

F.P.T. / VALVES, HOSES AND AUXILIARY COMPONENTS

FOR AN ALWAYS RELIABLE CONTROL

INDEX

VALVES, HOSES AND AUXILIARY COMPONENTS



04/

Series

Complementary valves for flow rate
and pressure control

V



PAGE

108

Pressure gauges

MD



110

Accessories for pressure gauges

VM
PM



111

Flex hoses

TFG
TFR



112

Quick couplers

GR



114

Manifold fittings, oil

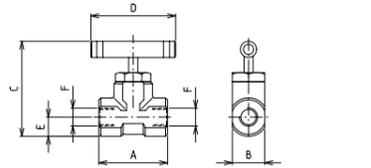
MR
MA
ML

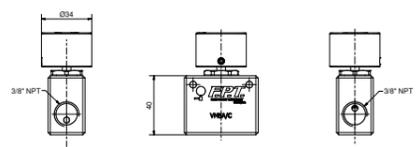


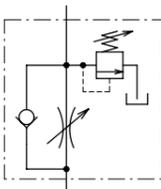
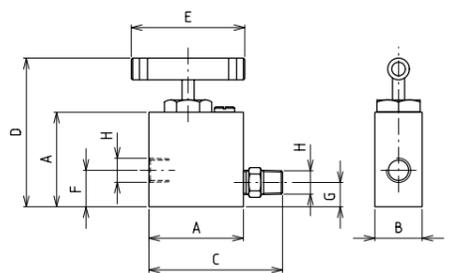
116



PRODUCT PAGE

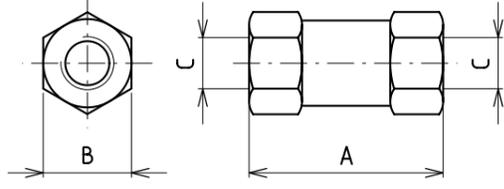
	TYPE OF VALVE	HYDRAULIC DIAGRAM	DESCRIPTION	TECHNICAL DRAWING		
	NEEDLE VALVE 700 BAR		Inline needle valve used to exclude or hold parts of the hydraulic circuit under pressure (female-female).			
MODEL	A	B	C	D	E	F
VM - 5A	68	32	94	84	19	3/8" NPT

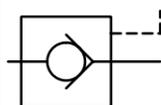
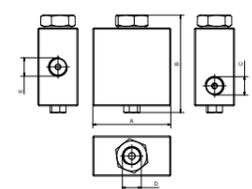
	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)
	VM5A/C	2	700	

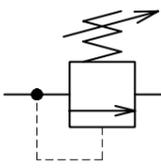
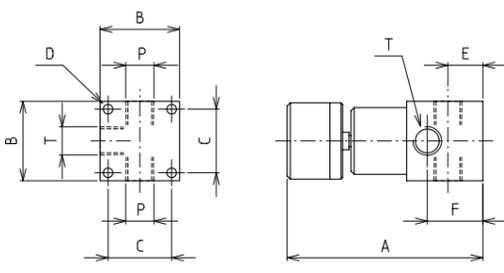
	TYPE OF VALVE	HYDRAULIC DIAGRAM	DESCRIPTION	TECHNICAL DRAWING				
	UNIDIRECTIONAL FLOW CONTROL VALVE 700 BAR		Unidirectional flow control valve, allows the lowering of the load in a controlled manner. The built-in relief valve protects the circuit against overpressure.					
MODEL	A	B	C	D	E	F	G	H
RFUA	70	35	100	110	84	27	18	3/8" NPT

Other models of 3-way valves also available

Dimensions (mm)

	TYPE OF VALVE	HYDRAULIC DIAGRAM	DESCRIPTION	TECHNICAL DRAWING
	VALVE OF RETURN 700 BAR		Inline unidirectional check valve. It blocks the flow in one direction while allowing it to move in the opposite direction.	
MODEL	A	B	C	
VR - A38	66	30	3/8" NPT	

	TYPE OF VALVE	HYDRAULIC DIAGRAM	DESCRIPTION	TECHNICAL DRAWING	
	VRPLAC		Inline pilot-operate check valve: blocks the flow in one direction allowing it to move in the opposite direction. The circuit is unblocked thanks to a pilot pressure 4 times lower than the circuit pressure.		
MODEL	A	B	C	D	E
VRPLAC	70	87,5	3/8" NPT	3/8" NPT	3/8" NPT

	TYPE OF VALVE	HYDRAULIC DIAGRAM	DESCRIPTION	TECHNICAL DRAWING				
	PRESSURE RELIEF VALVE 700 BAR		Pressure relief valve; the knob is used to regulate the pressure in the circuit. For inline mounting.					
MODEL	A	B	C	D	E	F	P	T
VMPL - A	125	50	40	5,5	22	35	3/8" NPT	3/8" NPT

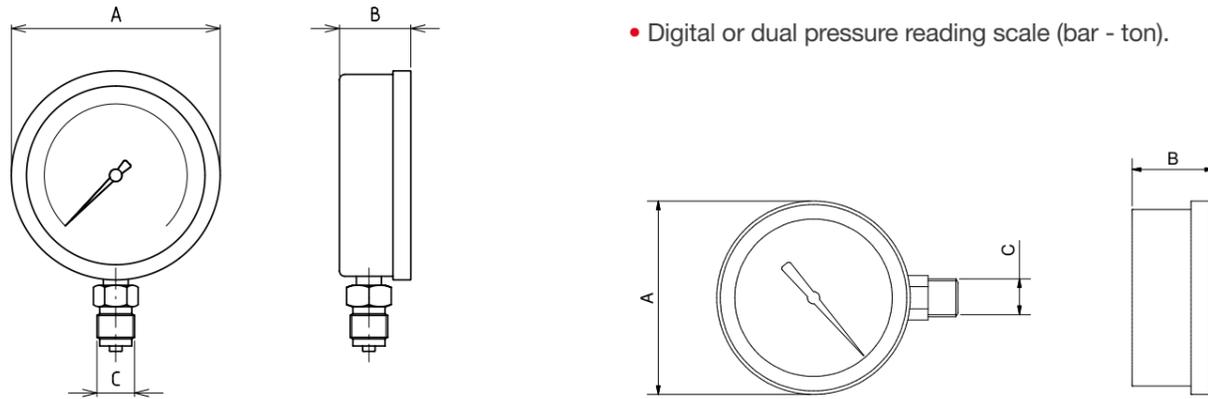
Other models of 3-way valves also available

Dimensions (mm)



PRODUCT PAGE

- Excellent precision and readability, easy to assemble.
- Digital or dual pressure reading scale (bar - ton).



MD PRESSURE GAUGES

MD-60G/H3

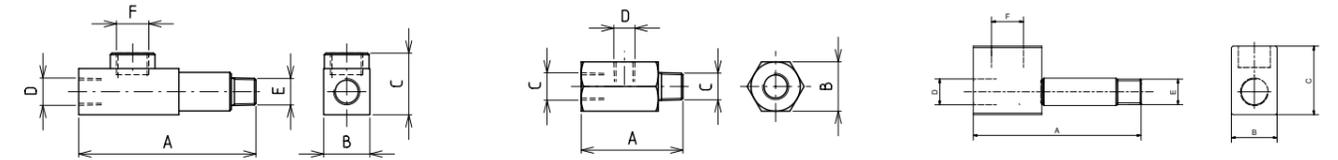
MODEL	PRESSURE RANGE		PRECISION CLASS	Ø FACE	TYPE	DIMENSIONS (mm)		
	Bar	Psi				A	B	C
MD 60G/H3	0 - 1000	0 - 14000	1,6	60	IN GLYCERINE BATH	68	28	1/4" NPT
MD 60G	0 - 1000	0 - 14000	1,6	60	IN GLYCERINE BATH	68	28	1/4" NPT
MD 100G	0 - 1000	0 - 14000	1,0	100	IN GLYCERINE BATH	110	36	G 1/2"
MD 160G	0 - 1600	0 - 23000	1,0	100	IN GLYCERINE BATH	110	47	G 1/2"
MD 200G	0 - 2000	0 - 30000	1,0	100	IN GLYCERINE BATH	110	50	G 1/2"
MD 300G	0 - 3000	0 - 45000	1,0	100	IN GLYCERINE BATH	110	50	M16x1,5 Female
MD 400G	0 - 4000	0 - 60000	1,0	100	IN GLYCERINE BATH	110	50	M16x1,5 Female



PRODUCT PAGE

Pressure gauge adaptors

The FPT system can be used to mount the pressure gauge directly on the pump head. The pressure gauge adaptors are required on pumps and valves when the pressure gauge is not directly installed.



PM-351

PM-355 PM-356

PM-346 PM-348

	MODEL	DIMENSIONS (mm)					
		A	B	C	D	E	F
	PM - 346	115	30	45	3/8" NPT	3/8" NPT	G 1/2"
	PM - 348	111	35	50	3/8" NPT	3/8" NPT	G 1/2"
	PM - 351	115	30	40	3/8" NPT	1/4" NPT	G 1/2"
	PM - 355	68	27	1/4" NPT	1/4" NPT	-	-
	PM - 356	68	32	3/8" NPT	1/4" NPT	-	-



PRODUCT PAGE

High pressure hoses

CUSTOM FLEX HOSES ON REQUEST



The 1000 bar thermoplastic flex hoses standard 1/4 version with internal Ø 6.3 mm are suitable for demanding applications and have a safety factor of 2.8: 1. On request, also available hoses with custom sizes and fittings, flexible hoses with internal Ø of 9.7 mm for applications with high flow rates as well.

For very high pressure applications, thermoplastic hoses available in a range from 1.800 to 4.000 bar to cover all market needs.

FLEX HOSES

Max working pressure
1.000 to 4.000 bar

MAX W.P.	1000 BAR							
	TFR #		TFRR #		TFG #		TFGG #	
	END 1	END 2	END 1	END 2	END 1	END 2	END 1	END 2
LENGTH [m]								
0,6								
1								
2								
3								
4	3/8" NPT		1/4" NPT		3/8" NPT		GR-6M	
5								
6								
10								

MAX W.P.	1800 BAR		2500 BAR		3000 BAR		3000 BAR		4000 BAR		4000 BAR	
	TFR # / 1800		TFR # / 2500		TFR # / 3000-M16D		TFR # / 3000-M16G		TFR # / 4000-M16D		TFR # / 4000-M16H	
	END 1	END 2										
LENGTH [m]												
1												
1,5												
2												
3	1/4" GAS M - 120°		1/4" GAS M - 120°		M16x1,5		1/4" GAS F - 60°		M16x1,5		M16x1,5	
4												
5												
6												

insert length of the hose expressed in meters





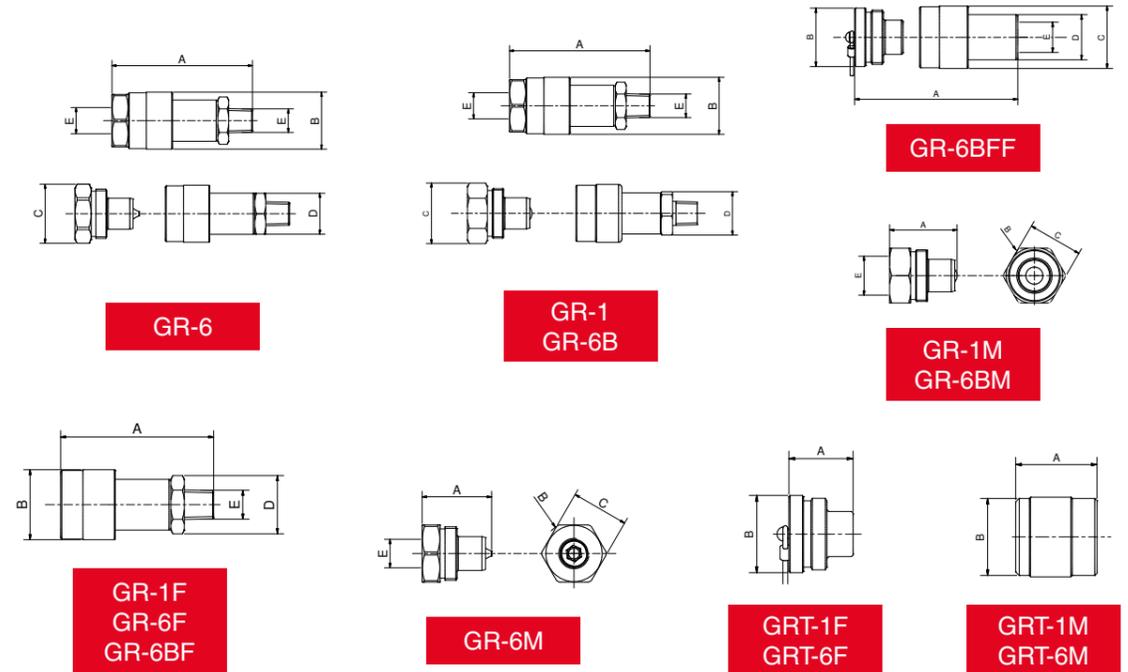
PRODUCT PAGE

For quick and safe connection of the hydraulic circuits

CUSTOM QUICK COUPLERS ON REQUEST



700 bar couplings available in high flow version. Female quick couplings are equipped with dust caps. For very high pressures, quick couplings are available up to 4,000 bar depending on specific needs.



MODEL	Description				
	A	B	C	D	E
GR-1	78	30	CH27	CH22	1/4" NPT
GR-6	86	35	CH32	CH25	3/8" NPT
GR-6B	86	35	CH32	CH25	3/8" NPT
GR-1F	58	30	-	CH22	1/4" NPT
GR-6F	76	35	-	CH25	3/8" NPT
GR-6BF	76	35	-	CH25	3/8" NPT
GR-1M	37	30	CH27	-	1/4" NPT
GR-6M	39	36	CH32	-	3/8" NPT
GR-6BM	35,5	36	CH32	-	3/8" NPT
GRT-1M	28	30	-	-	-
GRT-6M	36	35,5	-	-	-
GRT-1F	20	28	-	-	-
GRT-6F	27	32,5	-	-	-

MAX WP	MODEL	Description	Connection
700 bar - high flow	GR-6F	Female coupler, male threaded, poppet valve	3/8" NPT Male
	GR-6M	Male coupler, female threaded, poppet valve	3/8" NPT Female
	GR-6	Complete quick coupler (GR-6F + GR-6M) and poppet valve	3/8" NPT Male
700 bar	GR-6BF	Female quick coupler, male threaded and ball valve	3/8" NPT Male
	GR-6BM	Male quick coupler, female threaded and ball valve	3/8" NPT Female
	GR-6BFF	Female quick coupler, female threaded and ball valve	3/8" NPT Female
	GR-6B	Complete quick coupler (GR-6F + GR-6M) and ball valve	3/8" NPT Male
	GRT-6M	Dust cap for GR-6M	-
	GR-1F	Female quick coupler, male threaded and ball valve	1/4" NPT Male
	GR-1M	Male quick coupler, female threaded and ball valve	1/4" NPT Female
	GR-1	Complete quick coupler (GR-1F + GR-1M) and ball valve	1/4" NPT
1500 bar	GR-15F	Female quick coupler, female threaded	1/4" G
	GR-15M	Male quick coupler, female threaded	
2500 bar	GR-25F	Female quick coupler, female threaded	M16x1,5
	GR-25M	Male quick coupler, female threaded	
3000 bar	GR-30F	Female quick coupler, female threaded	M16x1,5
	GR-30M	Male quick coupler, female threaded	
4000 bar	GR-40F-M16	Female quick coupler, female threaded	M16x1,5
	GR-40M-M16	Male quick coupler, female threaded	

Series
MR - MA - ML
MI - VM - MR

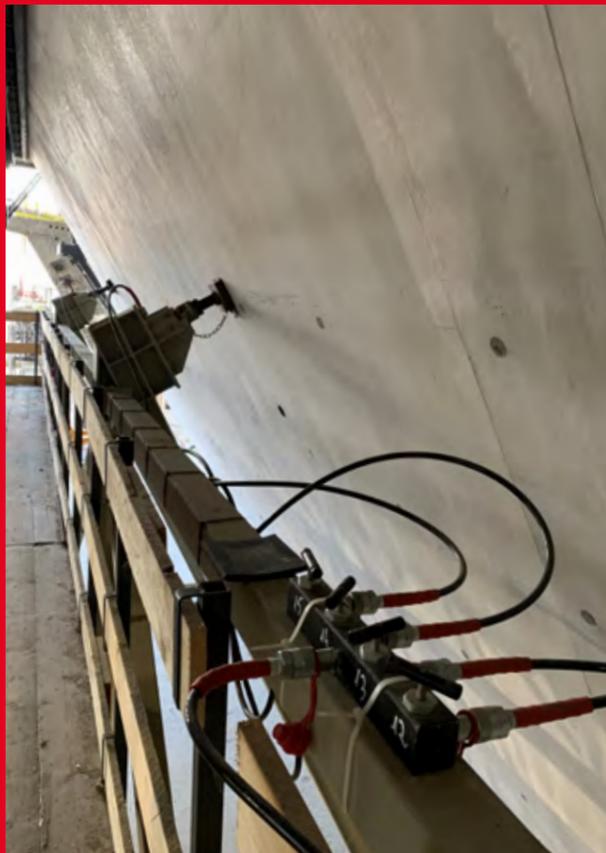
Manifolds - fittings and hydraulic oil up to 4.000 bar



PRODUCT PAGE

For quick and safe connection of the hydraulic circuits

CUSTOM VALVES ON REQUEST



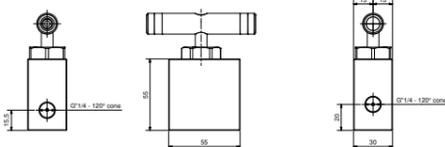
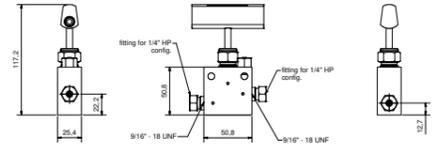
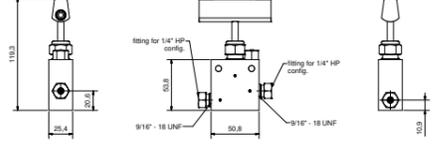
- Used to connect multiple lines to one inlet.
- Built with radial or linear outlet. The linear models are supplied with a pressure gauge installation hole.
- Available in 11 standard models and in custom versions for high pressure jobs.
- From 700 to 4.000 bar

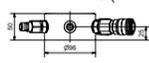
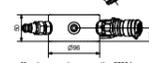
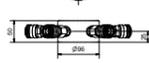
	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)									
				A	B	C	D	E	F	G	H		
	MR - 3V	3	700	70	26	3/8" NPT							
	MR - 5V	5		70	26	3/8" NPT							
	MR - 11V	11		148	35	3/8" NPT							
	MR - 17V	17		230	35	3/8" NPT							
	ML - 5	5	700	200	45	50	3/8" NPT	G 1/2"	186	31	6,5		
	ML - 7	7		300	45	50	3/8" NPT	G 1/2"	286	31	6,5		
	ML - 9	9		400	45	50	3/8" NPT	G 1/2"	386	31	6,5		
	ML - 11	11		500	45	50	3/8" NPT	G 1/2"	486	31	6,5		

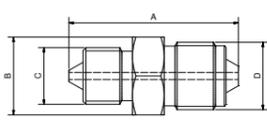
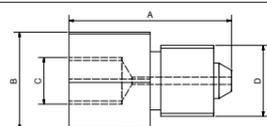
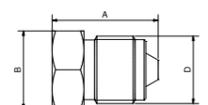
	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)
	VM5A/2	3	700	
	VM5A/4	5	700	

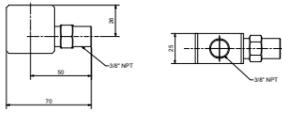
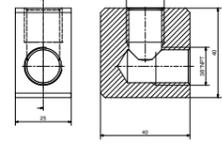
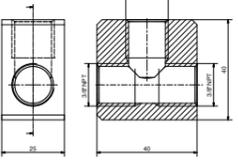
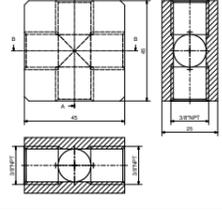
INTEGRATED MANIFOLD FOR DOUBLE ACTING	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	MASS (KG)	DIMENSIONS (mm)
	MI-4DE-M	4	700	19	
	MI-8DE-M	8		19+19	

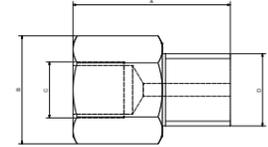
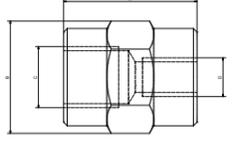
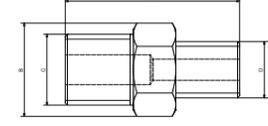
AUXILIARY COMPONENTS AND VALVES

	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)
	VM5A/1600	2	1600	
	VM5A/2000	2	2000	
	VM5A/4000	2	4000	

	MODEL	NUMBER OF USES	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)	
	MR3V/1500	3	1500	MR3V/1500	MR3V/2500
	MR3V/2500	3	2500		
	MR5V/1500	5	1500	MR5V/1500	MR5V/2500
	MR5V/2500	5	2500		

TYPE	MODEL	MAX WORKING PRESSURE (bar)	DIMENSIONS (mm)				
			A	B	C	D	
NIPPLE	0925613265	2000	45	CH 17	G"1/4 - 120°	G"1/4 - 120°	
NIPPLE	09299199501611	3000	48,5	CH 21	G"1/4 - 120°	3/4" - 16 UNF	
NIPPLE	0922225257	3000	48	CH 22	M16x1,5	3/4" - 16 UNF	
NIPPLE	0922225482	3000	42	CH 22	G"1/4 - 60°	3/4" - 16 UNF	
NIPPLE	0922225016	4000	40	CH 19	M16x1,5	9/16" - 18 UNF (1/4" HP)	
REDUCTION	0929112241	2500	45	CH 27	G"1/4" - 120° F	3/4"-16 UNF M	
PLUG	0925614601	2000	30	CH 17	-	G"1/4 - 120°	
	0922225585	3000	30	CH 22	-	3/4" - 16 UNF	
	0922221364	4000	26	CH 17	-	9/16" - 18 UNF (1/4" HP)	

TYPE	MODEL AND DIMENSIONS	
	G-241	GF-242
ELBOW		
T-FITTING - CROSS FITTING	T-342	C-442
		

TYPE	MODEL	DIMENSIONS (mm)				
		A	B	C	D	
REDUCTION	R-313	40	CH 27	1/4" NPT	3/8" NPT	
	R-314	40	CH 27	3/8" NPT	1/4" NPT	
	R-316	45	CH 32	G 1/2"	1/4" NPT	
	R-352	45	CH 32	G 1/2"	3/8" NPT	
HEX COUPLING	ME-349	37	CH 27	3/8" NPT	3/8" NPT	
	ME-357	37	CH 27	1/4" NPT	3/8" NPT	
NIPPLE	N-341	39	CH 17	1/4" NPT	1/4" NPT	
	N-343	41	CH 19	1/4" NPT	3/8" NPT	
	N-344	41	CH 19	3/8" NPT	3/8" NPT	
LONG NIPPLE	NL-345	55	3/8" NPT	-	-	
	NL-346	80	3/8" NPT	-	-	
	NL-347	150	3/8" NPT	-	-	

	MODEL	LITRES
	OIL - 1	1
	OIL - 5	5
	OIL - 10	10
	BIO-OIL-1	1
	BIO-OIL-5	5
	BIO-OIL-10	10

MINERAL HIDRAULIC OIL ISO VG 32
Available different oil for custom applications.

BIO OIL - Eco-friendly oil
Eco-friendly oil. High-performance, fully synthetic, biodegradable, non-toxic hydraulic fluid, saturated esters made.

