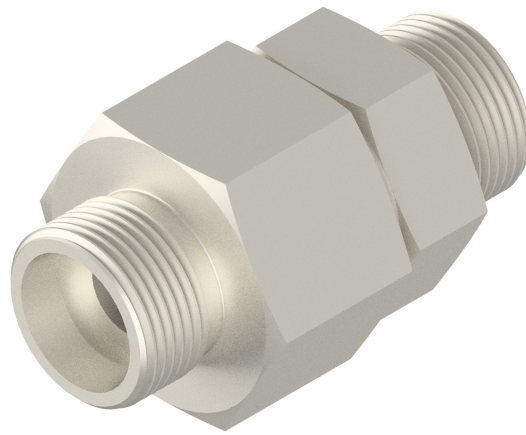


Check Valves

# CHECK VALVE ( NON-RETURN )

All Check Valves are manufactured by GEPEF, the result of the development of products with high efficiency standards, providing perfect non-return operation and a wide range of actuation options (opening pressure, selection of retention seat) and connection types (tube-to-tube; male threads, female threads, as well as combinations of different connection types in the same valve). Also available in special versions for low pressures and high vacuums.



## Opening Pressure

Approximately 1 bar (other values upon request)

## Surface Treatment

Chemical Nickel Plating or Trivalent Chromium VI

Nickel Zinc

## Seals and Operating Temperatures

NBR / Buna-N (-25°C to 100°C) (-13°F to +212°F) (Standard)

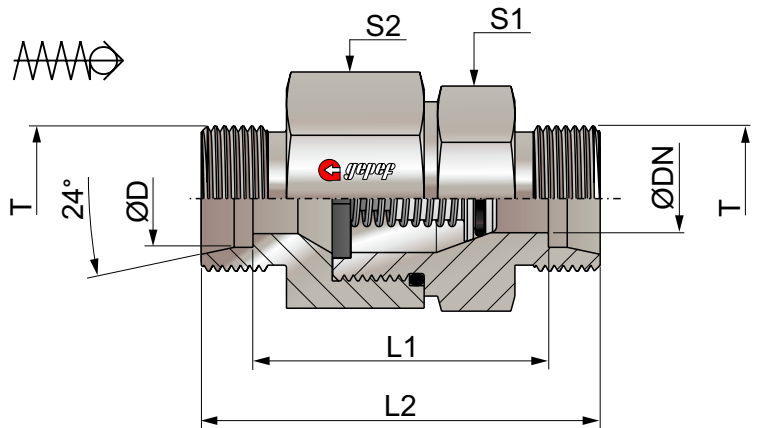
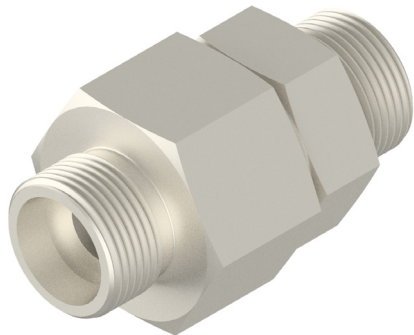
(FKM) Viton (-15°C to 200°C) (5°F to +392°F) - V

EPDM (-40°C to 150°C) (-40°F to +302°F) - E

## Materials

Carbon Steel

Stainless Steel AISI 316



DIN 2353 / ISO 8434-1 Series L

Type	D	DN	T	S1	S2	L1	L2	Working Pressure
VARMA 6L	6	4	M12x1,5	17	17	29	43	400 bar / 5800 PSI
VARMA 8L	8	6	M14x1,5	19	19	30	44	400 bar / 5800 PSI
VARMA 10L	10	8	M16x1,5	22	24	40,5	55	400 bar / 5800 PSI
VARMA 12L	12	8	M18x1,5	27	30	43,5	58	400 bar / 5800 PSI
VARMA 15L	15	12	M22x1,5	27	32	47,5	62	400 bar / 5800 PSI
VARMA 18L	18	16	M26x1,5	36	41	51,5	67	400 bar / 5800 PSI
VARMA 22L	22	20	M30x2	41	46	61,5	77	250 bar / 3625 PSI
VARMA 28L	28	25	M36x2	50	55	69,5	85	250 bar / 3625 PSI
VARMA 35L	35	32	M45x2	60	65	75,5	96	250 bar / 3625 PSI
VARMA 42L	42	32	M52x2	65	70	74	96	250 bar / 3625 PSI

DIN 2353 / ISO 8434-1 Series H

Type	D	DN	T	S1	S2	L1	L2	Working Pressure
VARMA 6S	6	4	M14x1,5	19	19	34,5	48,5	420 bar / 6090 PSI
VARMA 8S	8	4	M16x1,5	19	19	34,5	48,5	420 bar / 6090 PSI
VARMA 10S	10	6	M18x1,5	22	24	40,5	55,5	420 bar / 6090 PSI
VARMA 12S	12	8	M20x1,5	24	27	42,5	57,5	420 bar / 6090 PSI
VARMA 14S	14	10	M22x1,5	27	32	47,5	64	420 bar / 6090 PSI
VARMA 16S	16	12	M24x1,5	32	36	50,5	68	420 bar / 6090 PSI
VARMA 20S	20	16	M30x2	41	46	54,5	76	420 bar / 6090 PSI
VARMA 25S	25	20	M36x2	46	50	58,5	83	420 bar / 6090 PSI
VARMA 30S	30	25	M42x2	60	60	69,5	97	250 bar / 3625 PSI
VARMA 38S	38	32	M52x2	65	70	75,5	108	250 bar / 3625 PSI

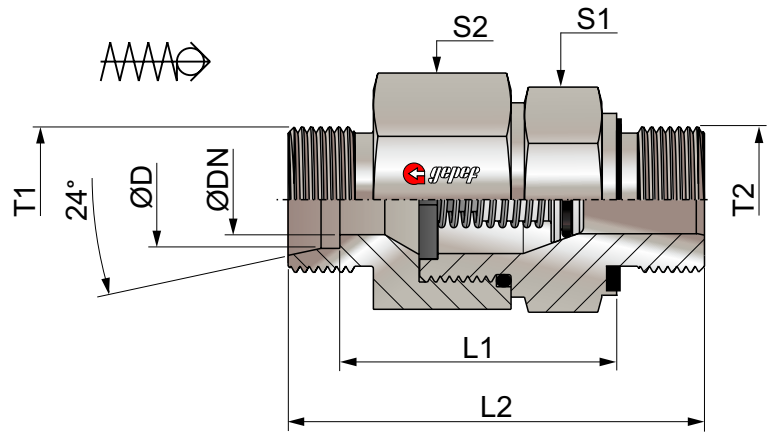
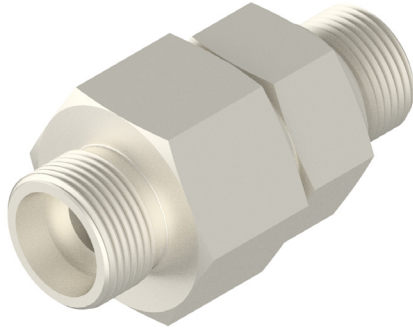
Coding Example:

**VARMA 6L (Check Valve, Retention Line, for tube Ø6, Series L).**

Material: Stainless Steel AISI 316, add the letter I at the end of the code.

Seals in Viton or EPDM, add the letter V or E at the end of the code.

If you require another type of check valve not listed in this catalog, please contact our technical department.



**DIN 2353 / ISO 8434-1 Series L - ISO 9974-2 Metric Thread**

Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA 6L - M10x1	6	4	M12x1,5	M10x1	17	17	28	44	400 bar / 5800 PSI
VARMA 8L - M12x1,5	8	6	M14x1,5	M12x1,5	19	19	30	48	400 bar / 5800 PSI
VARMA 10L - M14x1,5	10	8	M16x1,5	M14x1,5	22	24	38,5	57,5	400 bar / 5800 PSI
VARMA 12L - M16x1,5	12	8	M18x1,5	M16x1,5	27	30	42,5	61,5	400 bar / 5800 PSI
VARMA 15L - M18x1,5	15	12	M22x1,5	M18x1,5	27	32	45,5	64,5	400 bar / 5800 PSI
VARMA 18L - M22x1,5	18	16	M26x1,5	M22x1,5	36	36	50	70	400 bar / 5800 PSI
VARMA 22L - M26x1,5	22	20	M30x2	M26x1,5	41	46	55	78,5	250 bar / 3625 PSI
VARMA 28L - M33x2	28	25	M36x2	M33x2	50	55	63	88,5	250 bar / 3625 PSI
VARMA 35L - M42x2	35	32	M45x2	M42x2	60	60	69	99,5	250 bar / 3625 PSI
VARMA 42L - M48x2	42	32	M52x2	M48x2	65	70	68,5	99,5	250 bar / 3625 PSI

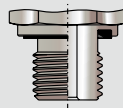
**DIN 2353 / ISO 8434-1 Series S - ISO 9974-2 Metric Thread**

Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA 6S - M12x1,5	6	4	M14x1,5	M12x1,5	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA 8S - M14x1,5	8	4	M16x1,5	M14x1,5	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA 10S - M16x1,5	10	6	M18x1,5	M16x1,5	22	24	38	57,5	420 bar / 6090 PSI
VARMA 12S - M18x1,5	12	8	M20x1,5	M18x1,5	24	27	41	60,5	420 bar / 6090 PSI
VARMA 14S - M20x1,5	14	10	M22x1,5	M20x1,5	27	32	44,5	66,5	420 bar / 6090 PSI
VARMA 16S - M22x1,5	16	12	M24x1,5	M22x1,5	32	36	48	69	420 bar / 6090 PSI
VARMA 20S - M27x2	20	16	M30x2	M27x2	41	46	52	78,5	420 bar / 6090 PSI
VARMA 25S - M33x2	25	20	M36x2	M33x2	46	50	54,5	84,5	420 bar / 6090 PSI
VARMA 30S - M42x2	30	25	M42x2	M42x2	60	60	64	97,5	250 bar / 3625 PSI
VARMA 38S - M48x2	38	32	M52x2	M48x2	65	70	69,5	107,5	250 bar / 3625 PSI

**WD Type**

ISO 1179-2 - BSP Thread

ISO 9974-2 - Metric Thread



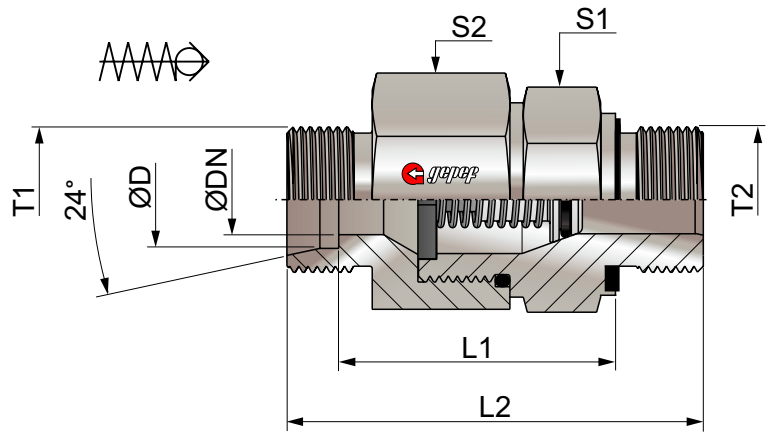
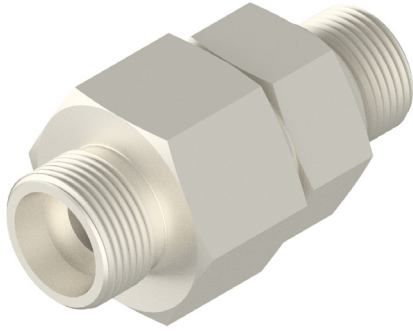
**Coding Example:**

**VARMA 6L - M10x1 (Check Valve for tube Ø6, Series L, male thread M10x1, WD sealing type).**

Material: Stainless Steel AISI 316, add the letter I at the end of the code.

Seals in Viton or EPDM, add the letter V or E at the end of the code.

**If another type of check valve not listed in this catalog is required, please contact our technical department.**



**DIN 2353 / ISO 8434-1 Series L - ISO 1179-2 BSP Thread**

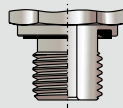
Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA 6L - G1/8 BSP	6	4	M12x1,5	G1/8 BSP	17	17	28	43	400 bar / 5800 PSI
VARMA 8L - G1/4 BSP	8	6	M14x1,5	G1/4 BSP	19	19	30	49	400 bar / 5800 PSI
VARMA 10L - G1/4 BSP	10	8	M16x1,5	G1/4 BSP	22	24	38,5	58	400 bar / 5800 PSI
VARMA 12L - G3/8 BSP	12	8	M18x1,5	G3/8 BSP	27	30	42,5	62	400 bar / 5800 PSI
VARMA 15L - G1/2 BSP	15	12	M22x1,5	G1/2 BSP	27	32	45,5	67	400 bar / 5800 PSI
VARMA 18L - G1/2 BSP	18	16	M26x1,5	G1/2 BSP	36	36	50	72	400 bar / 5800 PSI
VARMA 22L - G3/4 BSP	22	20	M30x2	G3/4 BSP	41	46	55	79	250 bar / 3625 PSI
VARMA 28L - G1 BSP	28	25	M36x2	G1 BSP	50	55	63	89	250 bar / 3625 PSI
VARMA 35L - G1.1/4 BSP	35	32	M45x2	G1.1/4 BSP	60	60	69	100	250 bar / 3625 PSI
VARMA 42L - G1.1/4 BSP	42	32	M52x2	G1.1/4 BSP	65	70	68,5	102	250 bar / 3625 PSI

**DIN 2353 / ISO 8434-1 Series S - ISO 1179-2 BSP Thread**

Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA 6S - G1/4 BSP	6	4	M14x1,5	G1/4 BSP	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA 8S - G1/4 BSP	8	4	M16x1,5	G1/4 BSP	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA 10S - G3/8 BSP	10	6	M18x1,5	G3/8 BSP	22	24	38	57,5	420 bar / 6090 PSI
VARMA 12S - G3/8 BSP	12	8	M20x1,5	G3/8 BSP	24	27	41	60,5	420 bar / 6090 PSI
VARMA 14S - G1/2 BSP	14	10	M22x1,5	G1/2 BSP	27	32	44,5	67	420 bar / 6090 PSI
VARMA 16S - G1/2 BSP	16	12	M24x1,5	G1/2 BSP	32	36	48	71	420 bar / 6090 PSI
VARMA 20S - G3/4 BSP	20	16	M30x2	G3/4 BSP	41	46	52	79	420 bar / 6090 PSI
VARMA 25S - G1 BSP	25	20	M36x2	G1 BSP	46	50	54,5	84,5	420 bar / 6090 PSI
VARMA 30S - G1.1/4 BSP	30	25	M42x2	G1.1/4 BSP	60	60	64	98	250 bar / 3625 PSI
VARMA 38S - G1.1/2 BSP	38	32	M52x2	G1.1/2 BSP	65	70	69,5	108	250 bar / 3625 PSI

**WD Type**

ISO 1179-2 - BSP Thread  
 ISO 9974-2 - Metric Thread



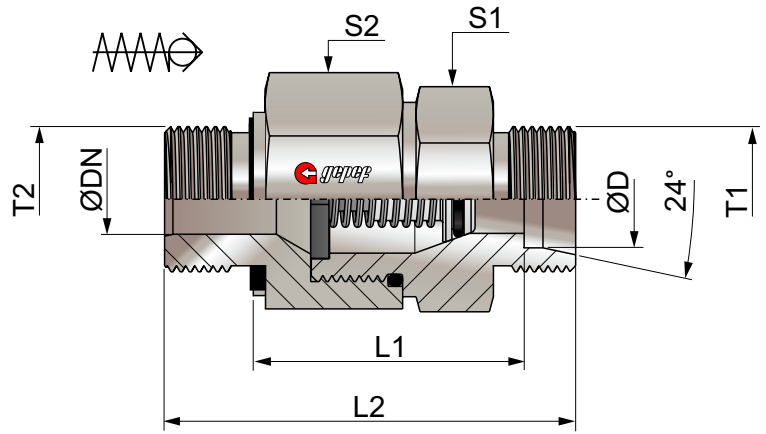
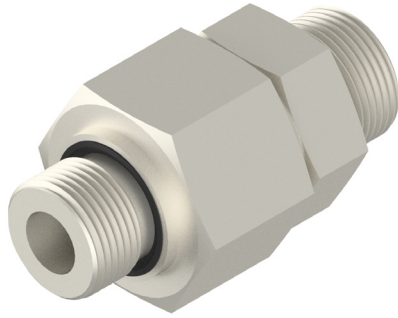
**Coding Example:**

**VARMA 6L - G1/8 BSP (Check Valve for tube Ø6, Series L, male thread G1/8 BSP, WD sealing type).**

Material: Stainless Steel AISI 316, add the letter I at the end of the code.

Seals in Viton or EPDM, add the letter V or E at the end of the code.

If another type of check valve not listed in this catalog is required, please contact our technical department.



ISO 9974-2 Metric Thread - DIN 2353 / ISO 8434-1 Light Series L

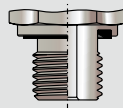
Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA M10x1 - 6L	6	4	M12x1,5	M10x1	17	17	28	43	400 bar / 5800 PSI
VARMA M12x1,5 - 8 L	8	6	M14x1,5	M12x1,5	19	19	29	48	400 bar / 5800 PSI
VARMA M14x1,5 - 10L	10	8	M16x1,5	M14x1,5	22	24	38,5	57,5	400 bar / 5800 PSI
VARMA M16x1,5 - 12L	12	8	M18x1,5	M16x1,5	27	30	42,5	61,5	400 bar / 5800 PSI
VARMA M18x1,5 - 15L	15	12	M22x1,5	M18x1,5	27	32	45,5	64,5	400 bar / 5800 PSI
VARMA M22x1,5 - 18L	18	16	M26x1,5	M22x1,5	36	36	50	70	400 bar / 5800 PSI
VARMA M26x1,5 - 22L	22	20	M30x2	M26x1,5	41	46	55	80	250 bar / 3625 PSI
VARMA M33x2 - 28L	28	25	M36x2	M33x2	50	55	63	90	250 bar / 3625 PSI
VARMA M42x2 - 35L	35	32	M45x2	M42x2	60	60	69	101	250 bar / 3625 PSI
VARMA M48x2 - 42L	42	32	M52x2	M48x2	65	70	68,5	104	250 bar / 3625 PSI

ISO 9974-2 Metric Thread - DIN 2353 / ISO 8434-1 Heavy Series S

Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA M12x1,5 - 6S	6	4	M14x1,5	M12x1,5	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA M14x1,5 - 8S	8	4	M16x1,5	M14x1,5	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA M16x1,5 - 10S	10	6	M18x1,5	M16x1,5	22	24	38	57,5	420 bar / 6090 PSI
VARMA M18x1,5 - 12S	12	8	M20x1,5	M18x1,5	27	27	41	60,5	420 bar / 6090 PSI
VARMA M20x1,5 - 14S	14	10	M22x1,5	M20x1,5	27	32	44,5	66,5	420 bar / 6090 PSI
VARMA M22x1,5 - 16S	16	12	M24x1,5	M22x1,5	32	36	48	69	420 bar / 6090 PSI
VARMA M27x2 - 20S	20	16	M30x2	M27x2	41	46	52	77	420 bar / 6090 PSI
VARMA M33x2 - 25S	25	20	M36x2	M33x2	46	50	54,5	85	420 bar / 6090 PSI
VARMA M42x2 - 30S	30	25	M42x2	M42x2	60	60	64	98	250 bar / 3625 PSI
VARMA M48x2 - 38S	38	32	M52x2	M48x2	65	70	69,5	110	250 bar / 3625 PSI

WD Type

ISO 1179-2 - BSP Thread  
ISO 9974-2 - Metric Thread



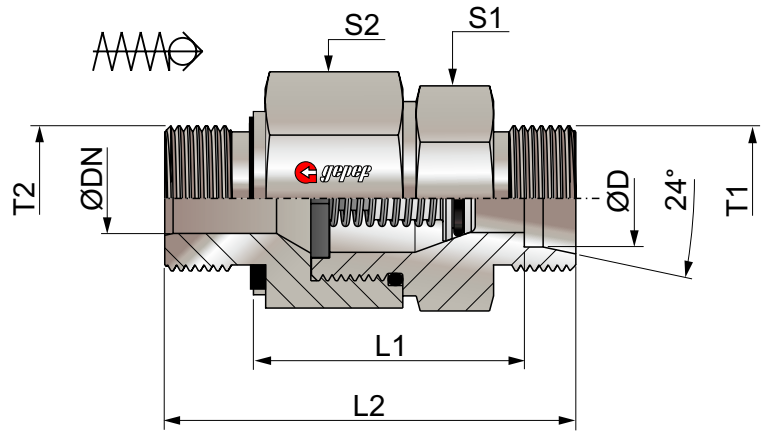
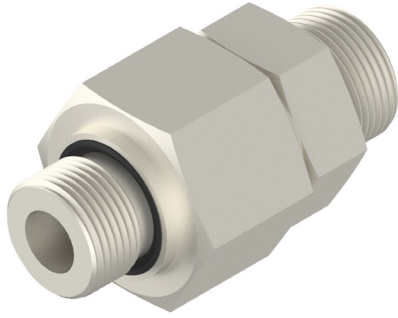
Coding Example:

**VARMA M18x1 - 6L (Check valve for 6D tube, Light Series L, male thread M18x1, WD sealing type).**

Stainless steel material AISI 316, add the letter I at the end of the code.

Viton or EPDM sealing, add the letter V or E, respectively, at the end of the code.

If another type of check valve not listed in this catalog is required, please contact our technical department.



ISO 1179-2 BSPP Thread - DIN 2353 / ISO 8434-1 Light Series L

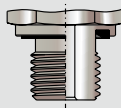
Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA G1/8 BSP - 6L	6	4	M12x1,5	G1/8 BSP	17	17	26,5	41,5	400 bar / 5800 PSI
VARMA G1/4 BSP - 8L	8	6	M14x1,5	G1/4 BSP	19	19	28,5	47,5	400 bar / 5800 PSI
VARMA G1/4 BSP - 10L	10	8	M16x1,5	G1/4 BSP	22	24	38,5	58	400 bar / 5800 PSI
VARMA G3/8 BSP - 12L	12	8	M18x1,5	G3/8 BSP	27	30	40,5	60	400 bar / 5800 PSI
VARMA G1/2 BSP - 15L	15	12	M22x1,5	G1/2 BSP	27	32	42,5	64	400 bar / 5800 PSI
VARMA G1/2 BSP - 18L	18	16	M26x1,5	G1/2 BSP	36	36	48	70	400 bar / 5800 PSI
VARMA G3/4 BSP - 22L	22	20	M30x2	G3/4 BSP	41	46	56	80	250 bar / 3625 PSI
VARMA G1 BSP - 28L	28	25	M36x2	G1 BSP	50	55	64	90	250 bar / 3625 PSI
VARMA G1.1/4 BSP - 35L	35	32	M45x2	G1.1/4 BSP	60	60	70	101	250 bar / 3625 PSI
VARMA G1.1/4 BSP - 42L	42	32	M52x2	G1.1/4 BSP	65	70	70,5	104	250 bar / 3625 PSI

ISO 1179-2 BSP Thread - DIN 2353 / ISO 8434-1 Heavy Series S

Type	D	DN	T1	T2	S1	S2	L1	L2	Working Pressure
VARMA G1/4 BSP - 6S	6	4	M14x1,5	G1/4 BSP	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA G1/4 BSP - 8S	8	4	M16x1,5	G1/4 BSP	19	19	31,5	50,5	420 bar / 6090 PSI
VARMA G3/8 BSP - 10S	10	6	M18x1,5	G3/8 BSP	22	24	38	57,5	420 bar / 6090 PSI
VARMA G3/8 BSP - 12S	12	8	M20x1,5	G3/8 BSP	24	27	41	60,5	420 bar / 6090 PSI
VARMA G1/2 BSP - 14S	14	10	M22x1,5	G1/2 BSP	27	32	43,5	66	420 bar / 6090 PSI
VARMA G1/2 BSP - 16S	16	12	M24x1,5	G1/2 BSP	32	36	46	69	420 bar / 6090 PSI
VARMA G3/4 BSP - 20S	20	16	M30x2	G3/4 BSP	41	46	50	77	420 bar / 6090 PSI
VARMA G1 BSP - 25S	25	20	M36x2	G1 BSP	46	50	54,5	85	420 bar / 6090 PSI
VARMA G1.1/4 BSP - 30S	30	25	M42x2	G1.1/4 BSP	60	60	64	98	250 bar / 3625 PSI
VARMA G1.1/2 BSP - 38S	38	32	M52x2	G1.1/2 BSP	65	70	71,5	110	250 bar / 3625 PSI

WD Type

ISO 1179-2 - BSP Thread  
ISO 9974-2 - Metric Thread



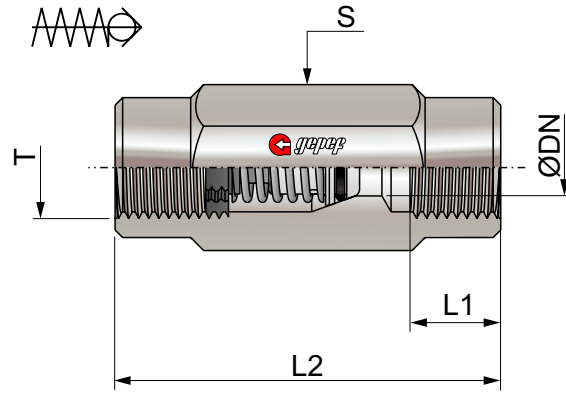
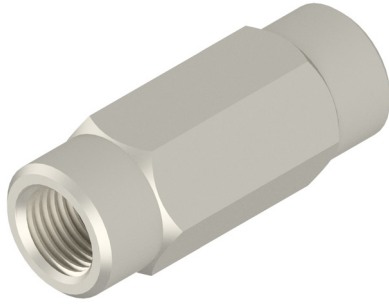
Coding Example:

**VARMA G1/4 BSP - 6S (Check valve for 6D tube, Heavy Series S, BSPP male thread G1/4, WD sealing type).**

Stainless steel material AISI 316, add the letter I at the end of the code.

Viton or EPDM sealing, add the letter V or E, respectively, at the end of the code.

If another check valve type not listed in this catalog is required, please contact our technical department.



Type	D	T	S	L1	L2	Working Pressure
VARFA G1/8 BSP	4	G1/8 BSP	19	9,5	42,5	400 bar / 5800 PSI
VARFA G1/4 BSP	8	G1/4 BSP	19	13,5	51	400 bar / 5800 PSI
VARFA G3/8 BSP	8	G3/8 BSP	24	13,5	60	400 bar / 5800 PSI
VARFA G1/2 BSP	12	G1/2 BSP	32	15,5	72	315 bar / 4560 PSI
VARFA G3/4 BSP	16	G3/4 BSP	41	17,5	84	250 bar / 3625 PSI
VARFA G1 BSP	20	G1 BSP	46	19,5	95	250 bar / 3625 PSI
VARFA G1.1/4 BSP	25	G1.1/4 BSP	60	23,5	110	250 bar / 3625 PSI
VARFA G1.1/2 BSP	32	G1.1/2 BSP	65	25,5	114	250 bar / 3625 PSI
VARFA G2 BSP	40	G2 BSP	90	25,5	165	250 bar / 3625 PSI

Type	D	T	S1	L1	L2	Working Pressure
VARFA 1/8 NPT	4	1/8 NPT	19	9,5	42,5	400 bar / 5800 PSI
VARFA 1/4 NPT	8	1/4 NPT	19	13,5	51	400 bar / 5800 PSI
VARFA 3/8 NPT	8	3/8 NPT	24	13,5	60	400 bar / 5800 PSI
VARFA 1/2 NPT	12	1/2 NPT	32	15,5	72	315 bar / 4560 PSI
VARFA 3/4 NPT	16	3/4 NPT	41	17,5	84	250 bar / 3625 PSI
VARFA 1 NPT	20	1 NPT	46	19,5	95	250 bar / 3625 PSI
VARFA 1.1/4 NPT	25	1.1/4 NPT	60	23,5	110	250 bar / 3625 PSI
VARFA 1.1/2 NPT	32	1.1/2 NPT	65	25,5	114	250 bar / 3625 PSI
VARFA 2 NPT	40	2 NPT	90	25,5	165	250 bar / 3625 PSI

### Coding Example:

**VARFA G1/8 BSP (Check valve with female thread G1/8 BSP).**

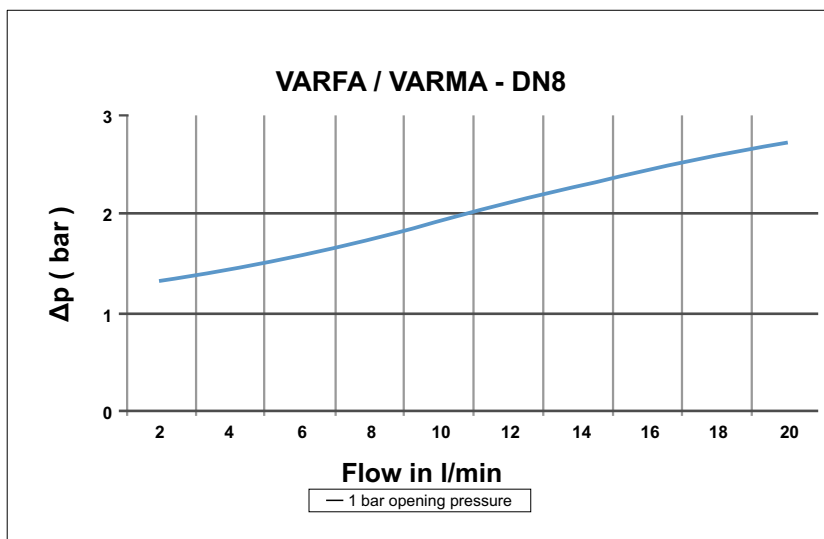
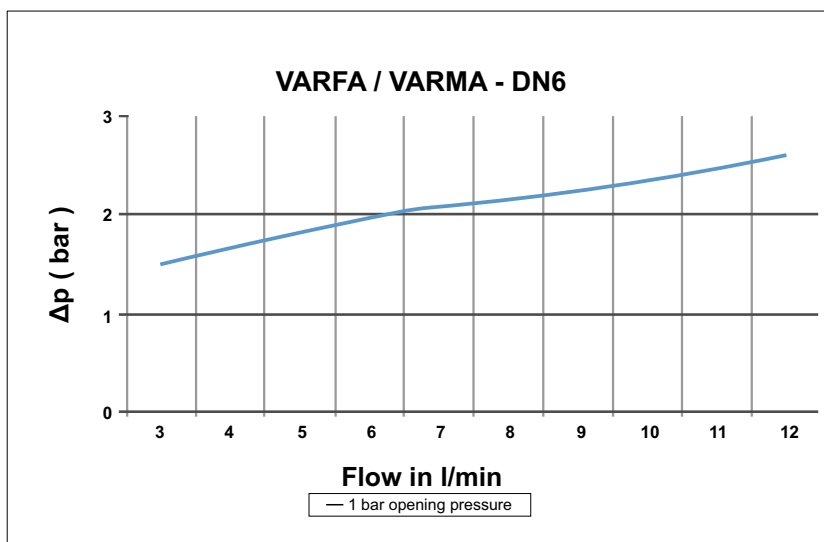
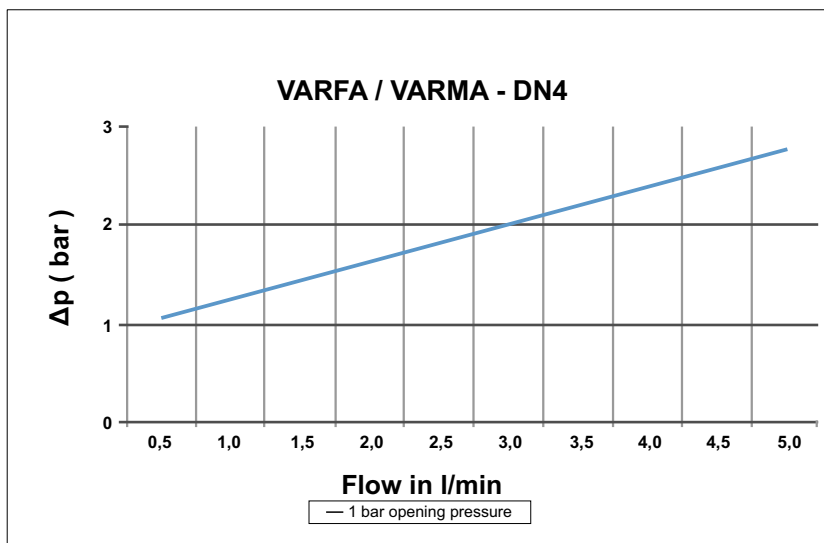
Stainless steel material AISI 316, add the letter I at the end of the code.

Viton or EPDM sealing, add the letter V or E, respectively, at the end of the code.

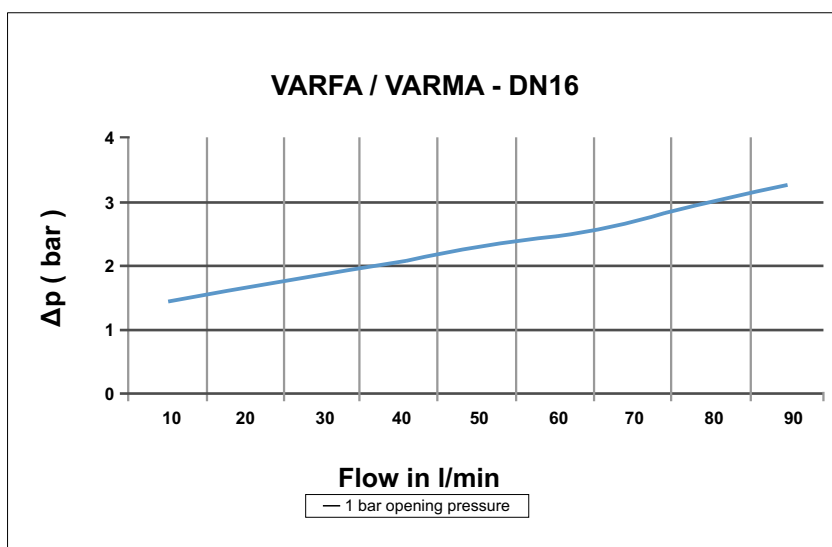
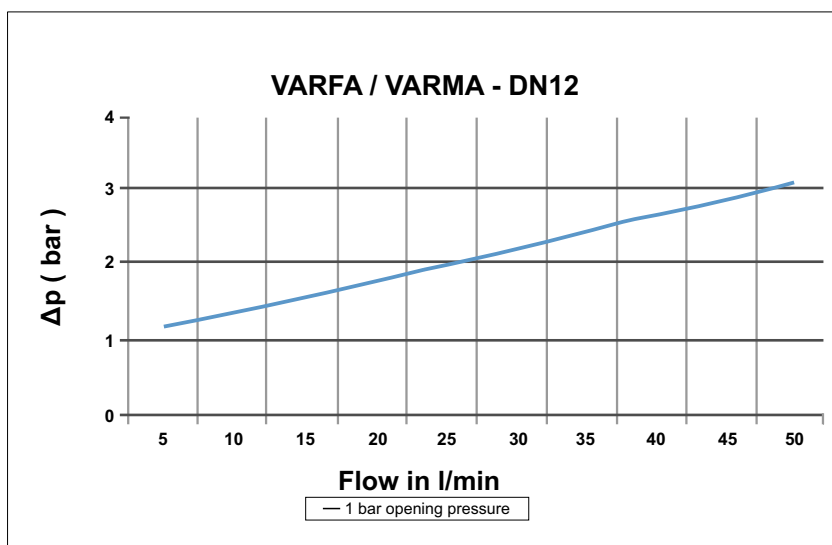
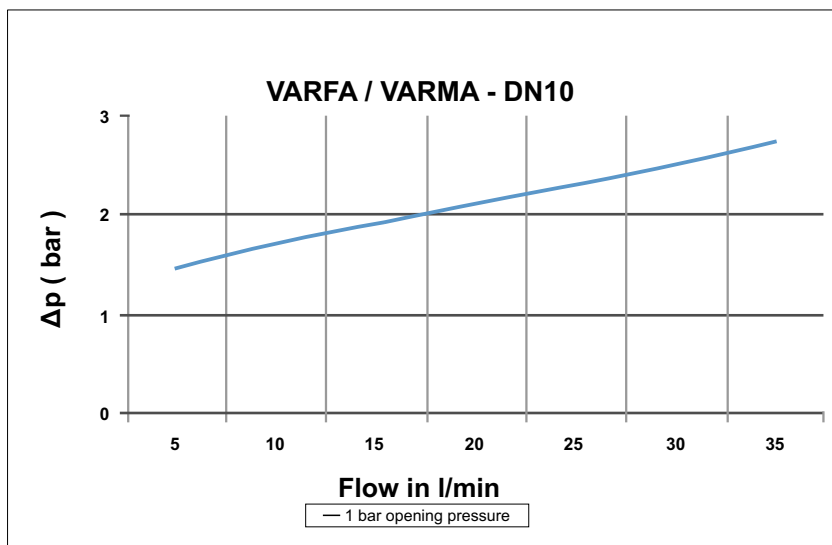
If another type of check valve not listed in this catalog is required, please contact our technical department.

# CHECK VALVE ( FLOW CHARTS )

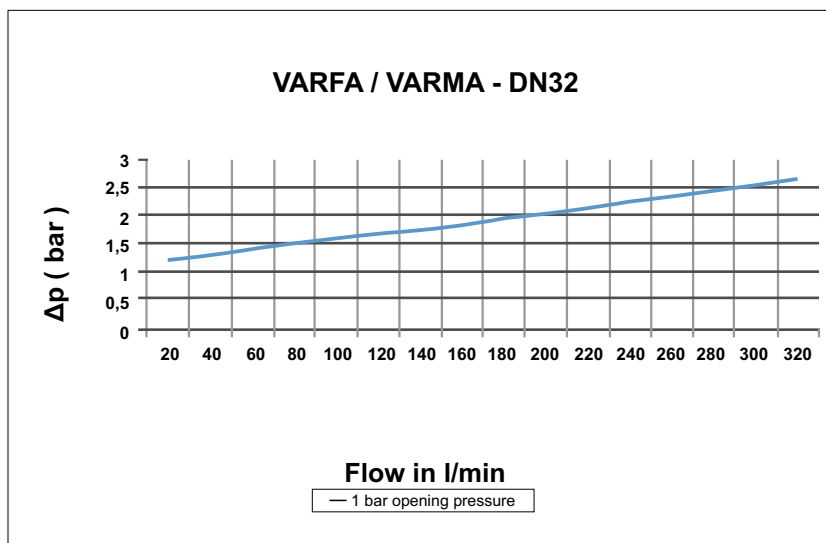
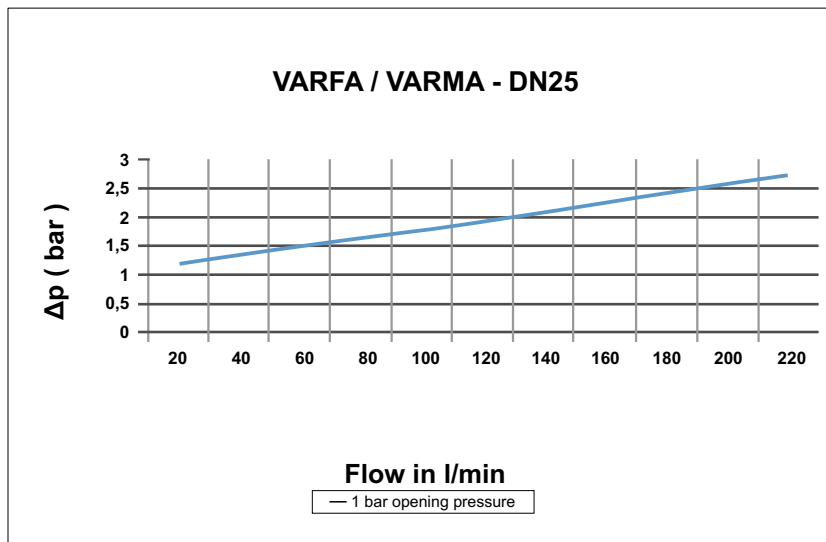
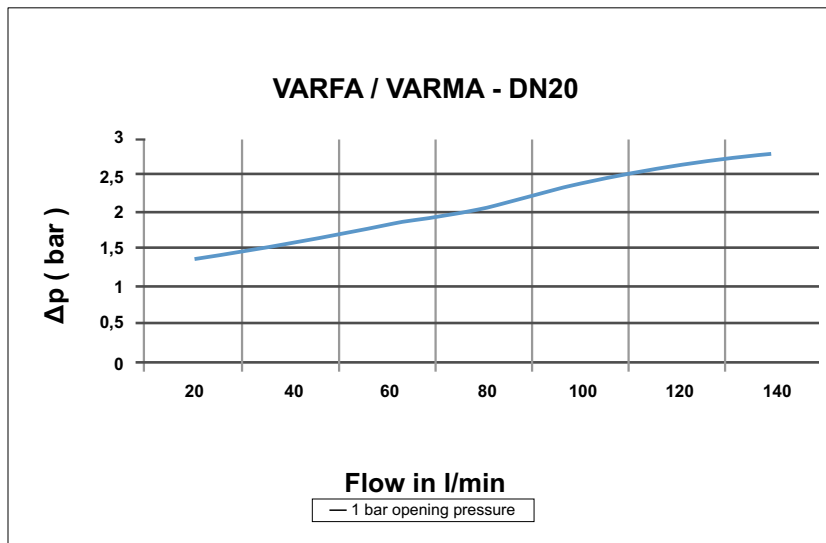
The flow values shown are based on hydraulic oil with flow rate in l/min, relative to the maximum allowable flow velocity of 8 m/s.



# CHECK VALVE ( FLOW CHARTS )

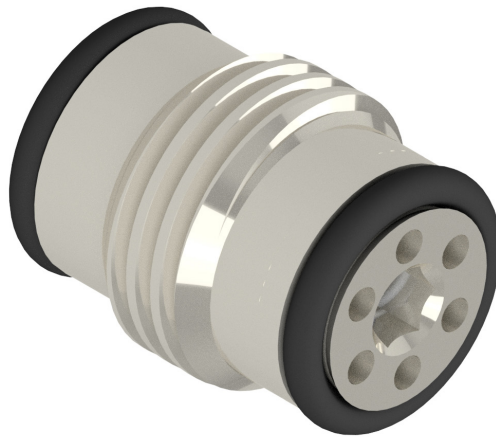


# CHECK VALVE ( FLOW CHARTS )



# CHECK VALVE (SCREW-IN CARTRIDGE)

All Check Valves are manufactured by GEPF, resulting from the development of products with a high level of technical efficiency, providing an increase in service life and a wide range of mounting options (manifold cavities with direct mounting of the check valve) and connection points (tube-to-tube; male threads, female threads, as well as combinations of different types of connections in the same valve). Also available in special versions for low pressure drops and low flow rates.



## Cracking Pressure

1 bar

## Surface Treatment

White Trivalent Zinc (Cr VI free)

## Maximum Pressure

350 bar

## Nominal Flow

até 80 l/min

## Seals and Operating Temperature Ranges

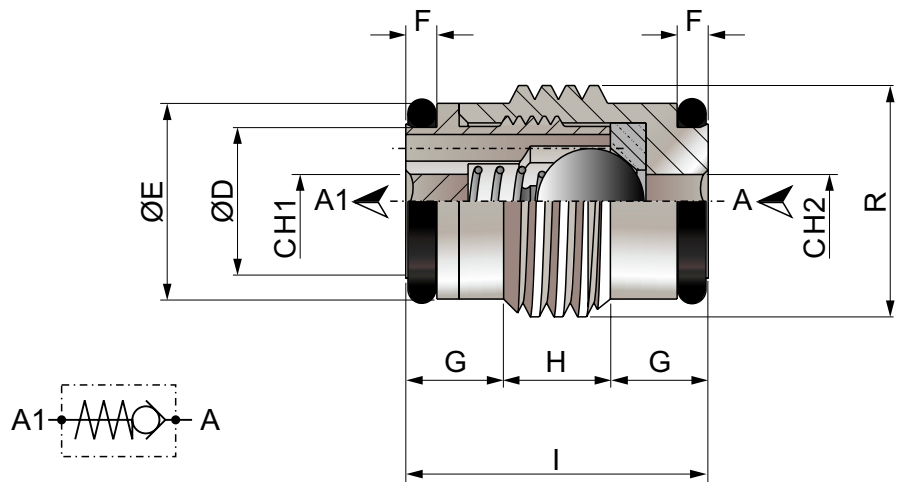
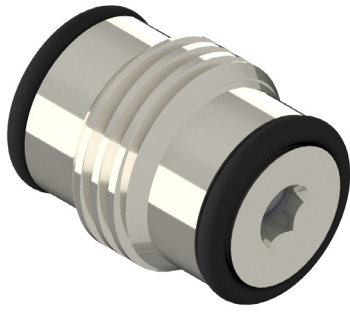
NBR / Buna-N (-25°C to 100°C) (-13°F to +212°F) - (Standard)

FKM / Viton (-15°C to 200°C) (5°F to +392°F) - V

EPDM (-40°C to 150°C) (-40°F to +302°F) - E

## Materials

Tempered Carbon Steel



Type	R	D	E	F	G	H	I	CH1	CH2	Oring	Rated Flow	Working Pressure
VRCI 1/4	1/4 BSP	9,2	11,4	1,1	5,5	6,5	17	3	3	9x1	15 l/min	350 bar / 5076 PSI
VRCI 3/8	3/8 BSP	10,9	14,9	2,1	5,6	7,5	18,3	3	4	10,8x1,78	30 l/min	350 bar / 5076 PSI
VRCI 1/2	1/2 BSP	14,2	18,5	2,1	7,2	8,6	22,5	5	6	14x1,78	45 l/min	350 bar / 5076 PSI
VRCI 3/4	3/4 BSP	18,1	24,1	3	7	14,5	28	6	8	17,86x2,62	80 l/min	350 bar / 5076 PSI

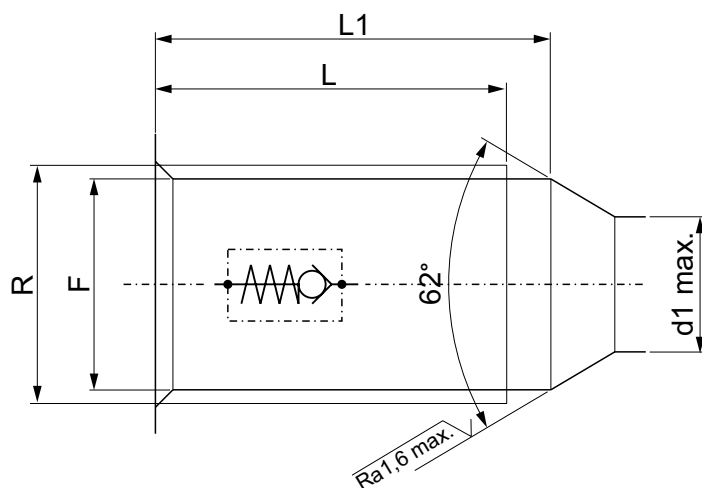
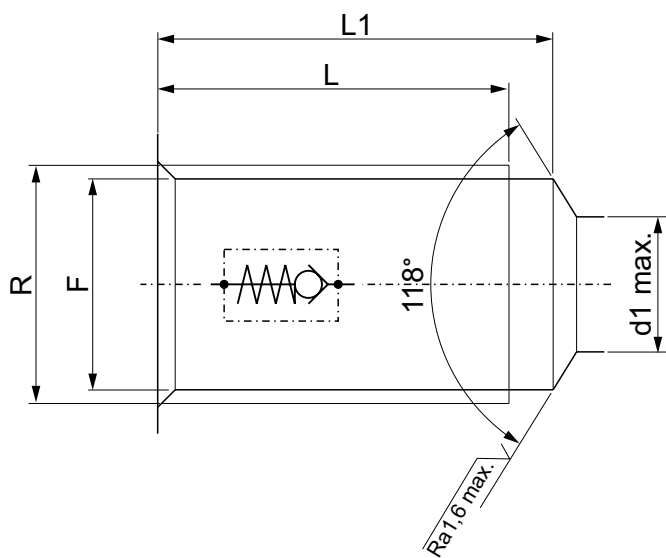
### Coding Example:

**VRCI 1/4 (Check valve with threaded connection size 1/4 BSP).**

Material: For AISI 316, add the letter L at the end of the code.

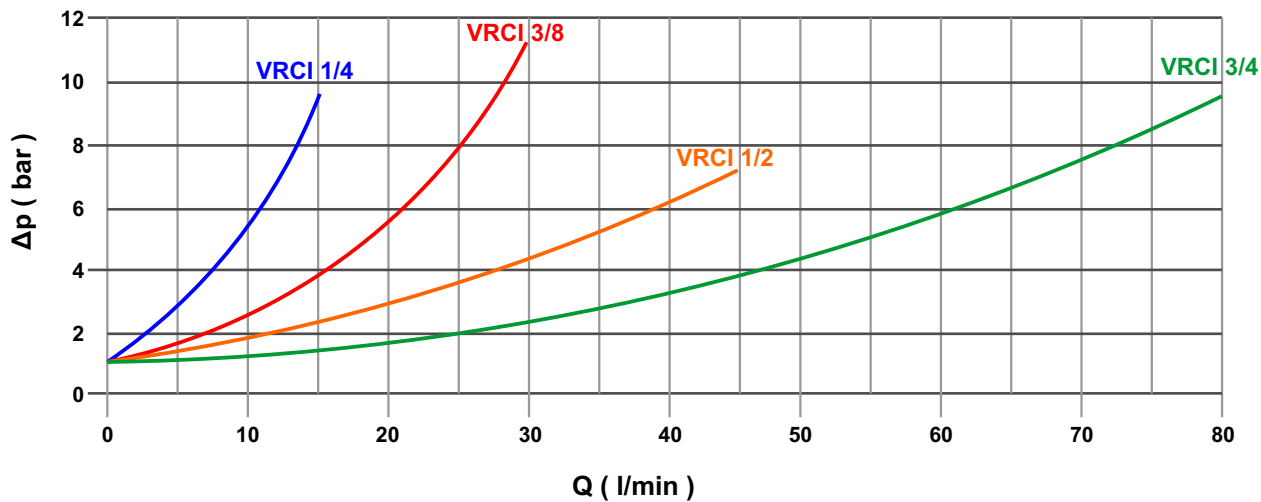
Seals: In Viton EPDM, add the letter V or E at the end of the code.

If a different type of check valve than those shown is required, please contact our technical department.




Type	R	F	d1	L	L1	Installation Torque
VRCI 1/4	1/4 BSP	11,8	8	29	26	6 Nm
VRCI 3/8	3/8 BSP	15,2	9	30	27	10 Nm
VRCI 1/2	1/2 BSP	19	12	36	32	20 Nm
VRCI 3/4	3/4 BSP	24,5	16	43	39,5	30 Nm

Mineral Oil Viscosity 24 mm<sup>2</sup>/sec. (3.5°E) Temperature 50°C






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