



Valves Handbook



FORMATURA
INIEZIONE
POLIMERI

Valves Handbook

Valves Handbook is a new tool that resumes all FIP valve range.

All types and versions available in a glance as well as their specific accessories and main technical details such Nominal Working Pressure and Kv factors.

This handbook is intended as practical quick reference. It does not substitute FIP catalogues which are the official reference for the products data.



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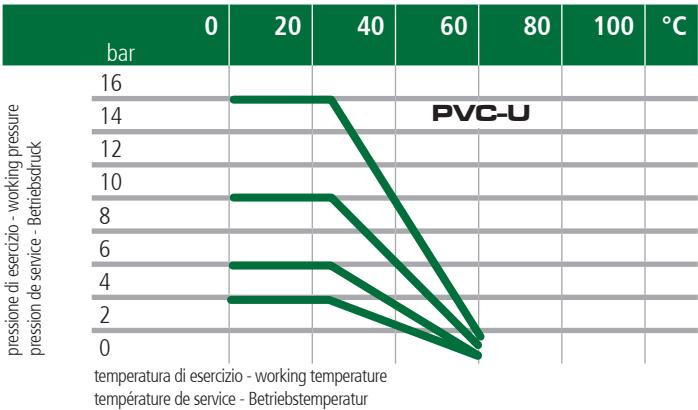
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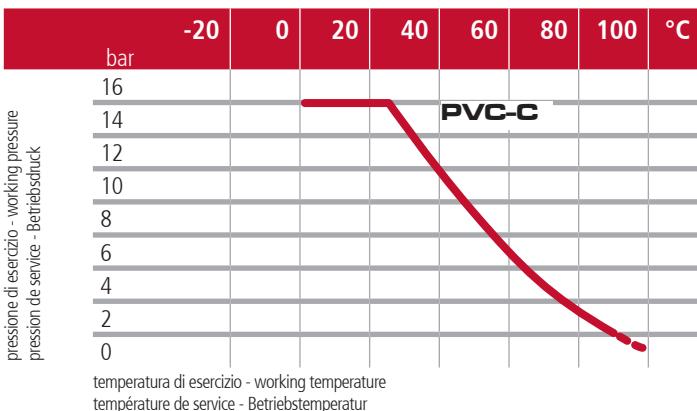
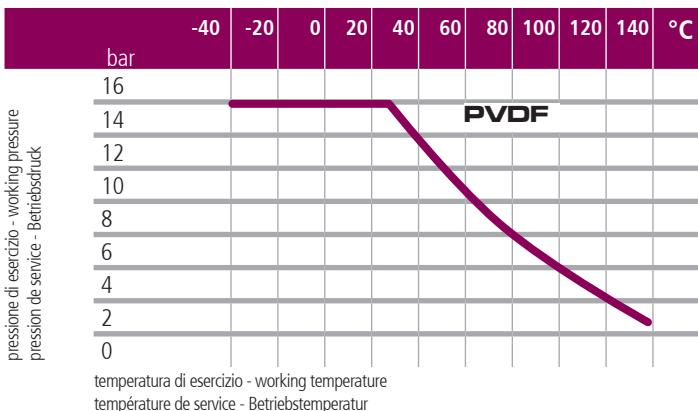
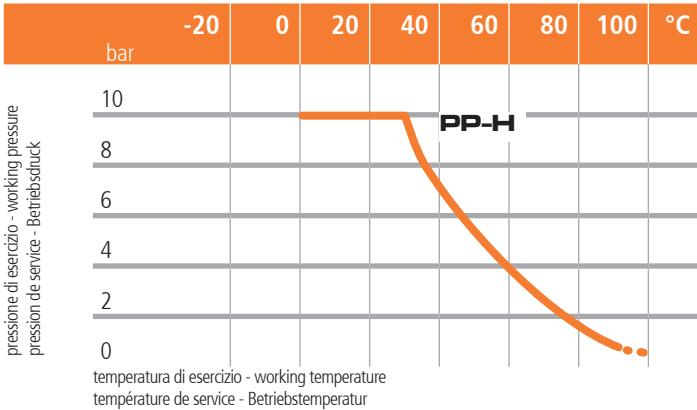


LEGENDA

d	Nominal outside diameter of the pipe in mm
DN	Nominal internal diameter in mm
PN	Nominal pressure (max working pressure at 20°C - water)
PVC-U	Unplasticized polyvinylchloride
PP-H	Homopolymer polypropylene MRS-10
PVC-C	Chlorinated polyvinylchloride
PVDF	Polyvinylidene fluoride MRS-25
ABS	Acrylonitrile Butadiene Styrene
PE	Polyethylene
EPDM	Ethylene propylene rubber
FPM	Vinylidene fluoride rubber
PTFE	Polytetrafluoroethylene
NBR	Butadiene-acrylonitrile rubber
CR	Chloroprene rubber
Kv100 [l/min]	Number of litres per minute of water, at a temperature of 20°C, that will flow through a valve with 1bar differential pressure, at a stated opening rate. The Kv100 values shown in the tables are calculated with the valve fully open.



Pressure / Temperature rating for water and harmless fluids to which the material is resistant.
In the other cases a reduction of the rated PN is required.





2-Way Ball Valve

Body materials

PVC-U

PP-H

PVDF

PVC-C

Ball seats material

PTFE

Seals materials

EPDM

FPM

Accessories

Dual Block System (supplied as standard)

Handle Block (SHKD)

Actuation module (Power Quick)

Mounting Plate (PMKD)

Stem Extension (PSKD)

Limit Switches box (MSKD)

End connections (Butt Weld.) in PE (CVDE)

End connections (Butt Weld.) in PP-H (CVDM)

	d [mm]	16	20	25	32	40	50	63	75	90	110	
	DN [mm]	10	15	20	25	32	40	50	65	80	100	
	SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	Type
ISO-DIN metric series plain female ends	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDIV
	PP-H	○	○	○	○	○	○	○	○	○	○	VKDIM
	PVDF	●	●	●	●	●	●	●	●	●	●	VKDIF
	PVC-C	●	●	●	●	●	●	●	●	●	●	VKDIC
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDDV
	PP-H	n.a.	○	○	○	○	○	○	○	○	○	VKDDM
	PVDF	n.a.	●	●	●	●	●	●	●	●	●	VKDDF
	PVC-C	n.a.	●	●	●	●	●	●	●	●	●	VKDDC
BSP series threaded female ends	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDFV
	PP-H	○	○	○	○	○	○	○	n.a.	n.a.	n.a.	VKDFM
	PVC-C	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VKDFC
BS socket welding	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDLV
ASTM series plain female ends	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDAV
	PVC-C	●	●	●	●	●	●	●	●	●	●	VKDAC
NPT series threaded female ends	PVC-U	●	●	●	●	●	●	●	●	●	●	VKDNV
	PVC-C	●	●	●	●	●	●	●	●	●	●	VKDNC
JIS series plain female ends	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VKDJV
JIS series threaded female ends	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VKDGV
FLANGED ISO-DIN	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VKDOV
	PP-H	n.a.	○	○	○	○	○	○	○	○	○	VKDOM
	PVDF	n.a.	●	●	●	●	●	●	●	●	●	VKDOF
	PVC-C	n.a.	●	●	●	●	●	●	●	●	●	VKDOC
FLANGED ANSI	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VKDOAV
	PP-H	n.a.	○	○	○	○	○	○	○	○	○	VKDOAM
	PVDF	n.a.	●	●	●	●	●	●	●	●	●	VKDOAF
	PVC-C	n.a.	●	●	●	●	●	●	●	●	●	VKDOAC
FLANGED JIS	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VKDOJV
PN [bar] 16 bar = 232 psi 10 bar = 150 psi	PVC-U	16	16	16	16	16	16	16	16	16	16	
	PP-H	10	10	10	10	10	10	10	10	10	10	
	PVDF	16	16	16	16	16	16	16	16	16	16	
	PVC-C	16	16	16	16	16	16	16	16	16	16	
Kv100 [l/min]		80	200	385	770	1100	1750	3400	5250	7100	9500	

Notes: n.a.= not available, o.r.= on request (not in standard production)

DUAL BLOC**TKD**

3-Way Ball Valve

Body materials

PVC-U

PP-H

PVC-C

Ball seats material

PTFE

Seals materials

EPDM

FPM

Functions

T - bore

L - bore

Accessories

Dual Block System (supplied as standard)

Handle Block (SHKD)

Actuation module (Power Quick)

Mounting Plate (PMKD)

Stem Extension (PSKD)

Limit Switches box (MSKD)

End connections (Butt Weld.) in PE (CVDE)

End connections (Butt Weld.) in PP-H (CVDF)

Handle stop 90° or 180° (HSTKD090 or

HSTKD180)

d [mm]	16	20	25	32	40	50	63		
DN [mm]	10	15	20	25	32	40	50		
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type	
ISO-DIN metric series plain female ends	PVC-U	●	●	●	●	●	●	●	TKDIV
	PP-H	●	●	●	●	●	●	●	TKDIM
	PVDF	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDIF
	PVC-C	●	●	●	●	●	●	●	TKDIC
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	●	TKDDV
	PP-H	n.a.	●	●	●	●	●	●	TKDDM
	PVDF	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDDF
	PVC-C	n.a.	●	●	●	●	●	●	TKDDC
BSP series threaded female ends	PVC-U	●	●	●	●	●	●	●	TKDFV
	PP-H	●	●	●	●	●	●	●	TKDFM
BS socket welding	PVC-U	●	●	●	●	●	●	●	TKDLV
	PVC-U	●	●	●	●	●	●	●	TKDAV
ASTM series plain female ends	PVC-U	●	●	●	●	●	●	●	TKDAC
	PVC-C	●	●	●	●	●	●	●	TKDNC
NPT series threaded female ends	PVC-U	●	●	●	●	●	●	●	TKDNV
	PVC-C	●	●	●	●	●	●	●	TKDNC
JIS series plain female ends	PVC-U	n.a.	●	●	●	●	●	●	TKDJV
	PVC-U	n.a.	●	●	●	●	●	●	TKDGV
FLANGED ISO-DIN	PVC-U	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOV
	PP-H	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOM
	PVDF	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOF
	PVC-C	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOC
FLANGED ANSI	PVC-U	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOAV
	PP-H	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOAM
	PVDF	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOAF
	PVC-C	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOAC
FLANGED JIS	PVC-U	n.a.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	TKDOJV
	PVC-U	16	16	16	16	16	16	16	
PN [bar] 16 bar = 232 psi 10 bar = 150 psi	PP-H	10	10	10	10	10	10	10	
	PVDF	16	16	16	16	16	16	16	
	PVC-C	16	16	16	16	16	16	16	

Notes: n.a.= not available, o.r.= on request (not in standard production)



VEE Easyfit



2-Way Ball Valve

Body material

PVC-U

Ball seats material

PE

Seals material

EPDM

Accessories

End connections (Butt Weld.) in PE (CVDE)

Hose adaptor (CPV)

Threaded male ends (CVRV)

d [mm]	16	20	25	32	40	50	63	
DN [mm]	10	15	20	25	32	40	50	
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type
PVC-U	●	●	●	●	●	●	●	VEEIV
ISO-DIN metric series plain female ends								
BSP series threaded female ends	PVC-U	●	●	●	●	●	●	VEEFV
BS socket welding	PVC-U	n.a.	●	●	●	●	●	VEELV
ASTM series plain female ends	PVC-U	n.a.	●	●	●	●	●	VEEAV
NPT series threaded female ends	PVC-U	n.a.	●	●	●	●	●	VEENV
JIS series plain female ends	PVC-U	n.a.	●	●	●	●	●	VEEJV
JIS series threaded female ends	PVC-U	n.a.	●	●	●	●	●	VEEGV
PN [bar] 16 bar = 232 psi	PVC-U	16	16	16	16	16	16	
Kv100 [l/min]		80	200	385	770	1100	1750	3400

Notes: n.a.= not available

Multifunctional handle



Support regulation



Nuts tightening

Easy Labelling System

LSE Set

Label Design and Print
 Easyfit LSE set contains circle labels die cut on white polyethylene self-adhesive A4 sheets and a CD Rom with the label creation and printer management software.

The non hygroscopic sheets are suitable for normal inkjet printer and for each valve size there is available a special packaging that allows you to customize up to 500 valves.



VEE Easyfit



VE



2-Way Ball Valve

d [mm]	75	90	110	
DN [mm]	65	80	100	
SIZE [inch]	2 1/2"	3"	4"	Type
PVC-U	●	●	●	VEIV
ISO-DIN metric series plain female ends				
BSP series threaded female ends	PVC-U	●	●	VEFV
BS socket welding	PVC-U	●	●	VELV
ASTM series plain female ends	PVC-U	●	●	VEAV
NPT series threaded female ends	PVC-U	●	●	VENV
JIS series plain female ends	PVC-U	●	●	VEJV
JIS series threaded female ends	PVC-U	●	●	VEGV
PN [bar]	PVC-U	10	10	6
10 bar = 150 psi				
6 bar = 87 psi				
Kv100 [l/min]		5250	7100	9500

Notes: n.a.= not available, o.r.= on request (not in standard production)

Body material

PVC-U

Ball seats material

PE

Seals material

CR

Accessories

End connections (Butt Weld.) in PE (CVDE)



VXE Easyfit



2-Way Ball Valve

Body materials

PVC-U
PVC-C

Ball seats material

PTFE

Seals materials

EPDM
FPM

Accessories

End connections (Butt Weld.) in PE (CVDE)
Hose adaptor (CPV)
Threaded male ends (CVR)

d [mm]	16	20	25	32	40	50	63	
DN [mm]	10	15	20	25	32	40	50	
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type
PVC-U	●	●	●	●	●	●	●	VXEIV
PVC-C	●	●	●	●	●	●	●	VXEIC
ISO-DIN metric series plain female ends								
BSP series threaded female ends	PVC-U	●	●	●	●	●	●	VXEFV
BS socket welding	PVC-U	n.a.	●	●	●	●	●	VXELV
ASTM series plain female ends	PVC-U	n.a.	●	●	●	●	●	VXEAV
PVC-C	n.a.	●	●	●	●	●	●	VXEAC
NPT series threaded female ends	PVC-U	n.a.	●	●	●	●	●	VXENV
PVC-C	n.a.	●	●	●	●	●	●	VXENC
JIS series plain female ends	PVC-U	n.a.	●	●	●	●	●	VXEJV
JIS series threaded female ends	PVC-U	n.a.	●	●	●	●	●	VXEGV
PN [bar]	PVC-U	16	16	16	16	16	16	
16 bar = 232 psi	PVC-C	16	16	16	16	16	16	
Kv100 [l/min]		80	200	385	770	1100	1750	3400

Notes: n.a.= not available

Multifunctional handle



Support regulation



Nuts tightening

Easy Labelling System

LSE Set

Label Design and Print
Easyfit LSE set contains circle labels die cut on white polyethylene self-adhesive A4 sheets and a CDRom with the label creation and printer management software.
The non hygroscopic sheets are suitable for normal inkjet printer and for each valve size there is available a special packaging that allows you to customize up to 500 valves.



VXE Easyfit



VX



2-Way Ball Valve

Body materials

PVC-U

PVC-C

Ball seats material

PTFE

Seals materials

EPDM

FPM

Accessories

End connections (Butt Weld.) in PE (CVDE)

Hose adaptor (CPV)

Threaded male ends (CVRV)

d [mm]	75	90	110	
DN [mm]	65	80	100	
SIZE [inch]	2 1/2"	3"	4"	Type
PVC-U	●	●	●	VXIV
PVC-C	●	●	●	VXIC
ISO-DIN metric series plain female ends				
PVC-U	●	●	●	VXFV
BSP series threaded female ends				
BS socket welding	PVC-U	●	●	VXLV
ASTM series plain female ends	PVC-U	●	●	VXAV
PVC-C	●	●	●	VXAC
NPT series threaded female ends	PVC-U	●	●	VXNV
PVC-C	●	●	●	VXNC
JIS series plain female ends	PVC-U	●	●	n.a. VXJV
JIS series threaded female ends	PVC-U	●	●	n.a. VXGV
PN [bar]	PVC-U	10	10	6
10 bar = 150 psi	PVC-C	10	10	6
6 bar = 87 psi				
Kv100 [l/min]		5250	7100	9500

Notes: n.a.= not available, o.r.= on request (not in standard production)

VX



Butterfly Valve

Body material

PP-GR

Disc materials

PVC-U
PP-H
PVDF
PVC-C
ABS

Stem material

Stainless steel 420
(S.S 316 on req.)

Seals materials

EPDM
FPM
(NBR on req.)

Accessories

Infinite adjusting kit (FK/RF)
Microswitches box (FK/MS)

d [mm]	50	63	75	90	110	140	160	225	280	315	
DN [mm]	40	50	65	80	100	125	150	200	250	300	
SIZE [inch]	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	Type
PVC-U	●	●	●	●	●	●	●	●	●	●	FKOV/..
PP-H	○	○	○	○	○	○	○	○	○	○	FKOM/..
PVDF	●	●	●	●	●	●	●	●	●	●	FKOF/..
PVC-C	●	●	●	●	●	●	●	●	●	●	FKOC/..
ABS	●	●	●	●	●	●	●	●	●	●	FKOA/..
PVC-U	n.a.	n.a.	●	●	●	●	●	●	n.a.	n.a.	FKOLV/..
PP-H	n.a.	n.a.	○	○	○	○	○	○	n.a.	n.a.	FKOLM/..
PVDF	n.a.	n.a.	●	●	●	●	●	●	n.a.	n.a.	FKOLF/..
PVC-C	n.a.	n.a.	●	●	●	●	●	●	n.a.	n.a.	FKOLC/..
ABS	n.a.	n.a.	●	●	●	●	●	●	n.a.	n.a.	FKOLA/..
PVC-U	n.a.	n.a.	●	●	●	●	●	●	o.r.	o.r.	FKOALV/..
PP-H	n.a.	n.a.	○	○	○	○	○	○	o.r.	o.r.	FKOALM/..
PVDF	n.a.	n.a.	●	●	●	●	●	●	o.r.	o.r.	FKOALF/..
PVC-C	n.a.	n.a.	●	●	●	●	●	●	o.r.	o.r.	FKOALC/..
ABS	n.a.	n.a.	●	●	●	●	●	●	o.r.	o.r.	FKOALA/..
PVC-U	16	16	10	10	10	10	10	10	10	8	
PP-H	10	10	10	10	10	10	10	10	10	8	
PVDF	16	16	10	10	10	10	10	10	10	8	
PVC-C	16	16	10	10	10	10	10	10	10	8	
ABS	16	16	10	10	10	10	10	10	10	8	
PN [bar] lug version	all mater.	-	-	10	10	10	10	10	10	6	6
Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700	30500	53200	81600

Notes: n.a.= not available, o.r.= on request (not in standard production)

Versions

With handle FKO.../LM DN 40 - DN 200

Free shaft with actuation flange FKO.../FM DN 40 - DN 300

With gear box FKO.../RM DN 65 - DN 300

**FE**

d [mm]	50	63	75	90	110	140	160	225	
DN [mm]	40	50	65	80	100	125	150	200	
SIZE [inch]	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	
Flangeable according:									Type
ISO-DIN-UNI	●	●	●	●	●	●	●	●	FEOV/..
BS 10 table D/E									
ASA B16,5 class 150									
JIS 2212									
LUG version DIN (with movable inserts kit)	PVC-U	●	●	●	●	●	●	●	
PN [bar]	PVC-U	16	16	10	10	10	10	10	
16 bar = 232 psi									
10 bar = 150 psi									
6 bar = 87 psi									
4 bar = 58 psi									
PN [bar] lug version		6	6	6	6	6	6	4	4
Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700	30500

Notes: n.a.= not available, o.r.= on request (not in standard production)

Butterfly Valve

Body material

PVC-U

Disc material

PVC-U

Stem material

Zinc plated steel

Seals materials

EPDM

FPM

(NBR on req.)

Accessories

LUG DIN inserts kit

Versions

With handle FEOV/LM DN 40 - DN 200

With gear box FEOV/RM DN 65 - DN 200

FE



Diaphragm Valve

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE
(NBR on req.)

O-Ring materials

EPDM
FPM

Accessories

Position indicator as standard
Security blocking device
Electrical position indicator (1 microswitch)
Plate for DN15-50 bodies alignment
End connections (Butt Weld.) in PE (DN15-50)
End connections (Butt Weld.) in PP-H (DN15-50)

d [mm]	20	25	32	40	50	63	75	90	110	
DN [mm]	15	20	25	32	40	50	65	80	100	
SIZE [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	●	●	●	●	●	n.a.	n.a.	n.a.	VMUIV
	PP-H	○	○	○	○	○	n.a.	n.a.	n.a.	VMUIM
	PVDF	●	●	●	●	●	n.a.	n.a.	n.a.	VMUIF
	PVC-C	●	●	●	●	●	n.a.	n.a.	n.a.	VMUIC
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	●	●	VMDV
	PP-H	○	○	○	○	○	○	○	○	VMMDM
	PVDF	●	●	●	●	●	●	●	●	VMDF
	PVC-C	●	●	●	●	●	●	●	●	VMDC
BSP series unionised threaded female ends	PVC-U	●	●	●	●	●	n.a.	n.a.	n.a.	VMUFV
	PVC-C	●	●	●	●	●	n.a.	n.a.	n.a.	VMUFC
BS unionised socket welding	PVC-U	●	●	●	●	●	n.a.	n.a.	n.a.	VMULV
ASTM series unionised plain female ends	PVC-U	●	●	●	●	●	n.a.	n.a.	n.a.	VMUAV
	PVC-C	●	●	●	●	●	n.a.	n.a.	n.a.	VMUAC
ASTM series plain male ends	PVC-U	●	●	●	●	●	●	●	●	VMYV
	PVC-C	●	●	●	●	●	●	●	●	VMYC
NPT series unionised threaded female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VMUNV
	PVC-C	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VMUNC
JIS series unionised plain female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VMUJV
FLANGED ISO-DIN	PVC-U	●	●	●	●	●	●	●	●	VMOV
	PP-H	○	○	○	○	○	○	○	○	VMOM
	PVDF	●	●	●	●	●	●	●	●	VMOF
	PVC-C	●	●	●	●	●	●	●	●	VMOC
FLANGED ANSI	PVC-U	●	●	●	●	●	●	●	●	VMOAV
	PP-H	○	○	○	○	○	○	○	○	VMOAM
	PVDF	●	●	●	●	●	●	●	●	VMOAF
	PVC-C	●	●	●	●	●	●	●	●	VMOAC
FLANGED JIS	PVC-U	●	●	●	●	●	●	●	●	VMOJV
PN [bar] 10 bar = 150 psi	PVC-U	10	10	10	10	10	10	10	10	
	PP-H	10	10	10	10	10	10	10	10	
	PVDF	10	10	10	10	10	10	10	10	
	PVC-C	10	10	10	10	10	10	10	10	
Kv100 [l/min]		93	136	175	300	416	766	1300	2000	2700

Notes: n.a.= not available, o.r.= on request (not in standard production)

**CM**

Compact Diaphragm Valve

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE

O-Ring materials

EPDM
FPM

Accessories

Position indicator as standard
Adjustable travel stop as standard
End connections (Butt Weld.) in PE (DN15)
End connections (Butt Weld.) in PP-H (DN15)

d [mm]	16	20	
DN [mm]	12	15	
SIZE [inch]	3/8"	1/2"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	n.a.	CMUIV
	PP-H	n.a.	CMUIM
	PVDF	n.a.	CMUIF
	PVC-C	n.a.	CMUIC
	PVC-U	●	CMIV
	PP-H	○	CMIM
ISO-DIN metric series plain female ends	PVDF	●	CMIF
	PVC-U	●	CMDV
	PP-H	n.a.	CMDM
	PVDF	n.a.	CMDF
	PVC-C	n.a.	CMDC
	PVC-U	n.a.	CMUFV
BSP series unionised threaded female ends	PVC-U	●	CMFV
	PP-H	○	CMFM
	PVDF	●	CMFF
	PVC-U	●	CMULV
	ASTM series unionised plain female ends	n.a.	CMUAV
	PVC-C	n.a.	CMUAC
NPT series unionised threaded female ends	PVC-U	n.a.	CMUNV
	PVC-C	n.a.	CMUNC
	PVC-U	6	
	PP-H	6	
	PVDF	6	
	PVC-C	6	
Kv100 [l/min]	47	60	

Notes: n.a.= not available, o.r.= on request (not in standard production)

CM



d [mm]	12	
DN [mm]	8	
R [BSP inches]	1/4"	Type
ISO-DIN metric series plain female ends	PVC-U	● VMIV
BSP series threaded female ends	PVC-U	● VMFV
PN [bar]	PVC-U	10



d [mm]	20	
DN [mm]	15	
R [BSP inches]	1/2"	Type
BSP series one male thread one hose adaptor	PVC-U	● RMRPV
BSP series two male threads	PVC-U	● RMRV
PN [bar]	PVC-U	4

Notes: n.a.= not available, o.r.= on request (not in standard production)

Mini Diaphragm Valve

Body material

PVC-U

Diaphragm material

EPDM



VZ/VA



Foot Valve

Body material

PVC-U

Seals material

EPDM

Accessories

PVC-U screen (SZIV)

d [mm]	16	20	25	32	40	50	63	
DN [mm]	10	15	20	25	32	40	50	
R [BSP inches]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type
ISO-DIN metric series plain male and female ends	PVC-U	●	●	●	●	●	●	VZIV
BSP series threaded female ends	PVC-U	n.a.	●	●	●	●	●	VZFV
PN [bar] 16 bar = 232 psi	PVC-U	16	16	16	16	16	16	16
Minimum pressure drop [bar] for piston in the fully open position		0.008	0.008	0.009	0.014	0.017	0.018	0.021
Minimum back pressure [mm H ₂ O] for drop tight service (piston in closed position)		150	150	200	350	350	350	350



Air Release Valve

Body material

PVC-U

Seals material

EPDM

VZ/VA

d [mm]	20	25	32	40	50	63	
DN [mm]	15	20	25	32	40	50	
R [BSP inches]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type
ISO-DIN metric series plain male and female ends	PVC-U	●	●	●	●	●	VAIV
BSP series threaded female ends	PVC-U	●	●	●	●	●	VAFV
PN [bar] 16 bar = 232 psi	PVC-U	16	16	16	16	16	16



Notes: n.a.= not available, o.r.= on request (not in standard production)



SXE

Easyfit



Ball Check Valve

Body materials

PVC-U

PVC-C

Seals materials

EPDM

FPM

d [mm]	16	20	25	32	40	50	63	
DN [mm]	10	15	20	25	32	40	50	
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Type
ISO-DIN metric series plain female ends	PVC-U	●	●	●	●	●	●	SXEIV
	PVC-C	●	●	●	●	●	●	SXEIC
BSP series threaded female ends	PVC-U	●	●	●	●	●	●	SXEFV
BS socket welding	PVC-U	n.a.	●	●	●	●	●	SXELV
ASTM series plain female ends	PVC-U	n.a.	●	●	●	●	●	SXEAV
	PVC-C	n.a.	●	●	●	●	●	SXEAC
NPT series threaded female ends	PVC-U	n.a.	●	●	●	●	●	SXENV
	PVC-C	n.a.	●	●	●	●	●	SXENC
JIS series plain female ends	PVC-U	n.a.	●	●	●	●	●	SXEJV
	PVC-U	n.a.	●	●	●	●	●	SXEGV
PN [bar] 16 bar = 232 psi	PVC-U	16	16	16	16	16	16	
	PVC-C	16	16	16	16	16	16	
Kv100 [l/min]		172	152	258	433	643	928	1343
Minimum back pressure [bar] for drop tight service (valve in horizontal position)	PVC-U	0,2	0,2	0,2	0,2	0,2	0,2	
	PVC-C	0,2	0,2	0,2	0,2	0,2	0,2	

Notes: n.a.= not available

Multifunctional handle



Support regulation



Nuts tightening

Easy Labelling System

LSE Set

Label Design and Print Easyfit LSE set contains circle labels die cut on white polyethylene self-adhesive A4 sheets and a CDRom with the label creation and printer management software. The non hygroscopic sheets are suitable for normal inkjet printer and for each valve size there is available a special packaging that allows you to customize up to 500 valves.

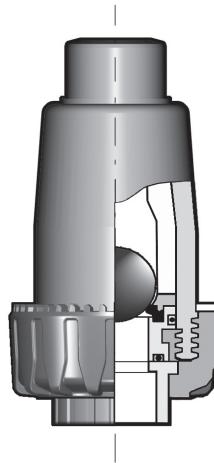




SR



d [mm]	20	25	32	40	50	63	Type
DN [mm]	15	20	25	32	40	50	
ISO-DIN metric series plain male and female ends	PP-H ●	●	●	●	●	●	SRIM
	PVDF ●	●	●	●	●	●	SRIF
FLANGED ISO-DIN	PP-H o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	SROM
	PVDF o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	SROF
FLANGED ANSI	PP-H o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	SROAM
	PVDF o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	SROAF
PN [bar] 16 bar = 232 psi 10 bar = 150 psi	PP-H 10	10	10	10	10	10	
	PVDF 16	16	16	16	16	16	
Kv100 [l/min]		152	258	433	643	928	1343
Minimum back pressure [bar] for drop tight service (valve in horizontal position)	PP-H 0,4	0,4	0,4	0,4	0,4	0,4	
	PVDF 0,2	0,2	0,2	0,2	0,2	0,2	



Notes: n.a.= not available, o.r.= on request (not in standard production)

Ball Check Valve

Body materials

PP-H

PVDF

Seals materials

EPDM

FPM



VR

Angle Seat Check Valve

Body materials

PVC-U
PP-H

Seals materials

EPDM
FPM

d [mm]	16	20	25	32	40	50	63	75	90	110	
DN [mm]	10	15	20	25	32	40	50	65	80	100	
R [BSP inches]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	VRUIV
	PP-H	●	●	●	●	●	●	n.a.	n.a.	n.a.	VRUIM
ISO-DIN metric series plain female ends	PVC-U	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	VRIV
	PP-H	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	n.a.	VRIM
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	VRDV
BSP series unionised threaded female ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	VRUFV
BSP series threaded female ends	PVC-U	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	VRFV
BS unionised socket welding	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VRULV
ASTM series unionised plain female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VRUAV
NPT series unionised threaded female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VRUNV
FLANGED ISO-DIN	PVC-U	n.a.	●	●	●	●	●	●	●	●	VROV
FLANGED ANSI	PVC-U	n.a.	●	●	●	●	●	●	●	●	VROAV
PN [bar] 16 bar = 232 psi 10 bar = 150 psi 6 bar = 87 psi 4 bar = 58 psi	PVC-U	16	16	16	16	16	16	10	6	6	
	PP-H	10	10	10	10	10	10	10	6	4	
Kv100 [l/min]	47	110	205	375	560	835	1300	1950	2600	3500	
Min pressure to raise the piston [bar]	0,008	0,008	0,009	0,014	0,017	0,018	0,021	0,022	0,022	0,024	
Minimum back pressure [mmH2O] for drop tight service (valve in horizontal or vertical position)	150	150	200	350	350	350	350	350	350	350	

Notes: n.a.= not available, o.r.= on request (not in standard production)

VR



RV



Sediment Strainer

Body materials

PVC-U
PVC-U transparent
PP-H
PVC-C

Seals materials

EPDM
FPM

screen material	PP	PVC	PVC	PVC	PVC	INOX
hole pitch [mm]	1,5	1,0	1,5	2,0	2,5	0,7
holes per cm ²	100	190	100	60	35	240
equivalent ASTM mesh size	30	50	35	30	18	35
equivalent hole diameter µm	600	300	500	600	900	500

d [mm]	16	20	25	32	40	50	63	75	90	110	
DN [mm]	10	15	20	25	32	40	50	65	80	100	
Size [inches]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUIV
	PVC-U tr.	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUIT
	PP-H	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUIM
	PVC-C	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUIC
ISO-DIN metric series plain female ends	PVC-U	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVIV
	PVC-U tr.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVIT
	PP-H	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVIM
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	RDV
	PVC-U tr.	●	●	●	●	●	●	n.a.	n.a.	n.a.	RDVT
BSP series unionised threaded female ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUFV
	PVC-U tr.	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUFT
BSP series threaded female ends	PVC-U	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVFV
	PVC-U tr.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVFT
BS unionised socket welding	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	RVULV
	PVC-U tr.	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUAT
ASTM series unionised plain female ends	PVC-U	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUAC
	PVC-C	●	●	●	●	●	●	n.a.	n.a.	n.a.	
ASTM series plain female ends	PVC-U tr.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	RVAT
NPT series unionised threaded female ends	PVC-U tr.	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUNT
	C- PVC	●	●	●	●	●	●	n.a.	n.a.	n.a.	RVUNC
NPT series threaded female ends	PVC-U tr.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	RVNT
FLANGED ISO-DIN	PVC-U	n.a.	●	●	●	●	●	●	●	●	RVOV
	PVC-U tr.	n.a.	●	●	●	●	●	●	●	●	RVOT
FLANGED ANSI	PVC-U	n.a.	●	●	●	●	●	●	●	●	RVOAV
	PVC-U tr.	n.a.	●	●	●	●	●	●	●	●	RVOAT
PN [bar] 16 bar = 232 psi 10 bar = 150 psi 6 bar = 87 psi 4 bar = 58 psi	PVC-U	16	16	16	16	16	16	10	6	6	
	PVC-U tr.	16	16	16	16	10	10	10	6	4	
	PP-H	n.a.	10	10	10	10	10	6	4	4	
	PVC-C	n.a.	16	16	16	16	16	n.a.	n.a.	n.a.	
Kv100 [l/min]		22	40	70	103	188	255	410	650	1050	1700
Total filtering surface At [cm ²]		16	16	23,5	36	53	69	101	197	247	396

Notes: n.a.= not available, o.r.= on request (not in standard production)

RV



Angle Seat Valve

Body material

PVC-U

Seals materials

EPDM/PE

EPDM/PTFE (*)

FPM/PTFE (*)

(*) spare set

d [mm]		16	20	25	32	40	50	63	75	90	110	
DN [mm]		10	15	20	25	32	40	50	65	80	100	
Size [inches]		3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	●	●	●	●	●	●	●	n.a.	n.a.	n.a.	VVUIV
ISO-DIN metric series plain female ends	PVC-U	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	●	●	●	VVIV
ISO-DIN metric series plain male ends	PVC-U	●	●	●	●	●	●	●	n.a.	n.a.	n.a.	VVDV
BSP series unionised threaded female ends	PVC-U	●	●	●	●	●	●	●	n.a.	n.a.	n.a.	VVUFV
BS unionised socket welding	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VVULV
ASTM series unionised plain female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VVUAV
NPT series unionised threaded female ends	PVC-U	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	n.a.	n.a.	n.a.	VVUNV
FLANGED ISO-DIN	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VVOV
FLANGED ANSI	PVC-U	n.a.	●	●	●	●	●	●	●	●	●	VVOAV
PN [bar] 16 bar = 232 psi 10 bar = 150 psi 6 bar = 87 psi	PVC-U	16	16	16	16	10	10	10	10	6	6	
Kv100 [l/min]		47	110	205	375	560	835	1300	1950	2600	3500	

Notes: n.a.= not available, o.r.= on request (not in standard production)



CR



d [mm]	50	63	75	90	110	140	160	225	280	315	Type
DN [mm]	40	50	65	80	100	125	150	200	250	300	CROV
ISO-DIN	PVC-U	●	●	●	●	●	●	●	●	●	
Working Pressure [bar]	PVC-U	5	5	5	5	5	5	5	5	5	
Minimum pressure [bar] for opening with upward flow	PVC-U	0,002	0,003	0,003	0,003	0,003	0,005	0,005	0,008	0,008	
Minimum back pressure [bar] for drop tight service	PVC-U	0,3	0,3	0,3	0,2	0,2	0,2	0,2	0,2	0,2	
Kv100 [l/min]		370	900	1250	1867	2867	5700	8167	18800	25000	31900

Notes: n.a.= not available, o.r.= on request (not in standard production)

Wafer Check Valve

Body material

PVC-U

Seals material

EPDM

NOTE: Other materials and types of Wafer Check Valves can be supplied on request: please ask for type FR.

CR

**SV**

d [mm]	20	25	32	
DN [mm]	15	20	25	
Size [inches]	1/2"	3/4"	1"	Type
ISO-DIN metric series unionised plain female ends	PVC-U	●	●	●
BSP series unionised threaded female ends	PVC-U	●	●	●
BS unionised socket welding	PVC-U	o.r.	o.r.	o.r.
ASTM series unionised plain female ends	PVC-U	o.r.	o.r.	o.r.
NPT series unionised threaded female ends	PVC-U	o.r.	o.r.	o.r.
PN [bar] 16 bar = 232 psi	PVC-U	16	16	16
Regulation Range [bar]				0.3 ÷ 4

Notes: n.a.= not available, o.r.= on request (not in standard production)

Angle Seat Pressure Relief Valve

Body material

PVC-U

Seals materials

EPDM
FPM



Pneumatically actuated 2-Way Ball Valve

Body materials

PVC-U
PP-H
PVDF
PVC-C

Ball seats material

PTFE

Seals materials

EPDM
FPM

Working functions

DA Double acting
NC Normally Closed
NO Normally Open

d [mm]	16	20	25	32	40	50	63	75	90	110
DN [mm]	10	15	20	25	32	40	50	65	80	100
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"

for materials and sizes available see manual valve VKD

Kv100 [l/min]	80	200	385	770	1100	1750	3400	5250	7100	9500
PN [bar]	PVC-U	16	16	16	16	16	16	10*	10*	10*
16 bar = 232 psi	PP-H	10	10	10	10	10	10	10	10	10
10 bar = 150 psi	PVDF	16	16	16	16	16	16	10*	10*	10*
	PVC-C	16	16	16	16	16	16	10*	10*	10*
Control pressure [bar]							standard 6			
NAMUR Air Connections	BSP	1/8"	1/8"	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]	DA	0,18	0,18	0,23	0,23	0,45	0,45	0,45	0,61	0,98
	NC-NO	0,18	0,18	0,23	0,23	0,45	0,45	0,61	0,98	1,8

* on request PN16

Accessories

Position Indicator

Pilot solenoid valve 3-5/2 ways	Voltages AC	230-110-24 V
	Voltages DC	24 V
	Protection	IP 65

Limit Switches box	Electromechanical	Contact rate	2,5A (24V)-0,3A (250V)
		Protection	IP 67
		Proximity PNP (3 wires)	Voltage 5-36 V DC
	Proximity NAMUR	Current	0-200 mA
		Protection	IP67
		Voltage	8 V DC
Pneumatic or Electropneumatic Positioner	Input signal	Proximity NAMUR	IP 67
		Protection	EEx ia IIC T6
		Safety Class	



Pneumatically actuated 3-Way Ball Valve

Body materials

PVC-U
PP-H
PVC-C

Ball seats material

PTFE

Seals materials

EPDM
FPM

Working functions

DA	<i>Double acting</i>
NC	<i>Normally Closed</i>
NO	<i>Normally Open</i>

*supplied standard with L-bore
on request with T-bore
(Configuration 1,2,3,4: see catalogue)*

d [mm]	16	20	25	32	40	50	63
DN [mm]	10	15	20	25	32	40	50
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

for materials and sizes available see manual valve TKD

Kv100 [l/min] with L bore	48	73	150	265	475	620	1220
PN [bar] 16 bar = 232 psi	PVC-U PP-H	16 10	16 10	16 10	16 10	16 10	16 10
10 bar = 150 psi	PVDF	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.
	PVC-C	16	16	16	16	16	16
Control pressure [bar]					standard 6		
NAMUR Air Connections	BSP DA	1/8" 0,23	1/8" 0,23	1/4" 0,45	1/4" 0,45	1/4" 0,45	1/4" 0,61
Actuator capacity [NL]	NC-NO	0,23	0,23	0,45	0,45	0,45	0,61

Note: o.r.= on request (not in standard production).

Accessories

Position Indicator

Pilot solenoid valve 3-5/2 ways	Voltages AC	230-110-24 V
	Voltages DC	24 V
	Protection	IP 65

Limit Switches box

Electromechanical	Contact rate	2,5A (24V)-0,3A (250V)
	Protection	IP 67
	Proximity PNP (3 wires)	Voltage Current Protection
Proximity NAMUR	Voltage	5-36 V DC
	Current	0-200 mA
	Protection	IP67
Proximity NAMUR	Voltage	8 V DC
	Protection	IP 67
	Safety Class	EEx ia IIC T6

Pneumatic or Electropneumatic Positioner

Input signal	3-15 psi or 4-20 mA
Protection	IP 65



FK/CP



Pneumatically actuated Butterfly Valve

Body material

PP-GR

Disc materials

PVC-U

PP-H

PVDF

PVC-C

ABS

Stem material

Stainless steel 420
(S.S 316 on req.)

Seals materials

EPDM

FPM

(NBR on req.)

Working functions

DA Double acting

NC Normally Closed

NO Normally Open

d [mm]	50	63	75	90	110	140	160	225	280	315
DN [mm]	40	50	65	80	100	125	150	200	250	300
SIZE [inch]	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"

for materials and sizes available see manual valve FK

Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700	30500	53200	81600
PN [bar]	PVC-U	16	16	10	10	10	10	10	10	10	8
16 bar = 232 psi	PP-H	10	10	10	10	10	10	10	10	10	8
10 bar = 150 psi	PVDF	16	16	10	10	10	10	10	10	10	8
8 bar = 116 psi	PVC-C	16	16	10	10	10	10	10	10	10	8
	ABS	16	16	10	10	10	10	10	10	10	8
PN [bar] Lug version	all mater.	n.a.	n.a.	10	10	10	10	10	10	n.a.	n.a.
Control pressure [bar]											standard 6
NAMUR Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]	DA	0,45	0,45	0,45	0,61	0,98	0,98	1,8	2,8	4,9	4,9
	NC-NO	0,45	0,61	0,61	0,98	1,8	2,8	2,8	8	14,2	14,2

Notes: n.a.= not available, o.r.= on request (not in standard production)

Accessories

Position Indicator

Pilot solenoid valve 3-5/2 ways	Voltages AC	230-110-24 V
	Voltages DC	24 V
	Protection	IP 65

Limit Switches box

Proximity PNP (3 wires)	Electromechanical	Contact rate	2,5A (24V)-0,3A (250V)
		Protection	IP 67
	Proximity NAMUR	Voltage	5-36 V DC
		Current	0-200 mA
		Protection	IP67
		Voltage	8 V DC
Proximity NAMUR		Protection	IP 67
		Safety Class	EEx ia IIC T6

Pneumatic or Electropneumatic Positioner	Input signal	3-15 psi or 4-20 mA
	Protection	IP 65

SPECIAL VERSIONS FOR SWIMMING POOL APPLICATION AVAILABLE ON REQUEST

FK/CP




Pneumatically actuated Butterfly Valve

Body material

PVC-U

Disc material

PVC-U

Stem material

Zinc plated steel

Seals materials

EPDM

FPM

(NBR on req.)

Working functions

DA Double acting

NC Normally Closed

NO Normally Open

d [mm]		50	63	75	90	110	140	160	225
DN [mm]		40	50	65	80	100	125	150	200
SIZE [inch]		1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"

for materials and sizes available see manual valve FE

Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700	30500
PN [bar]	PVC-U	16	16	10	10	10	10	10	10
16 bar = 232 psi									
10 bar = 150 psi									
PN [bar] Lug version	all mater.	6	6	6	6	6	4	4	4
Control pressure [bar]							standard 6		
NAMUR Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]	DA	0,45	0,45	0,45	0,61	0,98	0,98	1,8	2,8
	NC-NO	0,45	0,61	0,61	0,98	1,8	2,8	2,8	8

Accessories

Position Indicator

Pilot solenoid valve 3-5/2 ways	Voltages AC	230-110-24 V
	Voltages DC	24 V
	Protection	IP 65

Limit Switches box	Electromechanical	Contact rate	2,5A (24V)-0,3A (250V)
		Protection	IP 67
	Proximity PNP (3 wires)	Voltage	5-36 V DC
		Current	0-200 mA
		Protection	IP67
	Proximity NAMUR	Voltage	8 V DC
		Protection	IP 67
		Safety Class	EEx ia IIC T6

Pneumatic or Electropneumatic Positioner	Input signal	3-15 psi or 4-20 mA
	Protection	IP 65

SPECIAL VERSIONS FOR SWIMMING POOL APPLICATION AVAILABLE ON REQUEST




**Pneumatically
actuated Diaphragm
Valve**
Piston type actuator

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE
(NBR on req.)

O-Ring materials

EPDM
FPM

Working functions

DA Double acting
NC Normally Closed
NO Normally Open

d [mm]	20	25	32	40	50	63
DN [mm]	15	20	25	32	40	50
SIZE [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

for materials and sizes available see manual valve VM

Kv100 [l/min]	93	136	175	300	416	766
PN [bar]	all mater.	10	10	10	10	10
10 bar = 150 psi						
6 bar = 87 psi						
Control pressure [bar]	NC	max 6 (see graph)				
	NO-DA	max 5 (see graph)				
Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]	NC	0,19	0,19	0,19	0,31	0,31
	NO-DA	0,17	0,17	0,17	0,33	0,79

Accessories

Position Indicator

Stroke limiter

Stroke limiter with optical position indicator

Stroke limiter with optical position indicator and emergency manual override

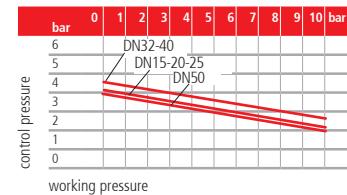
Pilot solenoid valve 3/2 ways (Direct or gang mounting)	Voltages AC	230-110-48-24 V
	Voltages DC	110-24-12 V
	Protection	IP 65

Limit Switches box	Electromechanical	Contact rate	250 V-5 A
		Protection	IP 65
	Proximity PNP (3 wires)	Voltage	10-30 V DC
		Current	0-100 mA
		Protection	box: IP65
	Proximity NAMUR (2 wires)	Voltage	8 V DC
		Protection	box: IP 65

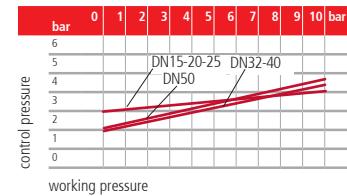
Electropneumatic Positioner	Input signal	4-20 mA
	Protection	IP 65

OTHER SPECIAL: SEE OFFICIAL CATALOGUE

MK/NC



MK/NO-DA



MK/CP



**Pneumatically
actuated Diaphragm
Valve Normally Closed
Diaphragm type actuator**

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE
NBR

O-Ring materials

EPDM
FPM

d [mm]		20	25	32	40	50	63	75	90	110
DN [mm]		15	20	25	32	40	50	65	80	100
SIZE [inch]		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"

for materials and sizes available see manual valve VM

Kv100 [l/min]		93	136	175	300	416	766	1300	2000	2700
PN [bar]	all mater.	10	10	10	10	10	10	6	6	6
10 bar = 150 psi 6 bar = 87 psi										
Control pressure [bar]								max 6 (see graph)		
Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]		0,16	0,16	0,16	0,36	0,36	1,15	2,10	2,10	

Accessories

Position Indicator

Stroke limiter

Stroke limiter with optical position indicator

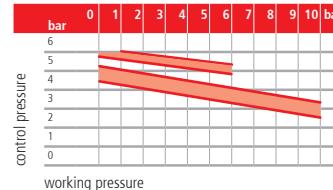
Stroke limiter with optical position indicator and emergency manual override

Pilot solenoid valve 3/2 ways (Direct or gang mounting)	Voltages AC	230-110-48-24 V
	Voltages DC	110-24-12 V
	Protection	IP 65

Limit Switches box	Electromechanical	Contact rate	250 V-5 A
		Protection	IP 65

Proximity PNP (3 wires)	Voltage	10-30 V DC
	Current	0-100 mA
	Protection	box: IP65
Proximity NAMUR (2 wires)	Voltage	8 V DC
	Protection	box: IP 65

Electropneumatic Positioner	Input signal	4-20 mA
	Protection	IP 65



OTHER SPECIAL: SEE OFFICIAL CATALOGUE



VM/NO



**Pneumatically
actuated Diaphragm
Valve Normally Open
Diaphragm type actuator**

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE
NBR

O-Ring materials

EPDM
FPM

Functions

Up to DN50 the NO is also suitable for DA
For DN65-80-100 DA version on request

d [mm]	20	25	32	40	50	63	75	90	110
DN [mm]	15	20	25	32	40	50	65	80	100
SIZE [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"

for materials and sizes available see manual valve VM

Kv100 [l/min]	93	136	175	300	416	766	1300	2000	2700
PN [bar]	all mater.	10	10	10	10	10	10	6	6
10 bar = 150 psi									
6 bar = 87 psi									
Control pressure [bar]						max 6 (see graph)			
Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]		0,13	0,13	0,13	0,28	0,28	0,50	2,20	2,20

Accessories

Position Indicator

Stroke limiter

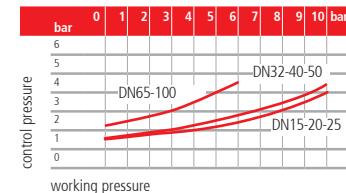
Stroke limiter with optical position indicator

Stroke limiter with optical position indicator and emergency manual override

Pilot solenoid valve	Voltages AC	230-110-48-24 V
3/2 ways <i>(Direct or gang mounting)</i>	Voltages DC	110-24-12 V
	Protection	IP 65

Limit Switches box	Electromechanical	Contact rate	250 V-5 A
		Protection	IP 65
Proximity PNP (3 wires)		Voltage	10-30 V DC
		Current	0-100 mA
		Protection	box: IP65
Proximity NAMUR (2 wires)		Voltage	8 V DC
		Protection	box: IP 65

Electropneumatic Positioner	Input signal	4-20 mA
	Protection	IP 65



OTHER SPECIAL: SEE OFFICIAL CATALOGUE



DM/NO



**Pneumatically
actuated Diaphragm
Valve Normally Open
Direct acting actuator**

Body materials

PVC-U
PP-H

Diaphragm materials

EPDM
FPM

O-Ring materials

EPDM
FPM

d [mm]	20	25	32	40	50	63
DN [mm]	15	20	25	32	40	50
SIZE [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Kv100 [l/min]	93	136	175	300	416	766
PN [bar] 8 bar = 116 psi	all mater.	2-8	2-8	2-8	2-8	2-8
Control pressure [bar]				max 10 (see graph)		
Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"

Accessories

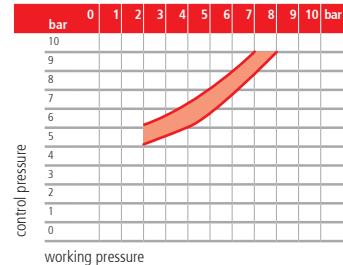
Position Indicator

Stroke limiter with optical position indicator

Pilot solenoid valve	Voltages AC	230-110-48-24 V
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3/2 ways (Direct or gang mounting)	Voltages DC	110-24-12 V
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	Protection	IP 65
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CM/CP



**Compact
Pneumatically
actuated Diaphragm
Valve
*Piston type actuator***

Body materials

PVC-U
PP-H
PVDF
PVC-C

Diaphragm materials

EPDM
FPM
PTFE
NBR

O-Ring materials

EPDM
FPM

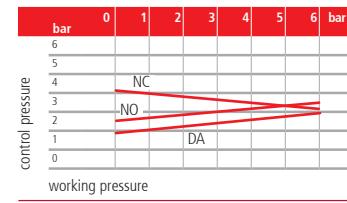
Working functions

DA Double acting
NC Normally Closed
NO Normally Open

d [mm]	16	20
DN [mm]	12	15
SIZE [inch]	3/8"	1/2"

for materials and sizes available see manual valve CM

Kv100 [l/min]	47	58
PN [bar] 6 bar = 87 psi	all mater.	6
Control pressure [bar]	4 - 7 (see graph)	
Air Connections	BSP	1/8" 1/8"
Actuator capacity [NL]	0,027	0,027



working pressure

CM/CP



**Pneumatically
actuated Angle Seat
Valve**
Piston type actuator

Body material

PVC-U

Seals material

EPDM

FPM on request

Working functions

DA *Double acting*

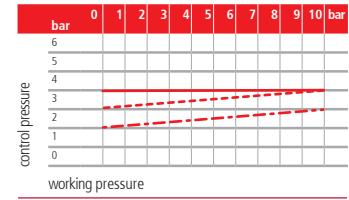
NC *Normally Closed*

NO *Normally Open*

d [mm]	16	20	25	32	40	50	63
DN [mm]	12	15	20	25	32	40	50
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

for materials and sizes available see manual valve VV

Kv100 [l/min]	53	74	136	156	250	330	570
PN [bar]	10	10	10	10	10	10	10
10 bar = 150 psi							
Control pressure [bar]	max 4 (see graph)						
Air Connections	BSP	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Actuator capacity [NL]		0,15	0,15	0,15	0,15	0,15	0,15



working pressure



VKD/CE



Electrically actuated 2-Way Ball Valve

Body materials

PVC-U
PP-H
PVDF
PVC-C

Ball seats material

PTFE

Seals material

EPDM
FPM

d [mm]	16	20	25	32	40	50	63	75	90	110
DN [mm]	10	15	20	25	32	40	50	65	80	100
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"

for materials and sizes available see manual valve VKD

PN [bar]	PVC-U	16	16	16	16	16	10*	16	16	16
16 bar = 232 psi	PP-H	10	10	10	10	10	10	10	10	10
10 bar = 150 psi	PVDF	16	16	16	16	16	10*	16	16	16
	PVC-C	16	16	16	16	16	10*	16	16	16
Kv100 [l/min]		80	200	385	770	1100	1750	3400	5250	7100
* on request PN16										

Actuator data	DN 10-63			DN 65-80			DN 100		
	DC	AC/DC	AC	DC	AC/DC	AC	DC	AC/DC	AC
Voltage [V]	12	24	90÷240	12	24	90÷240	12	24	90÷240
Power [W]	15	15	15	45	45	45	45	45	45
Max Working time [s]	11	12	13	12	13	15	22	22	25
Duty rating CEI34	50%	30%	30%	50%	30%	30%	50%	30%	30%
Protection	IP66	IP65	IP65	IP66	IP65	IP65	IP66	IP65	IP65

Temperature	-10°C/+55°C
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Electrical connections	Power supply	DIN 43650 3P+T
	Limit switches	gland ISO M20

Special versions on request	Different working times
	IP66 or IP67
	Duty 50%
	ATEX II 2 GD EEx d IIB T6

Actuator standard equipment	Emergency manual override
	Visual position indicator
	2 auxiliary and adjustable limit switches
	Torque limiter
	Heating resistor (for IP66-IP67)
	Positioner 4-20 mA or 0-10 V

Actuator accessories	Fail safe security device (NC or NO)
	Heating resistor (for IP65)
	Feed back potentiometer 0.1 - 1 - 5 - 10 Kohm
	4-20 mA position transmitter
	2 additional limit switches

VKD/CE



Electrically actuated 3-Way Ball Valve

Body materials

PVC-U
PP-H
PVC-C

Ball seats material

PTFE

Seals materials

EPDM
FPM

Functions

L-bore (standard)
T-bore (on request)

d [mm]	16	20	25	32	40	50	63
DN [mm]	10	15	20	25	32	40	50
SIZE [inch]	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

for materials and sizes available see manual valve TKD

PN [bar]	PVC-U	16	16	16	16	16	10
16 bar = 232 psi	PP-H	10	10	10	10	10	10
10 bar = 150 psi	PVDF	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.
	PVC-C	16	16	16	16	16	10
Kv100 [l/min] with L bore		48	73	150	265	475	620
							1220

Note: o.r.= on request (not in standard production).

Actuator data	DN 10-63		
	DC	AC/DC	AC
Voltage [V]	12	24	90÷240
Power [W]	15	15	15
Max Working time [s]	11	12	13
Duty rating CEI34	50%	30%	30%
Protection	IP66	IP65	IP65

Temperature	-10°C/+55°C	
Electrical connections	Power supply	DIN 43650 3P+T
	Limit switches	gland ISO M20
Different working times		
IP66 or IP67		
Duty 50%		
ATEX II 2 GD EEx d IIB T6		
Emergency manual override		
Visual position indicator		
2 auxiliary and adjustable limit switches		
Torque limiter		
Heating resistor (for IP66-IP67)		
Positioner 4-20 mA or 0-10 V		
Fail safe security device (NC or NO)		
Heating resistor (for IP65)		
Feed back potentiometer 0.1 - 1 - 5 - 10 Kohm		
4-20 mA position transmitter		
2 additional limit switches		
3rd position 180°		



FK/CE



Electrically actuated Butterfly Valve

Body material

PP-GR

Disc materials

PVC-U

PP-H

PVDF

PVC-C

ABS

Stem material

Stainless steel 420
(S.S 316 on req.)

Seals materials

EPDM

FPM

(NBR on req.)

d [mm]	50	63	75	90	110	140	160	225	280	315	
DN [mm]	40	50	65	80	100	125	150	200	250	300	
SIZE [inch]	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	

for materials and sizes available see manual valve FK

PN [bar]	PVC-U	16	16	10	10	10	10	10	10	8	
16 bar = 232 psi	PP-H	10	10	10	10	10	10	10	10	8	
10 bar = 150 psi	PVDF	16	16	10	10	10	10	10	10	8	
8 bar = 116 psi	PVC-C	16	16	10	10	10	10	10	10	8	
ABS	ABS	16	16	10	10	10	10	10	10	8	
PN [bar] Lug version	all mater.	10	10	10	10	10	10	10	10	n.a.	n.a.
Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700	30500	53200	81600
Actuator data		DN 40-50-65			DN 80-100			DN 125-150		DN 200	
Voltage [V]	DC	AC/DC	AC	DC	AC/CD	AC	AC/DC	AC	AC/DC	AC	AC/DC
Power [W]	12	24	90÷240	12	24	90÷240	24	90÷240	24	90÷240	24*
Max Working time [s]	15	15	15	45	45	45	85	85	85	85	-
Duty rating CEI34	12	12	13	12	13	15	30	30	50	50	38
Protection	50%	30%	30%	50%	30%	30%	50%	50%	50%	50%	50%
	IP66	IP65	IP65	IP66	IP65	IP65	IP67	IP67	IP67	IP67	IP67

* on request

Temperature	-10°C/+55°C		
Electrical connections	(DN40-100)	Power supply	DIN 43650 3P+T
	(DN125-300)	Limit switches	gland ISO M20
Different working times			
IP66 or IP67			
Duty 50%			
ATEX II 2 GD EEx d IIB T6			
Actuator standard equipment	Emergency manual override		
	Visual position indicator		
	2 auxiliary and adjustable limit switches		
	Torque limiter		
Actuator accessories	Heating resistor for (IP66-IP67)		
	Positioner 4-20 mA or 0-10 V		
	Fail safe security device (NC or NO)		
	Heating resistor (for IP65)		
	Feed back potentiometer 0.1 - 1 - 5 - 10 Kohm		
	4-20 mA position transmitter		
	2 additional limit switches		

FK/CE




Electrically actuated Butterfly Valve

Body material

PVC-U

Disc material

PVC-U

Stem material

Zinc plated steel

Seals materials

EPDM

FPM

(NBR on req.)

d [mm]	50	63	75	90	110	140	160	225
DN [mm]	40	50	65	80	100	125	150	200
SIZE [inch]	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"

for materials and sizes available see manual valve FE

PN [bar]	PVC-U	16	16	10	10	10	10	10
16 bar = 232 psi								
10 bar = 150 psi								
PN [bar] Lug version		6	6	6	6	4	4	4
Kv100 [l/min]		1000	1285	1700	3550	5900	9850	18700
								30500

Actuator data	DN 40-50-65			DN 80-100			DN 125-150		DN 200	
	DC	AC/DC	AC	DC	AC/CD	AC	AC/DC	AC	AC/DC	AC
Voltage [V]	12	24	90÷240	12	24	90÷240	24	90÷240	24	90÷240
Power [W]	15	15	15	45	45	45	85	85	85	85
Max Working time [s]	12	12	13	12	13	15	30	30	50	50
Duty rating CEI34	50%	30%	30%	50%	30%	30%	50%	50%	50%	50%
Protection	IP66	IP65	IP65	IP66	IP65	IP65	IP67	IP67	IP67	IP67

Temperature	-10°C/+55°C		
Electrical connections	(DN40-100)	Power supply	DIN 43650 3P+T
	(DN125-300)	Limit switches	gland ISO M20
Special versions on request	(DN125-300)	Power supply	gland ISO M20
		Limit switches	gland ISO M20
	Different working times		
	IP66 or IP67		
Actuator standard equipment	Duty 50%		
	ATEX II 2 GD EEx d IIB T6		
	Emergency manual override		
	Visual position indicator		
Actuator accessories	2 auxiliary and adjustable limit switches		
	Torque limiter		
	Heating resistor for (IP66-IP67)		
	Positioner 4-20 mA or 0-10 V		
	Fail safe security device (NC or NO)		
	Heating resistor (for IP65)		
	Feed back potentiometer 0.1 - 1 - 5 - 10 Kohm		
	4-20 mA position transmitter		
	2 additional limit switches		

S12/S22



2-Way Solenoid Valve

Body material

PVC-U

PVC-C on request (not in standard production)

Seals materials

EPDM

FPM

	S12			S22					
d [mm]	10-16	12-16	12-16		16-20	16-20	20		
DN [mm]	4	6	8		8	10	15		
R [inch]	3/8"	3/8"	3/8"	Type	3/8"-1/2"	3/8"-1/2"	1/2"		
ISO-DIN metric series plain female ends	PVC-U	●	●	●	S12IV	●	●	●	S22IV
BSP series threaded female ends	PVC-U	●	●	●	S12FV	●	●	●	S22FV
BS socket welding	PVC-U	●	●	●	S12LV	●	●	●	S22LV
ASTM series plain female ends	PVC-U	●	●	●	S12AV	●	●	●	S22AV
NPT series threaded female ends	PVC-U	●	●	●	S12NV	●	●	●	S22NV
PN [bar]	PVC-U	6	4	2		6	4	2	
6 bar = 87 psi									
4 bar = 58 psi									
2 bar = 29 psi									
Kv100 [l/min]		6,7	12,1	15,3		27,5	34,2	58,3	
Voltages	a.c. (*)	230 - 110 - 24	50/60 Hz	other voltages					
	d.c.	24	other voltages						
Power consumption		10 W				20 W			
Duty		100% ED							
Protection		IP65							

(*) the coils are RAC (rectifier alternate current): use the plug supplied with the valve, that includes the rectifier.

Note: o.r.= on request (not in standard production).

S13/S23



3/2-Way Solenoid Valve

Body material

PVC-U

Seals materials

EPDM

FPM

Functions

DT (diverter)

MX (mixer)

NC (normally closed)

NO (normally open)

	S13				S23							
d [mm]	10-16	12-16	12-16		16-20	16-20	20					
DN [mm]	4	6	8		8	10	15					
R [inch]	3/8"	3/8"	3/8"	Type	3/8"-1/2"	3/8"-1/2"	1/2"	Type				
ISO-DIN metric series plain female ends	PVC-U	●	●	●	S13IV	●	●	S23IV				
BSP series threaded female ends	PVC-U	●	●	●	S13FV	●	●	S23FV				
BS socket welding	PVC-U	●	●	●	S13LV	●	●	S23LV				
ASTM series plain female ends	PVC-U	●	●	●	S13AV	●	●	S23AV				
NPT series threaded female ends	PVC-U	●	●	●	S13NV	●	●	S23NV				
PN [bar]	NC	2.5	1.2	0.6		2.5	1.5	0.5				
	MX	1	0.5	0.4		1.5	1	0.5				
	NO	2.5	1.2	0.6		3	1.5	1				
	DT	4	2.5	1.5		6	4	2				
Kv100 [l/min]	NC	6.2	9.6	12.8		16.3	30	56.6				
	MX	6.3	10.8	13.3		17.5	30.8	57.5				
	NO	6.4	10	13		15.8	29	55.8				
	DT	6.8	11.6	13.8		20	32.5	60.3				
Voltages	a.c. (*)	230 - 110 - 24 50/60 Hz other voltages										
	d.c.	24 other voltages										
Power consumption		10 W			20 W							
Duty		100% ED										
Protection		IP65										

(*) the coils are RAC (rectifier alternate current): use the plug supplied with the valve, that includes the rectifier.
Note: o.r.= on request (not in standard production).

STANDARD REFERENCES (dimensions)

	Solvent Welding		Socket Fusion		Threaded couplings	Flanged couplings	Butterfly Valves overall dimensions
		Relevant Pipe Standard		Relevant Pipe Standard			
PVC-U	ISO 727	ISO 161/1			UNI ISO 228/1	DIN 2501	(all materials) DIN 2501 ISO DIS 9624 UNI 2223 BS 10 table D/E ASA B16.5 class 150 JIS 2212 K10 (except for DN 200/DN300)
	UNI EN 1452	UNI EN 1452			DIN 2999	ISO 2084	
	DIN 8063	DIN 8062			BS 21	UNI 7442/75	
	NF T54-028	NF T54-016			ASTM 2464/76	DIN 8063	
	BS 4346/1	BS 3506, BS 3505			ANSI B1.20.1	ASA ANSI B.16.5 150	
	ASTM 2467/6a	ASTM D 1785/76					JIS 2212 K5 (except for DN 50)
PP-H			DIN 16962	DIN 8077	UNI ISO 228/1	ISO 2084	
				EN ISO 15494	DIN 2999	UNI EN 1452	
				UNI 8318	BS 21	DIN 8063	
						ASA ANSI B.16.5 150	
PVDF		ISO 10931	ISO 10931/2		DIN 2501		
					ISO 2084		
					UNI 7442/75		
					DIN 8063		
					ASA ANSI B.16.5 150		
PVC-C	ISO 727	EN ISO 15493			ASTM 2464/76	ISO 2084	
	EN ISO 15493	DIN 8079/8080			ANSI B1.20.1	UNI 7442/75	
	ASTM F439	ASTM D 1785/76				DIN 8063	
						ASA ANSI B.16.5 150	



Note



Note



FORMATURA
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Since 1954 FIP produces injection moulded valves and fittings in thermoplastic materials for pressure pipeline systems thus becoming nowadays the largest European valves manufacturer.

FIP is a company of the Aliaxis Group: a worldwide industrial holding gathering together a series of companies manufacturing and marketing plastic plumbing

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