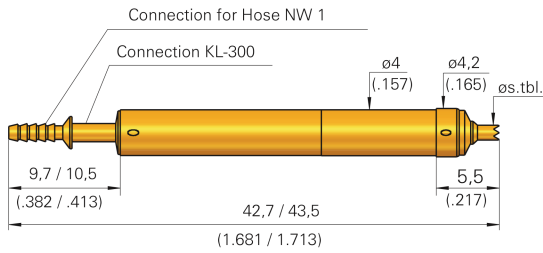


Grid:
 ≥ 4,50 mm
 ≥ 177 Mil

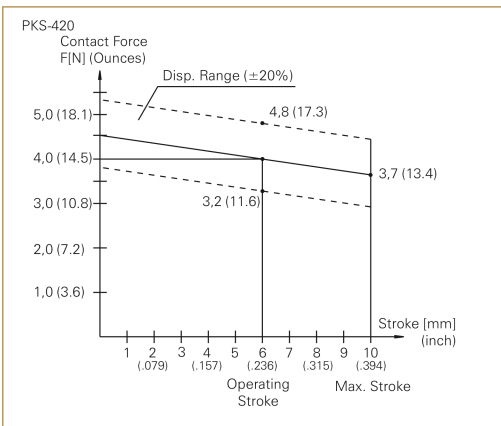
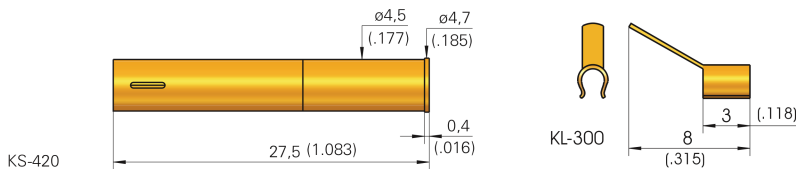
Installation height with KS: 5,9 mm (.232)
Recommended stroke: 6,0 mm (.236)

Mounting and functional dimensions



PKS-420 Type 1: with Connection for Hose NW 1

PKS-420 Type 2: with Connection for Hose NW2 (lengths see 2nd value)



Mechanical data

Working stroke: 6,0 mm (.236)
Maximum stroke: 10,0 mm (.394)
Cont. force at work.stroke: 3,7 N (13.4oz) or 4,2 N (15.2oz)***
Operating medium: Compressed air (filtered, oil-free)
Operating pressure: 6 bar (86 psi)

Electrical data

Current rating: 2 - 3 A
 10 A (Type "1H" or "2H", see Note below)
R_i typisch: < 30 mΩ

Operating temperature

Standard: 0° up to +80 °C

Materials

Plunger: Steel, rhodium- or gold-plated
Barrel: Brass, gold-plated
Restoring spring: Steel, gold-plated
Receptacle: Brass, gold-plated
O-rings: Perbunan

Mounting hole size

with receptacle: ø 4,48 - 4,49 mm (.1764 - .1768)
without receptacle: ø 4,00 mm (.1575)

		Available tip styles			
Material	Tip style	Plating	Further versions		
			ø	ø (inch)	
2	01	R	ø 2,00 (.079)		
2	04**	R	ø 1,30 (.051)	2,00 (.079)	
2	05	R	ø 2,50 (.098)	1,30** (.051)	
2	06**	A	ø 1,30 (.051)	2,50 (.098) 3,50 (.138)	
2	15*	A	ø 2,00 (.079)		
2	33**	A	ø 1,30 (.051)		
2	91**	A	ø 1,30 (.051)		

* pressed-in HM-tip, installation height 6,5 mm (.256)
 ** collar diameter: 2,0 mm (.079)

Warning:

Do not solder the cable to the crimp points of the receptacle.

Note:

For high current applications up to 10 A, order with special designation "1H" (terminal "1") resp. "2H" (terminal "2").

Note:

The receptacle can be used from grid size 5,08 mm (200 Mil) upwards.

Note:

Pneumatic accessories and general instructions shown on page 174.

*** Note:

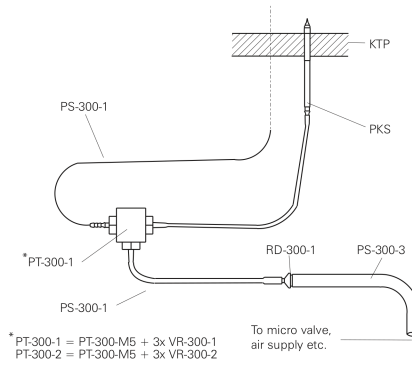
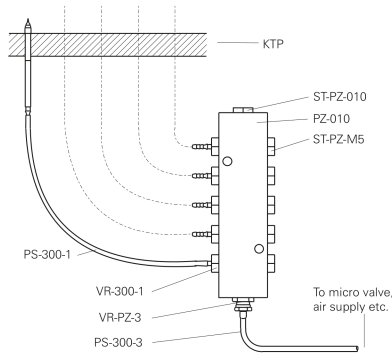
Tip 15, 01, 91 F = 3,7 N (13.4oz)
 Tip 04, 05, 06, 33 F = 4,2 N (15.2oz)

Ordering example

	Series	Tip material 2 = Steel	Tip style	Tip diameter (1/100 mm)	Plating A = Gold R = Rhodium	Spring force (dN)	Collar height (mm)	Type (alternative "1", "1H", "2", "2H")
Test probe:	PKS	4	20	2	06	130	A	42021
Test probe for use up to 10 A:	PKS	4	20	2	04	130	R	42021H
Receptacle:	KS	4	20					
Clip connection with solder terminal for type 1:	KL	3	00					

Pneumatic test probes can be actuated and controlled individually or in groups.

Example of set-up and layout:



General notes:

A compressed air hose with a standard width of 1 mm (NW1) or 2 mm (NW2) is required to connect pneumatic probes. A range of adapters (see table below) are offered to establish air feed lines from commercially available compressed air hose NW3 or from compressed air distributors with threaded terminals M5.

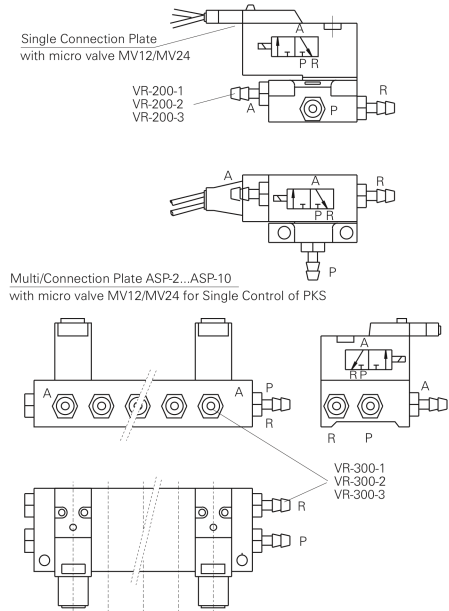
The hose NW1 should only be used for short distances. The larger diameter of 3 mm guarantees good operating pressure.

The electrical connection is established by first soldering the wire to the KL-300 clip, then fixing the clip onto the end of the pneumatic test probe. (Refer to marked positions in the drawings on the previous data sheets).

To avoid damage to the ends of the hose, only the recommended specialised cutter tool SS-101 should be used

The various connections plates are controlled using micro-valves. Instead of a micro-valve, a sealing plate (DP-1) can be used to seal the air outlet holes.

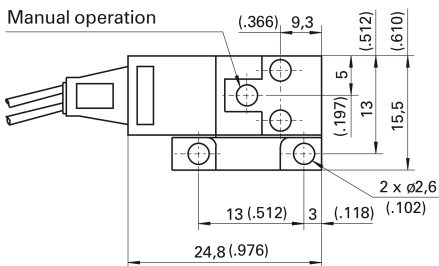
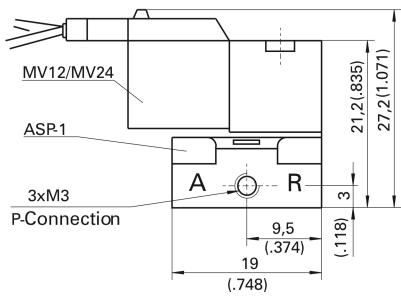
Item	Tech. designation	Order number
Reducer piece	NW 3 / NW 1	RD-300-1
Reducer piece	NW 1 / NW 2	RD-300-1-2
Reducer piece	NW 3 / NW 2	RD-300-2
Threaded terminal	M 5 / NW 1	VR-300-1
Threaded terminal	M 5 / NW 2	VR-300-2
Threaded terminal	M 5 / NW 3	VR-300-3
Threaded terminal	M 3 / NW 1	VR-200-1
Threaded terminal	M 3 / NW 2	VR-200-2
Threaded terminal	M 3 / NW 3	VR-200-3
T-Piece (without threaded terminal)	3 x M 5	PT-300-M5
T-Piece incl. 3 x VR-300-1	3 x NW 1	PT-300-1
T-Piece incl. 3 x VR-300-2	3 x NW 2	PT-300-2
Ten-fold distributor	10 x M 5	PZ-010
Compressed-air hose, Ø _i 1,2; Ø _o 2,0	NW 1	PS-300-1
Compressed-air hose, Ø _i 2,0; Ø _o 3,9	NW 2	PS-300-2
Compressed-air hose, Ø _i 2,6; Ø _o 4,0	NW 3	PS-300-3
Specialised cutting tool		SS-010
Dummy plug for distributor	B1/8	ST-PZ-010
Dummy plug for distributor	M 5	ST-PZ-M 5
Plug for distributor	M 5-1/8a	ST-PZ-VR
Terminal for hose NW 3	NM 5-PK 3	VR-PZ-3
Terminal for hose NW 4	NM 5-PK 4	VR-PZ-4
3/2 Micro-valve 12V (0,95 W)		MV 12
3/2 Micro-valve 24V (0,95 W)		MV 24
Single-connection plate	for 1 valve	ASP-1
Multi-connection plate	for 2-10 Valves	ASP-X
Sealing plate	for conn. plate	DP-1
Silencer	M3	28574
Silencer	M5	3981



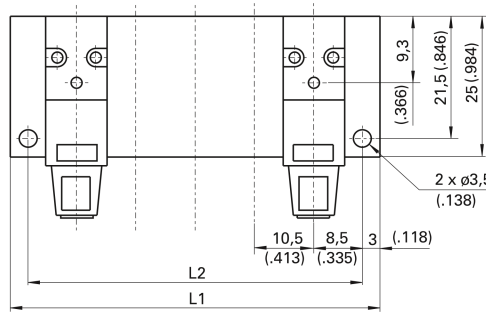
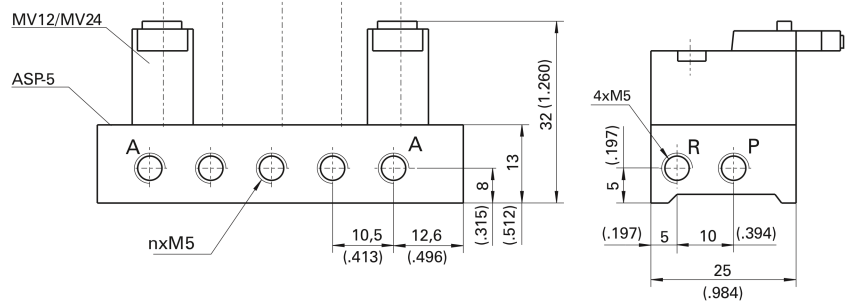
Ordering examples to activate and control 5 PKS-300

Simultaneously activation and control	Separate activation and control	Item	Order number
5	5	Pneumatic test probes	PKS-300 xxx xxx x xx02 x
x meter	x meter	Compressed-air hose NW 1	PS-300-1
1	-	Ten-fold distributor	PZ-010
1	-	Dummy plug	ST-PZ-010
1	1	Terminal for hose NW 3	VR-PZ-3
5	5	Terminal for hose NW 1	VR-300-1
x meter	x meter	Compressed-air hose NW 3	PS-300-3
1	5	Microvalve 24V or 12V(incl. plug)	MV 24 / MV 12
1	-	Single-connection plate for microvalve	ASP-1
-	1	Single-connection plate for microvalve	ASP-5
2	-	Terminal for hose NW 3	VR-200-3
5	2	Dummy plug for distributor	ST-PZ-M5
-	1	Terminal for hose NW 3	VR-300-3
-	1	Silencer	3981

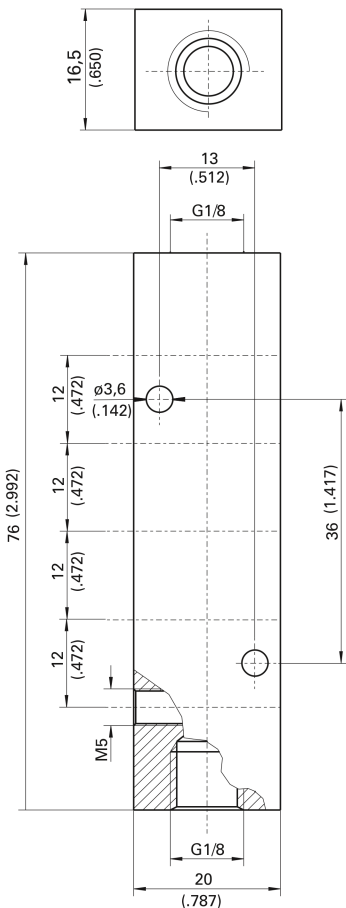
Single Connection Plate (ASP-1)



Multi Connection Plate (ASP-2...-10)



Ten-fold distributors (PZ-010)



T-piece (PT-300-M5)

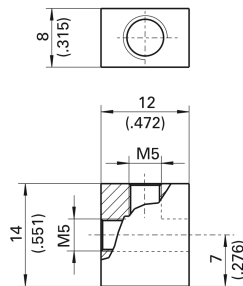


Table of Dimensions for Multi Connection Plate

Number Valves	L1	L2
2	33,5 (1.319)	27,5 (1.083)
3	44,0 (1.732)	38,0 (1.496)
4	54,5 (2.146)	48,5 (1.909)
5	65,0 (2.559)	59,0 (2.323)
7	86,0 (3.386)	80,0 (3.150)
8	96,0 (3.780)	90,5 (3.563)
9	107,0 (4.213)	101,0 (3.976)
10	117,5 (4.626)	111,5 (4.390)

Threaded Terminal M3	Threaded Terminal M5	Reducers	Plugs for Distributors PZ-010
 VR-200-1	 VR-300-1	 RD-300-1	 ST-PZ-VR
 VR-200-2	 VR-300-2	 RD-300-1-2	 VR-PZ-3
 VR-200-3	 VR-300-3	 RD-300-2	 VR-PZ-4