm inch	22 0,87	- -	64,6 2,54	63 2,48	113,5 4,47	25 0,98	14 0,55	41,4 1,63
VR12 S16	1/2"	3	M24X1.5	36X3 * SP	M36X1	mm inch	24 0,94	- -	73,6 2,90	71,7 2,82	127,8 5,03	28 1,10	14 0,55	47,2 1,86
VR100 S20	1"	6	M30X2	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	111 4,37	100,2 3,94	182,5 7,19	44,9 1,77	16 0,63	62,2 2,45
VR100 S25	1"	6	M36X2	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	113 4,45	102,2 4,02	186,5 7,34	44,9 1,77	18 0,71	62,2 2,45
VR100 S30	1"	6	M42X2	54X4 * SP	M54X1.5	mm inch	41 1,61	46 1,81	115 4,53	104,2 4,10	190,5 7,50	44,9 1,77	20 0,79	62,2 2,45
VR114 S38	1-1/4"	8	M52X2	79X4 * SP	M80X2	mm inch	55 2,17	55 2,17	136,4 5,37	129 5,08	225,15 8,86	60,8 2,39	22 0,87	90 3,54

Description	BODY SIZE	BG	N	HEX P	HEX Q	HEX R	S	V	W	X	Part Number	
VR38 S10	3/8"	2	-	-	36	36	19	41.4	37	7	Female	809609002
			-	-	1.42	1.42	0.75	1.63	1.46	0.28	Male	-
VR38 S12	3/8"	2	38.7	32	36	36	19	41.4	37	7	Female	809609004
			1.52	1.26	1.42	1.42	0.75	1.63	1.46	0.28	Male	809609005
VR38 S14	3/8"	2	38.7	32	36	36	19	41.4	39	7	Female	809609006
			1.52	1.26	1.42	1.42	0.75	1.63	1.54	0.28	Male	809609007
VR12 S16	1/2"	3	54	46	41	41	22.4	47.15	42.1	8	Female	809609000
			2.13	1.81	1.61	1.61	0.88	1.86	1.66	0.31	Male	809609001
VR100 S20	1"	6	64	55	55	60	22.75	69	57	10	Female	809609008
			2.52	2.17	2.17	2.36	0.90	2.72	2.24	0.39	Male	809609009
VR100 S25	1"	6	64	55	55	60	22.75	69	59	10	Female	809609010
			2.52	2.17	2.17	2.36	0.90	2.72	2.32	0.39	Male	809609011
VR100 S30	1"	6	64	55	55	60	22.75	69	61	10	Female	809609012
			2.52	2.17	2.17	2.36	0.90	2.72	2.40	0.39	Male	809609013
VR114 S38	1-1/4"	8	89.7	-	85	90,5°	35	100	71	14	Female	809609014
			3.53	-	3.35	3,56°	1.38	3.94	2.80	0.55	Male	809609015

* SP = SPECIAL THREAD
° to mount with a sickle spanner

OVERALL DIMENSIONS



FEMALE THREAD BSPP (DIN 3852-2 form X)

Description	BODY SIZE	BG	A	E	U	UNIT	HEX B	HEX C	D	F	G	M
VR34 BSP	3/8"	4	G 3/4"	M48x3 SP*	M45x1.5	mm	32	36	88,1	88,1	152,1	61
						inch	1,26	1,42	3,47	3,47	5,99	2,40

Description	BODY SIZE	BG	A	N	HEX P	HEX Q	HEX R	S	T	V	W	X	Part Number	
VR34 BSP	3/8"	4	G 3/4"	68	60	55	50	26.9	38	57.5	53.1	9	Female	809600000
				2.68	2.36	2.17	1.97	1.06	1.50	2.26	2.09	0.35	Male	809600001

* SP = SPECIAL THREAD

SERIES: VR

PROTECTION CAPS FOR VR SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

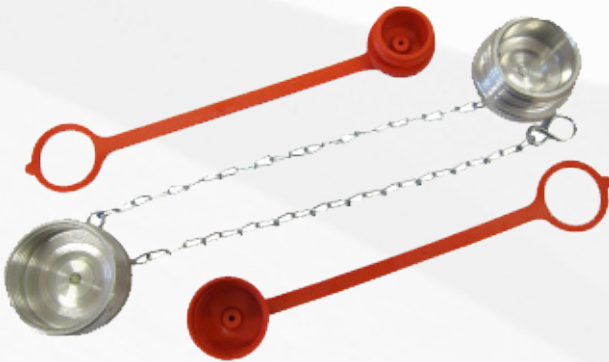
The protection caps for VR couplings are manufactured in plastic and aluminum.

Plastic caps with ribbon or aluminum screw caps

- Available colors: Plastic Red - Aluminum

- Temperature range: from -20°C to +100°C.

SIZE	Part Number		Material/Color
	Plug for Female	Cap for Male	
VR38	814900012	814900013	Plastic/Red
VR12	814900014	814900015	Aluminum/Natural
VR34	814906016	814906017	Aluminum/Natural
VR100	814906018	814906019	Aluminum/Natural
VR114	814906020	814906021	Aluminum/Natural



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