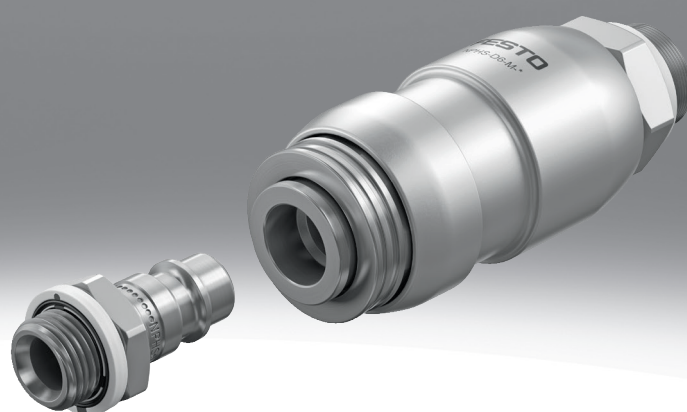


Coupling socket, quick coupling plug NPHS

FESTO



Characteristics

At a glance

- Safety coupling to ISO 4414, with shut-off on one side.
- Exhaust the air on the connector side without releasing the coupling

Notes on product selection:

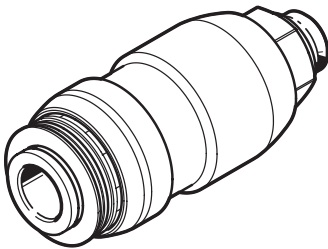
- All types of coupling socket NPHS-D6 are compatible with all plugs NPHS-S6. In addition, the coupling sockets NPHS-D6-M and all quick coupling plugs NPHS-S6 can be combined with the coupling sockets/quick coupling plugs KD4/KS4 made of brass.
- The coupling sockets NPHS-D6-P, on the other hand, can only be used with the hardened quick coupling plugs NPHS-S6.
- No safety function when combining coupling socket KD4 and quick coupling plug NPHS-S6. With this combination, the plug is released directly in one step.
- Safety exhaust couplings with the coupling sockets NPHS-D6 fulfil the requirements for pneumatic systems to EN ISO 4414.

Additional documents Link [nphs](#)



The additional document QUICK-COUPPLINGS-ADD contains further information on the operating mode and possible combinations of coupling sockets and plugs, as well as an overview of possible combinations of couplings and tubing.

Coupling element

[S]	Coupling plug	[D]	Coupling socket
			

Releasing sleeve version

[M]	Metal	[P]	Polymer
Coupling socket: metal release sleeve • Exhaust the air on the connector side by moving the sliding sleeve, then unlocking the coupling • can be combined with brass coupling sockets/quick coupling plugs KD4/KS4 • Combination of coupling and hand slide valve • Can be used as an on/off valve		Coupling socket: polymer release sleeve • Exhaust the air on the connector side by pushing the release sleeve, then unlocking the coupling • can only be used with the hardened quick coupling plugs NPHS-S6	

Type code

001	Series	
NPHS	Coupling socket/plug	
002	Coupling element	
S	Coupling plug	
D	Coupling socket	
003	Coupling size	
6	Size 6	
004	Releasing sleeve version	
P	Polymer	
M	Metal	

005	Pneumatic connection 1	
BC9	Barbed connector 9 mm for tubing clip	
G12	G1/2	
G14	G1/4	
G18	G1/8	
G38	G3/8	
006	Thread type connection 1	
	Male thread	
F	Female thread	

Datasheet

General technical data – Coupling sockets NPHS-D6-M (metal unlocking sleeve)

Pneumatic connection, port 1	Male thread G1/4	Male thread G3/8	Male thread G1/2
Nominal size	8.2 mm	10 mm	
Nominal torque	7 Nm	15 Nm	25 Nm
Tolerance for nominal tightening torque	±20%		
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	1,750 ... 1,833 l/min	2,000 ... 2,100 l/min	
Nominal flow rate standardised according to ISO 8778	1,897 ... 1,987 l/min	2,168 ... 2,276.4 l/min	

1) Measured at p1 = 6 bar and Δp = 1 bar

General technical data – Coupling sockets NPHS-D6-P (polymer release sleeve)

Pneumatic connection, port 1	Male thread G1/8	Male thread G1/4	Male thread G3/8	Male thread G1/2	Female thread G1/4	Female thread G3/8	Female thread G1/2	Barbed hose fitting 9 mm
Nominal size	5 mm	7.8 mm	10.2 mm	11 mm	10.5 mm			7 mm
Nominal torque	3.5 Nm	11 Nm	12.5 Nm	14 Nm	–			
Tolerance for nominal tightening torque	±10%		±20%		–			
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	875 ... 1,050 l/min	1,183 ... 1,966 l/min	1,216 ... 2,083 l/min	1,233 ... 2,016 l/min	1,183 ... 2,050 l/min	1,203 ... 2,083 l/min	1,008 ... 2,050 l/min	1,093 ... 1,613 l/min
Nominal flow rate standardised according to ISO 8778	948.5 ... 1,138.2 l/min	1,282.4 ... 2,131.1 l/min	1,318.1 ... 2,258 l/min	1,336.6 ... 2,185.3 l/min	1,282.4 ... 2,222.2 l/min	1,304.1 ... 2,258 l/min	1,092.7 ... 2,222.2 l/min	1,184.8 ... 1,748.5 l/min

1) Measured at p1 = 6 bar and Δp = 1 bar

General technical data – Quick coupling plug NPHS-S6

Pneumatic connection, port 1	Male thread G1/8	Male thread G1/4	Male thread G3/8	Male thread G1/2	Female thread G1/4	Female thread G3/8	Female thread G1/2	Barbed hose fitting 9 mm
Nominal size	5.5 mm	7.85 mm						7 mm
Nominal torque	3.5 Nm	11 Nm	12.5 Nm	14 Nm	–			
Tolerance for nominal tightening torque	±10%		±20%		–			
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	875 ... 1,238 l/min	1,038 ... 2,100 l/min	1,038 ... 2,050 l/min	1,002 ... 2,000 l/min	1,002 ... 1,950 l/min	1,050 ... 2,083 l/min	1,038 ... 2,050 l/min	966 ... 1,700 l/min
Nominal flow rate standardised according to ISO 8778	948.5 ... 1,342 l/min	1,125.2 ... 2,276.4 l/min	1,125.2 ... 2,222.2 l/min	1,086.2 ... 2,168 l/min	1,086.2 ... 2,113.8 l/min	1,138.2 ... 2,258 l/min	1,125.2 ... 2,222.2 l/min	1,047.1 ... 1,842.8 l/min

1) Measured at p1 = 6 bar and Δp = 1 bar

Operating and environmental conditions

Coupling element	Coupling plug	Coupling socket
Releasing sleeve version	Metal	Polymer
Operating pressure complete temperature range	-0.095 ... 1.2 MPa	
Operating pressure complete temperature range	-0.95 ... 12 bar	
Operating pressure complete temperature range	-13.775 ... 174 psi	
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]	
Note on operating and pilot medium	Lubricated operation possible	
Ambient temperature	-10 ... 60°C	-20 ... 80°C
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress	

1) More information: www.festo.com/x/topic/crc

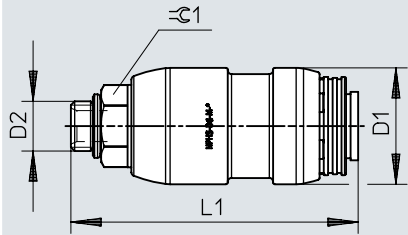
Datasheet

Materials			
Coupling element	Coupling plug	Coupling socket	
Releasing sleeve version	Metal		Polymer
Material housing	–	Brass, nickel-plated	
Valve body material	–		Brass
Material sleeve	–	Wrought aluminium alloy, Colourless anodised	–
Material releasing sleeve	–	Brass, nickel-plated	POM PP High-alloy stainless steel
Material seals	–	NBR	
Material spring	–	High-alloy stainless steel	
Material thread seal ¹⁾	PA66-GF30 / TPE-U	Aluminium, HNBR	PA66-GF30 / TPE-U
Material thread piece	–	Brass, nickel-plated	
Material of inner raceway	–	Brass	POM
Material ball	–	High-alloy stainless steel	
Material pins	–		High-alloy stainless steel
Information on materials	Galvanised steel	–	
Note on materials	RoHS compliant		
LABS (PWIS) conformity	VDMA24364-B1/B2-L		

1) only for male thread

Dimensions

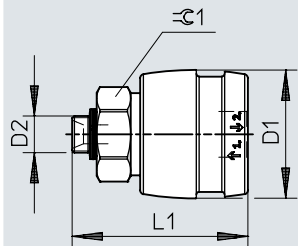
Dimensions – Coupling socket male thread metal Download CAD data www.festo.com



	D1 Ø	D2	L1	⌀ 1
NPHS-D6-M-G14	30,8	G1/4	76	19
NPHS-D6-M-G38		G3/8	77	22
NPHS-D6-M-G12		G1/2	80,5	24

Dimensions

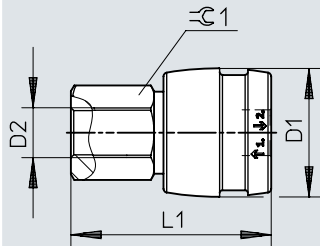
Dimensions – Coupling socket male thread, polymer

[Download CAD data](#) www.festo.com


	D1 Ø	D2	L1	±0.1
NPHS-D6-P-G18	34	G1/8	46,5	22
NPHS-D6-P-G14		G1/4	48	22
NPHS-D6-P-G38		G3/8	49	22
NPHS-D6-P-G12		G1/2	50,5	24

Dimensions

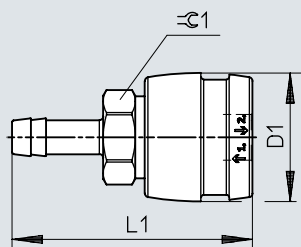
Dimensions – Coupling socket female thread Download CAD data www.festo.com



	D1 Ø	D2	L1	⌀ 1
NPHS-D6-P-G14F	34	G1/4	53	22
NPHS-D6-P-G38F		G3/8	53	22
NPHS-D6-P-G12F		G1/2	56	24

Dimensions

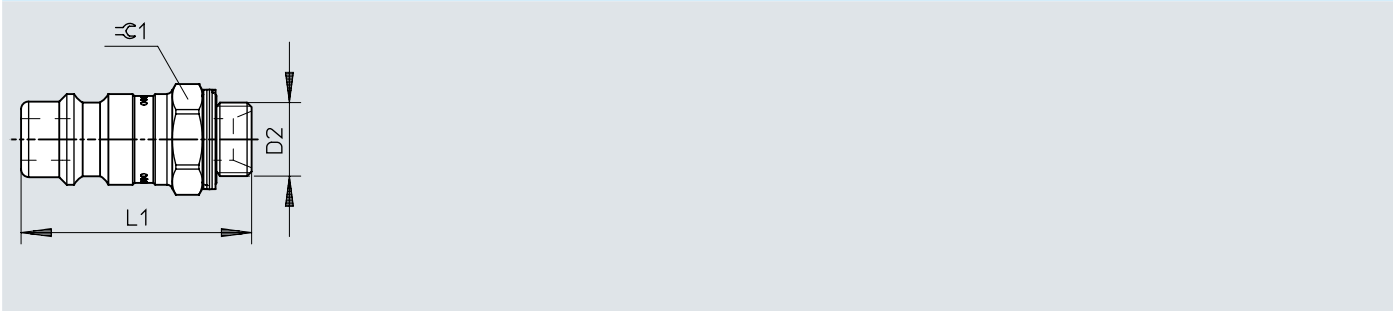
Dimensions – Coupling socket for plug-in nipple

[Download CAD data](#) www.festo.com


	D1 Ø	D2	L1	±0.1
NPHS-D6-P-BC9	34	–	63,6	22

Dimensions

Dimensions – Quick coupling plug, male thread Download CAD data www.festo.com

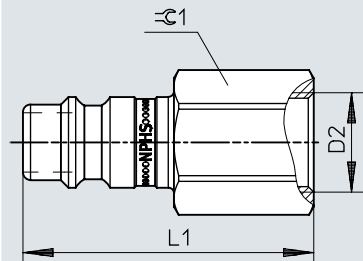


	D2	L1	⌀ 1
NPHS-S6-M-G18	G1/8	30,5	13
NPHS-S6-M-G14	G1/4	32,5	17
NPHS-S6-M-G38	G3/8	34	19
NPHS-S6-M-G12	G1/2	37,5	24

Dimensions

Dimensions – Quick coupling plug female thread

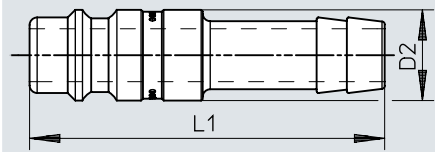
Download CAD data www.festo.com



	D2	L1	H7/k6 1
NPHS-S6-M-G14F	G1/4	38,5	17
NPHS-S6-M-G38F	G3/8	39,5	19
NPHS-S6-M-G12F	G1/2	44	24

Dimensions

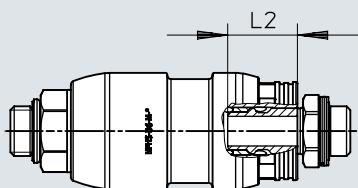
Dimensions – Quick coupling plug for plug-in sleeve [Download CAD data](http://www.festo.com) www.festo.com



	D2	L1
NPHS-S6-M-BC9	12	47

Dimensions

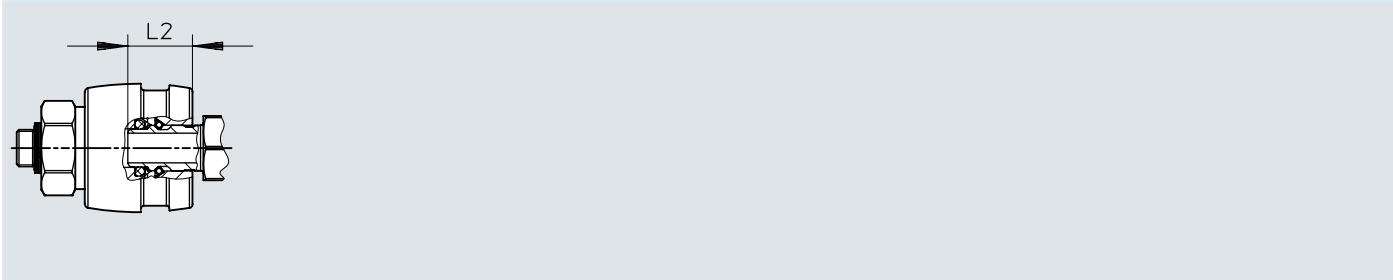
Dimensions – Quick coupling plug Insertion depth Unlocking sleeve metal

Download CAD data www.festo.com

	L2
NPHS-D6-M-...	18,6 ±0,4

Dimensions

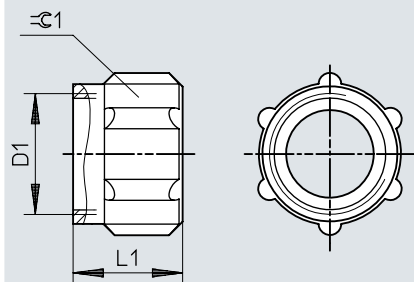
Dimensions – Quick coupling plug insertion depth unlocking sleeve, polymer [Download CAD data](#) www.festo.com



	L2
NPHS-D6-P-...	17,1 ±0,3

Dimensions

Dimensions – Union nut MCK

[Download CAD data](http://www.festo.com) www.festo.com


	D1	L1	⌀1
MCK-PK-3	M6x0,75	8,5	8
MCK-PK-4	M10x1	11	12
MCK-PK-6	M12x1	11	14
MCK-PK-9	M16x1	14,4	19

Ordering data

Ordering data – Coupling sockets NPHS-D6-M (metal releasing sleeve)

	Pneumatic connection, port 1	Nominal size	Nominal torque	Product weight	Part no.	Type
	Male thread G1/4	8.2 mm	7 Nm	173 g	8059275	NPHS-D6-M-G14
	Male thread G3/8	10 mm	15 Nm	179 g	8059276	NPHS-D6-M-G38
	Male thread G1/2		25 Nm	200 g	8059277	NPHS-D6-M-G12

Ordering data – Coupling sockets NPHS-D6-P (plastic releasing sleeve)

	Pneumatic connection, port 1	Nominal size	Nominal torque	Product weight	Part no.	Type
	Male thread G1/8	5 mm	3.5 Nm	94 g	8059266	NPHS-D6-P-G18
	Male thread G1/4	7.8 mm	11 Nm	95 g	8059267	NPHS-D6-P-G14
	Male thread G3/8	10.2 mm	12.5 Nm	98 g	8059268	NPHS-D6-P-G38
	Male thread G1/2	11 mm	14 Nm	113 g	8059269	NPHS-D6-P-G12
	Female thread G1/4	10.5 mm		124 g	8059271	NPHS-D6-P-G14F
	Female thread G3/8			114 g	8059272	NPHS-D6-P-G38F
	Female thread G1/2			122 g	8059273	NPHS-D6-P-G12F
	Barbed hose fitting 9 mm	7 mm		95 g	8059274	NPHS-D6-P-BC9

Ordering data – Quick coupling plug NPHS-S6

	Pneumatic connection, port 1	Nominal size	Nominal torque	Product weight	Part no.	Type
	Male thread G1/8	5.5 mm	3.5 Nm	19 g	8059257	NPHS-S6-M-G18
	Male thread G1/4	7.85 mm	11 Nm	20 g	8059258	NPHS-S6-M-G14
	Male thread G3/8		12.5 Nm	27 g	8059259	NPHS-S6-M-G38
	Male thread G1/2		14 Nm	50 g	8059260	NPHS-S6-M-G12
	Female thread G1/4			28 g	8059262	NPHS-S6-M-G14F
	Female thread G3/8			29 g	8059263	NPHS-S6-M-G38F
	Female thread G1/2			49 g	8059264	NPHS-S6-M-G12F
	Barbed hose fitting 9 mm	7 mm		17 g	8059265	NPHS-S6-M-BC9

Accessories

Union nut MCK					
	Size	LABS (PWIS) conformity	Note on materials	Part no.	Type
	Female thread M10x1	VDMA24364-B2-L	RoHS compliant	2965	MCK-PK-4
	Female thread M12x1			2966	MCK-PK-6
	Female thread M16x1			2967	MCK-PK-9
	Female thread M6x0.75			205254	MCK-PK-3