



FT 290



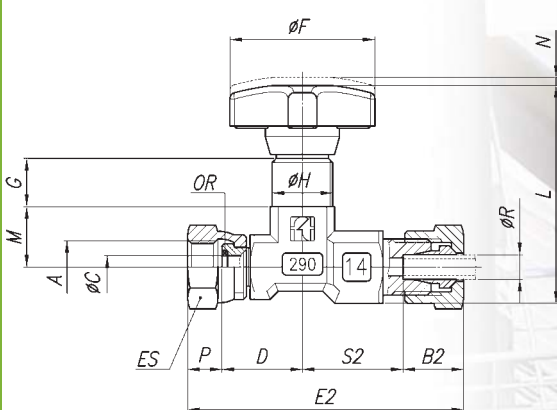
**MATERIALS**

BODY	9 S MN Pb 23 - UNI 5105 - PRESS FORG.
NEEDLE	35 S MN Pb 23 - UNI 5105 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

*All components are surface treated and protected*

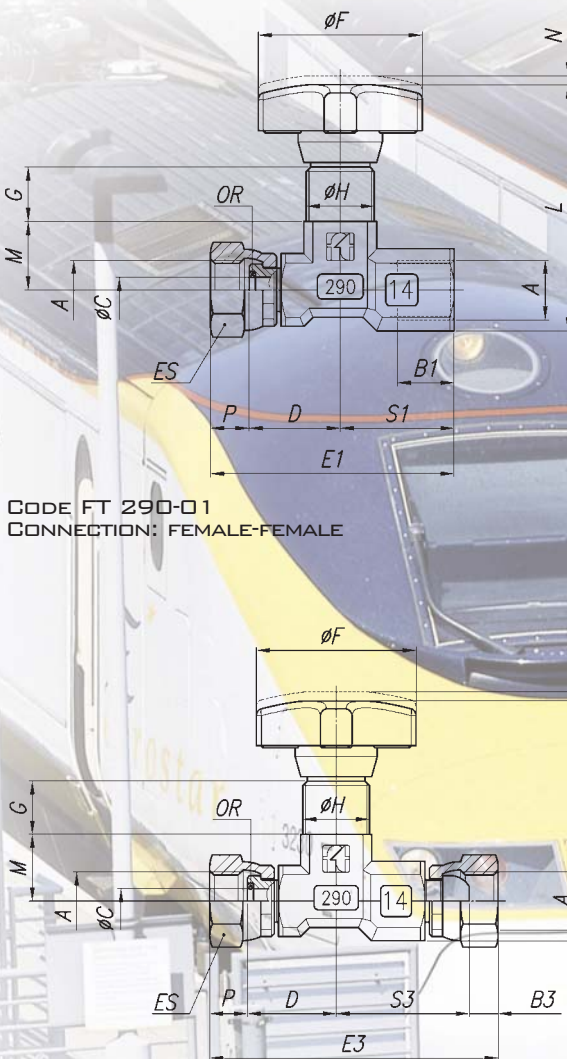
SPECIAL VERSIONS  
ONLY FOR TYPE 14  
SUPPLIED ON REQUEST  
FOR QUANTITIES OF  
AT LEAST 200 PIECES

CODE FT 290-01  
CONNECTION: FEMALE-FEMALE



CODE FT 290-04  
CONNECTION RIGID PIPES - DIN 2353

CODE FT 290-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611



**DIMENSIONS**

A	B1	B2	B3	ØC	D	E1	E2	E3	ØF	G	H	L	M	N	P	R	S1	S2	S3	OR	ES	WEIGHT KG
1/4" G	11	15	6,5	5,6	20	54,5	69,5	66	34	12	M15x1	53	15	2	8,5	6	25	25	30	2108	18	010,125
																						040,150
																						050,145



## GAUGE ISOLATOR NEEDLE VALVES IN LINE

The FT290 isolator needle valves (in line) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

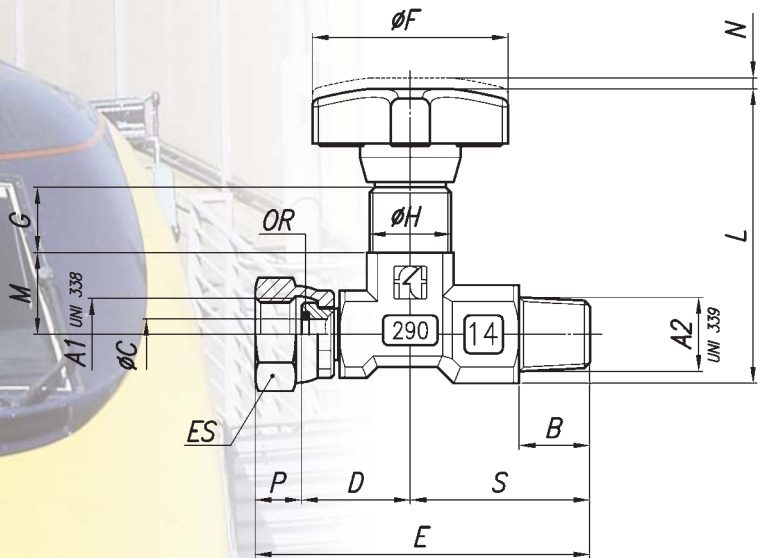
For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page 182 of this catalogue (to be requested separately). Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2290



**FT 290**



## DIMENSIONS

TYPE	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	S	OR	ES	WEIGHT KG
1 4	1/4"G	1/4"Gc	13	5,6	20	61,5	34	12	M15x1	53	15	2	8,5	33	2018	18	0,125
1 2	1/2"G	1/2"Gc	16	6,5	32	83	40	12,5	M20x1	82,5	19	6	11	40	2021	27	0,413

## EXAMPLE FOR ORDERING

CODE	TYPE F/F	CONNECTION	PANEL LOCK NUT	VITON SEAL
FT 290	14	01	G	V
FT 290	12	-	G	-



FT 291

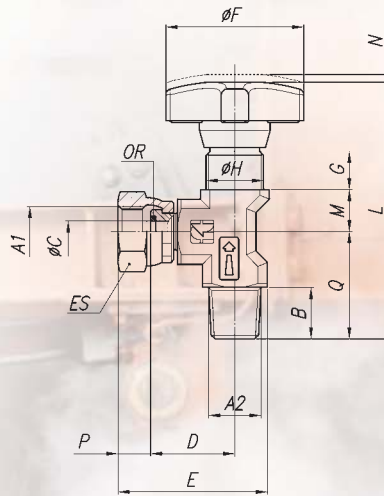


SPECIAL VERSIONS  
SUPPLIED ON REQUEST  
FOR QUANTITIES OF  
AT LEAST 200 PIECES

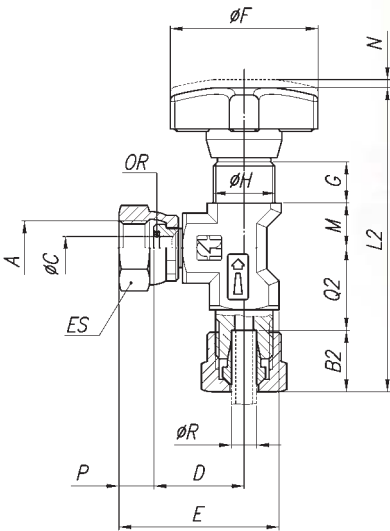
**MATERIALS**

BODY	9 S MN Pb 23 - UNI 5105 - PRESS FORG.
NEEDLE	35 S MN Pb 23 - UNI 5105 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

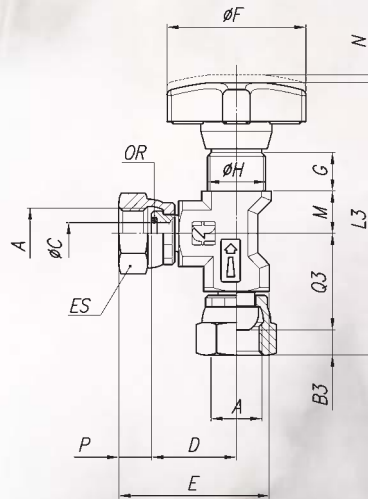
All components are surface treated and protected



CODE FT 291-01  
CONNECTION FEMALE/FEMALE



CODE FT 291-04  
CONNECTION RIGID PIPES - DIN 2353



CODE FT 291-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611

**DIMENSIONS**

A	B1	B2	B3	ØC	D	E	ØF	G	H	L1	L2	L3	M	N	P	Q1	Q2	Q3	R	ES	OR	PESO KG
1/4" G	11	15	6,5	5,6	22	40	34	10	M15x1	65	73	69,5	11	2	9,5	27	20	25	6	18	2018	010,125
																						040,135
																						050,130





## GAUGE ISOLATOR NEEDLE VALVES 90° ANGLE

The isolator needle valves FT 291 (90° angle) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life.

A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page ??? of this catalogue (to be requested separately).

Equipped with connectors Ft 299-24 (see page 103), they also allow the connection with attack of 1/2" Gas (as alternative it is advisable the use of the series FT 290-12).

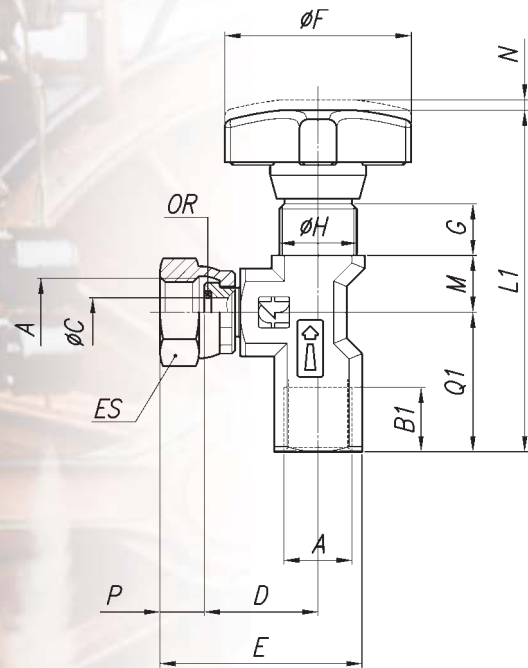
Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2291



FT 291



### DIMENSIONS

TYPE	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	Q	ES	OR	WEIGHT KG
1 4	1/4" G	1/4" G <sub>c</sub>	13,5	5,6	22	40	34	10	M15x1	66	11	2	8,5	28	18	2018	0,105

### EXAMPLE FOR ORDERING

CODE	CONNECTION FEMALE FEMALE	PANEL RING NUT	VITON SEAL
FT 291	01	G	V



## GAUGE ISOLATOR NEEDLE VALVES IN LINE

The FT2290 isolator needle valves (in line) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge. Suitable for pressure up to 400 bar and temperature from -20° to +130° they can be panel mounted by use of lock nut (G), supplied on request.

### On request

- Complete with lock nut (G). Indicate whether KM or hexagonal
- NPT threads

## dimensions

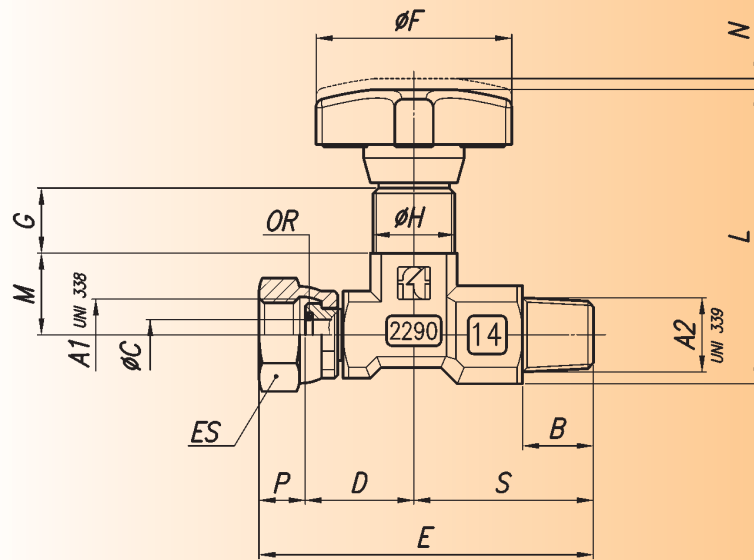
Type	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	S	OR	ES	Weight kg
14	1/4" G	1/4" Gc	13	5,6	20	61,5	34	12	M15x1	53	15	2	8,5	33	2018	18	0,125
12	1/2" G	1/2" Gc	16	6,5	32	83	40	12,5	M20x1	82,5	19	6	11	40	2021	27	0,413

## materials

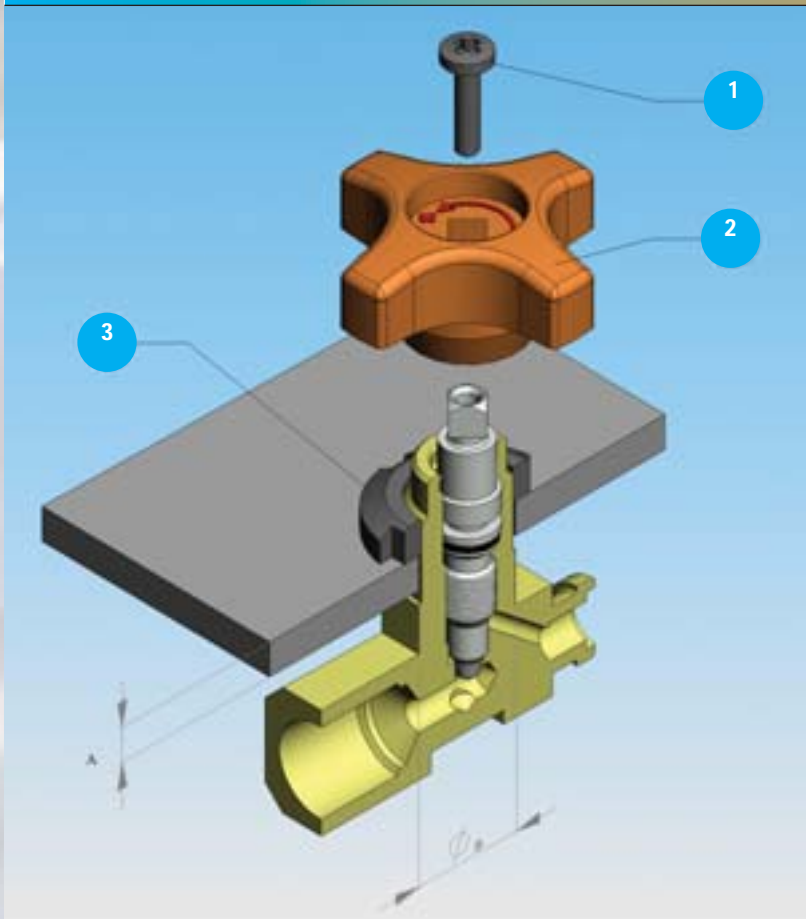
Body	AISI 316 stainless steel
Needle	AISI 316 stainless steel
OR	Viton
Antiextrusion ring	PTFE
Handwheel	Nylon 66

## example for ordering

Code	Type	Lock nut	Ring nut type
FT 2290	14	G	KM
FT 2290	12	G	KM



## instructions to fit panel mounting nut



## panel mounting

- 1° Remove screw-item (1)
- 2° Pull off handwheel-item (2)
- 3° Insert ring KM type (3) or hexagonal

Panel thickness A max	Panel hole $\varnothing B$
5	16







## GAUGE ISOLATOR NEEDLE VALVES 90° ANGLE

The isolator needle valves FT 2291 (90° angle) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge. Equipped with connectors FT 2299-24, they also allow the connection with attack of 1/2" Gas. Suitable for pressure up to 400 bar and temperature from -20° to +130° they can be panel mounted by use of log nut (G), supplied on request.

### A richiesta

- Complete with lock nut (G). Indicate whether KM or hexagonal
- NPT threads

## dimensions

Type	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	Q	ES	OR	Weight kg
14	1/4"G	1/4"Gc	13,5	5,6	22	40	34	10	M15x1	66	11	2	8,5	28	18	2018	0,105

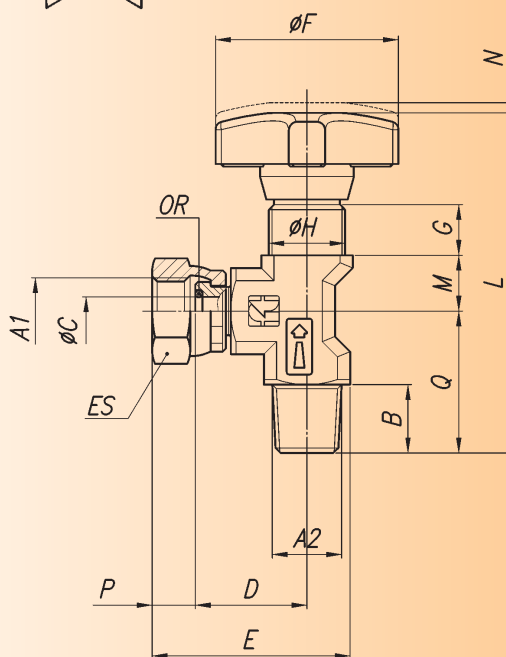
## materials

Body	AISI 316 stainless steel
Needle	AISI 316 stainless steel
OR	Viton
Antiextrusion ring	PTFE
Handwheel	Nylon 66

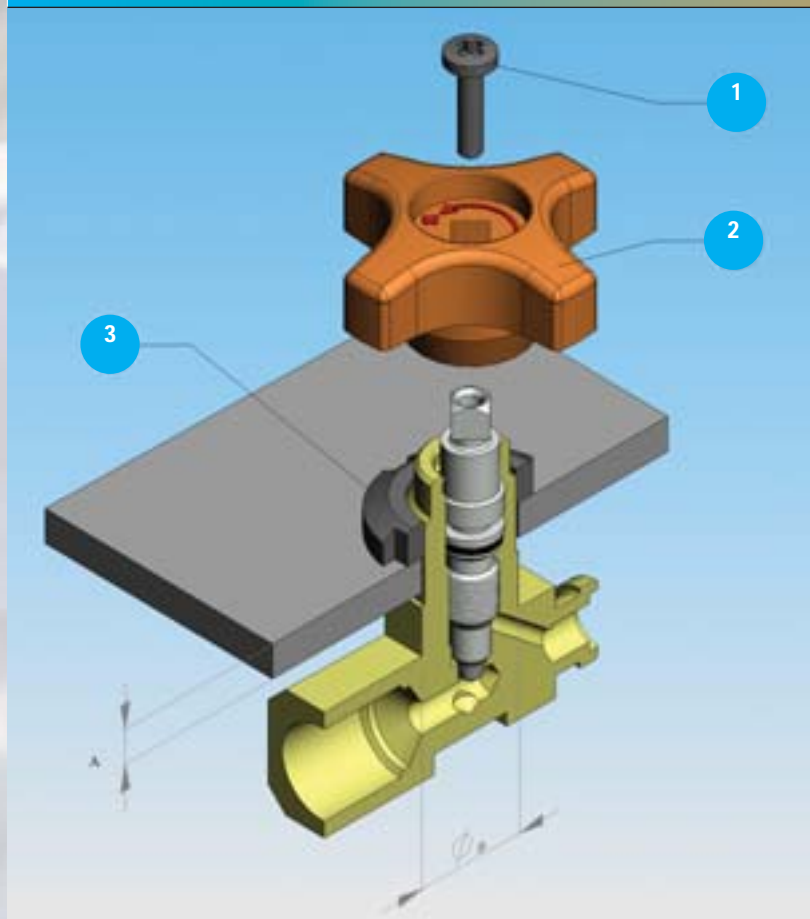
All components are surface treated and protected

## example for ordering

Code	Lock nut	Ring nut type
FT 2291	G	KM



## instructions to fit panel mounting nut



### panel mounting

- 1° Remove screw-item (1)
- 2° Pull off handwheel-item (2)
- 3° Insert ring KM type (3) or hexagonal

Panel thickness A max

Panel hole ØB

5

16



79





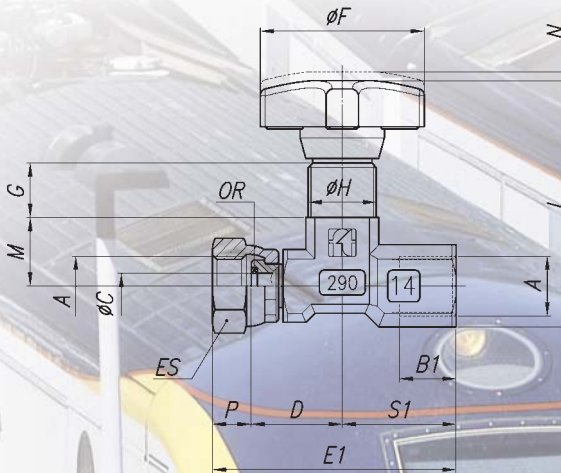


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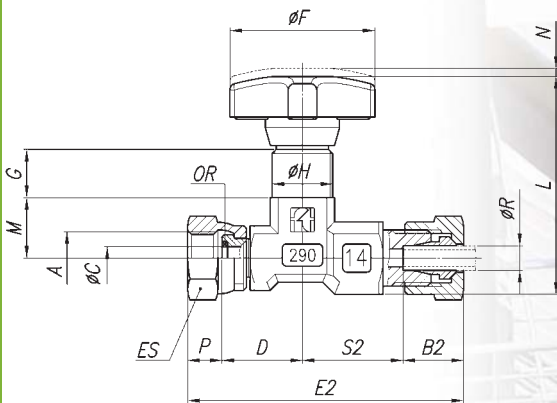
**MATERIALS**

BODY	9 S MN Pb 23 - UNI 5105 - PRESS FORG.
NEEDLE	35 S MN Pb 23 - UNI 5105 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

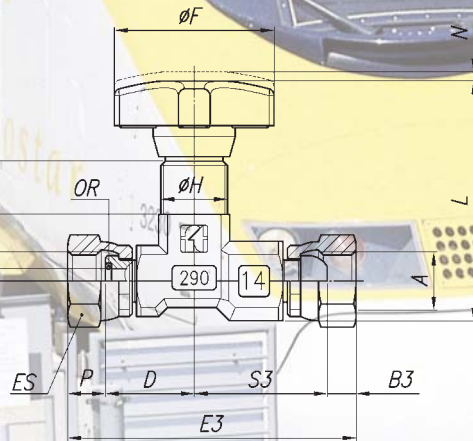
All components are surface treated and protected



CODE FT 290-01  
CONNECTION: FEMALE-FEMALE



CODE FT 290-04  
CONNECTION RIGID PIPES - DIN 2353



CODE FT 290-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611

**DIMENSIONS**

A	B1	B2	B3	øC	D	E1	E2	E3	øF	G	H	L	M	N	P	R	S1	S2	S3	OR	ES	WEIGHT KG
1/4" G	11	15	6,5	5,6	20	54,5	69,5	66	34	12	M15x1	53	15	2	8,5	6	25	25	30	2108	18	ø10,125
																						ø40,150
																						ø50,145



## GAUGE ISOLATOR NEEDLE VALVES IN LINE

The FT290 isolator needle valves (in line) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

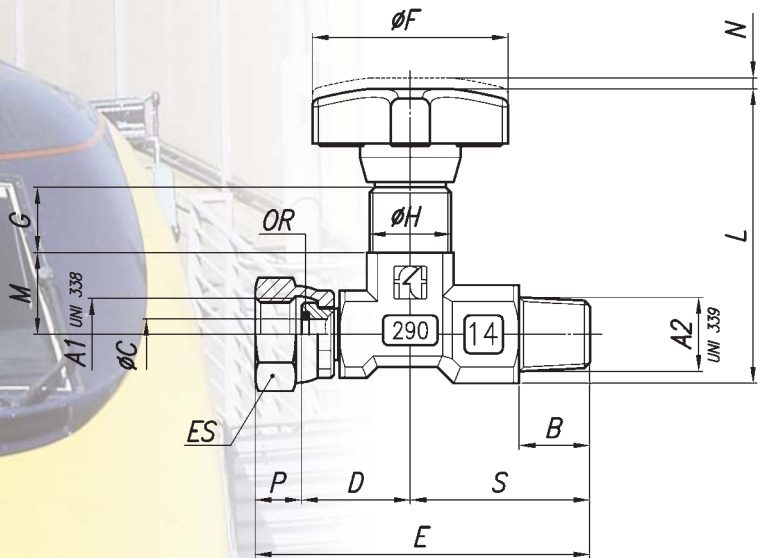
For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page 182 of this catalogue (to be requested separately). Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2290



**FT 290**



## DIMENSIONS

TYPE	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	S	OR	ES	WEIGHT KG
1 4	1/4"G	1/4"Gc	13	5,6	20	61,5	34	12	M15x1	53	15	2	8,5	33	2018	18	0,125
1 2	1/2"G	1/2"Gc	16	6,5	32	83	40	12,5	M20x1	82,5	19	6	11	40	2021	27	0,413

## EXAMPLE FOR ORDERING

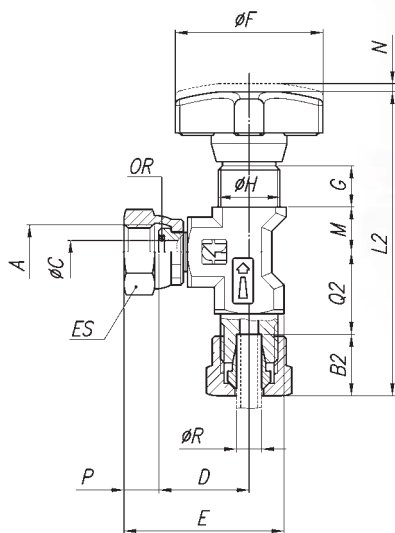
CODE	TYPE F/F	CONNECTION	PANEL LOCK NUT	VITON SEAL
FT 290	14	01	G	V
FT 290	12	-	G	-



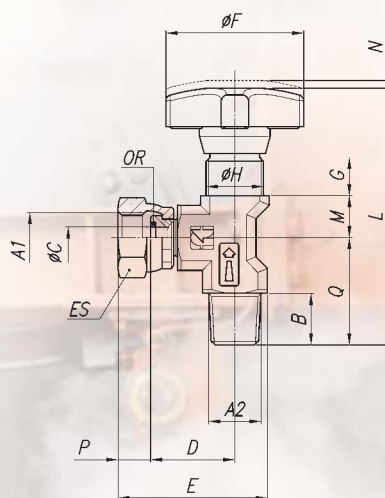
FT 291



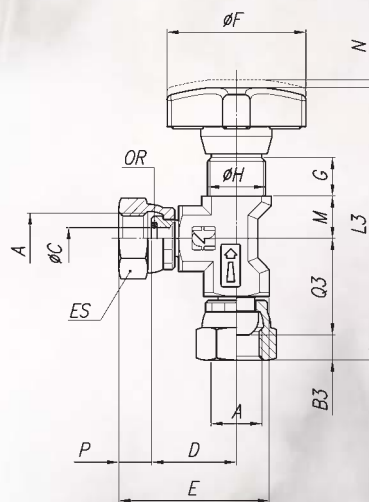
SPECIAL VERSIONS  
SUPPLIED ON REQUEST  
FOR QUANTITIES OF  
AT LEAST 200 PIECES



CODE FT 291-04  
CONNECTION RIGID PIPES - DIN 2353



CODE FT 291-01  
CONNECTION FEMALE/FEMALE



CODE FT 291-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611

## DIMENSIONS

A	B1	B2	B3	ØC	D	E	ØF	G	H	L1	L2	L3	M	N	P	Q1	Q2	Q3	R	ES	OR	PESO KG
1/4" G	11	15	6,5	5,6	22	40	34	10	M15x1	65	73	69,5	11	2	9,5	27	20	25	6	18	2018	010,125
																						040,135
																						050,130





## GAUGE ISOLATOR NEEDLE VALVES 90° ANGLE

The isolator needle valves FT 291 (90° angle) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life.

A rotating swivel nut allows for accurate pressure gauge orientation.

The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page ??? of this catalogue (to be requested separately).

Equipped with connectors Ft 299-24 (see page 103), they also allow the connection with attack of 1/2" Gas (as alternative it is advisable the use of the series FT 290-12).

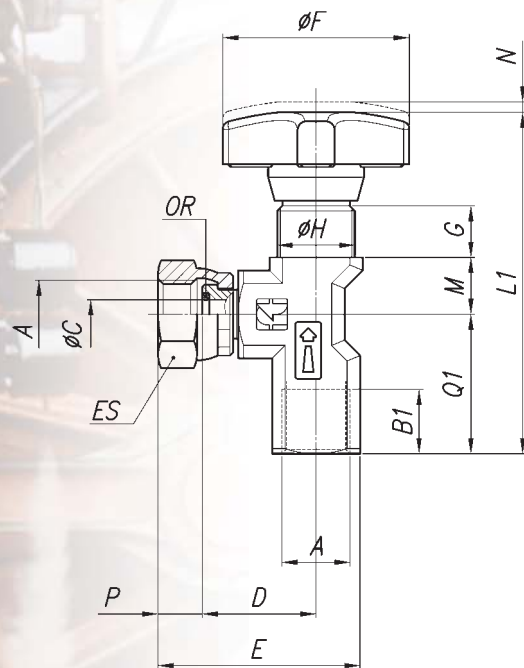
Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2291



FT 291

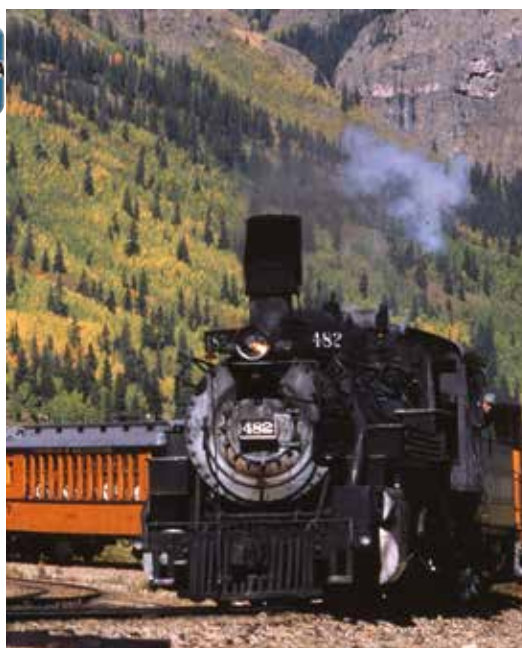


## DIMENSIONS

TYPE	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	Q	ES	OR	WEIGHT KG
1 4	1/4" G	1/4" G <sub>c</sub>	13,5	5,6	22	40	34	10	M15x1	66	11	2	8,5	28	18	2018	0,105

## EXAMPLE FOR ORDERING

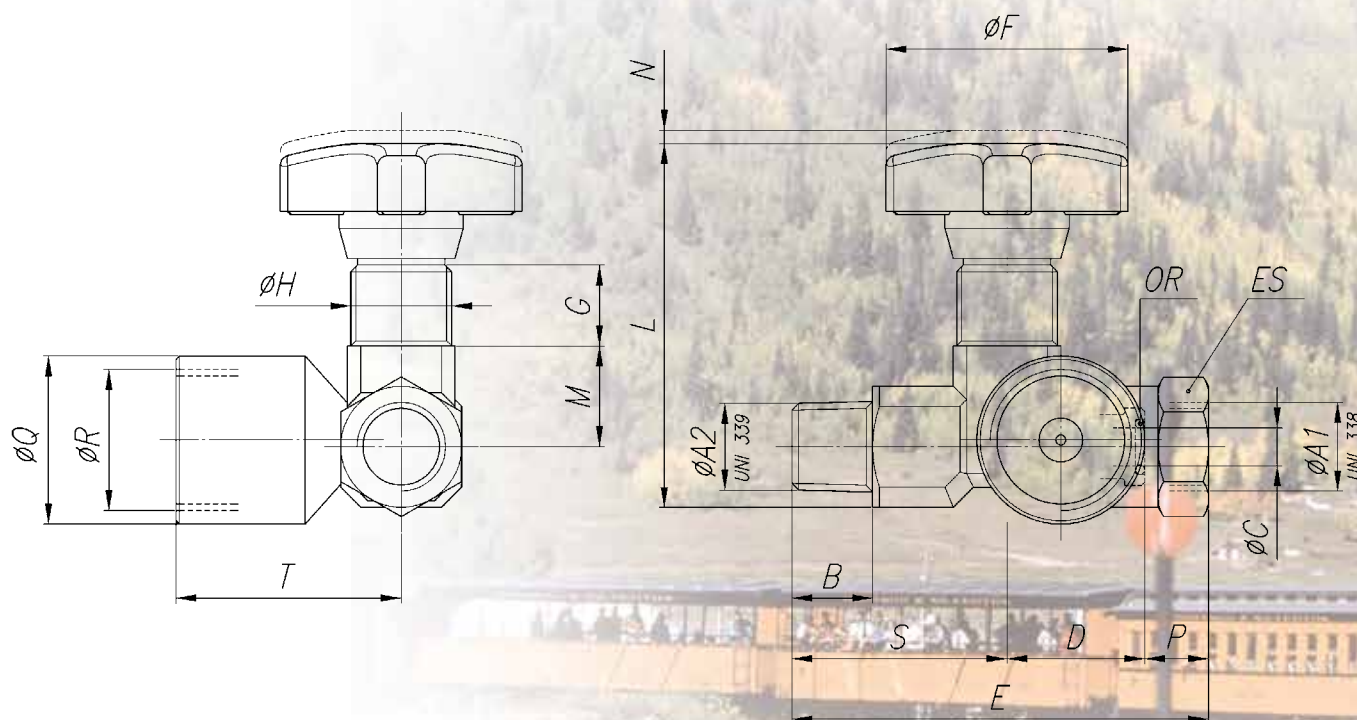
CODE	CONNECTION FEMALE FEMALE	PANEL RING NUT	VITON SEAL
FT 291	01	G	V



## MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087 - PRESS
NEEDLE	35 S MN Pb 23 - UNI EN 10087 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

All components are surface treated and protected



## DIMENSIONS

TYPE	ØA1	ØA2	B	ØC	D	E	ØF	G	ØH	L	M	N	P	ØQ	ØR	S	T	OR	ES	WEIGHT KG
14	1/4"G	1/4"Gc	12	5,6	20,5	62	34	12	M15x1	53	15	2	9,5	25	1/2"G	32	33,5	2018	18	0,194



**GAUGE ISOLATOR NEEDLE VALVES IN LINE WITH LATERAL INTERFACE OF 1/2**



They are generally used for hydraulic-pneumatic elevators subjected to initial and periodical tests by the institution in charge. They are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge. For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page 182 of this catalogue (to be requested separately). Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

**On request**

- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal



FT 01-290



**EXAMPLE FOR ORDERING**

CODE	TYPE M/F	PANEL LOCK NUT	VITON SEAL
01-290	14	G	V





FT 290

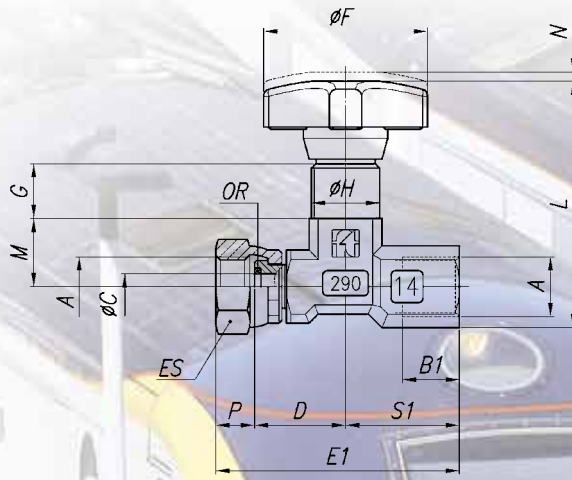


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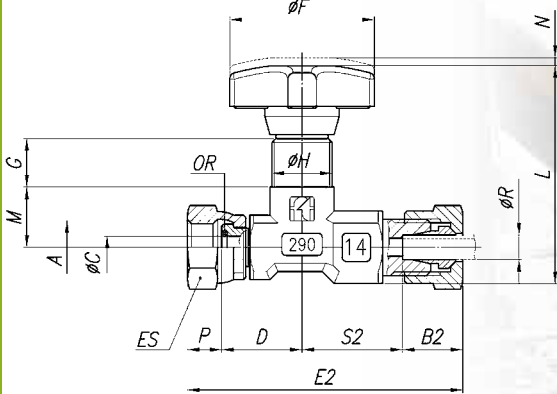
**MATERIALS**

BODY	11 S MN Pb 30 - UNI EN 10087 - PRESS FORG.
NEEDLE	35 S MN Pb 23 - UNI EN 10087 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

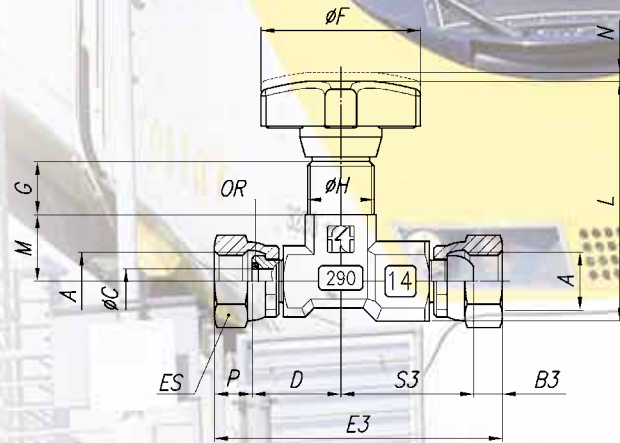
All components are surface treated and protected



CODE FT 290-01  
CONNECTION: FEMALE-FEMALE



CODE FT 290-04  
CONNECTION RIGID PIPES - DIN 2353



CODE FT 290-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611

**DIMENSIONS**

A	B1	B2	B3	ØC	D	E1	E2	E3	ØF	G	H	L	M	N	P	R	S1	S2	S3	OR	ES	WEIGHT KG
1/4" G	11	15	6,5	5,6	20	54,5	69,5	66	34	12	M15x1	53	15	2	8,5	6	25	25	30	2108	18	ø10,125
																						ø40,150
																						ø50,145



## GAUGE ISOLATOR NEEDLE VALVES IN LINE

The FT290 isolator needle valves (in line) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life.

A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

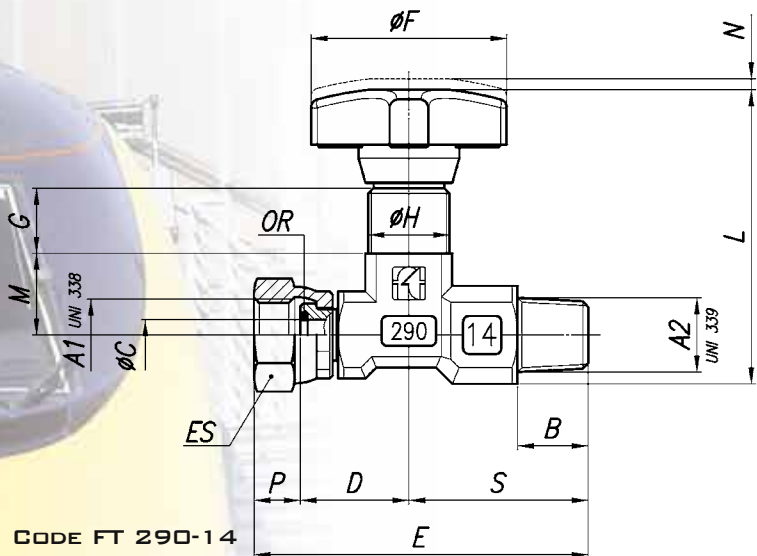
For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page 219 of this catalogue (to be requested separately). Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2290



FT 290



CODE FT 290-14

## DIMENSIONS

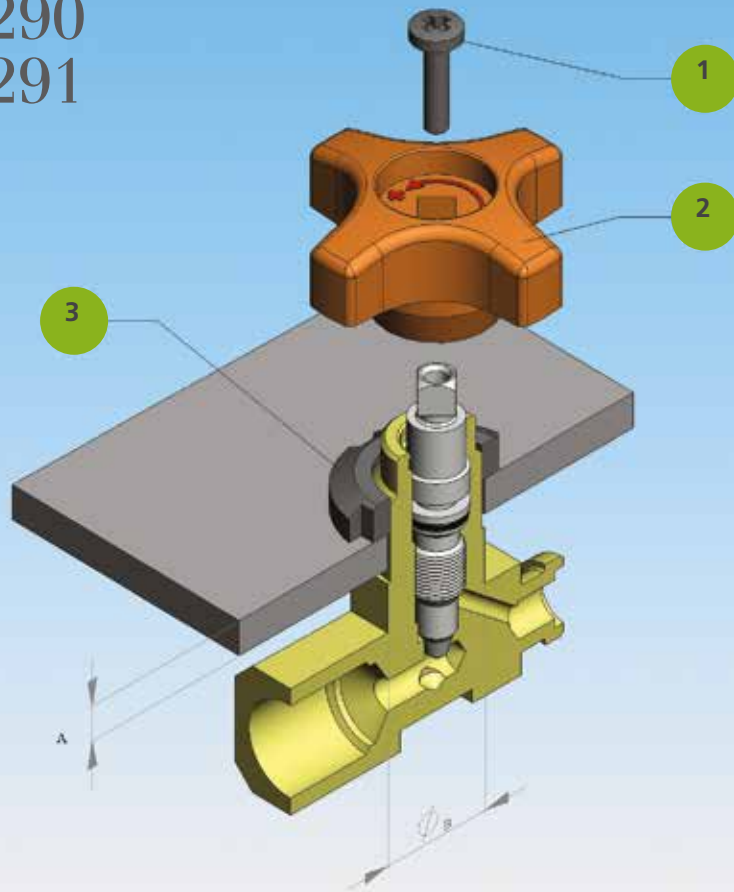
TYPE	A1 UNI 338	A2 UNI 339	B	$\phi C$	D	E	$\phi F$	G	H	L	M	N	P	S	OR	ES	WEIGHT KG
14	1/4"G	1/4"Gc	13	5,6	20	61,5	34	12	M15x1	53	15	2	8,5	33	2018	18	0,125
12	1/2"G	1/2"Gc	16	6,5	32	83	40	12,5	M20x1	82,5	19	6	11	40	2021	27	0,413

## EXAMPLE FOR ORDERING

CODE	TYPE F/F	TYPE M/F	CONNECTION	PANEL LOCK NUT	VITON SEAL
FT 290	14	14	01	G	V
FT 290	12	-	-	G	-



# FT 290 291





## ASSEMBLY INSTRUCTION

1°	REMOVE SCREW (1)
2°	PULL OFF HANDWHEEL (2)
3°	INSERT RING NUT (3) TYPE KM OR HEXAGONAL

PANEL A THICKNESS MAX	PANEL HOLE $\varnothing$ B
5	16



FT 290 - 291



FT 290

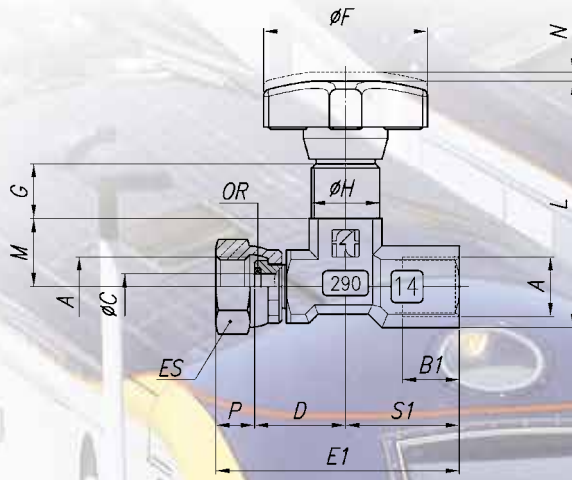


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FOR QUANTITIES OF  
AT LEAST 200 PIECES

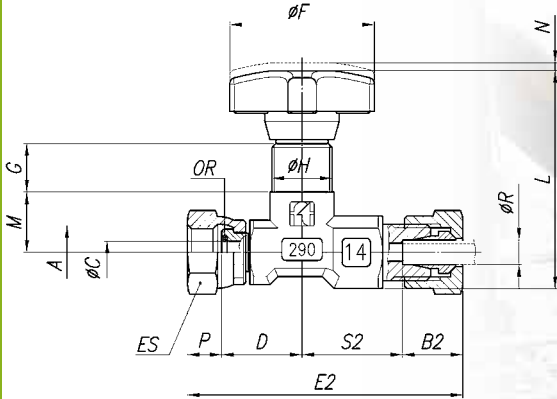
**MATERIALS**

BODY	11 S MN Pb 30 - UNI EN 10087 - PRESS FORG.
NEEDLE	35 S MN Pb 23 - UNI EN 10087 - BURNISHED
OR	NITRILE
ANTIEXTRUSION RING	PTFE
HANDWHEEL	NYLON 66

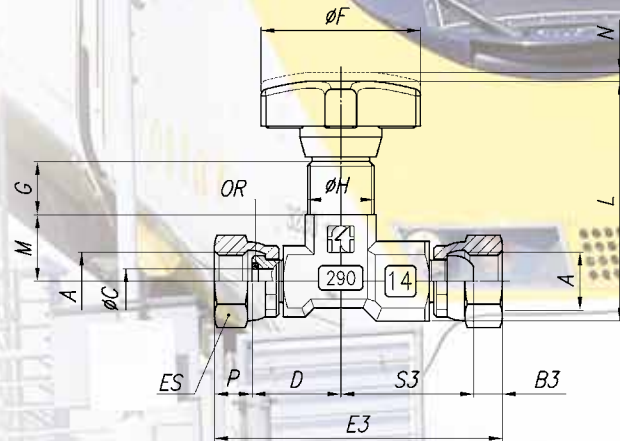
All components are surface treated and protected



CODE FT 290-01  
CONNECTION: FEMALE-FEMALE



CODE FT 290-04  
CONNECTION RIGID PIPES - DIN 2353



CODE FT 290-05  
CONNECTION FLEXIBLE PIPES DIN 3861 - DIN 7611

**DIMENSIONS**

A	B1	B2	B3	øC	D	E1	E2	E3	øF	G	H	L	M	N	P	R	S1	S2	S3	OR	ES	WEIGHT KG
1/4"G	11	15	6,5	5,6	20	54,5	69,5	66	34	12	M15x1	53	15	2	8,5	6	25	25	30	2108	18	ø10,125
																						ø40,150
																						ø50,145



## GAUGE ISOLATOR NEEDLE VALVES IN LINE

The FT290 isolator needle valves (in line) are normally used to protect the pressure gauge since they have the double function of dampening pressure surge during opening and of isolating the pressure gauge entirely. Pressed in high-resistance steel, protected by an accurate treatment, subjected to strict tests, they ensure reliability and long life. A rotating swivel nut allows for accurate pressure gauge orientation. The sealing, standard supplied, and inserted in the nut, prevents any drawing between the connection and the gauge.

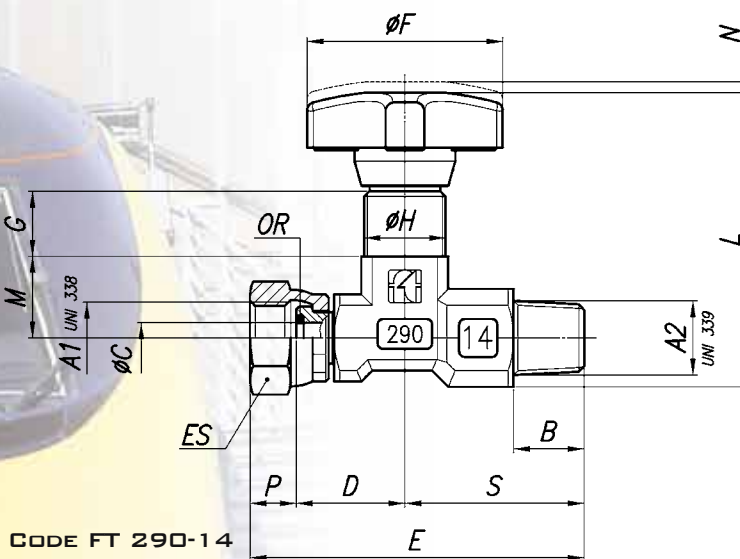
For pressure gauge with taper threads, it will be necessary to use copper washers FT 1201 shown on page 219 of this catalogue (to be requested separately). Suitable for pressure up to 400 bar and temperature from -20° to +100° they can be panel mounted by use of log nut (G), supplied on request.

### On request

- Versions with connections female/female (01)
- For rigid pipes (04)
- For flexible pipes (05)
- Seals in Viton (V)
- Complete with lock nut (G). Indicate whether KM or hexagonal
- Version in AISI 316 code FT 2290



FT 290



CODE FT 290-14

## DIMENSIONS

TYPE	A1 UNI 338	A2 UNI 339	B	ØC	D	E	ØF	G	H	L	M	N	P	S	OR	ES	WEIGHT KG
14	1/4"G	1/4"Gc	13	5,6	20	61,5	34	12	M15x1	53	15	2	8,5	33	2018	18	0,125
12	1/2"G	1/2"Gc	16	6,5	32	83	40	12,5	M20x1	82,5	19	6	11	40	2021	27	0,413

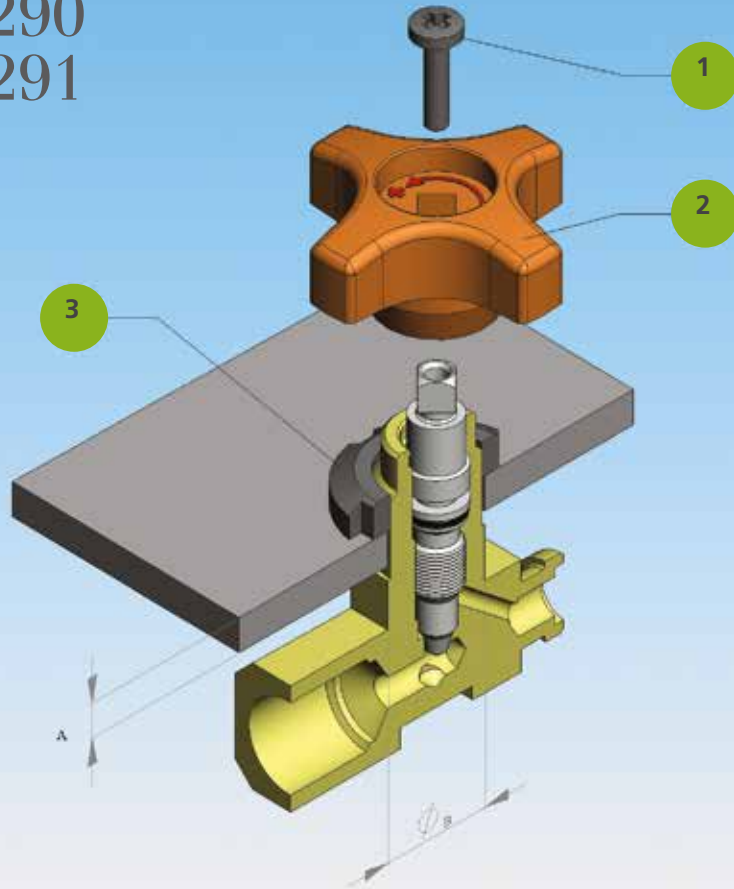
## EXAMPLE FOR ORDERING

CODE	TYPE F/F	TYPE M/F	CONNECTION	PANEL LOCK NUT	VITON SEAL
FT 290	14	14	01	G	V
FT 290	12	-	-	G	-





# FT 290 291



## ASSEMBLY INSTRUCTION

1°	REMOVE SCREW (1)
2°	PULL OFF HANDWHEEL (2)
3°	INSERT RING NUT (3) TYPE KM OR HEXAGONAL

PANEL A THICKNESS MAX	PANEL HOLE $\varnothing$ B
5	16



FT 290 - 291