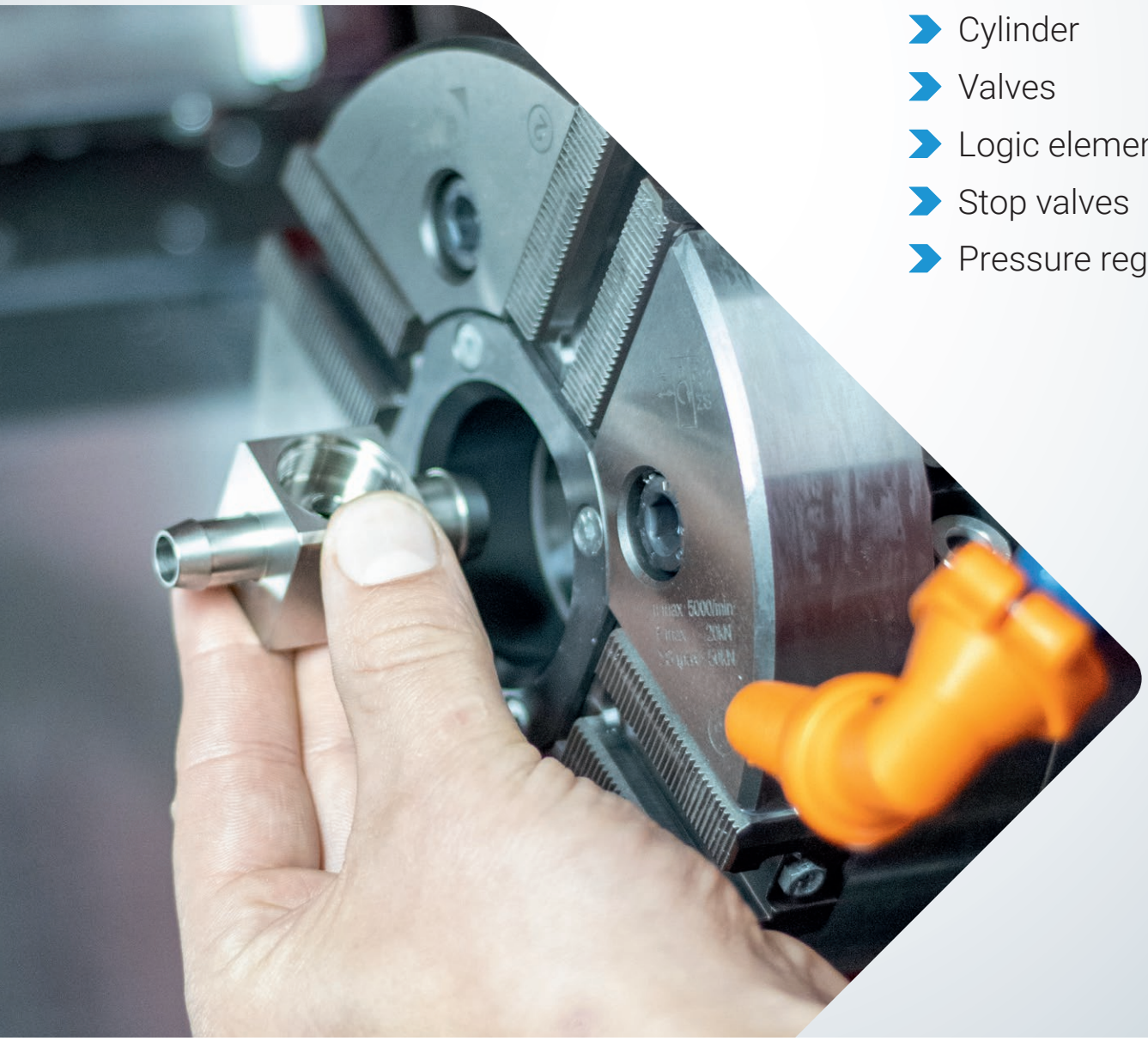
sfs-fluidsysteme.com

PNEUMATIC SOLUTIONS

Product catalogue

Version: 10/2021



- Cylinder
- Valves
- Logic elements
- Stop valves
- Pressure regulators

Family business in second generation

We are a Tyrolean family business in the second generation specialized in pneumatic special solutions. Otto Staudacher founded the company in 1992. Today, his sons Michael, Franz and Hansjörg work together on the successful future of the company.

In the beginning, there was our founder Otto Staudacher's unconditional passion for technology. After two decades as an extremely successful distributor of technical components, he fulfilled his heart's desire in 1992: by founding SFS-Fluidsysteme, he developed special pneumatic solutions for the first time. The three-man operation of yesteryear has since developed into an internationally active family business with around 50 employees. Only one thing has remained the same: the passion with which we reliably find special solutions for the problems and needs of our customers.

Michael, Franz and Hansjörg Staudacher

Milestones of our success

1992

Foundation in Zirl-Dirschenbach

1999

Sales expanded with the establishment of SFS-Fluidsysteme GmbH in Esslingen

2000

First own CNC machine

2003

SFS becomes an apprenticeship company

2007

Extension in Polling

2011

Spin-off of solenoid valve division

2014

Change of managing director and award

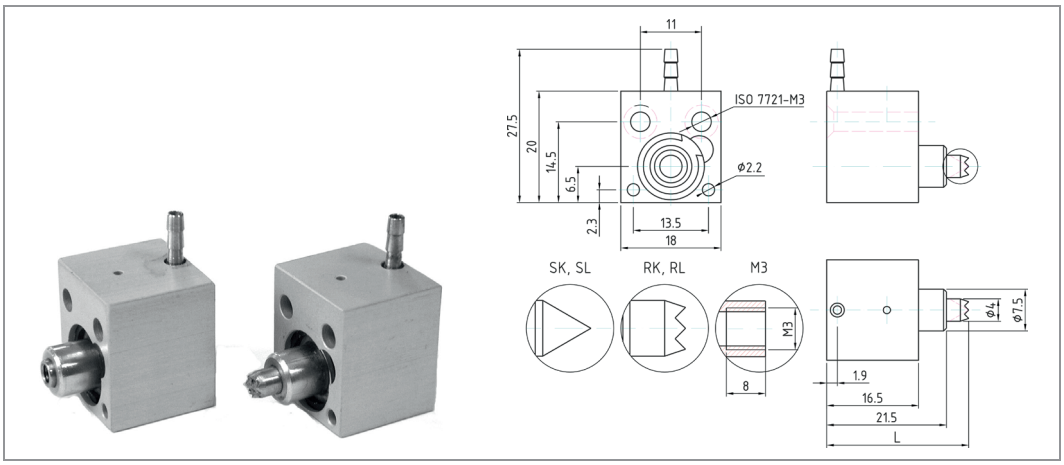
2021

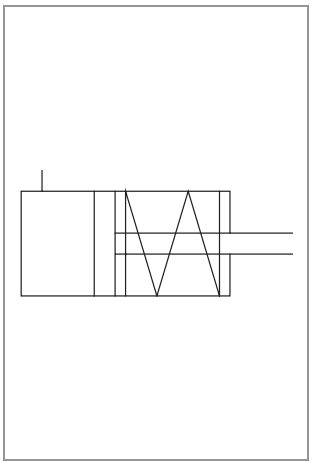
Family business in second generation

Contents

Compact cylinder 12mm diameter

type AA12S-04-.. , single acting





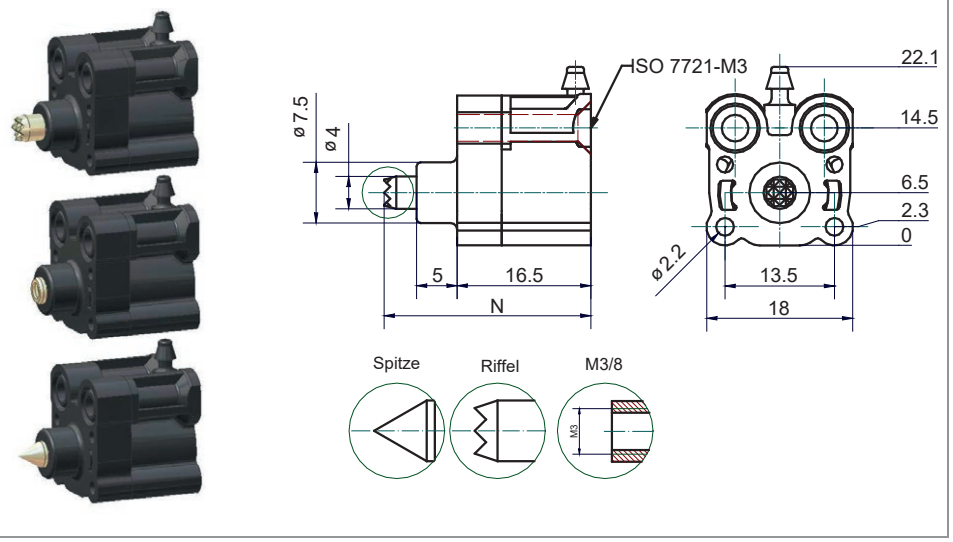
SPECIFICATION				
general				
construction	compact cylinder, pneumatic, single acting, spring return, end plate secured by C-clip			
bore	12 mm piston diameter			
stroke lengths	4 mm			
operation	pneumatic, with spring return			
connections	hose tails for PA or PU 2 mm ID			
ambient temperature	-20°C to +80°C			
fluid temperature	-20°C to +80°C			
materials	body:	anodised aluminium	spring:	steel
	piston:	brass (Ms58)	seals:	perbunan (NBR)
	cover:	brass (Ms58)	hose tail:	brass (Ms58)
	piston rod:	stainless steel		
cushioning	none			
mounting	fixing holes in body			
installation position	in any position			
magnetic sensors	none			
pneumatic				
air	filtered, lubricated or non lubricated			
pressure range	3 to 10 bar			
attainable force	38 N at 6 bar			
spring Return force	F1= 13 N, F2= 25 N (friction not taken into account)			

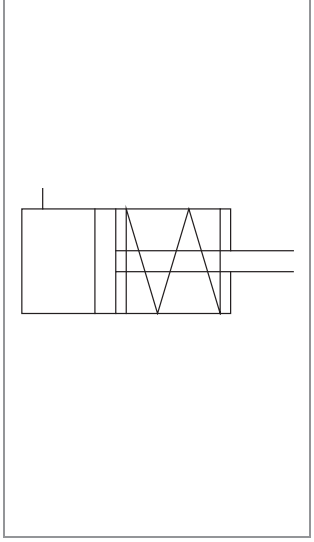
type	article-nr.	piston rod	L	weight (approx. g)
AA12S-04-SK	**90 000 197**	pointed short	21.5	19
AA12S-04-SL	**90 000 198**	pointed long	25.5	19
AA12S-04-RK	**90 000 195**	serrated short	21.5	19
AA12S-04-RL	**90 000 196**	serrated long	25.5	19
AA12S-04-M3	**90 000 199**	M3 female thread	22.5	19

NB: It is not possible to handle heavy external objects with this product type

Compact cylinder 12mm diameter

technopolymer
type AA12S-04-.. , single acting





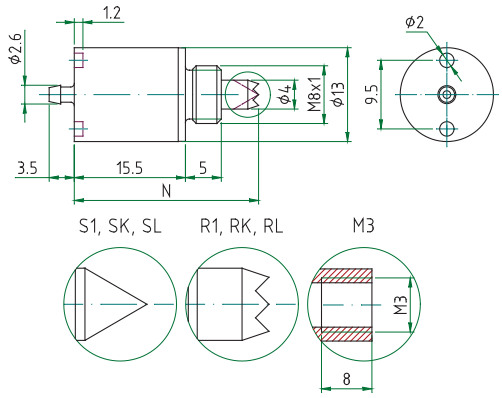
SPECIFICATION				
general				
construction	compact cylinder, single acting, spring return			
bore	12mm piston diameter			
stroke lengths	4mm			
operation	pneumatic			
return	mechanical spring			
connections	hose tails for PA or PU with 2mm ID			
ambient temperature	-20°C to +60°C			
fluid temperature	-20°C to +60°C			
materials	body: thermoplastic cover: thermoplastic piston: brass (Ms58)		piston rod: stainless steel springs: steel seals: perbunan (NBR)	
cushioning	none			
mounting	fixing holes in body			
installation position	as required			
magnetic sensor	non			
pneumatic				
air	filtered, lubricated or non lubricated			
pressure range	3 to 8 bar			
attainable force	39 N at 6 bar			
spring return force	F1= 12 N, F2= 24 N (friction not taken into account)			

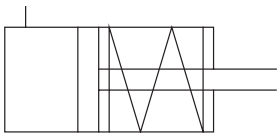
type	article-nr.	piston rod	N	weight (approx. g)
AA12S-04-SK	**90 000 380**	pointed short	21.5	8
AA12S-04-SL	**90 000 381**	pointed long	25.5	9
AA12S-04-RK	**90 000 378**	serrated short	21.5	8
AA12S-04-RL	**90 000 379**	serrated long	25.5	9
AA12S-04-M3	**90 000 382**	M3 female thread	22.5	8

NB: It is not possible to handle heavy external objects with this product type

Round cylinder

type AB12S-03-.. , single acting





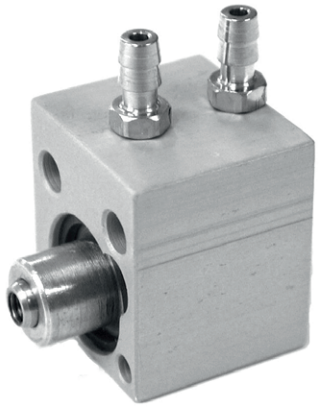
SPECIFICATION			
general			
construction	compact cylinder, pneumatic, single acting, spring return, press-fit end plate		
bore	12 mm piston diameter		
stroke length	3 mm		
operation	pneumatic, with spring return		
connections	hose tails for polyamide or polyurethane tubes, inside diameter 1.5 - 2 mm		
ambient temperature	-20°C to +80°C		
fluid temperature	-20°C to +80°C		
materials	body: brass (Ms58) piston: brass (Ms58) end plate: brass (Ms58)	piston rod: stainless steel spring: steel seals: perbunan (NBR)	
cushioning	none		
mounting	neck mounting thread M8x1		
installation position	as required		
magnetic sensors	none		
pneumatic			
air	filtered, lubricated or non lubricated		
pressure range	3 to 8 bar		
attainable force	43 N at 6 bar		
spring Return force	F1= 10N, F2= 20N (friction not taken into account)		

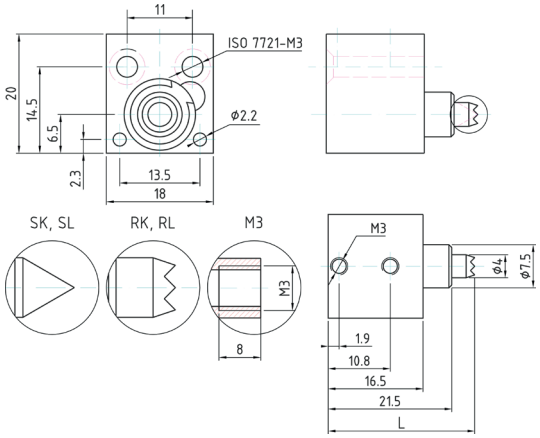
type	article-nr.	piston rod	N	weight (approx. g)
AB12S-03-S1	**90 000 209**	pointed S1	20.5	13
AB12S-03-SK	**90 000 282**	pointed short	21.7	13
AB12S-03-SL	**90 000 283**	pointed long	25.7	13
AB12S-03-R1	**90 000 210**	serrated R1	20.5	13
AB12S-03-RK	**90 000 284**	serrated short	21.7	13
AB12S-03-RL	**90 000 285**	serrated long	25.7	13
AB12S-03-M3	**90 000 286**	M3 female thread	22.7	13

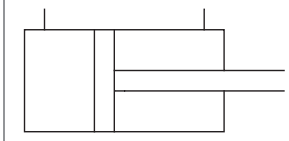
NB: It is not possible to handle heavy external objects with this product type

Compact cylinder 10mm diameter

type AC10D-04 .., double acting







SPECIFICATION				
general				
construction	compact cylinder, pneumatic, double acting, end plate secured by C-clip			
bore	10 mm piston diameter			
stroke length	4 mm			
operation	pneumatic, both directions			
connections	M3 female (optional hose tail to be ordered separately)			
ambient temperature	-20°C to +80°C			
fluid temperature	-20°C to +80°C			
materials	body:	anodised aluminium	piston rod:	stainless steel
	cover:	brass (Ms58)	seals:	NBR or polyurethane
	hose tails:	nickel-plated brass		
cushioning	none			
mounting	fixing holes in body			
installation position	in any position			
magnetic sensors	none			
pneumatic				
air	filtered, lubricated or non lubricated			
pressure range	1 to 10 bar			
attainable force	at 6 bar: 42 N +, 34 N -			

type	article-nr.	piston rod	L	weight (approx. g)
AC10D-04-SK	**90 000 278**	pointed short	21.5	20
AC10D-04-SL	**90 000 279**	pointed long	25.5	20
AC10D-04-RK	**90 000 280**	serrated short	21.5	20
AC10D-04-RL	**90 000 281**	serrated long	25.5	20
AC10D-04-M3	**90 000 273**	M3 female thread	22.5	20

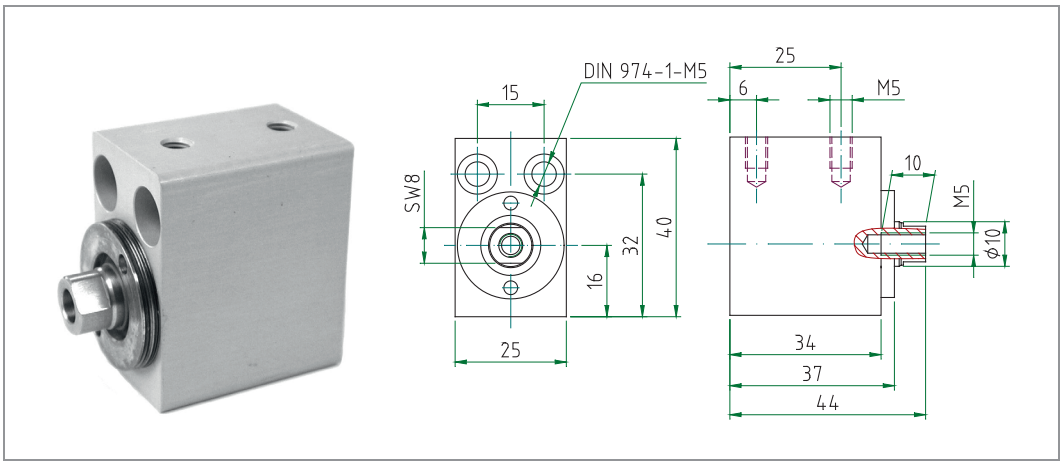
Accessories: hose tails M3 OD threads for **PA or PU**

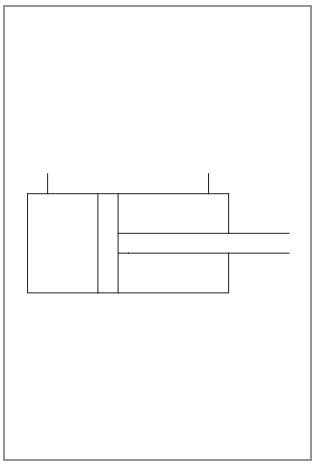
hose tail for tube inside diameter	article-nr.		washer	article-nr.
1.5 bis 2mm	**10 000 931**		M3	**10 000 934**
2.5 bis 3mm	**10 000 932**			

NB: It is not possible to handle heavy external objects with this product type

Compact cylinder 20mm diameter

type AD20D-.. , double acting





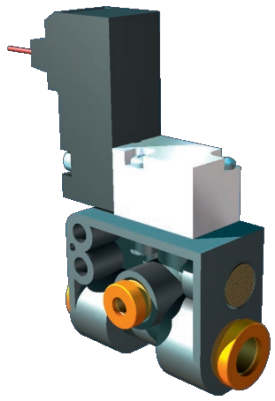
SPECIFICATION	
general	
construction	compact cylinder, pneumatic, double acting, with threaded end plate
bore	20 mm piston diameter
stroke length	5.5 or 10 mm ±0.05 mm
operation	pneumatic, with pneumatic return
port threads	M5 female
ambient temperature	-20°C to +80°C
fluid temperature	-20°C to +80°C
materials	body: anodised aluminium cover: brass (Ms58) piston rod: stainless steel seals: NBR or polyurethane
cushioning	none
mounting	fixing holes in body or piston rod.
installation position	as required
magnetic sensors	none
pneumatic	
air	filtered, lubricated or non lubricated
pressure range	1 to 8 bar
attainable force	at 6bar: 180 N +, 135 N -

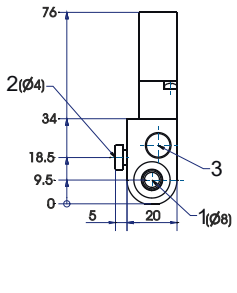
type	article-nr.	stroke	weight (approx. g)
AD20D-05.5	**90 000 136**	5.5	120
AD20D-10	**90 000 137**	10	120

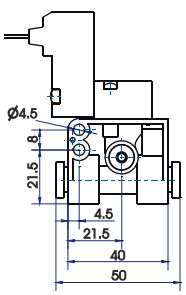
NB: It is not possible to handle heavy external objects with this product type

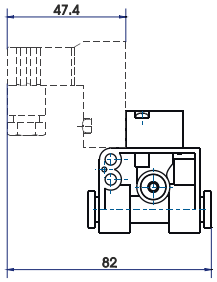
3/2-way solenoid valve with integrated quick exhaust valve

type V01

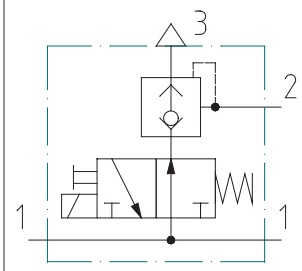








Art. Nr. 90 000 339 Art. Nr. 90 000 359 .

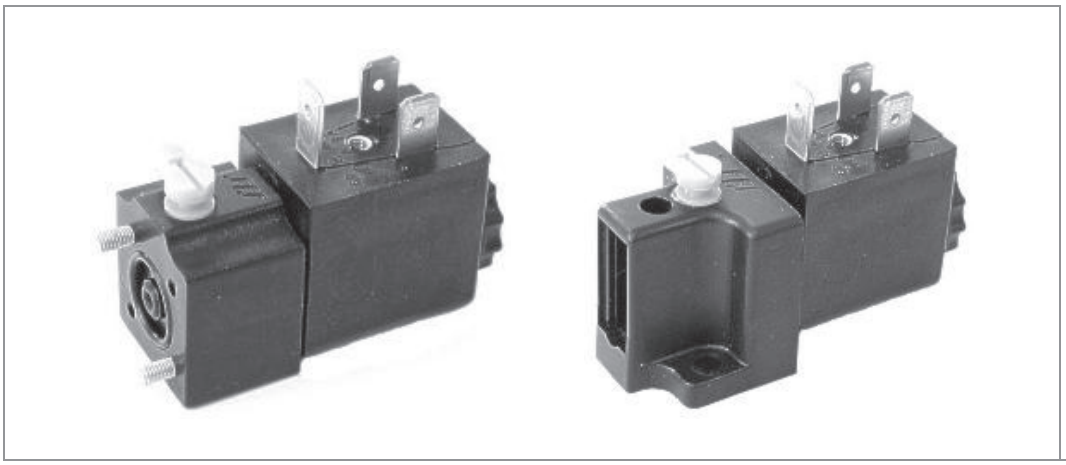


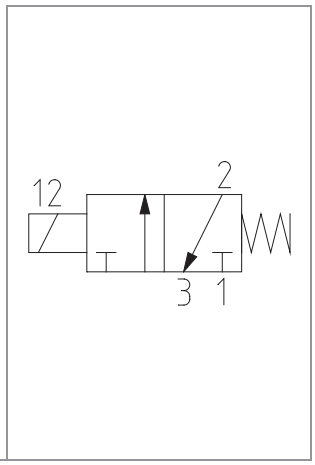
SPECIFICATION	
general	
type	3/2-way poppet valve, normal open, with integrated quick exhaust valve
operator	solenoid or bistable manual override
ports	inlet ports push in raccord diameter 8 mm (2 pieces), outlet port push in raccord diameter 4 mm, exhaust through silencer plate
ambient temperature	-20 °C to +60 °C
fluid temperature	-20 °C to +60 °C
material	valve body POM, seals NBR, internal parts POM and stainless steel, silencer plate bronze
mounting	2 holes
installation	in any position
electrical Data	
standard voltage	24V DC
special voltage	12V DC, 24V AC, 48V AC, 110V AC
voltage tolerance	± 10 %
power consumption	2,5 Watt
duty cycle	100 % ED
protection class	IP 54
electrical connection	flying leads, length 300 mm
pneumatic	
function	3/2 NO
fluid	filtered, lubricated or non lubricated air
operating pressure	0 – 7 bar
nominal flow	QNn: P -> A: 16 Nl/min, A -> R: 125 Nl/min (p1 = 6 bar, Δp = 1 bar)
nominal diameter	DN 0.8 mm
switch time	10 – 20 ms
max. operating Frequency	300 / min
special functions	valve instead 3/2 NO in 3/2 NC

type	article-nr.	function	weight (approx. g)
V01	**90 000 339**	3/2 NO	80
	90 000 359	3/2 NO	85

Direct operated 3/2-way solenoid valve flanged

type V10C-.





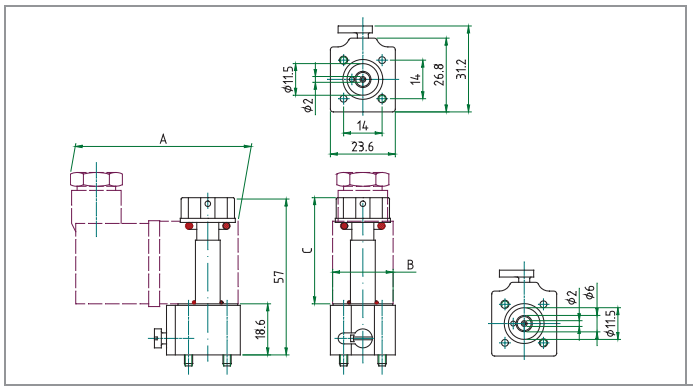
SPECIFICATION	
general	
type	poppet valve
operator	solenoid or by manual override, manual override is equipped with a monostable function (push) and a bistable function (push and turn). The manual override element may be cut off, after which it can be operated by screwdriver only.
Port	flanged
ambient Temperature	-20°C to +50°C
fluid Temperature	-20°C to +50°C
material	body, manual override: POM seals: perbunan (NBR) internal parts: brass, stainless steel coil: encapsulated (polyamide)
mounting	with screws to subbase
installation	in any position
unit of supply	type V10CA-...: valve, flange O-rings 2.31x1.5, 11.5x1.5, 2 screws DIN 965-M3x23,5 type V10CB-...: valve, 2 screws DIN 7985-M4x10
electrical Data	
standard voltage	24V DC, 24V AC (50-60Hz), 110V AC (50-60Hz), 230V AC (50-60Hz),
special voltage	12 - 250V AC, 6 - 110V DC
voltage tolerance	± 10%
power consumption	AC: inrush 6VA, holdpower 4.3VA DC: 2.6W (warm), 3W (cold)
duty cycle	100% , continuous operation
protection class	IP65 with correctly mounted connector according to DIN 40050
electrical connection	connector PG9 (see optionals)

Direct operated 3/2-way solenoid valve flanged

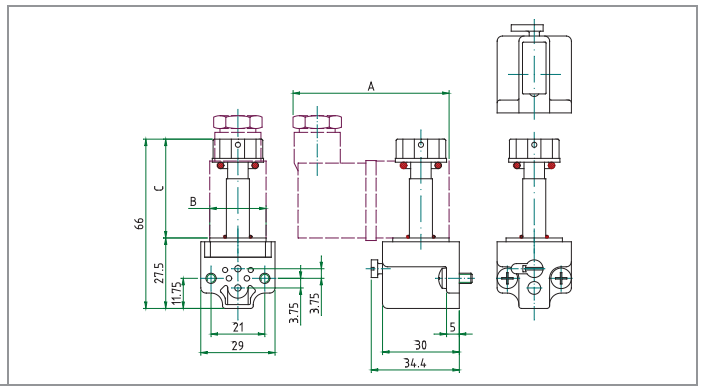
type V10C-.

pneumatic	
function	3/2 NC
fluid	filtered, lubricated or non lubricated compressed air
operating pressure	0 to 10bar
nominal flow	QNn (p_1=6bar, Δp=1bar) =43Nl/min from P(1) to A(2),
nominal diameter	DN 1.2mm (body), DN 1.2mm (exhaust)
switch time	10 to 20ms
cycles per minute	max. 1200/min
specials	valves are also available with explosion proofed coils EExmIIT5 und T6, and with intrinsic safety version EExiaIICT6
special equipment	seals in FPM, function 2/2-NC, 2/2-NO, 3/2-NO
optionals	subbases for concentric and CNOMO mounting surfaces

TYP V10CA - B1212 - . D concentric mounting surface



TYP V10CB - B1212 - . D CNOMO - mounting surface



General information: pressure range 0 to 10bar, function 3/2 NC, Nominal diameter 1.2mm, exhaust orifice 1.2mm

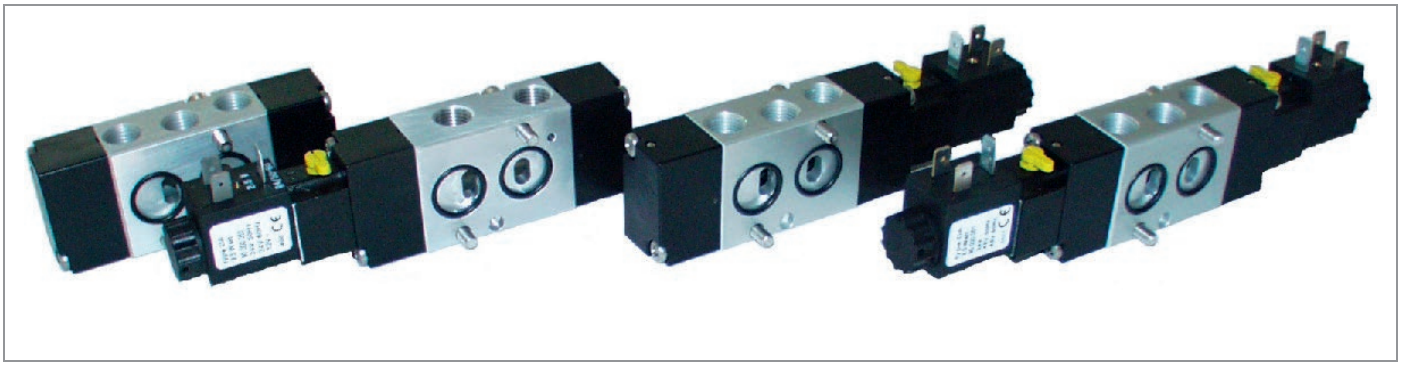
type	article-nr.	mounting surface	coil type	manual override	flow regulation P→A	A (mm)	B (mm)	C (mm)	weight without coil (approx. g)
V10CA-B1212-MD	**90 000 063**	concentric	DA, DB DC, DD DE, DW DX, DY	yes	no	59	22	39	35
V10CA-B1212-OD	**90 000 276**	concentric		no	no	59	22	39	35
V10CB-B1212-MD	**90 000 079**	CNOMO		yes	no	59	22	39	40
V10CB-B1212-OD	**90 000 078**	CNOMO		no	no	59	22	39	40
V10CB-B1212-BD	**90 000 080**	CNOMO		yes	yes	59	22	39	50
V10CB-B1212-AD	**90 000 081**	CNOMO		no	yes	59	22	39	50

Models for intrinsic safety coil EEXiaIICT6

type	article-nr.	mounting surface	coil type	manual override	flow regulation P→A	A (mm)	B (mm)	C (mm)	weight without coil (approx. g)
V10CA-B1212-MD-0001	**90 000 085**	concentric	DZ	yes	no	67	30	39	35
V10CB-B1212-MD-0001	**90 000 277**	CNOMO	DZ	yes	no	67	30	39	50

3/2, 5/2 und 5/3-way valve according to NAMUR standard

type V46 ..., solenoid or pneumatic operated

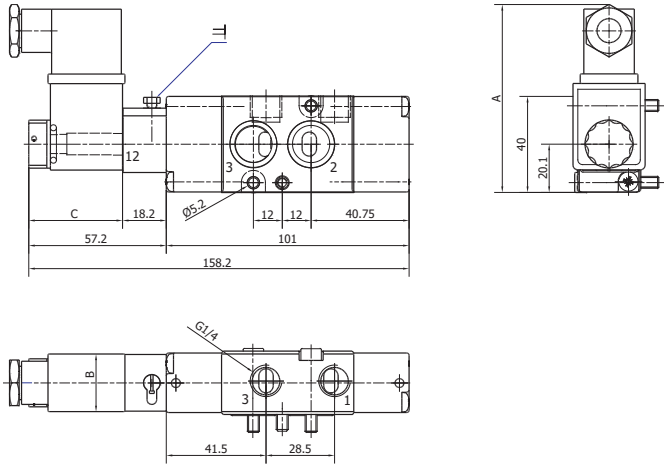


SPECIFICATION	
general	
type of construction	spool valve
operator	solenoid or pneumatic operated or by manual override. Manual override is equipped with a monostable function (push) and a bistable function (push and turn). The manual override element may be cut off, after which it can be operated by screwdriver only.
return	pneumatic spring, mechanical spring, solenoid operated, pneumatic operated
ports	ISO 228 /1-G 1/4
ambient temperature	-20°C to +60°C (EX-system -15°C to +50°C)
fluid temperature	-20°C to +80°C (EX-system -15°C to +50°C)
material	body and internal parts: aluminium, technical anodised, brass end caps reinforced: plastic seals: perbunan (NBR) and polyurethane (AU)
mounting	2 holes according NAMUR standard and according VDI / VDE 3845
installation	in any position
unit of supply	valve without coil, including 2 O-rings 16x2 mm, 1 set screw DIN 913-45H M5x10 mm, and 2 fixing screws M5x30
electrical data	
standard voltage	24V=, 24V/50, 110V/50 and 230V/50
special voltage	6V= to 110V=, and 12V to 254V, 50Hz or 60Hz
voltage tolerance	±10% for standard
power consumption	standard coil: AC inrush 6 VA, hold power 4,3 VA (warm) DC 2,6W (warm), 3W (cold)
duty cycle	100% ED (DB), continuous operation
protection class	IP65 with correctly mounted connector according to DIN 40050
electrical connection	connector Pg 9 (see optionals)
pneumatic	
function	3/2-way NC (V46C2), 5/2-way (V46K2), 5/3-NC (V46L2), 5/3-exhausted (V46M2) and 5/3-pressurized (V46N2)
fluid	filtered (50 micron), lubricated or non lubricated compressed air, also dried to a dew point of –20 °C
operating pressure	p_{min} see table, p_{max}=10bar
nominal flow	type V46-K2: QNn=1060Nl/min, type V46C2: 1-2 QNn=1060 Nl/min, 2-3 QNn=1060 Nl/min, V46L2: QNn=850 Nl/min, V46M2: QNn=850 Nl/min, V46N2: QNn=850 Nl/min
nominal diameter	DN 7mm
switch time	approx. 40ms
special equipment	explosion protected coil (different implementations)
optional extras	see page 7 and 8

3/2, 5/2 und 5/3-way valve according to NAMUR standard

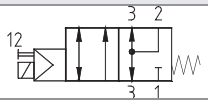
type V46 ..., solenoid or pneumatic operated

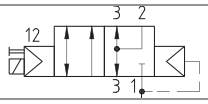
NAMUR-valve 3/2 way solenoid operated



Measures A, B, C please find on sheet of the coils type D.

Coils and connectors must be ordered separately.

type *	symbol	article-nr.	pressure (bar)	weight (approx. g)
V46C2-15		**90 000 502**	2.5 - 10	210
solenoid operated, return by mechanical spring				

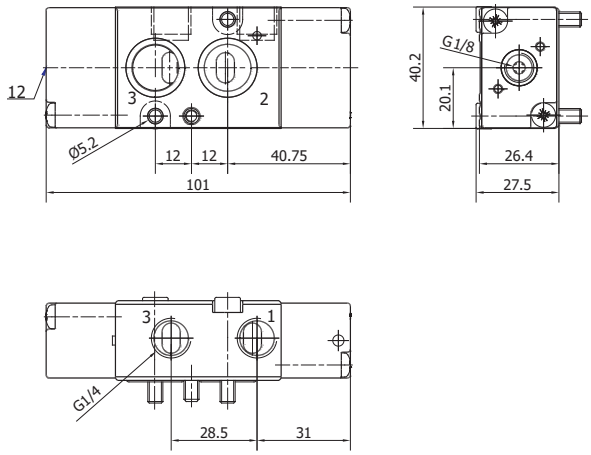
V46C2-16		**90 000 500**	1.8 - 10	210
standard valve, solenoid operated, return by pneumatic spring				

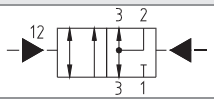
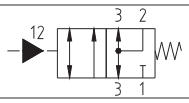
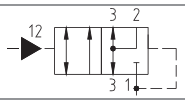
*** bold printed valves are preferred types**

3/2, 5/2 und 5/3-way valve according to NAMUR standard

type V46 ..., solenoid or pneumatic operated

NAMUR-valve 3/2 way pneumatic operated



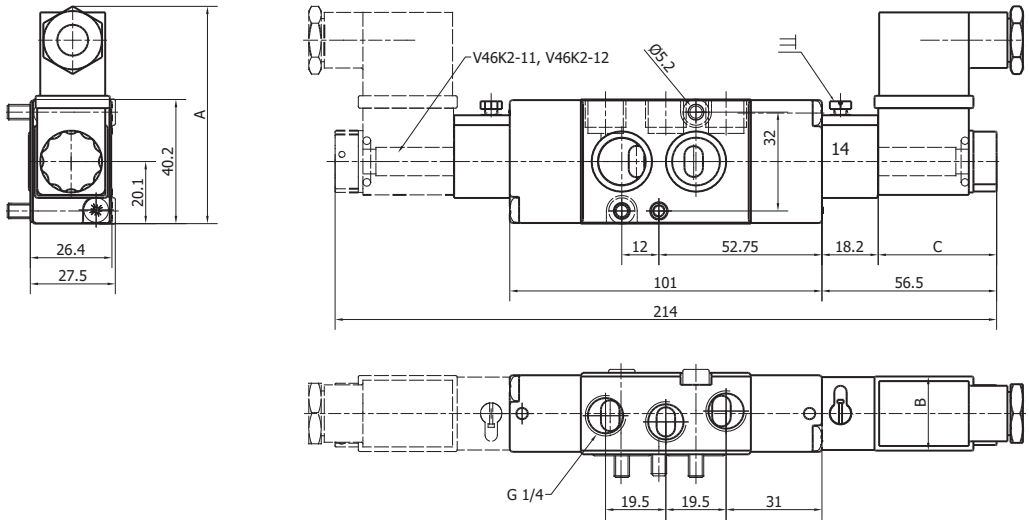
type *	symbol	article-nr.	pressure (bar)	weight (approx. g)
V46C2-33		**90 000 507**	1.0 - 10	200
bistable valve, pneumatic operated, return by air				
V46C2-35		**90 000 508**	2.5 - 10	200
pneumatic operated, return by mechanical spring				
V46C2-36		**90 000 501**	1.8 - 10	200
pneumatic operated, return by internal air				

*** bold printed valves are preferred types**

3/2, 5/2 und 5/3-way valve according to NAMUR standard

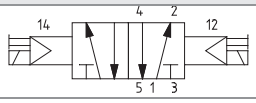
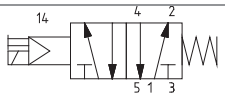
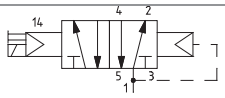
type V46 ..., solenoid or pneumatic operated

NAMUR-valve 5/2 way solenoid operated



Measures A, B, C please find on sheet of the coils type D.

Coils and connectors must be ordered separately.

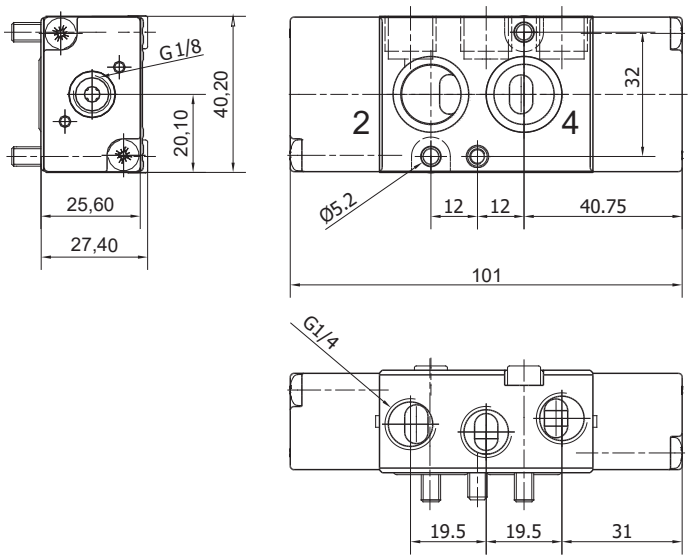
type *	symbol	article-nr.	pressure (bar)	weight (approx. g)
V46K2-11		**90 000 490**	1.0 - 10	230
bistable valve, both directions solenoid operated				
V46K2-15		**90 000 491**	2.5 - 10	210
monostable valve, solenoid operated, return mechanical spring				
V46K2-16		**90 000 489**	1.8 - 10	210
monostable valve, solenoid operated, return pneumatic spring				

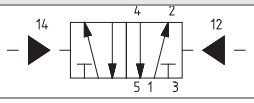
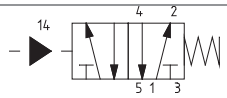
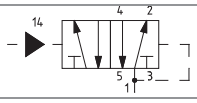
*** bold printed valves are preferred types**

3/2, 5/2 und 5/3-way valve according to NAMUR standard

type V46 ..., solenoid or pneumatic operated

NAMUR-valve 5/2 way pneumatic operated



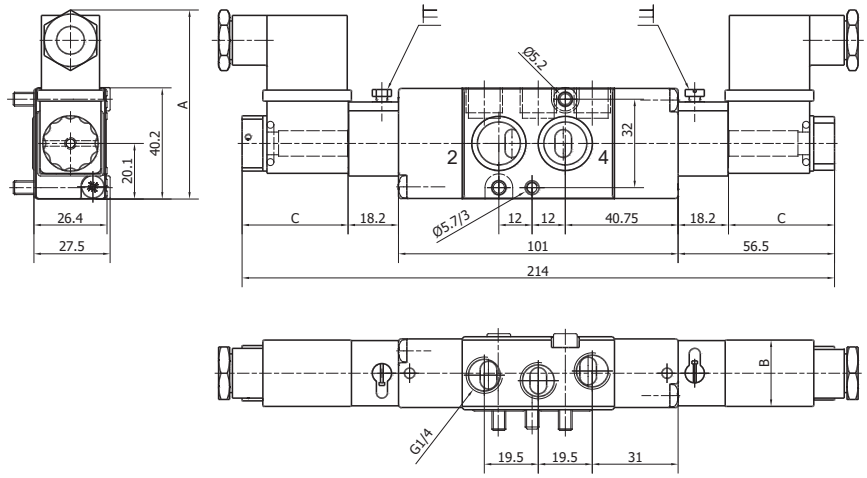
type *	symbol	article-nr.	pressure (bar)	weight (approx. g)
V46K2-33		**90 000 493**	1.0 - 10	200
bistable valve, pneumatic operated, return by air				
V46K2-35		**90 000 492**	2.5 - 10	200
pneumatic operated, return mechanical spring				
V46K2-36		**90 000 503**	1.8 - 10	200
pneumatic operated, return pneumatic spring				

*** bold printed valves are preferred types**

3/2, 5/2 und 5/3-way valve according to NAMUR standard

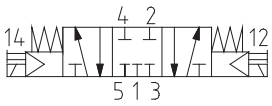
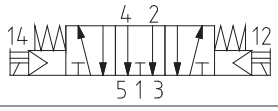
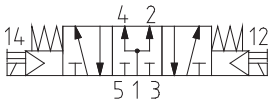
type V46 ..., solenoid or pneumatic operated

NAMUR-valve 5/3 way solenoid operated



Measures A, B, C please find on sheet of the coils type D.

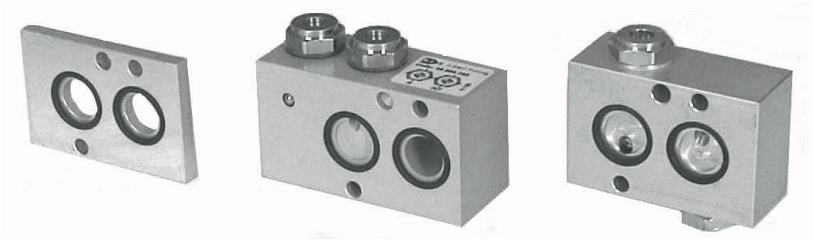
Coils and connectors must be ordered separately

type	symbol	article-nr.	pressure (bar)	weight (approx. g)
V46L2-11		**90 000 494**	2.5 - 8	290
central position, NC				
V46M2-11		**90 000 495**	2.5 - 8	290
central position exhausted				
V46N2-11		**90 000 496**	2.5 - 8	290
central position pressurized				

3/2, 5/2 und 5/3-way valve according to NAMUR standard

type V46 ..., solenoid or pneumatic operated

Adapter plates and adapter plates for flow control



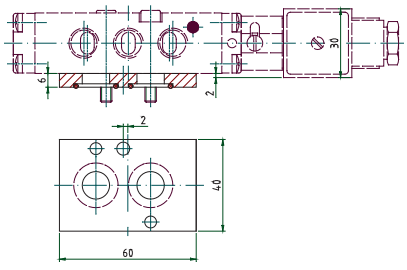
Adapter plates for use with more than 22mm wide coils

dimensions	article-nr.	supply item	weight (approx. g)
40x60x6	**90 000 062**	1 pc. adapter plate, 2 pcs. O-rings 16x2, 1 pc. set screw DIN 913-45H, M5x16, 2 pcs. screws M5x35	45

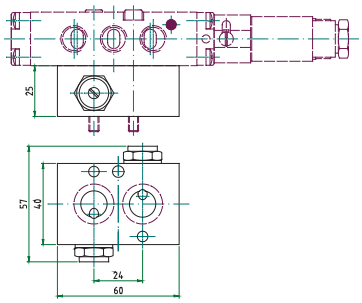
Adapter plates for flow control

dimensions	article-nr.	function	supply item	weight (approx. g)
40x60x25	**90 000 066**	3/2 way and 5/2 way flow control closing	1 pc. adapter plate with 1 pc. flow control valve, 1 pc. hollow screw, 2 pcs. O-rings 16x2, 1 pc. set screw DIN 913-45H M5x35, 2 pcs. fixing screws M5x55	210
40x60x25	**90 000 065**	3/2 way flow control opening	1 pc. adapter plate with 1 pc. flow control valve, 1 pc. hollow screw, 2 pcs. O-rings 16x2, 1 pc. set screw DIN 913-45H, M5x35, 2 pcs. fixing screw M5x55	210
40x75x30	**90 000 268**	3/2 way flow control both directions	1 pc. adapter plate with 2 pcs. flow control valve, 2 pcs. O-rings 16x2, 1 pc. set screw DIN 913-45H M5x10, 2 pcs. fixing screws M5x60	250
40x60x25	**90 000 064**	5/2 way flow control both directions	1 pc. adapter plate 2 pcs. flow control valve, 2 pcs. O-rings 16x2, 1 pc. set screw DIN 913-45H, M5x35, 2 pcs. fixing screws M5x55	210

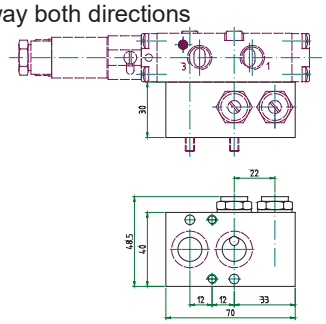
Adapter plates for use with width more than 22mm



Adapter plate for flow control 5/2 way or 3/2 way



Adapter plate for flow control 3/2 way both directions



Accessories

type	article-nr.	description	thread	weight (approx. g)
	10 000 293	silencer	M5	2
	10 000 471	silencer	G1/4 A	35
	10 000 472	flow control silencer	G1/4 A	50

3/2, 5/2 und 5/3-way valve according to NAMUR standard

type V46 ..., solenoid or pneumatic operated

Coils* (Type D) and Connectors*

type *	article-nr.	voltage	usalbe also for	A	B	C	weight (approx. g)
DA24-	**90 000 051**	24V = (DC)	48V/50, 48V/60	59	22	39	50
DA2450	**90 000 052**	24V/50 (AC)	24V/60; 12V = (DC)	59	22	39	50
DA11050	**90 000 100**	110V/50 (AC)	110V/60, 115V/60, 127V/50, 48V = (DC)	59	22	39	50
DA23050	**90 000 053**	230V/50 (AC)	230V/60, 220V/50, 220V/60 110V = (DC)	59	22	39	50

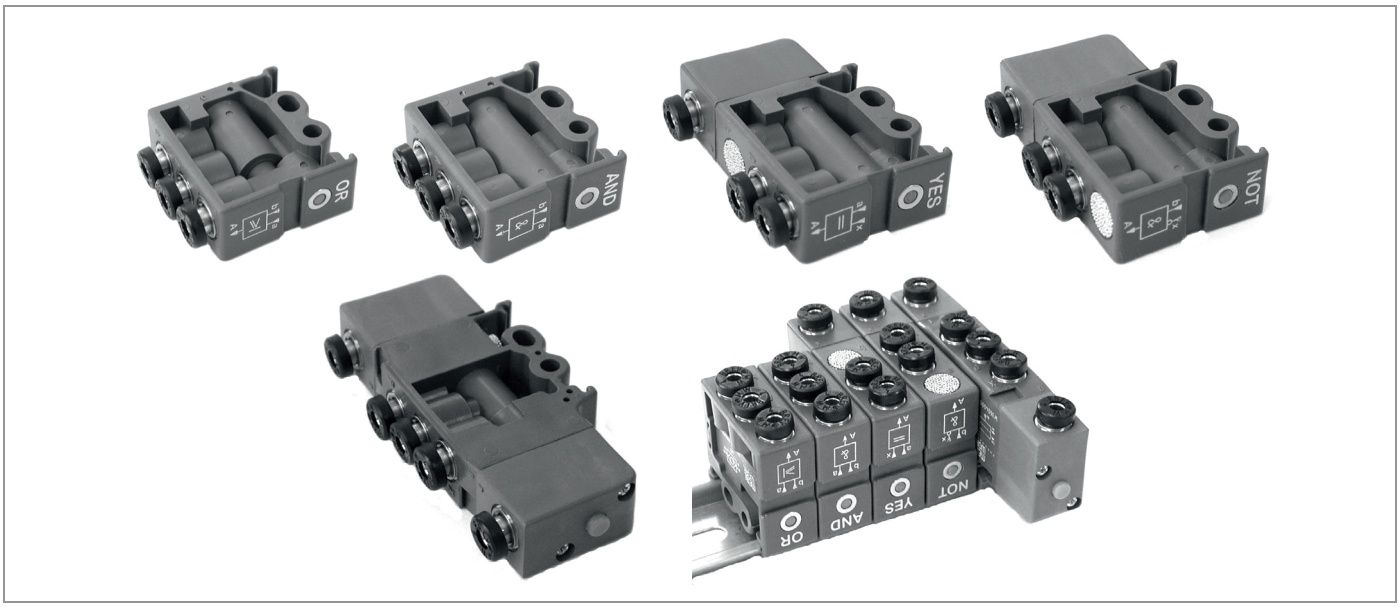
Connectors*

type *	article-nr.	voltage	protective system	LED	usalbe or coil	weight (approx. g)
22mm Standard	**90 000 058**	0 - 250V, AC, DC	none	no	DA	20
22mm 24V VDR, LED	**90 000 059**	24V AC und DC	VDR-resistor	yes	DA	20
22mm 230V VDR, LED	**90 000 060**	230V, AC	VDR-resistor	yes	DA	20
30mm Standard	**90 000 061**	0 - 250V, AC, DC	none	No	DZ	25

* Coils and connectors must be ordered separately. Please indicate the voltage.
More available coil-types on request. (EX-coils, special voltage etc.)

Logic elements

type OR, AND, NOT, YES, MEMORY

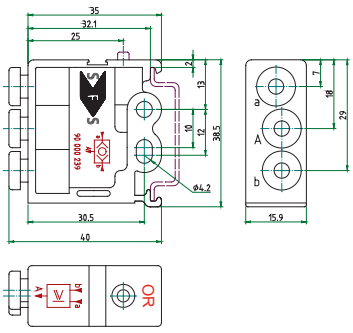


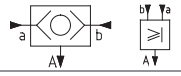
SPECIFICATION	
general	
construction	MEMORY spool valve, OR, AND, YES, NOT poppet valve with pressure indicator
operation	pneumatic
return	pneumatic, mechanical spring
connections	push in for PA-, PE-, PU-tubes, 4 mm outside diameter
ambient temperature	-10°C to 50°C
fluid temperature	-10°C to 50°C
humidity	0 - 100% rH
materials	body: POM raccords (push in connectors): brass silencer: sinterbronce internal parts: POM, aluminium anodised, brass seals: perbunan (NBR) springs: stainless steel
mounting	pick up to Ω-rail according to DIN 50022 or 2 holes for M4 screws
installation position	as required
pneumatic	
function	OR, AND, YES, NOT, MEMORY
fluid	filtered, lubricated or non lubricated air
pressure range	OR, AND: 1.5 to 8 bar YES, NOT: 0 to 8 bar MEMORY: 0 to 8 bar NOT: pressure drop point 0.4 bar at 6 bar working pressure
control pressure range	YES: 1 to 8 bar (minimal 3 bar at 8 bar working pressure) NOT: 1 to 8 bar MEMORY: 1.5 to 8 bar
nominal flow	QNn: 100Nl/min (p_1=6bar, Δp=1bar)
nominal diameter	DN 2.7 mm
frequency	≤10/sec
special solutions	seals of FPM or NBR

Logic elements

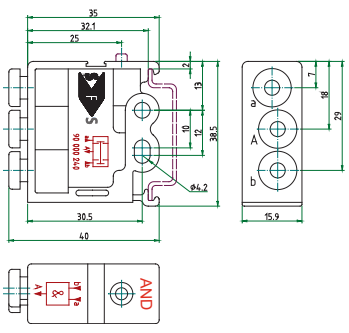
type OR, AND, NOT, YES, MEMORY

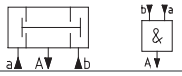
OR - element



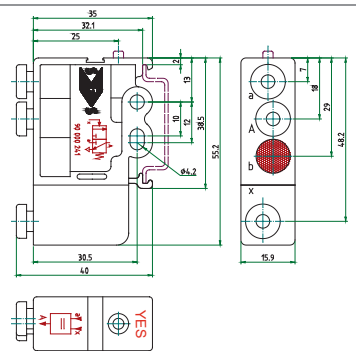
type	symbol	article-nr.	weight
OR - A		**90 000 239**	approx. 25g

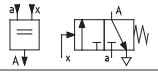
AND - element



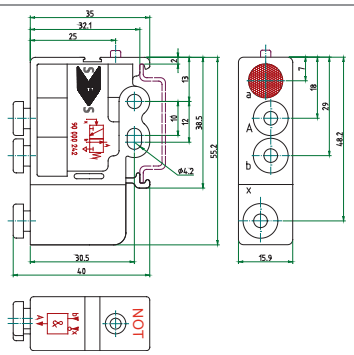
type	symbol	article-nr.	weight
AND - A		**90 000 240**	approx. 25g

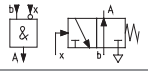
YES- element



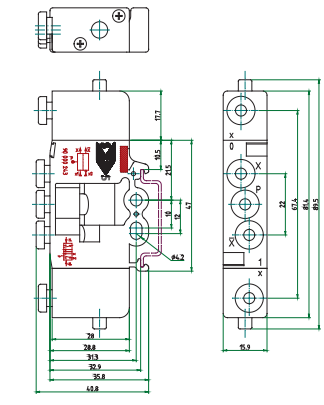
type	symbol	article-nr.	weight
YES - A		**90 000 241**	approx. 37g

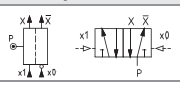
NOT - element



type	symbol	article-nr.	weight
NOT - A		**90 000 242**	approx. 37g

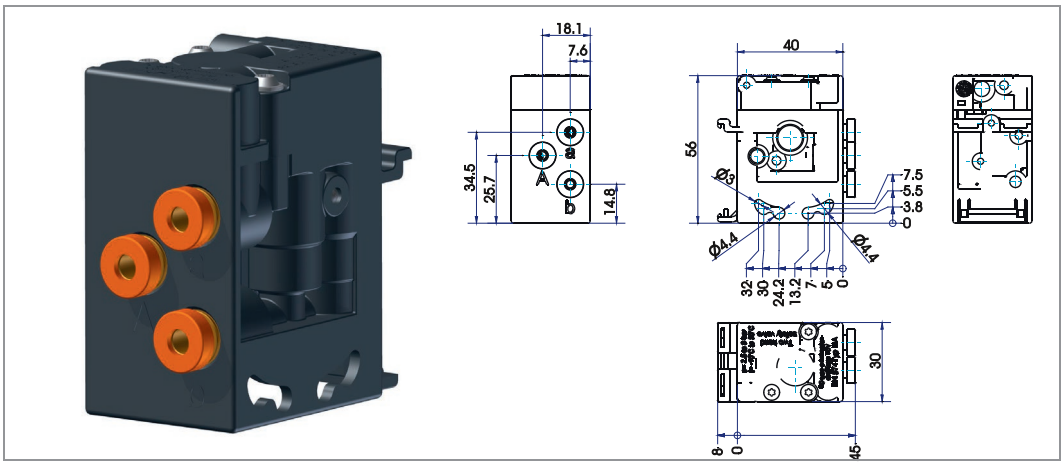
MEMORY - element

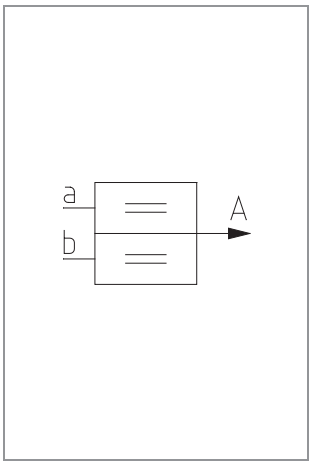


type	symbol	article-nr.	weight
MEMORY - A		**90 000 243**	approx. 52g

Two-hand-safety valve, EN 574 type IIIA

type ZH-A





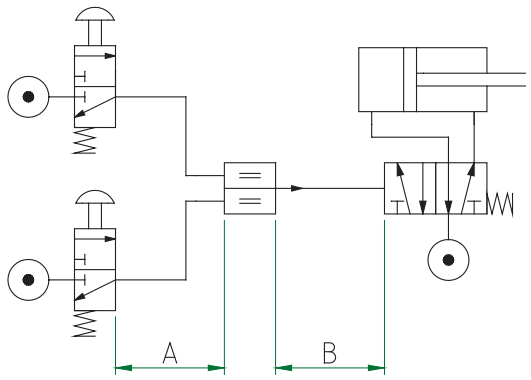
SPECIFICATION	
general	
construction	poppet valve
operator	pneumatic
return	mechanical spring
connection	push-in connection for calibrated plastic tubes with 4 mm outside diameter
ambient temperature	-10°C to +50°C
fluid temperature	-10°C to +50°C
humidity	0 – 100% r.H.
material	body: POM inner parts: brass, POM seals: perbunan (NBR) springs: stainless steel
mounting	mounting on a Ω-rail according to EN 60715 or with M4 screws
installation position	any position
items supplied	valve incl. mounting and service instruction
pneumatic	
fluid	dried, filtered (50 µm), non lubricated , compressed air
operating pressure	2.5 – 8 bar
nominal flow	QNn = 85 Nl/min (p_1 = 6bar, Δp = 1 bar)
nominal diameter	NW (DN) 2.7mm
max. signal delay	0.4 seconds
response time	see attached chart
minimal nominal diameter of operating device	DN 2.5mm
EC-type-examination-certificate TÜV	TÜV-A-MHF/MG/13-05260 A

type	article-nr.	description	weight (approx. g)
ZH-A	**90 000 682**	two-hand-safety valve according EN ISO 13851 Typ IIIA	85

Two-hand-safety valve, EN 574 type IIIA

type ZH-A

Installation of two-hand-safety valve



cable length A	cable length B	tube dimension
max. 10m	max. 10m	Ø2.7 x 4mm

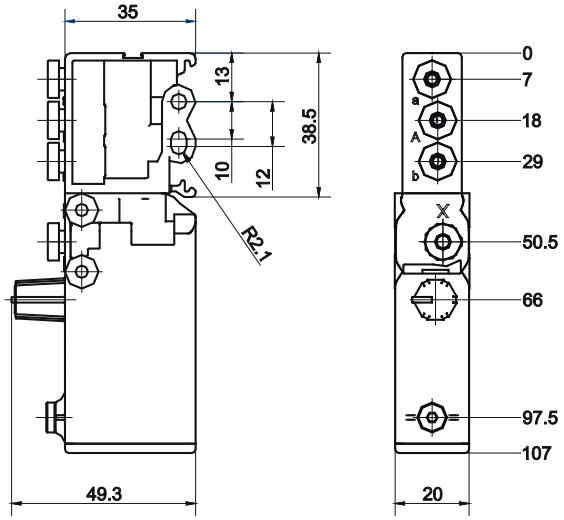
Reaction time (p=6bar)

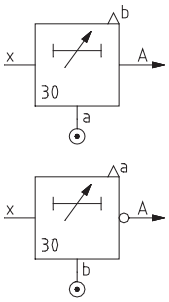
cable length A	cable length B	average reaction time
1m	1m	0.05s
1m	5m	0.20s
1m	10m	0.60s
5m	1m	0.10s
10m	1m	0.50s

Response time (definition): The time interval between the release of at least one of the control elements and the end of the output signal.
In the test procedure the end of the output signal was established by means of a pressure switch positioned at the end of the tube B. The operation of a control valve and associated cylinder (as shown in the schematic diagram) was not taken into account. The control valve in question had a 2.5mm orifice. The response time is dependent on the relevant configuration and must be determined accordingly in individual cases.

Time delay valve

type ZV-A, 3/2 NC or 3/2 NO





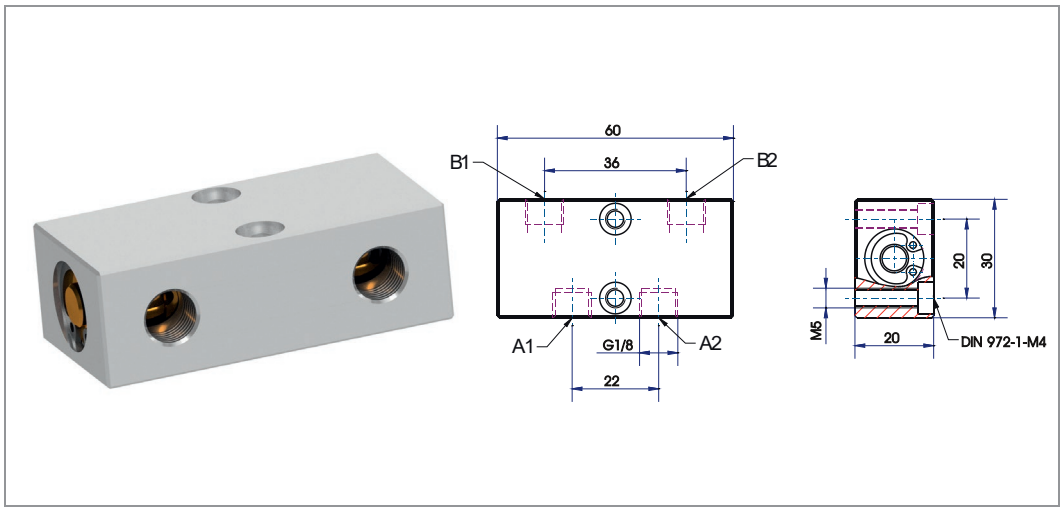
Using the inlet port *a* the timer valve has a positive outlet (A), using *b* it has a negative outlet (A). Each of the free connections *a* or *b* then serves as exhaust.

SPECIFICATION	
general	
construction	poppet valve
operator	pneumatic
return	mechanical spring
connection	push-in connection for calibrated tubes 4 mm diameter
ambient temperature	-10°C to +50°C
fluid temperature	-10°C to +50°C
humidity	0 – 100% r.H.
material	body: POM inner parts: brass, POM, Delrin, PMMA seals: perbunan (NBR) springs: stainless steel
mounting	snap on to Ω-rail according to DIN 50022 or 2 holes for M4 screws
installation position	any position
pneumatic	
function	usable with 3/2 NC or 3/2 NO-outlet, according to use of inlet pressure a or b
fluid	filtered (20 µm), lubricated or non lubricated compressed air
operating pressure	2,5 to 8 bar
nominal flow	QNn = 100 Nl/min (p_1 = 6 bar, Δp = 1 bar)
nominal diameter	DN 2.7 mm
repeat interval	< 0.5 seconds
repeating accuracy	± 2%

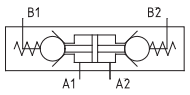
type	article-nr.	description	time range (seconds)	colour button	weight (approx. g)
ZV-A30	**90 000 461**	time delay valve	0 - 30	orange	75
ZV-A10	**90 000 747**	time delay valve	0 - 10	orange	75

pressure-safety-valve

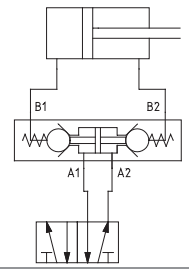
type DSV, port 1/8“



symbol



port illustration



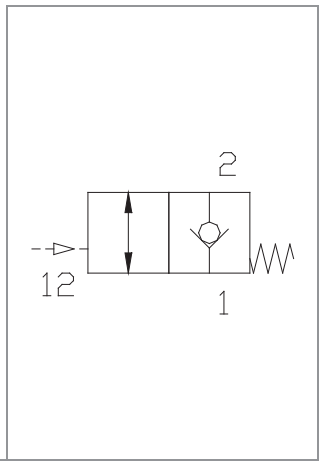
The pressure-safety-valve is used to fix the position of a double-effect-cylinder, if the pressure will be lost.
The valve consists of two pneumatically operated non-return-valves. The valve is mounted between the control-valve (port A1, A2) and the cylinder(port B1, B2), as shown on the port illustration.
If the pressure is lost, both outlet ports for the cylinder will be closed.

SPECIFICATION	
general	
type	seat valve
operator	pneumatic
reset	spring
ports	G1/8“
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +60°C
material	body anodized aluminium, internal parts brass and POM, seal NBR, ball ceramics
mounting	mounting holes or M5 inner thread
installation	in any position
pneumatic	
fluid	filtered, lubricated or non-lubricated air
operating pressure	1 - 10 bar
nominal flow	A → B (fill) 230 Nl/min, B → A (exhaust) 360 Nl/min (p_1=6bar, Δp=1bar)
nominal diameter	DN 4 mm
special functions	The pressure between the pressure-safety-valve and the cylinder is 0.25bar lower than the air supply pressure.

type	article-nr.	weight (approx. g)
DSV1	**90 000 107**	100
DSV1 with manual exhaust	**90 000 969**	100

Non return valve pneumatic controlled

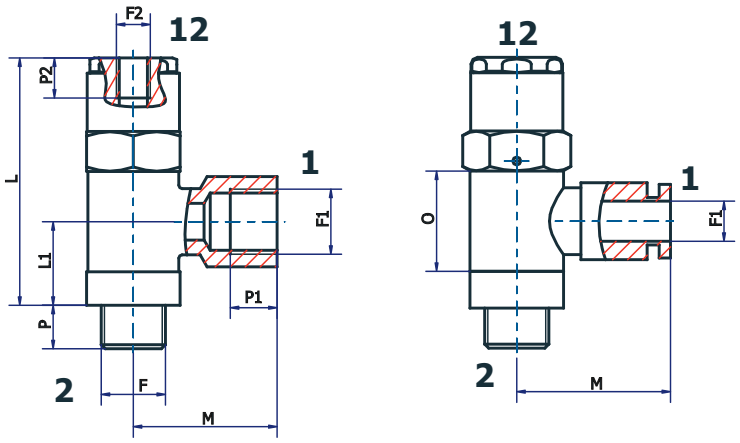
type HRP..., size 1/8“ to 1/2“



SPECIFICATION	
general	
type	non return valve with elastic seat
operator	by compressed air
return	spring return
ports	port 2 male thread BSP, port 1 female thread BSP or push in raccord, port 12 female thread M5 or 1/8” BSP
ambient temperature	-10°C to +60°C
fluid temperature	-10°C to +60°C
material	metal parts: brass nickel plated and stainless steel springs: stainless steel seals: perbunan (NBR), FPM on request washer: nylon
installation	in any position, ring piece turn able 360° before the valve is tightened
pneumatic	
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air, other fluids on request
operating pressure	0.3 - 10 bar
control Pressure	see diagram

Non return valve pneumatic controlled

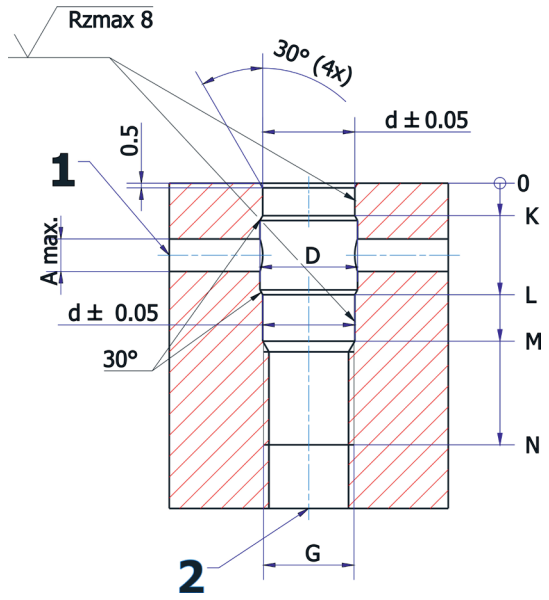
type HRP..., size 1/8“ to 1/2“



type	article-nr.	F	F1	F2	L	L1	M	O*	P	P1	P2	SW	weight (approx. g)
HRP1X	**90 000 038**	G1/8 A	-	M5	37.5	-	-	15	6.5	-	6	14	30
HRP11	**90 000 039**	G1/8 A	G1/8			12.5	21			7			48
HRP1A	**90 000 613**	G1/8 A	4				21			-			48
HRP1C	**90 000 146**	G1/8 A	6				25			-			48
HRP2X	**90 000 023**	G1/4 A	-	G1/8	42.5	-	-	17	7	-	7	17	50
HRP22	**90 000 040**	G1/4 A	G1/4			13.5	25			8			75
HRP2C	**90 000 147**	G1/4 A	6				27.5			-			75
HRP2D	**90 000 148**	G1/4 A	8				32			-			82
HRP3X	**90 000 133**	G3/8 A	-		46	-	-	20	9	-		19	90
HRP33	**90 000 110**	G3/8 A	G3/8			15	31			10			120
HRP3D	**90 000 149**	G3/8 A	8				31.5			-			110
HRP3E	**90 000 150**	G3/8 A	10				36			-			120
HRP4X	**90 000 132**	G1/2 A	-		51.5	-	-	24	10	-		24	155
HRP44	**90 000 151**	G1/2 A	G1/2			17	40			14			210
HRP4F	**90 000 152**	G1/2 A	12				40.5			-			210
HRP5X	**90 000 978**	G3/4 A	G3/4		57	-	-	27	12	-		36	95
HRP55	**90 000 950**	G3/4 A	G3/4			18.5	39			14			140

Non return valve pneumatic controlled

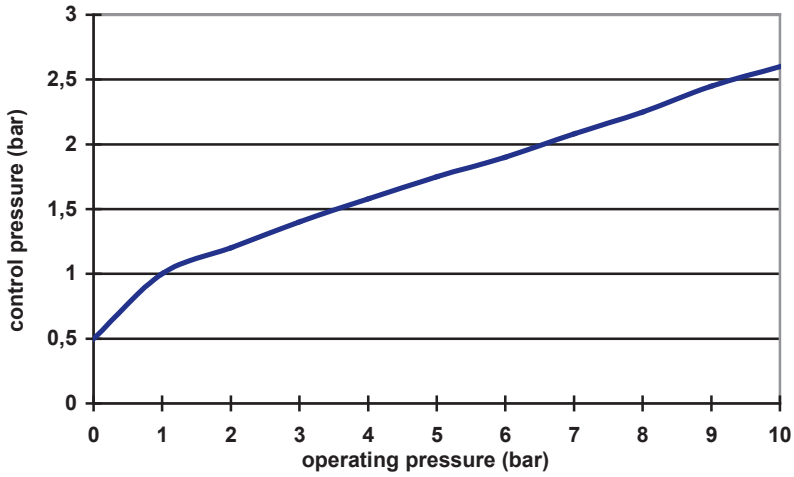
type HRP..., size 1/8“ to 1/2“



screw-in geometry for HRP.X (without ring piece)									
for typ:	article-nr.	G	d	D	A	K	L	M	N
HRP1X	**90 000 038**	G1/8	9.9	10.5	7	3.5	12	17	28
HRP2X	**90 000 023**	G1/4	13.3	14	8	3.5	12	19	30
HRP3X	**90 000 133**	G3/8	16.8	17.5	11	4	15	20	35
HRP4X	**90 000 132**	G1/2	21	22	13	4.2	20	25	40
HRP5X	**90 000 878**	G3/4	26.6	28.5	17.8	4.2	22	32	45

size	DN [mm]	QN 1→2 [Nl/min]	QN 2→1 [Nl/min]	max. torque moment [Nm]	min. pressure in flow direction [bar]
1/8“	3.0	220	280	1.2	0.2
1/4“	4.4	340	460	1.8	0.2
3/8“	5.7	700	910	3.5	0.2
1/2“	8.8	1450	1660	4.0	0.15

control pressure

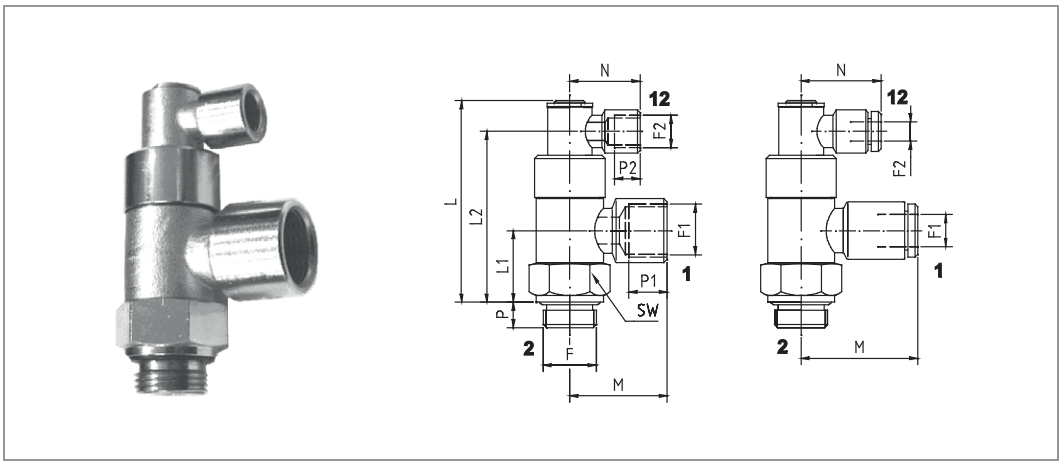


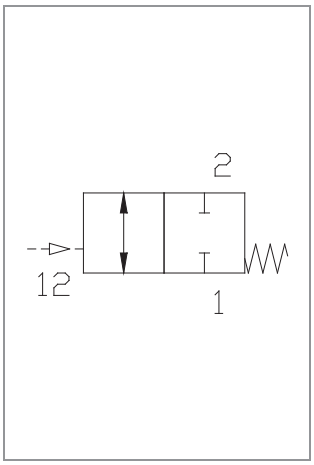
DEVELOPMENT

We develop your individual pneumatic special solution – creatively, in partnership, reliably and efficiently realizable.

Stop-valve

pneumatic controlled
type HVP..., size G1/8“ to G1/2“





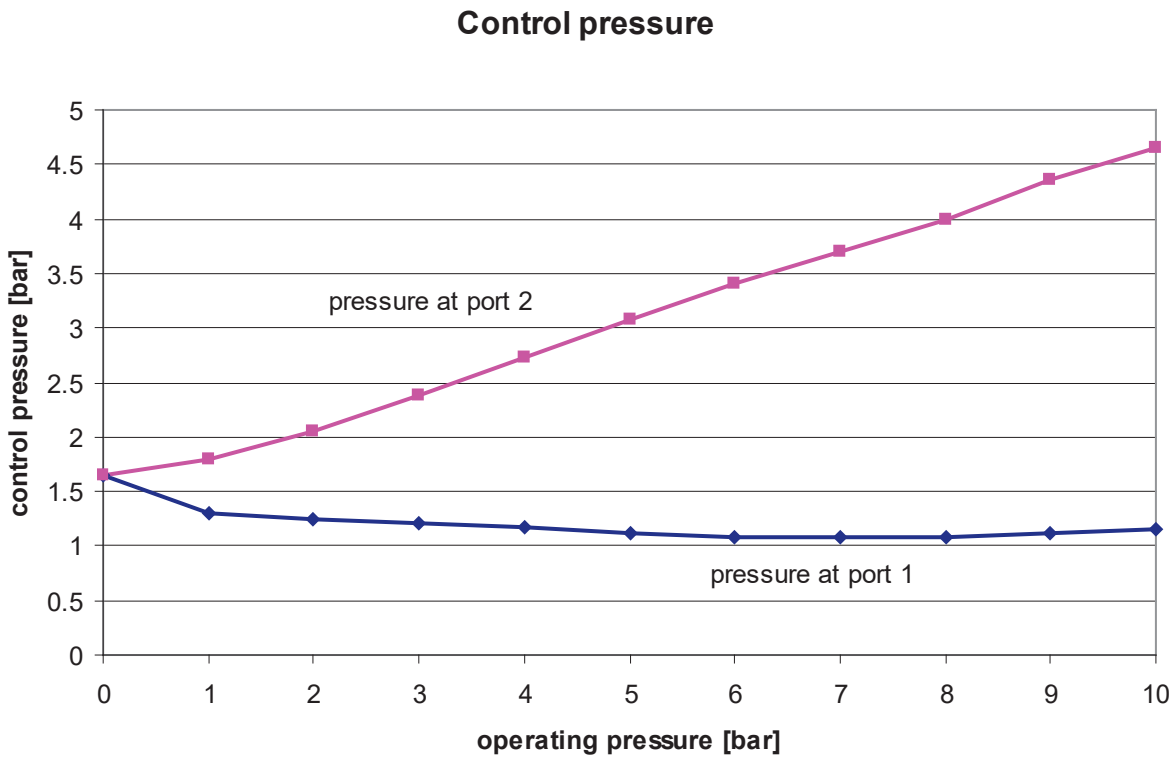
SPECIFICATION	
general	
construction	2/2-spool valve, normally closed (NC)
operator	pneumatic
return	spring return
connections	port 2: male thread BSP, port 1: female thread BSP or push in raccord port 12: female thread 1/8” BSP or push in raccord 4mm diameter
ambient temperature	-10°C to +70°C
fluid temperature	-10°C to +70°C
material	metal parts: brass nickel plated and stainless stell springs: stainless steel seals: perbunan (NBR), FPM on request
installation position	in any position, ring pieces revolvable also if the valve is tightened
pneumatic	
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air, other fluids on request
operating pressure	0 – 10bar
control pressure	see diagram
special version	with T-ring piece or as manual operated version on request

type	article-nr.	F	F1	F2	L	L1	L2	M	N	P	P1	P2	SW	weight (approx. g)
HVP111	**90 000 115**	G1/8 A	G1/8	G1/8	51.5	16	42	21	21	6	7	7	14	68
HVP11A	**90 000 160**	G1/8 A	G1/8	4				21	21.3		7	-		68
HVP1CA	**90 000 139**	G1/8 A	6	4				25	25		-	-		70
HVP221	**90 000 116**	G1/4 A	G1/4	G1/8	57.5	19.5	48	25	21	8	8	7	17	104
HVP22A	**90 000 161**	G1/4 A	G1/4	4				25	21.3		8	-		104
HVP2CA	**90 000 140**	G1/4 A	6	4				27.5	25		-	-		104
HVP2DA	**90 000 141**	G1/4 A	8	4				32	21.3		-	-		110
HVP331	**90 000 117**	G3/8 A	G3/8	G1/8	63	22.5	53.5	31	21	8	10	7	22	150
HVP33A	**90 000 162**	G3/8 A	G3/8	4				31	21.3		10	-		150
HVP33C	**90 000 352**	G3/8 A	G3/8	6				31	23		10	-		150
HVP3DA	**90 000142**	G3/8 A	8	4				31.5	25		-	-		145
HVP3EA	**90 000 143**	G3/8 A	10	4				36	21.3		-	-		155
HVP441	**90 000 144**	G1/2 A	G1/2	G1/8	71.5	27	61.5	40	21	12	14	7	27	239
HVP4FA	**90 000 145**	G1/2 A	12	4				40.5	25		-	-		240
HVP551	**90 000 878**	G3/4 A	G3/4	G1/8	81.6	32.7	72	39	21.6	12	14	7	32	160

Stop-valve

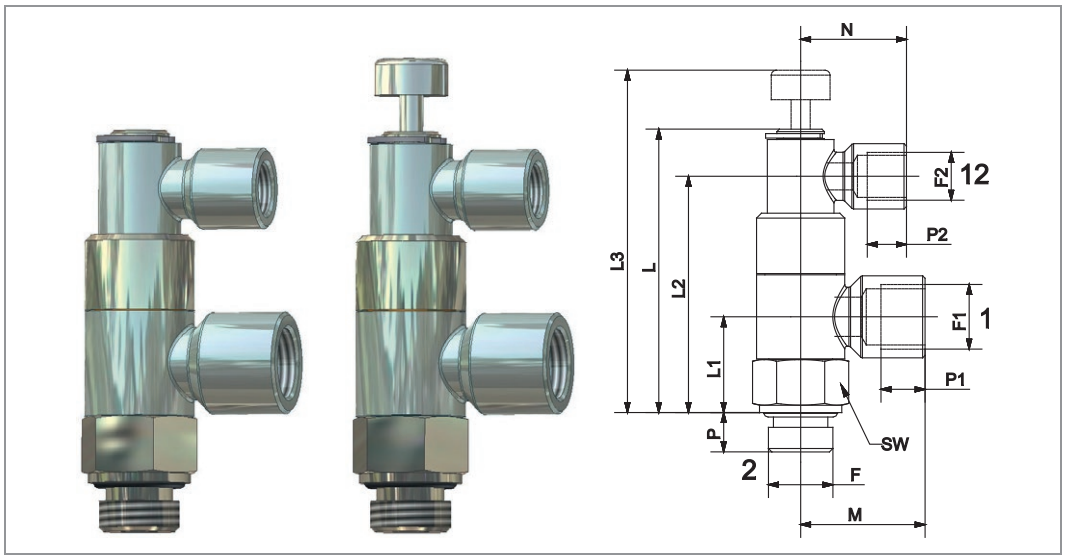
pneumatic controlled
type HVP..., size G1/8“ to G1/2“

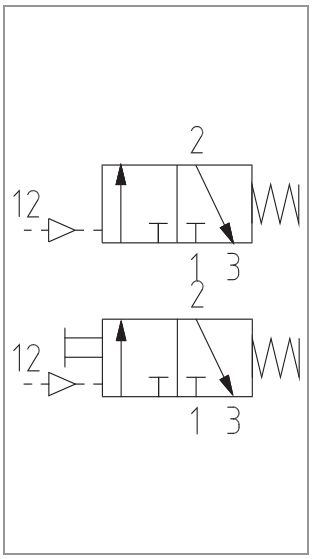
size	DN [mm]	QN [Nl/min]	max. torque-moment [Nm]
1/8“	4.0	300	3.0
1/4“	5.6	700	7.0
3/8“	7.7	1200	9.0
1/2“	10.0	2100	15.0



3/2-way non return valve pneumatic controlled

type HEP..., size 1/8“ and 1/4“
type HEP...M, size 1/8“ and 1/4“, with manual override





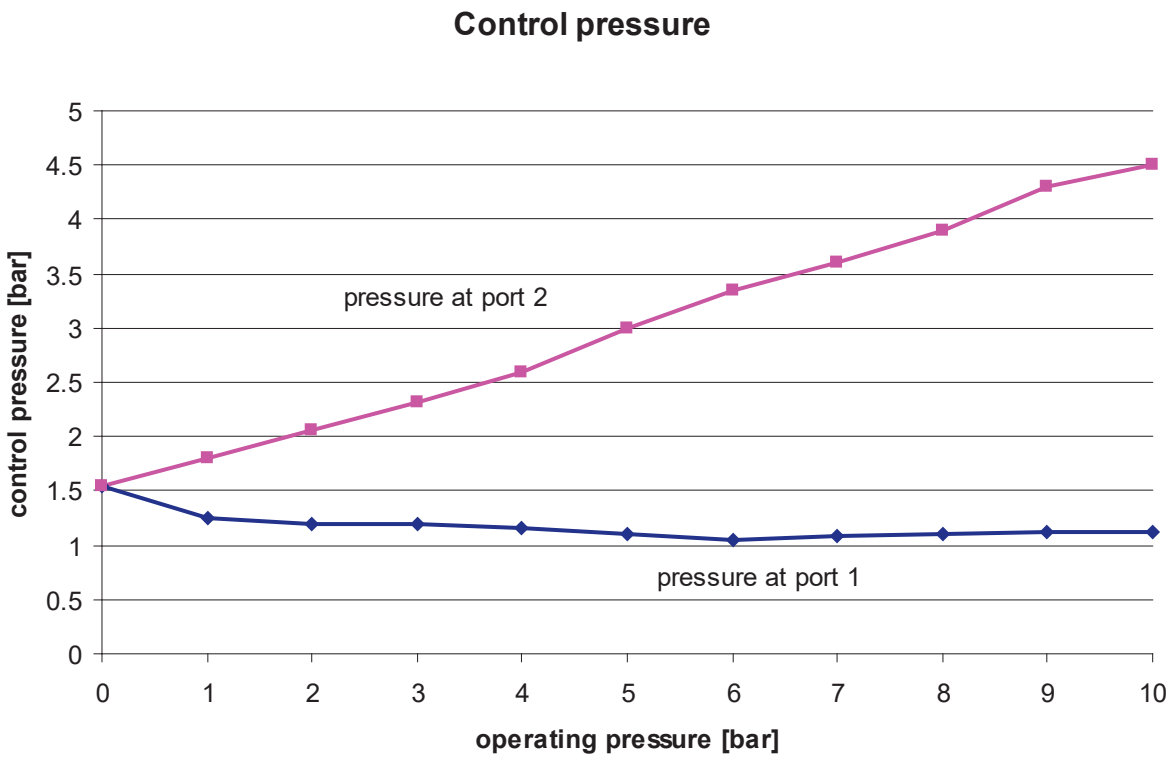
SPECIFICATION	
general	
type	3/2-spool valve, normal closed (NC)
operator	pneumatic or manual
return	spring return
ports	port 2: male thread BSP, port 1: female thread BSP or push in raccord port 12: female thread M5 or 1/8” BSP
ambient temperature	-10°C to +70°C
fluid temperature	-10°C to +70°C
material	metal parts: brass nickel plated and stainless steel springs: stainless steel seals: perbunan (NBR)
installation	in any position, ring pieces revolvable also if the valve is tightened
pneumatic	
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air, other fluids on request
operating pressure	0 - 10 bar
control pressure	see diagram

type	article-nr.	F	F1	F2	L	L1	L2	L3	M	N	P	P1	P2	SW	weight (approx. g)
HEP111	**90 000 438**	G1/8 A	G1/8	G1/8	51.5	16	42		21.5	21.5	6	7	7	14	66
HEP1CA	**90 000 439**	G1/8 A	6	4					25	25		-	-		68
HEP221	**90 000 440**	G1/4 A	G1/4	G1/8	57.5	19.5	48		25.5	21.5	8	8	7	17	102
HEP2CA	**90 000 441**	G1/4 A	6	4					27.5	25		-	-		102
HEP2DA	**90 000 442**	G1/4 A	8						32			-	-		108
HEP111M	**90 000 443**	G1/8 A	G1/8	G1/8		16	42	64.5	21.5	21.5	6	7	7	14	70
HEP1CAM	**90 000 444**	G1/8 A	6	4					25	25		-	-		72
HEP221M	**90 000 445**	G1/4 A	G1/4	G1/8		19.5	48	71.0	25.5	21.5	8	8	7	17	106
HEP2CAM	**90 000 446**	G1/4 A	6	4					27.5	25		-	-		106
HEP2DAM	**90 000 447**	G1/4 A	8						32			-	-		112

3/2-way non return valve pneumatic controlled

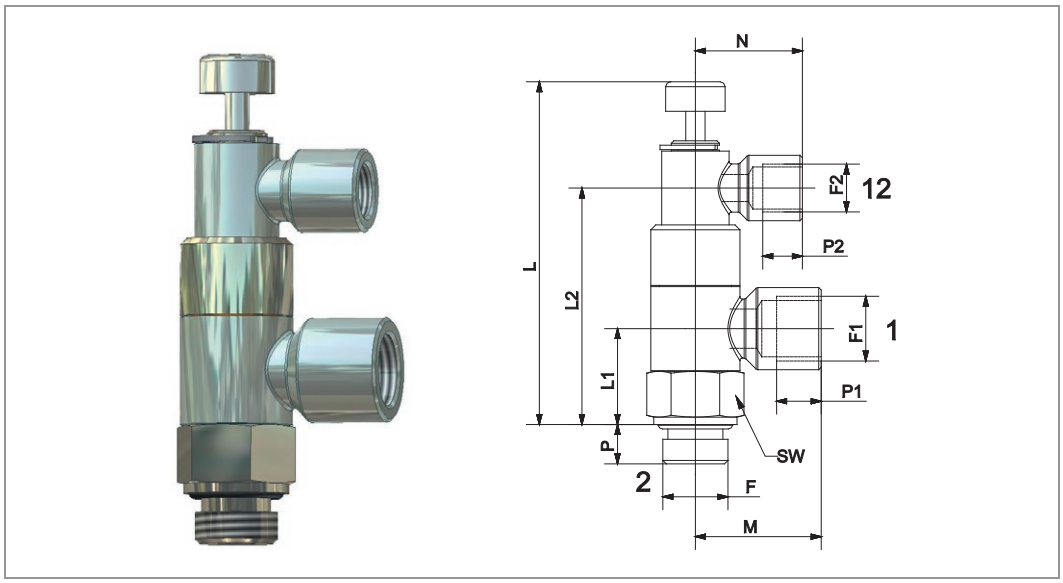
type HEP..., size 1/8“ and 1/4“
type HEP...M, size 1/8“ and 1/4“, with manual override

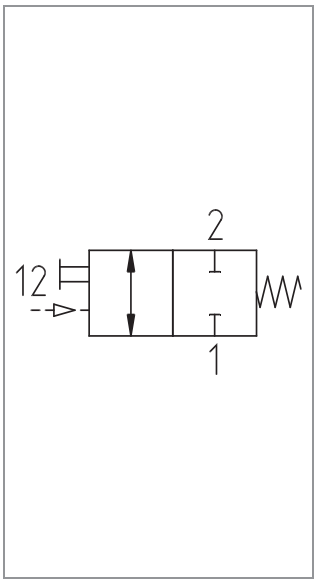
size	DN (mm)	QNn 1→2 (Nl/min)	QNn 2→3 (Nl/min)	max. torque moment (Nm)
1/8“	4.0	300	75	3.0
1/4“	5.6	700	100	7.0



Stop-valve

pneumatic controlled, with manual override
type HVP...M, size 1/8“ and 1/4“





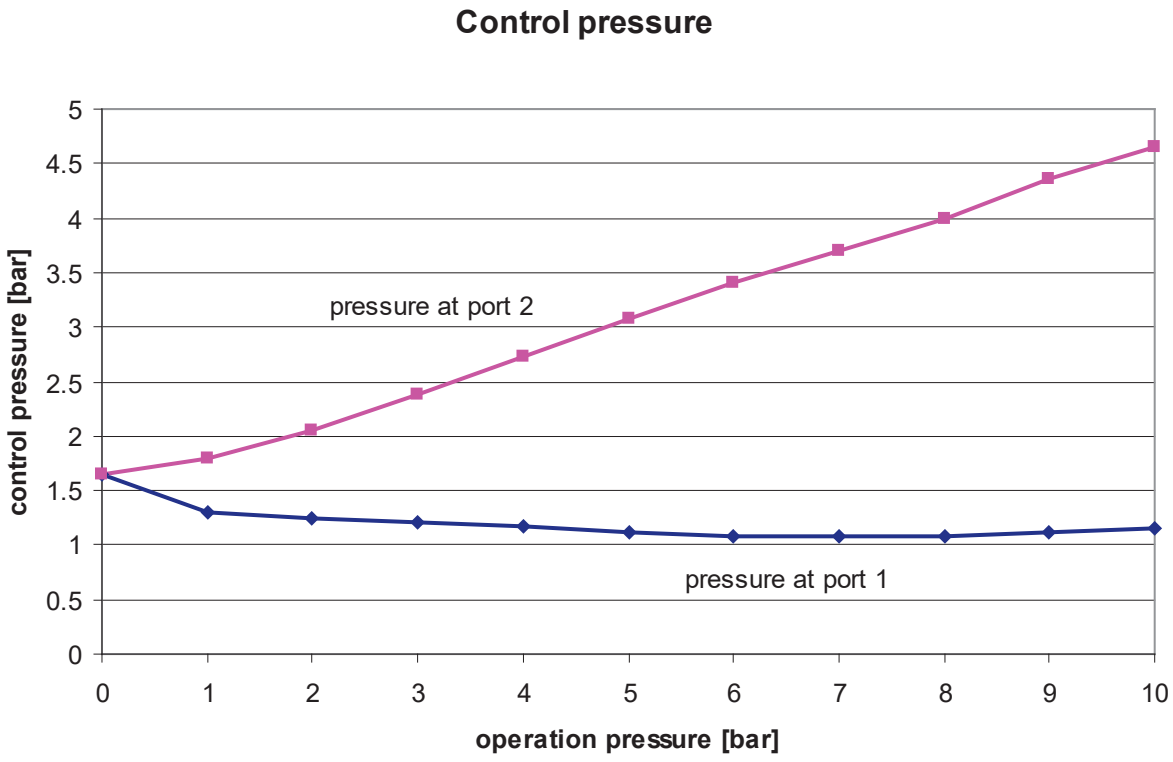
SPECIFICATION	
general	
construction	2/2-spool valve, normal closed (NC)
operator	pneumatic or manual
return	spring return
connections	port 2: male thread BSP, port 1: female thread BSP or push in raccord, port 12: female thread M5 or 1/8” BSP
ambient temperature	-10°C to +70°C
fluid temperature	-10°C to +70°C
material	metal parts: brass nickel plated and stainless steel springs: stainless steel seals: perbunan (NBR)
installation position	in any position, ring piece revolvable also if the valve is tightened
pneumatic	
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air, other fluids on request
operating pressure	0-10 bar
control pressure	see diagram

type	article-nr.	F	F1	F2	L	L1	L2	M	N	P	P1	P2	SW	weight (approx. g)
HVP111M	**90 000 433**	G1/8 A	G1/8	G1/8	64.5	16	42	21.5	21.5	6	7	7	14	72
HVP1CAM	**90 000 434**	G1/8 A	6	4				25	25		-	-		74
HVP221M	**90 000 435**	G1/4 A	G1/4	G1/8	71.0	19.5	48	25.5	21.5	8	8	7	17	108
HVP2CAM	**90 000 436**	G1/4 A	6	4				27.5	25		-	-		108
HVP2DAM	**90 000 437**	G1/4 A	8					32			-	-		114

Stop-valve

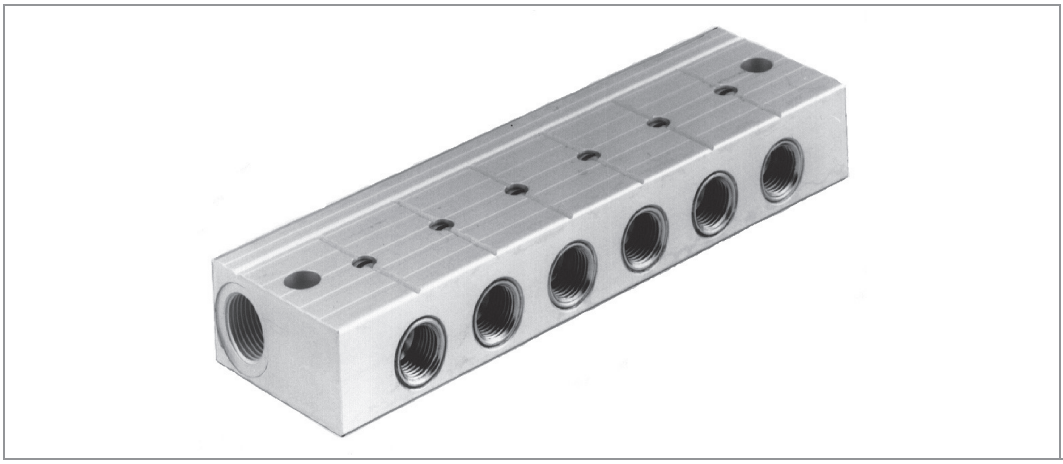
pneumatic controlled, with manual override
type HVP...M, size 1/8“ and 1/4“

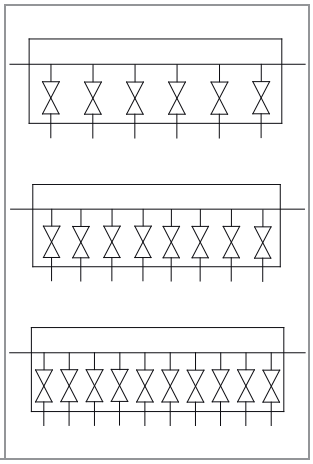
size	DN [mm]	QNn [Nl/min]	max. torque moment [Nm]
1/8“	4.0	300	3.0
1/4“	5.6	700	7.0



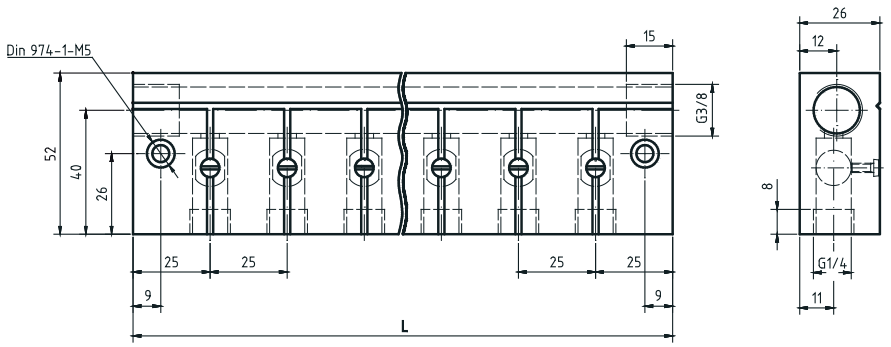
Distributor block with integral ball valves

type KPV





SPECIFICATION	
description	distributor block with integral ball valves
type	KPV 5226-…E
pressure range	vacuum to 10 bar
operation	screwdriver (width 4 to 6 mm)
rotation angle	90°
temperature range	-10° C to +100° C
orifice (per channel)	DN 8 mm
material	body: anodised aluminium alloy ball and spindle: chromed brass ball seals: PTFE O-Ring: perbunan (NBR)
mounting	via 2 holes in body, for M5 screws
other versions	on application: specified number of outlets, control knob operation



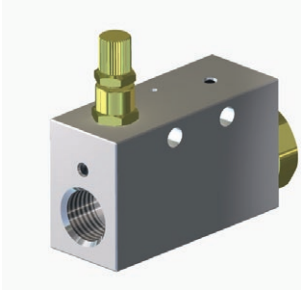
This handy unit serves as a compact distributor and isolator block in complex machines and installations, where it is necessary to open or close individual circuits.

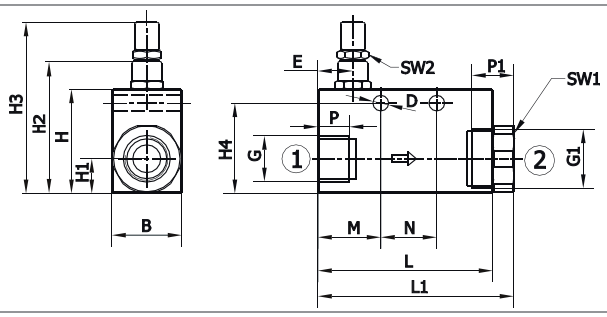
The slot in the spindles indicates the open or closed status of the individual channels.

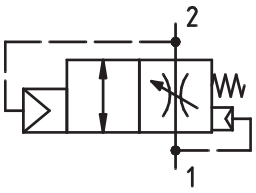
type	article-nr.	number of outlets	length (mm)	weight (approx. g)
KPV 5226 - 6E	**90 000 010**	6	175	650
KPV 5226 - 8E	**90 000 427**	8	225	730
KPV 5226 - 10E	**90 000 459**	10	275	890

2/2- way soft start valve

Typ WSV..., size G1/4 to G1/2





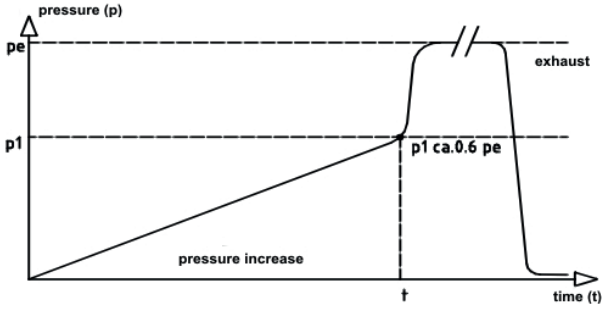


Specification	
generell	
type of construction	coaxial system
operator	by compressed air, load valve adjustable and lockable
return	mechanical spring
ambient temperature	-10°C bis +70°C
fluid temperature	-10°C bis +70°C
material	body and internal parts: aluminium anodized, POM spring: stainless steel load valve and hexagonal fitting: brass seals: perbunan (NBR) and polyurethane (AU)
mounting	2 holes for screws M4 or pipe installation
installation	in any position
pneumatic data	
function	2/2-NC
fluid	filtered, lubricated or non lubricated compressed air, other fluids on request
operating pressure	0,5 - 10 bar
nominal flow	G 1/4“: 1380 Nl/min (kv – Wert: 1,26 m3/h), G 1/2": 3500 Nl/min (kv – Wert: 3,24 m3/h)
nominal flow load valve	G 1/4“: 0 – 100 Nl/min, G 1/2": 0-200 Nl/min
nominal diameter	G 1/4“: DN 7.5 mm, G 1/2": DN 12 mm
free flow	appr. 60% of input pressure pe = 6 bar (p1 = 0.6 pe)
max. freqency	5/Sec.

type	code	G	G1	B	D	E	H	H1	H2	H3	H4	L	L1
WSV2	**90000178**	G1/4	G1/4	20	4.5	10	30	10	38	49 - 52	26	50	56
WSV4	**90000179**	G1/2	G1/2	30	4.5	13	40	15	48	59 - 62	36	65	75.8

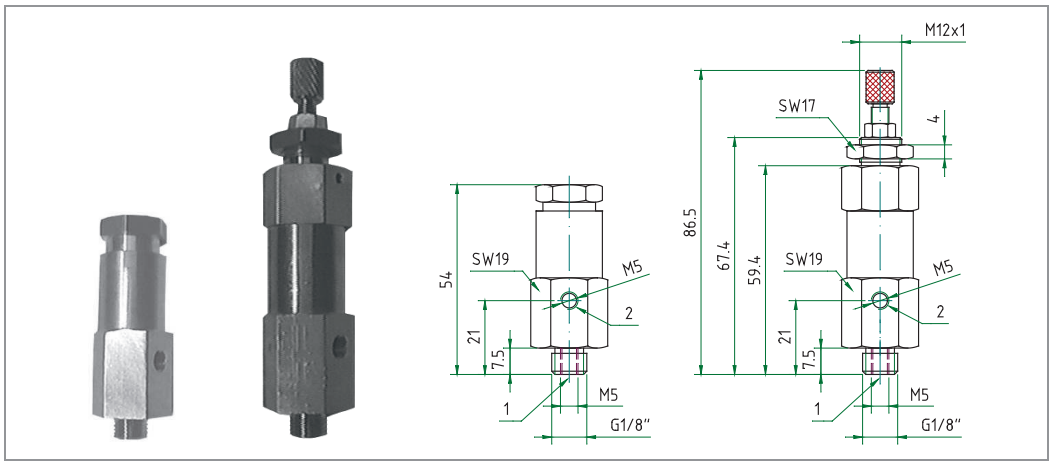
type	M	N	SW1	SW2	P	P1	QNn (Nl/min)	Weight (ca. g)
WSV2	18	16	19	8	9	9	1380	90
WSV4	26.5	16	27	8	11	11	3500	220

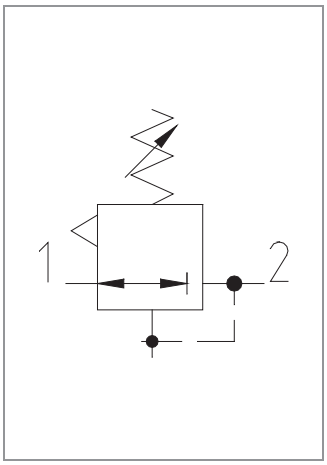
Soft start valves type WSV are used to provide a controlled pressure build-up in pneumatic systems. They are equally suitable for use with a group of valves or between a single valve and cylinder. The main pressure pe at inlet port 1 passes to the outlet port 2 via a load valve (adjustable). Adjusting the load valve allows the pressure build-up time to be set as required. The valve switches over if 60% of the inlet pressure is reached.
In the absence of main pressure pe at the inlet port of the soft start valve, the valve exhausts from port 2 back through port 1.



Mini pressure reducer

type MDR0 and MDRS0, size M5



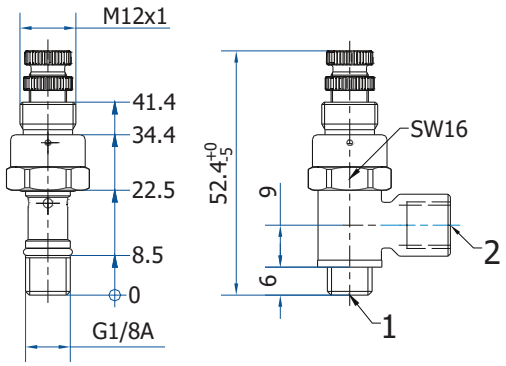


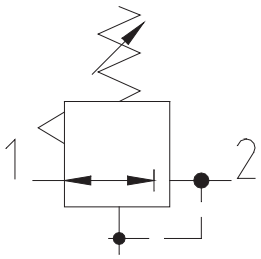
SPECIFACTION	
general	
construction	piston type with secondary exhaust
connection	inlet M5 and G1/8", outlet M5, gauge port M5
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +80°C
material	metal parts: brass (Ms58) seals: perbunan (NBR) springs: stainless steel and steel zinc plated
mounting	type MDRS0 also panel mounting
installation position	in any position
supply item	type MDRS0 incl. nut for panel mounting
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air
inlet pressure	max. 12 bar
outlet pressure	adjustable from 1 to 8 bar
nominal flow	100 Nl/min (inlet pressure 10 bar, outlet pressure 6 bar and a pressure drop of 1 bar)
nominal diameter	DN 2.2 mm
special solution (on request)	seals in FPM solution without secondary exhaust

type	article-nr.	outlet pressure (bar)	seal material	weight (approx. g)
MDR0	**90 000 041**	1 bis 8	NBR	80
MDR0V	**90 000 042**	1 bis 8	FPM	80
MDRS0	**90 000 043**	1 bis 8	NBR	110
MDRS0V	**90 000 044**	1 bis 8	FPM	110

Mini pressure reducer

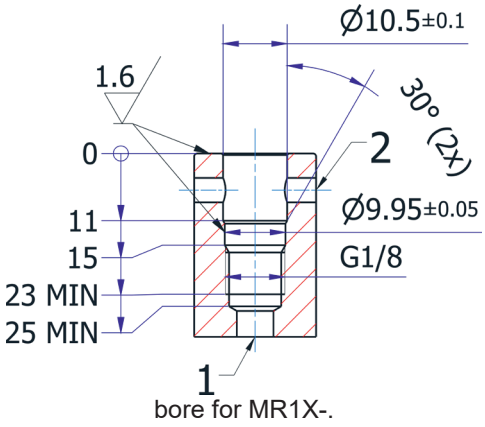
type MR1.-.





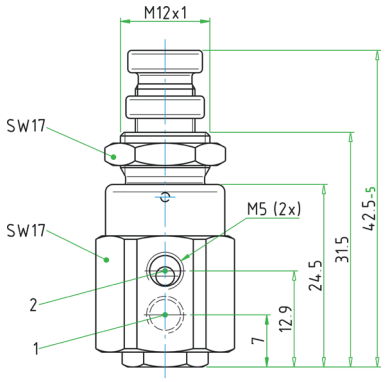
SPECIFICATION	
general	
construction	piston type with secondary exhaust
connection	port 1 (pressure inlet) G1/8'' A according to ISO 228 port 2 (outlet) G1/8'' according to ISO 228 respective push in raccord for plastic tubes
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +80°C
material	metal parts: brass nickel plated seals: Perbunan (NBR) springs: stainless steel washer : polyamide
mounting	
installation position	any position, ring piece turntable 360° before the valve is tightened
items supplied	
fluid	neutral gazes, filtered, lubricated or non lubricated compressed air, filter 50 micron
inlet pressure	type MR1.-2 max. 6 bar, type MR1.-8 max. 10 bar
outlet pressure	Type MR1.-2 0.5 – 2 bar, Type MR1.-8 1 – 8 bar
nominal flow	inlet pressure 8 bar, outlet pressure 6 bar and a pressure drop of 1 bar: 75 Nl/min
nominal diameter	DN 2.5 mm
special version (on request)	without secondary exhaust, for liquids

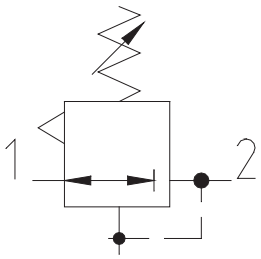
Type	article-nr.	outlet pressure (bar)	outlet (2)	weight (appr.) g
MR1X-2	**90 000 530**	0.5 – 2	hollow screw	28
MR1X-8	**90 000 531**	1 – 8	hollow screw	28
MR11-2	**90 000 532**	0.5 – 2	ring piece G1/8	45
MR11-8	**90 000 533**	1 – 8	ring piece G1/8	45
MR1A-2	**90 000 534**	0.5 – 2	ring piece ∅4	45
MR1A-8	**90 000 535**	1 – 8	ring piece ∅4	45
MR1C-2	**90 000 536**	0.5 – 2	ring piece ∅6	46
MR1C-8	**90 000 537**	1 – 8	ring piece ∅6	46



Mini pressure reducer

type MR0-. , size M5, with secondary exhaust



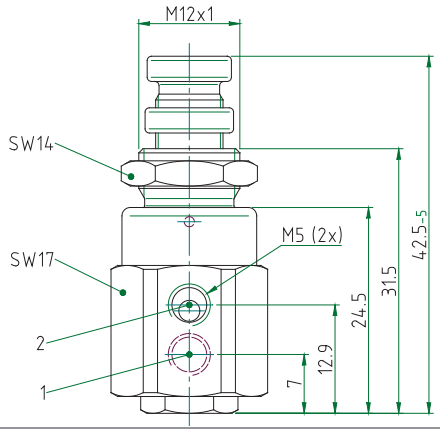


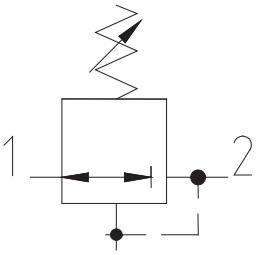
SPECIFICATION	
general	
construction	piston type with secondary exhaust
connection	thread M5
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +80°C
material	metal parts: brass (Ms58), nickel-plated seals: perbunan (NBR) springs: stainless steel nut: plastic
mounting	panel mounting nut
installation position	any position
items supplied	reducer and panel mounting nut
fluid	filtered (50 µm) neutral gases, lubricated or non lubricated compressed air
inlet pressure	max. 10 bar with MR0-8, max. 6 bar with MR0-2
outlet pressure	MR0-2: 0.2 – 2 bar, MR0-8: 1 – 8 bar
nominal flow	inlet pressure 8 bar, outlet pressure 6 bar and a pressure drop of 1 bar: 75 Nl/min
nominal diameter	DN 2.5 mm

type	article-nr.	outlet pressure (bar)	seal material	weight (approx. g)
MR0-2	**90 000 335**	0.2 – 2	NBR	45
MR0-8	**90 000 336**	1 – 8	NBR	45

Mini pressure reducer

type MRW0. , size M5, without secondary exhaust



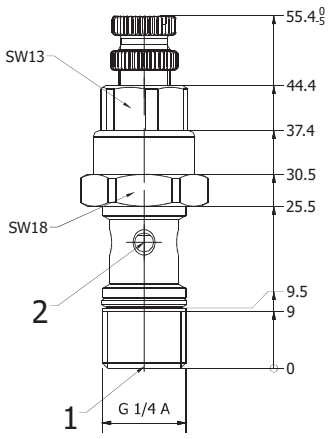


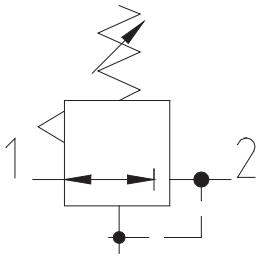
SPECIFICATION	
general	
construction	piston type without secondary exhaust
connection	thread M5
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +80°C
material	metal parts: brass (Ms58) nickel-plated seals: perbunan (NBR) springs: stainless steel nut: brass (Ms58) nickel-plated
mounting	panel mounting nut
installation position	any position
items supplied	reducer and panel mounting nut
fluid	filtered (100 µm), neutral gases and liquids
inlet pressure	max. 10 bar at MRW0-8, max. 6 bar at MRW0-2
outlet pressure	MRW0-2: 0.2 – 2 bar, MRW0-8: 1 – 8 bar
flow rate	k_{vs}-value: 0.093 m³/h (1,55 l/min) water
nominal diameter	DN 2.5 mm

type	article-nr.	outlet pressure (bar)	seal material	weight (approx. g)
MRW0-2	**90 000 366**	0.2 – 2	NBR	46
MRW0-8	**90 000 367**	1 – 8	NBR	46

Mini pressure reducer

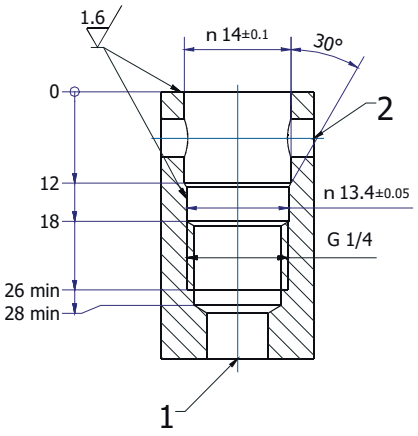
type MR2x-8





SPECIFICATION	
general	
construction	piston type with secondary exhaust
connection	port 1 (pressure inlet) G1/4A according to ISO 228 port 2 (outlet) ring piece or location hole
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +60°C
material	metal parts: brass nickel plated seals: NBR springs: stainless steel
mounting	line installation
installation position	any position, ring piece turntable 360° before the valve is tightened
items supplied	
fluid	neutral gazes, filtered, lubricated or non-lubricated compressed air, filter 50 micron
inlet pressure	type MR2X.-8 max. 10 bar
outlet pressure	type MR2X.-8 1 – 8 bar
nominal flow	inlet pressure 8 bar, outlet pressure 6 bar and a pressure drop of 1 bar: 92 Nl/min
nominal diameter	DN 2.5 mm

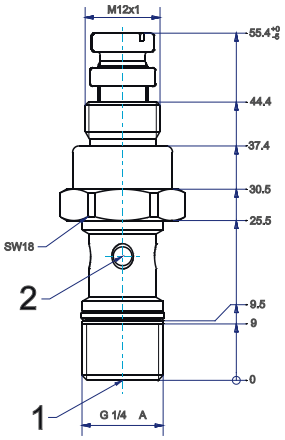
type	articel-nr.	outlet pressure (bar)	outlet (2)	weight (appr.) g
MR2X-8	**90 000 646**	1 – 8	hollow screw	44

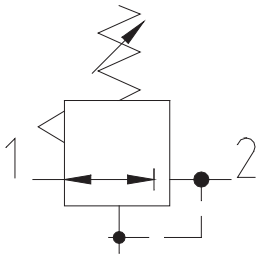


bore for MR2X-8

Mini pressure reducer

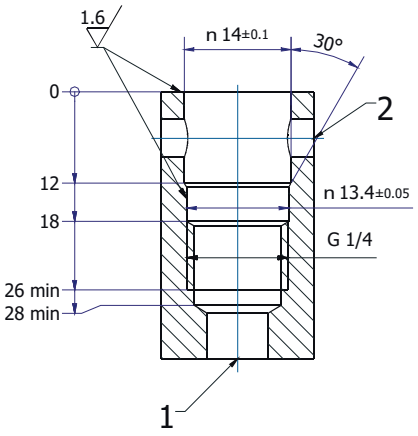
type MR2x-8 (panel mounting)





SPECIFICATION	
general	
construction	piston type with secondary exhaust
connection	port 1 (pressure inlet) G1/4A according to ISO 228 port 2 (outlet) ring piece or location hole
ambient temperature	-20°C to +60°C
fluid temperature	-20°C to +60°C
material	metal parts: brass nickel plated seals: NBR springs: stainless steel
mounting	line installation
installation position	any position, ring piece turntable 360° before the valve is tightened
items supplied	
fluid	neutral gazes, filtered, lubricated or non-lubricated compressed air, filter 50 micron
inlet pressure	type MR2X.-8 max. 10 bar
outlet pressure	type MR2X.-8 1 – 8 bar
nominal flow	inlet pressure 8 bar, outlet pressure 6 bar and a pressure drop of 1 bar: 92 Nl/min
nominal diameter	DN 2.5 mm

type	articel-nr.	outlet pressure (bar)	outlet (2)	weight (appr.) g
MR2X-8	**90 000 677**	1 – 8	hollow screw	44



bore for MR2X-8

Contact persons

DI (FH) FRANZ STAUDACHER

Management
+43 5262 64626-19
f.staudacher@sfs-fluidsysteme.com

ING. JOSEF LADNER

Technology, QM, IT
+43 5262 64626-18
j.ladner@sfs-fluidsysteme.com

MAG. (FH) DANIELA PRAXMARER, MBA, MSc.

Purchasing, Finance, Production Planning
+43 5262 64626-21
d.praxmarer@sfs-fluidsysteme.com

HANSJÖRG STAUDACHER

Technology, Distribution
+43 5262 64626-38
h.staudacher@sfs-fluidsysteme.com

MST. ROLAND MOHRHERR

Production Management
+43 5262 64626-13
r.mohrherr@sfs-fluidsysteme.com

MARIO GREIL, BSc.

Technology, IT
+43 5262 64626-20
m.greil@sfs-fluidsysteme.com

ANDREAS LADNER

Technology
+43 5262 64626-55
a.ladner@sfs-fluidsysteme.com

ISABELLE OBERTHALER

Purchasing
+43 5262 64626-32
i.oberthaler@sfs-fluidsysteme.com

KATHARINA HAGNER

Office
+43 5262 64626-11
k.hagner@sfs-fluidsysteme.com

From the heart of Tyrol out into the whole world

We are passionate about serving our international customers and partners with innovation special solutions.

PNEUMATIC SOLUTIONS

SFS-Fluidsysteme GmbH
Gewerbezone 4 | 6404 Polling | Austria
T +43 5262 64 62 60 | F +43 5262 64 62 64
info@sfs-fluidsysteme.com

sfs-fluidsysteme.com