

3/2-, 5/2- and 5/3 directional control valves
 Operation: elektromagnetic
 Indirectly controlled
 soft seal spool valves
 Port size: G1/4
 NAMUR-Interface

For single and double operated actuators
 Manual override with and without detent
 Simple design of soft seal spool system
 Maintenance-free
 Easily interchangeable solenoid
 Valves and solenoids are ATEX approved
 (see solenoids on page 2)



Technical data

Medium:
 Compressed air, filtered, lubricate*1) or non-lubricate

Operation:
 Elektromagnetic, indirectly controlled

Port size:
 G 1/4

Operating pressure:
 max. 10 bar
 (see specifications)

Flow:
 Fixed

Operating temperature:
 -10* to +60°C

*Please contact our technical service for use below +2°C.

Materials:

Housing: aluminium anodised
 Pilot flange: plastic (POM)
 Seals: NBR (Perbunan)

Ordering example

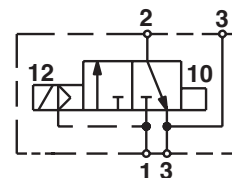
See page 2

Connector plugs see page 2
 and data sheet N/UK 7.7.002

NAMUR quick exhaust module to achieve
 a bigger Kv value when exhausting, see
 data sheet N/UK 5.4.344

NAMUR interlinking plate for redundant
 arrangement 'SAFE EXHAUSTING' and
 'SAFE VENTING', see data sheet
 N/UK 5.8.300

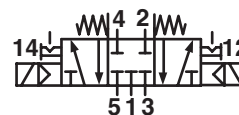
3/2



5/2

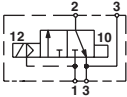
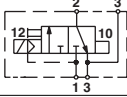
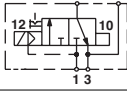


5/3

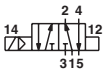
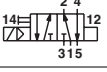
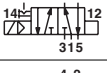

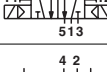
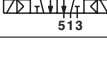


*1) Oil recommendation: Shell Hydrol DO 32, ESSO Febis K 32 (as of 07/92) or comparable oils
 with DVI values < 8 (DIN 53521) and ISO viscosity class 32 to 46 (DIN 51519)

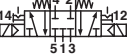
3/2 directional control valves

Symbol	Type	Port size		Operating pressure (bar)		Flow l/min	Switching time (ms)	Manual override with/without detent	Weight without solenoid (kg)	Dimension
		1, 3	2, 3	min.	max.					
	8020745	G 1/4	Flange	1	10	1200	35	–	0,24	1
	8020746	G 1/4	Flange	1	10	1200	35	without	0,24	1
	8020747	G 1/4	Flange	1	10	1200	35	with	0,24	1




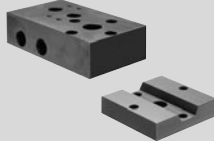

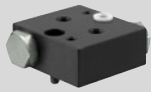
5/2 directional control valves

Symbol	Type	Port size		Operating pressure (bar)		Flow l/min	Switching time (ms)	Manual override with/without detent	Weight without solenoid (kg)	Dimension
		1, 3, 5	2, 4	min.	max.					
	2636045	G 1/4	Flange	1	10	1200	35	–	0,55	2
	2636046	G 1/4	Flange	1	10	1200	35	without	0,55	2
	2636047	G 1/4	Flange	1	10	1200	35	with	0,55	2
	2636245	G 1/4	Flange	1	10	1200	30	–	0,90	3
	2636246	G 1/4	Flange	1	10	1200	30	without	0,90	3
	2636247	G 1/4	Flange	1	10	1200	30	with	0,90	3

5/3 directional control valves

Symbol	Type	Port size		Operating pressure (bar)		Flow l/min	Switching time (ms)	Manual override with/without detent	Weight without solenoid (kg)	Dimension
		1, 3, 5	2, 4	min.	max.					
	2636447	G 1/4	Flange	3	10	950	40	with	1,0	4

Accessories

Silencer	Cable gland protection class EEx e, EEx d (ATEX), Ms nickel plated brass	Connector	Flange plate	Yoke	Spacer plate
					
0014600 (G1/4) *1) (for solenoid 42xx / 46xx M20 x 1,5)	EEx e 0588819 EEx d 0588851 (for solenoid 46xx M20 x 1,5) EEx d, EEx e 0588925 (for solenoid 46xx 1/2-14 NPT)	0570275 0663303 (with rectifier)	0612790 single connection plate 0612791 NAMUR rip use in combination with 0612790 (Alu)	0540593	0540109 when using solenoids 42xx, 46xx, 37xx

*1) For indoors use

Ordering example

3/2 directional control valve, port size G 1/4,
solenoid in protection class EEx me, 24 V DC,
Type: 8020747.4210.024.00

Actuation solenoids group 13B

	Type	Power consumption		Rated current at		Protection class	Temperature Ambient/ Fluid °C	Electroport size	Weight (kg)	Dimension No.	Circuit - diagram No.
		24 V DC (W)	230 V AC (VA)	24 V DC (mA)	230 V AC (mA)						
	0242	2,7	-	113	-	IP 65 (with connector)*5)	-25 ... +60 Fluid: max. 80	Connector DIN EN 175301-803 form A *6)	0,150	5	1
	0245	-	4,2	-	-	IP 65 (with connector)*5)	-25 ... +60 Fluid: max. 80	Connector DIN EN 175301-803 form A *6)	0,150	5	1
	3215	2,7	-	113	-	EEx nA II T4 IP 65 T110°C	-20 ... +60	Connector DIN EN 175301-803 form A with special screw	0,160	5	1
	0298	3,2	-	135	-	EEx m II T4 *1) IP 66 T110°C	-20 ... +70	cable 3 m	0,400	9	4
	0299	-	3,5	-	15	EEx m II T4*1) IP 66 T110°C	-20 ... +70	cable 3 m	0,400	9	7
	4210 *8) 3,9	-	-	162	-	EEx me II T4 *2) IP 66 T110°C	T6: -40 ...+55 T4: -40 ... +80	M20 x 1,5 *6)	0,500	10	4
	4211 *8) -	-	5,3	-	23	EEx me II T6/T4 *2) IP 66 T130°C	T6: -40 ...+55 T4: -40 ... +80	M20 x 1,5 *6)	0,500	10	7
	4610 *8) 3,9	-	-	162	-	EEx md IIC T6/T4 *3) EEx me II T6/T4 *3) IP 66 T130°C	T6: -40 ...+55 T4: -40 ... +80	1/2-14 NPT *6)	0,800	11	4
	4611 *8) -	-	5,3	-	23	EEx md IIC T6/T4 *3) EEx me II T6/T4 *3) IP 66 T130°C	T6: -40 ...+55 T4: -40 ... +80	1/2-14 NPT *6)	0,800	11	7
	4612 *8) 3,9	-	-	162	-	EEx md IIC T6/T4 *3) EEx me II T6/T4 *3) IP 66 T130°C	T6: -40 ...+55 T4: -40 ... +80	M20 x 1,5 *6) T4:	0,800	11	7
	4613 *8) -	-	5,3	-	23	EEx md IIC T6/T4 *3) EEx me II T6/T4 *3) IP 66 T130°C	T6: -40 ...+55 T4: -40 ... +80	M20 x 1,5 *6)	0,800	11	7
	3722	-	5,3	-	23	NEMA 4,4X *4) 6,6P, 7,9 T3C (160°C)	-20 ... +60	Litze 450 mm lang	0,500	12	1
	3723	-	5,3	-	23	NEMA 4,4X *4) 6,6P, 7,9 T3C (160°C)	-20 ... +60	Litze 450 mm lang	0,500	12	5

Standardvoltages 24 V DC, 230 V AC. Other voltages on request.

Design acc. to VDE 0580, EN 50014/50028. 100% duty cycle.

*1) Categorie II 2 GD, EC-Type-Examination-Certificate KEMA 02 ATEX 1347X

*2) Categorie II 2 GD, EC-Type-Examination-Certificate KEMA 98 ATEX 4452 X

*3) Categorie II 2 GD, EC-Type-Examination-Certificate PTB 02 ATEX 2085 X

*4) CSA-LR 57643-6, FM approved, for hazardous locations: Div. 1 and 2, Class I, II, III

*5) Required connector for DC: type 0570275. Valves can be operated with DC only for 230V AC application please use 200V DC coil together with rectifier plug: type 063305

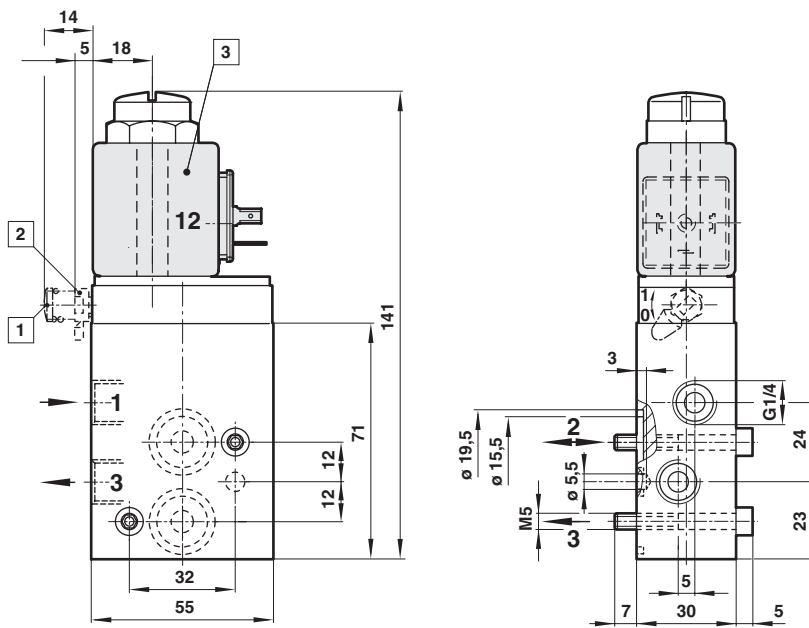
*6) Cable gland is not indicated in delivery

*7) IP65 according to DIN 40050/IEC 529 and DIN EN 600068-2-38

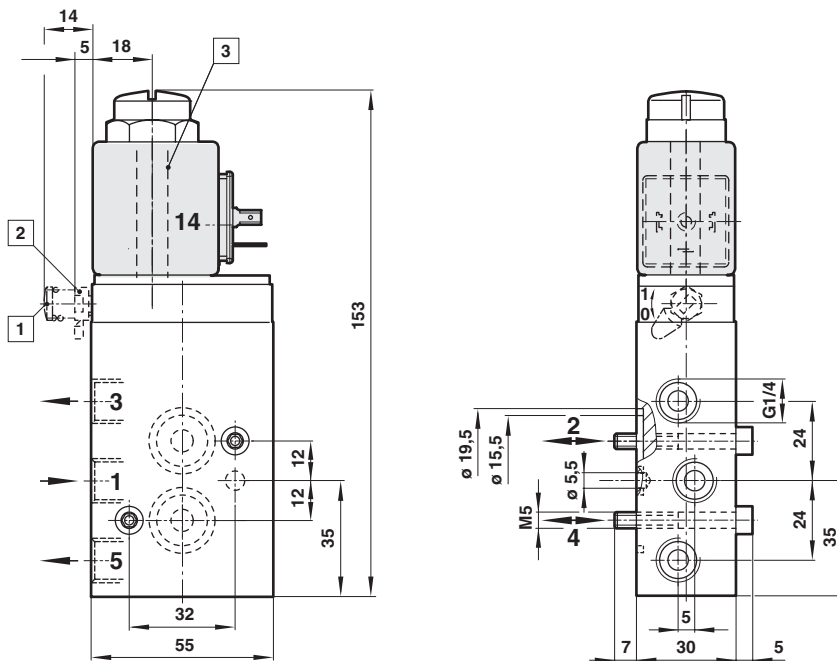
*8) This solenoid has a fuse with an appropriate rating.

Dimensions

①



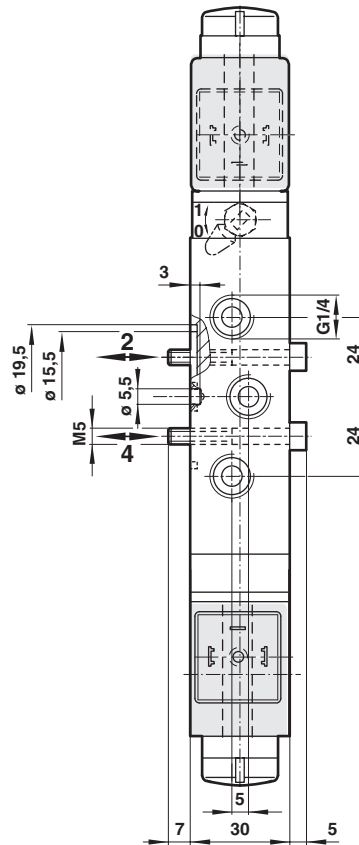
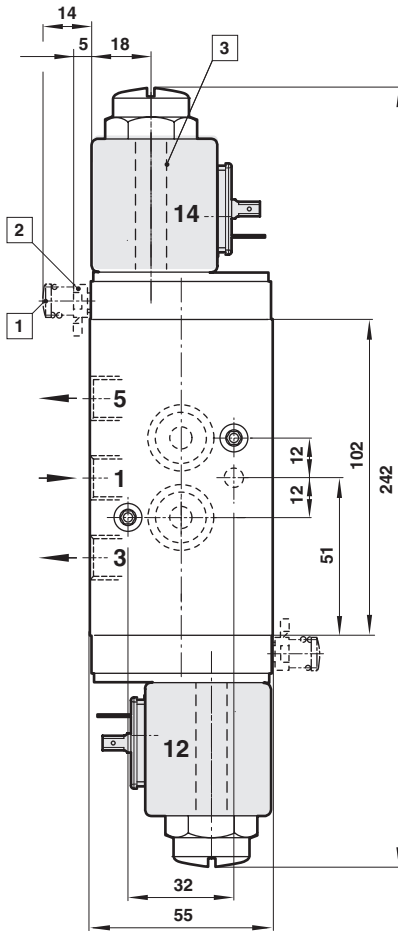
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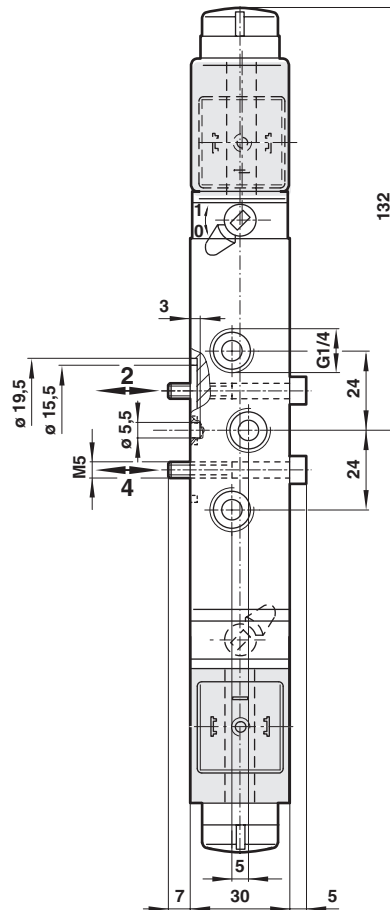
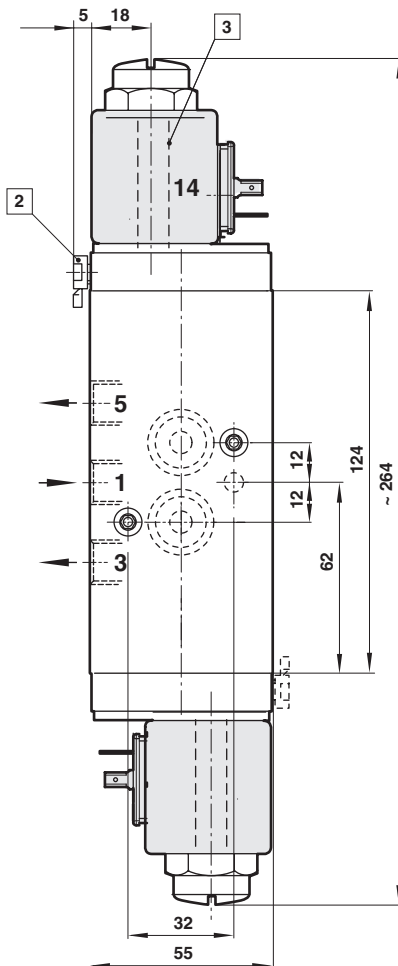
1	Manual override without detent
2	Manual override with detent
3	Solenoid 4 x 90° turnable

Dimensions

③

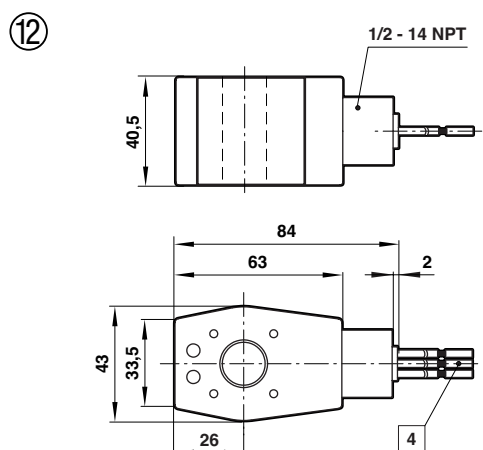
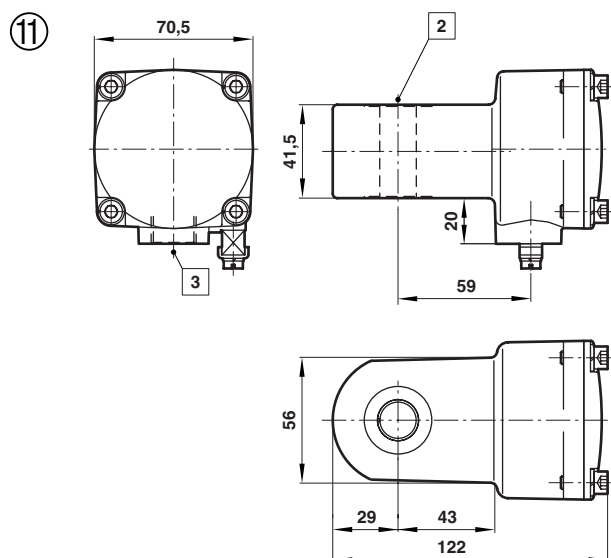
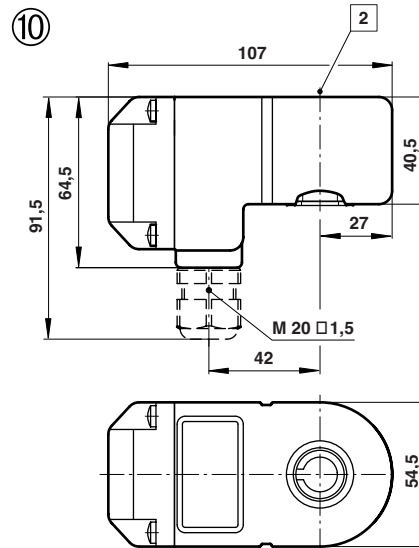
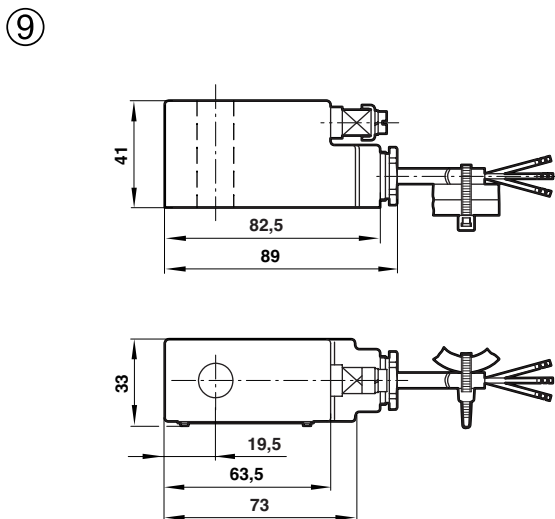
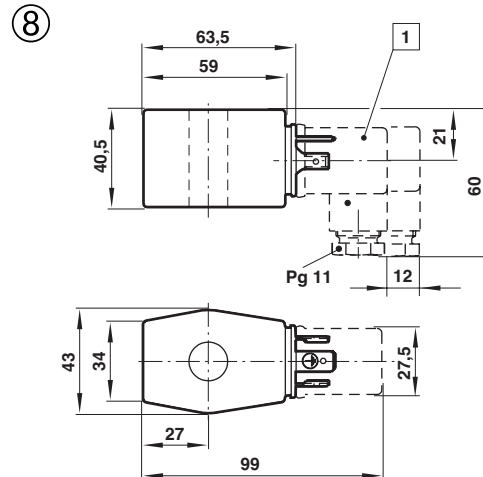
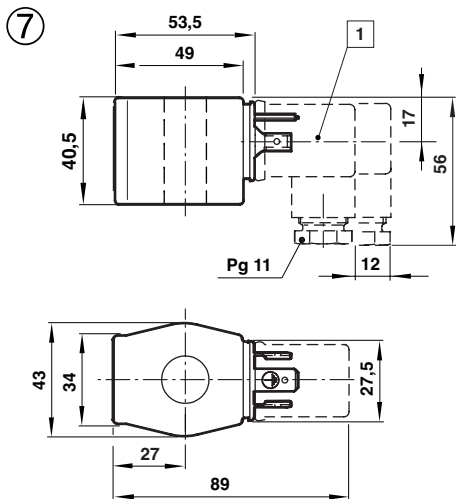


④



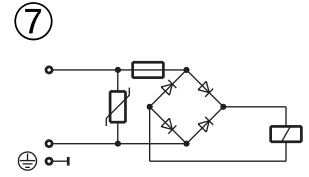
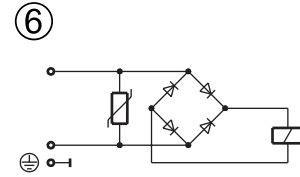
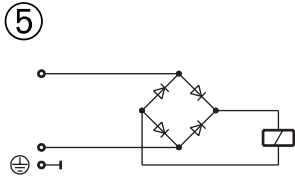
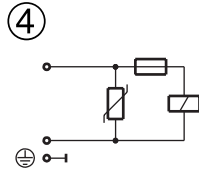
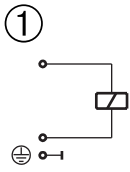
- 1 Manual override without detent
- 2 Manual override with detent
- 3 Solenoid 4 x 90° turnable

Dimensions for solenoid operators

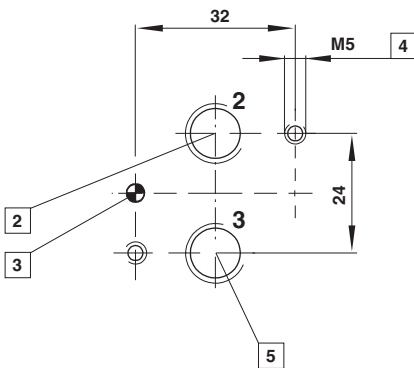


- 1** Connector can be indexed by 4 x 90°
- 2** Ø 13 (with spacer tube)
- 3** M20 x 1,5 or 1/2 - 14 NPT
- 4** Flying leads 18 (450 mm long)

Circuit diagrams



NAMUR hole pattern



- 2 Port 2 (A)
- 3 Coding stud threaded
- 4 M5 (10 deep)
- 5 Port 3 (R)

Warning

These products are intended for use in industrial hydraulic systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.